SHARP

MODEL

AR-M355N
AR-M455N

LASER PRINTER

OPERATION MANUAL
(for general information and copier operation)

Be sure to become thoroughly familiar with this manual to gain the maximum benefit from the product. **Before installing this product, be sure to read the installation requirements and cautions sections.**

Be sure to keep all operation manuals handy for reference including this manual, the "Operation manual (for general information and copier operation)" and operation manuals for any optional equipment which has been installed.

The power switch positions are marked " I " to indicate power "ON" and " ⏻ " to indicate stand-by.
Caution:

For complete electrical disconnection, pull out the main plug.
The socket-outlet should be installed near the equipment and should be easily accessible.

FOR YOUR RECORDS ...
To protect against loss or theft, record and retain for reference the machine's serial number located on the back of the unit.

Model Number _____

Serial Number _____

Date of Purchase _____

Place of Purchase _____

Authorized Sharp Copier
Service Department Number _____

This operation manual is also used for the AR-355 / AR-455 / AR-355 J / AR-455 J / AR-M355N J / AR-M455N J.

Part 1: General Information

NOTES
- Considerable care has been taken in preparing this manual. If you have any comments or concerns about the manual, please contact your nearest SHARP Service Department.
- This product has undergone strict quality control and inspection procedures. In the unlikely event that a defect or other problem is discovered, please contact your dealer or nearest SHARP Service Department.
- Aside from instances provided for by law, SHARP is not responsible for failures occurring during use of the product or its options, or failures due to incorrect operation of the product and its options, or other failures, or for any damage that occurs due to use of the product.

The display screens, messages, and key names shown in the manual may differ from those on the actual machine due to product improvements and modifications.

PRODUCT CONFIGURATIONS

The table below shows the product models covered by this manual.

(As of October 2004)

Model	Product configuration
AR-M355N/AR-M455N	Laser printer

OPERATION MANUALS

The following operation manuals are provided for the machine. Please read the appropriate manuals as needed for the features you wish to learn about.

- Operation manual (for general information and copier operation) (this manual):
  The first half of this manual provides general information about the machine, including safety information, loading paper, removing misfeeds, and regular maintenance.
  The second half of the manual explains how to use the copy and document filing functions.
- Key operator's guide:
  This primarily explains key operator programs for machine management and copier related functions. Key operator programs for the fax, printer and network scanner functions are explained in the manuals for those functions.
  Key operator programs are used by key operators to configure function settings to meet the needs of the customer.
- Operation manual (for facsimile)
  This manual explains the procedures for using the machine as a facsimile. To use the fax function, the facsimile expansion kit must be installed.
- Software setup guide (for printer)
  This explains how to connect the machine to your computer, install the printer driver for Windows, and configure the printer driver settings.
- Operation manual (for printer)*
  This manual explains the procedures for using the machine as a printer.
- Operation manual (for network scanner)*
  This manual explains the procedures for using the machine as a network scanner when connected to a computer. To use the network scanner function, the AR-NS3 network scanner expansion kit must be installed.
 * The Operation manual (for network scanner) is provided as PDF file in the CD-ROM.
    This manual is not provided as printed manual.

INSTALLATION REQUIREMENTS

Improper installation may damage this product. Please note the following during initial installation and whenever the machine is moved.

1. The machine should be installed near an accessible power outlet for easy connection.
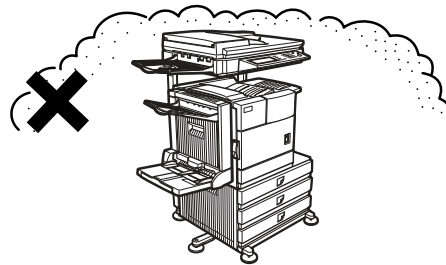
2. Be sure to connect the power cord only to a power outlet that meets the specified voltage and current requirements. Also make certain the outlet is properly grounded.
   ● For the power supply requirements, see the name plate on the back of the main unit.
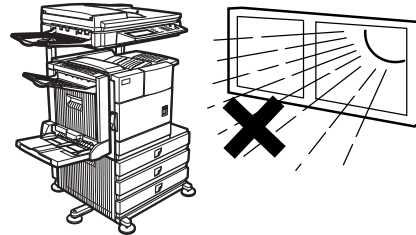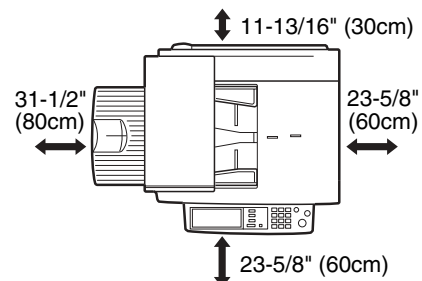
3. Do not install your machine in areas that are:
   ● damp, humid, or very dusty
   ● exposed to direct sunlight
   ● poorly ventilated
   ● subject to extreme temperature or humidity changes, e.g., near an air conditioner or heater.
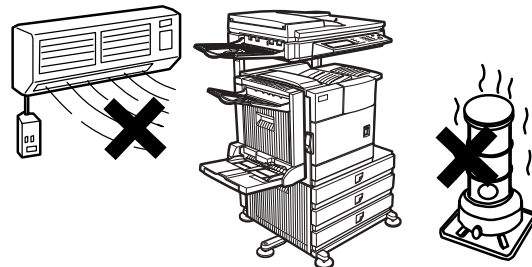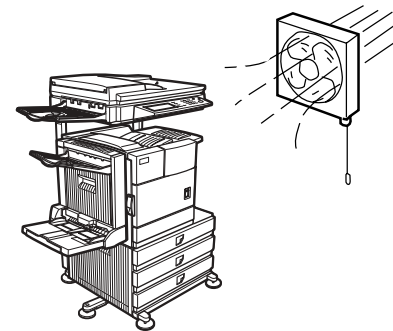
4. Be sure to allow the required space around the machine for servicing and proper ventilation.

11-13/16" (30cm)

31-1/2" (80cm)   23-5/8" (60cm)

23-5/8" (60cm)

A small amount of ozone is produced within the machine during operation. The emission level is insufficient to cause any health hazard.

NOTE:

The present recommended long term exposure limit for ozone is 0.1 ppm (0.2 mg/m^3) calculated as an 8 hr. time-weighted average concentration.

However, since the small amount that is emitted may have an objectionable odor, it is advisable to place the copier in a ventilated area.

CAUTIONS

1. Do not touch the photoconductive drum. Scratches or smudges on the drum will cause dirty prints.

2. The fusing unit is extremely hot. Exercise care in this area.

3. Do not look directly at the light source. Doing so may damage your eyes.

Fusing unit

4. Five adjusters are provided on all optional stand/paper drawer units. These adjusters should be lowered until they contact the floor.
When moving the machine with the optional stand/paper drawer, be sure to raise the adjusters. Also, unlock the two casters at the front of the optional stand/paper drawer. After moving the machine, lower the four adjusters until they reach the floor and lock the two casters.

5. Do not make any modifications to this machine. Doing so may result in personal injury or damage to the machine.

6. Since this machine is heavy, it is recommended that it be moved by more than one person to prevent injury.

Adjuster

7. When connecting this machine to a computer, be sure to first turn both the computer and the machine off.

8. Do not make copies of anything which is prohibited from copying by law. The following items are normally prohibited from printing by national law. Other items may be prohibited by local law.
   - Money ● Stamps ● Bonds ● Stocks
   - Bank drafts ● Checks ● Passports ● Driver's licenses

Lock ⬅➡ Release
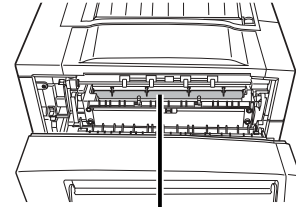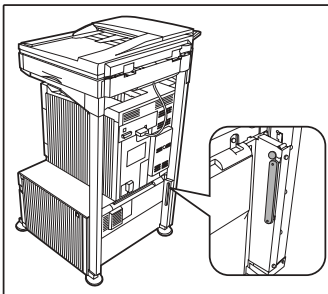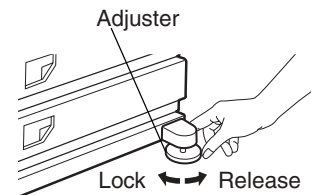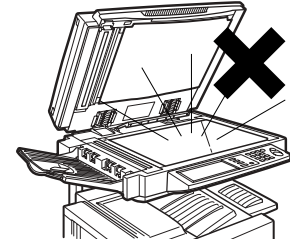
The part indicated in the illustration is only to be handled by a service technician. Absolutely do not touch this part.

The machine includes the document filing function, which stores document image data on the machine's hard disk. Stored documents can be called up and printed or transmitted as needed. If a hard disk failure occurs, it will no longer be possible to call up the stored document data. To prevent the loss of important documents in the unlikely event of a hard disk failure, keep the originals of important documents or store the original data elsewhere.
With the exception of instances provided for by law, Sharp Corporation bears no responsibility for any damages or loss due to the loss of stored document data.

Laser Information

Wave length	785 nm	+10 nm -15 nm	
Pulse times	North America:	35 cpm model: (4.1 µs ± 4.1 ns)/7 mm 45 cpm model: (5.7 µs ± 5.7 ns)/7 mm	
	Europe:	35 cpm model: (3.8 µs ± 3.8 ns)/7 mm 45 cpm model: (4.4 µs ± 4.4 ns)/7 mm	
Output power	0.2 mW - 0.4 mW		

At the production line, the output power of the scanner unit is adjusted to 0.4 MILLIWATT PLUS 8 % and is maintained constant by the operation of the Automatic Power Control (APC).

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

For North America:
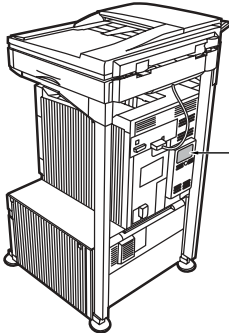
SAFETY PRECAUTIONS

This Digital Equipment is rated Class 1 and complies with 21 CFR 1040.10 and 1040.11 of the CDRH standards. This means that the equipment does not produce hazardous laser radiation. For your safety, observe the precautions below.
● Do not remove the cabinet, operation panel or any other covers.
● The equipment's exterior covers contain several safety interlock switches. Do not bypass any safety interlock by inserting wedges or other items into switch slots.

For Europe:

CLASS 1 LASER PRODUCT

LASER KLASSE 1

LUOKAN 1 LASERLAITE

KLASS 1 LASERAPPARAT

CAUTION
INVISIBLE LASER RADIATION WHEN OPEN INTERLOCKS DEFEATED. AVOID EXPOSURE TO BEAM.

VORSICHT
UNSICHTBARE LASERSTRAHLUNG WENN ABDECKUNG GEÖFFNET UND SICHERHEITSVERRIEGELUNG ÜBERBRÜCKT. NICHT DEM STRAHL AUSSETZEN.

ADVARSEL
USYNLIG LASERSTRÅLING VED ÅBNING, NÅR SIKKERHEDSBRYDERE ER UDE AF FUNKTION. UNDGÅ UDSAETTELSE FOR STRÅLNING.

VAROITUS!
LAITTEEN KÄYTTÄMINEN MUULLA KUIN TÄSSÄ KÄYTTÖOHJEESSA MAINITULLA TAVALLA SAATTAA ALTISTAA KÄYTTÄJÄN TURVALLISUUSLUOKAN 1 YLITTÄVÄLLE NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE.

VARNING
OM APPARATEN ANVÄNDS PÅ ANNAT SÄTT ÄN I DENNA BRUKSANVISNING SPECIFICERATS, KAN ANVÄNDAREN UTSÄTTAS FÖR OSYNLIG LASERSTRÅLNING, SOM ÖVERSKRIDER GRÄNSEN FÖR LASERKLASS 1.

CLASS 1
LASER PRODUCT

LASER KLASSE 1

CAUTION INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCKS DEFEATED. AVOID EXPOSURE TO BEAM.
VORSICHT UNSICHTBARE LASERSTRAHLUNG WENN ABDECKUNG GEÖFFNET UND SICHERHEITSVERRIEGELUNG ÜBERBRÜCKT. NICHT DEM STRAHL AUSSETZEN.
ADVARSEL USYNLIG LASERSTRÅLING VED ÅBNING, NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION. UNDGÅ UDSAETTELSE FOR STRÅLNING.
ADVERSEL USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES OG SIKKERHEDSLÅS BRYTES. UNNGÅ EKSPONERING FOR STRÅLEN.
VARNING OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD OCH SPÄRRAR ÄR URKOPPLADE. STRÅLEN ÄR FARLIG. BETRAKTA EJ STRÅLEN.
VARO! AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTÖNTÄ LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.

Laserstrahl

⚠ 注　意（サービスマン用）
カバーを開けてかつインターロックを無効にした場合には
レーザー光にさらされないようにしてください。

0-4

CONTENTS

CHAPTER 1
BEFORE USING THE PRODUCT

CHAPTER 2
MANAGING THE MACHINE

CHAPTER 3
PERIPHERAL DEVICES

CHAPTER 4
MAKING COPIES

CHAPTER 5
CONVENIENT COPY FUNCTIONS

CHAPTER 6
MACHINE MAINTENANCE (FOR COPYING)

CHAPTER 7
DOCUMENT FILING FUNCTION

CHAPTER 8
SPECIFICATIONS

CHAPTER 1

BEFORE USING THE PRODUCT

This chapter contains basic information that should be read before using the product.

INTRODUCTION

Thank you for purchasing a SHARP digital multifunction copier.
Please read this manual before using the machine. In particular, be sure to read "INSTALLATION REQUIREMENTS" before using the machine.
Please keep this manual close at hand for reference whenever necessary.
This manual provides general information on using the machine, such as routine maintenance and how to load paper and remove misfeeds. It also explains how to use the copier and document filing functions.
Separate manuals have been provided for the fax function, printer function, and network scanner function.

■ Original and paper sizes

This machine allows use of standard sizes in both the inch and AB systems.
These are shown in the tables below.

Sizes in the inch system
11" x 17" (LEDGER)
8-1/2" x 14" (LEGAL)
8-1/2" x 13" (FOOLSCAP)
8-1/2" x 11" (LETTER)
7-1/4" x 10-1/2" (EXECUTIVE)
5-1/2" x 8-1/2" (INVOICE)

Sizes in the AB system
A3
B4
A4
B5
A5

■ The meaning of "R" in original and paper size indications

Some original and paper sizes can be placed in either the portrait or landscape orientations. To differentiate between landscape and portrait, the landscape orientation size indication will contain an "R". These are indicated as 8-1/2" x 11"R, 5-1/2" x 8-1/2"R, A4R, B5R, etc. Sizes that can be placed only in the landscape orientation (11" x 17", 8-1/2" x 14", 8-1/2" x 13", A3, B4) do not contain the "R" in their size indication.

Size indication with "R"   Landscape orientation   Size indication without "R"   Portrait orientation
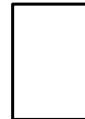
MAIN FEATURES

The digital multifunction copier is capable of performing a variety of functions. This page shows features related to the copy function.

- Sort mode → See page 1-3
- Group mode → See page 1-3
- 2-sided Copy → See page 1-3
  (When the duplex module is installed.)
- Exposure Adjustments → See page 1-3
- Reduction/Enlargement → See page 1-4
- XY Zoom → See page 1-4
- Margin Shift → See page 1-4
- Erase → See page 1-4
- Dual Page Copy → See page 1-4
- Pamphlet Copy → See page 1-4
- Job Build → See page 1-5
- Tandem Copy → See page 1-5
- Covers/inserts → See page 1-5
- Transparency Insert → See page 1-5
- Multi Shot → See page 1-5
- Book Copy → See page 1-5
- Card Shot → See page 1-6

- Job programs → See page 1-6
- Mirror Image → See page 1-6
- B/W Reverse → See page 1-6
- Date → See page 1-6
- Stamp → See page 1-6
- Page numbering → See page 1-7
- Text → See page 1-7
- Interrupting a copy run → See page 1-7
- Offset mode → See page 1-7
  (When the Finisher or Saddle stitch finisher is installed.)
- Staple sort mode → See page 1-7
  (When the Finisher or Saddle stitch finisher is installed.)
- Saddle stitch → See page 1-7
  (When the Saddle stitch finisher is installed.)
- Hole punching → See page 1-8
  (When the Saddle stitch finisher and Punch Module are installed.)
- Document filing function → See page 1-8

1

Sort mode → **See page 4-9**

Copies can be collated.

Original   Copy
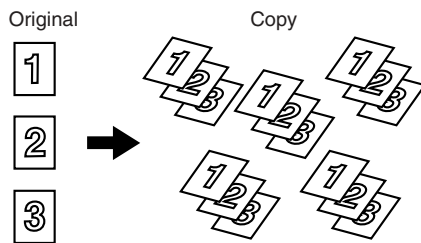
2-sided Copy → **See pages 4-10, 4-13**

Copy onto both sides of the paper using the document glass or the automatic document feeder.
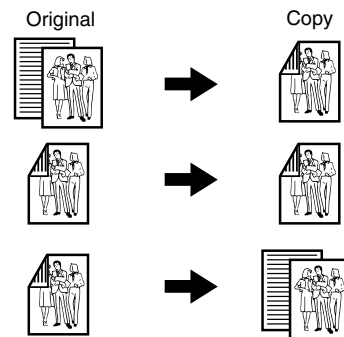
Original   Copy

* When the duplex module is installed.

Group mode → **See page 4-9**

Copies can be grouped by page.
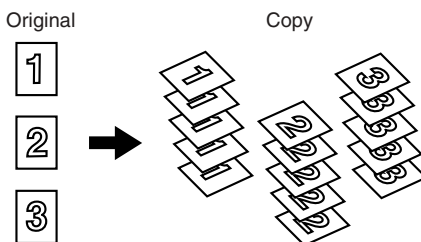
Original   Copy

Exposure Adjustments → **See page 4-14**

The desired image type for the original can be selected.

	Text	Text/Photo	Photo
Resolution	ABCDE	ABCDE	

Lighter   Darker

Exposure	A B	A B	A B
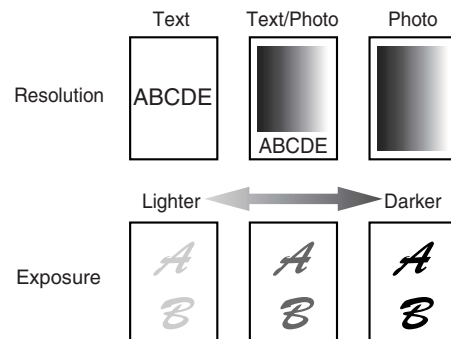
Reduction / Enlargement → **See page 4-15**

Copies can be enlarged or reduced to the desired size.

Original   Copy

Enlargement   Reduction
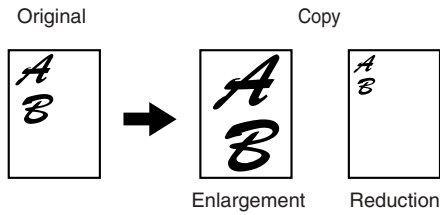
Erase → **See page 5-4**

Shadows that appear around the edges of copies of books or thick originals can be erased.

Original   Copy

Edge erase

Center erase

Edge+Center erase
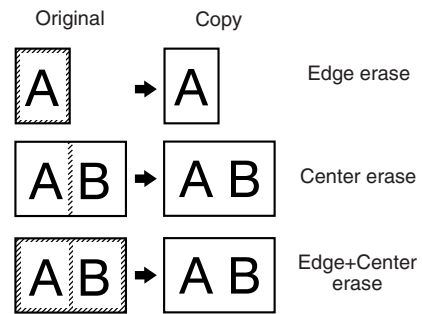
XY Zoom → **See page 4-18**

Separate ratio settings can be selected for the length and width of a copy.

Original   Copy
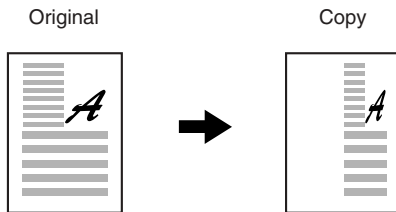
Dual Page Copy → **See page 5-5**

The left and right pages of a book can be successively copied onto separate sheets.

Book original   Copy
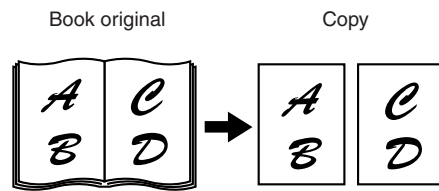
Margin Shift → **See page 5-3**

Margins can be added to copies.

One-sided copying Original   Image shifted to the right   Image shifted to the left

Margin   Margin

Two-sided copying Original

Image shifted to the right   Image shifted to the left

Or

Margin   Margin
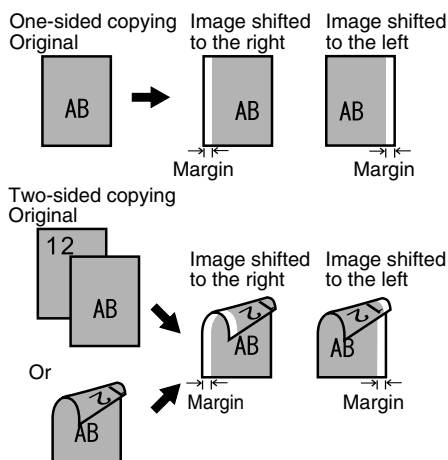
Pamphlet Copy → **See page 5-6**

One-sided or two-sided pamphlet style copies can be made.

Originals (one-sided)

Finished copies are folded in two.

Left binding

First page

Originals (two-sided)

Right binding

First page

1-4

1
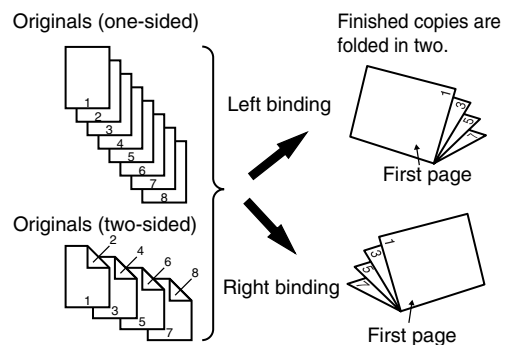
Job Build → **See page 5-8**

When you have a very large number of originals, the pages can be scanned in sets.

100 sheets   50 sheets   50 sheets
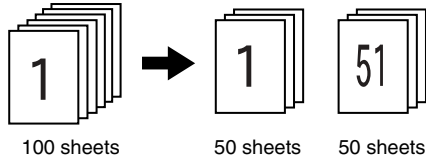
Transparency Insert → **See page 5-22**

Inserts can be automatically inserted between transparencies.

Originals (1-sided)

Copy

Originals (2-sided)
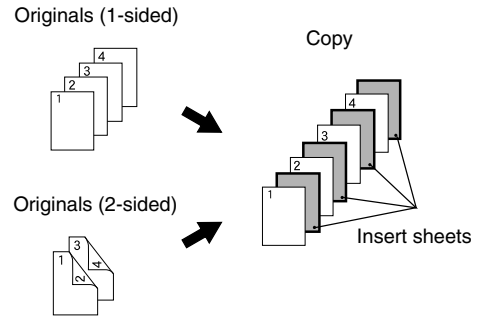
Insert sheets

Tandem Copy → **See page 5-9**

Two machines can be used to run a large copy job in parallel.

100 sets of copies   50 sets of copies   50 sets of copies
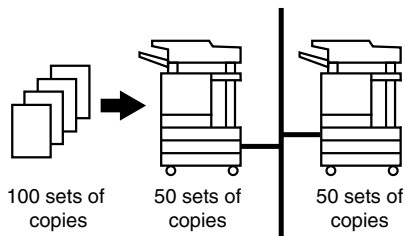
Multi Shot → **See page 5-23**

Multiple original pages can be copied onto a single sheet of paper in a uniform layout.

Originals (1-sided)   Originals (2-sided)   Copy

2in1

4in1
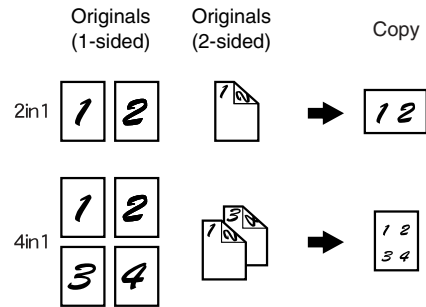
Covers/inserts → **See page 5-11**

Front covers, back covers, and inserts can be added. These can also be copied on.

Originals

Back cover

Front cover

Insert sheets
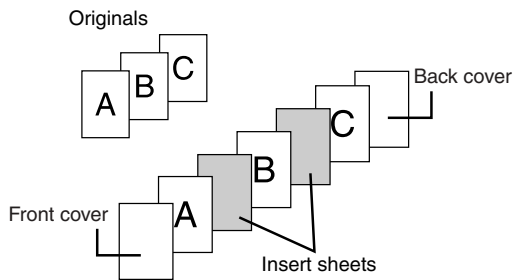
Book Copy → **See page 5-25**

Books and other bound originals can be copied pamphlet style.

Original   Copy

Left binding

First page   First page

First page   First page

Right binding

1-5
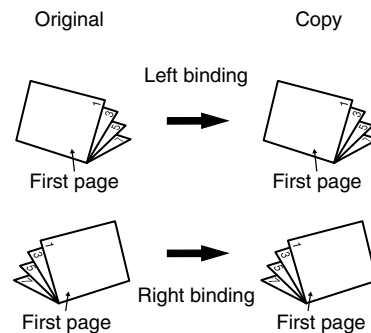
Card Shot → **See page 5-26**

The front and back of a card can be copied onto one sheet of paper.
This function is convenient for making copies for certification purposes and helps save paper.

Original   Copy

CARD
Front of card

Back of card

CARD

CARD

Example:
Portrait
8-1/2" x 11" (A4) size

Example:
Landscape
8-1/2" x 11" (A4) size
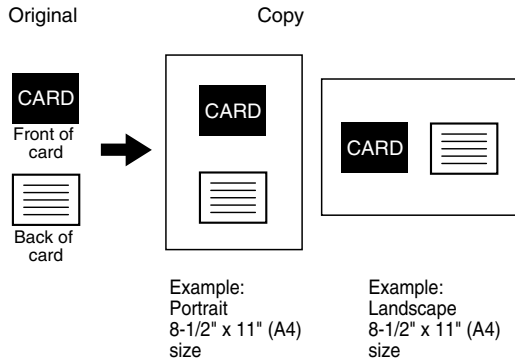
B/W Reverse → **See page 5-28**

White and black can be inverted on a copy to produce a negative image.

Original   Copy

A B   →   *A B*
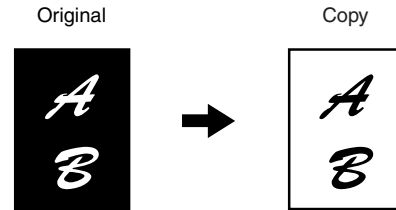
Job programs → **See page 5-41**

Various steps of a copy operation can be stored as a program, and up to 10 programs can be stored. Saving frequently used sets of settings in a program saves you the trouble of selecting those settings each time you wish to use them.

JOB PROGRAMS

PRESS PROGRAM NUMBER.

1 2 3

6 7 8

RECALL
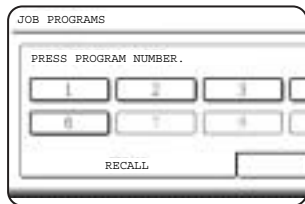
Date → **See page 5-32**

The date can be added to copies.

2004/OCT/1
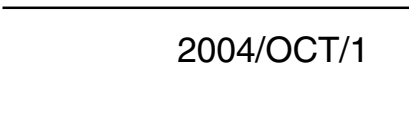
Mirror Image → **See page 5-28**

A mirror image copy can be made.

Original   Copy

A B   →   *A B*
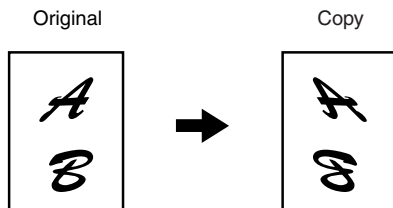
Stamp → **See page 5-33**

Reverse text can be added to copies ("stamp").

CONFIDENTIAL

1-6

Page numbering   → **See page 5-34**

Page numbers can be added to copies.
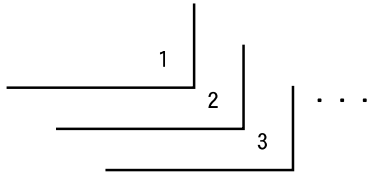
Offset mode   → **See page 3-8**

Each set of output can be offset slightly from other sets for easy separation.

Offset mode   Non-Offset mode
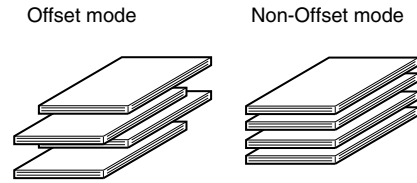
*When the Finisher or Saddle stitch finisher is installed.

Text   → **See page 5-38**

Entered text can be added to copies.

October, 2004 Meeting
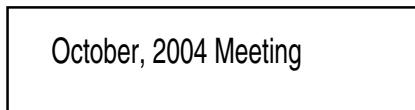
Staple sort mode   → **See page 3-8, 3-16**

Sets of copies can be automatically stapled.

Original   Copy
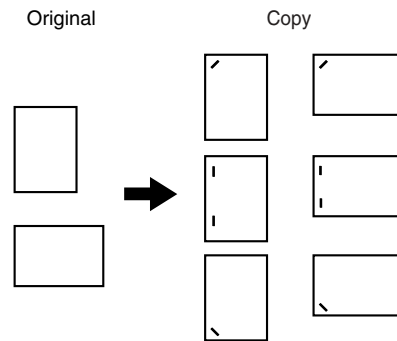
*When the Finisher or Saddle stitch finisher is installed.

Interrupting a copy run   → **See page 5-43**

A copy job in progress can be interrupted for a rush job.

INTERRUPT

ORIGINAL 8½x11   AUTO ORIGINA

AUTO EXPOSUR
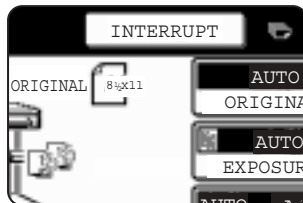
Saddle stitch   → **See page 3-14**

When a saddle stitch finisher is installed, copies can be automatically folded in half and stapled at the fold. (Use with the pamphlet function (see page 5-6) or book copy function (see page 5-25).)

Saddle stitch binding

6   7
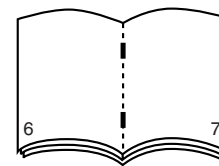
*When the Saddle stitch finisher is installed.

Hole punching	→ See page 3-17

Copies can be punched to add holes.
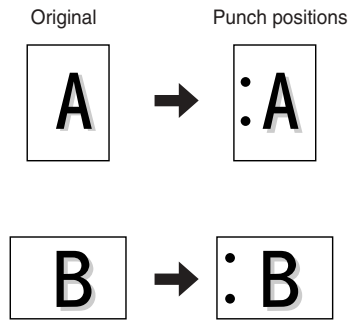
Original   Punch positions

A → ∶A

B → ∶B

* When the saddle stitch finisher and punch
module are installed.

Document filing function	→ See CHAPTER 7

A document image can be stored on the hard disk.
A stored file can easily be called up and printed or
transmitted.

Document Image → HDD → Printed / Transmitted

Save to machine's hard disk   Call up a saved file to reuse
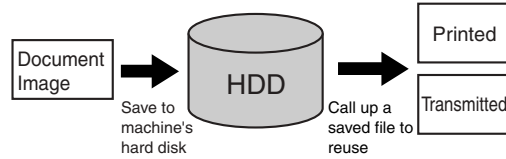
As an ENERGY STAR® Partner, SHARP has determined that this product meets the ENERGY STAR® guidelines for energy efficiency.

Energy saving features

This product has the following two power reducing modes to help conserve natural resources and reduce environmental pollution.

Preheat mode
When the machine remains in the standby state for the amount of time set in the key operator programs, preheat mode automatically reduces the temperature of the fusing unit to save power while the machine is on standby. When a fax or print job is received, or keys are pressed on the operation panel, or an original is placed for a copy, fax, or network scanner job, preheat mode automatically turns off.

Auto power shut-off mode
The auto power shut-off mode is the second level of power reduction. In this mode power is shut off to the fusing unit and the touch panel. In this state more energy is saved than in the preheat mode but the time to recover to the ready condition will be longer. The preset time to enter this mode can be set by a key operator program.

When this product is used as a printer, and either of the above modes is active, the mode will be deactivated automatically by an incoming job and the machine will automatically warm up and start to print when it has reached the ready temperature.
When this product is configured for multi-function operation, and either of the above modes is active, the mode will be deactivated as above by an incoming print job. Either mode will also be deactivated by operation of DOCUMENT FILING, IMAGE SEND or COPY mode key.

PART NAMES AND FUNCTIONS

Exterior
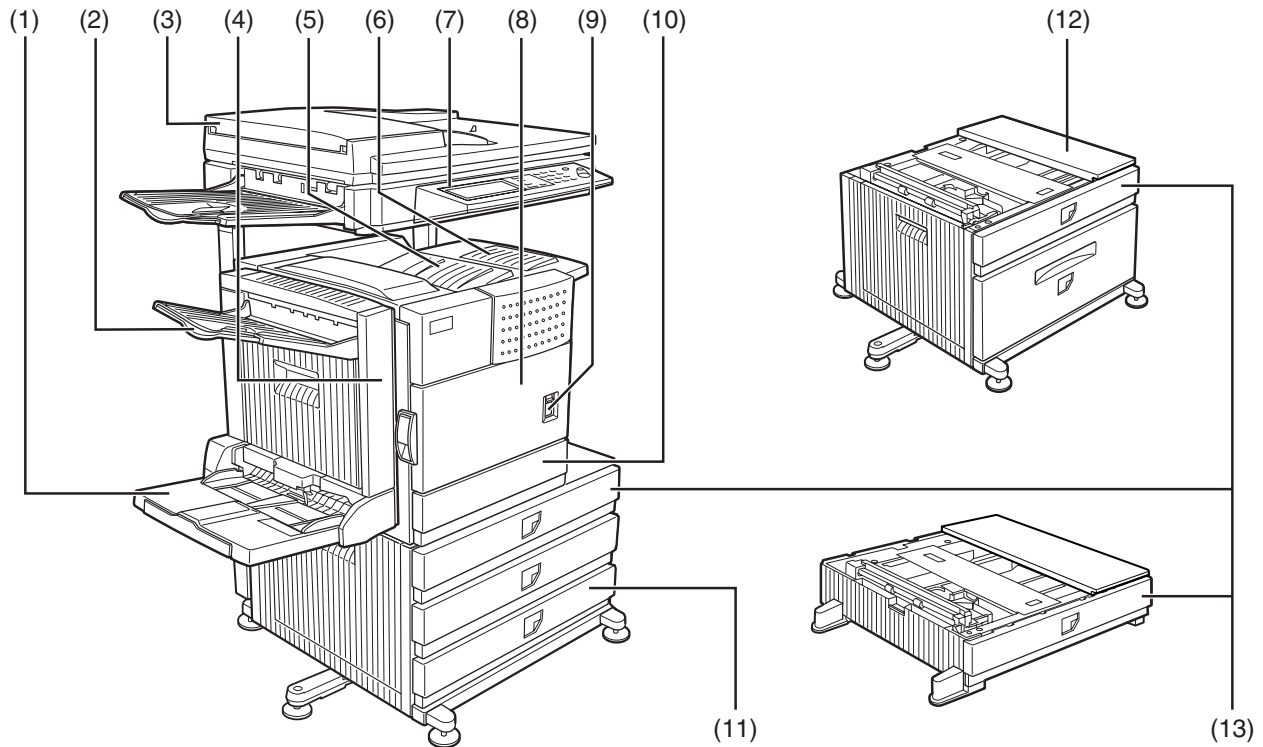
(1) Bypass tray*

(2) Exit tray*

(3) Automatic document feeder (See page 4-2.)
This automatically feeds and scans multiple sheet originals. Both sides of two-sided originals can be scanned at once.

(4) Duplex module*
Module for two-sided printing

(5) Upper paper output area (Center tray)
Finished sheets are deposited here.

(6) Upper exit tray extension*
Provides support for large size paper.

(7) Operation panel

(8) Front cover
Open to add toner.

(9) Power switch
Press to turn power on and off.

(10) Paper tray 1

(11) Stand/3 x 500 sheet paper drawer*

(12) Stand/MPD & 2000 sheet paper drawer* (See page 2-11.)

(13) Multi purpose drawer* (See page 2-8.)

*   (1), (2), (4), (6), (11), (12) and (13) are peripheral devices. For description of these devices, see page 1-11.

Interior
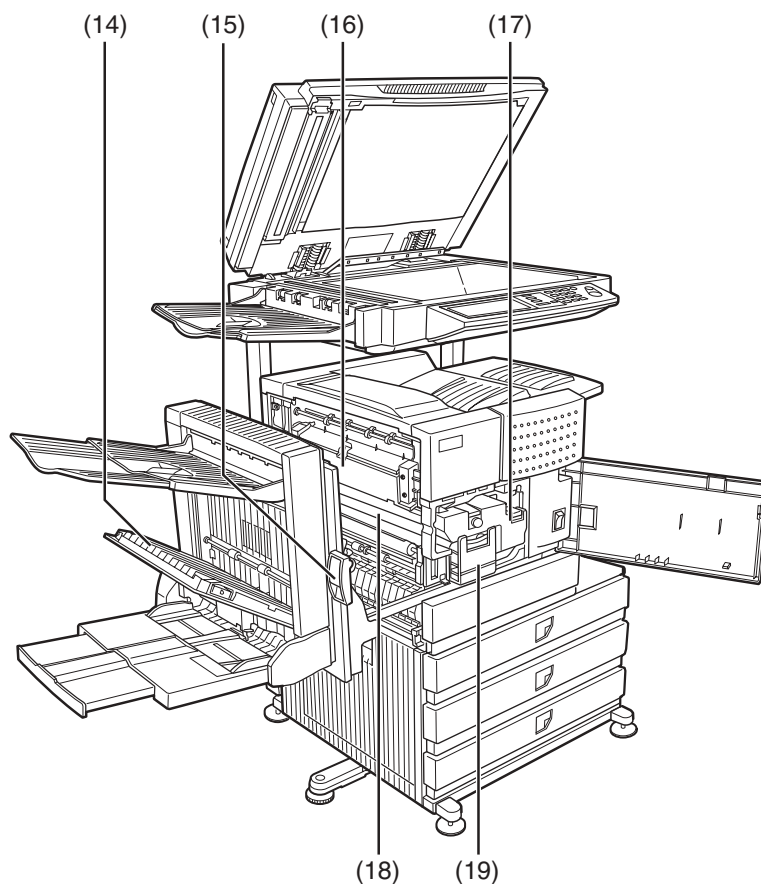
(14) Duplex module side cover

Open when a misfeed has occurred in the duplex module.

(15) Side cover latch

Push up to open the side cover when a misfeed has occurred in the main unit.

(16) Fusing unit

Lift up to open the side cover when a misfeed has occurred in the main unit.

CAUTION
The fusing unit is hot. Take care in removing misfed paper.

(17) Toner cartridge (drum/toner cartridge)

The toner cartridge must be replaced when indicated on the operation panel. (See page 2-15)

(18) Photoconductive drum

Images are formed on the photoconductive drum.

NOTE
Do not touch or damage the photoconductive drum.

(19) Cartridge lock lever

When replacing the drum, toner or developer cartridge, turn down this lever and pull it out.

1-10

Part names and functions of peripheral devices
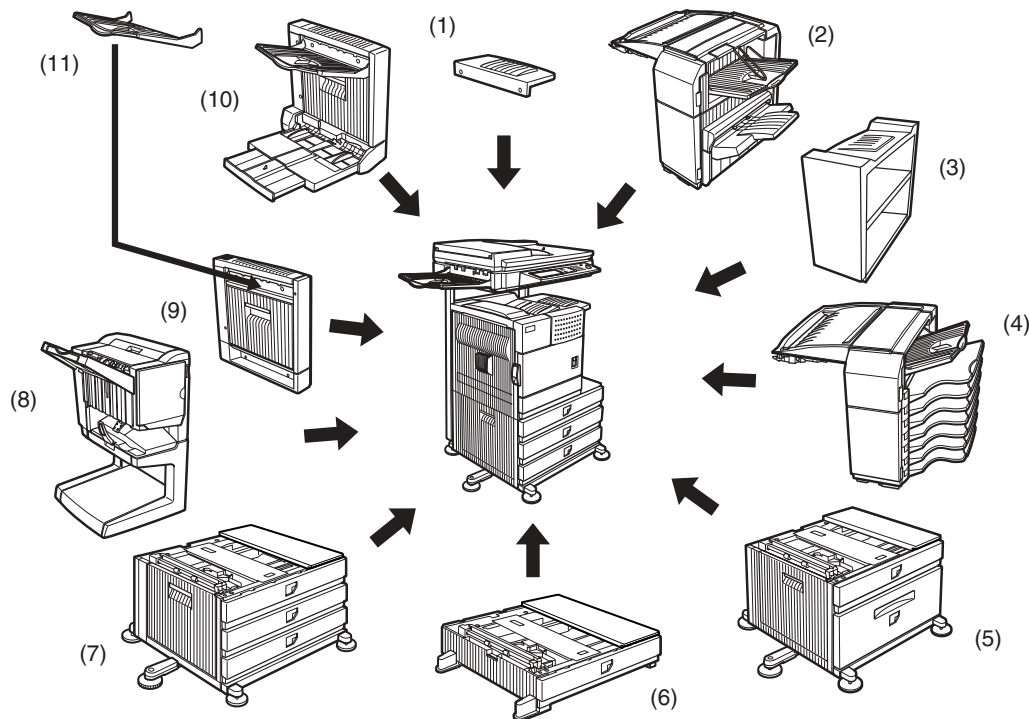
(1) Upper exit tray extension (AR-TE4)

Mount this unit to the upper paper exit tray. This extension is needed to support large size paper.

(2) Finisher (AR-FN6)

Output sheets can either be sorted in page order or grouped by page. Sorted sets or groups are offset stacked for easy separation when removed. Sorted sets can be delivered either stapled or unstapled.

(3) Right output tray (AR-TE5)

Attaches to the output outlet on the right side of the machine.

(4) Mail-bin stacker (AR-MS1)

This unit is an output sorter that has seven receiving bins.

The bin to receive printed output can be selected in the printer driver. Each bin can be assigned to receive printed output by an individual person or by groups of people so that their prints are separated from other users making them easy to retrieve.

When this unit is installed, any copies or facsimile prints will be sent to the top tray and not into the mail bins.

(5) Stand/MPD & 2000 sheet paper drawer (AR-D28)

This paper feed unit contains an upper multi-purpose drawer (see item (6)) and a lower drawer which can hold a maximum of 2000 sheets of 20 lbs. (80 g/m^2) paper.

(6) Multi purpose drawer (AR-MU2)

Up to 500 sheets of 20 lbs. (80 g/m^2) paper can be loaded. Also special papers such as envelopes (standard sizes only) and postcards can be set.

(7) Stand/3 x 500 sheet paper drawer (AR-D27)

This paper feed unit contains an upper multi-purpose drawer (see item (6)) and two lower drawers each of which can hold a maximum of 500 sheets of 20 lbs. (80 g/m^2) paper.

(8) Saddle stitch finisher (AR-FN7)

The saddle stitch finisher can automatically place two staples for centerline binding of paper and fold them along the centerline.

An optional punch module is available for installation into the finisher.

(9) Duplex module (AR-DU3)

An optional duplex module must be installed for automatic two-sided printing.

(10) Duplex module/bypass tray (AR-DU4)

This module is basically the same as (9) above with the addition of a manual bypass paper feed unit.

(11) Exit tray (AR-TE3)

Mounted to the paper output port of a duplex module.

■ Other optional equipment

●**Barcode font kit (AR-PF1)**
This kit adds bar code fonts to the machine.

● **Data security kit (AR-FR21, AR-FR21U)**
This kit is used to erase electronic data from the hard disk and memory immediately after a document is printed or transmitted.

●**PS3 expansion kit (AR-PK6)**
This kit provides compatibility of PostScript level 3 to the printer.

●**Facsimile expansion kit (AR-FX12)**
This kit is required to add fax function.

●**Additional fax memory (8MB) (AR-MM9)**

●**Network scanner expansion kit (AR-NS3)**
This kit is required to add the network scanning feature.

Some peripheral devices cannot be installed together while others may require the installation of one or more others to be functional. See page 8-4, "LIST OF COMBINATION OF PERIPHERAL DEVICES".
Peripheral devices are basically optional, but some are provided as standard equipment for some models.

Operation panel
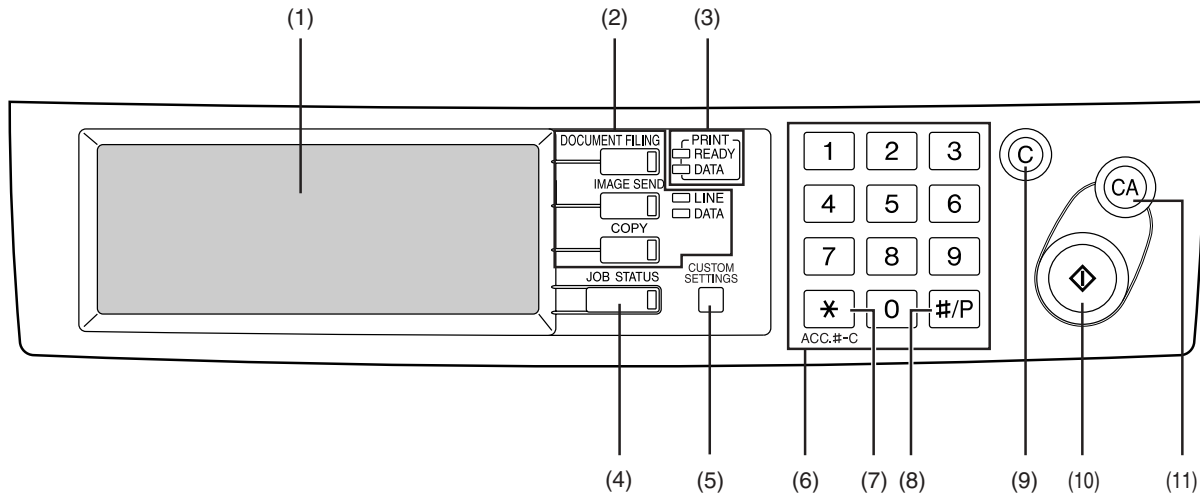
(1) Touch panel

The machine status, messages and touch keys are displayed on the panel. The document filing, copy, network scanner*1, and fax*2 functions are used by switching to the screen for the desired function. See the following page.

(2) Mode select keys and indicators

Use to change modes and the corresponding display on the touch panel.

[DOCUMENT FILING] key

Press to select the document filing mode. (See page 7-5.)

[IMAGE SEND] key/LINE indicator/DATA indicator

Press to change the display to network scanner mode*1 or fax mode*2. (See the "Operation manual (for network scanner)") and "Operation manual (for facsimile)".)

[COPY] key

Press to select the copy mode.

(3) PRINT mode indicators

READY indicator

Print data can be received when this indicator is lit.

DATA indicator

Lights up or blinks when print data is being received. Also lights up or blinks when printing is being performed.

(4) [JOB STATUS] key

Press to display the current job status. (See page 1-15.)

(5) [CUSTOM SETTINGS] key

This is used to store, edit, and delete user names and folder names for the document filing function, and to configure the key operator programs and printer configuration settings. (See page 7-21)

(6) Numeric keys

Use to enter numeric values for various settings.

(7) [✻] key ([ACC.#-C] key)

This key is used in copy mode, document filing mode, network scanner mode*1, and fax mode*2.

(8) [#/P] key

This is used as a program key when using the copy function, and to dial when using the fax function*2.

(9) [C] key (Clear key)

This key is used in copy mode, document filing mode, network scanner mode*1, and fax mode*2.

(10) [START] key

Use this key to start copying in copy mode, scan a document in network scanner mode*1, or scan a document for transmission in fax mode*2.

(11) [CA] key (Clear all key)

This key is used in copy mode, document filing mode, network scanner mode*1, and fax mode*2. Use the key to cancel settings and perform an operation from the initial machine state.

*1 When the network scanner option is installed.
*2 When the fax option is installed.

Touch panel

The touch panel screens shown in this manual are printed images, and may appear different from the actual screens.

■ Using the touch panel

[Example 1]
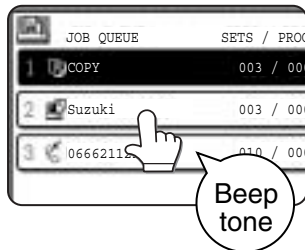
Items on the touch panel are easily selectable by touching the key associated with the item with a finger. Selection of an item will be accompanied with a beep tone* to confirm the item was selected.

Also, the key area for the item will be highlighted for visual confirmation.

* If a grayed out key is touched, double beeps will sound.

[Example 2]
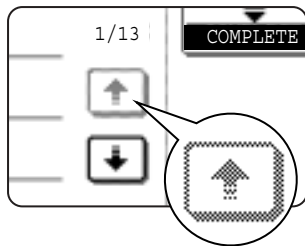
Keys which are grayed out on any screen are not selectable.

The confirmation beeps can be disabled by a key operator program. (See page 10 of the key operator's guide.)

■ Selecting a function

[Example 1]
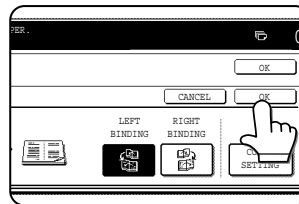
If a key is highlighted in a setting screen at the time the screen appears, the [OK] key can be pressed to store the selection without further operation.

[Example 2]
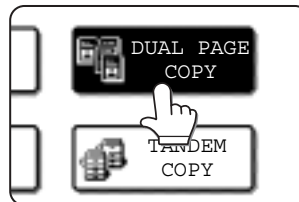
A function in the special functions screen is selected by touching the key so that it is highlighted. To cancel the selection, touch the highlighted key once again.

Copier feature
● Dual page copy
● Job build
● Tandem copy
● Mirror image
● B/W Reverse

[Example 3]
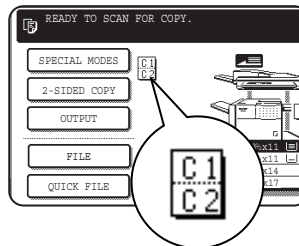
A corresponding icon representing the feature will appear on the touch panel and on the main screen of the mode selected. If this icon is touched, the setting screen of the function (or a menu screen) will appear, allowing the settings to be checked or adjusted and the function to be canceled easily.

1-14

■ Job status screen (common to print, copy, fax, network scan and Internet fax)

This screen is displayed when the [JOB STATUS] key on the operation panel is pressed.
This screen can be used to display the "JOB QUEUE" (showing stored jobs and the current job) or the "COMPLETE" job list (showing finished jobs). This screen can be used to check jobs, interrupt a job in progress to perform another job, and cancel a job.

"JOB QUEUE" screen   (1)   *1   (2)   "COMPLETE" job screen

	JOB QUEUE	SETS / PROGRESS	STATUS	
1	COPY	020 / 001	COPYING	
2	COPY	020 / 000	PAPER EMPTY	
3	Suzuki	020 / 000	WAITING	
4	066211221	002 / 000	WAITING	

JOB QUEUE / COMPLETE   1/1

DETAIL   PRIORITY   STOP/DELETE

JOB QUEUE / COMPLETE   DETAIL   CALL

PRINT JOB   E-MAIL/FTP   FAX JOB   INTERNET-FAX   INTERNET-FAX

(3)   (4)   (5)   (6)   (7)   (8) (9)(10)   (11)
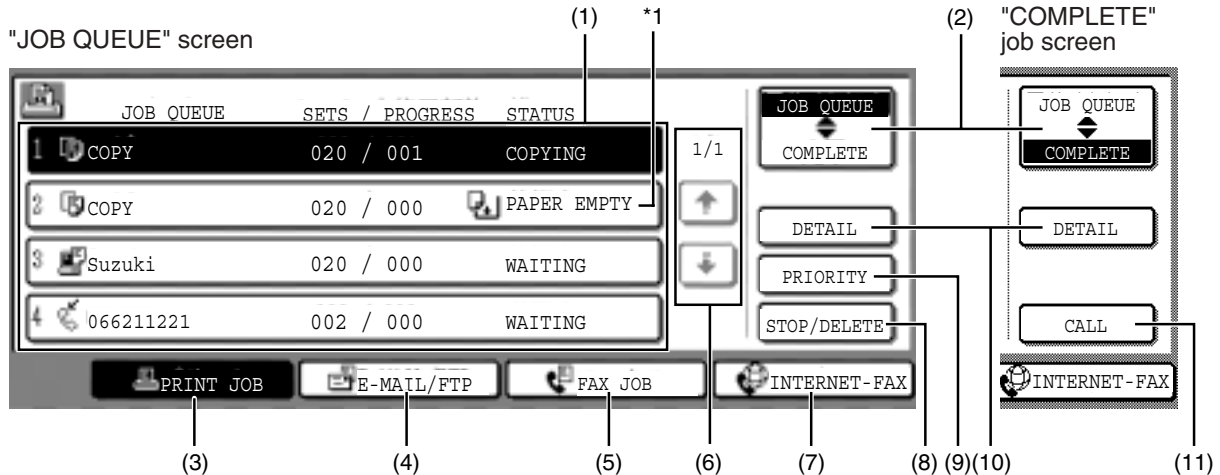
(1) Job list

The displayed jobs in the job list are themselves operation keys. To cancel printing or to give a job the highest print priority, touch the relevant job key to select the job and execute the desired operation using the keys described in (8) and (9).

This shows the current job and the jobs waiting to be run. The icons to the left of the jobs in the queue show the job mode. The document filing reprint job icon is highlighted.

Note that the icon does not become highlighted during retransmission of a fax/image transmission job.

📠	Print mode	🖨	Copy mode

E-MAIL/FTP mode

	Scan to e-mail job		Scan to FTP job
	Scan to Desktop job		

Fax mode

	Fax send job		Fax reception job
	PC-Fax send job		

Internet Fax mode

	i-Fax send job		i-Fax reception job
	PC-Internet Fax send job		

*1 "PAPER EMPTY" in the job status display

When a job status display indicates "PAPER EMPTY", the specified paper size for the job is not loaded in any of the trays.

In this case, the job will be suspended until the required paper is loaded. Other stored jobs will be printed (if possible) until the required paper is loaded. (Other jobs will not be printed if the paper runs out during printing.) If you need to change the paper size because the specified paper size is not available, touch the current job key to select it and then touch the [DETAIL] key described in (10).

(2) Mode select key

This switches the job list display between "JOB QUEUE" and "COMPLETE".

"JOB QUEUE":   Shows stored jobs and the job in progress.
"COMPLETE":   Shows finished jobs.

Files saved using the "FILE" and "QUICK FILE" functions and finished broadcast transmission jobs appear as keys in the finished job screen. The "FILE" or "QUICK FILE" job keys in the finished job screen can be touched, followed by the [CALL] key, to call up a finished job and print or transmit it. A finished broadcast transmission job key can be touched followed by the [DETAIL] key to check the result of the transmission.

1-15

(3) [PRINT JOB] key

This displays the print job list of print mode (copying, printing, fax reception, Internet fax reception, and self printing).

(4) [E-MAIL/FTP] key

This displays the transmission status and finished jobs of scan mode (Scan to e-mail, Scan to FTP, and Scan to Desktop) when the network scanner option is installed.

(5) [FAX JOB] key

This displays the transmission/reception status and finished jobs of fax mode (fax and PC-Fax) when the fax option is installed.

(6) Display switching keys

Use to switch the page of the displayed job list.

(7) [INTERNET-FAX] key

This displays the transmission/reception status and finished jobs of Internet fax mode and PC Internet fax mode when the network scanner option is installed.

(8) [STOP/DELETE] key

Use to cancel or delete the current job or delete the stored job. Note that printing of received faxes and received Internet faxes cannot be canceled or deleted.

(9) [PRIORITY] key

Touch this key after selecting a stored job in this [JOB QUEUE] list to print the job ahead of the other jobs.

Note that a job in progress cannot be interrupted if it is an interrupt copy job or if it is a list print job.

(10) [DETAIL] key

This shows detailed information on the selected job. Files saved using the "FILE" and "QUICK FILE" functions and finished broadcast transmission jobs appear as keys in the finished job screen. A Quick File in the finished job screen or the [Filing] key can be touched, followed by the [CALL] key, to call up a finished job and print or transmit it. A finished broadcast transmission job key can be touched followed by the [DETAIL] key to check the result of the transmission.

(11) [CALL] key

When this key is touched after selecting a job in the COMPLETE job status screen (a job stored using the FILE or QUICK FILE keys of the document filing function), the "JOB SETTINGS" menu screen appears to let you resend or reprint the finished job. (See "Document filing function" on page 7-2.)

1-16

TURNING THE POWER ON AND OFF

Use the power switch on the front of the machine to turn the power on or off.

"ON" position

"OFF" position
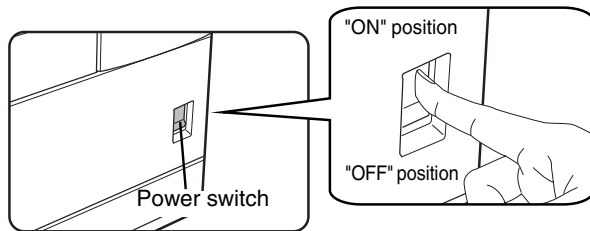
Power switch

CAUTION

Before turning off the main power switch, make sure that the communication and data indicators are not blinking on the operation panel. Turning off the main power switch or unplugging the power cord while the lights are blinking may damage the hard disk and cause the data being stored or received to be lost.

1

NOTES

● Turn both switches off and unplug the power cord if you suspect a machine failure, if there is a bad thunderstorm nearby, or when you are moving the machine.
● If the fax function has been added, always keep the fax power switch turned on. Faxes cannot be received if the fax power switch is turned off. (Faxes can be received when the main power switch is turned off.)

AUDITING MODE

Auditing mode can be enabled to keep track of the number of pages printed and transmitted (scanned) by each account (up to 500 accounts can be established). The page counts can be viewed and totaled as needed.
<This mode is enabled in the key operator programs separately for the copy, printer, fax, Internet fax, network scanner, document filing functions. (Page 7 of the key operator's guide)>

Using the machine when the auditing mode is enabled

The procedure for making copies when auditing mode has been enabled for the copy function is explained below.

NOTES
● When auditing mode is enabled for document filing and fax/image transmission, a message will appear asking you to enter your account number each time you switch to the main screen of one of those functions in the touch panel. Enter your account number in the same way as for copy mode, and then begin the scanning procedure.
● When the account counter is turned on for the printer function, you must enter your account number in the setting screen of the printer driver on your computer in order to print.

When the auditing mode is turned on, the right message appears on the touch panel.

ENTER YOUR ACCOUNT NUMBER.
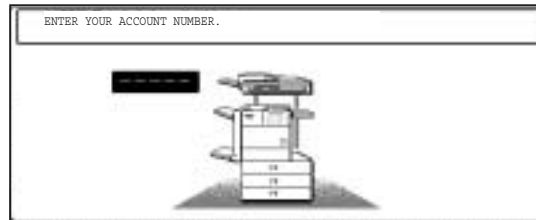
When the above screen appears, enter your 5-digit account number and then begin the copying procedure.

1 **Enter your account number (5 digits) with the numeric keys.**
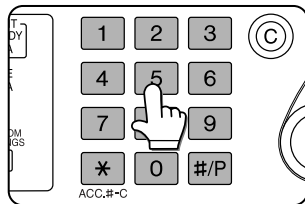
As you enter your account number, the hyphens (-) change to asterisks (✱). If you enter an incorrect digit, press the [C] (Clear) key and re-enter the correct digit.

When a correct account number is entered, the following message will appear.

```
ACCOUNT STATUS  :MADE    /REMAINING
COPIES          :00,123,000/00,012,456

                              OK
```
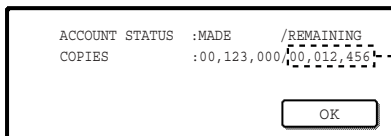
If a limit has been set by a key operator program for the number of copies that can be made by the account, the remaining number that can be made is displayed.

Check the number in the display and touch the [OK] key.

NOTE

If "ACCOUNT NUMBER SECURITY" is enabled in the key operator programs and an incorrect account number is entered three times in a row, "PLEASE SEE YOUR KEY OPERATOR FOR ASSISTANCE." will appear. (Page 8 of the key operator's guide.) Operation is not possible while this message appears (about one minute).

---

2 **Follow the appropriate steps to perform the copy job.**

When copying is begun, the following message will appear.

```
READY TO SCAN FOR COPY.

PRESS [ACC.#-C] WHEN FINISHED.
```

To perform an interrupt copy job (page 5-43), touch the [INTERRUPT] key and then enter your account number as explained in step 1. The following message will appear.

```
COPY INTERRUPT MODE.

READY TO SCAN FOR COPY.
```

3 **When the copy job is finished, press the [✱] key ([ACC.#-C] key)**
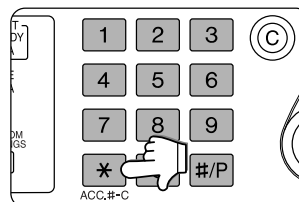
CHAPTER 2

MANAGING THE MACHINE

This chapter explains how to load paper, replace the toner cartridge, and remove paper misfeeds. It also contains information about supplies.

LOADING PAPER

If the paper runs out during printing, a message will appear in the display.
Follow the procedure below to load paper.

> **NOTES**
> ● Do not use curled or folded paper. Doing so may cause a misfeed.
> ● For best results use paper supplied by SHARP. (See page 2-4.)
> ● When you change the paper type and size in paper tray 1, set the paper type and size referring to "Setting the paper type and paper size" (page 2-5).
> ● Do not place heavy objects or press hard on any tray which is pulled out.
> ● Load paper with the print side face up. However, when the paper type is set to "PRE-PRINTED", "PRE-PUNCHED" or "LETTER HEAD", load the paper face down*.
>   * If the two-sided function is disabled using "DISABLING OF DUPLEX" in the key operator programs (page 11 of the key operator's guide), load the paper face up.

Loading paper in paper tray 1

1 Pull out paper tray 1.
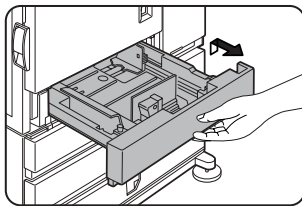
Gently pull the tray out until it stops.

2 Load paper into the tray.
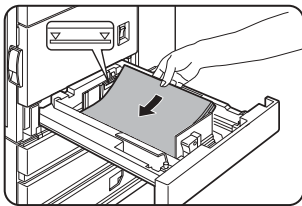
Do not load paper above the maximum height line (approximately 500 sheets of 20 lbs. (80 g/m²) paper).

3 Gently push tray 1 into the machine.

Push the tray firmly all the way into the machine.

4 Set the paper type.

If you change the paper type setting if the paper type is changed in either paper tray, refer to "Setting the paper type and paper size" (page 2-5).

5 Loading paper in paper tray 1 is now complete.

Changing the paper size in paper tray 1

For paper tray 1, 8-1/2" x 11", A4 or B5 size paper can be set. Use the following procedure to change the size as needed.

1 Pull out paper tray 1.

If paper remains in the tray, remove it.

2 Adjust the guide plates A and B in the tray to the length and width of the paper.
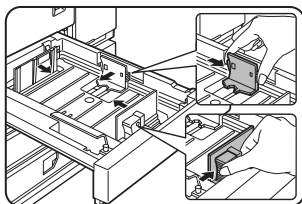
The guide plates A and B are slidable. Adjust them to the paper size to be loaded while squeezing their lock levers.

3 Load paper into the tray.

4 Gently push tray 1 into the machine.

Push the tray firmly all the way into the machine.

5 Set the paper size.

Be sure to set the paper size and paper type referring to "Setting the paper type and paper size" (page 2-5).
If this is not done, paper misfeeds will occur.

6 Changing paper size in paper tray 1 is now complete.

Specifications of paper trays

The specifications for types and sizes of paper that can be used in each tray are shown below.

Tray		Tray No. (tray name)	Applicable paper types		Applicable paper sizes	Paper weight
Paper tray 1		Tray 1	Plain paper (Refer to the next page for applicable plain papers.)		● 8-1/2" x 11", A4, B5	16 to 28 lbs. or 60 to 105 g/m2
Multi purpose drawer /bypass tray		Tray 2 /bypass tray	Plain paper (Refer to the next page for applicable plain papers.)		● If "AUTO-INCH" is selected in setting the paper type and paper size (page 2-5), the following paper sizes can be used with the automatic detection function: 11" x 17", 8-1/2" x 14", 8-1/2" x 11", 8-1/2" x 11"R, 7-1/4" x 10-1/2", 5-1/2" x 8-1/2"R ● If "AUTO-AB" is selected in setting the paper type and paper size (page 2-5), the following paper sizes can be used with the automatic detection function: A3, B4, A4, A4R, B5, B5R, A5R, 8-1/2 x 13" ● Non-standard sizes	16 to 34 lbs. or 60 to 128 g/m2
			Special paper (Refer to the next page for applicable special papers.)	● Thick paper ● Labels, transparency film	● If "AUTO-INCH" is selected in setting the paper type and paper size (page 2-5), the following paper sizes can be used with the automatic detection function: 8-1/2" x 11", 8-1/2" x 11"R ● If "AUTO-AB" is selected in setting the paper type and paper size (page 2-5), the following paper sizes can be used with the automatic detection function: A4, A4R, B5, B5R ● Non-standard sizes	See the remarks for special paper on the next page.
				Postcard	● Japanese official postcard	
			Envelopes can only be fed from the multi-purpose drawer. Applicable stock weight for envelopes is 20 to 23 lbs. or 75 to 90 g/m2.		● Applicable standard size envelopes: COM-10, Monarch, DL, C5, ISO B5 CHOKEI 3 ● Non-standard size	
Stand /3 x500 sheet paper drawer	Upper	Tray 2	Same as multi purpose drawer			
	Middle	Tray 3	Plain paper (Refer to the next page for applicable plain papers.)		● If "AUTO-INCH" is selected in setting the paper type and paper size (page 2-5), the following paper sizes can be used with the automatic detection function: 11" x 17", 8-1/2" x 14", 8-1/2" x 11", 8-1/2" x 11"R, 7-1/4" x 10-1/2" ● If "AUTO-AB" is selected in setting the paper type and paper size (page 2-5), the following paper sizes can be used with the automatic detection function: A3, B4, A4, A4R, B5, B5R, 8-1/2" x 13"	16 to 28 lbs. or 60 to 105g/m2
	Lower	Tray 4				
Stand /MPD & 2000 sheet paper drawer	Upper	Tray 2	Same as multi purpose drawer			
	Lower	Tray 3	Plain paper (Refer to the next page for applicable plain papers.)		● 8-1/2" x 11", A4	16 to 28 lbs.or 60 to 105g/m2

2

■ Applicable plain paper

For satisfactory results, plain paper must conform to the following requirements.

	Paper in AB system	Paper in inch system
	A5 to A3	5-1/2" x 8-1/2" to 11"x17"
Plain paper	16 to 28 lbs. or 60 to 105 g/m^2	
Recycled, colored, pre-punched, pre-printed and letterhead papers must conform to the same conditions as above.		

■ Applicable special paper

For satisfactory results, special paper must conform to the following requirements.

	Type	Remarks
Special paper	Thick paper	● For 5-1/2" x 8-1/2" to 8-1/2" x 11" or A5 to A4 sizes, thick paper ranging from 16 to 34 lbs. or 60 to 128 g/m^2 can be used. ● For sizes larger than 8-1/2" x 11" or A4, thick paper ranging from 16 to 28 lbs. or 60 to 105 g/m^2 can be used. ● Other thick papers Index stock (65 lbs. or 176 g/m^2) can be used. Cover stock (110 lbs. or 200 to 205 g/m^2) can be used but only for 8-1/2 x 11, A4 paper in the portrait orientation. ● For 5-1/2" x 8-1/2" or A5 paper, the orientation must be landscape.
	Transparency film, labels, and tracing paper	● Use SHARP recommended paper. Do not use labels other than SHARP recommended labels. Doing so may leave adhesive residue in the machine, causing paper misfeeds, smudges on prints or other machine trouble.
	Postcards	● Japanese official postcards can be used.
	Envelopes	● Applicable standard envelopes: COM-10, Monarch, DL, C5, ISO B5, CHOKEI 3 ● Envelopes can only be fed from the tray 2. Applicable paper stock weight for envelopes is 20 to 23 lbs. or 75 to 90 g/m^2.

■ Paper that can be used for automatic two-sided printing

Paper used for automatic two-sided printing (paper that can be fed through the duplex module) must meet the following conditions:

Paper type   :Plain paper as specified above.
Paper size   :Must be one of the following standard sizes: 11" x 17", 8-1/2" x 14", 8-1/2" x 13", 8-1/2" x 11", 8-1/2" x 11"R or 5-1/2" x 8-1/2"R (A3, B4, A4, A4R, B5, B5R or A5R)
Paper weight :16 to 28 lbs. (64 to 105 g/m^2)

NOTES

● Special papers (explained above) cannot be used for automatic two-sided printing.
● Various types of plain paper and special paper are sold. Some of these cannot be used in the machine. Please consult your retailer or your dealer when buying paper.
● The image quality and toner fusibility of special papers may change due to ambient conditions, operating conditions, and paper characteristics, resulting in image quality inferior to that of SHARP standard paper.

Setting the paper type and paper size

Follow these steps to change the paper type setting if the paper type is changed in either paper tray. For the paper types that can be used in each tray, see page 2-3.

1 Press the [CUSTOM SETTINGS] key.
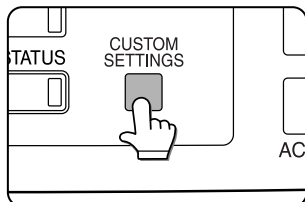
The custom setting menu screen will appear.

2 Touch the [PAPER TRAY SETTINGS] key.
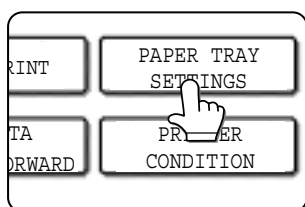
The paper tray selection screen will appear.

3 Touch the [TRAY SETTINGS] key.
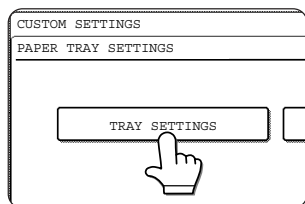
4 Display the setting screen of the desired paper tray.
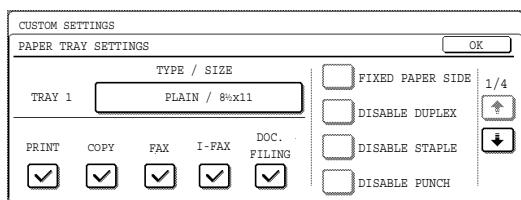
Touch the ⬆ key or ⬇ key to display the setting screen of the desired paper tray.

NOTE

To automatically switch to a tray with the same size and type of paper (if there is one) in the event that the paper tray runs out of paper, display the last screen with the ⬇ key and select [AUTO TRAY SWITCHING].

5 Touch the [TYPE / SIZE] key.
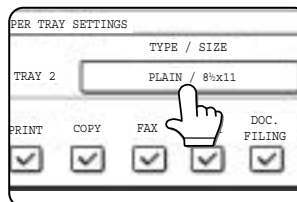
6 Select the type of paper that was loaded in the tray.

Example: The paper type of tray 2 is selected
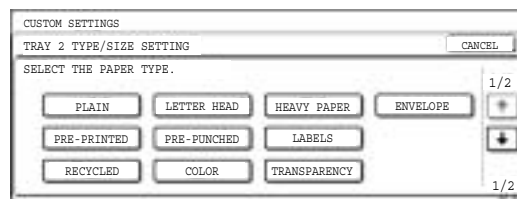
Touch the desired paper type to select it. The paper size setting screen will appear.

NOTE

Heavy paper, label sheets and transparency film cannot be used in trays 1, 3, and 4. Envelopes can only be placed in tray 2.

■ **User type**

Set a user type when a paper type is not available as an option. To select a user type, touch the ⬇ key in the screen of step 6 to display the user type selection screen. To store or edit a user type name or set tray attributes, see "Programming and editing paper types" on page 2-7.

2

2-5
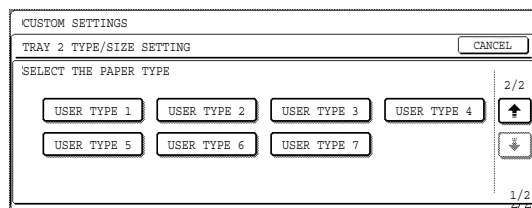
7 Select the size of paper that was loaded in the tray.

Touch the appropriate keys (checkboxes).

```
CUSTOM SETTINGS
TRAY 2 TYPE/SIZE SETTING              [TYPE]   [OK]

   TYPE                 SIZE           [POST]
                              ┌ 11X17,8½X14,8½X11
  PLAIN      [AUTO-INCH]      └ 8½X11R,7¼X10½,5½X8½R
                              ┌ A3,A4,A4R,A5R,B4,B5
             [AUTO-AB]        └ B5R,216X330(8½X13)

         [SIZE INPUT]  X17  Y11  ☐ NON STANDARD
                                   SIZE
                                                    2/2
```
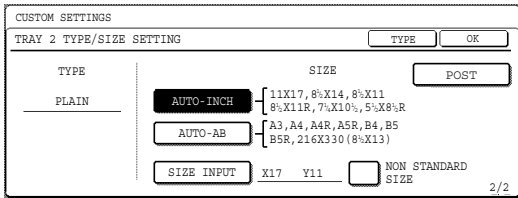
[AUTO-INCH] key   : Select when you have loaded an inch-based size of paper.

[AUTO-AB] key   : Select when you have loaded an AB size of paper.

[SIZE INPUT] key : Select to directly enter a paper size (see page 2-6).

[NON STANDARD SIZE] checkbox : Select when you have loaded a non-standard size of paper (see page 2-6).

[POST] key   : Select this when you have loaded postcards.

NOTE

Sizes that can be selected vary depending on the selected paper type.

8 Touch the [OK] key in the size setting screen.

You will return to the tray setting screen of step 4.

9 Select output functions that can be used with the selected tray.

```
PRINT  COPY  FAX  I-FAX  DOC.
                         FILING
 ☑     ☑     ☑    ☑      ☑
```
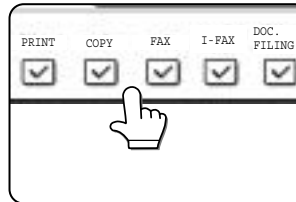
Touch the checkboxes under the desired items to select them.
Checkboxes that can be selected will vary depending on the options that are installed.

10 Configure paper settings for each tray and then touch the [OK] key to exit.

NOTE

The type and size of paper loaded in the bypass tray can also be set from the paper selection screen. Touch the [PAPER SELECT] key at the top of the base screen to display the paper selection screen, touch the [PAPER SELECT] key for the bypass tray, and then go to step 6.

Setting the paper size when a special size is loaded

NOTE

Special sizes of paper cannot be loaded in trays 1, 3 and 4.

Tray 2 and the bypass tray

1 Perform steps 1 through 6 of "Setting the paper type and paper size" (see page 2-5).

2 Touch the [SIZE INPUT] key and then touch the [INCH] tab.

```
            [OK]
 Y
  [X]  [17] (5 1/2~17)
            inch
  [Y]  [11] (5 1/2~11 5/8)
            inch
  AB           INCH
```
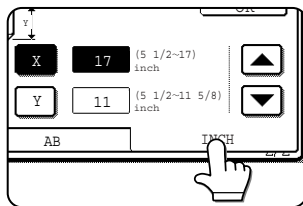
The size entry palette appears.

3 Touch the ▲ key or the ▼ key to enter the X (width) and Y (length) dimensions of the paper.

```
            [OK]
 Y
  [X]  [17] (5 1/2~17)  ▲
            inch
  [Y]  [11] (5 1/2~  ▼
            inch
  AB           INCH
```
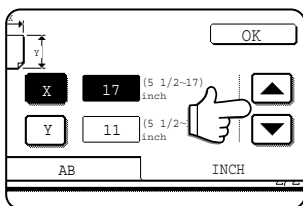
Entry of the X dimension (width) is initially selected. Touch the [Y] key and enter the Y dimension (length) in the same way as the X dimension.

4 Touch the [OK] key.

```
            [OK]
 Y
  [X]  [17] (5 1/2~17)
            inch
  [Y]  [11] (5 1/2~11 5/8) ▼
            inch
  AB           INCH
```
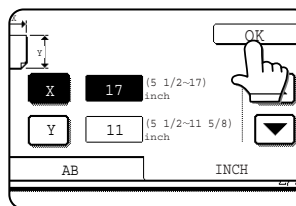
You will return to the size setting screen of step 2.

5 If the paper is a non-standard size, select the [NON STANDARD SIZE] checkbox.

```
 ┌ 11X17,8½X14,8½X11
 └ 8½X11R,7¼X10½,5½X8½R
 ┌ A3,A4,A4R,A5R,B4,B5
 └ B5R,216x330(8½X13)

X17  Y11½  ☐ NON STANDARD
              SIZE
```
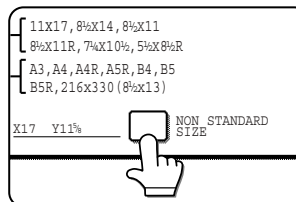
6 Perform steps 8 through 10 of "Setting the paper type and paper size" (See page 2-6).

Programming and editing paper types

To program or edit the name of a paper type or set paper attributes, follow the steps below.

1 Follow steps 1 and 2 of "Setting the paper type and paper size" (page 2-5)

2 Touch the [PAPER TYPE REGISTRATION] key.

```
                                    OK

            PAPER TYPE REGISTRATION
```
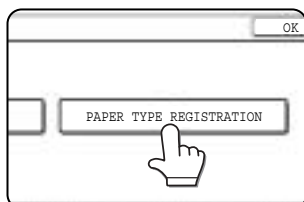
3 Select the paper type that you wish to program or edit.

```
CUSTOM SETTINGS
TRAY 2 TYPE/SIZE SETTING
SELECT THE PAPER TYPE

 USER TYPE 1    USER TYPE 2    USE

 USER      5    USER TYPE 6    USE
```

4 Touch the [TYPE NAME] key.

```
PAPER TYPE REGISTRATION
No.01
   TYPE NAME   USER TYPE 1

           PAPER SIDE        DISA

   DISABLE STAPLE            DISA
```
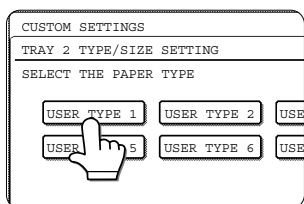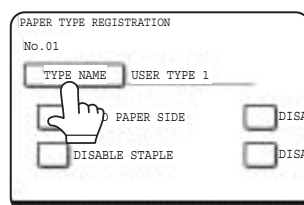
A character entry screen appears.
Enter a type name (maximum of 14 characters). (See page 7-26 to enter characters.)

5 Set the attributes of the paper tray.

```
PAPER TYPE REGISTRATION
No.01
   TYPE NAME   USER TYPE 1

   FIXED PAPER SIDE          DISA

   DISABLE STAPLE            DISA
```
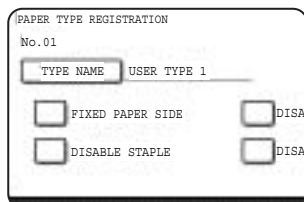
Touch the checkboxes to the left of the items to select them.

"FIXED PAPER SIDE" : Select when paper is to be loaded print side down in the tray. Make sure a checkmark does not appear when paper is to be loaded print side up.
• If the two-sided function is prohibited in "DISABLING OF DUPLEX" in the key operator programs (page 11 of the Key operator's guide), do not use this setting.

"DISABLE DUPLEX" : Prohibits two-sided printing. Enable when the back side of the paper cannot be printed on.

"DISABLE STAPLE" : Prohibits stapling. Enable when using special papers such as transparency film and label sheets.

"DISABLE PUNCH" : Prohibits punching. Enable when using special papers such as transparency film and label sheets.

NOTE
"FIXED PAPER SIDE" and "DISABLE DUPLEX" cannot be simultaneously enabled.

6 Touch the [EXIT] key to exit the programming/editing procedure.

```
                    CANCEL    EXIT


   DISABLE DUPLEX

   DISABLE PUNCH
```
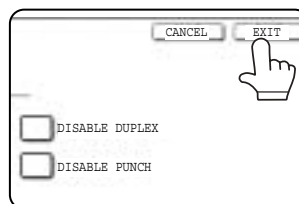
2

Loading paper in the multi purpose drawer

The method of loading paper into the multipurpose drawer is the same as for paper tray 1 described on page 2-2. For specifications of paper, see page 2-3. When loading envelopes, postcards or transparency film, follow the descriptions below.

● Two maximum height lines are indicated: one for plain paper and one for special paper.

Maximum height line for plain paper
Do not exceed this line when loading plain paper.

Maximum height line special paper (red line)
Do not exceed this line when loading special paper.
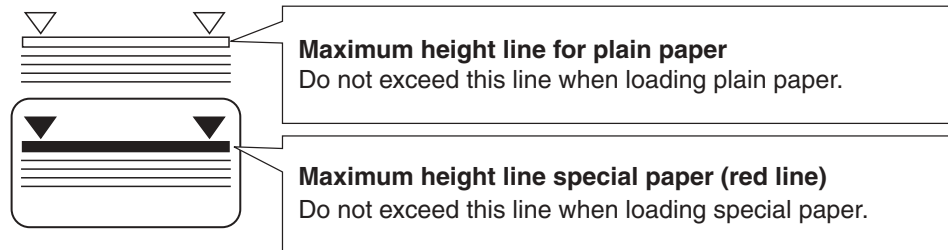
■ How to change the paper size

To change the paper size or paper type when paper is loaded into the multi purpose drawer, refer to page 2-5 for details.

■ Setting envelopes or postcards

When setting envelopes or postcards in the multi purpose drawer, set them in the orientation shown below.

Loading postcards

Load postcards print side up to the rear left of the tray as shown.
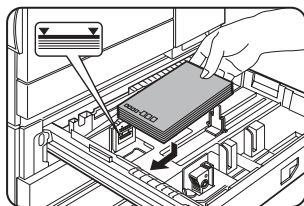
Loading envelopes

Envelopes can only be printed on the address side. Be sure to place envelopes with the address side up and the top of the envelope to the rear.
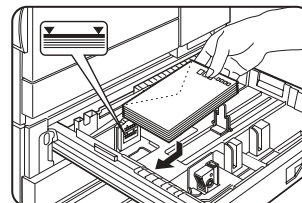
Printing onto envelopes or postcards

● Attempting to print onto both sides of envelopes or postcards may result in misfeeds or poor prints.
● Do not use paper that has already been printed on by a thermal transfer or inkjet printer. In particular, paper that has been printed on by a thermal transfer printer (such as a word processor that uses a cassette) may cause missing characters and smudges.
● To avoid wrinkling, misfeeds or poor printing, make sure the postcard or envelopes stock is not curled.

2-8

Printing onto envelopes

● Do not use envelopes that have metal clasps, plastic snaps, string closures, windows, linings, self-adhesive patches or synthetic materials. Attempting to print on these may cause misfeeds, inadequate toner adherence or other trouble.
● Creases or smudging may occur. This is especially true of embossed surfaces and other irregular surfaces.
● Under high humidity and temperature conditions the glue flaps on some envelopes may become sticky and be sealed closed when printed.
● Use only envelopes which are flat and crisply folded. Curled or poorly formed envelopes may be poorly printed or may cause misfeeds.

2

Fusing unit pressure adjusting levers

When feeding envelopes from the multi purpose drawer, damage to the envelopes or smudges on prints may occur even if envelopes within specification are used. In this case, the problem may be reduced by shifting the fusing unit pressure adjusting levers from the normal position to the lower pressure position. Follow the procedure below.

> **NOTE**
>
> Be sure to return the lever to the normal position when finished feeding envelopes. If not, inadequate toner adherence, paper misfeeds or other trouble may occur.

1 Unlatch the duplex module and slide it to the left.
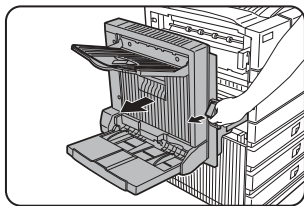
Unlatch the module and gently move the module away from the machine. If the machine is not equipped with a duplex module, open the side cover similarly.

3 Gently close the duplex module.
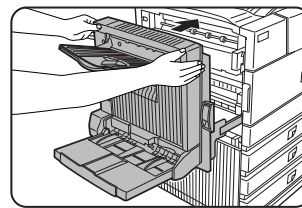
If the machine is not equipped with a duplex module, close the side cover.

2 Lower the two fusing unit pressure adjusting levers marked A and B in the illustration.

Normal position

Lower pressure position
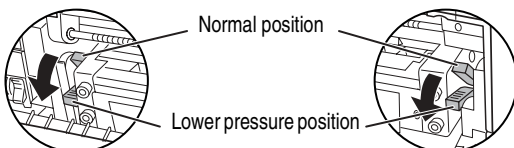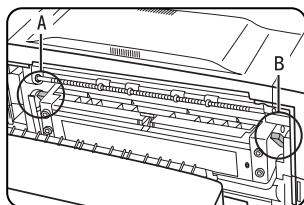
A: Rear side of fusing unit

B: Front side of fusing unit

■ Loading transparency film

Be sure to load the transparency film with the white label side up. Make sure no image will be printed on the label. Printing on the label may cause smudges on prints. Transparency film must be set in the portrait orientation.

Specifications (multi purpose drawer)

Name	Multi purpose drawer
Paper size/weight	See specifications of paper trays on page 2-3.
Paper capacity	500 sheets (20 lbs. (80 g/m^2)) of paper, 40 envelopes, 40 postcards, 40 sheets of transparency film
Dimensions	25-3/4" (W) x 22-21/64" (D) x 5-43/64" (H) (654 mm (W) x 567 mm (D) x 144 mm (H))
Weight	Approximately 24.3 lbs. or 11 kg

Specifications are subject to change for improvement without notice.

Loading paper in the stand/3 x 500 sheet paper drawer

Upper paper tray:
The upper tray is the same as the multi-purpose drawer. Use the upper tray according to the instructions for the multi-purpose drawer on page 2-8.

Middle and lower paper trays:
Up to 500 sheets of SHARP recommended plain paper can be loaded in these trays. The method of loading paper is the same as for paper tray 1 in the main unit. See the description (page 2-2).

NOTE

If the paper size or paper type is changed in either paper tray, the tray settings must be changed in custom settings. Refer to "Setting the paper type and paper size" on page 2-5.

Specifications (stand/3 x 500 sheet paper drawer)

Name	Stand/3 x 500 sheet paper drawer
Paper size/weight	See specifications of paper trays on page 2-3.
Paper capacity (ordinary paper)	500 sheets (20 lbs. (80 g/m^2) each
Dimensions	24-3/8" (W) x 26-5/32" (D) x 15-29/32" (H) (619 mm (W) x 664 mm (D) x 404 mm (H))
Weight	Approximately 70.6 lbs. or 32.9 kg

Loading paper in the stand/MPD & 2000 sheet paper drawer

Upper paper tray:

The upper paper tray is equivalent to the multi purpose drawer. The method of loading paper and the paper that can be used are the same as for the multi purpose drawer. Refer to the description of the multi purpose drawer (see page 2-8).

Lower paper tray:

The lower paper tray is a large capacity tray that holds 2,000 sheets of 8-1/2" x 11" or A4 paper (20 lbs. (80 g/m^2)). Use the following procedure to load paper in the large capacity tray.

2

> **NOTE**
>
> If the paper size or paper type is changed in either paper tray, the tray settings must be changed in custom settings. Refer to "Setting the paper type and paper size" on page 2-5.

1 **Pull out the large capacity tray.**

Gently pull the tray out until it stops.

2 **Load paper onto the right and left paper feed tables.**
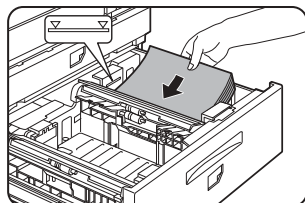
Load paper onto the right paper feed table. The right table holds approximately 1,200 sheets.
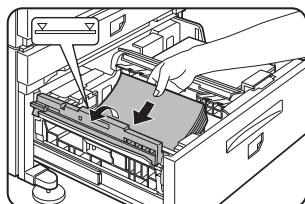
Raise the paper guide and load paper onto the left paper feed table. The left table holds approximately 800 sheets. After loading paper, be sure to return the paper guide.

3 **Gently push the large capacity paper tray into the machine.**

Push the tray firmly all the way into the machine.

4 **Set the paper type.**

If you have changed the paper size from the AB system to the inch system or vice versa, select the relevant type referring to "Setting the paper type and paper size" on page 2-5.

5 **Loading paper in the stand/MPD & 2000 sheet paper drawer is now complete.**

Specifications (stand/MPD & 2000 sheet paper drawer)

Name	Stand/MPD & 2000 sheet paper drawer
Paper size/weight	See specifications of paper trays on page 2-3.
Paper capacity (ordinary paper)	Upper tray: 500 sheets (20 lbs. (80 g/m^2)), Lower tray: 2,000 sheets (20 lbs. (80 g/m^2))
Dimensions	24-3/8" (W) x 26-5/32" (D) x 15-29/32" (H) (619 mm (W) x 664 mm (D) x 404 mm (H))
Weight	Approximately 75 lbs. or 34 kg

2-11

CUSTOM SETTINGS

The items that can be set with the custom settings are shown below.

- Total count . . . . The number of pages processed by the machine and optional equipment can be displayed. (See page 2-14)
- Default settings . . . . Used to configure the screen contrast, date and time, and keyboard selection*1 settings. (See page 2-14)
- List print . . . . Used to print lists of settings and fonts. (See page 2-14)
- Paper tray settings . . . . The paper type, paper size and automatic tray switching can be set for each tray. Automatic tray switching allows feeding to switch between trays loaded with the same type and size of paper. If one tray runs out of paper during printing, printing will continue from the other tray. (See page 2-14)

For the detailed descriptions and use of the settings listed below, see the fax, network scanner, and printer manuals.

- Address control*1 . . . . Used to store information for various functions.
- Sender control*2 . . . . Used to program the sender's information that appears on your Scan to E-mail transmissions at the destination.
- Fax data*1 receive/forward . . . . . . Faxes received to memory and received Internet faxes can be forwarded to another destination.
- Printer condition . . . . Used to configure default settings for the printer function (see the Operation manual (for printer)).

- Document filing control . . . . Used to configure default settings for the document filing function. (pages 7-21 to 7-25)
- Key operator programs . . . . These are programs that are used by the key operator (administrator of the machine) to configure machine settings. A key appears for these settings in the custom settings menu screen. For information on these settings, see the key operator's guide.

*1 These settings can be configured in a system where the facsimile or network scanner function is available.
*2 These settings can be configured in a system where the network scanner function is available.

General procedure for custom settings

1 **Press the [CUSTOM SETTINGS] key.**
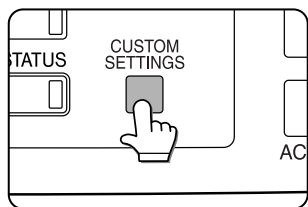
The custom settings menu screen will appear.

2 **Touch the key of the desired item to display its setting screen.**

The example of selecting the [DEFAULT SETTINGS] key and then the [CLOCK] key is explained below.
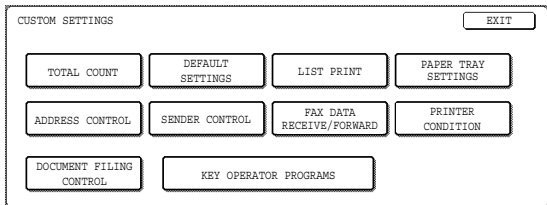
Detailed descriptions for program settings start on the next page.

3 **Touch the [CLOCK] key.**

Touch the [CLOCK] key and then the following screen appears.
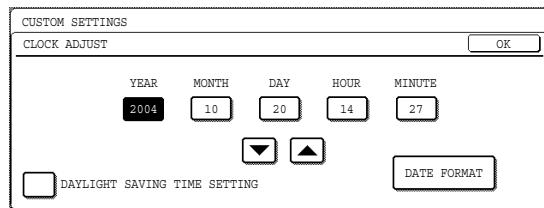
4 **Touch the year, month, day, hour or minute key, and then use the ▲ or ▼ key to adjust the setting.**

- If you select a non-existent date (for example, Feb. 30), the [OK] key will gray out to prevent entry of the date.
- Select [DAYLIGHT SAVING TIME SETTING] checkbox to have the time automatically change at the beginning and end of daylight saving time.

5 **Touch the [DATE FORMAT] key.**

The following screen appears.

```
CUSTOM SETTINGS

DATE FORMAT                              [ OK ]

               2004/10/20/MON 14:27

 ┌───────────┐  ┌─┐   DAY-NAME
 │ YYYY/MM/DD│  │/│   POSITION
 └───────────┘  └─┘  ┌─────────┐  ┌─────────┐
 ┌───────────┐  ┌─┐  │  FIRST  │  │ 12-HOUR │
 │ MM/DD/YYYY│  │.│  └─────────┘  └─────────┘
 └───────────┘  └─┘  ┌─────────┐  ┌─────────┐
 ┌───────────┐  ┌─┐  │  LAST   │  │ 24-HOUR │
 │ DD/MM/YYYY│  │-│  └─────────┘  └─────────┘
 └───────────┘  └─┘
                ┌─┐
                │ │
                └─┘
```

6 **If you wish to change the format of the date and time, touch the desired format keys.**

Touched keys are highlighted.
The selected format is applied to lists printed out in "LIST PRINT".

7 **Touch the [OK] key.**

```
              ┌────────┐
              │   OK   │
              └────────┘


──────────────────────────────
ME
ON
┐         ┌─────────┐
│         │ 12-HOUR │
┘         └─────────┘
```

You will return to the date and time setting screen.

8 **Touch the [OK] key.**

9 **To exit the settings, touch the [EXIT] key.**

```
CUSTOM SETTINGS                              [ EXIT ]

 ┌───────────┐ ┌──────────┐ ┌──────────┐ ┌──────────┐
 │TOTAL COUNT│ │ DEFAULT  │ │LIST PRINT│ │PAPER TRA │
 │           │ │ SETTINGS │ │          │ │ SETTINGS │
 └───────────┘ └──────────┘ └──────────┘ └──────────┘
 ┌───────────┐ ┌──────────┐ ┌──────────┐ ┌──────────┐
 │  ADDRESS  │ │  SENDER  │ │ FAX DATA │ │ PRINTER  │
 │  CONTROL  │ │ CONTROL  │ │RECEIVE/  │ │CONDITION │
 │           │ │          │ │FORWARD   │ │          │
 └───────────┘ └──────────┘ └──────────┘ └──────────┘
 ┌───────────┐ ┌──────────────────────┐
 │ DOCUMENT  │ │ KEY OPERATOR PROGRAMS │
 │  FILING   │ │                       │
 │  CONTROL  │ │                       │
 └───────────┘ └──────────────────────┘
```
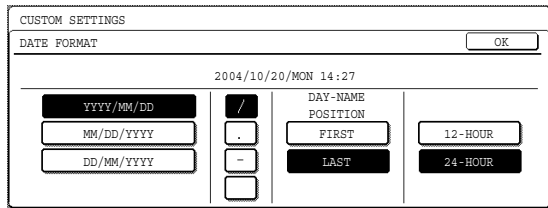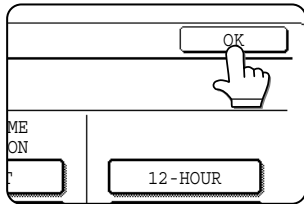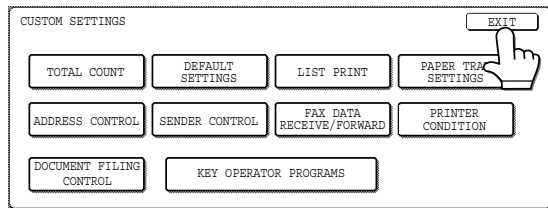

More information on setting procedures

In the following type of screen, a setting is selected by touching the key so that a checkmark (☑) appears. The settings below are configured to allow use of tray 1 in print, copy, and fax modes. To display the next screen, touch the 🔼 or 🔽 keys.

```
CUSTOM SETTINGS

PAPER TRAY SETTINGS                          [ OK ]

              TYPE / SIZE        ┌─┐
 ┌──────┐ ┌───────────────────┐ │ │ FIXED PAPER SIDE   1/4
 │TRAY1 │ │  PLAIN / 8½X11     │ └─┘                   ┌─┐
 └──────┘ └───────────────────┘ ┌─┐ DISABLE DUPLEX    │▲│
                                │ │                   └─┘
                 DOC.           └─┘                   ┌─┐
 PRINT  COPY  FAX  I-FAX  FILING ┌─┐ DISABLE STAPLE   │▼│
 ┌─┐   ┌─┐   ┌─┐   ┌─┐   ┌─┐    │ │                   └─┘
 │☑│   │☑│   │☑│   │ │   │ │    └─┘
 └─┘   └─┘   └─┘   └─┘   └─┘    ┌─┐ DISABLE PUNCH
                                │ │
                                └─┘
```
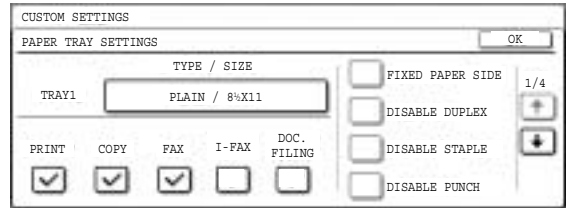
2

About the settings

■ Total count

This displays the following sheet counts (the counts that can be displayed vary depending on the options installed):

(1) Number of pages output by the machine.
(2) Number of original pages transmitted by the machine.
(3) Number of times the automatic document feeder was used to feed original pages and number of times the stapler was used (if installed).
(4) Number of pages stored by document filing.

In the case of (1) only,

● 11" x 17" (A3) size paper is counted as two sheets.
● Each sheet of paper used for automatic two-sided copying is counted as two sheets (11" x 17" (A3) paper is counted as four sheets).
● Paper with an entered size of 15-1/8" (384 mm) or larger is counted as two sheets (four sheets during automatic two-sided copying).

## ■ Default settings

The following settings can be configured:

● Display contrast
Screen contrast adjustment is used to make the LCD touch panel easier to view under various lighting conditions. Touch the [LIGHTER] key to make the screen lighter, or the [DARKER] key to make the screen darker.

● Clock
Use this to set the date and time in the machine's built-in clock. This clock is used by functions that require date and time information.

● Keyboard select
The layout of the keyboard that appears in letter entry screens can be changed.
Select the arrangement of the letter keys that you find easiest to use.

The following three alphabet keyboard configurations are available:

● Keyboard 1 (QWERT... configuration)*
● Keyboard 2 (AZERTY...configuration)
● Keyboard 3 (ABCDEF...configuration)
 * The default setting is "Keyboard 1".

(Example: Character entry screen when Keyboard 3 is selected)
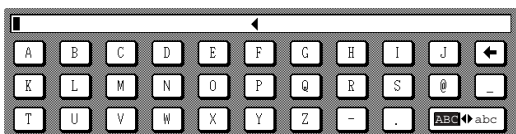
■ List print

This is used to print lists of machine settings and a test page to check resident fonts.
The following lists and pages are available:

● All custom setting list
Shows the hardware status, software status, printer configuration settings, tray settings, and counts.

● Printer test page
Shows the PCL symbol set list, fonts, network interface (NIC interface) settings, and settings used for the NIC card.

● Sending address list
One touch destination list, group list, program list, and memory box list.

● Document filing user / folder list
Shows the user names and folder names for document filing.

● Sender control list
Shows the senders that have been stored.

NOTE

A test page cannot be printed if "PROHIBIT TEST PAGE PRINTING" (See the "Operation manual (for printer)".) has been set to "prohibited" in the key operator programs.

■ Paper tray settings

The paper type, paper size, enabled modes and automatic tray switching can set for each tray. See page 2-5 to 2-7 for details on setting the paper type and paper size. Automatic switching to another paper tray is used to automatically switch to another tray with the same size and type of paper in the event that the paper runs out during continuous printing. This requires that the trays be loaded with the same size of paper. The paper tray settings can be enabled or disabled for each tray, and for printer mode, copy mode, fax mode, Internet fax mode, and document filing mode. To enable any function, touch the check box key so that a checkmark (☑) appears.
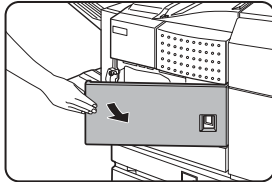
REPLACING THE TONER CARTRIDGE

When toner runs low, a message will appear to inform you that the toner cartridge must be replaced.
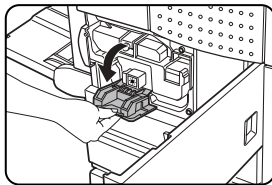
NOTE

To view the approximate amount of toner remaining, hold down the [COPY] key during printing or when the machine is on standby. The percentage of toner remaining will appear in the display while you hold down the key. When the percentage falls to "25-0%" , obtain a new toner cartridge and keep it ready for replacement.

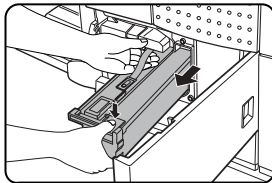Follow the steps below to replace the toner cartridge.
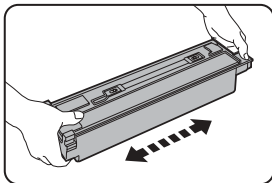
1 Open the front cover.

2 Lower the cartridge lock lever.

3 While depressing the lock release button, pull out the toner cartridge and remove it.
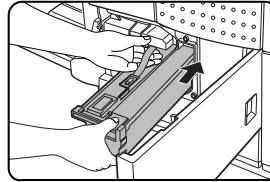
4 Remove a new toner cartridge from the package and shake it horizontally five or six times.

NOTE
Shake the toner cartridge well to ensure that the toner flows well and will not stick to the inside of the cartridge.
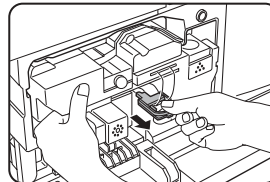
5 Insert a new toner cartridge.

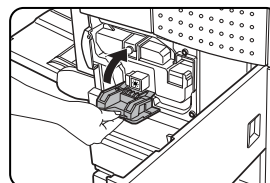Push the cartridge in until it locks securely into place.

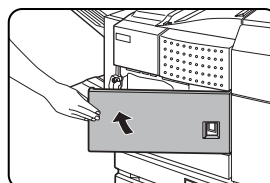**6 Gently remove the sealing tape from the cartridge.**

Once the seal is pulled out, the toner in the toner cartridge is supplied to the developer cartridge.

7 Return the cartridge lock lever.

8 Close the front cover.

CAUTION
● Do not throw the toner cartridge into a fire. Toner may fly and cause burns.
● Store toner cartridges out of the reach of small children.

NOTE
Place the used toner cartridge in the plastic bag and store it. When placing the toner cartridge in the bag, insert it horizontally, not vertically. If the cartridge is stood on end, the collected used toner may spill out and soil the floor or your clothes.

STORAGE OF SUPPLIES

Standard supplies for this product that can replaced by the user include paper, toner cartridges, and staple cartridges for the finisher.

SHARP
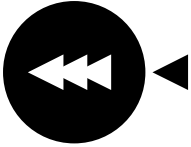
For best copying results, be sure to use only Sharp Genuine Supplies which are designed, engineered, and tested to maximize the life and performance of Sharp products. Look for the Genuine Supplies label on the toner package.

GENUINE SUPPLIES
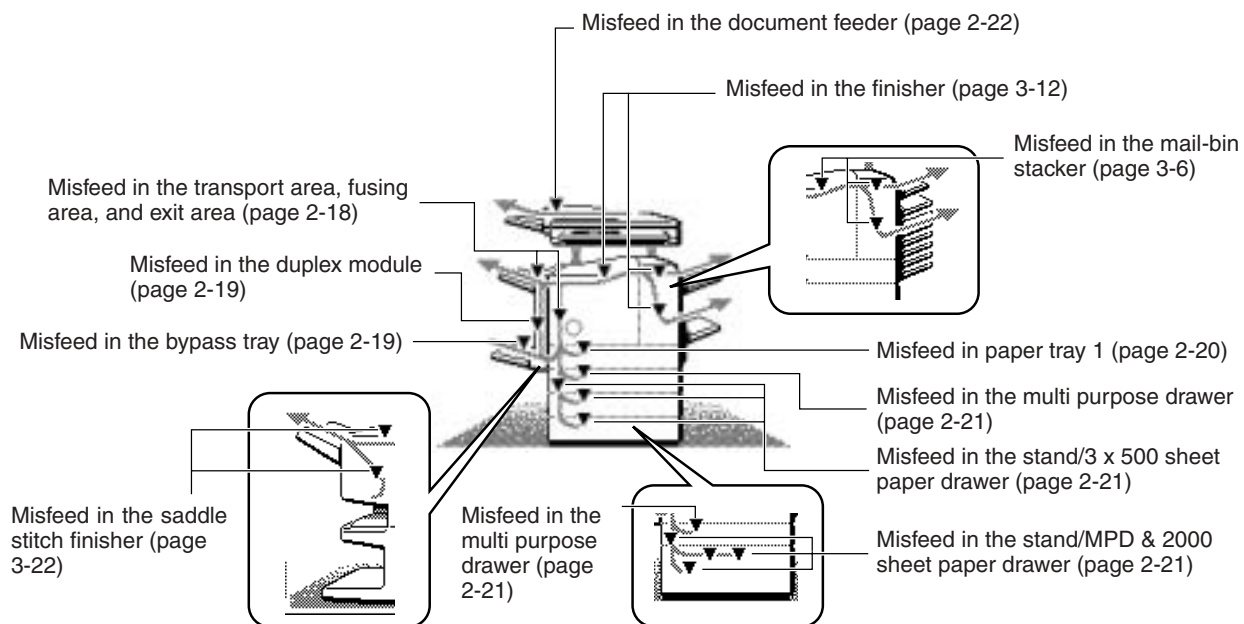
■ Proper storage

1. Store the supplies in a location that is:
● clean and dry,
● at a stable temperature,
● not exposed to direct sunlight.

2. Store paper in the wrapper and lying flat.
3. Paper stored in packages standing up or out of the wrapper may curl or become damp, resulting in paper misfeeds.
4. Store a new toner cartridge box horizontally. Do not store it standing on end. If stored standing on end, the toner may not distribute well even after shaking the cartridge vigorously, and will remain inside the cartridge without flowing out.

Supply and Consumables
The supply of spare parts for a repair of the appliance is guaranteed for at least 7 years following the termination of production. Spare parts are those parts of the apparatus which may break down within the scope of the ordinary use of the product - whereas those parts which normally exceed the life of the product are not to be considered as spare parts. Consumables too, are available for 7 years following the termination of production.

MISFEED REMOVAL

When a misfeed has occurred during printing, the message "A MISFEED HAS OCCURRED". will appear in the touch panel display of the operation panel and printing including copying and facsimile output will stop. The approximate misfeed locations are indicated with " ▼ " shown in the illustration below. The page numbers for detailed information on misfeed removal are also shown.

Misfeed in the document feeder (page 2-22)

Misfeed in the finisher (page 3-12)

Misfeed in the mail-bin stacker (page 3-6)

Misfeed in the transport area, fusing area, and exit area (page 2-18)

Misfeed in the duplex module (page 2-19)

Misfeed in the bypass tray (page 2-19)

Misfeed in paper tray 1 (page 2-20)

Misfeed in the multi purpose drawer (page 2-21)

Misfeed in the stand/3 x 500 sheet paper drawer (page 2-21)

Misfeed in the saddle stitch finisher (page 3-22)

Misfeed in the multi purpose drawer (page 2-21)

Misfeed in the stand/MPD & 2000 sheet paper drawer (page 2-21)

2

NOTE

Printing is not possible when a misfeed occurs, and thus any faxes or Internet faxes received at this time will be temporarily held in memory. The faxes will print out automatically as soon as the misfeed is cleared.

NOTES

● Do not damage or touch the photoconductive drum. (See page 2-18.)
● Be careful not to tear the misfed paper during removal.
● If paper is accidentally torn during removal, be sure to remove all pieces.
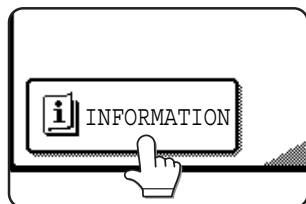
⚠CAUTION

The fusing unit is hot. Take care in removing paper.
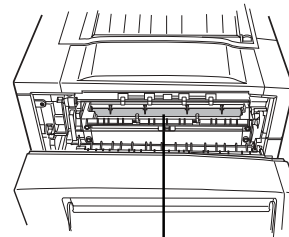
Fusing unit

Misfeed removal guidance

Misfeed removal guidance can be displayed by touching the [INFORMATION] key on the touch panel after a misfeed has occurred.
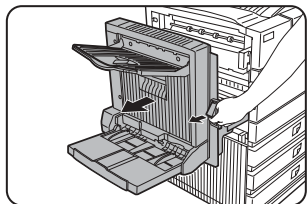
# Misfeed in the transport area, fusing area, and exit area

CAUTION

The fusing unit is hot. Take care in removing paper. (Do not touch the metal parts.)

**1 Unlatch the duplex module and slide it to the left.**

Unlatch the module and gently move the module away from the machine. If the machine is not equipped with a duplex module, open the side cover similarly.

2 Remove the misfed paper as shown in the illustrations below.

Roller rotating knob A
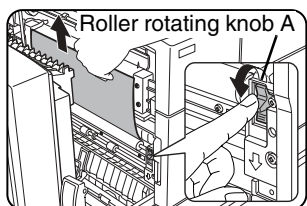
If paper is misfed in the transport area, turn roller rotating knob A in the direction of the arrow to remove the misfed paper.
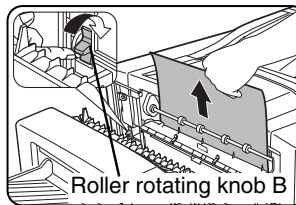
NOTE
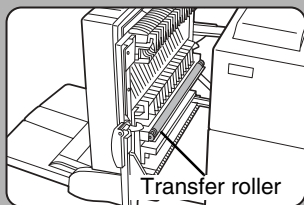
Do not touch or damage the transfer roller.

Transfer roller

Do not touch or damage the photoconductive drum.

Photoconductive drum

Roller rotating knob B

If paper is misfed in the fusing area, turn roller rotating knob B in the direction of the arrow to remove the misfed paper.
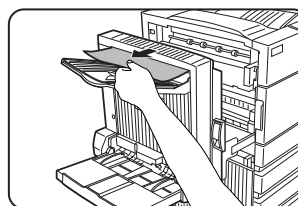
CAUTION

The fusing unit is hot. Take care in removing paper. (Do not touch any metal parts.)

Fusing unit open tab
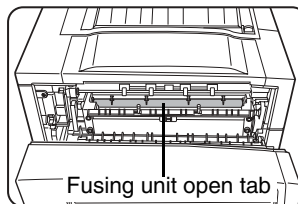
If the misfed paper is inside the fusing area, turn down the fusing unit open tab to open the fusing unit and remove the misfed paper.
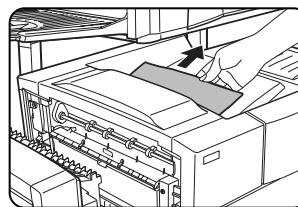
If paper is misfed in the exit area, remove it as shown while taking care not to tear the paper.

If the duplex module is equipped with an exit tray and paper is misfed in the exit area, remove the misfed paper as shown in the illustration.
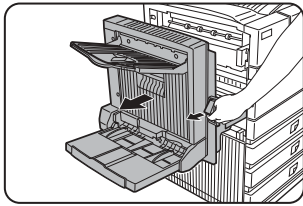
3 Gently close the duplex module.

If the machine is not equipped with a duplex module, close the side cover.
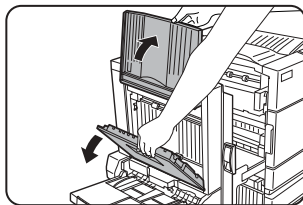After closing, confirm that the misfeed message is cleared and the normal display appears.

2-18

Misfeed in the duplex module

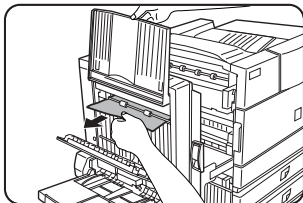**1** **Unlatch the duplex module and slide it to the left.**

Unlatch the unit and gently move the module away from the machine.

2 **If the duplex module has an exit tray, rotate it up out of the way and open the cover of the duplex module.**
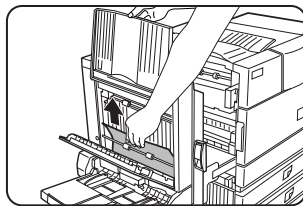
If no exit tray is attached, just open the cover of the duplex module and ignore any reference to the tray in the following steps.

3 **While holding the exit tray up, remove the misfed paper as shown in the illustrations below.**

If paper is misfed at the upper part of the duplex module, gently remove it while taking care not to tear the paper.

If paper is misfed at the lower part of the duplex module, gently remove it while taking care not to tear the paper.

4 **Close the cover of the duplex module and lower the exit tray.**
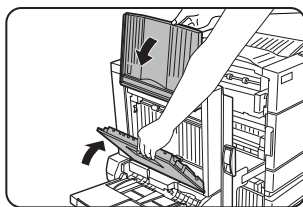
5 **Gently close the duplex module.**
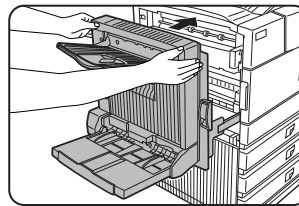
After closing the duplex module, confirm that the misfeed message is cleared and the normal display appears.

■ Misfeed in the bypass tray

1 **Unlatch the duplex module and slide it to the left.**
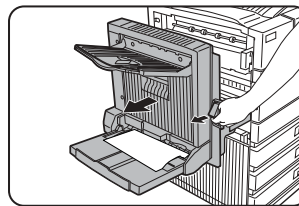
Unlatch the unit and gently move the module away from the machine.

2 **Remove the misfed from the bypass tray.**
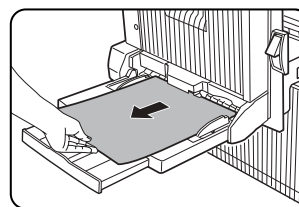
Be careful not to tear the misfed paper during removal.

3 **Gently close the duplex module.**

After closing the duplex module, confirm that the misfeed message is cleared and that the normal display appears.

2

2-19

Misfeed in the paper feed area

> **NOTE**
>
> Be sure to follow the misfeed removal sequence. Do not pull the tray out immediately as the misfeed may have occurred with paper partially fed out of the tray. Open the left cover and see if there is misfed paper first (steps 1 and 2). If you open the tray without checking, the partially fed paper may tear and leave torn pieces in the machine, increasing the difficulty of removal.

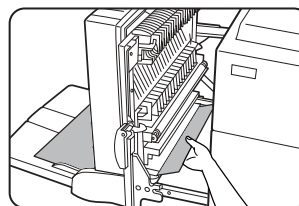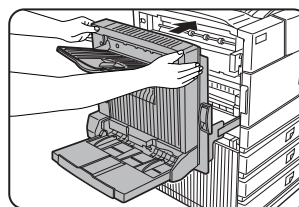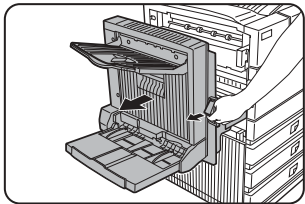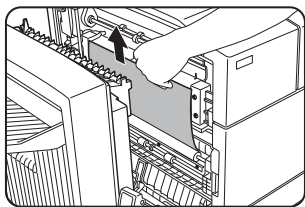## ■ Misfeed in paper tray 1

1 Unlatch the duplex module and slide it to the left.

Unlatch the module and gently move the module away from the machine. If the machine is not equipped with a duplex module, open the side cover similarly.

2 Remove the misfed paper.

Be careful not to tear the misfed paper during removal.

> **NOTE**
>
> The paper may not be extending out far from inside the machine but must be removed if it is possible to grasp it. If it is not possible to grasp it, go to the next step.

3 If misfed paper is not found in step 2, pull out paper tray 1 and remove the misfed paper.

Be careful not to tear the misfed paper during removal.

4 Gently close the paper tray.
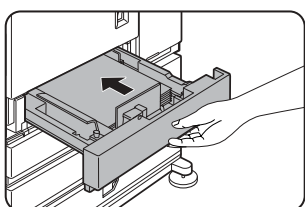
Push the paper tray back into the machine.

5 Gently close the duplex module.
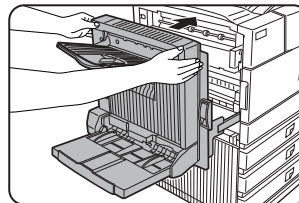
If the machine is not equipped with a duplex module, close the side cover.
After closing, confirm that the misfeed message is cleared and the normal display appears.

> **NOTE**
>
> If paper drops beyond the rear side of the paper tray that has been pulled out, remove the paper tray and then remove the paper. (For removal of the paper tray, see the illustration below.)
>
> After pulling out the paper tray until it stops, gently lift and pull the tray to remove it. To reinstall the paper tray, insert it at an angle and then push it into the machine.
>
> To remove a paper tray from a stand/paper drawer, pull the tray out until it stops then rotate it to the left to disengage it from the stand. When reinstalling it, place the left rear or the drawer into the slot and rotate the drawer to the right and into the stand.
>
> **Installation of trays in the stand/3x500 sheet paper drawer**
>
> The middle and lower trays cannot be installed in the upper tray position and the upper tray cannot be installed to the middle and lower tray positions. (These cannot be pushed into the machine.)
> Take care not to install a tray to an improper position after removing the tray.

■ Misfeed in the multi purpose drawer

1 Unlatch the duplex module and slide it to the left.
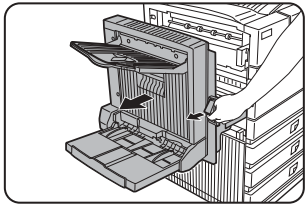
Unlatch the module and gently move the module away from the machine. If the machine is not equipped with a duplex module, open the side cover similarly.

2 Open the left cover of the stand/paper drawer.
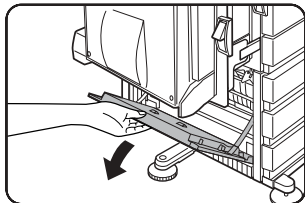
Hold the knob and gently open the cover.
If the machine is not equipped with a stand/paper drawer, open the left cover of the multi purpose drawer.
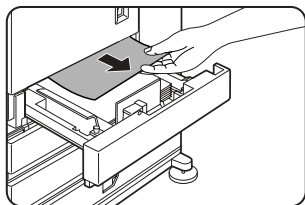
3 Remove the misfed paper.
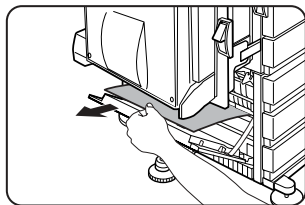
Be careful not to tear the misfed paper during removal.

NOTE

The paper may not be extending out far from inside the machine but must be removed if it is possible to grasp it. If it is not possible to grasp it, go to the next step.

4 Close the left cover of the stand/paper drawer.
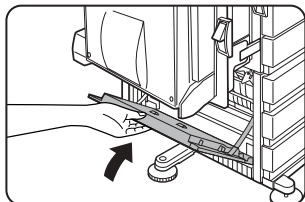
5 Gently close the duplex unit.
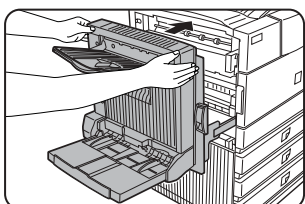
If the machine is not equipped with a duplex module, close the side cover.
After closing, confirm that the misfeed message has been cleared and the normal display appears.

6 If misfed paper is not found in step 3, refer to "Misfeed in paper tray 1" (steps 1 to 5 on the previous page) to remove the misfed paper.

■ Misfeed in the stand/3 x 500 sheet paper drawer

For misfeed removal in the upper tray, follow the procedure of "Misfeed in the multi purpose drawer" shown to the left to remove the misfed paper.

■ Misfeed in the stand/MPD & 2000 sheet paper drawer

For misfeed removal in the upper tray, follow the procedure of "Misfeed in the multi purpose drawer" shown to the left to remove the misfed paper. For misfeed removal in the lower large capacity tray, follow the procedure below.

1 Follow steps 1 to 4 of "Misfeed in the multi purpose drawer" shown to the left.

2 If misfed paper is not found in step 1, refer to "Misfeed in paper tray 1" on the previous page.

3 If misfed paper is not found in steps 1 and 2, pull out the large capacity tray (lower tray) and remove the misfed paper as shown in the illustrations below.
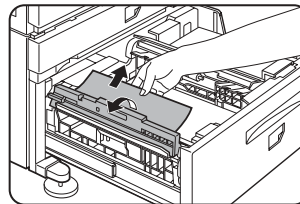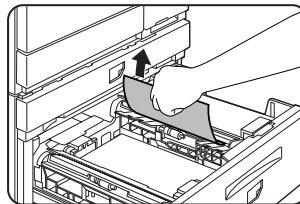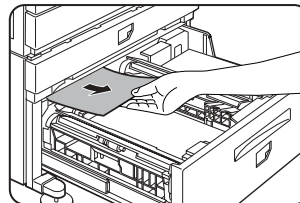
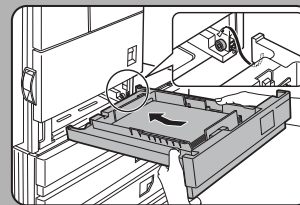Raise the paper guide and remove the misfed paper. After removing the misfed paper, be sure to return the paper guide.

4 Gently close the large capacity tray.
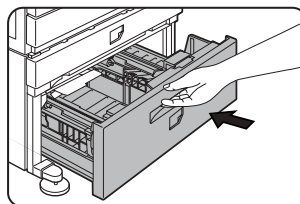
Push the paper tray all the way into the machine.

5 Gently close the duplex module.

If the machine is not equipped with a duplex module, close the side cover.
After closing, confirm that the misfeed message has been cleared and the normal display appears.

2

2-21

REMOVING AN ORIGINAL MISFEED

Removing a misfed original from the automatic document feeder

If an original misfeed occurs in the automatic document feeder, follow the steps below to remove the misfed original.

NOTES

● For misfeed removal in the main unit and other peripheral devices, see page 2-17

● When a misfeed occurs, touch the [INFORMATION] key to display detailed information for misfeed removal.
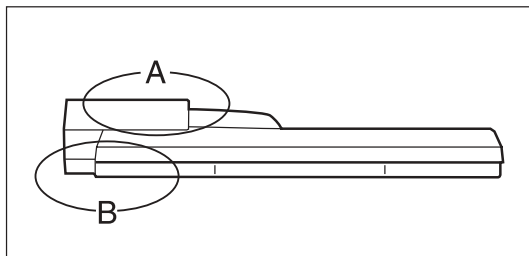
Check locations A and B in the diagram at left to remove the original.

1 Removing misfeeds from each location.

● **Check location A**
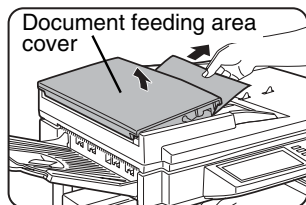
Open the document feeding area cover and gently remove the misfed original without tearing it.
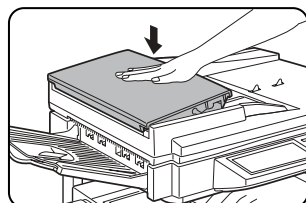
Close the cover securely so that cover clicks into place.

● **Check location B**
● **Misfeed in the transfer unit**
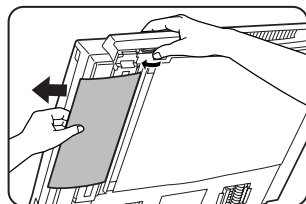
Open the document feeder and turn the green rotating knob in the direction of the arrow to remove any misfed originals.

2 Open and close the document feeder.
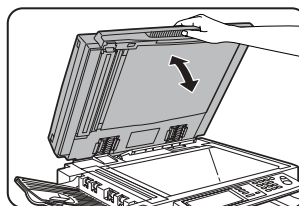
Opening and closing the cover clears the misfeed display. Copying cannot be resumed until this step is performed. However, this step is not necessary after a misfeed is removed from location B.

A message may appear indicating the number of originals which must be returned to the document feeder tray. Return the originals to the document feeder tray and press the [START] key.

TROUBLESHOOTING

Check the following troubleshooting list before requesting service as many problems can be fixed by the user. If you are unable to solve the problem by checking the list, turn off the power switch, unplug the power cord.
Problems related to general use of the machine are described below. For problems related to the copy function, see page 6-3. For problems related to document filing, see page 7-28. For fax, printer, and network scanner problems, see the manuals for those functions. For peripheral device problems, see the explanation of the device.
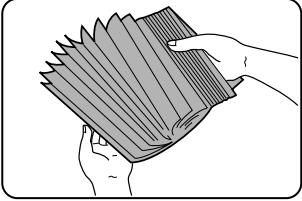
> If the message "CALL FOR SERVICE. CODE:**-**"(Note) appears in the touch panel, turn off the power switch, wait about 10 seconds, and then turn the power switch back on. If the message still appears after turning the power switch off and on several times, it is likely that a failure has occurred that requires service. In this event, stop using the machine, unplug the power cord, and contact your Sharp dealer.
>
> Note: Letters and numbers appear in "**-**". When you contact your Sharp dealer, please tell your dealer what letters and numbers appear.

2

Problem	Check	Solution or cause
The machine does not operate.	Machine plugged in?	Plug the machine into a grounded outlet.
	The power switch are not turned on?	Turn on the power switch. (Page 1-17)
	READY indicator off?	The machine is warming up. (Warm-up time is approximately 120 seconds.) Wait until the READY indicator lights up.
	Message indicating need to load paper displayed?	Load paper. (Page 2-2)
	Message indicating need to replace the toner cartridge displayed?	Replace the toner cartridge. (Page 2-15)
	Message indicating a paper misfeed displayed?	Remove misfed paper. (Page 2-17)
Copying/printing is not possible	A message appears saying that this type of paper cannot be used for two-sided copying.	Two-sided printing is not possible on special paper. Use paper that can be used for automatic two-sided printing. (Page 2-4)

Problem	Check	Solution or cause
Printing stops before the job is finished	If too many pages collect on the output tray, the tray full sensor activates and stops printing.	Remove the paper from the output tray.
	You have run out of paper.	Load paper. (Page 2-2)
Smudges on printed sheets	Does a message appear indicating the need for maintenance?	Please contact the your dealer as soon as possible.
The displayed paper size or paper type does not match the loaded paper size or paper type.	The correct paper size or paper type is not set in the paper tray settings of the custom settings.	When loading paper, if you change the paper size from an inch size to an AB size, or from an AB size to an inch size, or change the paper type, be sure to set the new paper type as explained in "Setting the paper type and paper size" (see page 2-5).
When printing on a special size of paper, part of the printed image is missing.	The paper size setting is not set correctly in the paper tray settings of the custom settings.	When using a special size of paper, set the correct paper size as explained in "Setting the paper type and paper size" on page 2-5. If the paper size setting is not correct, part of the image may be cut off or the image may not print.
Paper misfeeds frequently.	Is paper other than SHARP-recommended paper being used?	Use SHARP-recommended paper. (Page 2-16)
	Paper curled or damp?	Do not use curled or crimped paper. If you will not use the paper for a long time, remove the paper from the tray and store it in the wrapper in a cool and dark location so that it will not absorb moisture.
	Is the paper curled and does it frequently misfeed in the finisher or saddle stitch finisher?	Paper may be curled when output depending on the paper type and quality. In some cases turning the paper over in the tray will reduce misfeeding due to curling.
	Multiple sheets of paper fed simultaneously?	Remove the paper from the paper tray or the bypass tray, fan the paper as shown in the illustration, and then load it again.
	The paper in the tray is not stacked evenly.	Make sure that the paper in the paper tray is stacked evenly. If the stack is not even, paper misfeeds will occur.

2-24

Problem	Check	Solution or cause
Printed paper is wrinkled or the image rubs off easily.	Is paper other than SHARP-recommended paper being used?	Use SHARP-recommended paper. (Page 2-16)
	Is paper size or weight out of the allowable range?	Use paper in the allowable range.
	Paper damp?	Be sure to store paper in the wrapper in a dry location and do not store paper in a location that is ●humid ●at a high temperature or an extremely low temperature ●exposed to direct sunlight ●dusty.
The contrast on the touch panel is too high or too low.	Is LCD contrast properly adjusted?	Adjust the screen contrast using "DISPLAY CONTRAST" in "Default settings" of the custom settings. (Page 2-14)
Printing takes place on the wrong side of the paper.	The paper is loaded in the tray with the print side face down*. *Face up if the paper type is "PRE-PRINTED", "PRE-PUNCHED" or "LETTER HEAD".	Load paper in the tray with the print side face up. However, if the paper type is "PRE-PRINTED", "PRE-PUNCHED" or "LETTER HEAD", load the paper with the print side face down*. *If the two-sided function has been prohibited using "DISABLING OF DUPLEX" in the key operator programs (page 11 of the Key operator's guide), load the paper face up.
Marks appear at regular intervals on printed pages.	Paper with punch holes is being used.	If the original image overlaps the punch holes, marks will appear at the position of the holes on the back of the paper after one-sided printing, or on the front and back of the paper after two-sided printing. Make sure that the original image does not overlap the punch holes.

2

CHAPTER 3

PERIPHERAL DEVICES

This chapter describes operating instructions for the Mail-Bin Stacker, the Finisher, the Saddle Stitch Finisher, and the Duplex Module.

DUPLEX MODULE

If a duplex module is installed, printing onto both sides of paper can be performed.

Two types of duplex modules are available: duplex module/bypass tray and duplex module. The descriptions in this manual are for the duplex module/bypass tray. For information on misfeed removal for these modules, see page 2-19.

Part names

Exit tray
The tray is extendable to support large size paper. Extend the tray when 11" x 17", 8-1/2" x 14", 8-1/2" x 13", A3 or B4 paper is being used. For a duplex module (not duplex module/bypass tray), the exit tray is optional.

Bypass tray
This tray can also be used for special papers including transparency film. (See next page and page 2-3.)
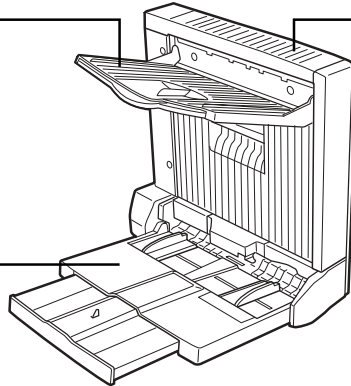
Duplex module
Automatic copying on both sides of the paper is possible.

NOTE
Automatic two-sided printing can be done only onto plain paper. Special papers cannot be used for two-sided printing. (See page 2-4 for explanation on special paper.)

NOTES
● Do not press down on the bypass tray or the exit tray.
● The duplex module requires the installation of other peripheral devices in order to be functional and cannot be installed together with some other devices. The table on page 8-4 shows the configurations which are compatible.

Specifications

Name	Duplex module (AR-DU3) or Duplex module/bypass tray (AR-DU4)
Paper size (for duplex copy)*1	11" x 17", 8-1/2" x 14", 8-1/2" x 13", 8-1/2" x 11", 8-1/2 "x 11"R, 5-1/2" x 8-1/2" R, A3, B4, A4, A4R, B5, B5R, A5R
Paper weight (for duplex copy)*1	16 to 28 lbs. or 60 to 105 g/m^2
Reference paper position	Center
Bypass tray paper capacity*2	100 sheets (8-1/2" x 11" or A4 size, 20 lbs. or 80 g/m^2)
Dimensions	Duplex module: 4-17/32" (W) x 16-15/64" (D) x 16-25/64" (H) (115 mm (W) x 412 mm (D) x 416 mm (H)) Duplex module/bypass tray*3: 17-49/64" (W) x 17-19/64" (D) x 16-25/64" (H) (451 mm (W) x 439 mm (D) x 416 mm (H))
Weight	Duplex module: Approx. 11.1 lbs. (5 kg) Duplex module/bypass tray: Approx. 16.6 lbs. (7.5 kg)

*1 For paper size and paper weight for the bypass tray, see "Specifications of paper trays (types and sizes of applicable papers for trays)" on page 2-3.

*2 Duplex module/bypass tray only.

*3 When the bypass tray extension is extended.

Name	Exit tray (AR-TE3)
Paper output	Print face down
Paper capacity	100 sheets (8-1/2" x 11" or A4 size, 20 lbs. or 80 g/m^2)
Paper size	Max. 11" x 17" or A3, Min. 5-1/2" x 8-1/2"R or A5R
Paper type and weight to be output	Plain paper, 16 to 28 lbs. or 60 to 105 g/m^2 Heavy paper, 29 to 110 lbs. or 106 to 205 g/m^2

Specifications are subject to change for improvement without notice.

Loading paper in the bypass tray

The bypass tray can be used for plain paper and special paper including labels. Up to 100 sheets of standard paper can be set. For paper types that can be used in the bypass tray, refer to page 2-3.
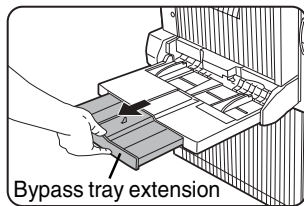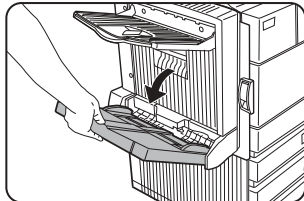
NOTE
If the paper type or size is changed, be sure to enter the paper type and size as in step 4.

1 Open the bypass tray.

When setting 11"x 17", 8-1/2" x 14", 8-1/2" x 13, A3 or B4 paper, be sure to extend the bypass tray extension.
If the bypass tray extension is not pulled all the way out the size of the loaded paper will not be correctly displayed.

Bypass tray extension

2 Set the bypass tray paper guides to the width of the paper to be used.
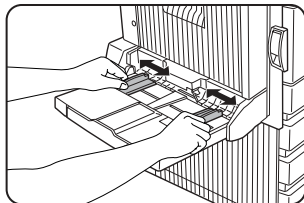
3 Insert the paper all the way into the bypass tray.
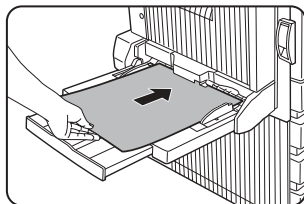
Set the paper face down. If there is a clearance between the paper and the paper guides, the paper may not be fed correctly. Adjust the guides so that they contact the edges of the paper.

NOTES
● When using 5-1/2" x 8-1/2" paper, A5 paper or postcards, be sure to load them with their shorter edge into the feed slot as shown in the illustration.
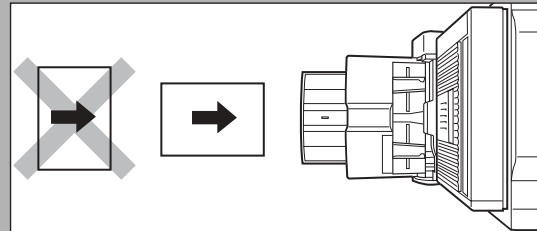
● When loading plain paper other than SHARP standard paper, special media other than postcards, SHARP-recommended transparency film, or paper to be printed on the back, the paper must be loaded one sheet at a time. Loading more than one sheet at a time will cause misfeeds.
● When adding paper, remove any paper remaining in the tray, combine it with the paper to be added, and reload as a single stack.
● Do not use paper that has already been printed on by a plain paper fax machine or a laser printer. This may cause printed images to become dirty.
● Do not use paper that has already been printed on by a thermal transfer or inkjet printer. In particular, paper that has been printed on by a thermal transfer printer (such as a word processor that uses a cassette) may cause missing characters and smudges.
● When printing on transparency film, be sure to remove each sheet as it exits the machine. Allowing sheets to stack in the output tray may cause curling.
● Please use SHARP-recommended transparency film. Place the film in the bypass tray so that it is oriented vertically with the label side face up. If the label side is placed face down, smudging may result.

Label facing up
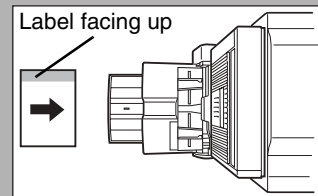
● When loading multiple sheets of transparency film in the bypass tray, be sure to fan the sheets several times before loading.

4 Set the type and size of the loaded paper.

When the paper system is changed from the inch system to the AB system or vise versa or when the paper type is changed, the paper type must be designated. For setting the paper type and paper size, see page 2-5.

5 Loading paper in the bypass tray is now complete.

3

Troubleshooting (concerning the duplex module)

Check the list below before calling for service.

Problem	Check	Solution or cause
The machine will not print duplex prints.	Message indicating the paper type cannot be used for two-sided printing displayed?	Special paper cannot be used for two-sided printing. Use a paper type adequate for two-sided printing. (See pages 2-4 and 3-2.)
	Message indicating the paper size cannot be used for two-sided printing displayed?	Use a paper size adequate for two-sided printing. (See pages 2-4 and 3-2.)
	Bypass tray extension not extended?	When using 11" x 17", 8-1/2" x 14", 8-1/2 "x 13", A3 or B4 paper, the bypass tray extension must be extended.
Printed images onto paper from the bypass tray are skewed.	Does the number of sheets exceed the limit?	Set paper within the allowable range.
	Paper guides properly set?	Set the paper guides properly to the paper size.
A paper misfeed occurs in the bypass tray.	Paper size and type set properly?	When using non-standard size paper or special paper, be sure to set the paper size and type. (See pages 2-3 to 2-5.)
	Does the number of sheets exceed the limit?	Set paper within the allowable range.
	Paper guides properly set?	Set the paper guides properly to the paper size.
When printing on a special size of paper, part of the printed image is missing.	The paper size setting is not set correctly in the paper tray settings of the custom settings.	When using a special size of paper, set the correct paper size as explained in "Setting the paper type and paper size" on page 2-5. If the paper size setting is not correct, part of the image may be cut off or the image may not print.

3-4

MAIL-BIN STACKER

The mail-bin stacker has 7 mail bins which can each be designated to receive printed output from a user or a group of users .
Output paper in the copy mode and the fax mode will be delivered to the top tray of the stacker separated from printed output. (Printed output can also be delivered to the top tray.)

Part names

Top cover
Open for misfeed removal.

Top tray
Output paper from the printer, copier, and facsimile features can be delivered here.

Front cover
Open for misfeed removal.

Mail bins
Each bin can be designated to receive printed output for assigned users. These bins cannot be used for copier or facsimile output.

3
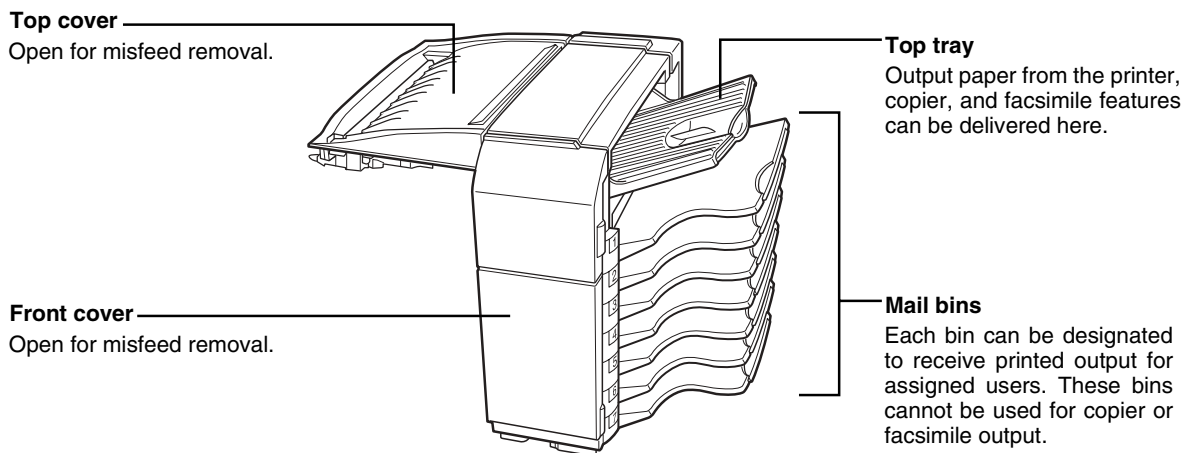
NOTES
- Do not put pressure on the mail-bin stacker, particularly on the top tray and mail bins.
- Do not place anything on the top cover. Doing so will interfere with the machine's paper handling during duplex printing.
- The top tray and each mail bin are extendable. To print onto large paper (11" x 17", 8-1/2" x 14", 8-1/2" x 13", A3 or B4), extend the tray.
- The mail-bin stacker requires the installation of other peripheral devices in order to be functional and cannot be installed together with some other devices. The table on page 8-4 shows the configurations which are compatible.

Specifications

Name	Mail-bin stacker (AR-MS1)
Number of trays	8 (Top tray and seven mail bins)
Paper output	Print face down
Tray type	Top tray: normal tray, Mail bins: mail bin tray
Tray capacity	Top tray: 250 sheets (8-1/2" x 11" or A4 size, 20 lbs. or 80 g/m^2) Mail bins: 100 sheets each (8-1/2" x 11" or A4 size, 20 lbs. or 80 g/m^2)
Paper sizes	Top tray: same as the specifications of paper for feeding in the main unit Mail bins: 11" x 17", 8-1/2" x 14", 8-1/2" x 13", 8-1/2" x 11", 8-1/2" x 11"R, 7-1/4" x 10-1/2", A3, B4, A4, A4R, B5, B5R
Paper weight	Top tray: same as the specifications of paper for feeding in the main unit Mail bins: 15 to 34 lbs. or 60 to 105 g/m^2
Paper types	Top tray: same as the specifications of paper for feeding in the main unit Mail bins: plain paper only
Tray full detection	Provided in both the top tray and the mail bins
Power supply	Supplied from machine
Dimensions	18-5/16" (W) x 20-7/8" (D) x 20" (H) (465 mm (W) x 530 mm (D) x 508 mm (H))
Weight	Approx. 41.9 lbs. (19 kg)

Specifications are subject to change for improvement without notice.

Misfeed in the mail-bin stacker

If a misfeed has occurred in the mail-bin stacker during printing, remove the misfed paper following the procedure below.

1 Open the top cover.
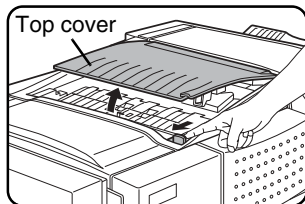
Move the tab in the direction of the arrow as shown in the illustration to open the top cover.

2 Remove the misfed paper.

Be careful not to tear the misfed paper during removal.
After removing the paper, press down on the top cover to close it.

3 If the misfed paper is not found in step 2, open the front cover.
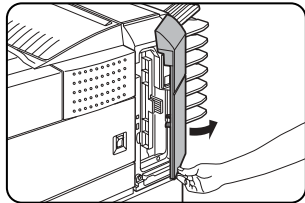
4 Turn the roller rotating knob in the direction of the arrow to remove the misfed paper.
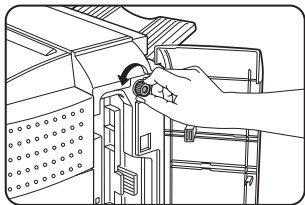
5 Open the paper guide.
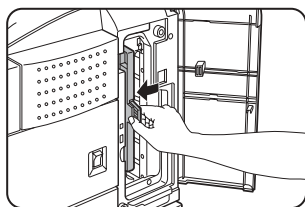
Unlatch the paper guide and open it in the direction of the arrow.

6 Remove the misfed paper.

Be careful not to tear the misfed paper during removal.

7 Close the paper guide.

Close the paper guide securely.

8 Close the front cover.

3-6

FINISHER

The finisher can deliver collated sets either stapled or unstapled. Unstapled sets can be offset stacked from the previous set for easy separation of the sets.

Part names

Latch

Release the latch to open the finisher for misfeed removal.

Top cover

Open for misfeed removal.

Staple box

Pull the box out to replace the staple cartridge or to remove jammed staples.
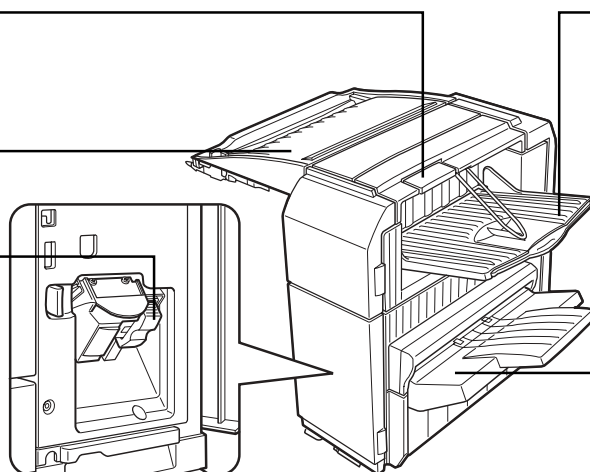
Top tray

Printer, copier and fax output can be delivered here.
To print onto large paper (11" x 17", 8-1/2" x 14", 8-1/2" x 13", A3 or B4), extend the tray.

Offset tray

Stapled sets or sets to be offset will be delivered here.

NOTES

● Do not put pressure on the finisher (particularly each tray).
● Do not place anything on the top cover. Doing so will interfere with the machine's paper handling during duplex printing.
● The tray moves up and down during operation. Be careful not to impede its movement.
● The finisher requires the installation of other peripheral devices in order to be functional and cannot be installed together with some other devices. The table on page 8-4 shows the configurations which are compatible.

3

Specifications

Name	Finisher (AR-FN6)
Number of trays	2
Paper output	Print face down
Tray type	Top tray: normal tray, Lower tray: offset tray
Tray capacity	Top tray: 500 sheets (8-1/2" x 11" or A4 size, 20 lbs. or 80 g/m^2) Lower tray: 750 sheets (8-1/2" x 11" or A4 size, 20 lbs. or 80 g/m^2)
Paper sizes	Top tray: same as the specifications of paper for feeding in the main unit Lower tray: Max. 8-1/2" x 11" or A4, Min. B5
Paper weight	Top tray: same as the specifications of paper for feeding in the main unit Lower tray: 16 to 34 lbs. or 60 to 128 g/m^2
Paper types	Top tray: same as the specifications of paper for feeding in the main unit Lower tray: plain paper only
Tray full detection	Provided in both the top tray and the lower tray
Offset function	Provided for the lower tray only. The offset amount is approx. 1 inch (25 mm)
Paper sizes for stapling	8-1/2" x 11", A4, and B5
Stapling capacity	30 sheets* (8-1/2" x 11" or A4 or smaller 20 lbs. or 80 g/m^2) *Up two sheets of cover stock (34 lbs. or 128 g/m^2) can be included.
Staples	Single staple can be placed in the top left or lower left corners or two staples can be centered on the left side
Power supply	Supplied from machine
Dimensions	18-1/8" (W) x 20-7/8" (D) x 20" (H) (460 mm (W) x 530 mm (D) x 508 mm (H))
Weight	Approx. 46.3 lbs. (21 kg)

Specifications are subject to change for improvement without notice.

Supplies

AR-SC1 staple cartridges must be used for this finisher. The cartridge package contains three cartridges approx. 3000 staples each.

Finisher functions

■ Sort mode

Sorted sets will be delivered.

Original   Printouts
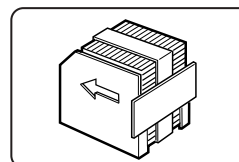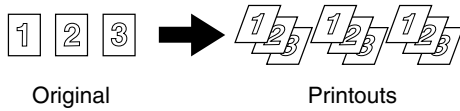
■ Group mode

Groups of prints or copies of the same page will be delivered.
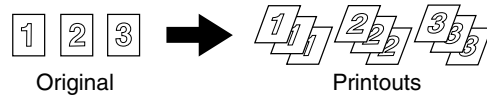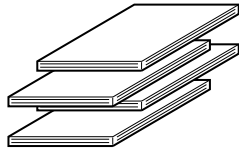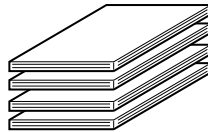
Original   Printouts

■ Offset mode

Offset mode   Non-offset mode

Sets will move from side to side so that each set or group will be offset from the previous set or group for easy separation. The offset function can only be used in the offset tray.
Stapled sets will not be offset.

■ Staple sort mode

Collated sets will be stapled and delivered to the offset tray. The stapling positions, orientation, paper size for stapling, and stapling capacity are shown below.

Stapling positions	Portrait orientation		Landscape orientation
Top left corner of printouts		Available paper sizes: 8-1/2" x 11", A4 and B5 Stapling capacity: Up to 30 sheets for any available sizes	
Center left two positions of printouts		Same as above	Stapling cannot be made.
Lower left corner of printouts		Same as above	

NOTES

● Stapling can only be done when the offset tray has been selected.
● If mixed paper sizes are selected for stapling jobs, stapling will be automatically canceled.

NOTE

Transparency film heavy paper, punched paper, labels , envelopes and postcards cannot be stapled.

3-8

Using the finisher functions

When the [OUTPUT] key on the main screen of copy mode is touched, a screen for selecting the sort/group/staple sort functions and selecting an exit tray will appear. As a selection is made, the touch key for the selection will be highlighted.
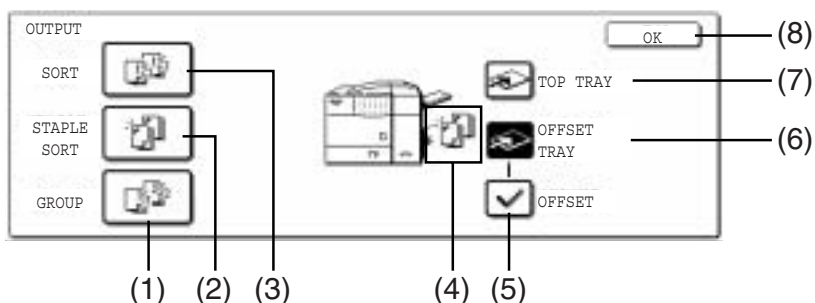
(1) [GROUP] key (See page 3-8.)

When Group is selected, all copies of the same original will be grouped.

(2) [STAPLE SORT] key (See page 3-8.)

When Staple Sort is selected, sorted sets will be stapled and delivered to the offset tray. (They will not be offset stacked.)

(3) [SORT] key (See page 3-8.)

When Sort is selected, sets of copies will be sequentially delivered.

(4) Icon display

An icon representing a selected function (sort, staple sort or group) is displayed.

(5) [OFFSET] key (See page 3-8.)

If Offset is checked, offset is enabled. If not checked, offset will not function. If staple sort is selected, the check mark of offset will be automatically canceled. If the staple sort function is selected, the checkmark in the offset checkbox is automatically removed.

(6) [OFFSET TRAY] key (See page 3-8.)

When the offset tray is selected, copies will be delivered to the offset tray. When staple sort is selected, the offset tray will be automatically selected.

(7) [TOP TRAY] key

When top tray is selected, copies will be delivered to the top tray.

(8) [OK] key

Press to close the output screen and to return to the main screen.

3

Staple cartridge replacement

When the staple cartridge becomes empty, the message "Add staples." will appear in the message display of the operation panel.
Follow the procedure below to replace the staple cartridge.

1 Open the front cover.
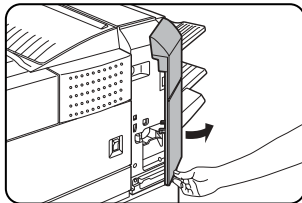
2 Turn the staple unit to face up.
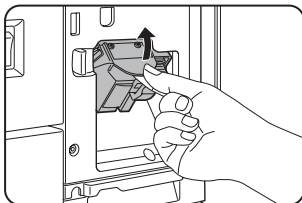
3 Pull the release lever for the staple box and remove the box.
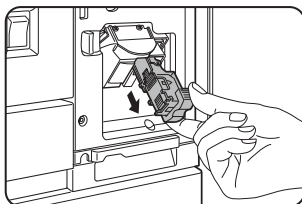
4 Remove the empty staple cartridge from the staple box.
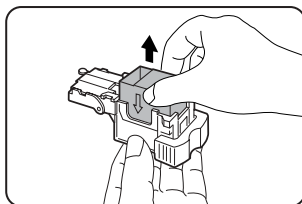
5 Insert a new staple cartridge into the staple box aligning the arrow of the staple cartridge with that of the staple box.
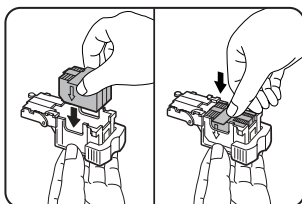
When reinstalling the staple box, push it in until it clicks into place.

NOTES
- Do not remove the tape from the cartridge before inserting the staple cartridge into the box.
- When reinstalling the staple box, push it in until it clicks into place.

6 Remove the tape from the staple cartridge by pulling it straight.
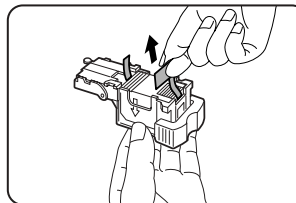
7 Reinstall the staple box.
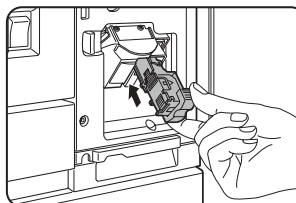
Push the staple box in until it clicks into place.

8 While pushing the staple unit release lever to the left, rotate the staple unit to face down.
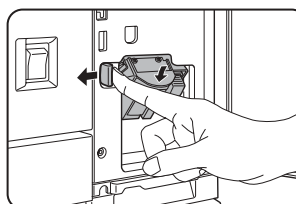
9 Close the front cover.

NOTE
Make a test print or copy in the staple sort mode to ensure that stapling is performed properly.

■ Checking the staple unit

If the message "CHECK THE STAPLER UNIT" or "CHECK STAPLER POSITION OR STAPLER JAM" appears, follow the procedure below.

1 Open the finisher compiler.
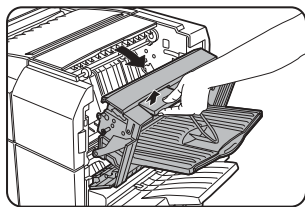
Release the latch to open the finisher compiler.

2 Remove the misfed paper from the stapler compiler.
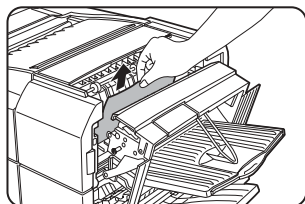
Be careful not to tear the misfed paper during removal.

3 Close the finisher compiler.
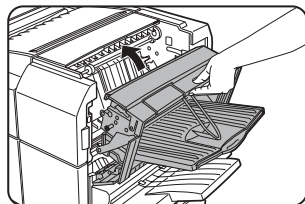
4 Open the finisher front cover.
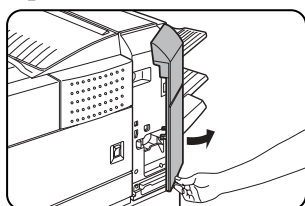
5 Turn the staple unit to face up.
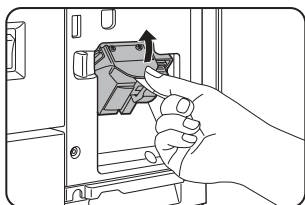
6 Pull the release lever for the staple box and remove the box.
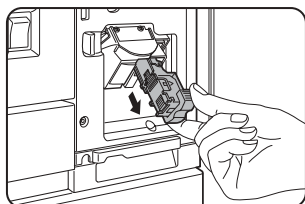
7 Raise the lever at the end of the staple box.
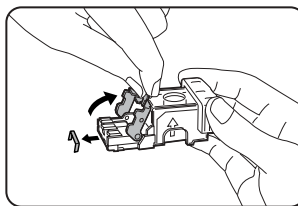
Remove the top staple if it is bent. If bent staples remain, a staple jam will occur again.

8 Return the lever to its original position.
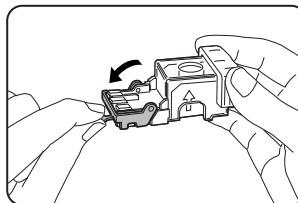
9 Reinstall the staple box.
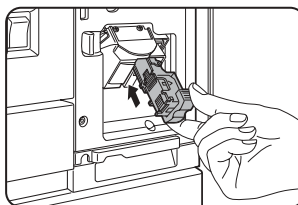
Push the staple box in until it clicks into place.

10 While pushing the staple unit release lever to the left, rotate the staple unit to face down.
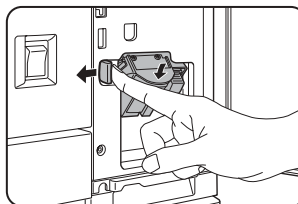
When reinstalling the staple box, push it in until it clicks into place.

11 Close the front cover.

NOTE

Make a test print or copy in the staple sort mode to ensure that stapling is performed properly.

3

3-11

Misfeed in the finisher

When a misfeed occurs in the finisher, remove the misfed paper following the procedure below.

1 Remove the misfed paper from the output area.
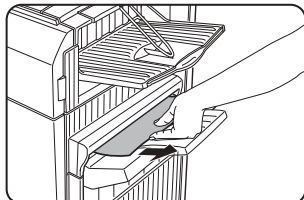
Be careful not to tear the misfed paper during removal.

5 Raise the paper guide and remove the misfed paper.

Paper guide
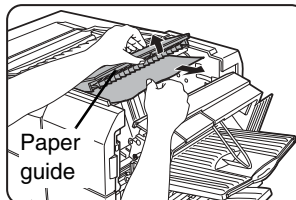
Be careful not to tear the misfed paper during removal.

2 Open the finisher top cover.
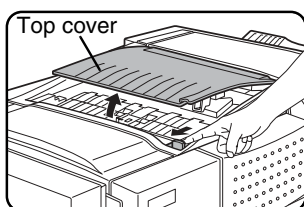
Top cover

Move the tab in the direction of the arrow as shown in the illustration to open the top cover.

6 Close the finisher compiler.
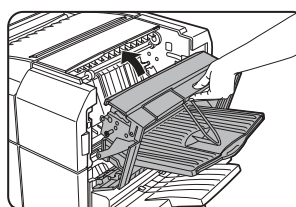
3 Remove the misfed paper.
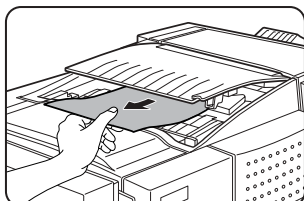
Be careful not to tear the misfed paper during removal.
After removing the paper, press down on the top cover to close it.

4 Open the finisher compiler.

Release the latch to open the finisher compiler.

3-12
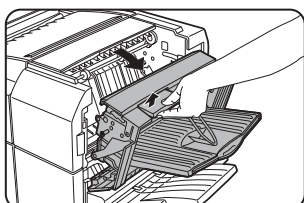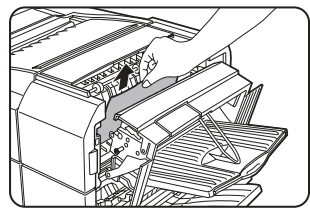
Troubleshooting finisher problems

Check the list below before calling for service.

Problem	Check	Solution or cause
The finisher does not operate.	Are any finisher covers open?	Close all covers.
	Message indicating need to remove paper from the stapler compiler displayed?	Open the finisher as described in step 4 on page 3-12 and remove all paper from the stapler compiler.
Stapling cannot be performed.	Is a "CHECK THE STAPLER UNIT" or "CHECK STAPLER POSITION OR STAPLER JAM" message displayed?	Check the staple unit. (See page 3-11.)
	Is a message "ADD STAPLES" displayed?	Replace the staple cartridge. (See page 3-10.)
	Different size paper included?	Stapling cannot be performed onto different size paper.
Stapled sets are not stacked correctly or some sheets in a set are not stapled.	Paper heavily curled?	Paper may be curled heavily depending on the paper type and quality. Remove paper from the paper tray or the bypass tray, turn it upside down, and load it again.

3

SADDLE STITCH FINISHER

The saddle stitch finisher can automatically place two staples for centerline binding of prints or copies and fold them along the centerline.
An optional hole punching unit is available for installation into the finisher.

Part names

Stapler compiler
Paper to be stapled is stacked temporarily.

Top cover
Open for misfeed removal.

Offset tray
Output which is stapled or offset will be delivered to this tray.

Stapler section
Open the front cover and pull out this section to replace the staple cartridge or to remove jammed staples.

Saddle stitch tray
Saddle stitched output is delivered here.

Front cover
Open the front cover and pull out this section for staple cartridge replacement or to remove jammed staples.

NOTES
● Do not press on the saddle stitch finisher (particularly the offset tray).
● Be careful about the offset tray during printing because the tray moves up and down.
● The saddle stitch finisher requires the installation of other peripheral devices in order to be functional and cannot be installed together with some other devices. The table on page 8-4 shows the configurations which are compatible.

Specifications

Name	Saddle stitch finisher (AR-FN7)
Number of trays	2
Paper output	Print face down
Tray system	Upper tray: offset tray, Lower tray: saddle stitch tray
Tray capacity	Upper tray: Non-stapling: Max. 1,000 sheets for 8-1/2" x 11" or A4 or smaller sizes (20 lbs. or 80 g/m^2), max. 500 sheets for 8-1/2" x 13" or B4 or larger sizes (20 lbs. or 80 g/m^2) Stapling: Max. 30 stapled sets and max. 1,000 sheets for 8-1/2" x 11" or A4 or smaller sizes (20 lbs. or 80 g/m^2), max. 30 stapled sets and max. 500 sheets for 8-1/2" x 13" or B4 or larger sizes (20 lbs. or 80 g/m^2) Lower tray: Stapled print capacity is (6 - 10) sheets x 10 sets or (1 - 5) sheets x 20 sets.
Paper size	Upper tray: 11" x 17", 8-1/2" x 14", 8-1/2" x 13", 8-1/2" x 11", 8-1/2" x 11"R, 7-1/4" x 10-1/2", 5-1/2" x 8-1/2"R, A3, B4, A4, A4R, B5, B5R, A5R Lower tray: max. 11" x 17", 8-1/2" x 11"R, A3, B4, A4R
Paper weight	Upper tray: 16 to 54 lbs. or 60 to 205 g/m^2 Lower tray: 17 to 34 lbs. or 64 to 80 g/m^2
Paper types	Upper tray: plain paper, thick paper Lower tray: plain paper only
Tray full detection	Provided in both trays
Offset function	Upper tray only
Paper sizes for stapling	Upper tray: 11" x 17", 8-1/2" x 14", 8-1/2" x 13", 8-1/2" x 11", 8-1/2" x 11"R, A3, B4, A4, A4R, and B5 Lower tray: 11" x 17", 8-1/2" x 11"R, A3, B4, and A4R

Stapling capacity	8-1/2" x 11" or A4 or smaller size: 50 sheets*(20 lbs. or 80 g/m2) 8-1/2" x 14" or B4 or larger size: 25 sheets*(20 lbs. or 80 g/m2) *Up to two sheets of 34 lbs. or 128 g/m2 paper can be included as covers.
Staples	Upper tray: Single staple can be placed in the top left or lower left corners or two staples can be centered on the left side. Lower tray: 4-47/64" (120 mm) pitch from the center of paper
Power supply	Supplied from machine
Dimensions	28-9/32"* (W) x 23-3/4" (D) x 39-3/8" (H) (718 mm* (W) x 603 mm (D) x 1000 mm (H)) *When the top tray is extended.
Weight	Approx. 86 lbs. (39 kg)

Name	Punch module
Paper sizes for hole punching	3 holes: 11" x 17", 8-1/2" x 11", A3, A4 2 holes: 8-1/2" x 14", 8-1/2" x 11"R

Specifications are subject to change for improvement without notice.

Supplies

AR-SC2 staple cartridges must be used for this finisher. The cartridge package contains three cartridges approx. 5000 staples each.

3
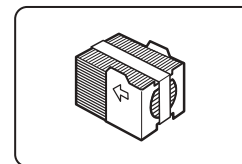
Saddle stitch finisher functions

■ Sort mode

Sorted sets will be delivered.

Original   Printouts
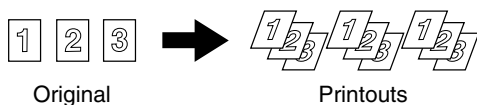
■ Group mode

Groups of copies of the same page will be delivered.
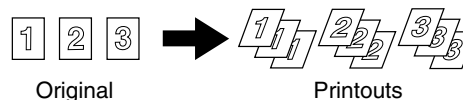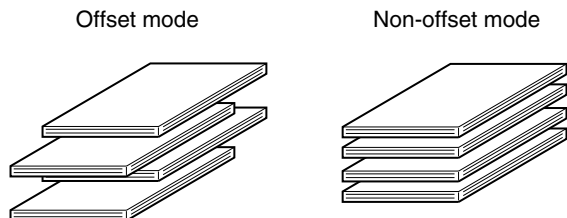
Original   Printouts

■ Offset mode

Offset mode   Non-offset mode

Sets will move from side to side so that each set or group will be offset from the previous set or group for easy separation. The offset function can only be used in the offset tray.
Stapled sets will not be offset.

3-15

■ Staple sort mode

Collated sets of prints or copies will be stapled and delivered to the offset tray. When saddle stitching is selected, the prints or copies will be stapled at the center and delivered to the saddle stitch tray. The stapling positions, orientation, paper size for stapling, and stapling capacity are shown below.

Stapling positions	Portrait orientation		Landscape orientation	
Top left corner of printouts		Available paper sizes: 8-1/2" x 11", A4 and B5 Stapling capacity: Up to 50 sheets for any sizes		Available paper sizes: 11" x 17", 8-1/2" x 14", 8-1/2" x 13", 8-1/2" x 11" R, A3, B4, and A4R Stapling capacity: Up to 50 sheets for 8-1/2" x 11"R, A4R and B5R, and up to 25 sheets for other sizes
Center left two positions of printouts		Same as above		Available paper sizes: 11" x 17", 8-1/2" x 14", 8-1/2" x 13", A3, and B4 Stapling capacity: Up to 25 sheets for any sizes
Lower left corner of printouts		Same as above		Available paper sizes: 11" x 17", 8-1/2" x 14", 8-1/2" x 13", 8-1/2" x 11" R, A3, B4, and A4R Stapling capacity: Up to 50 sheets for 8-1/2" x 11"R, A4R and B5R, and up to 25 sheets for other sizes
Saddle stitch on centerfold line.		Paper in the portrait direction cannot be saddle stitched.		Available paper sizes: 11" x 17", 8-1/2" x 11"R, A3, B4, and A4R Stapling capacity: Up to 10 sheets for any sizes

■ Original orientation when using the staple sort or punch function

When using the staple sort or punch function, the original must be placed in the following orientations to enable stapling or punching in the desired position on the paper.

Staple sort		Punch	
Document feeder	Document glass	Document feeder	Document glass

3-16

■ Saddle stitch function

The saddle stitch finisher can automatically place two staples for centerline binding of prints or copies and fold them along the centerline.
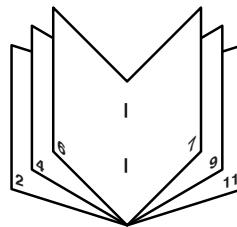
■ Hole punching (only if a punch module is installed)

If the saddle stitch finisher is equipped with a hole punch module, printed paper can be hole punched and delivered to the offset tray. Saddle stitching and hole punching cannot be selected at the same time. The automatic image rotation will not function when the hole punching function is used.

Two or three holes can be punched depending on the paper size. (See paper sizes for hole punching on page 4-4.)

If the punching function is enabled for a paper size that cannot be punched, the paper will be output without being punched. (For paper sizes that can be punched, see the specifications on page 3-15.) When using the punching function in copy mode, place the original with the top edge toward the back of the machine. If the original is not placed in this orientation, punching will not take place at the correct positions.

<Example>

{Original 1}   {Punch positions}
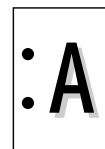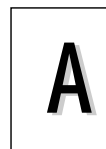
{Original 2}   {Punch positions}

3

3-17

Using the saddle stitch finisher

When [OUTPUT] is selected on the main screen of copy mode, a screen for making selections for sort, group, staple sort, saddle stitch, punch and exit tray will appear.
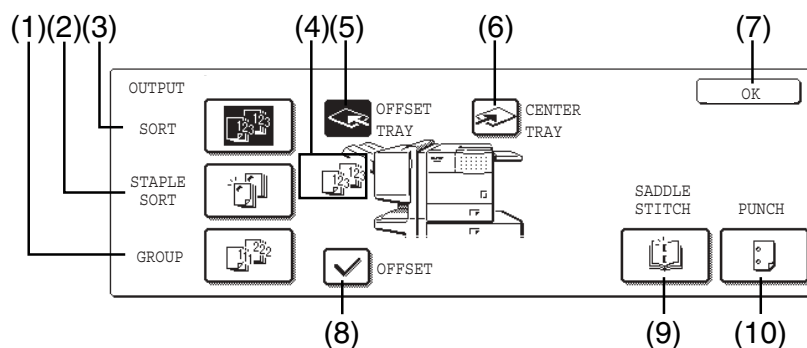
(1) [GROUP] key (See page 3-15.)

When Group is selected, all copies of the same original will be grouped.

(2) [STAPLE SORT] key (See page 3-16.)

When Staple Sort is selected, sorted sets will be stapled and delivered to the offset tray. (They will not be offset stacked.)

(3) [SORT] key (See page 3-15.)

When Sort is selected, sets of copies will be sequentially delivered.

(4) Icon display

An icon representing a selected function (sort, staple sort or group saddle stitch) is displayed.

(5) [OFFSET TRAY] key

If Offset is checked, the offset will be enabled. If not checked, the offset will not function. If the staple sort is selected, the check mark of offset will be automatically selected.

(6) [CENTER TRAY] key

If the center tray is selected, output paper will be delivered to the exit tray.

(7) [OK] key

Press to close the [OUTPUT] screen and to return to the main screen.

(8) [OFFSET] key (See page 3-15.)

When the offset tray is selected, copies will be delivered to the offset tray. When staple sort is selected, the offset tray will be automatically canceled.

(9) [SADDLE STITCH] key (See page 3-17.)

When saddle stitching is selected, the copies will be stapled at the center and delivered to the saddle stitch tray.

(10) [PUNCH] key (See page 3-17.)

If the saddle stitch finisher is equipped with a punch module, printed paper can be hole punched and delivered to the offset tray.

* As a selection is made, the touch key for the selection will be highlighted.

Staple cartridge replacement and staple jam removal

When the staple cartridge becomes empty or staples become jammed, a message will appear in the message display of the operation panel.
Follow the procedure below to replace the staple cartridge or remove jammed staples.

■ Staple cartridge replacement

1 **Open the front cover.**
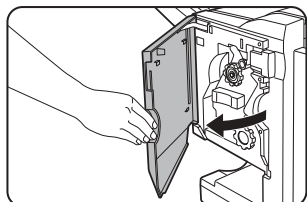
2 **Pull out the stapler section.**
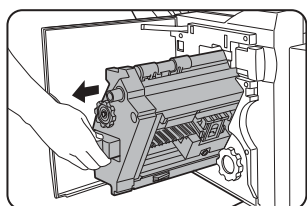
3 **Turn roller rotating knob A in the direction of the arrow to move the staple unit to the front.**

Turn the roller rotating knob until the triangle mark is aligned with the index.

Roller rotating knob A

Staple unit
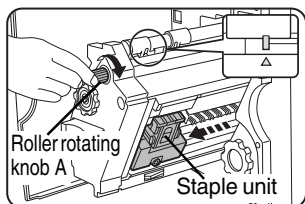
4 **Remove the empty staple box.**
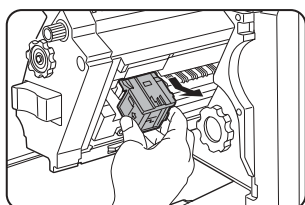
5 **Remove the empty staple cartridge.**
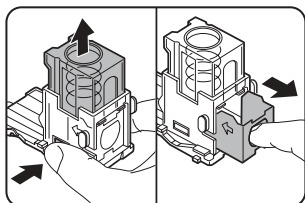
Press the lock button to unlock the staple box cover and remove the staple cartridge.

NOTE

If staples remain, the staple cartridge cannot be removed.

6 **Insert a new staple cartridge into the staple box.**
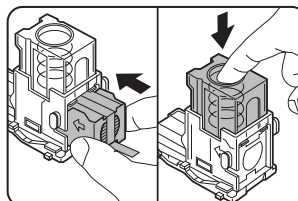
After inserting the staple cartridge, press down on the staple box cover to lock the cartridge in place.

NOTES

● Do not remove the tape from the cartridge before inserting the staple cartridge into the box.
● Make sure that the staple cartridge is secured firmly.
● When reinstalling the staple box, push it in until it clicks into place.

3

7 **Remove the tape from the staple cartridge by pulling it straight.**
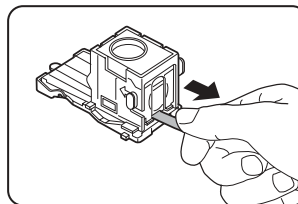
8 **Insert the staple box.**
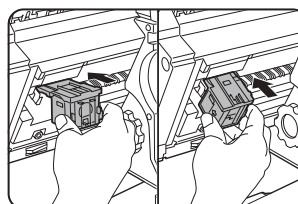
Push the staple box in until it clicks into place.

9 **Push the stapler section back into the finisher.**

10 **Close the front cover.**

NOTE

Make a test print or copy in the staple sort mode to ensure that stapling is performed properly.

■ Staple jam removal

1 Unlatch the saddle stitch finisher and slide it away from the machine.
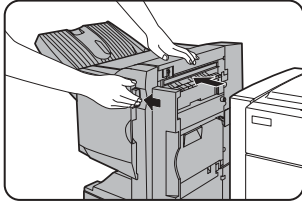
2 Open the front cover.
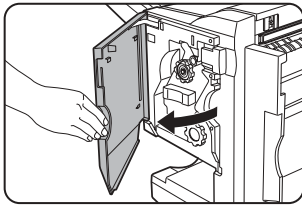
3 Turn roller rotating knob C as shown in the illustration until the blue indication is seen.

Roller rotating knob C

Blue
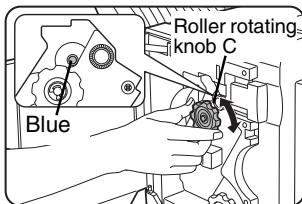
4 Remove the paper from the stapler compiler.
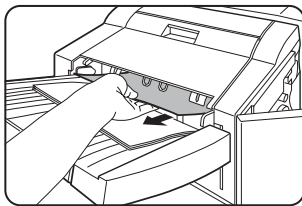
5 If saddle stitch was selected, open the saddle stitch section cover.
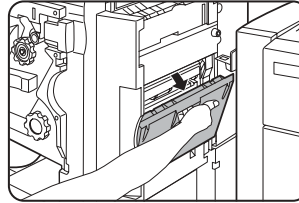
6 Remove the misfed paper.
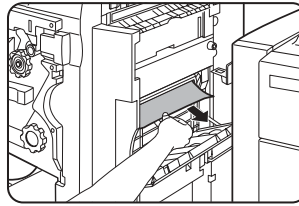
Be careful not to tear the misfed paper during removal.

7 Close the saddle stitch section cover.
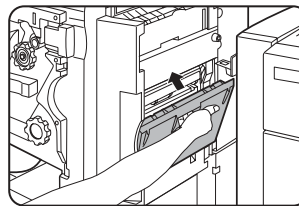
8 Open the front cover and pull out the stapler unit.
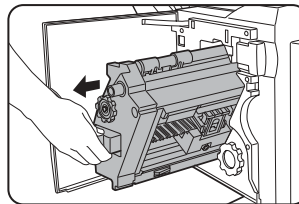
9 **Turn roller rotating knob A in the direction of the arrow to move the staple unit to the front.**

Turn the roller rotating knob until the triangle mark is aligned with the index.

Roller rotating knob A

Staple unit
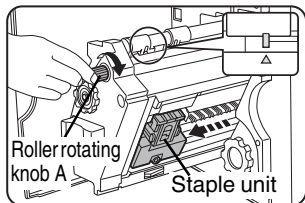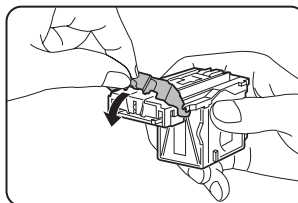
10 **Remove the staple box.**
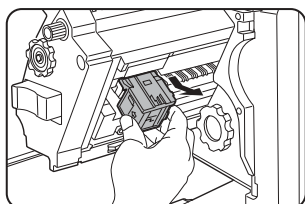
11 **Raise the lever at the end of the staple box.**
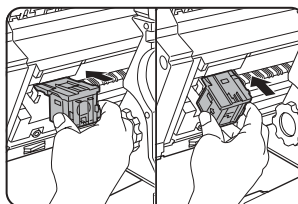
Remove the top staple if it is bent. If bent staples remain, a staple jam will occur again.

12 **Return the lever to its original position.**

13 **Reinstall the staple box.**

Push the staple box in until it clicks into place.
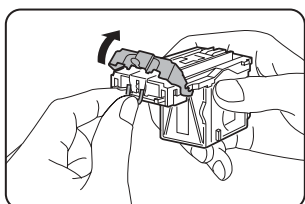
14 **Push the stapler section back into the finisher.**

15 **Close the front cover.**

16 **Push the saddle stitch finisher back against the machine.**

NOTE
Make a test print or copy in the staple sort mode to ensure that stapling is performed properly.

■ **Disposal of hole punch scrap**

1 **Unlatch the saddle stitch finisher and slide it away from the machine.**

2 **Pull out the punch scrap collecting container and empty it.**
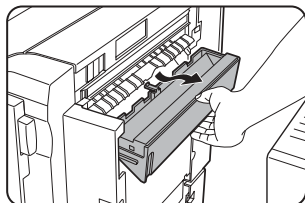
Empty the punch debris into a plastic bag or other container for disposal, taking care not to spill any of the punch debris.

3 **Return the punch scrap collecting container to its original position.**

4 **Push the saddle stitch finisher back against the machine.**

3

3-21
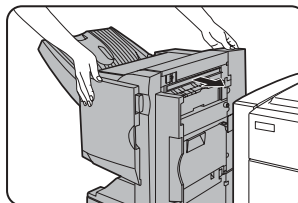
Misfeed in the saddle stitch finisher

When a misfeed occurs in the saddle stitch finisher, remove the misfed paper following the procedure below.

1 **Press the detach button and separate the saddle stitch finisher from the machine.**
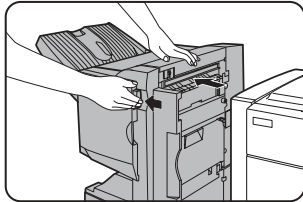
CAUTION

The saddle stitch finisher and the machine are connected at the rear. Exercise caution when pulling them apart.

2 **Remove any misfed paper from the machine.**
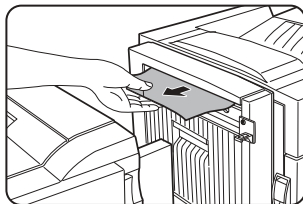
3 **If there was no misfed paper in step 2, pull roller rotating knob B on the punch unit toward you and rotate it. (Only when an optional punch unit is installed.)**

Roller rotating knob B
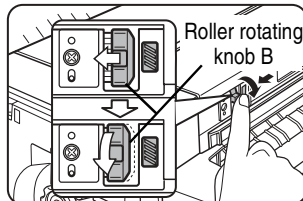
Rotating roller rotating knob B releases the caught paper.

4 **Open the top cover.**
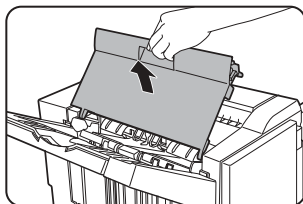
5 **Remove the misfed paper.**
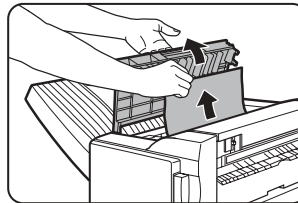
Remove the paper gently, taking care not to tear it.

6 **Close the top cover.**
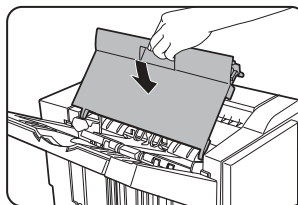
7 **Remove any misfed paper from the stapler compiler.**
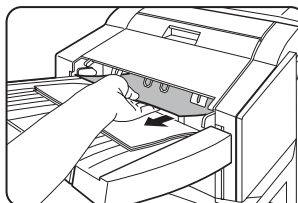
Remove the paper gently, taking care not to tear it.

8 **Open the cover of the saddle stitch section.**
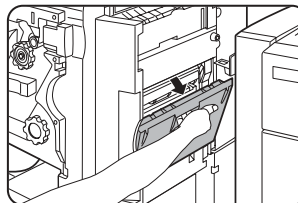
9 **Remove the misfed paper.**
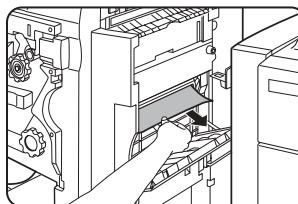
Remove the paper gently, taking care not to tear it.

10 Open the front cover.
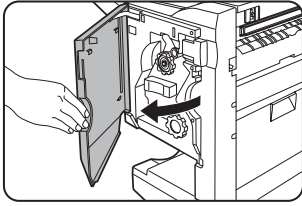
15 Push the saddle stitch finisher back onto the machine.
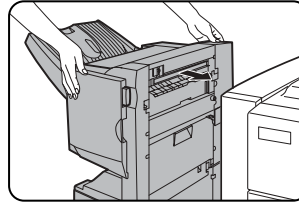
11 Rotate roller rotating knob D in the direction of the arrow.

Roller rotating knob D
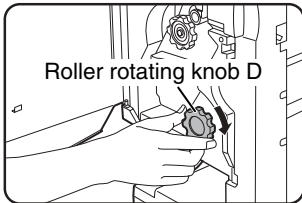
12 Remove any misfed paper from the saddle stitch tray.

Remove the paper gently, taking care not to tear it.

3
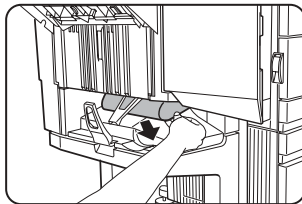
13 Close the cover of the saddle stitch section.
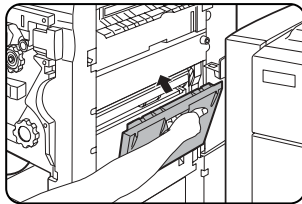
14 Close the front cover.

3-23
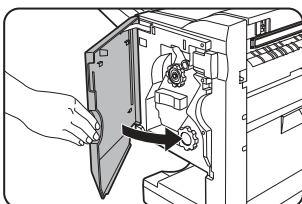
Troubleshooting (concerning the saddle stitch finisher)

Check the list below before calling for service.

Problem	Check	Solution or cause
The saddle stitch finisher does not operate.	Are any saddle stitch finisher covers open?	Close all covers. (See page 3-14.)
	Message indicating need to remove paper from the stapler compiler displayed?	Remove all remaining paper from the stapler compiler referring to step 4 on page 3-20.
Stapling cannot be performed (including saddle stitch).	Message requesting check for the staple unit displayed?	Remove jammed staples. (See page 3-20.)
	Message requesting adding staples displayed?	Replace the staple cartridge. (See page 3-19.) Check that a staple cartridge has been installed. (See page 3-20.)
	Different size paper included?	Stapling cannot be performed onto different size paper.
Stapled sets are not stacked correctly or some sheets in a set are not stapled.	Paper heavily curled?	Paper may be curled heavily depending on the paper type and quality. Remove paper from the paper tray or the bypass tray, turn it upside down, and load it again.
Punching does not take place in the correct positions.*	The punching function is not set for the correct positions.	Check the positions where punching is possible.
Cannot be punched.*	Message requesting check for punch module displayed?	Dispose of punch scraps. (See page 3-21.)
	Different size paper included?	Stapling cannot be performed onto different size paper.
	The paper is badly curled and is not punched.	Some types and qualities of paper may curl badly when printed on. Remove the paper from the tray or bypass tray, turn it around to reverse the top and bottom, and then place it back in the tray.

* When a punch module is installed

Part 2: Copier Operation

CHAPTER 4

MAKING COPIES

This chapter explains the basic procedures for making copies, including selection of the copy ratio and other copy settings.

AUTOMATIC DOCUMENT FEEDER

The automatic document feeder automatically feeds originals into the machine, making continuous copying possible. In addition, both sides of two-sided sheet originals can be simultaneously scanned. This function is convenient when you have a large number of original pages to scan.

Acceptable originals

A stack of up to 50 original sheets (30 original sheets*1 for 8-1/2" x 14" (B4) or larger) of the same size paper can be set in the document feeder tray provided the stack height is within the limit shown below.
A stack of up to 30 mixed size originals can be set if the width of the originals is the same and the stack height is within the limit shown below. In this case, however, stapling and duplex will not function and some special functions may not give the expected result.

*1   For paper heavier than 28 lbs. (105 g/m^2), only a stack of up to 15 sheets can be set. Setting 16 or more sheets may cause incorrect scanning of original and scanned image may become expanded compared with original itself.

■ **Size and weight of acceptable originals**

Original size:
5-1/2" x 8-1/2" or A5
(148 x 210 mm)
11" x 17" or A3
(297 x 420 mm)

Weight (thickness):
14 lbs. or 50g/m^2
34 lbs. or 128 g/m^2

g/m^2 ... Weight of a sheet of paper of 1 m^2
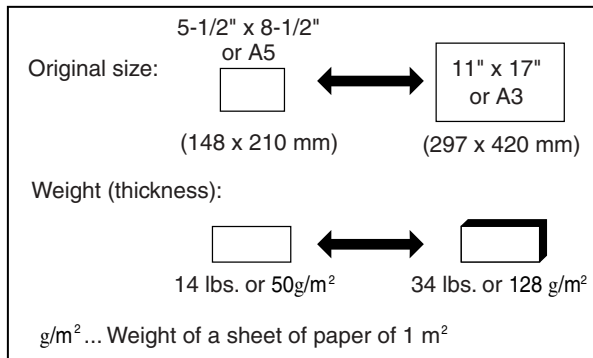
■ **Total number of originals that can be set in the document feeder tray**

Total aggregate thickness must not exceed 1/4" or 6.5 mm (for 14 to 21 lbs. or 50 to 80 g/m^2 paper).
1/4" or 6.5 mm or less

Total aggregate thickness must not exceed 3/16" or 5.0 mm (for 21 to 34 lbs. or 80 to 128 g/m^2 paper).
3/16" or 5.0 mm or less
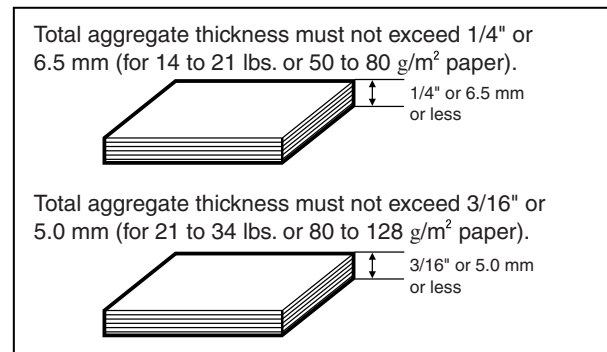
■ **Notes on use of the automatic document feeder**

● Use originals within the specified size and weight ranges. Use of originals out of the specified range may cause an original misfeed.

● Before loading originals into the document feeder tray, be sure to remove any staples or paper clips.

● If originals have damp spots from correction fluid, ink or glue from pasteups, be sure they are dried before they are fed. If not, the interior of the document feeder or the document glass may be soiled.

● Do not use the following originals. These originals may cause incorrect original size detection, original misfeeds, and smudges on copies.

  • Transparency film, tracing paper, carbon paper, thermal paper or originals printed with thermal transfer ink ribbon should not be fed through the document feeder. Originals to be fed through the feeder should not be damaged, crumpled or folded or have loosely pasted paper on them or cutouts in them. Originals with multiple punched holes other than two-hole or three-hole punched paper may not feed correctly.

● When using originals with two or three holes, place them so that the punched edge is at a position other than the feed slot.

Hole positions

Hole positions

Hole positions
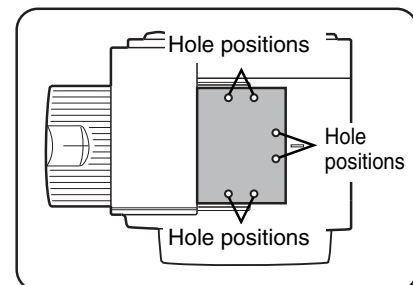
PLACING ORIGINALS

■ Using the automatic document feeder

1 **Open the document cover, make sure that an original has not been left on the document glass, and then gently close the document cover.**
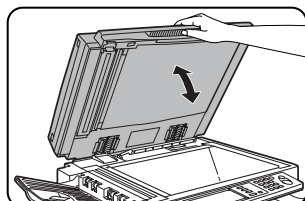
2 **Adjust the original guides to the size of the originals.**
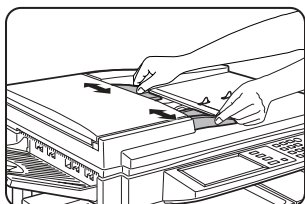
3 **Place the originals face down in the document feeder tray.**
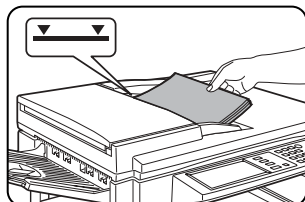
Place the originals face down.

Insert the originals all the way into the document feeder. The stack height must not be higher than the indicator line (maximum of 50 pages).

■ Using the document glass

Open the document cover, place the original face down on the document glass, and then gently close the document cover.
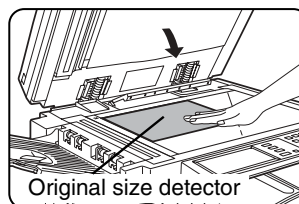
To make a copy of a small original such as a postcard, use the [PAPER SELECT] key to select the desired paper size.

Original size detector

NOTE
Do not place any objects under the original size detector, because they may damage it or the original size may not be detected properly.
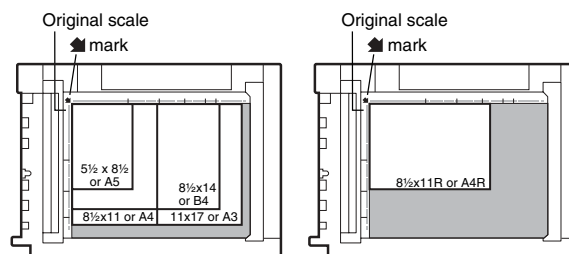
Original scale ♠ mark

Original scale ♠ mark

5½ x 8½ or A5

8½x14 or B4

8½x11 or A4   11x17 or A3

8½x11R or A4R

● Align the corner of the original with the tip of the arrow mark ♠ on the document glass scale.
● Place the original in the appropriate position for its size as shown above.

NOTE
Original size detection function
One of the four groups of standard original sizes shown below can be selected for detection by the original size detection function. The factory default setting is "INCH-1". The setting can be changed using "ORIGINAL SIZE DETECTOR SETTING" in the key operator programs.

	Group	Detectable original sizes	
		Document feeder tray (for automatic document feeder)	
		Document glass	
1	INCH-1	11" x 17", 8-1/2" x 14", 8-1/2" x 11", 8-1/2" x 11"R, 5-1/2" x 8-1/2"	Document glass + A3, A4
2	INCH-2	11" x 17", 8-1/2" x 13", 8-1/2" x 11", 8-1/2" x 11"R, 5-1/2" x 8-1/2"	Document glass + A3, A4
3	AB-1	A3, A4, A4R, A5,B4, B5, B5R	Document glass + 11" x 17", 8-1/2" x 11", 216x330
4	AB-2	A3, A4, A4R, A5,B5, B5R, 216x330	Document glass + 11" x 17", 8-1/2" x 11", B4

4

■ Standard original placement orientations

[Example 1]

Document feeder tray   Document glass

[Example 2]
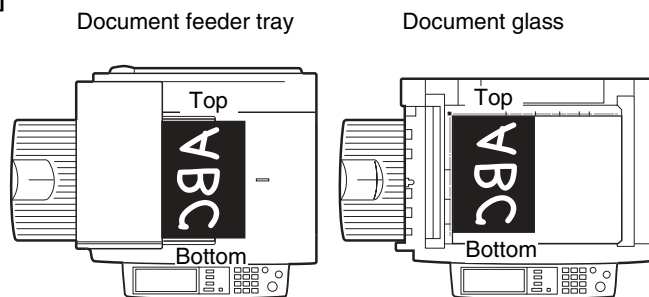
Place originals in the document feeder tray or on the document glass so that the top and bottom of the original is positioned as shown in the illustration. If not, staples will be incorrectly positioned and some special features may not give the expected result.
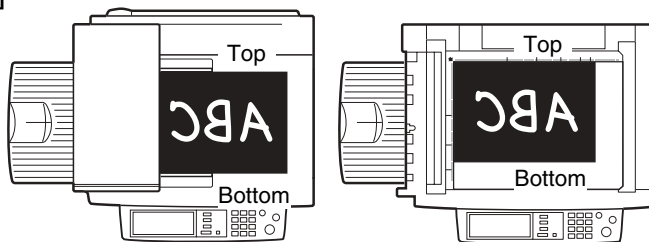
■ Automatic copy image rotation - rotation copying

If the orientation of the originals and copy paper are different, the original image will be automatically rotated 90° and copied. (When an image is rotated, a message will be displayed.) If a function is selected that is not suitable for rotation, such as enlarging the copy to greater than 8-1/2" x 11" (A4) size or staple sorting with the saddle stitch finisher, rotation will not be possible.

[Example]

Orientation of original   Orientation of paper   Copy after rotation

Face down   Face down
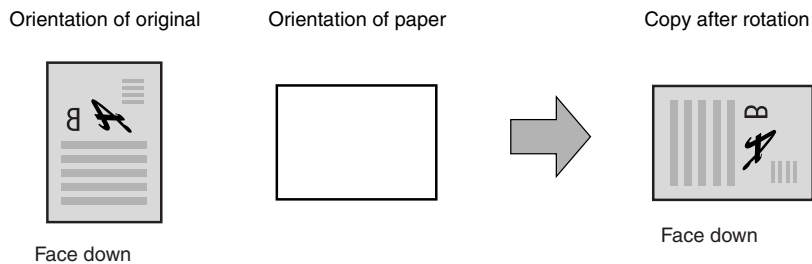
● This function operates in both the auto paper select or auto image mode. ("Rotation copy setting" can be disabled with a key operator program. See page 14 of the key operator's guide.)

4-4

CHECKING THE SIZE OF A PLACED ORIGINAL

If the placed original is a standard size, the size will be automatically detected (automatic original detection function) and displayed in the touch panel. Make sure that the correct size has been detected.

(A) : The original size is displayed.

(B) : [AUTO] appears when the automatic original detection function is operating.

If you have loaded a non-standard size original or wish to change the scanning size, you can follow the steps below to manually set the original scanning size. (For the standard sizes, see "Original size detection function" on page 4-3.)

(A)   (B)
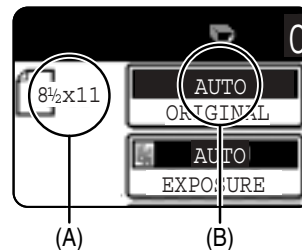
NOTE

If a non-standard size original is loaded (including special sizes), the closest standard size may be displayed, or the original size may not appear at all.

If "CANCEL DETECTION AT DOCUMENT GLASS" is enabled in the key operator programs (see page 11 of the key operator's guide), automatic original detection at the document glass will not operate. In this case, follow the steps below to manually set the original scanning size.

Manually setting the scanning size

4

If you load an original that is not a standard size (such as an AB size), or if the size is not detected correctly, you must touch the [ORIGINAL] key and set the original size manually. Perform the following steps after placing the document in the automatic document feeder or on the document glass.

1 Touch the [ORIGINAL] key.

2 Touch the desired original size key.
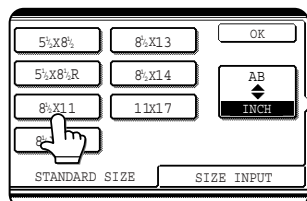
[AUTO] is no longer highlighted. [MANUAL] and the original size key you touched are highlighted.

If you wish to select an AB size, touch the [AB/INCH] key and then touch the desired original size key.
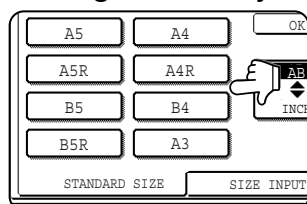
[AB] is highlighted and AB size keys are displayed. To return to the inch palette, touch the [AB/INCH] key once again.

If a non-standard size original is placed in the document feeder or on the document glass, touch the [SIZE INPUT] tab and then enter the X (width) and Y (length) dimensions of the original.
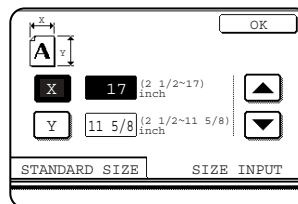
X is initially selected. Enter the X dimension (width) and then touch the Y(☐) key and enter the Y dimension (length). X can be from 2-1/2 to 17 inch, and Y can be from 2-1/2 to 11-5/8 inch.

If you frequently use originals that are the same non-standard size, you can store the size as explained in "STORING, DELETING, AND USING ORIGINAL SIZES" on the following page. This will save you the trouble of manually entering the size each time you use that original size.

3 Touch the [OK] key.

You will return to the initial screen.

4 The selected original size appears in the top half of the [ORIGINAL] key.
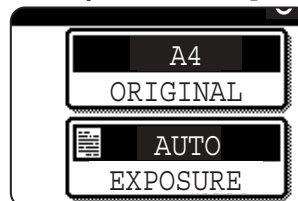
STORING, DELETING, AND USING ORIGINAL SIZES

Up to 9 special original sizes can be stored. Stored sizes can be easily called up and are not erased if the power is turned off. Storing a frequently used original size saves you the trouble of manually setting the size each time you copy that size of document.

● To cancel an original size storing, using, or deleting operation, press the [CA] key or touch the [ORIGINAL] key on the screen.

Storing or deleting an original size

1 **Touch the [ORIGINAL] key.**
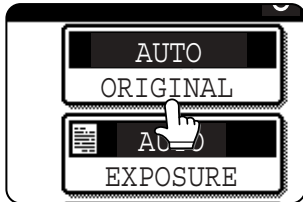
2 **Touch the [CUSTOM SIZE] key.**
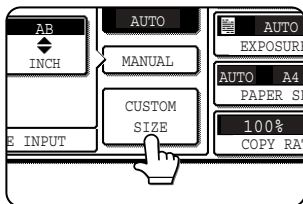
3 **Touch the [STORE/DELETE] key.**
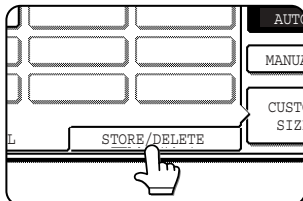
4 **Touch the original size key ( ) that you wish to store or delete.**
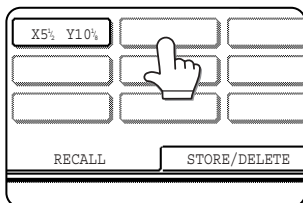
To store an original size, touch a key that does not show a size ( ).

Keys that already have an original size stored will show the stored size (X5½ Y10⅜).

To delete or change a stored size, touch the key that shows the size that you wish to delete or change.

● If you are storing an original size, go to step 5.
● To delete or change an original size, go to step 7.

5 **Enter the X (width) and Y (length) dimensions of the original with the ▲▼ keys.**
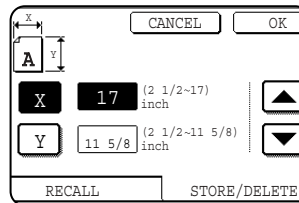
X (width) is initially selected.

Enter X and then touch the (Y) key to enter Y. A width of 2-1/2 to 17 inches can be entered in X, and a length of 2-1/2 to 11-5/8 inches can be entered in Y.

6 **Touch the [OK] key.**

The original size entered in step 5 is stored in the key selected in step 4.

To exit, touch the [ORIGINAL] key.

7 **When you touch a key that shows an original size in step 4, a message screen appears that contains the keys [CANCEL], [DELETE], and [STORE].**

● To cancel the procedure, touch the [CANCEL] key.
● To delete the selected original size, touch the [DELETE] key.
● To change the original size stored in the key, touch the [STORE] key. The screen of step 5 will appear to let you change the size.

8 **To exit, touch the [ORIGINAL] key.**

■ USING A STORED ORIGINAL SIZE

1 **Follow steps 1 to 2 of "STORING OR DELETING AN ORIGINAL SIZE".**

2 **Touch the original size key that you wish to use.**

3 **Touch the [OK] key.**

The stored original size is called up.

4-6
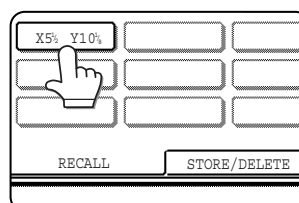
NORMAL COPYING

This section describes the normal copying procedure.

Making copies with the automatic document feeder

■ 1-sided copies of 1-sided originals
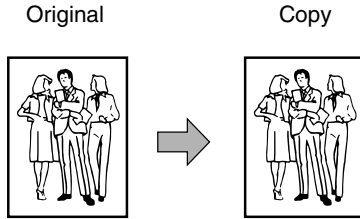
Original   Copy

1 **Place the originals in the document feeder tray. (pages 4-3 to 4-6)**

2 **Make sure that the 1-sided to 1-sided copy mode is selected.**
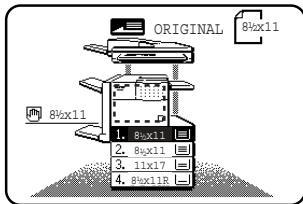
ORIGINAL 8½x11

8½x11

1. 8½x11
2. 8½x11
3. 11x17
4. 8½x11R

The one-sided to one-sided mode is selected when no icon for a two-sided mode appears in the dashed area on the display. If the 1-sided to 1-sided copy mode is already selected, steps 3 to 5 are not needed.

3 **Touch the [2-SIDED COPY] key.**

SPECIAL MODES

2-SIDED COPY

OUTPUT

4 **Touch the [1-sided to 1-sided copy] key.**

Touch the [1-sided to 1-sided copy] key.

1▸1

5 **Touch the [OK] key.**

0

OK

6 **Make sure that paper of the same size as the originals is automatically selected*.**
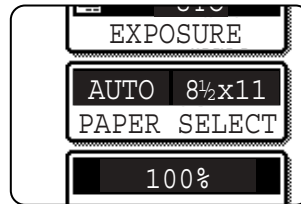
EXPOSURE

AUTO 8½x11
PAPER SELECT

100%

The selected tray will be highlighted or the message "LOAD xxxxxx PAPER." will appear. If the message appears, load paper in a paper tray with paper of the required size.

Even if the message above appears, copying can be performed onto the currently selected paper.

*The following requirements must be satisfied.

Originals of a standard size (11" x 17", 8-1/2" x 14", 8-1/2" x 11", 8-1/2" x 11"R or 5-1/2" x 8-1/2R" (A3, B4, A4, A4R, B5, B5R or A5)) are set and the auto paper select function is enabled.

READY TO SCAN FOR COPY.

1. 8½x11   PLAIN
8½x11   2. 11x17   PLAIN
PLAIN   3. 11x17   PLAIN
4. 8½x   PLAIN

If originals of a size other than the sizes above are to be copied, manually select the desired paper size by touching the [PAPER SELECT] key and then touching the desired paper size selection key.

The selected key will be highlighted and the paper selection screen will close. To close the paper selection screen without making a selection, touch the [PAPER SELECT] key.

4
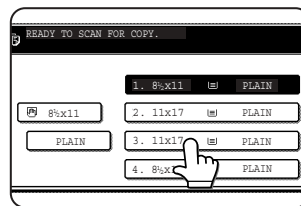
7 **Select the desired output mode (page 4-9).**

```
2-SIDED COPY
OUTPUT
FILE
```

The sort mode is the default mode.
To select the group mode, touch the [OUTPUT] key, then touch the [GROUP] key on the output setting screen, and then touch the [OK] key on the setting screen.

8 **Use the numeric keys to set the desired number of copies.**
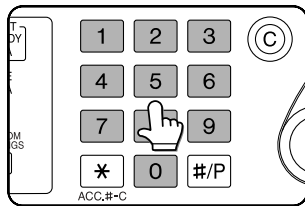
```
  1   2   3   Ⓒ
  4   5   6
  7       9
  ✳   0  #/P
ACC.#-C
```

Up to 999 can be set.
If you are only making a single copy, the copy can be made with the copy number display showing "0". Use the [C] (clear) key to cancel an entry if a mistake has been made.

9 **If needed, touch the [FILE] key or the [QUICK FILE] key.**
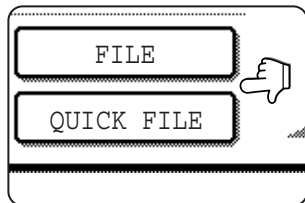
```
FILE
QUICK FILE
```

Either key can be touched to store the scanned document image on the machine's hard disk. The stored image can be re-used later.
For more information on this function, see "Document filing function" in chapter 7.
If the [FILE] key is grayed out, only the [QUICK FILE] key can be selected.
When you touch the [QUICK FILE] key, a message asking you to confirm the save will appear. Touch the [OK] key in the message screen and go to the next step.
If you wish to cancel the save, touch the [QUICK FILE] key after touching the [OK] key so that the [QUICK FILE] key is no longer highlighted.

10 **Press the [START] key.**

```
 6        CA
 9
#/P
```
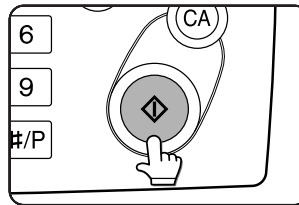
If the [C] key is pressed while originals are being scanned, scanning will stop. If copying had already started, copying and scanning will stop after the original in progress is output to the original exit area. In these cases the copy quantity will be reset to "0".

NOTES
● The 1-sided to 1-sided copying mode is set as the default in the initial settings. If the default setting has not been changed using the "Initial status settings" program (key operator program), steps 3 to 5 on page 4-7 can be omitted.

To cancel copying...
To cancel a copy job in progress, press the [CA] key. A confirmation message will appear. Touch the [YES] key to cancel copying.

■ Copy output (sort and group)

Example: Making five sets or five copies each of three originals

● Sorting copies into sets

Original

Five sets of copies

| Set the number of copies (5) | Touch the [OUTPUT] key | Touch the [SORT] key | Press the [START] key |

When using the automatic document feeder, sorting is automatically selected when the original is placed in the document feeder.

● Grouping copies by page

Original

5 copies per page

| Set the number of copies (5) | Touch the [OUTPUT] key | Touch the [GROUP] key | Press the [START] key |

"Group" is automatically selected when the original is placed on the document glass.

■ Selecting the output tray (when an optional finisher or saddle stitch finisher is installed)

When the [OFFSET TRAY] key is highlighted, output pages are delivered to the offset tray of the finisher or saddle stitch finisher. When the "CENTER TRAY" key is highlighted, output pages are delivered to the center tray. Touch the appropriate key to select the desired output tray.
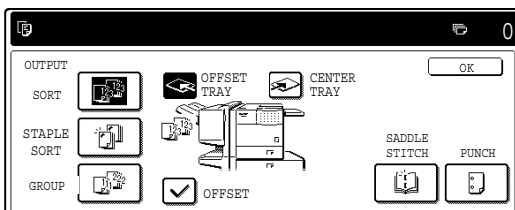
This screen appears when a saddle stitch finisher is installed.

The screen that appears when a finisher is installed is slightly different.

4-9

Automatic two-sided copying using the automatic document feeder

When the optional duplex module is installed, the following automatic two-sided copying can be performed. The paper is automatically turned over during copying, allowing two-sided copies to be made with ease.
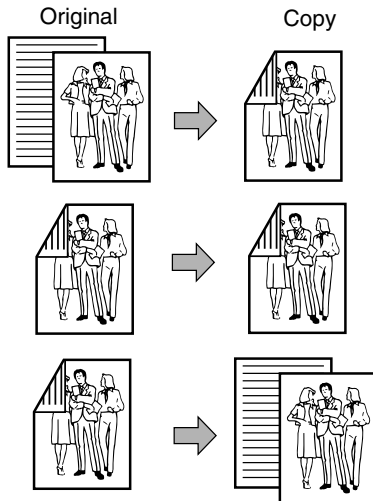
Original   Copy

1. **Automatic two-sided copying from one-sided originals**

2. **Automatic two-sided copying from two-sided originals**

3. **Automatic one-sided copying from two-sided originals**

1 **Place the originals in the document feeder tray. (pages 4-3 to 4-6)**

2 **Touch the [2-SIDED COPY] key.**

SPECIAL MODES

2-SIDED COPY

OUTPUT
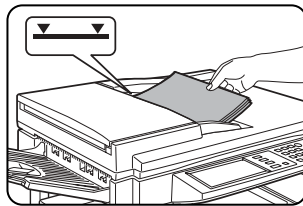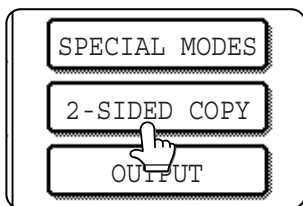
3 **Select the desired copy mode.**

DED COPY

BIN
CHA
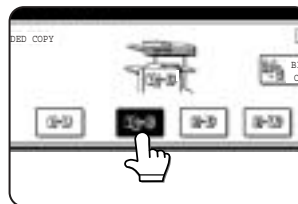
The display will vary depending on the equipment installed.

If a copy key is touched for a mode that cannot be selected, a double beep will sound.

Example of a portrait-oriented original
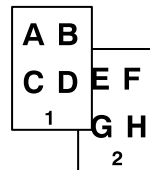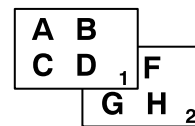
Example of a landscape-oriented original

A B
C D E F
1
G H
2

A B
C D
1
F
G H
2

When making automatic two-sided copies of a one-sided 11" x 17" (A3) or 8-1/2" x 14" (B4) size portrait original, or when you wish to invert the top and bottom of the back side of a two-sided original, touch the [BINDING CHANGE] key.

4 **Touch the [OK] key.**

0

OK

BINDING
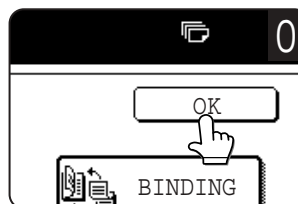
Perform steps 6 through 10 on pages 4-7 and 4-8.

4-10

Copying from the document glass

When copying originals which cannot be fed from the automatic document feeder such as thick originals, open the document cover and copy the originals from the document glass.

■ 1-sided copies of 1-sided originals
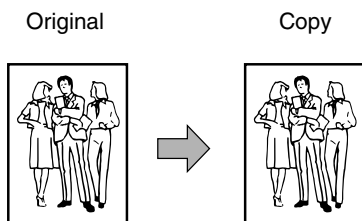
Original   Copy

1 **Place the original on the document glass. (pages 4-3 to 4-6)**

Original scale   Original scale
▲ mark   ▲ mark

- ●Align the corner of the original with the tip of the arrow mark ▲ on the document glass scale.
- ●Place the original in the appropriate position for its size as shown above.

2 **Ensure that the 1-sided to 1-sided copy mode is selected.**
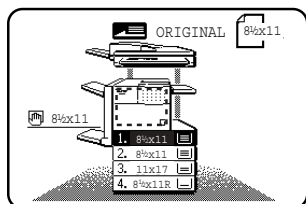
The one-sided to one-sided mode is selected when no icon for a two-sided mode appears in the dashed area on the display. If an icon appears, perform steps 3 to 5 on page 4-7 and then go to step 3.

3 **Ensure that paper of the same size as the original is automatically selected*.**
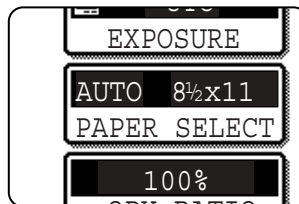
The selected tray will be highlighted or the message "LOAD xxxxxx PAPER." will appear. If the message appears, load paper in a paper tray with paper of the required size.

Even if the message above is displayed, copying can be performed onto the currently selected paper.

* The following requirements must be satisfied.
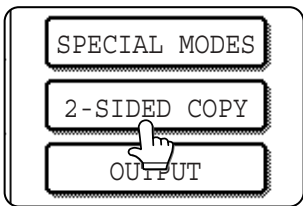Originals of a standard size (11" x 17", 8-1/2" x 14", 8-1/2" x 11", 8-1/2" x 11"R or 5-1/2" x 8-1/2"R (A3, B4, A4, A4R, B5, B5R or A5)) are set and the auto paper select function is enabled.
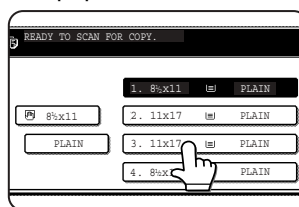
If originals of a size other than the sizes above are to be copied, manually select the desired paper size by touching the [PAPER SELECT] key and then touching the desired paper size selection key.

The selected key will be highlighted and the paper selection screen will close. To close the paper selection screen without making a selection, touch the [PAPER SELECT] key.

4

4 Select the desired output mode. (page 4-9.)

```
2-SIDED COPY

OUTPUT

FILE
```
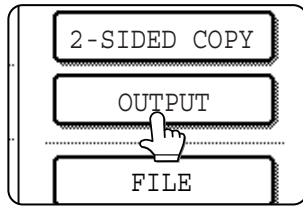
Group mode is the default mode.

To select sort mode, touch the [OUTPUT] key, touch the [SORT] key in the screen that appears, and then touch the [OK] key.

5 Use the numeric keys to set the desired number of copies.
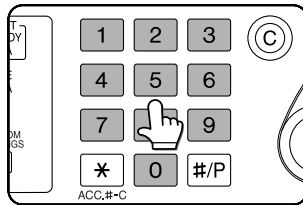
```
1   2   3   Ⓒ
4   5   6
7       9
*   0   #/P
ACC.#-C
```

Up to 999 can be set.
If you are only making a single copy, the copy can be made with the copy number display showing "0".

Use the [C] (clear) key to cancel an entry if a mistake has been made.

6 If needed, touch the [FILE] key or the [QUICK FILE] key.
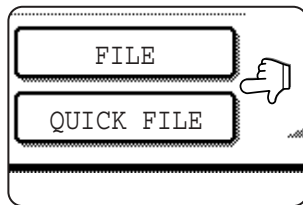
```
FILE

QUICK FILE
```

Either key can be touched to store the scanned document image on the machine's hard disk. The stored image can be re-used later.

For more information on this function, see "Document filing function" in chapter 7.

If the [FILE] key is grayed out, only the [QUICK FILE] key can be selected.

When you touch the [QUICK FILE] key, a message asking you to confirm the save will appear. Touch the [OK] key in the message screen and go to the next step.

If you wish to cancel the save, touch the [QUICK FILE] key after touching the [OK] key so that the [QUICK FILE] key is no longer highlighted.

7 Press the [START] key.
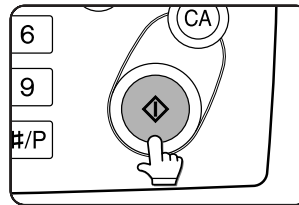
```
        CA
6
9
#/P
```

Replace the original with the next original and press the [START] key. Repeat this operation until all originals have been scanned.

If you selected "Sort" for the output mode in step 4 and pressed the [START] key, it is necessary to touch the [READ-END] key.

8 Touch the [READ-END] key.
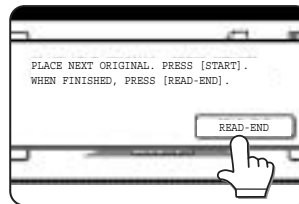
```
PLACE NEXT ORIGINAL. PRESS [START].
WHEN FINISHED, PRESS [READ-END].

                          READ-END
```

To cancel copying...
To cancel a copy job in progress, press the [CA] key. A confirmation message will appear. Touch the [YES] key to cancel copying.

Automatic two-sided copying from the document glass

When the optional duplex module is installed, the following automatic two-sided copying can be performed. The paper is automatically turned over during copying, allowing two-sided copies to be made with ease.

Original   Copy

1 **Place the original on the document glass.** **(pages 4-3 to 4-6)**

Original scale ◢ mark   Original scale ◢ mark

5½ x 8½ or A5
8½x14 or B4
8½x11 or A4   11x17 or A3

8½x11R or A4R
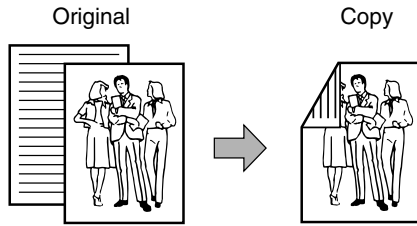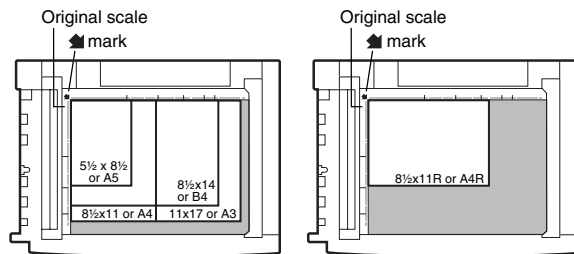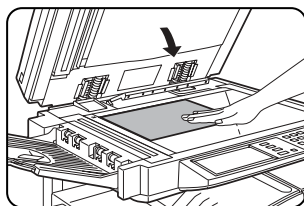
● Align the corner of the original with the tip of the arrow mark ◢ on the document glass scale.
● Place the original in the appropriate position for its size as shown above.

2 **Touch the [2-SIDED COPY] key.**

SPECIAL MODES

2-SIDED COPY

OUTPUT
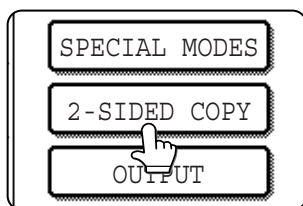
3 **Touch the [1-sided to 2-sided copy] key.**
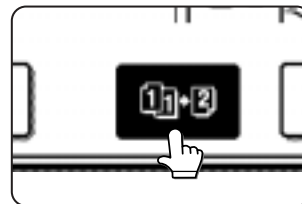
Example of a portrait-oriented original
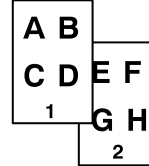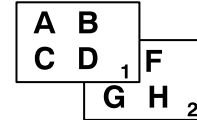
Example of a landscape-oriented original

A B
C D E F
G H
1
2

A B
C D 1 F
G H 2

When making automatic two-sided copies of a one-sided 11" x 17" (A3) or 8-1/2" x 14" (B4) size portrait original, or when you wish to invert the top and bottom of the back side of a two-sided original, touch the [BINDING CHANGE] key.

4 **Touch the [OK] key.**

OK

BINDING

Perform steps 3 to 8 on pages 4-11 and 4-12.

4

ADJUSTING THE EXPOSURE

Select an appropriate exposure mode for the original to be copied. The selections are AUTO, TEXT, TEXT/PHOTO and PHOTO.

■ Automatic exposure adjustment
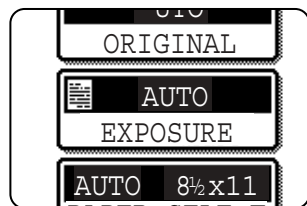
The default exposure setting is "AUTO", which automatically adjusts the exposure for the original. To select the exposure mode, or to manually adjust the exposure level, follow the steps below.

■ Selecting the exposure mode and manually adjusting the exposure level

1 Touch the [EXPOSURE] key.
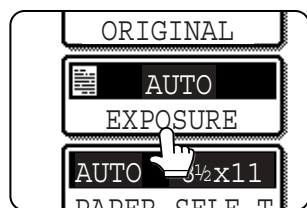
2 Select [TEXT], [TEXT/PHOTO] or [PHOTO] as appropriate for the original to be copied.
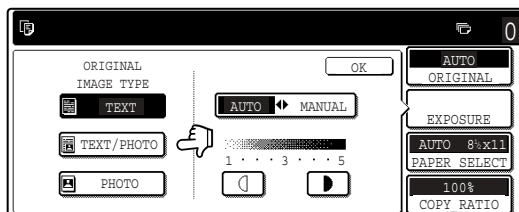
To select [TEXT], touch the [AUTO ◆ MANUAL] key so that [MANUAL] is selected.

> **Exposure modes selection**
>
> TEXT: This mode is useful for producing dark text copies with minimum background.
> TEXT/PHOTO: This provides the best balance for copying an original which contains both text and photos. This mode is also useful for copying printed photographs.
> PHOTO: This mode provides the best copies of photographs with fine details.

3 Adjust the exposure level.
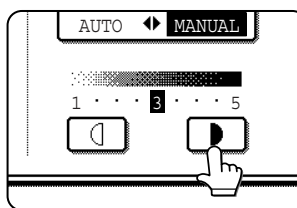
Touch the ▣ key to make darker copies. Touch the ▢ key to make lighter copies.

> **NOTE**
>
> **Exposure levels in TEXT mode**
>
> 1 to 2: Dark originals such as newspaper
> 3: Normal density originals
> 4 to 5: Originals written with pencils or light color characters

> **About the steps that follow**
> If an automatic document feeder is being used, see pages 4-7 through 4-10. If the document glass is being used, see pages 4-11 through 4-13.

> **NOTES**
> ● To return to the automatic exposure mode, touch the [AUTO / MANUAL] key to highlight [AUTO], and then touch the [OK] key.
> ● The exposure level used in automatic exposure mode can be adjusted in the key operator programs. See "Exposure adjustment" on page 14 of the key operator's guide)

4-14

REDUCTION/ENLARGEMENT/ZOOM

Reduction and enlargement ratios can be selected automatically or manually.
● Automatic selection: Auto image (see below)
● Manual selection: Preset copy ratios/zoom (see page 4-16)

Automatic selection (auto image)

The reduction or enlargement ratio will be selected automatically based on the original size and the selected paper size.

1 Place the original in the document feeder tray or on the document glass. (pages 4-3 to 4-6)

The detected original size will be displayed.

> **NOTE**
> Automatic ratio adjustment can only be used for the following original and paper sizes. It cannot be used for other sizes. However, in the case of non-standard original and paper sizes, the sizes can be entered to make automatic ratio adjustment possible for those sizes.
>
> Original sizes: Standard sizes (see "Original size detection function" on page 4-3.)
>
> Paper size: 11" x 17", 8-1/2" x 14", 8-1/2" x 11", 8-1/2" x 11"R, or 5-1/2" x 8-1/2"R (A3, B4, A4, A4R, B5, B5R, or A5R)

2 Touch the [PAPER SELECT] key and then select the desired paper size.
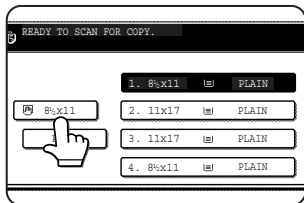
The selected paper size key is highlighted and the paper selection screen closes.

> **NOTE**
> If paper of the desired size is not loaded in any tray, load paper of the required size in a paper tray. (See "Setting the paper type and paper size" on page 2-5.)

3 Touch the [AUTO IMAGE] key.
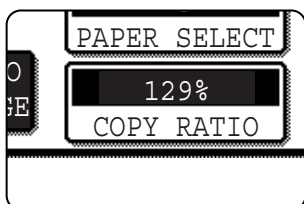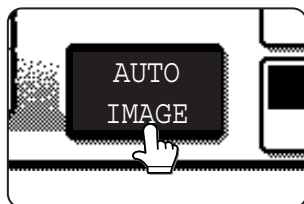
The [AUTO IMAGE] key will be highlighted and the best reduction or enlargement ratio for the original size and the selected paper size will be selected and displayed in the copy ratio display.

> **NOTE**
> If the message "ROTATE ORIGINAL FROM 🖹 TO 🕮" is displayed, change the orientation of the original as indicated in the message. When the message above is displayed, copying can be done without changing the orientation, but the image will not fit the paper correctly.

4 Use the numeric keys to set the desired number of copies.
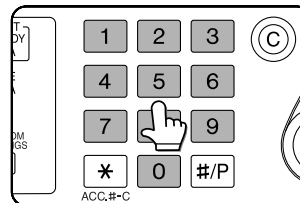
Up to 999 can be set. If you are only making a single copy, the copy can be made with the copy number display showing "0".

Use the [C] (clear) key to cancel an entry if a mistake has been made.

5 If needed, touch the [FILE] key or the [QUICK FILE] key.
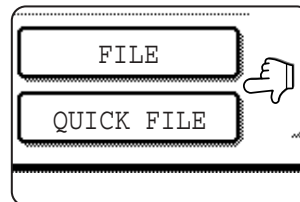
Either key can be touched to store the scanned document image on the machine's hard disk. The stored image can be re-used later.

For more information on this function, see "Document filing function" in chapter 7.

If the [FILE] key is grayed out, only the [QUICK FILE] key can be selected. When you touch the [QUICK FILE] key, a message asking you to confirm the save will appear. Touch the [OK] key in the message screen and go to the next step.

If you wish to cancel the save, touch the [QUICK FILE] key after touching the [OK] key so that the [QUICK FILE] key is no longer highlighted.

6 Press the [START] key.
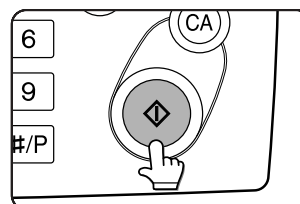
If you placed the original on the document glass, set the output mode to "Sort", and pressed the [START] key, you must touch the [READ-END] key after all pages of the original have been scanned. (Step 8 on page 4-12)

> To cancel the auto image mode, touch the [CA] key.

Manual selection (preset copy ratios/zoom)

Preset ratios (maximum 400%, minimum 25%) can be selected with the enlargement and reduction keys. In addition, the zoom keys can be used to select any ratio from 25% to 400% in increments of 1%.

<The key operator program on page 14 of the key operator's guide can be used to set two additional enlargement ratios and two additional reduction ratios.>

1 **Place the original in the document feeder tray or on the document glass. (pages 4-3 to 4-6)**

NOTE
When the original is placed in the document feeder, the ratio can be set from 25% to 200%.

2 **Touch the [COPY RATIO] key.**
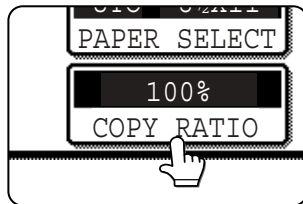
3 **Use the [MENU] key to select menu "①" or menu "②" for copy ratio selection.**
Menu ①
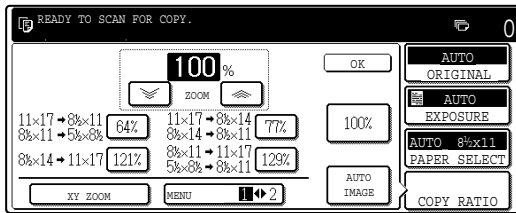
●A. Preset reduction copy ratios are:
　　77% and 64% (for the inch system).
　　70%, 81% and 86% (for the AB system).
●B. Preset enlargement copy ratios are:
　　121% and 129% (for the inch system).
　　115%, 122% and 141% (for the AB system).

Menu ②
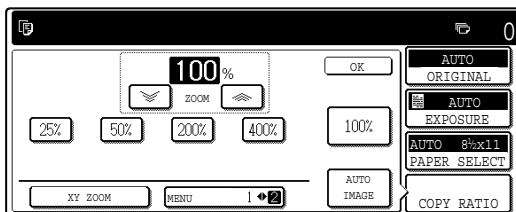
●A. Preset reduction copy ratios are:
　　50% and 25%.
●B. Preset enlargement copy ratios are:
　　200% and 400%.

(The custom ratios set by the key operator appear in ratio menu 2.)

4 **Use the reduction, enlargement, and [ZOOM] keys on the touch panel to set the desired copy ratio.**
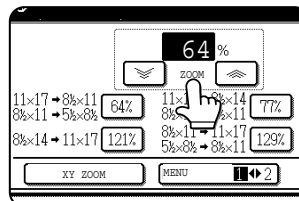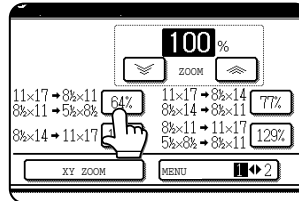
Zoom ratios: Any ratio from 25% to 400% can be set in 1% increments. Touch the [≫] key to increase the ratio, or the [≪] key to decrease the ratio. (If you continue to touch the [≫]/[≪] key, the ratio will change automatically. After 3 seconds, the ratio will change rapidly.)

NOTES
● Touch a reduction or enlargement key to set the approximate ratio, then touch the [≫] key to increase the ratio or the [≪] key to decrease the ratio.
● Automatic changing of the ratio when a zoom key is continuously touched can be disabled in the key operator programs (see "Key operation setting (prohibit key repeat)" on page 10 of the key operator's guide).
● If the message "IMAGE IS LARGER THAN COPY PAPER." appears when a ratio is selected, the image may not fit on the copy paper.
● To set the horizontal and vertical copy ratios separately, use the XY ZOOM feature. See page 4-18.

5 **Touch the [OK] key.**

4-16
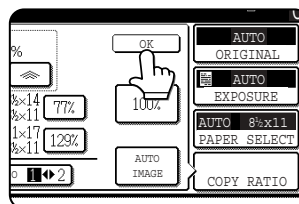
6 **Make sure that an appropriate paper size has been selected based on the selected ratio.**

Auto paper select display
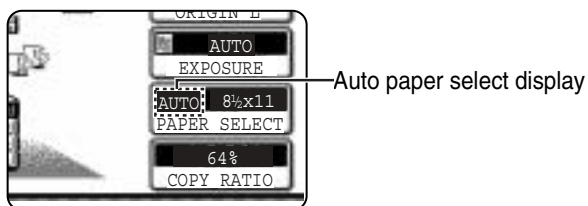
NOTE

If the auto paper select display does not appear, a tray with the correct size of paper for the selected ratio will not be automatically selected.

7 **Use the numeric keys to set the desired number of copies.**
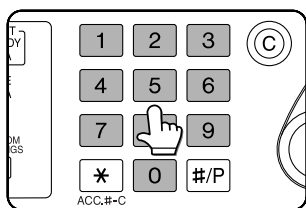
Up to 999 can be set. If you are only making a single copy, the copy can be made with the copy number display showing "0".

Use the [C] (clear) key to cancel an entry if a mistake has been made.

8 **If needed, touch the [FILE] key or the [QUICK FILE] key.**
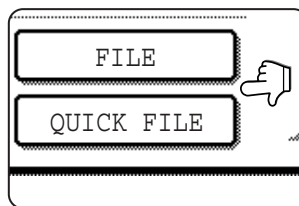
Either key can be touched to store the scanned document image on the machine's hard disk. The stored image can be re-used later.

For more information on this function, see "Document filing function" in chapter 7.

If the [FILE] key is grayed out, only the [QUICK FILE] key can be selected.

When you touch the [QUICK FILE] key, a message asking you to confirm the save will appear. Touch the [OK] key in the message screen and go to the next step.

If you wish to cancel the save, touch the [QUICK FILE] key after touching the [OK] key so that the [QUICK FILE] key is no longer highlighted.

9 **Press the [START] key.**
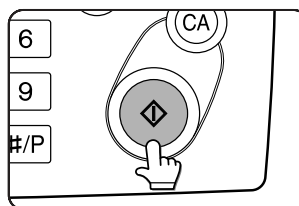
If you placed the original on the document glass, set the output to "Sort", and pressed the [START] key, you must touch the [READ-END] key after all pages of the original have been scanned. (Step 8 on page 4-12)

To return the ratio to 100%

To return the ratio setting to 100%, touch the [COPY RATIO] key to display the ratio menu and then touch the [100%] key. (Steps 2 and 3 on page 4-16.)

4

XY ZOOM

The XY ZOOM feature allows the horizontal and vertical copy ratios to be changed separately. The ratios can set from 25% to 400% in increments of 1%.

Example: Selecting 100% for the length and 50% for the width
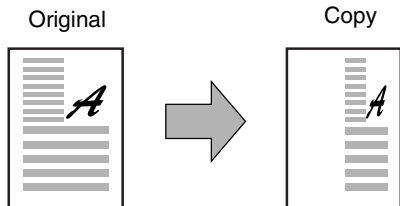
Original   Copy

1 **Place the original in the document feeder tray or on the document glass. (pages 4-3 to 4-6)**

NOTE
When the original is placed in the document feeder, the ratio can be set from 25% to 200%.

2 **Touch the [COPY RATIO] key.**

PAPER SELECT
100%
COPY RATIO

3 **Touch the [XY ZOOM] key.**

8½×14 → 11×17 121%   8½×1
5½×8

XY ZOOM   MENU

4 **Touch the [X] key.**

X 100 %
Y 100 %
ZOOM
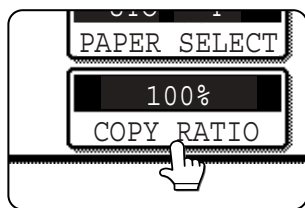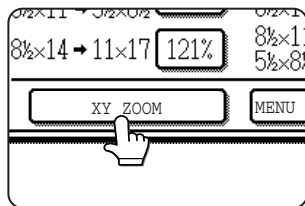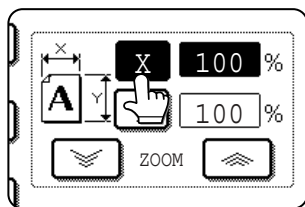
The initial state of the [X] key is selected (highlighted), so this step normally is not necessary. Touch the [X] key only if it is not highlighted yet.

5 **Use the reduction, enlargement, and ZOOM ([≫], [≪]) keys to change the copy ratio in the horizontal (X) direction.**

64%   Y   1
ZOOM
50%
XY ZOOM

A fixed ratio key will not become highlighted when touched.

X 50 %
Y 100 %
ZOOM

Zoom ratios: Any ratio from 25% to 400% can be set in 1% increments.

Touch the [≫] key to increase the ratio, or the [≪] key to decrease the ratio. (If you continue to touch the [≫]/[≪] key, the ratio will change automatically. After 3 seconds, the ratio will change rapidly.)

NOTES
● Touch a reduction or enlargement key to set the approximate ratio, then touch the [≫] key to increase the ratio or the [≪] key to decrease the ratio.
● Automatic changing of the ratio when a zoom key is continuously touched can be disabled in the key operator programs (see "Key operation setting (prohibit key repeat)" on page 10 of the key operator's guide).

6 **Touch the [Y] key.**

X 50 %
Y 100 %
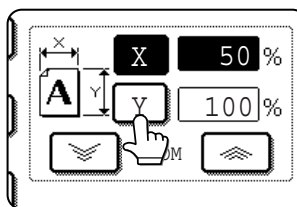
7 **Use the reduction, enlargement, and ZOOM ([⍀], [⍖]) keys to change the copy ratio in the vertical (Y) direction.**
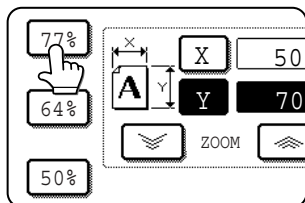
A fixed ratio key will not become highlighted when touched.
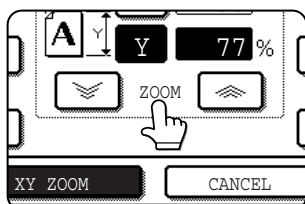
The zoom keys can be used to change the ratio from 25% to 400% in increments of 1%.
If needed, you can touch the [X] key once again to readjust the X zoom.

8 **Touch the [OK] key.**
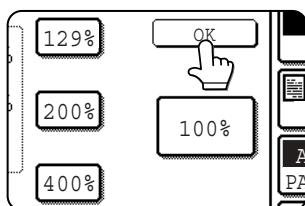
9 **If needed, touch the [PAPER SELECT] key and select the paper size.**
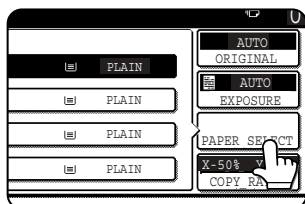
If the AUTO PAPER SELECT mode is on, the appropriate copy paper size will have been automatically selected based on the original size and selected copy ratios.

10 **Select any desired copy settings such as the exposure or number of copies, and then press the [START] key.**
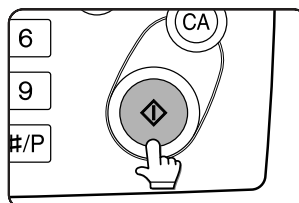
To cancel an X or Y zoom setting...
Touch the [XY ZOOM] key or the [CANCEL] key in the ratio selection screen (step 3 or 7 on page 4-18).

4

4-19

SPECIAL PAPERS

The tray 2 and the bypass tray on the optional duplex module with bypass tray can be used to make copies on transparencies, postcards, label sheets, envelopes*1, and plain paper.

*1 Envelopes can be placed in the tray 2.

1 Place the original in the document feeder tray or on the document glass. (pages 4-3 to 4-6)
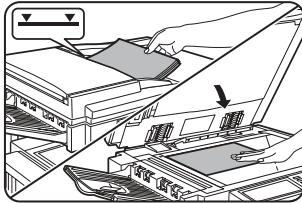
2 Load the special paper in the bypass tray.
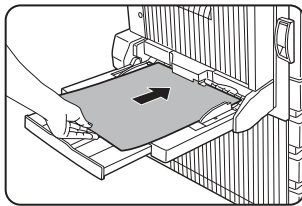
Place the paper with the printed side face down. See page 2-3 for the specifications of paper that can be used in the bypass tray.
For the paper loading instructions, see "Loading paper in the bypass tray" (page 3-3).

3 Touch the [PAPER SELECT] key.
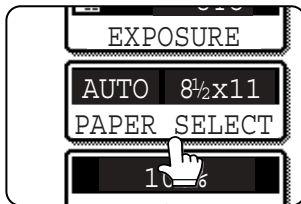
4 Set the type and size of paper loaded in the bypass tray.

(X)   (Y)
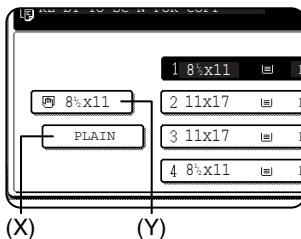
(1) The (X) key shows the currently selected paper type.

(2) The (Y) key shows the size of paper loaded in the bypass tray.

(3) To change the displayed paper type, touch the (X) key before touching the (Y) key. When loading paper, if you changed the paper size from an AB size to an inch size (or from an inch size to an AB size), or if you changed the paper type, be sure to change the paper type and size settings as explained in steps 5 to 7 on page 2-5, and steps 8 to 10 on page 2-6.

5 Select the bypass tray.
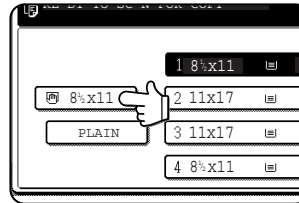
6 Select any desired copy settings such as the exposure or number of copies, and then press the [START] key.
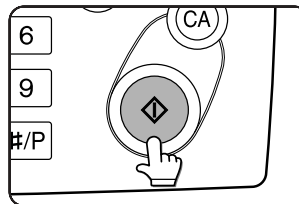
When copying from the document glass in the sort mode using the [START] key, touch the [READ-END] key after all originals have been scanned (step 8 on page 4-12).

4-20

CHAPTER 5

CONVENIENT COPY FUNCTIONS

This chapter explains special-purpose functions, storing of copy settings, and other convenient functions. Please select and read sections of this chapter as needed.

SPECIAL MODES

Touch the [SPECIAL MODES] key in the main screen of copy mode to open the special modes screen. The following functions can be selected in the special modes screen.

Touch the [SPECIAL MODES] key in the main screen.

(1)   (2)   (3)

SPECIAL MODES   OK

MARGIN SHIFT   ERASE   DUAL PAGE COPY   1/3

PAMPHLET COPY   JOB BUILD   TANDEM COPY

(4)   (5)   (6) (7) (8)
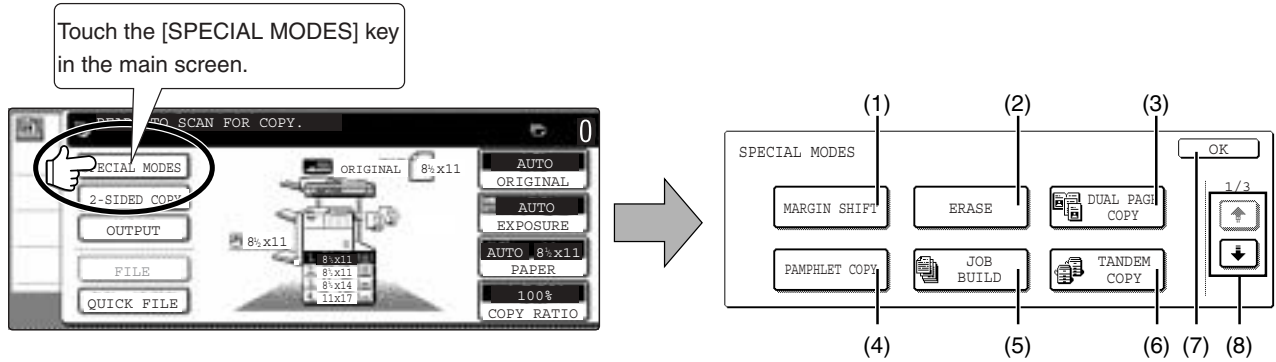
(1) Margin shift (page 5-3)

(2) Erase (page 5-4)

(3) Dual page copy (page 5-5)

(4) Pamphlet copy (page 5-6)

(5) Job build (page 5-8)

(6) Tandem copy (page 5-9)

(7) [OK] key on the special modes screen

Touch the [OK] key to return to the main screen of copy mode.

(8) ⬆ / ⬇ key

Touch these keys to change the special modes screen.

There are three special modes screens.
Touch the ⬇ key to change to the other two screens.

● The following special functions can be selected in the 2nd screen (2/3).
   Covers/inserts (page 5-11)   **Book copy (page 5-25)**
   Transparency inserts (page 5-22)   **Card shot (page 5-26)**
   Multi shot (page 5-23)   **Mirror image (page 5-28)**

● The following special functions can be selected in the 3rd screen (3/3).
   B/W reverse (page 5-28)   **Print menu (page 5-29)**

General procedure for using special functions

1 Touch the [SPECIAL MODES] key.

SPECIAL MODES
2-SIDED COPY
OUTPUT
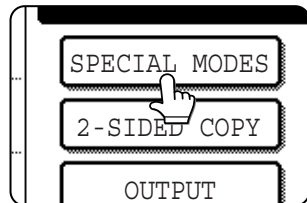
To select a special function in one of the other two screens, use the ⬆ / ⬇ keys to change the screen.

Setting procedures for modes requiring setting screens start on the next page.
The dual page copy, job build, tandem copy, mirror image and B/W reverse functions do not require setting screens.

2 Touch the key for the desired special mode.

SPECIAL MODES

MARGIN SHIFT   ERASE

PAMPHLET COPY   JOB BUILD
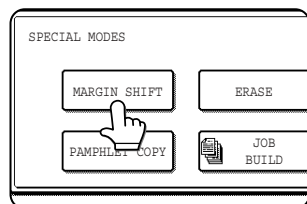
Example:
Selecting the margin shift function

Margin shift

The margin shift function will automatically shift the text or image on the copy paper approximately 1/2" (10 mm) in its initial setting.
This function is convenient when stapling or binding copies with a string.

NOTES
● The initial setting for the margin width can be changed in the key operator programs to any value from 0 to 1" (0 to 20 mm). (Page 15 of the Key operator's guide)
● When margin shift is selected, rotating copying will not operate even if the condition for rotate copying is met.

One-sided copying

Original — Image shifted to the right — Image shifted to the left

AB → AB AB

Margin   Margin

Two-sided copying
Original

12 / AB

Image shifted to the right — Image shifted to the left

Or

AB
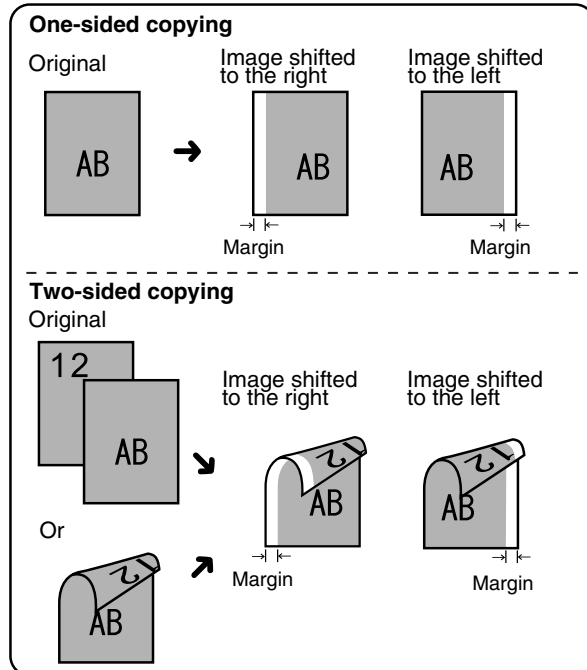
Margin   Margin

● The shift direction can be selected from right or left shift as shown in the illustration.

To display the special modes screen...
See "General procedure for using special functions" on page 5-2.

1 Touch the [MARGIN SHIFT] key on the special modes screen.

SPECIAL MODES
MARGIN SHIFT   ERASE
PAMPHLET COPY   JOB BUILD
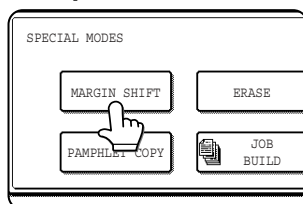
The margin shift setting screen will appear.
The margin shift icon ( ) will also appear in the upper left of the screen to indicate that the function is turned on.

2 Select the shift direction.

RIGHT   LEFT
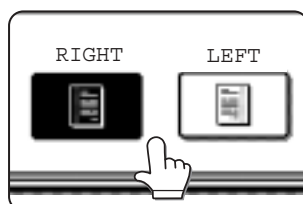
Touch a shift direction key to select right or left. The selected key will be highlighted.

3 Set the shift amount as needed and touch the [OK] key.

OK
CANCEL   OK
SIDE 1   SIDE
1/2 (0~1) inch   1/2 inch
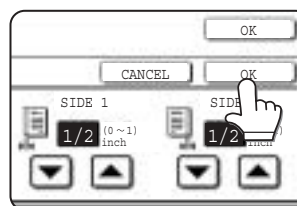
Use the ▼ and the ▲ keys to set the shift amount. The shift amount can be set from 0" to 1" in 1/8" (0 to 20 mm in 1 mm) increments.

4 Touch the [OK] key on the special modes screen.
You will return to the main screen of copy mode.

About the steps that follow
If an automatic document feeder is being used, see pages 4-7 through 4-10. If the document glass is being used, see pages 4-11 through 4-13.

To cancel the margin shift function, touch the [CANCEL] key on the margin shift setting screen.

5-3

Erase

The erase function is used to erase the shadow lines on copies produced when copying thick originals or books. The erase modes that can be selected are shown below. The erase width is approximately 1/2" (10 mm) in it's initial setting.

> **NOTE**
> The initial setting for the erasure width can be changed in the key operator programs to any value from 0 to 1" (0 to 20 mm). (Page 15 of the Key operator's guide)

Original   Copy

A ➔ A
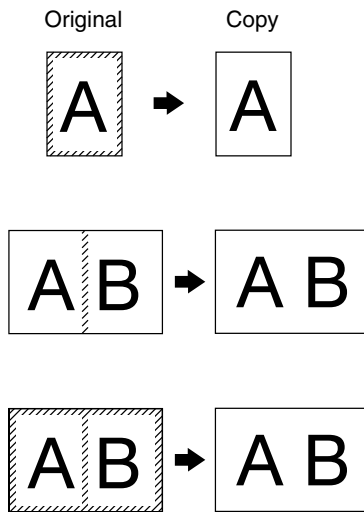
EDGE ERASE
Eliminates shadow lines around the edges of copies caused when heavy paper or a book is used as an original.

A B ➔ A B

CENTER ERASE
Eliminates shadow lines produced by the bindings of bound documents.

A B ➔ A B

EDGE + CENTER ERASE
Eliminates shadow lines around the edges of copies and eliminates the shadow at the center of copies.

> **To display the special modes screen...**
> See "General procedure for using special functions" on page 5-2.

1 Touch the [ERASE] key on the special modes screen.
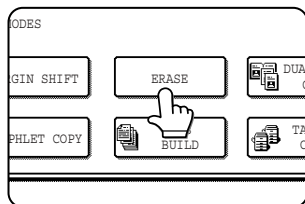
The erase setting screen will appear.
The erase icon (📝) will also appear in the upper left of the screen to indicate that the function is turned on.

2 Select the desired erase mode.
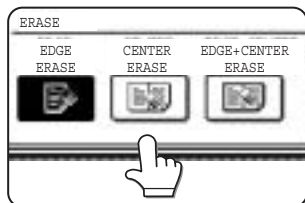
Select one of the three erase modes. The selected key will be highlighted.

3 Adjust the amount of erase and touch the [OK] key.
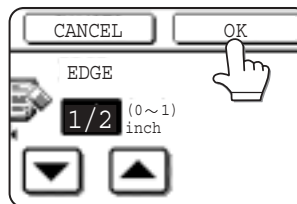
Use the ▼ and ▲ keys to set the erase width to any value from 0" to 1" in increments of 1/8" (0 to 10 mm in 1 mm).

4 Touch the [OK] key on the special modes screen.

You will return to the main screen of copy mode.

> **About the steps that follow**
> If an automatic document feeder is being used, see pages 4-7 through 4-10. If the document glass is being used, see pages 4-11 through 4-13.

> **NOTE**
> When erase is used, edge erase takes place at the edges of the original image. If you also use a ratio setting, the edge erase width will change according to the set ratio.

> To cancel the erase function, touch the [CANCEL] key on the erase setting screen (step3).

Dual page copy

The dual page copy function produces separate copies of two documents placed side by side on the document glass. This function is especially useful when copying books and other bound documents.

[Example] Copying right and left pages of a book

Book original   Dual page copy
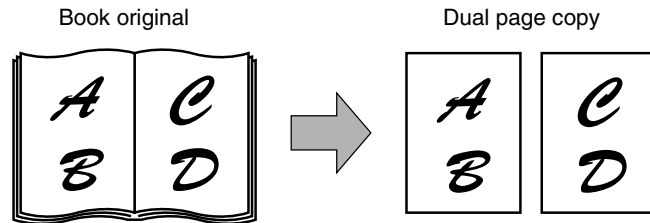
- The dual page copy function can be used only when copying from the document glass. The automatic document feeder cannot be used with this function.
- Only 8-1/2" x 11" (A4) paper can be used.

To display the special modes screen...
See "General procedure for using special functions" on page 5-2.

1 Touch the [DUAL PAGE COPY] key on the special modes screen.
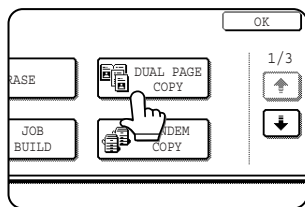
The [DUAL PAGE COPY] key will be highlighted to indicate that the function is turned on, and the dual page copy icon (🔲) will appear in the upper left of the screen.

2 Touch the [OK] key on the special modes screen.

You will return to the main screen of copy mode.

3 Place the originals on the document glass.
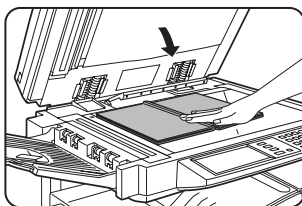
When copying a thick book, press down lightly on the book to flatten it against the document glass.

This page is copied first.

Center line of original
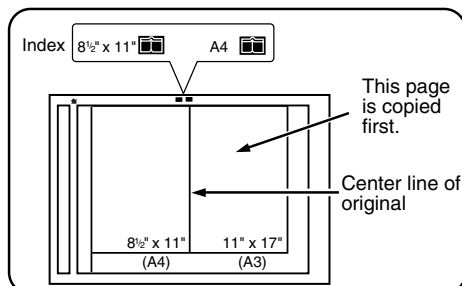
Place the opened original on the document glass so that the first page you wish to copy is on the right and the center of the original is aligned with the size mark.

4 Ensure that 8-1/2" x 11" (A4) size paper is selected.
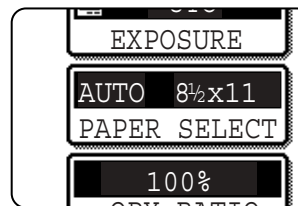
If 8-1/2" x 11" (A4) size paper is not selected, touch the [PAPER SELECT] key to select 8-1/2" x 11" (A4) size paper.

About the steps that follow
For two-sided copying, follow steps 2 through 4 on page 4-13 and then follow steps 4 through 7 on page 4-12.
For one-sided copying, follow steps 4 through 7 on page 4-12.

5

NOTE
To erase shadows caused by document binding, use the edge erase function (page 5-4). (Center Erase and Edge + Center Erase cannot be used in combination.)

To cancel the dual page copy function, touch the [DUAL PAGE COPY] key on the special modes screen (screen of step 1).

Pamphlet copy

The pamphlet copy function is used to arrange copies in proper order for eventual center-stapling and folding into a booklet. Two original pages are copied onto each side of copy paper. Four pages are, therefore, copied onto one sheet. This function is convenient for arranging copies into an attractive booklet or pamphlet.

NOTE

To make pamphlet copies of a book or other bound original, use the book copy function (page 5-25). The book copy function scans the opened original in two-page units. (Two pages are scanned at each scan, reducing the number of repetitions of the scanning operation by a half.)

[Example] Copying eight originals in the pamphlet copy mode
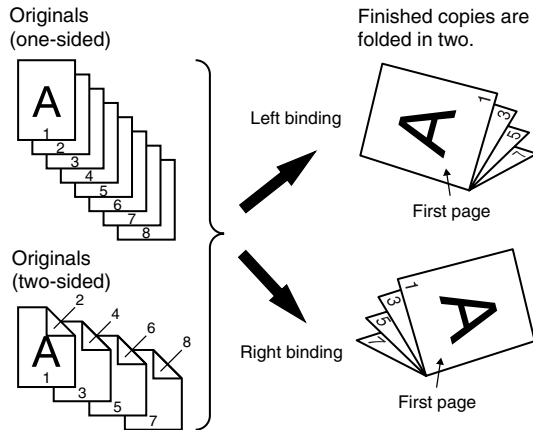
Originals
(one-sided)

Finished copies are folded in two.

Left binding

First page

Originals
(two-sided)

Right binding

First page

- When using this function, a duplex module must be installed.
- Scan the originals from the first page to the last page. The order of copying will be automatically adjusted by the machine.
- Either left binding (right to left turning) or right binding (left to right turning) can be selected.
- Four originals will be copied onto one sheet. Blank pages may be automatically produced at the end depending on the number of the originals.
- If a saddle stitch finisher is installed, copies can be stapled in two positions along the center of copies and folded at the center.

To display the special modes screen...
See "General procedure for using special functions" on page 5-2.

1 Touch the [PAMPHLET COPY] key on the special modes screen.

MARGIN SHIFT   ERASE

PAMPHLET COPY   JOB BUILD
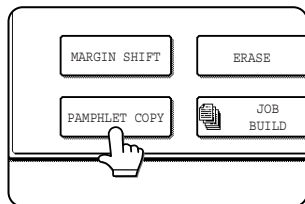
The PAMPHLET COPY setting screen will appear. The pamphlet copy icon (, etc.) will also appear in the upper left corner of the screen to indicate that the function is turned on.

2 Designate the type of originals to be copied: 1-sided or 2-sided.

ORIGINAL
1-SIDED   2-SIDED
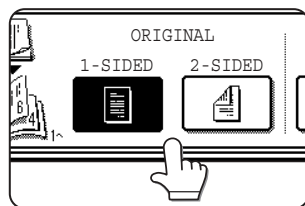
Select the [2-SIDED] key if you wish to scan a two-sided original using the automatic document feeder.

3 Select the binding position (left binding or right binding).

LEFT BINDING   RIGHT BINDING
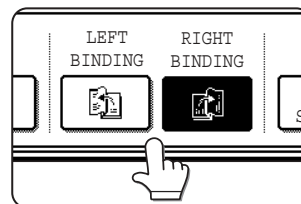
If you wish to insert a different type of paper for use as a cover, follow steps 4 through 12 below.

If you do not wish to insert paper for a cover, continue from step 8 on the next page.

4 Touch the [COVER SETTING] key.

CANCEL   OK
RIGHT BINDING
COVER SETTING
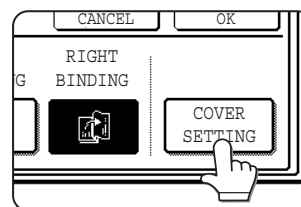
5 Select whether or not you wish to copy on the cover ("YES" or "NO").

```
PRINT ON COVER
YES        NO
```

6 Select the paper tray for the cover.

```
CANCEL        OK
PAPER TRAY
(1) ——— TRAY2
(2) ——— 8½x11
          PLAIN
```
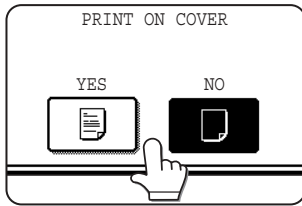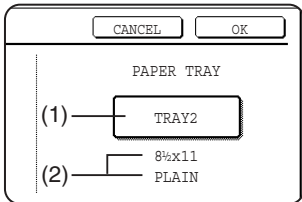
(1) The currently selected paper tray for the cover is displayed.
(2) The size and type of paper in the currently selected tray is displayed.

In the example screen above, 8-1/2" x 11" (A4) size plain paper is loaded.

To change the paper tray for the cover, touch the tray selection key. (In the screen example, the " TRAY2" display is the tray selection key.)

The tray selection screen appears when the tray selection key is touched. Select the desired tray in this screen.

NOTES
● Two-sided copying is not possible on label sheets, and transparency film. When copying on a cover, do not select a tray that has one of these types of paper.
● Select the same size of paper for the covers as for the copies.

7 Touch the [OK] key.

```
CANCEL        OK
RIGHT
BINDING
              COVER
              SETTING
```

8 Touch the [OK] key.

```
                    OK
        CANCEL
LEFT     RIGHT
BINDING  BINDING
                   COVER
                   SETTING
```
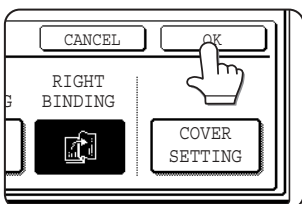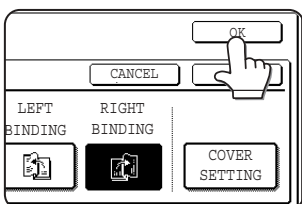
Return to the main screen of copy mode.

9 Place the original in the document feeder or on the document glass. (page 4-3)

10 Ensure that the desired paper size has been automatically selected based on the original size.

```
EXPOSURE
AUTO  11x17
PAPER SELECT
    100%
```
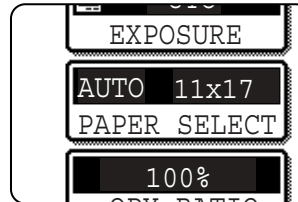
To select another size paper, select the desired size and touch the [AUTO IMAGE] key. The appropriate copy ratio will be selected automatically based on the original size and the paper size. (See steps 2 and 3 on page 4-15.)

11 Select any desired copy settings such as the exposure or number of copies, and then press the [START] key.

12 [When using the automatic document feeder:]

Copying will start after all originals have been scanned. (The next step is not needed.)

[When using the document glass:]

Replace the original with the next original and press the [START] key. Repeat this operation until all originals have been scanned and then touch the [READ-END] key.

5

NOTES
● When the pamphlet copy function is set, the two-sided copying mode will be automatically selected.
● If this function is used in combination with the pamphlet copy function (pamphlet stapling) and the number of original pages exceeds the number of pages that can be stapled, a message asking you to select "CANCEL", "CONTINUE", or "DIVIDE" will appear.
To cancel the job, select "CANCEL". To make pamphlet copies without stapling, select "CONTINUE". To divide the pages into sets that can be stapled, select "DIVIDE".
If you performed steps 4 to 6 to insert cover paper, divided stapling is not possible. You can either continue pamphlet copying without stapling, or cancel the job.

To cancel the pamphlet copy function, touch the [CANCEL] key on the pamphlet copy setting screen (step 7).

Job build

Use job build mode when you need to copy more originals than can be placed in the document feeder at once. The maximum number of originals that can be placed in the document feeder at once is 50 sheets (30 sheets when the size is B4 or larger; for more information see "Acceptable originals" on page 4-2). This function lets you divide and scan the originals in sets. This function allows the original pages to be scanned in sets.

[Example] Copying 100 pages of 8-1/2" x 11" originals

Originals

100 original pages   A:50 sheets   B:50 sheets
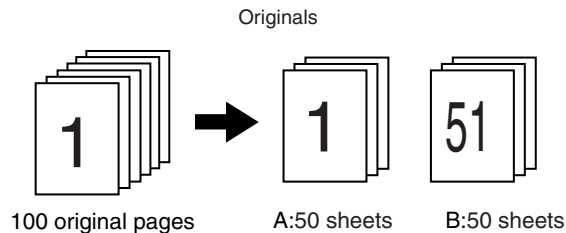
*Divide the originals into sets of 50 pages each. Scan the originals starting from the first page of set A. Scan set B next, taking care to keep the correct page order.

To display the special modes screen...
See "General procedure for using special functions" on page 5-2.

1 Touch the [JOB BUILD] key on the special modes screen.
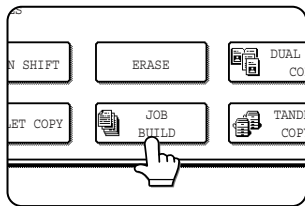
The [JOB BUILD] key will be highlighted to indicate that the function is turned on, and the job build icon (▤) will appear in the upper left of the screen.

2 Touch the [OK] key on the special modes screen.
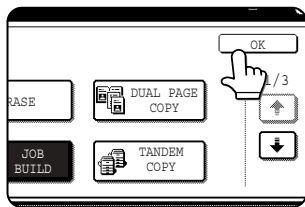
Return to the main screen of copy mode.

3 Place the first set of originals in the document feeder tray. (page 4-3)
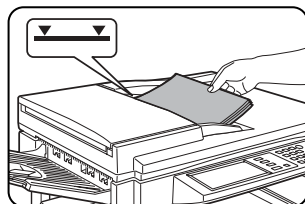
4 Make sure that the desired paper size is selected, select the number of copies or other copy settings, and press the [START] key.
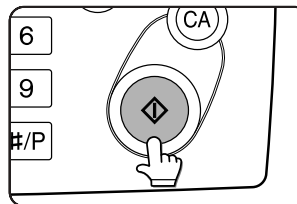
Scanning of originals will start. After scanning of the first set of originals (A in the example above) is completed, remove the scanned originals, place the next set of originals (set B in the example) and press the [START] key. Repeat this operation until all sets of originals have been scanned.

5 Touch the [READ-END] key.

PLACE NEXT ORIGINAL. PRESS [START].
WHEN FINISHED, PRESS [READ-END].

READ-END
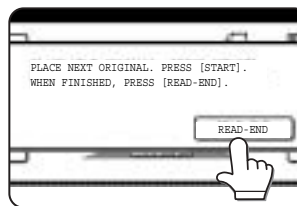
To cancel the job build function, touch the [JOB BUILD] key on the special modes screen (step 1). The highlighted display will be canceled.

Tandem copy

Two machines connected to the same network can be used to run a large copy job in parallel.
By dividing the job in half, approximately half the time is required to complete the job.
To use this function, two machines must be connected to your network as network printers. Even if more machines are connected to the network, this function can only be used to have one other machine share a job.

100 sets of copies   50 sets of copies   50 sets of copies
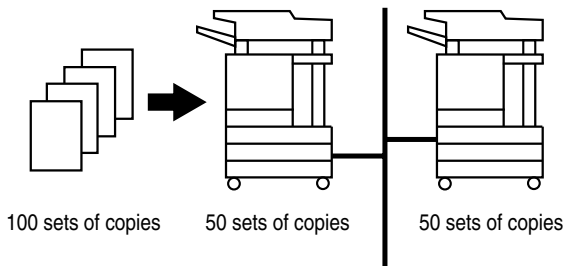
Server machine and client machine

●In the following explanations, the machine on which the copy job is initially set up and tandem copy selected is called the server machine. The other machine that is asked to share the job is called the client machine.

●To use the tandem copy function, the tandem settings must be configured in the key operator programs. (See page 5-7 of the "Operation manual (for printer)")

●When configuring the tandem settings in the server machine, the IP address of the client machine must be entered. For the port number, it is best to use the initial setting (50001). Unless you experience difficulty with this setting, do not change it. The tandem settings should be configured by your network administrator. If the server and client machines will alternate server and client roles, the IP address of the server machine must also be entered in the client machine. The same port number can be set in both machines.

5

To display the special modes screen...
See "General procedure for using special functions" on page 5-2.

1 Touch the [TANDEM COPY] key on the special modes screen.
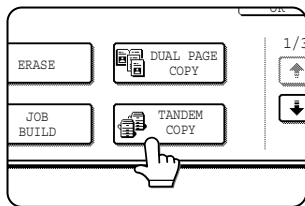
The [TANDEM COPY] key will be highlighted to indicate that the function is turned on, and the tandem copy icon ( ) will appear in the upper left of the screen.

2 Touch the [OK] key on the special modes screen.
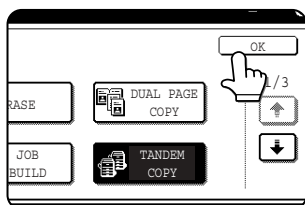
You will return to the main screen of copy mode.

3 Set the number of copies with the numeric keys.
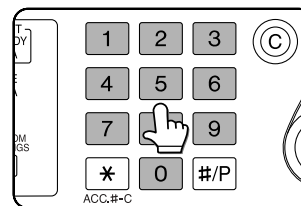
Up to 999 copies can be set. When the [START] key is pressed, the copies will automatically be divided between the server and client machines. If an odd number of copies is set, the server machine will make the extra set.

If an incorrect number of copies is set...
Press the clear key and set the correct number of copies.

4 Place the original in the document feeder or on the document glass. (page 4-3)

5 **Press the [START] key.**
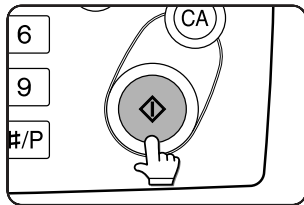
NOTES

● To perform tandem copying, the server machine and client machine must meet certain conditions.
After the [START] key is pressed on the server machine, the server machine verifies that the conditions have been met. If the conditions have not been met, tandem copying does not begin and "TANDEM OUTPUT IS NOT ALLOWED. OUTPUT ALL SETS USING MASTER MACHINE?" appears in the display. To have the server machine make all the copies, touch the [OK] key. To cancel the job, touch the [CANCEL] key.
  • As an example, the following conditions must be met when a staple finisher is installed on the server machine and not on the client machine:
  (1) If tandem copying is executed for a two-sided copy job with the number of copies set to 999 and "Non-staple" is selected, tandem copying will take place.
  (2) If tandem copying is executed for a two-sided copy job with the number of copies set to 999 and "Staple" is selected, tandem copying will not take place because the client machine does not have a finisher.
● After the [START] key is pressed, if the client machine cannot print because it is out of paper or other reason, the server machine will print its half of the job. The other half of the job will be stored in the client machine and the job will be printed when the client machine is able to print.
● If auditing mode is enabled on both the server and client machines, the same account number must be entered on both machines.
● If auditing mode is enabled on the client machine but not on the server machine, tandem copying cannot be performed.

To cancel the tandem copy function, touch the [TANDEM COPY] key on the special modes screen (step 2). The highlighted display will be canceled.

Covers/inserts

A different type of paper can be inserted in positions corresponding to front and back covers of a copy job when the automatic document feeder is used. A different type of paper can also be automatically added as an insert at specified pages.

● Covers/inserts can be disabled in the key operator programs (page 11 of the key operator's guide).

Example of adding covers
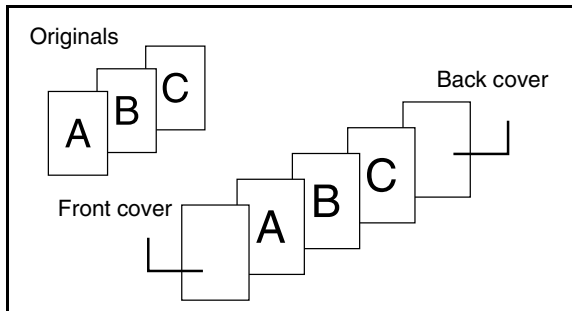
Example of adding inserts

About the explanations of covers and inserts

There are various ways of using covers and inserts. To keep the explanations simple, covers and inserts are explained separately. The procedure for inserting covers is explained on page 5-12. The procedure for adding inserts is explained on page 5-13. After reading these explanations, see the examples of using covers and inserts on pages 5-16 to 5-21.

Example of adding covers and inserts

■ Preparations for using covers and inserts

● Load the cover/insert paper in the tray before using the cover/insert function.
● Use the same size of paper for the covers/inserts as for the copies. (For the procedures for loading paper, see pages 2-2 to 2-7.)
● Before selecting the cover/insert function, place the originals in the document feeder, select one-sided or two-sided copying, and select the number of copies and any other desired copy settings as explained on pages 4-7 to 4-10. When these settings have been completed, perform the procedure to select covers/inserts on the following page.
● The original must be scanned from the document feeder. The document glass cannot be used.
● Up to 100 covers/inserts can be inserted. Two covers/inserts cannot be inserted between the same pages.
● Pamphlet copying cannot be used in combination with covers/inserts.
● When performing two-sided copying of two-sided originals, an insert cannot be added between the front and back sides of an original page.

5-11

■ Procedure for inserting front and back cover paper

The paper for the front cover is called the front cover paper ("FRONT COVER" in the touch panel). The paper for the back cover is called the back cover paper ("BACK COVER" in the touch panel).

● Examples of insertion methods for the front and back cover paper are given on pages 5-17 to 5-20.

To display the special modes screen...
See "General procedure for using special functions" on page 5-2.

**1** Touch the [COVERS/INSERTS] key in the special modes screen (2nd screen).

```
SPECIAL MODES

 COVERS/INSERTS     TRANSPARENCY
                      INSERTS

 BOOK COPY          CARD SHOT
```

2 Touch the [PAPER TRAY SETTINGS] key.

```
COVERS/INSERTS                  CANCEL    OK

 FRONT COVER    INSERTION                    PAPER TRAY
                TYPE A SETTING   INSERTION    SETTINGS
                                 SETTINGS
 BACK COVER     INSERTION                    PAGE LAYOUT
                TYPE B SETTING
```
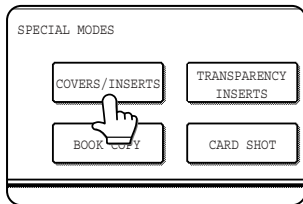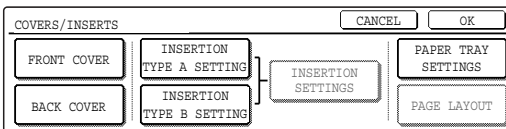
3 Select the tray used for the front cover paper.

```
PAPER TRAY SETTINGS                          OK

 FRONT COVER   BACK COVER   INSERTION   INSERTION
                             TYPE A      TYPE B

   TRAY2        TRAY2        TRAY2       TRAY2

  8½x11        8½x11        8½x11       8½x11
  PLAIN        PLAIN        PLAIN       PLAIN
```

(X)   (Y)
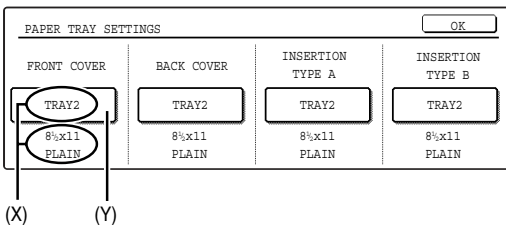
(1) The tray name (tray position) selected for the front cover paper and the paper size and type are shown in (X). If the tray in which you loaded paper for the front cover is shown, touch the [OK] key. You will return to the screen of step 2.

(2) If the correct tray for the cover sheet paper does not appear in (X), touch the (Y) key. The tray selection screen will appear. Select the tray in which you loaded paper for the front cover. You will return to the screen of above.

4 Touch the [FRONT COVER] key in the screen of step 2.

5 Set the insertion conditions for the front cover paper.

```
 PLEASE SET UP A FRONT COVER.              0

 FRONT COVER SETTING         CANCEL    OK

 PRINT ON FRONT COVER              PAPER TRAY

  YES    NO    1-SIDED  2-SIDED      TRAY2

                                    8½x11
                                    PLAIN
```

(X)   (Y)   (Z)
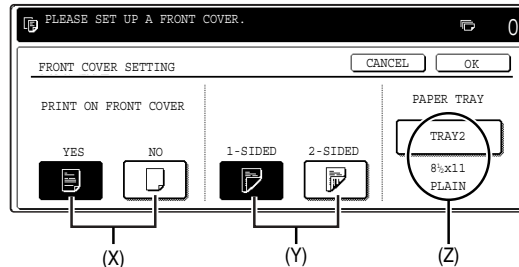
(1) Select whether or not the front cover paper is to be copied on with the (X) keys ([YES] or [NO]).

(2) Select whether one-sided copying or two-sided copying is to be performed on the front cover paper with the (Y) keys. This selection is only possible when the [YES] key of (X) has been selected. (The one-sided/two-sided selection made here only applies to the front cover paper. When the back cover paper is selected, the selection only applies to the back cover paper.)

(3) The (Z) key shows the tray selected for the front cover paper in step 3 and the paper size and type.

6 Touch the [OK] key in the screen of step 5. You will return to the screen of step 2.

When you return to the screen of step 2, the [FRONT COVER] key will be highlighted.

7 To insert back cover paper, repeat steps 2 through 6, using the [BACK COVER] key instead of the [FRONT COVER] key.

```
 PLEASE SET UP COVERS/INSERTS.             0

 SPECIAL MODES                        OK

 COVERS/INSERTS              CANCEL    OK

 FRONT COVER    INSERTION                    PAPER TRAY
                TYPE A SETTINGS  INSERTION    SETTINGS
                                 SETTINGS
 BACK COVER     INSERTION                    PAGE LAYOUT
                TYPE B SETTINGS
```
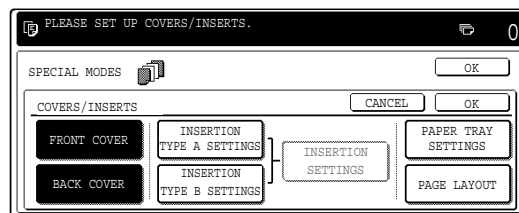
8 Touch the [PAGE LAYOUT] key in the screen of step 7 to display a list of the selected settings (page 5-15).
To exit the cover/insert settings, touch the upper [OK] key in the screen of step 7.

9 Press the [START] key.

To cancel covers/inserts settings...
Touch the [CANCEL] key in the screen of step 2.

■ Procedure for adding inserts

You can have different paper automatically inserted as an insert at a specified pages. Two types of insert paper can be used. These are specified with the [INSERTION TYPE A SETTING] key and [INSERTION TYPE B SETTING] in the touch panel.

● Examples of insertion methods for insert paper are given on page 5-21.

To display the special modes screen...
See "General procedure for using special functions" on page 5-2.

---

1 Touch the [COVERS/INSERTS] key in the special modes screen (2nd screen).
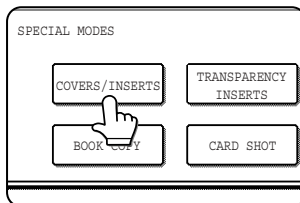
2 Touch the [PAPER TRAY SETTINGS] key.
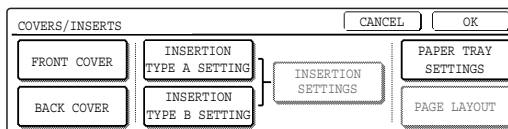
3 Select the tray used for insertion type A.
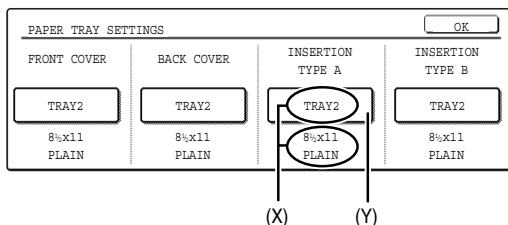
(1) The tray name (tray position) selected for insertion type A and the paper size and type are shown in (X). If the tray in which you loaded paper for insertion type A is shown, touch the [OK] key. You will return to the screen of step 2.

(2) If the correct tray for insertion type A does not appear in (X), touch the (Y) key. The tray selection screen will appear. Select the tray in which you loaded paper for insertion type A. You will return to the screen of step 2.

4 Touch the [INSERTION TYPE A SETTING] key in the screen of step 2

5 Set the insertion conditions for insertion type A .
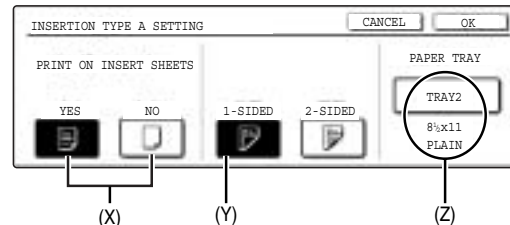
(1) Select whether or not insertion type A paper is to be copied on with the (X) keys ([YES] or [NO]).

(2) Select whether one-sided copying or two-sided copying is to be performed on insertion type A with the (Y) keys. This selection is only possible when the [YES] key of (X) has been selected. (The one-sided/two-sided selection made here only applies to insertion type A paper. When insertion type B is selected, the selection only applies to insertion type B paper.) The [2-SIDED] key appears when the duplex module is installed.

(3) The (Z) key shows the tray selected for insertion type A in step 3 and the paper size and type.

6 Touch the [OK] key in the screen of step 5. You will return to the screen of step 2.

When you return to the screen of step 2, the [INSERTION TYPE A SETTING] key will be highlighted.

7 If you wish to insert a different paper with the [INSERTION TYPE B SETTING] key, repeat steps 2 through 6. Use the [INSERTION TYPE B SETTING] key instead of the [INSERTION TYPE A SETTING] key, and the [INSERTION TYPE B] key instead of the [INSERTION TYPE A] key.

5

5-13
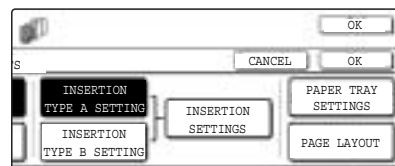
8 Touch the [INSERTION SETTINGS] key to specify the pages where you wish to insert the insert papers of [INSERTION TYPE A SETTING] and [INSERTION TYPE B SETTING].
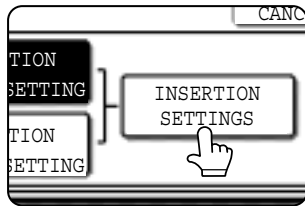
9 Touch the [INSERTION TYPE A] key or the [INSERTION TYPE B] key, enter the page number where you wish to insert the insert paper with the numeric keys, and then touch the [ENTER] key.

(X)   (Y)   (Z)
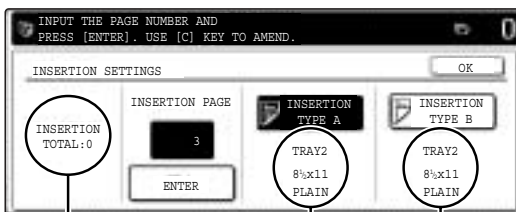
(1)(X) shows the total number of inserts. Up to 100 inserts can be added. When inserting multiple inserts, touch the [ENTER] key after each entry of an insertion page number (insertion position) with the numeric keys.

(2)(Y) shows the tray selected in step 3 for [INSERTION TYPE A SETTING] and the paper size and type.

(3)(Z) shows the tray selected in step 3 for [INSERTION TYPE B SETTING] and the paper size and type.

(4)When the [INSERTION TYPE A] key is highlighted, the insert settings apply to [INSERTION TYPE A SETTING]. When the [INSERTION TYPE B] key is highlighted, the insert settings apply to [INSERTION TYPE B SETTING].

10 Touch the [OK] key in the screen of step 9. You will return to the screen of step 2.

11 If you wish to insert a different paper with the [INSERTION TYPE B SETTING] key, repeat steps 2 through 6. Use the [INSERTION TYPE B SETTING] key instead of the [INSERTION TYPE A SETTING] key, and the [INSERTION TYPE B] key instead of the [INSERTION TYPE A] key.
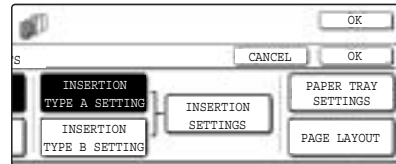
12 Touch the [PAGE LAYOUT] key in the screen of step 11 to display a list of the selected settings (page 5-15).
To exit the cover/insert settings, touch the upper [OK] key in the screen of step 11.

13 Press the [START] key.

> **To cancel covers/inserts settings...**
> Touch the [CANCEL] key in the screen of step 2.

■ Checking, editing, and deleting cover/insert pages

The [PAGE LAYOUT] key appears after covers/inserts settings are configured (the settings of step 1 through step 7 on pages 5-12 and 5-13).
The [PAGE LAYOUT] key is used for the following:
● To display the status of covers/inserts pages
● To edit, delete, or add inserted pages

To display the [PAGE LAYOUT] key...
Configure the settings in step 1 through step 7 on pages 5-12 and 5-13.

1 Touch the [PAGE LAYOUT] key.
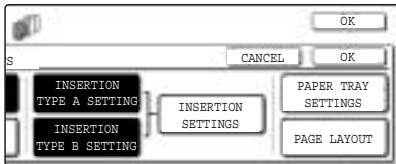
2 The set covers/inserts pages are shown.
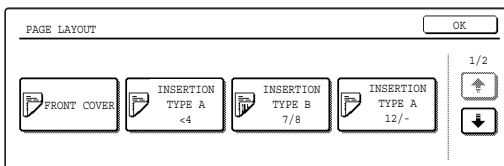
(1)If there are multiple screens, touch the ⬇ or ⬆ key to change screens.

(2)Displayed icons:
　　📄 : Front side copy only
　　📄 : Back side copy only
　　📄 : Two-sided copy
　　📄 : No copying
　For inserts, the insertion page also appears.
　"✱" represents a page number.

　　✱/- : Front side copy only at page ✱
　　✱/✱ : Two-sided copy at page ✱/✱
　　<✱ : Insert non-copied insert at page ✱

(3)To edit or delete the insertion page of an insert, touch the key of the insert that you wish to edit or delete in the page layout screen. When the key is touched, the [CANCEL], [DELETE], or [AMEND] keys appear.
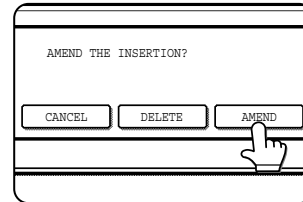
●To cancel, touch the [CANCEL] key.
●To delete an inserted page, touch the [DELETE] key.
●To edit an inserted page, touch the [AMEND] key. The screen of step 9 on page 5-14 appears. Edit the insertion page in the screen that appears.
(4)To edit or delete a cover page, touch the [BACK COVER] key in the page layout screen. The screen of step 5 on page 5-12 will appear. Edit or delete the cover page in this screen.

3 When you have finished checking the pages, touch the [OK] key.

5
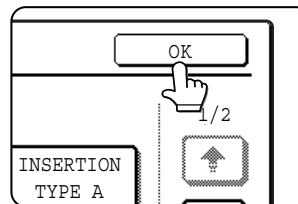
■ Examples of covers and inserts

The relations between the originals and finished copies when covers or inserts are inserted are shown on the following pages.

Covers
- One-sided copying of one-sided originals (page 5-17)
- One-sided copying of two-sided originals (page 5-19)

- Two-sided copying of one-sided originals (page 5-18)
- Two-sided copying of two-sided originals (page 5-20)

Inserts
- One-sided copying of one-sided originals (page 5-21)
- One-sided copying of two-sided originals (page 5-21)

- Two-sided copying of one-sided originals (page 5-21)
- Two-sided copying of two-sided originals (page 5-21)

■ Symbols used for covers and inserts

The following symbols are used to make the explanations easier to understand.

The numbers that appear indicate relations between the originals and copies, and will vary depending on the settings.

Type	Symbol	Meaning	Icon appearing in display	Type	Symbol	Meaning	Icon appearing in display
Front cover		Front cover when not copied on.		Inserts		Insert when not copied on.	
		Front cover after one-sided copying.				Insert after one-sided copying.	
		Front cover after one-sided copying of a two-sided original. (One page is not copied on.)				Insert after one-sided copying of a two-sided original. (One page is not copied on.)	
		Front cover after two-sided copying.				Insert after two-sided copying.	
Back cover		Back cover when not copied on.		Other		One-sided original or output page of regular one-sided copying	
		Back cover after one-sided copying of one-sided original.				Two-sided original or output page of regular two-sided copying.	
		Back cover after one-sided copying of a two-sided original. (One page is not copied on.)				One-sided original or output page of regular one-sided copying.	
		Back cover after two-sided copying.				Two-sided copy when only one side is copied on due to insufficient originals.	

5-16

■ Covers (One-sided copying of one-sided originals)

One-sided copies are made of the following one-sided originals.

1st page	2nd page	3rd page	4th page	5th page	6th page
1	2	3	4	5	6

Copying on cover		Resulting copies
Front cover	Back cover	
No copying	No copying	1 2 3 4 5 6
One-sided copying	No copying	1 2 3 4 5 6
Two-sided copying	No copying	1/2 3 4 5 6
No copying	One-sided copying	1 2 3 4 5 6
No copying	Two-sided copying	1 2 3 4 5/6
One-sided copying	One-sided copying	1 2 3 4 5 6
One-sided copying	Two-sided copying	1 2 3 4 5/6
Two-sided copying	One-sided copying	1/2 3 4 5 6
Two-sided copying	Two-sided copying	1/2 3 4 5/6

■ Covers (Two-sided copying of one-sided originals)

Two-sided copies are made of the following one-sided originals.

1st page	2nd page	3rd page	4th page	5th page	6th page
1	2	3	4	5	6

Copying on cover		Resulting copies
Front cover	**Back cover**	
No copying	No copying	[blank] · 1/2 · 3/4 · 5/6 · [blank]
One-sided copying	No copying	1/[blank] · 2/3 · 4/5 · 6/[blank] · [blank]
Two-sided copying	No copying	1/2 · 3/4 · 5/6 · [blank]
No copying	One-sided copying	[blank] · 1/2 · 3/4 · 5/[blank] · [blank]/6
No copying	Two-sided copying	[blank] · 1/2 · 3/4 · 5/6
One-sided copying	One-sided copying	1/[blank] · 2/3 · 4/5 · [blank]/6
One-sided copying	Two-sided copying	1/[blank] · 2/3 · 4/[blank] · 5/6
Two-sided copying	One-sided copying	1/2 · 3/4 · 5/[blank] · [blank]/6
Two-sided copying	Two-sided copying	1/2 · 3/4 · 5/6

■ Covers (One-sided copying of Two-sided originals)

One-sided copies are made of the following two-sided originals.

1st page	2nd page	3rd page
1 / 2	3 / 4	5 / 6

Copying on cover		Resulting copies
Front cover	Back cover	
No copying	No copying	▨ 1 2 3 4 5 6 ▨
One-sided copying	No copying	1 2 3 4 5 6 ▨
Two-sided copying	No copying	1/2 3 4 5 6 ▨
No copying	One-sided copying	▨ 1 2 3 4 5 /6
No copying	Two-sided copying	▨ 1 2 3 4 5/6
One-sided copying	One-sided copying	1 2 3 4 5 /6
One-sided copying	Two-sided copying	1 2 3 4 5/6
Two-sided copying	One-sided copying	1/2 3 4 5 /6
Two-sided copying	Two-sided copying	1/2 3 4 5/6

■ Covers (Two-sided copying of two-sided originals)

Two-sided copies are made of the following two-sided originals.

1st page	2nd page	3rd page

Copying on cover		Resulting copies
Front cover	Back cover	
No copying	No copying	
One-sided copying	No copying	
Two-sided copying	No copying	
No copying	One-sided copying	
No copying	Two-sided copying	
One-sided copying	One-sided copying	
One-sided copying	Two-sided copying	
Two-sided copying	One-sided copying	
Two-sided copying	Two-sided copying	

5-20

■ Inserts (One-sided copying of one-sided originals)

One-sided and two-sided copying is performed using the following one-sided originals. The insertion page of the insert is set to page 3.

1st page	2nd page	3rd page	4th page	5th page	6th page
1	2	3	4	5	6

Copying on insert	Resulting copies (one-sided copying)	Resulting copies (two-sided copying)
No copying	1 2 [blank] 3 4 5 6	1/2 [blank] 3/4 5/6
One-sided copying	1 2 3 4 5 6	1/2 3 4/5 6
Two-sided copying	1 2 3/4 5 6	1/2 3/4 5/6

■ Inserts (One-sided copying of two-sided originals)

One-sided and two-sided copying is performed using the following two-sided originals. The insertion page of the insert is set to page 3

1st page	2nd page	3rd page
1/2	3/4	5/6

Copying on insert	Resulting copies (one-sided copying)	Resulting copies (two-sided copying)
No copying	1 2 [blank] 3 4 5 6	1/2 [blank] 3/4 5/6
One-sided copying	1 2 3 4 5 6	1/2 3 5/6
Two-sided copying	1 2 3/4 5 6	1/2 3/4 5/6

5

Transparency film with insert sheets

When copying onto transparency film, blank insert sheets can be placed between transparent sheets.

Example: Inserting insert sheets between transparencies
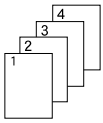
Originals (1-sided)

Originals (2-sided)

Two-sided originals are only supported when automatic document feeder is used.

Insert sheets
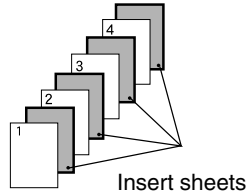
Inserts can also be copied on.

● This function only operates in "one-sided to one-sided" and "two-sided to one-sided" modes.
● Multiple copies cannot be selected in this mode.
● The inserts are inserted under each transparency as shown at left.
● Select insert paper that is the same size as the transparencies.
● Transparencies can be fed from the tray 2 or bypass tray.
● If the transparencies are loaded in tray 2, be sure to set the paper size and paper type as explained on pages 2-5 and 2-6.

1 Load transparency film into the tray 2.
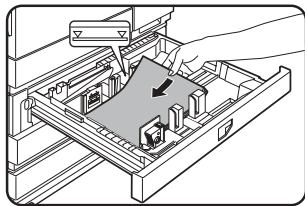
Remove any paper already in the tray 2 before loading the transparency film. (To load paper in the tray 2, see pages 2-6 and 2-7.)

2 Press the [CUSTOM SETTINGS] key.
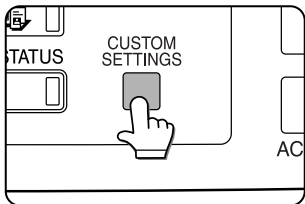
The custom settings menu screen will appear.

3 Touch the [PAPER TRAY SETTINGS] key.
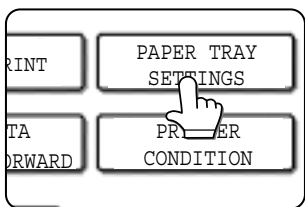
The paper tray selection screen will appear.

4 Touch the [TRAY SETTINGS] key.
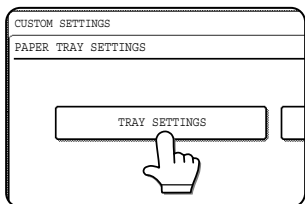
5 Touch the ⊡ key to display the tray settings screen of tray 2.

CUSTOM SETTINGS
PAPER TRAY SETTINGS — OK
TYPE / SIZE
TRAY 1 — PLAIN / 8½x11
FIXED PAPER SIDE 1/4
PRINT COPY FAX I-FAX DOC. FILING
DISABLE DUPLEX
DISABLE STAPLE
DISABLE PUNCH

6 Touch the [TYPE/SIZE] key.

PER TRAY SETTINGS
TYPE / SIZE
TRAY 2 — PLAIN / 8½x11
PRINT COPY FAX DOC. FILING

7 Touch the [TRANSPARENCY] key.

LETTER HEAD | HEAVY PAPER
PRE-PUNCHED | LABELS
COLOR | TRANSPARENCY

8 Touch the [OK] key.

TYPE/SIZE SETTING — TYPE OK
SIZE
AUTO-INCH — 8½X11
AUTO-AB — A4,B5
SIZE INPUT — NON STANDARD SIZE 2/2
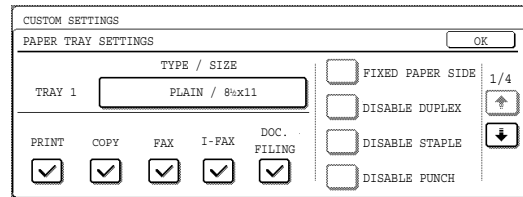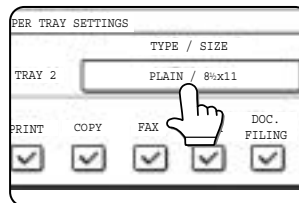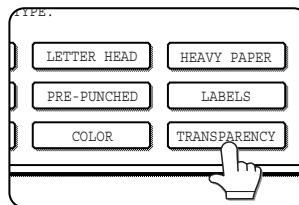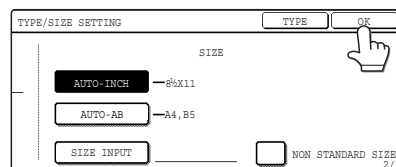
If the paper size was changed from an AB size to an inch size, or from an inch size to an AB size, be sure to set the paper type and size as explained on steps 5 to 6 on page 2-5 and steps 7 to 10 on page 2-6.
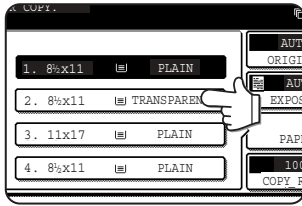
5-22

9 Select the tray 2.

```
  COPY.

1. 8½x11      ☰    PLAIN              AUT
                                      ORIGI
2. 8½x11      ☰ TRANSPAREN            AU
                                      EXPOS
3. 11x17      ☰    PLAIN
                                      PAP
4. 8½x11      ☰    PLAIN              100
                                      COPY R
```

To display the special modes screen...
See "General procedure for using special functions" on page 5-2.

---

10 Touch the [TRANSPARENCY INSERTS] key in the special modes screen (2nd screen).

```
SPECIAL MODES

COVERS/INSERTS     TRANSPARENCY
                      INSERTS

BOOK COPY          CARD SHOT
```
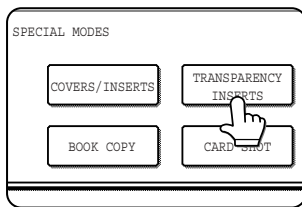
The Transparency inserts setting screen will appear. The transparency inserts icon (☰, etc.) will also appear in the upper left corner of the screen to indicate that the function is turned on.

11 Set the insertion conditions for the insert paper.

```
                              OK

                      CANCEL       OK

     PRINT ON INSERT SHEETS    INSERTION SHEET
        YES        NO             TRAY3
                                   A4
                                  PLAIN

         (X)                      (Y)
```
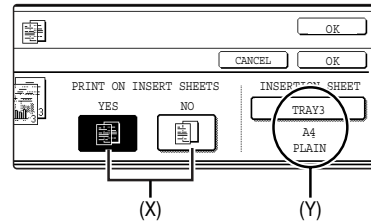
(1) Select whether or not the insert paper will be copied on with the (X) keys ([YES] or [NO]).

(2) The (Y) key shows the tray selected for the insert paper and the paper size and type. To select a different tray, touch this key to display the tray selection screen and select the tray that has the insert paper.

12 Touch the outer [OK] key in the screen of step 7.

You will return to the main screen of copy mode.

About the steps that follow
If an automatic document feeder is being used, see pages 4-7 through 4-10. If the document glass is being used, see pages 4-11 through 4-13.

To cancel the Transparency film with insert sheets function, touch the [CANCEL] key on the Transparency film with insert sheets setting screen.

5

Multi shot

Multiple original pages can be copied onto one sheet of copy paper in a uniform layout. Select 2in1 to copy two original pages onto one sheet, or 4in1 to copy four original pages onto one sheet. This function is convenient when you wish to present multiple pages in a compact format, or show a view of all pages in a document.

[Example] Copying 4 original pages onto one sheet of paper
(Page number : 4in1, layout : left top : right top (see the next page))

One-sided copies from one-sided originals

One-sided copies from two-sided originals

Copies
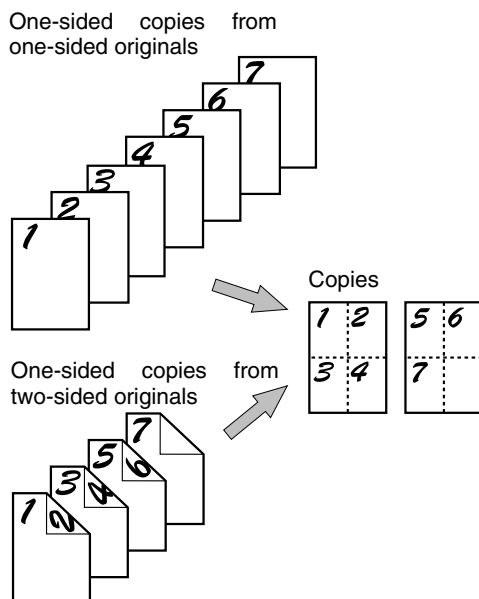
● When using the multi shot function, place the originals, select the desired paper size, and select the copying mode before selecting the multi shot function on the special modes screen.

● When using the multi shot function, the appropriate copy ratio will be automatically set based on the original size, paper size, and the number of originals to be copied onto one sheet. The minimum reduction ratio is 25%. The original size, copy paper size, and selected number of original pages may require that the ratio be less than 25%. As copying will take place at 25% in this case, part of the original images may be cut off.

5-23

1 **Touch the [MULTI SHOT] key in the special modes screen (2nd screen).**

TRANSPARENCY INSERTS   MULTI SHOT

CARD SHOT   MIRROR IMAGE
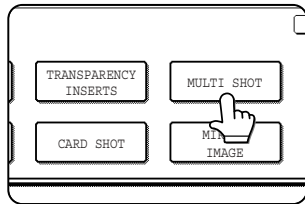
The MULTI SHOT setting screen will appear.
A multi shot icon (icon, etc.) will also appear in the upper left of the screen to indicate that the function is turned on.

2 **Select the number of images to be copied onto one sheet of copy paper.**

SPECIAL MODES

MULTI SHOT

2in1   4in1
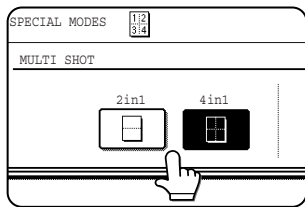
If needed, the orientation of the copy paper and the orientation of the images will be rotated.

3 **Select the layout.**

OK

CANCEL   OK

LAYOUT
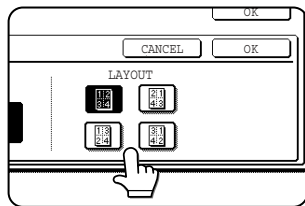
Select the order in which the originals will be arranged on the copy.

4 **Touch the [OK] key (inside [OK] key) on the multi shot setting screen.**

You will return to the special modes screen.
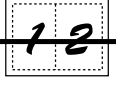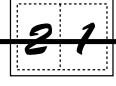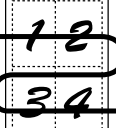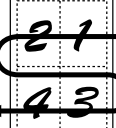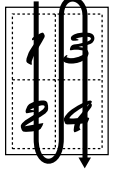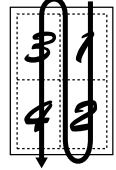
5 **Touch the [OK] key in the special modes screen.**

You will return to the main screen of copy mode.

About the steps that follow
If an automatic document feeder is being used, see pages 4-7 through 4-10. If the document glass is being used, see pages 4-11 through 4-13.

To cancel the multi shot function, touch the [CANCEL] key in the multi shot setting screen (the screen of step 2).

Shot number	Layout
2in1	1 2 → ← 2 1
4in1	1 2 / 3 4, 2 1 / 4 3, 1 3 / 2 4, 3 1 / 4 2

The arrows in the above diagram indicate the directions in which the images are arranged.

Book copy

This function is convenient when you wish to compile copies of books or other bound originals into an attractive pamphlet format. The two pages of the open book are scanned as a set, and two pages each are copied onto the front and back sides of the copy paper (four pages are copied onto one sheet of copy paper). This allows the copies to be folded down the center and made into a pamphlet.

[Example] Book copying an 8-page pamphlet

Originals   Finished copies are folded in two.

Left binding

First page   First page

Right binding

First page   First page

● When using this function, a duplex module must be installed.
● Scan the originals from the first page to the last page. The order of copying will be automatically adjusted by the machine.
● Either left binding (right to left turning) or right binding (left to right turning) can be selected.
● Four originals will be copied onto one sheet. Blank pages may be automatically produced at the end depending on the number of the originals.
● If a saddle stitch finisher is installed, book copy can be used in combination with the pamphlet function to staple and fold the copies at the centerline.

To display the special modes screen...
See "General procedure for using special functions" on page 5-2.

---

1 Touch the [BOOK COPY] key in the special modes screen (2nd screen).

SPECIAL MODES

COVERS/INSERTS   TRANSPARENCY INSERTS

BOOK COPY   CARD SHOT
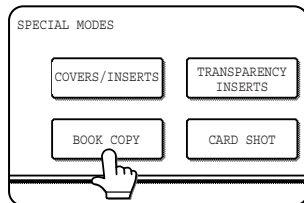
The BOOK COPY setting screen will appear. The book copy icon (🖥, etc.) will also appear in the upper left corner of the screen to indicate that the function is turned on.

2 Select whether the book opens to the left or to the right, and touch the [OK] key in the book copy setting screen.

LEFT BINDING   RIGHT BINDING   CO SET
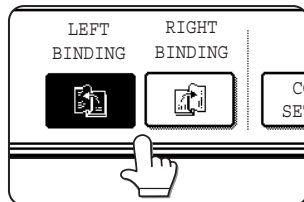
You will return to the special modes screen.

3 Select any desired cover settings.

CANCEL   OK

RIGHT BINDING   COVER SETTING
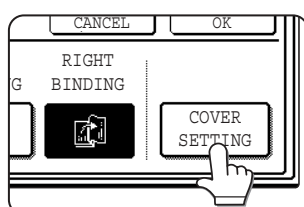
If you wish to use a different type of paper for the cover, perform steps 4 to 12 on pages 5-6 to 5-7.
If you do not wish to use a different type of paper, continue from step 4.

4 Touch the [OK] key in the special modes screen.

You will return to the main screen of copy mode.

5 Place the originals on the document glass. (page 4-3)

Scan the original pages in the following order:
Opened front and back cover
Opened inside of front cover and 1st page
Opened 2nd and 3rd page
⋮
Opened last page and inside of back cover

6 Make sure that the desired paper size has been selected.

EXPOSURE

AUTO   11x17
PAPER SELECT

100%
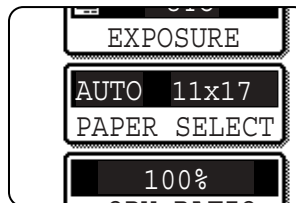
If the desired paper size is not selected, select the desired size.

7 Select the number of copies and any other desired copy settings, and then press the [START] key.

8 Place the next two pages and press the [START] key. Repeat until all pages have been scanned, and then touch the [READ-END] key.

When book copy is selected, two-sided copying is automatically selected.

To cancel the book copy function, touch the [CANCEL] key in the book copy setting screen (the screen of step 2).

5

Card shot

When copying a card, this function allows you to combine the front and back sides on a single sheet of paper.
This function is convenient for making copies for certification purposes and helps save paper.

Example:
Portrait
8-1/2" x 11" (A4)
size

Example:
Landscape
8-1/2" x 11" (A4)
size
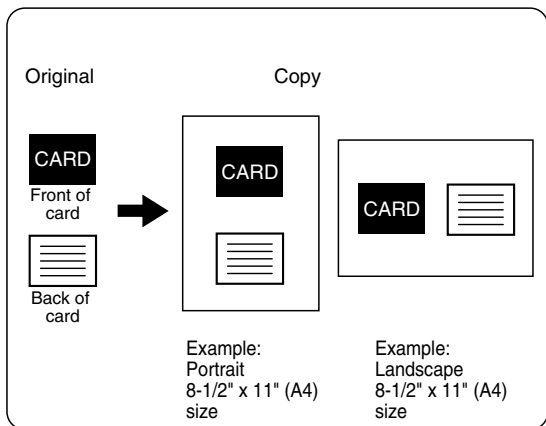
● Copying is only possible on standard size paper.
● A copy ratio cannot be selected when using this function.
● The image cannot be rotated when using this function.

1 Touch the [PAPER SELECT] key and then select the desired paper size.
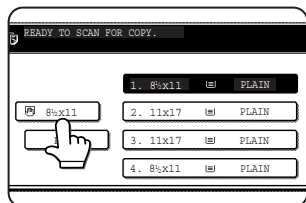
The selected paper size key is highlighted and the paper selection screen closes.

NOTE

If paper of the desired size is not loaded in any tray, load paper of the required size in a paper tray or the bypass tray. (See "Setting the paper type and paper size" on page 2-5.)

To display the special modes screen...
See "General procedure for using special functions" on page 5-2.

2 Touch the [CARD SHOT] key in the special modes screen (2nd screen).
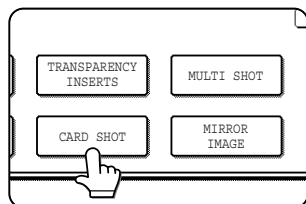
The CARD SHOT setting screen will appear. A card shot icon (, etc.) will also appear in the upper left corner of the screen to indicate that the function is turned on.

3 Enter the X dimension (width) and Y dimension (length) of the original with the keys.
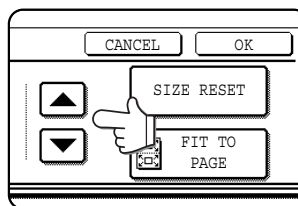
● X (width) is initially selected. Enter X and then touch the Y ( ) key to enter Y.
● To return the X and Y values to the initial settings configured in the key operator programs, touch the [SIZE RESET] key. ("CARD SHOT SETTINGS" on page 15 of the key operator's guide).
● To have the images enlarged or reduced by a suitable ratio based on the entered original size so that the front and back sides fit into the selected paper size, touch the [FIT TO PAGE] key.

4 **Touch the outer [OK] key.**
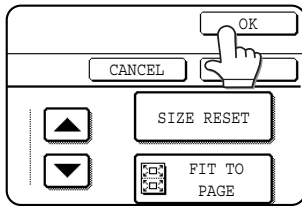
You will return to the main screen of copy mode.

5 **Place the original on the document glass.**
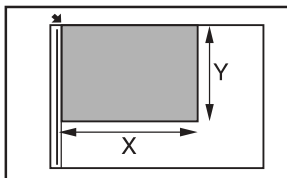
Place the front side of the original face down and close the document cover.

6 **Follow steps 4 through 6 of "Copying from the document glass" (page 4-11).**

7 **Press the [START] key.**
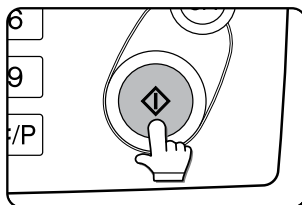
The front side of the card is scanned.

8 **Place the back side of the original face down on the document glass (see step 5).**

9 **Press the [START] key.**
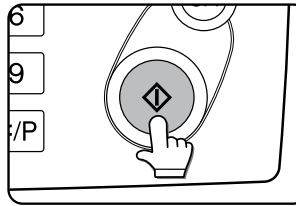
The back side of the card is scanned.

10 **Touch the [READ-END] key.**

NOTE

The original must be placed on the document glass. The document feeder (automatic document feeder) cannot be used.

To cancel the card shot function, touch the [CANCEL] key in the card shot setting screen (the screen of step 4).

5

Mirror image

This function is used to print a mirror image of the original. The images will be inverted in the right to left direction on the copies.
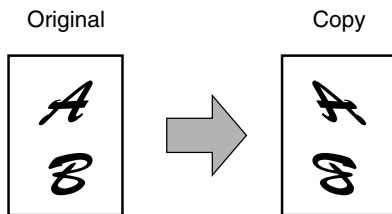
Original   Copy

To display the special modes screen...
See "General procedure for using special functions" on page 5-2.

1 Touch the [MIRROR IMAGE] key in the special modes screen (2nd screen).

| TRANSPARENCY INSERTS | MULTI SHOT |
| CARD SHOT | MIRROR IMAGE |
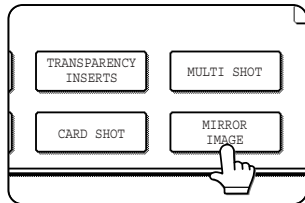
The [MIRROR IMAGE] key will be highlighted to indicate that the function is turned on, and the mirror image icon ( ) will appear in the upper left of the screen.

2 Touch the [OK] key on the special modes screen.

You will return to the main screen of copy mode.

About the steps that follow
If an automatic document feeder is being used, see pages 4-7 through 4-10. If the document glass is being used, see pages 4-11 through 4-13.

To cancel the mirror image function, touch the [MIRROR IMAGE] key in the special modes screen (the screen of step 1).

B/W reverse

Black and white are reversed in the copy to create a negative image.

NOTES
● When this function is selected, the exposure mode setting (page 4-14) automatically changes to "Text".
● Originals with large black areas (which use a large amount of toner) can be printed with black/white reverse to reduce toner consumption.
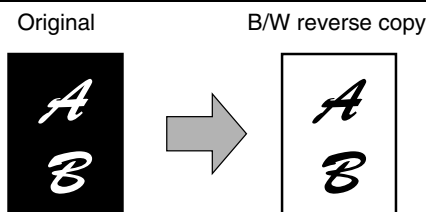
Original   B/W reverse copy

To display the special modes screen...
See "General procedure for using special functions" on page 5-2.

1 Touch the [B/W REVERSE] key in the special modes screen (3rd screen).

| ECIAL MODES |
| B/W REVERSE | PRINT MENU |
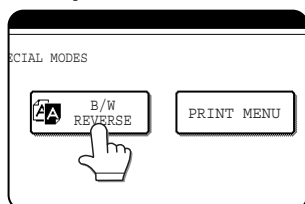
The [B/W REVERSE] key will be highlighted to indicate that the function is turned on, and the mirror image icon ( ) will appear in the upper left of the screen.

2 Touch the [OK] key in the special modes screen.

You will return to the main screen of copy mode.

About the steps that follow
If an automatic document feeder is being used, see pages 4-7 through 4-10. If the document glass is being used, see pages 4-11 through 4-13.

To cancel the B/W reverse function, touch the [B/W REVERSE] key in the special modes screen (the screen of step 1).

5-28

Print menu

The date, a stamp, page numbers, and entered text can be printed on copies. Four selections are available for the PRINT MENU:

- **Date print (page 5-32)**
  This prints the date on the paper.
  [Example] Printing 2004/OCT/1 in the upper right-hand corner of the paper

  ## 2004/OCT/1
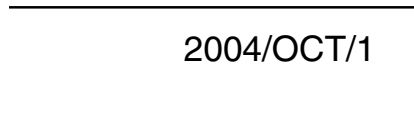
  The format of the date and the character that separates the year, month, and day can be changed.

- **Page numbering (page 5-34)**
  Page numbers can be printed on copies.
  [Example] Printing page numbers in the bottom right-hand corner of the paper

  ```
          1
        2      . . .
             3
  ```
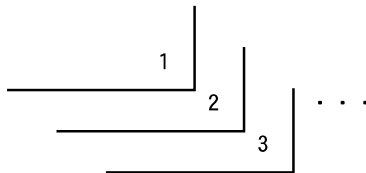
  The format of the page number can be changed.

- **Stamp (page 5-33)**
  Print a message such as "CONFIDENTIAL" in reverse text on the paper.
  [Example] Printing "CONFIDENTIAL" in the upper right-hand corner of the paper

  ## CONFIDENTIAL

  One of 12 stamps can be selected.

- **Text (page 5-38)**
  Entered text can be printed.
  [Example] Printing "October, 2004 Meeting" in the upper left-hand corner of the paper

  ### October, 2004 Meeting

  Up to 50 characters can be printed. You can store up to 30 sequences of frequently used text.

Six printing positions are available: left, center, or right of the top or bottom of the page.
Each printing position is divided into an area for the date, page number, and text (A below), and an area for the stamp (B below).

```
Top left ——— Top center ——— Top right

A                                              B

Bottom left ——— Bottom center ——— Bottom right
```

Print menu	Printing area	Maximum number of settings
DATE	A	One position only
STAMP	B	6 positions
PAGE NUMBERING	A	One position only
TEXT	A	6 positions

5

NOTES
- A part that overlaps the printed text will not be copied.
- If the set text content overlaps the print content of another position, the central print content will be moved to the bottom, the content on the left will be next, and the content on the right will be placed on top in that order such that only the content visible at the top is printed. Content that is hidden due to overlapping will not be printed.
- The printed text will be printed at the set size regardless of the copy ratio or paper size.
- The printed text will also be printed at the set density regardless of the copy exposure.
- Some copy paper sizes may cause the printed contents to be cut off or the print position to shift.
- If a copy job with a print menu setting is saved using the document filing function, the print menu setting will not be saved. If you wish to print a file saved in copy mode and use a print menu setting, use the special modes in the Job settings / print screen (or the document filing print screen in the Web page if the machine is connected to a network) to select the print menu setting. (A print menu setting cannot be selected when printing a file saved in a mode other than copy mode.)

■ Common operation procedure for using the print menu

To display the special modes screen...
See "General procedure for using special functions" on page 5-2.

1 Touch the [PRINT MENU] key in the special modes screen (3rd screen).
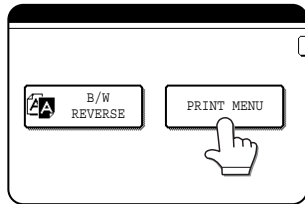
The print menu setting screen will appear. The print menu icon (🖶) will also appear in the upper left corner of the screen to indicate that the function is turned on.

2 Select the print position.
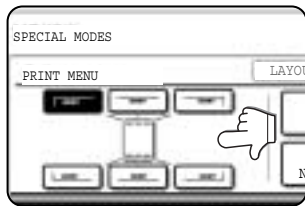
Six positions are available: left, center, or right of the top or bottom of the page. The touched key is highlighted.

The keys indicating the print position appear as follows depending on the state of the setting:

	Not selected, print menu setting has not been selected.
	Selected during selection of the print menu setting.
	Not selected, print menu setting has already been selected.

The image displayed within each key varies depending on the key position.

3 Select the print menu.
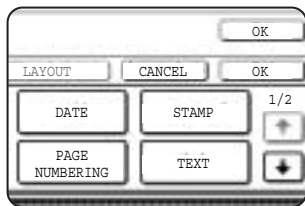
The settings screen of the print menu appears.
For information on each of the print menus, see the settings of each.

● DATE (page 5-32) ● STAMP (page 5-33)
● PAGE NUMBERING (page 5-34)
● TEXT (page 5-38)

4 To select print menu settings at another print position, repeat steps 2 and 3.

NOTES
● If the [DATE], [PAGE NUMBERING], or [TEXT] key is touched when other than a "STAMP" print menu setting has been selected for the print position selected in step 2, a message will appear. To overwrite the previously set print content of the print menu that you touched, touch the [YES] key. To keep the previous settings, touch the [NO] key.
● The "DATE" and "PAGE NUMBERING" cannot be set in multiple positions. If either of these keys is touched when a date or page numbering setting has already been configured, a message will appear asking you if you wish to move the print settings to the position that you selected in step 2. To move the print settings, touch the [YES] key. Otherwise touch the [NO] key.

5 Touch the ⬇ key.
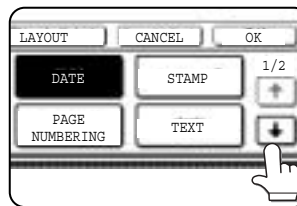
6 To specify the orientation of the original, touch the [ORIGINAL ORIENTATION] key.
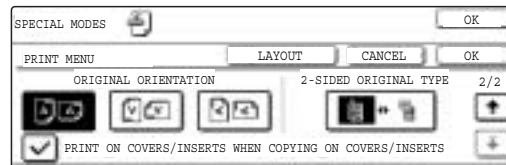
If you placed a two-sided original, touch the [■⏺🔲] key to specify the binding style (book or tablet). The icon of the selected binding style is highlighted.

7 If you are adding covers or inserts, select whether or not you wish to print on the covers or inserts.
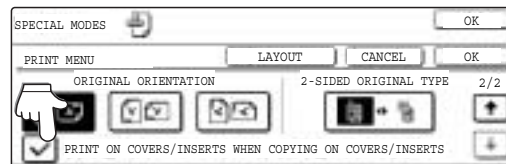
If you do not wish to print on covers or inserts, touch the checkbox to remove the checkmark.

NOTES
● If you are not copying on covers or inserts, printing will not take place on these even if a checkmark appears.
● A page number is never printed on covers or inserts, regardless of the above setting.
● If covers/inserts have been disabled in the key operator programs, the checkbox will be grayed out to prevent selection.

8 **Check the print layout if needed (page 5-40).**
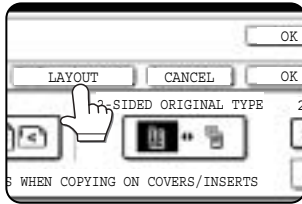
To display the layout and print content of the configured print menu, touch the [LAYOUT] key. The position can be changed and settings canceled if needed.

9 **Touch the [OK] key on the print menu setting screen.**

10 **Touch the [OK] key on the special modes screen.**

About the steps that follow
If an automatic document feeder is being used, see pages 4-7 through 4-10.
If the document glass is being used, see pages 4-11 through 4-13.

NOTE
To cancel print menu...
Touch the [CANCEL] key in the screen of step 3.

5

Printing in combination with other special functions
When a print menu is combined with one of the following special modes, printing will reflect the selected special mode.

Special modes	Printing operation
Margin shift	Like the copy image, the printed contents are shifted in accordance with the set margin.
Dual page copy	The print content is printed on each copy sheet.
Pamphlet copy Book copy	The print content is printed on each page of the "book".
Multi shot Card shot	The print content is printed on each copy sheet.
Covers/inserts	Whether it prints on the cover pages or the inserted pages needs to select in the print menu.

NOTE
When combined with "Erase", "Job build", "Mirror image" or "B/W reverse", printing takes place normally at the set position on the paper.

5-31

■ Printing the date on copies

The date can be printed on copies. Four selections each are available for the date format and the character that separates the year, month, and day.

NOTE
The date must be previously set in the custom settings. (See page 2-13.)

1 **Follow steps 1 and 2 of "Common operation procedure for using the print menu" (page 5-30).**

2 **Touch the [DATE] key.**

```
                                    OK
LAYOUT      CANCEL        OK
                                    1/2
   DATE        STAMP
 P           TEXT
 NUM
```

3 **Select the date format.**

```
DATE
    YYYY/MM/DD          /
    MM/DD/YYYY          .
    DD/MM/YYYY          -
    MM DD, YYYY
```
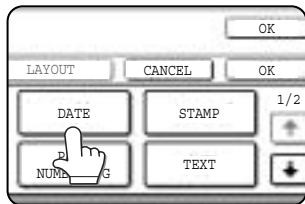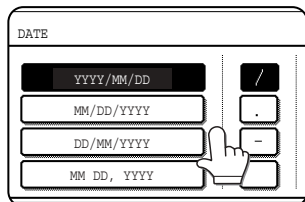
The selected date format is highlighted.
If you selected [YYYY/MM/DD], [MM/DD/YYYY], or [DD/MM/YYYY], you can select the character that separates the year, month, and date. Select [/] (slash), [,] (comma), [-] hyphen, or [ ] (space).

4 **Check the date and format.**

```
      CANCEL         OK
CURRENT SETTING    FIRST PAGE
 2004/AUG/01
                   ALL PAGES
 DATE CHANGE
```
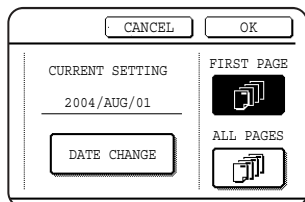
The date to be printed is displayed in "CURRENT SETTING" in the selected format. The date that appears is the date set in the machine. If you need to change the date, touch the [DATE CHANGE] key. The following screen appears.

```
DATE CHANGE                          OK

        YEAR     MONTH     DAY
        2004      08       01

              ▼   ▲
```
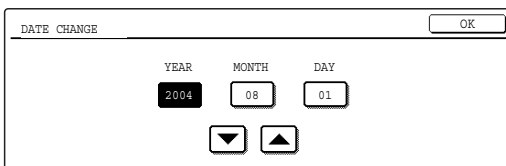
Touch the key of the number (year, month, or day) that needs to be changed, and then adjust the number with the ▼ or ▲ key. When finished, touch the [OK] key.

NOTE
If you select a non-existent date (for example, Feb. 30), the [OK] key will gray out to prevent entry of the date.

5 **Select the pages to be printed on.**

```
      CANCEL         OK
CURRENT SETTING    FIRST PAGE
 2004/AUG/01
                   ALL PAGES
 DATE CHANGE
```
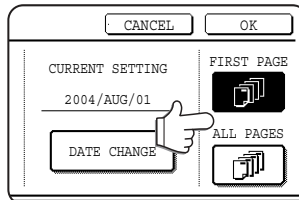
Select whether to print on only the first page, or all pages. The touched key is highlighted.

6 **Touch the [OK] key.**

```
      CANCEL         OK
CURRENT SETTING    FIRS    GE
 2004/AUG/01
                   ALL PAGES
 DATE CHANGE
```
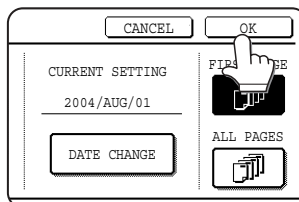
7 **Continue from step 4 of "Common operation procedure for using the print menu" (page 5-30).**

NOTE
To cancel a date print setting...
Touch the [CANCEL] key in the date selection screen. (The screen of step 6.)

■ Printing a stamp (reverse text) on copies

A message such as "CONFIDENTIAL" can be printed in reverse text on copies.
The following 12 messages are available.

CONFIDENTIAL	PRIORITY	PRELIMINARY	FINAL
FOR YOUR INFO.	DO NOT COPY	IMPORTANT	COPY
URGENT	DRAFT	TOP SECRET	PLEASE REPLY

You can select from three density levels for the background of the stamp.
Two selections are available for the size of the stamp.

NOTE
The text of the stamp cannot be edited.

1 Follow steps 1 and 2 of "Common operation procedure for using the print menu" (page 5-30).

2 Touch the [STAMP] key.
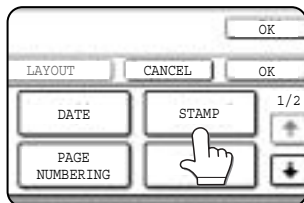
3 Select the stamp that you wish to print.
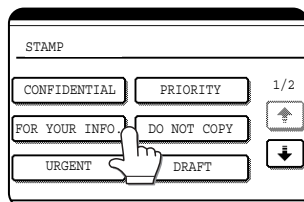
The selected stamp is highlighted. If the desired stamp does not appear, change screens with the 🔼 or 🔽 key.

4 Adjust the exposure as needed.
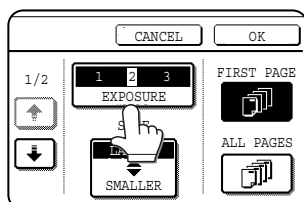
The density of the background of the stamp can be adjusted. Touch the [EXPOSURE] key to display the following screen.
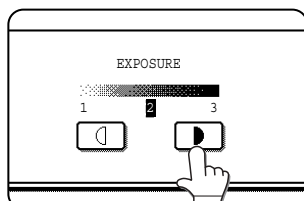
Touch the ▣ key for a darker background. Touch the ▢ key for a lighter background (3 levels).
When finished, touch the [OK] key.

5 Select the desired stamp size.
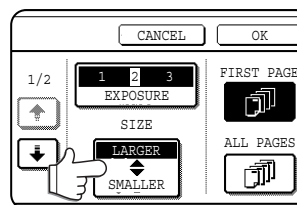
"LARGER" is initially selected. To make the stamp smaller, touch the [LARGER/SMALLER] key. "Smaller" is selected when [SMALLER] is highlighted.

6 Select the pages to be printed on.
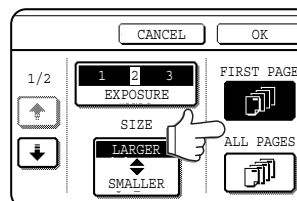
Select whether to print on only the first page, or all pages. The touched key is highlighted.

7 Touch the [OK] key.
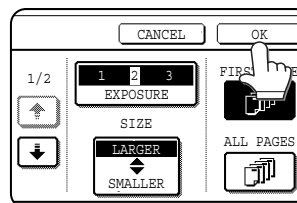
8 Continue from step 4 of "Common operation procedure for using the print menu" (page 5-30).

NOTE
To cancel a stamp setting...
Touch the [CANCEL] key in the stamp selection screen. (The screen of step 7.)

5

■ Printing the page number on copies

The page number can be printed on copies. One of 6 formats can be selected for the page number.

1 Follow steps 1 and 2 of "Common operation procedure for using the print menu" (page 5-30).

2 Touch the [PAGE NUMBERING] key.

```
                                    OK
LAYOUT      CANCEL      OK
                                   1/2
   DATE         STAMP
   PAGE
 NUMBERING      TEXT
```
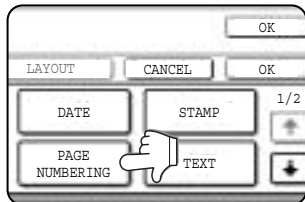
3 Select the page number format.

```
PAGE NUMBERING

PAGE NUMBERING FORMAT

  1,2,3..        (1),(2),(3)..

 -1-,-2-,-3-..   P.1,P.2,P.3..

 <1>,<2>,<3>..   5,2/5,3/5..
```
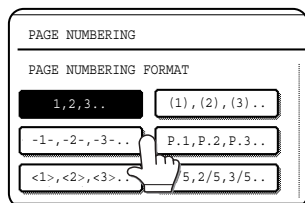
The selected format is highlighted.

If you selected "1/5, 2/5, 3/5",

"PAGE NUMBER/TOTAL PAGES" will be printed. "AUTO" is initially selected for "TOTAL PAGE", which means that the number of scanned original pages is automatically used. If you need to enter the total pages manually (for example, when a large number of originals are scanned in batches), touch the [MANUAL] key to display the total page entry screen.

```
PAGE NUMBERING              CANCEL    OK

PAGE NUMBERING FORMAT                    OK
  1,2,3..      (1),(2),(3)..   TOTAL PAGE
 -1-,-2-,-3-.. P.1,P.2,P.3..            TOTAL PAGE
                              AUTO
 <1>,<2>,<3>.. 1/5,2/5,3/5..               30
                              MANUAL          PAGE
```
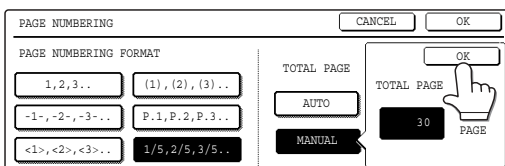
Enter the total pages (1 to 999) with the numeric keys and touch the [OK] key.

NOTES
- When two-sided copying is performed, each side of the paper is counted as a page. If the last page is blank, it will not be included in the total pages. However, if [COUNT BACK COVER] is selected, the last page will be counted. (See step 7.)
- When used in combination with "Dual page copy", "Multi shot", or "Card shot", the number of copied images is the total pages.
- When used in combination with "Pamphlet copy" or "Book copy", the number of pages in the "book" is the total pages.

4 If you need to change the starting or ending number of page numbering, the first page printed on, or the print settings for covers/inserts, touch the [PAGE NUMBER] key.

```
     CANCEL       OK

TOTAL PAGE
   AUTO              1

  MANUAL       PAGE NUMBER
```

5 Touch the [MANUAL] key.

```
PAGE NUMBER

                 FIRST NUMBER       LA
   AUTO
                      1        ~

  MANUAL         NTING STARTS FROM
                      1
```
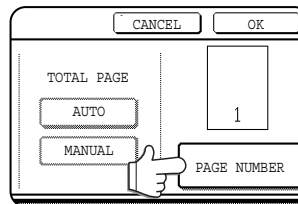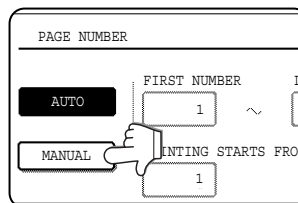
6 Enter settings for "FIRST NUMBER", "LAST NUMBER", and "PRINTING STARTS FROM SHEET".

```
FIRST NUMBER    LAST NUMBER
    1        ~     AUTO

PRINTING STA   ROM SHEET
    1
```
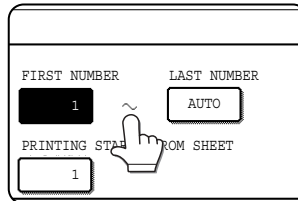
Touch each key so that it is highlighted, and then enter the number with the numeric keys (1 to 999).

To return a number to its initial value (FIRST NUMBER: 1, LAST NUMBER: AUTO, PRINTING STARTS FROM SHEET: 1), touch the [C] (clear) key while the key of the number is highlighted. If you enter the wrong number, press the [C] (clear) key and enter the correct number.

NOTES
- A last number smaller than the "FIRST NUMBER" number cannot be set.
- "LAST NUMBER" is initially set to "AUTO", which means that the page number is printed on each page through the final page in accordance with the "FIRST NUMBER" and "PRINTING STARTS FROM SHEET" settings.
- A number less than the total page number is set as the last number, the page number will not be printed on the pages that follow the set number.
- Unlike the first and last page numbers, "PRINTING STARTS FROM SHEET" specifies the sheet of paper (not the page number) from which printing of the page number begins.
  For example, when "3" is selected for one-sided copying, printing of the page number will start from the 3rd sheet of copy paper (the copy of the 3rd original page). When '3" is selected for two-sided copying, printing of the page number will start from the 3rd sheet of copy paper, which is the copy of the 5th original page.

7 When covers/inserts are added and you wish to include the covers/inserts in the page number count, touch the [COVERS/INSERTS COUNTING] key.

```
                    OK

LAST NUMBER
 AUTO              COVERS/INSERTS
                     COUNTING
```
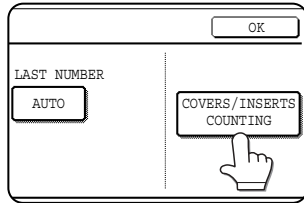
8 Select the checkboxes of the items that you wish to include in the page number count and then touch the [OK] key.

```
COVERS/INSERTS COUNTING              OK

□  COUNT FRONT COVER

□  COUNT INSERTS

□  COUNT BACK COVER                    2
                              1
```

Front cover image — Insert image — Back cover image
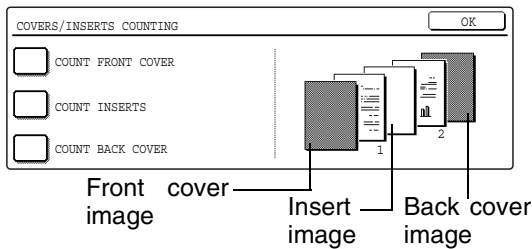
Items that are selected are reflected in the print image on the right side of the screen.

NOTES
● When an item is selected, one inserted sheet (front cover, insert, or back cover) is counted as one page during one-sided copying, and two pages during two-sided copying. However, if one-sided copying is used for the body pages and two-sided copying is used for the inserted sheets, each body page will be counted as one page and each inserted sheet will be counted as two pages.
● Printing never takes place on the front cover and back cover, regardless of whether or not these are counted.
● To print on an insert, the insert must be counted and it must be copied on.

9 Touch the [OK] key.

```
                         OK

LAST NUMBER
 AUTO              COVERS/INSERTS
                     COUNTING
```

10 Touch the [OK] key.

```
        CANCEL      OK

TOTAL PAGE
  AUTO
                        1
  MANUAL
                  PAGE NUMBER
```
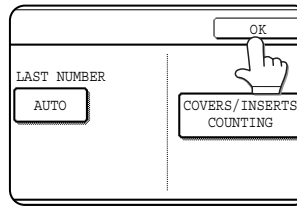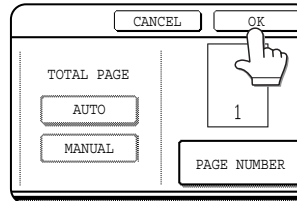
11 Continue from step 4 of "Common operation procedure for using the print menu" (page 5-30).

NOTE
To cancel a page number setting...
Touch the [CANCEL] key in the page number selection screen. (The screen of step 10.)

5

NOTES
● Copying in group mode is not possible when page number printing is selected. The mode will automatically switch to sort mode.
● When the page number print position is set to the left or right side and "Pamphlet copy" or "Book copy" is selected, the position of the page numbers will alternate so that they are always on the outside when the pamphlet/book is opened. If a stamp is set in an area with a page numbering setting, the position of the stamp will alternate in the same way.
If another item is set in a position that changes, that item will appear in the position that alternates with the page number position.
Print menus not related to the alternating print positions will appear in their set positions.
[Example] When the page number format "1, 2, 3.." is selected when performing pamphlet copying of 4 pages, the copies will appear as shown below.
In this example, the page number is at the bottom of the page and the date is at the top, so the position of the date does not change.

Print settings	Front		Back	
Date	2004/AUG/1	2004/AUG/1	2004/AUG/1	2004/AUG/1
Stamp	**CONFIDENTIAL**	**CONFIDENTIAL**	**CONFIDENTIAL**	**CONFIDENTIAL**
Page numbering Text	4 Minutes of meeting	Minutes of meeting 1	2 Minutes of meeting	Minutes of meeting 3
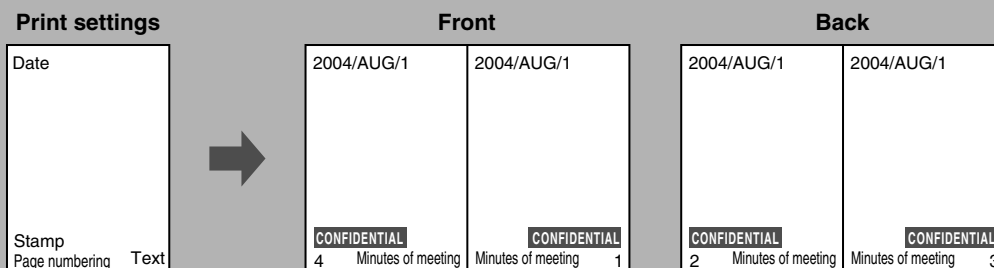
Examples of page number printing
Page number printing during one-sided copying (5 originals)

Setting	Value	1st page	2nd page	3rd page	4th page	5th page
TOTAL PAGE	AUTO	A 1/5	B 2/5	C 3/5	D 4/5	E 5/5
FIRST NUMBER	1					
LAST NUMBER	AUTO					
PRINTING STARTS FROM SHEET	1					
Printed contents when settings are changed as follows	FIRST NUMBER: 11	11/15	12/15	13/15	14/15	15/15
	FIRST NUMBER: 11 LAST NUMBER: 13	11/13	12/13	13/13	Not printed	Not printed
	TOTAL PAGE: 2	1/2	2/2	Not printed	Not printed	Not printed
	TOTAL PAGE: 15 FIRST NUMBER: 11 LAST NUMBER: 13	11/15	12/15	13/15	Not printed	Not printed
	PRINTING STARTS FROM SHEET: 3	Not printed	Not printed	1/3	2/3	3/3

Page number printing during two-sided copying (9 originals)

Setting	Value	1st page		2nd page		3rd page		4th page		5th page	
		Front	Back	Front	Back	Front	Back	Front	Back	Front	Back
TOTAL PAGE	AUTO	A 1/9	B 2/9	C 3/9	D 4/9	E 5/9	F 6/9	G 7/9	H 8/9	I 9/9	
FIRST NUMBER	1										
LAST NUMBER	AUTO										
PRINTING STARTS FROM SHEET	1										
Printed contents when settings are changed as follows	PRINTING STARTS FROM SHEET: 3	Not printed	Not printed	Not printed	Not printed	1/5	2/5	3/5	4/5	5/5	Not printed

Page number printing during one-sided copying of body pages with covers inserted (4 originals)

Setting	Value	1st page (Front cover)	2nd page	3rd page	4th page	5th page
TOTAL PAGE	AUTO		A 1/4	B 2/4	C 3/4	D 4/4
FIRST NUMBER	1					
LAST NUMBER	AUTO					
PRINTING STARTS FROM SHEET	1					
COUNT FRONT COVER	Not selected					
Printed contents when settings are changed as follows	PRINTING STARTS FROM SHEET: 2	Not printed	Not printed	1/3	2/3	3/3
	COUNT FRONT COVER: Selected	Not printed (count)	2/5	3/5	4/5	5/5
	COUNT FRONT COVER: Selected PRINTING STARTS FROM SHEET: 2	Not printed (count)	1/4	2/4	3/4	4/4

When a back cover is inserted, page numbers are counted and printed in the same way.

Note that page numbers are never printed on front and back covers.

Page number printing during two-sided copying of body pages with covers (one-side copying) inserted (9 originals)

Setting	Value	1st page (front cover)		2nd page		3rd page		4th page		5th page	
		Front	Back	Front	Back	Front	Back	Front	Back	Front	Back
TOTAL PAGE	AUTO	A		B 1/8	C 2/8	D 3/8	E 4/8	F 5/8	G 6/8	H 7/8	I 8/8
FIRST NUMBER	1										
LAST NUMBER	AUTO										
PRINTING STARTS FROM SHEET	1										
COUNT FRONT COVER	Not selected										
Printed contents when settings are changed as follows	PRINTING STARTS FROM SHEET: 3	Not printed	Not printed	Not printed	Not printed	Not printed	Not printed	1/4	2/4	3/4	4/4
	COUNT FRONT COVER: Selected	Not printed (count)	Not printed (count)	3/10	4/10	5/10	6/10	7/10	8/10	9/10	10/10
	COUNT FRONT COVER: Selected PRINTING STARTS FROM SHEET: 3	Not printed (count)	Not printed (count)	Not printed	Not printed	1/6	2/6	3/6	4/6	5/6	6/6

When a back cover is inserted, page numbers are counted and printed in the same way.
Note that page numbers are never printed on front and back covers.

Page number printing during one-sided copying with inserts (4 originals; 5 originals when copying on inserts)

Setting	Value	1st page	2nd page	3rd page (insert)	4th page	5th page
TOTAL PAGE	AUTO	A 1/4	B 2/4	C	D 3/4	E 4/4
FIRST NUMBER	1					
LAST NUMBER	AUTO					
PRINTING STARTS FROM SHEET	1					
COUNT INSERTS	Not selected					
Printed contents when copying on inserts and settings are changed as follows	PRINTING STARTS FROM SHEET: 3	Not printed	Not printed	Not printed	1/2	2/2
	COUNT INSERTS: Selected	1/5	2/5	3/5 (count)	4/5	5/5
	COUNT INSERTS: Selected PRINTING STARTS FROM SHEET: 3	Not printed	Not printed	1/3 (count)	2/3	3/3
Printed contents when not copying on inserts and settings are changed as follows	COUNT INSERTS: Selected	1/5	2/5	Not printed (count)	4/5	5/5
	COUNT INSERTS: Selected PRINTING STARTS FROM SHEET: 3	Not printed	Not printed	Not printed (count)	2/3	3/3

When inserts are not copied on, the page number is not printed.

Page number printing during two-sided copying of body pages with inserts (one-side copying) (9 originals)

Setting	Value	1st page		2nd page		3rd page (insert)		4th page		5th page	
		Front	Back	Front	Back	Front	Back	Front	Back	Front	Back
TOTAL PAGE	AUTO	A 1/8	B 2/8	C 3/8	D 4/8	E		F 5/8	G 6/8	H 7/8	I 8/8
FIRST NUMBER	1										
LAST NUMBER	AUTO										
PRINTING STARTS FROM SHEET	1										
COUNT INSERTS	Not selected										
Printed contents when settings are changed as follows	COUNT INSERTS: Selected	1/10	2/10	3/10	4/10	5/10	Not printed (count)	7/10	8/10	9/10	10/10

5

■ Printing entered text on copies

Entered text can be printed on copies. Up to 50 characters can be printed.

Up to 30 sequences of frequently used text can be stored. See "Storing text sequences" (page 5-39).

NOTE
When the machine is connected to a network, the printed text sequences can be stored and deleted in the Web page. For details, see Help in the Web page.

1 **Follow steps 1 and 2 of "Common operation procedure for using the print menu" (page 5-30).**
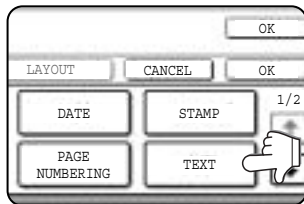
2 **Touch the [TEXT] key.**

3 **If you wish to use one of the preset text sequences, touch the [RECALL] key. To directly enter the text, touch the [DIRECT ENTRY] key.**
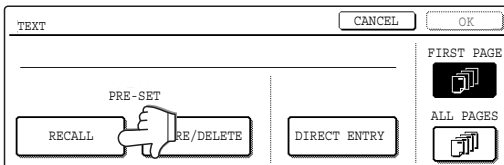
If you touch the [DIRECT ENTRY] key, a character entry screen will appear. For information on entering characters, see page 7-26. When finished, click the [OK] key to close the character entry screen. (Go to step 6.)

4 **The stored text sequences will appear as keys. Touch the key of the desired text sequence.**
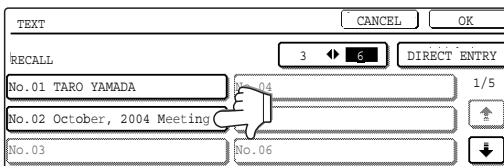
The selected text sequence key is highlighted.
If the desired text sequence key does not appear, change screens with the ⬆ or ⬇ key.
The display is initially set to show 6 keys per screen. This can be changed to 3 keys per screen by touching the [3 ◆ 6] key. When 3 keys are displayed, the entire text sequence will appear in each key. (When 6 keys are displayed, up to 22 characters appear in each key.)

5 **Touch the [OK] key.**
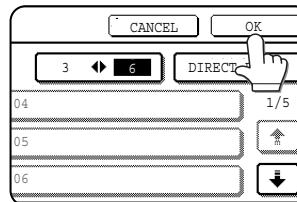
To edit the selected text sequence, touch the [DIRECT ENTRY] key to display the character entry screen. The selected text sequence is entered.

For information on entering characters, see page 7-26. When finished, touch the [OK] key to close the character entry screen.

6 **Select the pages to be printed on.**
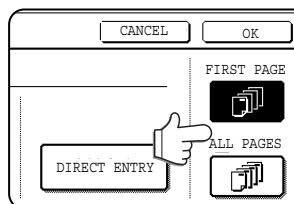
Select whether to print on only the first page, or all pages. The touched key is highlighted.

7 **Touch the [OK] key.**
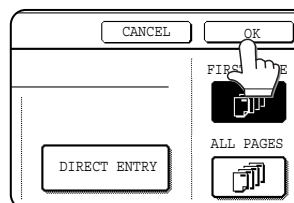
8 **Continue from step 4 of "Common operation procedure for using the print menu" (page 5-30).**

NOTE
To cancel a text setting...
Touch the [CANCEL] key in the text print screen. (The screen of step 7.)

Storing text sequences

1 Follow steps 1 and 2 of "Common operation procedure for using the print menu" (page 5-30).
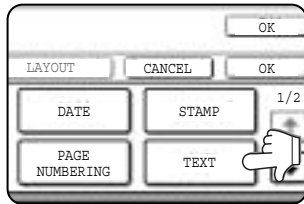
2 Touch the [TEXT] key.

3 Touch the [STORE/DELETE] key.
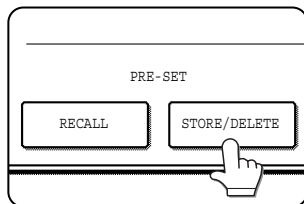
4 Touch a key that has not been programmed (a key in which No. xx appears).
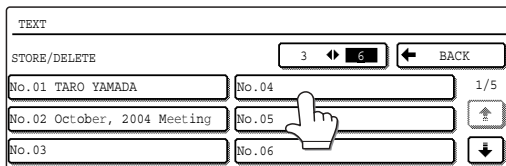
When touched, the character entry screen appears. Enter the text (max. 50 characters). For information on entering characters, see page 7-26. When finished, touch the [OK] key to close the character entry screen.

If no free keys appear, change screens with the ↑ or ↓ key.

5 Touch the [BACK] key.
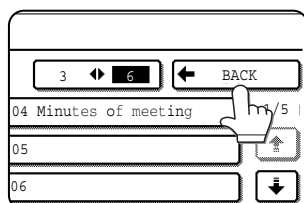
The entered text is stored.

Editing and deleting stored text

1 Follow steps 1 and 2 of "Common operation procedure for using the print menu" (page 5-30).
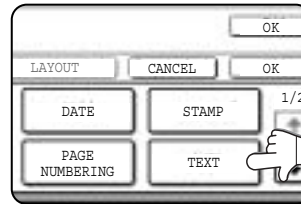
2 Touch the [TEXT] key.

3 Touch the [STORE/DELETE] key.
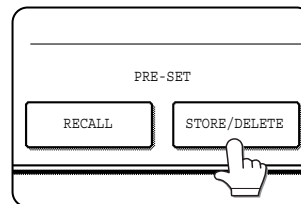
4 Touch the text key that you wish to edit or delete.
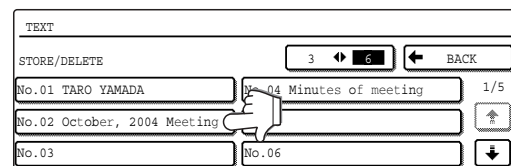
5 To edit the text, touch the [AMEND] key. To delete the text, touch the [DELETE] key.
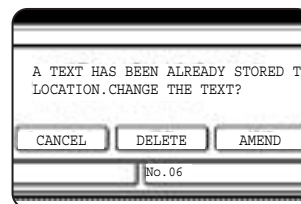
When the [AMEND] key is touched, the character entry screen appears. The selected text sequence is entered. For information on entering characters, see page 7-26. When finished, touch the [OK] key to close the character entry screen.

If you touch the [DELETE] key, the text will be deleted and you will return to the screen of step 4.

To cancel editing or deletion, touch the [CANCEL] key.

6 Touch the [BACK] key.
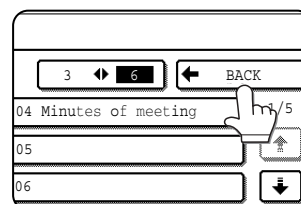
5

■ Checking and changing the print layout

You can check the print layout after the print items have been selected. If needed you can change the print position or delete print content.

1 Touch the [LAYOUT] key on the print menu screen.
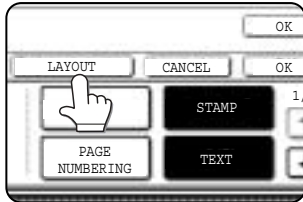
2 Touch the key in which you wish to change the print position or delete print content.
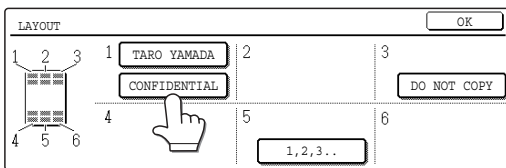
NOTE
Up to 14 characters of the print text appears in the key.

3 To change the print position, touch the [MOVE] key. To delete print content, touch the [DELETE] key.
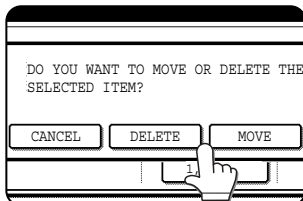
If you touched the [MOVE] key, the new position selection screen appears.
If you touched the [DELETE] key, the print content is deleted. (Go to step 6.)

4 Touch the key of the new position.
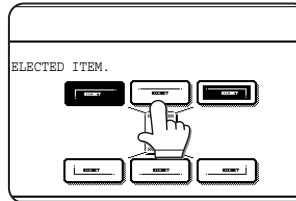
The selected key is highlighted and the print position changes to the new position.

The keys indicating the print position appear as follows depending on the state of the setting:

	Print position without any set print menus.
	Currently set print position.
	Print position with another competing print menu set. (When moving a stamp, this indicates that another stamp has been set. When moving a print menu other than a stamp, this indicates that the date, page number, or text has been set.)

NOTE
If you wish to swap the contents of two positions, temporarily move the content of one position to an unused position and then complete the swap.

5 Touch the [OK] key.
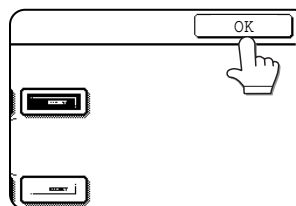
If you attempt to move print content to a position that already has print content set, a message will appear asking you if you wish to overwrite the previously set content.
To overwrite the content, touch the [YES] key. To cancel the move and return to the condition before the [OK] key was touched, touch the [NO] key.

6 Touch the [OK] key.
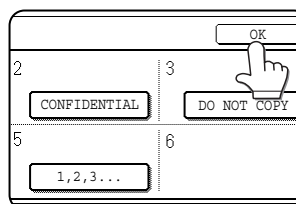
STORING, USING AND DELETING JOB PROGRAMS

The steps of up to 10 copy jobs can be stored as job programs. Job programs can be called up with ease, and are retained even when the power is turned off. By storing frequently used copy settings in a job program, you can eliminate the bother of selecting the settings each time you use them for a copy job.

● If any settings related to the steps of a job program are changed in the key operator programs after the job program is stored, the steps related to the changed settings will not be included when the job program is called up.
● To exit the job programs mode, press the [CA] (clear all) key on the operation panel or touch the [EXIT] key on the touch panel.

Storing a job program

1 **Press the [#/P] key.**

7	8	9
✳	0	#/P

ACC.#-C

2 **Touch the [STORE/DELETE] key.**

NUMBER.

2	3	4	
		8	

ECALL   STORE/DELETE

3 **Touch the number key ([1] to [10]) in which you wish to stored the job program.**

PROGRAMS

ESS PROGRAM NUMBER.

1	2	3	4
6	7	8	9

RECAL   STORE
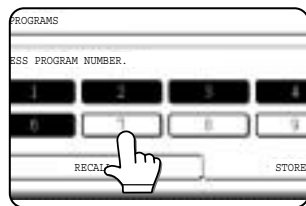
Number keys in which job programs are already stored are highlighted.

4 **Select the copy settings that you wish to store in the job program.**

TO STORE, MAKE SELECTIONS AND PRESS [OK], TO DELETE, PRESS [CANCEL].

SPECIAL MODES
2-SIDED COPY
OUTPUT

8½x11
8½x11
8½x14
11x7
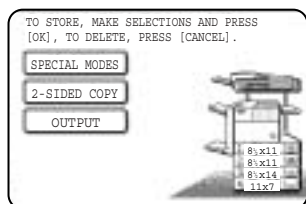
The number of copies cannot be stored.

5 **Touch the [OK] key.**

NCEL   OK

AUTO
ORIGINAL
AUTO

The selected settings will be stored in the number key selected in step 3.

■ If a number key is selected in step 3 that has already been programmed.

A setting confirmation screen will appear. To replace the existing program with the new program, touch the [STORE] key and continue from step 4. If you do not wish to replace the existing program, touch the [CANCEL] key to return to the screen of step 3 and select a different number key.

5

NOTE

If overwriting of programmed copy settings has been prohibited in the key operator programs, you will not be able to store a job program. (See page 15 of the key operator's guide.)

Calling up a job program

1 Press the [#/P] key.

```
  7    8    9
  *    0   #/P
ACC.#-C
```
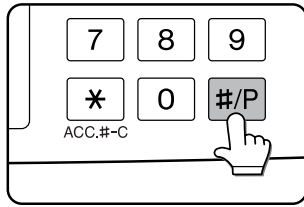
2 Touch the number key of the desired job program.

```
JOB PROGRAMS

PRESS PROGRAM NUMBER.

   1    2    3

   6         4

        RECALL
```
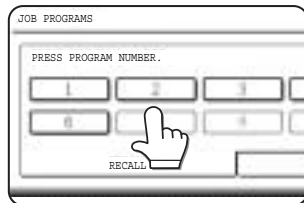
The screen automatically closes and the job program is called up. A number key that does not have a job program cannot be selected.

3 Set the number of copies if needed and then press the [START] key.

```
        CA
  6
  9
 #/P
```
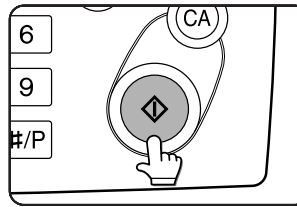
Copying will begin using the settings of the job program.

Deleting a stored job program

1 Press the [#/P] key.

```
  7    8    9
  *    0   #/P
ACC.#-C
```

2 Touch the [STORE/DELETE] key.

```
NUMBER.

   2    3    4

   7    8    9

ECALL          STORE/DELETE
```
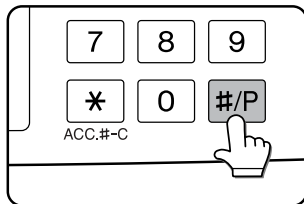
3 Select a storage register number of the program to be deleted.

```
                    EXIT



   1    4    5


       STORE/DELETE
```

If a number key for which no job program has been stored is selected, the screen will change to the screen of step 4 on the previous page (for storing a job program).

4 Touch the [DELETE] key.

```
A JOB PROGRAM HAS BEEN ALREADY STORED
 IN THIS LOCATION.

 CANCEL   DELETE   STORE
REC LL            STORE/DELETE
```
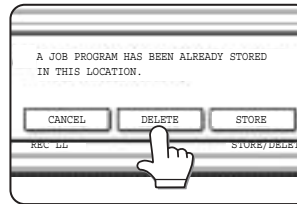
The selected program is deleted and you return to the screen of step 3. To return to the screen of step 3 without deleting the job program, touch the [CANCEL] key. In both cases, touch the [EXIT] key on the screen displayed in the screen of step 3 to exit the job program mode.

NOTE

If overwriting of programmed copy settings has been prohibited in the key operator programs, you will not be able to clear a job program. (See page 15 of the key operator's guide.)

INTERRUPTING A COPY RUN

The copy of the original scanned in interrupt mode is output before the remainder of the interrupted copy job.

1 **Touch the [INTERRUPT] key.**
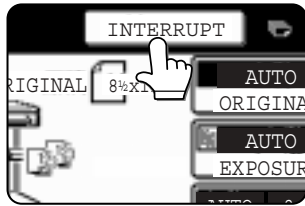
If interrupt copying is possible during a copy run, the [INTERRUPT] key will appear. (If the key does not appear, interrupt copying is not possible.)
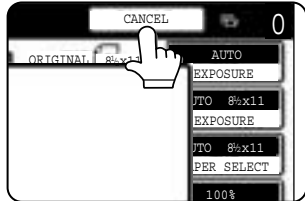
When the [INTERRUPT] key is touched in step 1, the [INTERRUPT] key will be replaced by the [CANCEL] key as shown in the illustration.

To cancel an interrupt copy job while the interrupt original is being scanned or while you are selecting copy settings, touch the [CANCEL] key.

NOTES

● If you touch the [INTERRUPT] key when auditing mode is enabled, the display will prompt you to enter your account number. Enter your account number with the numeric keys. The copies you make will be added to the count of the entered account number.

● If a copy is being printed when the [INTERRUPT] key is pressed, interrupt mode will begin after the copy is finished.

● If the document glass is used for an interrupt copy job, two-sided copying, sort copying, and staple sort copying cannot be selected. If any of these functions are necessary, use the document feeder.

2 **Place the original for the interrupt copy job in the document feeder or on the document glass (page 4-3).**
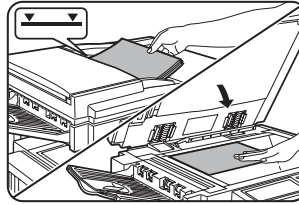
3 **Select the exposure mode, paper size, number of copies, and any other copy settings as needed, and then press the [START] key.**
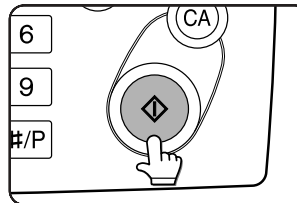
4 **The previous copy job automatically resumes after the interrupt job finishes.**

5

5-43

CHAPTER 6

MACHINE MAINTENANCE (FOR COPYING)

This chapter explains procedures for cleaning the machine, and troubleshooting.

USER MAINTENANCE

Cleaning the document glass and the automatic document feeder

If the document glass, document cover or automatic document scanning unit have dirty spots, these spots will form lines in scanned images. These will show up as defects when the images are printed. Always keep these parts clean.
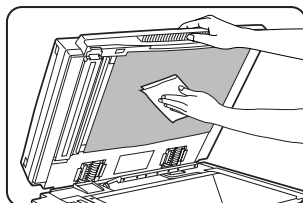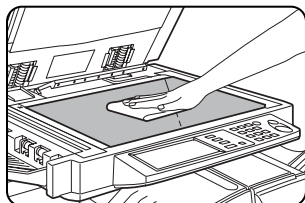
Wipe with a clean, soft cloth. If necessary, moisten the cloth with water or a small amount of neutral detergent. When finished, wipe dry with a clean cloth. When cleaning, do not use thinner, benzene, or similar volatile cleaning agents.
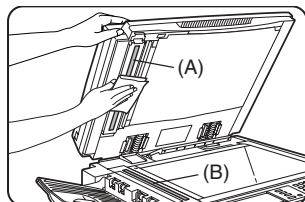
If black or white stripes appear on printed images of originals that were fed through the automatic document feeder, wipe the long narrow glasses in the scanning unit ((A) and (B) in the illustration).

Example of dirty print image
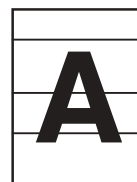
Black stripes   White stripes

CAUTION
Do not use flammable spray to clean the machine. If gas from the spray comes in contact with hot electrical components or the fusing unit inside the machine, fire or electrical shock may result.

Cleaning the main charger of the photoconductive drum

If black (or white) lines appear even after you have cleaned the document glass and document feeder, use the charger cleaner to clean the main charger that charges the drum.

1 Switch off the power switch (see page 1-17).

2 Open the front cover.
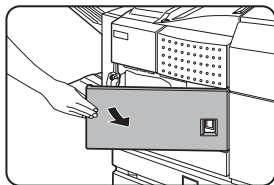
3 Slowly pull out the green knob (charger cleaner).

Charger cleaner
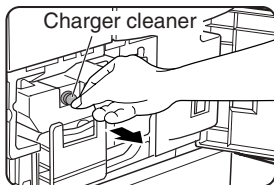
4 Once the knob is pulled out, slowly push it back in.
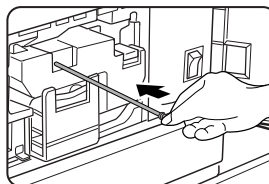
5 Close the front cover and switch on the power switch.
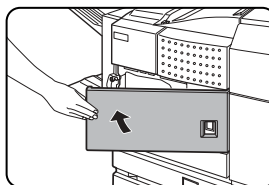
NOTES
● If this does not solve the problem, pull the knob out and push it back in 2 more times.
● When pulling and pushing the knob to clean the charger, pull and push the knob slowly from one end to the other.

6-2

TROUBLESHOOTING

Check the following troubleshooting list before requesting service as many problems can be fixed by the user. If you are unable to solve the problem by checking the list, turn off the power switch, and unplug the power cord.
Problems related to the copy function are described below. For problems related to general use of the machine, see page 2-23.

Problem	Check	Solution
Machine does not operate.	Is the [START] key indicator off?	This indicates that the machine is warming up (warming up lasts no more than 80 seconds after the power switch is turned on). Copying is not possible during this time. Wait until the [START] key light illuminates.
Copies are too dark or too light.	Is the original image too dark or too light?	Select an appropriate exposure mode for the original being copied and adjust the copy exposure. (See page 4-14.)
	Is the exposure mode set to "AUTO"?	The exposure level for "AUTO" can be adjusted using the "Exposure adjustment" key operator program. Contact your key operator. (See page 14 of the key operator's guide.)
	An appropriate exposure mode for the original has not been selected.	Change the exposure mode to "AUTO" or manually select an appropriate resolution setting. (See page 4-14.)
Text is not clear on a copy.	An appropriate exposure mode for the original has not been selected.	Change the exposure mode to "TEXT". (See page 4-14.)
Smudges appear on copies.	Document glass or document cover dirty?	Clean regularly. (See page 6-2.)
	Black lines appear on copies when the automatic document feeder is used.	Clean the original scanning area. (See page 6-2.)
	Original smudged or blotchy?	Use a clean original.
Image cannot be rotated.	Is the auto paper select or auto image function selected?	Rotation copy functions only if the machine is either in the auto paper select mode or in the auto image mode. (See page 4-15.)
Part of original image is not copied.	Is the original positioned correctly?	Set the original properly. (See page 4-3.)
	Is the copy ratio proper for the original and paper sizes?	Use the auto image function to select the appropriate copy ratio based on the original and copy sizes. (See page 4-15.)
Blank copies	Is the original placed correctly?	When using the document glass, place the original face down. When using the automatic document feeder, place original face down. (See page 4-3.)
Order of copies incorrect	Is the order of originals correct?	When using the document glass, place the originals from the first page one sheet at a time. When using the automatic document feeder, place the originals with the first page down.
Job cancellation needed	Is a message requesting cancellation of job displayed?	Press the [CA] key to cancel the current job.

6

CHAPTER 7

DOCUMENT FILING FUNCTION

OVERVIEW

Document filing function

The document filing function allows you to save a document image in the machine's hard disk as a data file. The image can be called up and printed or transmitted as needed.

The scanned document image is saved when printing or transmitting a document in copy mode, printer mode, or image send mode ("QUICK FILE" or "FILE"). A document can also be scanned and saved without being printed, copied, or transmitted ("scan save").

To allow you to search for the file and call it up, names (user name, file name, etc.) can be assigned to the file (except when using Quick File in copy mode or fax/image send mode).

■ Data flow

| Printing in copy mode (Quick File saving, page 7-6) |
| Printing from a computer (printer data, page 7-9) |
| Transmission in fax/image send mode (filing, page 7-7) |

and

| Scanning a document only (scan save, page 7-10) |

Save to machine's hard disk

Machine hard disk

HDD

Call up a saved file to reuse it.

Print

Send
(facsimile expansion kit or network scanner expansion kit required)

Machine hard disk

QUICK FILE FOLDER

Data is saved by job

- File 1
- File 2

MAIN FOLDER

A user name and file name is specified for each saved job

- File 1   A password can be set
- File 2

CUSTOM FOLDER

A user name and file name can be specified for each file and the file saved to a folder with any desired name assigned.

- Folder 1   A password can be set
- Folder 2
- Folder 3 — File 1   A password can be set
              File 2

Copier/printer model

● A stored file can be moved to a different folder under certain conditions (page 7-19).

■ Quick File folder

When [QUICK FILE FOLDER] is selected in the main screen of any of the modes, the file is saved in this folder.
Up to 1000 files can be saved in the Quick File folder. All files in the Quick File Folder can be deleted using a key operator program. If you have a file that you do not want deleted, set the file attribute to [PROTECT] (up to 500 files can be protected). (See [Property change] on page 7-18)
The following user and file names are automatically assigned (except when using Quick File in copy mode or fax/image send mode):
User name : User unknown
File name (example) : COPY_10012004_014050PM (job mode and month, day, year, hour, minute, second, AM/PM of save). (In the example, the file was saved on 10/1/2004 at 13:40 and 50 sec in copy mode.)
When saved, jobs are classified by mode. A saved job can be called up from the COMPLETE job status screen.

■ Main folder

When saving a file, a previously stored user name (see [CUSTOM SETTINGS] on page 7-21) can be specified and any file name can be assigned.
A password can also be set for a saved file ([CONFIDENTIAL] save). (See [Property change] on page 7-18.)
If a user name and file name are not selected, a name in the same format as Quick File is automatically assigned.

■ Custom folder

Up to 500 folders (named as desired) can be created in this folder. When saving a file in one of these folders, a previously stored user name (see [CUSTOM SETTINGS] on page 7-21) can be specified and any file name can be assigned.
A password can be set for a file saved in one of these folders.

■ Attributes of saved files

The protect setting can be selected for files saved with the document filing function. This prevents a file from being moved or automatically or manually deleted.
Three attributes are available for saved files: [SHARING], [PROTECT], and [CONFIDENTIAL]. When saved with the [SHARING] attribute, a file is not protected. When saved with the [PROTECT] or [CONFIDENTIAL] attribute, a file is protected.
Files saved to the Quick File folder are all [SHARING]. When saving a file to the main folder or a custom folder, [SHARING] or [CONFIDENTIAL] can be selected.
● A [SHARING] file can be changed to a [PROTECT] or [CONFIDENTIAL] file using [Property change] (page 7-18).
● A password is set for a [CONFIDENTIAL] file to protect it. (The password must be entered to call up the file.)
● A password cannot be set for a [PROTECT] file, however, as long as the file is not changed to [SHARING] with [PROPERTY CHANGE], the file will be protected.

CAUTION
● Documents saved with [QUICK FILE] are shared files that can be called up by anyone and printed or transmitted. For this reason, do not use Quick File for sensitive documents or documents that you do not want to be reused by others.
● When saving a document with [FILE], set the attribute to [CONFIDENTIAL] and set a password to prevent others from reusing the document.
● Even when a file is saved with the [CONFIDENTIAL] attribute, the attribute can be changed afterward to [SHARING] using [Property change] (page 7-18). For this reason, do not save sensitive documents or documents that you do not want to be reused by others.
● Except in cases provided for by law, SHARP Corporation bears no responsibility for any damages that result from the leaking of sensitive information due to 1) manipulation by a third party of any data saved using the Quick File function or filing function, or 2) incorrect operation of the Quick File function or filing function by the operator that saves the data.

7

TO USE THE DOCUMENT FILING FUNCTION
A look at the operation panel
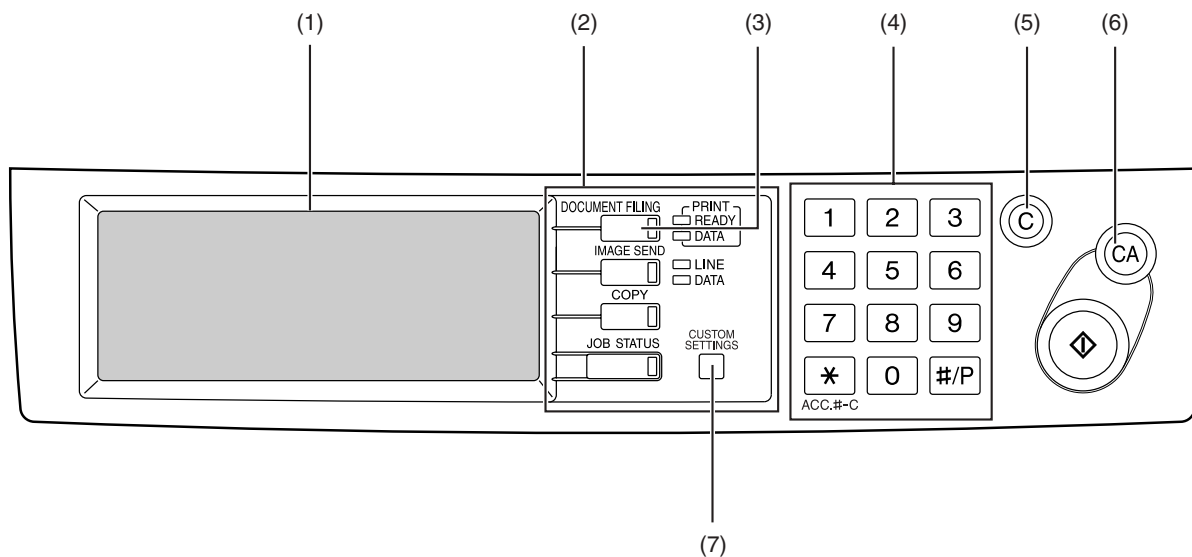
(1) Touch panel (see the next page)

This displays messages and keys. Keys can be touched to select and enter settings.

When a key is touched, a beep will sound and the key will be highlighted to indicate that it is selected. When a key cannot be selected in a screen, it will be grayed out. If touched, a warning beep will sound to alert you that it cannot be selected.

(2) Mode select keys

Use this key to select the mode.

(3) [DOCUMENT FILING] key

Touch this key to display the main screen of document filing mode.

(4) Numeric keys

Use these keys to enter a password or a numeric value for a setting.

(5) [C] key (clear key)

Use this key if you make a mistake when entering a password or numeric setting.

This key is also used to cancel scanning of a document.

(6) [CA] key

Use this key to cancel a setting procedure and return to the main screen. The key is also used to cancel a special function.

(7) [CUSTOM SETTINGS] key

Use this key to store, edit or delete a user name or custom folder.

Saving files

To save files to the main folder or custom folders, a user name must be previously stored. To create a folder in the custom folder, the folder name must be stored. These settings are configured in the custom settings.
Follow the procedures explained in "Programming a user name", "Editing and deleting a user name", "Creating a custom folder", and "Editing/deleting a custom folder" on pages 7-22 to 7-25.

Main screen of document filing

To display the main screen of document filing, press the [DOCUMENT FILING] key when the touch panel shows the copy mode screen, image send mode, or the job status screen.

The main screen shows messages, keys, and items that can be selected for document filing.
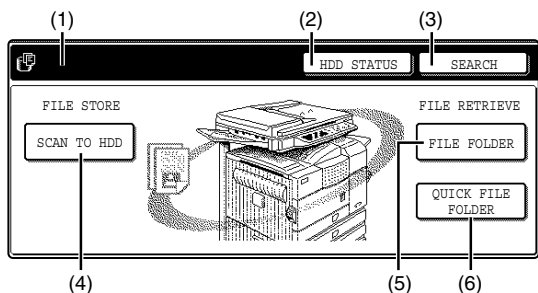
(1) Message display
Displays messages.

(2) [HDD STATUS] key
Touch to check the use of the machine's hard disk.

(3) [SEARCH] key
Touch to search for a file by user name, file name, or folder name.

(4) [SCAN TO HDD] key
Touch to select scan save. Scan save is used to save the image file of a scanned document in the main folder or a custom folder without printing or transmitting the document.

(5) [FILE FOLDER] key
Touch to call up a file from the main folder or the custom folder. When the key is touched, the files in the main folder or the folders in the custom folder appear.

(6) [QUICK FILE FOLDER] key
Touch to call up a file from the Quick File folder. When the key is touched, the files in the Quick File folder appear.

Document filing icons

Main icon	Icon of confidential file or folder	Icon of protected file	Meaning
🗀	🗀🔒		Folder
🗐	🗐🔒	🗐⊘	Copy job file
🖨	🖨🔒	🖨⊘	Print job file (including direct print jobs)
📞	📞🔒	📞⊘	Fax transmission job file
☎↗	☎🔒↗	☎⊘↗	PC-FAX transmission job file
🌐↗	🌐🔒↗	🌐⊘↗	Internet fax transmission job file
🌐↗	🌐🔒↗	🌐⊘↗	PC-Internet fax transmission job file
📑	📑🔒	📑⊘	Scan save file
✉↗	✉🔒↗	✉⊘	E-mail transmission job file
🖥↗	🖥🔒↗	🖥⊘↗	FTP transmission job file
▦↗	▦🔒↗	▦⊘↗	Desktop transmission job file

The following icons may appear added to a main icon or alone.

Icon	Meaning
🔒	Confidential file or folder
⊘	Protected file

NOTE
When the file of a job that was saved using scan save is printed in job settings, the icon of the job is highlighted.

7

SAVING A DOCUMENT IMAGE FILE

Quick File

When printing or transmitting a document in copy mode, printer mode, or fax/image transmission mode, "QUICK FILE" can be selected to save an image of the document to the Quick File folder.
The image can be called up at a later time, allowing you to print or transmit the document without having to locate the original.

> **NOTE**
> As an example, the procedure for saving a document to the Quick File folder while copying using the automatic document feeder is explained below.

1 Place the originals in the document feeder tray and select resolution and exposure settings.

ORIGINAL

AUTO EXPOSURE

AUTO A4
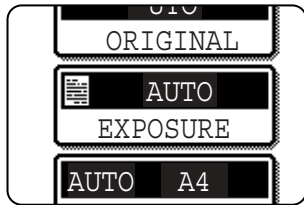
See steps 1 to 8 of "Making copies with the automatic document feeder" on pages 4-7 to 4-8 and "ADJUSTING THE EXPOSURE" on page 4-14.

2 Touch the [QUICK FILE] key in the main screen.
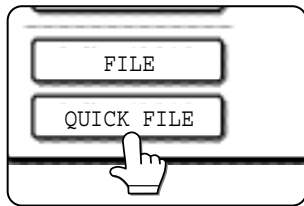
FILE

QUICK FILE

The [QUICK FILE] key will be highlighted to indicate that the function is selected.
If the [FILE] key is grayed out, only the [QUICK FILE] key can be selected.

When you touch the [QUICK FILE] key, a message asking you to confirm the save will appear. Touch the [OK] key in the message screen and go to the next step.
If you wish to cancel the save, touch the [QUICK FILE] key after touching the [OK] key so that the [QUICK FILE] key is no longer highlighted.

3 Press the [START] key on the operation panel.
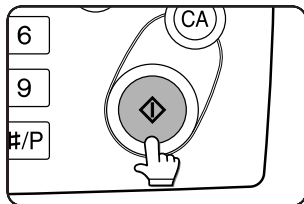
To prevent accidental saving of the document, the warning "THE SCANNED DATA IS STORED IN THE QUICK FILE FOLDER." appears for 6 seconds after the [START] key is pressed.
When copying begins, the image is saved.

4 The saved image can be called up from the Quick File folder or the job status screen.

- To call the image up from the Quick File folder, see "Calling up and using a saved file" on page 7-15.
- To call the job up from the finished job status screen, see "Calling up and manipulating a file from the job status screen" on page 7-20.

5 The following operations can be performed on the image that was called up in step 4.

- Print the image (page 7-16)
- Transmit the image (page 7-17)
- Change the attribute (page 7-18)
- Move the image (page 7-19)
- Delete the image (page 7-19)
- Check details on the image (page 7-19)

Filing

When printing or transmitting a document in copy mode, printer mode, or image send mode, "FILE" can be selected to save an image of the document to the main folder or a previously created custom folder. The image can be called up at a later time, allowing you to print or transmit the document without having to locate the original.

NOTE
As an example, the procedure for using the filing function while copying using the automatic document feeder is explained below.

1 **Place the originals in the document feeder tray and select resolution and exposure settings.**
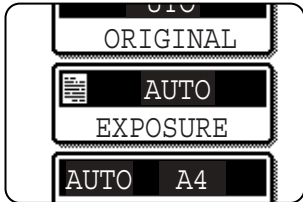
See steps 1 to 8 of "Making copies with the automatic document feeder" on pages 4-7 to 4-8 and "ADJUSTING THE EXPOSURE" on page 4-14

2 **Touch the [FILE] key in the main screen.**
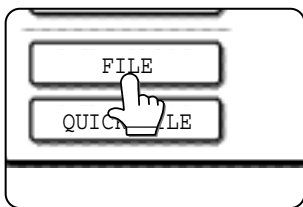
An information entry screen appears.

3 **Touch the [USER NAME] key.**
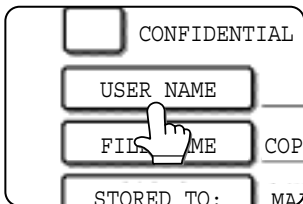
4 **Touch the desired user name in the list of user names that appears.**

User names must be previously stored ("Programming a user name" on page 7-22).

5 **Touch the [OK] key.**

The touched user name is selected and you return to the screen of step 3. The selected user name appears.

NOTE
If you do not select a user name, the following name is automatically selected:
Example : User unknown

6 **Touch the [FILE NAME] key.**
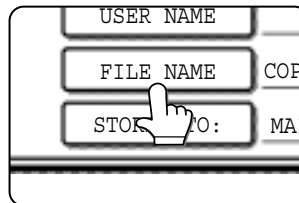
A character entry screen appears. Enter a file name (maximum of 30 characters). (See page 7-26 to enter characters.)

NOTE
If you do not enter a file name, a file name in the following format is automatically assigned:
Auto generated file name : Month, day, year, hour, minute, second, AM/PM
 (Example : COPY_10012004_014050PM)

7 **Touch the [STORED TO:] key.**

8 **Touch the desired folder name in the list of folder names that appears**
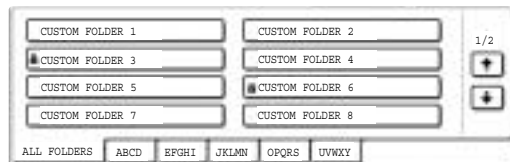
Folder names must be previously stored. ("Creating a custom folder" on page 7-24). If a password has been set for the folder, a password entry screen will appear. Enter the 5-digit password for the folder.

7

9 **Touch the [OK] key.**

FOLDER OK

2/2
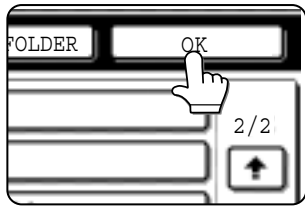
The touched folder is selected and you return to the screen of step 7. The selected folder name is displayed.

10 **If needed, select the [CONFIDENTIAL] checkbox (only in copy mode).**

FILE INFORMATION

✓ CONFIDENTIA

R NAME

FILE NAME
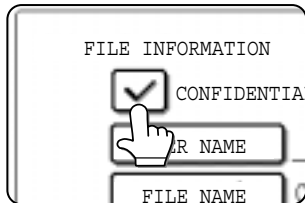
When this is selected, the file is stored with the attribute [CONFIDENTIAL]. To call up the file, the password that will be set in the following steps must be entered.

● If you selected the [CONFIDENTIAL] checkbox, touch the [PASSWORD] key and enter a password.
● If you did not select the [CONFIDENTIAL] checkbox, go to step 16. The file will be saved as a [SHARING] file.

11 **Touch the [PASSWORD] key.**

CA

PASSWORD

YYY
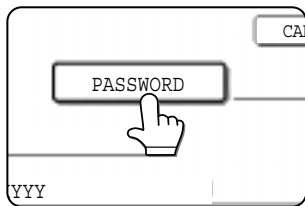
The password entry screen appears.

12 **Enter a 5-digit password with the numeric keys.**

CANCEL

ENTER PASSWORD VIA THE 10-KEY PAD.

✳✳✳✳–

As each digit is entered, "–" changes to "✳".

13 **Touch the [OK] key.**

0

CANCEL OK

10-KEY PAD.

14 **You will return to the screen of step 10. The set password is displayed with "✳".**

CANCEL O

PASSWORD ✳✳✳✳

YYY
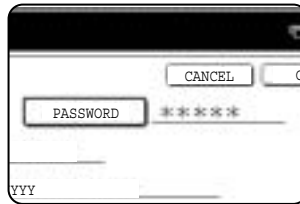
15 **Touch the [OK] key.**

You will return to the main screen.

16 **Press the [START] key on the operation panel.**

6

9

#/P

CA
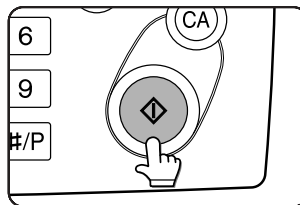
When copying begins, the image is saved.

17 **The saved image can be called up using the file name, folder name, or user name, or from the filing folder.**

● To call up the image by entering the file name, folder name, or user name, see "Searching for and calling up a saved file" on page 7-13.
● To call up the image from the filing folder, see "Calling up and using a saved file" on page 7-15.

18 **The following operations can be performed on the image that was called up:**

● Print the image (page 7-16)
● Transmit the image (page 7-17)
● Change the attribute (page 7-18)
● Move the image (page 7-19)
● Delete the image (page 7-19)
● Check details on the image (page 7-19)

Print jobs

Print jobs sent to the machine using the machine's printer driver can be saved in the main folder or a previously created custom folder when printed. The saved print data can be called up and printed or transmitted without having to open the original file on your computer.

This section gives an overview of this function and explains the procedure for printing from the operation panel of the machine.

For the procedures that are performed at your computer when initiating printing such as selecting the save location and file attribute, see the printer driver Help file.

■ Using a print job file (printing, deleting, transmitting, etc.)

1 Press the [DOCUMENT FILING] key on the operation panel.

2 Touch the [FILE FOLDER] key or the [QUICK FILE FOLDER] key depending on where the file is saved.

● Touch the [FILE FOLDER] key if the file is saved in the main folder or the custom folder. Touch the [QUICK FILE FOLDER] key if the file is saved in the Quick File folder.
If you touched the [FILE FOLDER] key, the files in the main folder or the folders in the custom folder appear. If you open the wrong folder, touch the [MAIN FOLDER] key or the [CUSTOM FOLDER] key and open the correct folder.
● If the desired file is saved in the main folder, go to step 4. If the desired file is saved in a custom folder, go to step 3.
● If you touched the [QUICK FILE FOLDER] key, the files in the Quick File folder appear. Go to step 4.

3 Touch the key of the folder that contains the desired file.

If a password is set for the selected folder, a password entry screen will appear. Enter the 5-digit password with the numeric keys.

4 Touch the printer icon (📃) tab and then touch the key of the desired file.
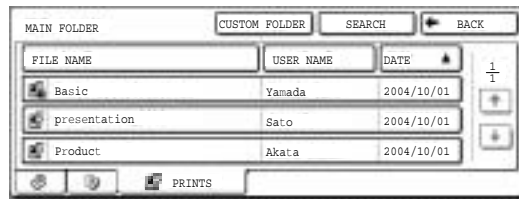
The following screen appears if the [QUICK FILE FOLDER] key is touched in step 2.
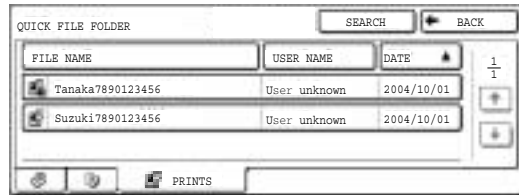
Touch the key of the file that you wish to call up. A menu screen will appear.
If a password is set for the file, a password entry screen will appear. Enter the 5-digit password with the numeric keys.

5 Touch the key of the operation that you wish to perform.
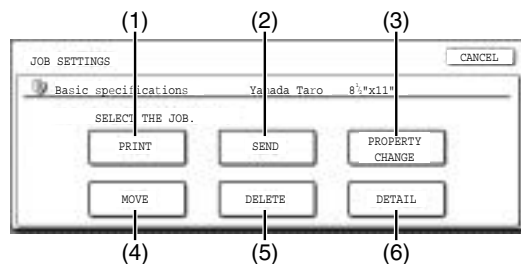
(1) **[PRINT] key** (see page 7-16)
(2) **[SEND] key** (see page 7-17)
(3) **[PROPERTY CHANGE] key** (see page 7-18)
(4) **[MOVE] key** (see page 7-19)
(5) **[DELETE] key** (see page 7-19)
(6) **[DETAIL] key** (see page 7-19)

The setting screen of the selected operation appears. See the indicated page.

Scan Save

Scan save is used to save a scanned document image in the main folder or the custom folder without copying or transmitting it.

1 Press the [DOCUMENT FILING] key on the operation panel.
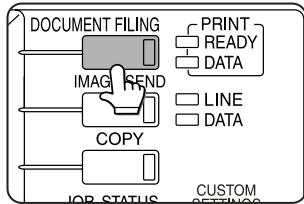
2 Touch the [SCAN TO HDD] key.

FILE STORE

SCAN TO HDD

3 Touch the [SPECIAL MODES] key.

SPECIAL MODES

INFORMATION
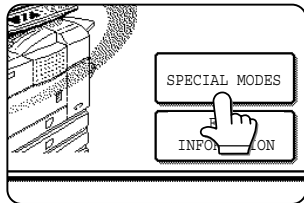
Select any special functions that you wish to use (otherwise skip this step).

When the [SPECIAL MODES] key is touched, the special modes selection screen appears. (See "Using special functions for scan save." on page 7-12.)

NOTE
For explanations of the special functions, see page 7-12 and chapter 5.

4 Touch the [FILE INFORMATION] key.

SPECIAL MODES

FILE INFORMATION
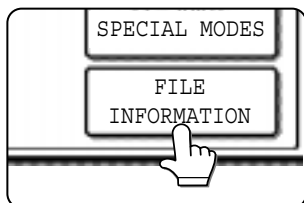
5 The screens for selecting the user name, file name, folder, and attribute appear. Configure the settings as explained in step 3 to step 15 on pages 7-7 to 7-8. When step 15 is completed, you will return to the main screen of document filing.

FILE STORE

SCAN TO HDD

FILE RETRIEVE

FILE FOLDER

QUICK FILE FOLDER
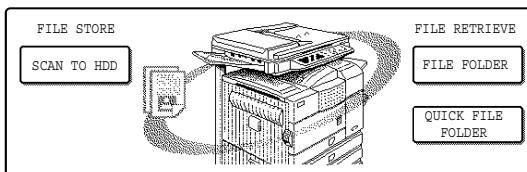
6 Perform any of the following steps 7 to 16 as needed. When finished, go to step 17 on page 7-11.

- To set the original size, perform steps 7 to 10.
- To set the resolution, perform steps 11 to 13 on page 7-11.
- To select the exposure, perform steps 14 to 16 on page 7-11.
- If you no not wish to select any of the above settings, go to step 17 on page 7-11.

7 Touch the [ORIGINAL] key.

300x300dpi
RESOLUTION

AUTO
ORIGINAL
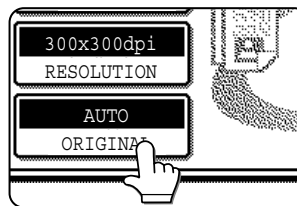
8 To set the original size, see "Manually setting the scanning size" on page 4-5.

9 If the original is two-sided, touch the [2-SIDED BOOKLET] key or the [2-SIDED TABLET] key depending on where the pages are bound.

SCAN SIZE
AUTO
100%
STORE SI
AUTO

2-SIDED BOOKLET
2-SIDED TABLET

10 Touch the [OK] key.

STORE SIZE
AUTO

OK

DED
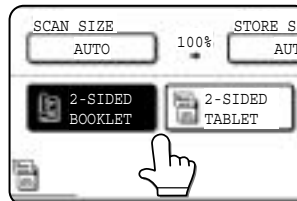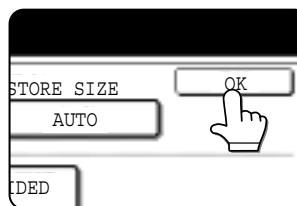
You will return to the screen of step 7.

NOTE
If the original pages are bound at the side, the document is a "booklet". If the original pages are bound at the top, the document is a "tablet".

11 Touch the [RESOLUTION] key.

```
AUTO
EXPOSURE

300x300dpi
RESOLUTION

AUTO
ORIGINAL
```

12 Touch the key of the desired resolution.

```
PRESS [START] TO SCAN ORIGINAL.

SCAN TO HDD                                    OK
AUTO
EXPOSURE          200x200dpi

                  300x300dpi
RESOLUTION        400x400dpi      HALF TONE
AUTO
ORIGINAL          600x600dpi
```
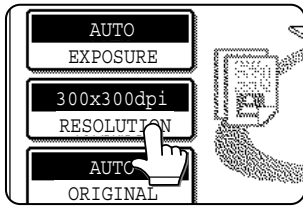
Select one of four resolution levels as appropriate for the original.

The selected resolution key is highlighted.

13 Touch the [OK] key.

```
OK

HALF TONE
```
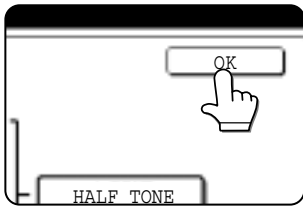
You will return to the screen of step 11.

14 Touch the [EXPOSURE] key.

```
AUTO
EXPOSURE

300x300d
RESOLUTION

AUTO
ORIGINAL
```
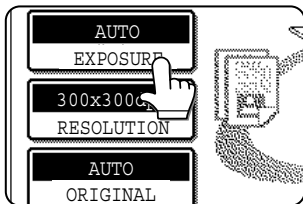
15 Select [AUTO] or [MANUAL].

```
AUTO  ◄► MANUAL

1  ·  3  ·  5
◖        ◗
```
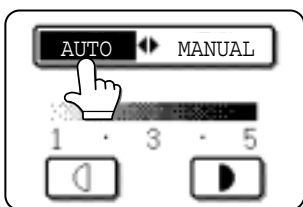
To have the exposure adjusted automatically, select [AUTO].

```
AUTO  ◄► MANUAL

1  ·  3  ·  5
◖        ◗
```
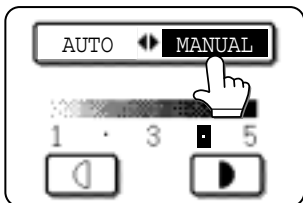
If you selected [MANUAL], touch the ◚ or ◛ key to adjust the exposure.
(For a darker image, touch the ◛ key. For a lighter image, touch the ◚ key.)

16 Touch the [OK] key.

```
OK

MANUAL
```
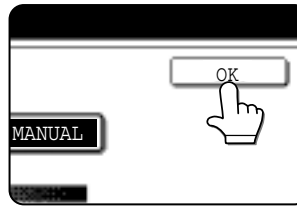
You will return to the screen of step 14.

17 Place the original and touch the [START] key.

[Placing the original]
- For information on placing the original, see "NORMAL COPYING" in chapter 4.
- If you selected the "Card Shot" special function, the document glass must be used.
- If you selected job build mode, the automatic document feeder must be used.

```
        CA
6

9

#/P     ◇
```
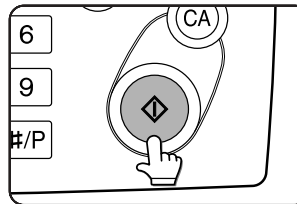
Scanning begins.
If you are using the document glass, touch the [READ-END] key after all pages have been scanned.

NOTE
This completes the scan save procedure. Follow the steps below when you wish to call up the image and print or transmit it.

18 The saved image can be called up using the file name, folder name, or user name, or from the filing folder.

- To call up the image by entering the file name, folder name, or user name, see "Searching for and calling up a saved file" on page 7-13.
- To call up the image from the filing folder, see "Calling up and using a saved file" on page 7-15.

19 The following operations can be performed on the image that was called up in step 18:

- Print the image (page 7-16)
- Transmit the image (page 7-17)
- Change the attribute ((page 7-18)
- Move the image (page 7-19)
- Delete the image (page 7-19)
- Check details on the image (page 7-19)

7

7-11

■ Using special functions for scan save.

Touch the [SPECIAL MODES] key in the main scan save screen to display the special modes screen.
The functions below can be selected in this screen.

Touch the [SPECIAL MODES] key in the main screen.
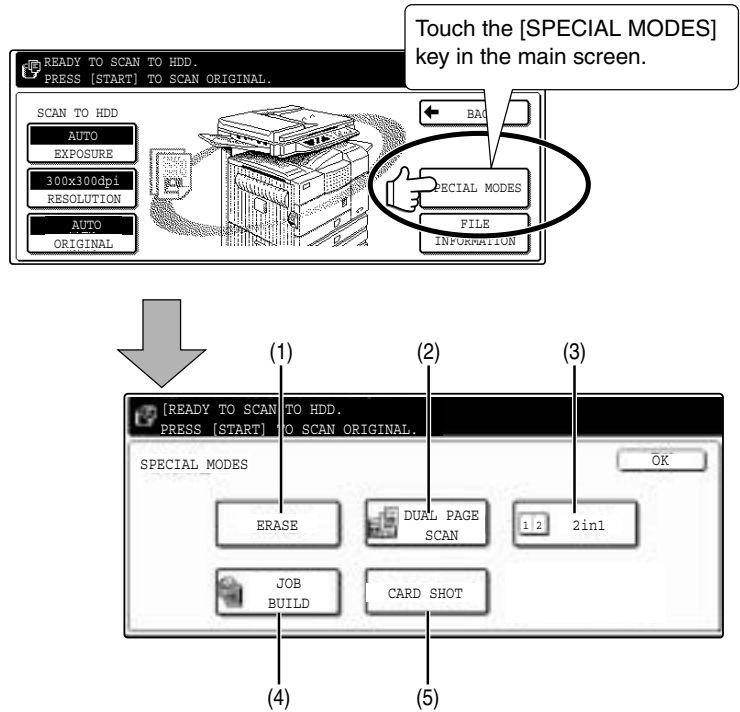
(1) [ERASE] key (see page 5-4)

Use this function to erase shadows that can appear around the edges of the image when books and other thick originals are scanned.

(2) [DUAL PAGE SCAN] key (see page 5-5)
(Equivalent to Dual page copy in copy mode)

This function is used to save the opened pages of a book in order one page at a time (left page then right page).

(3) [2in1] key (see page 5-23)
(When the fax or network scanner option is installed, this is equivalent to the 2in1 function described in the fax and network scanner manuals. It is also equivalent to the "Multi shot" function in copy mode; however, only 2in1 is possible for scan save.)

This function reduces two original pages and arranges the images on a single page in a uniform layout.

(4) [JOB BUILD] key (see page 5-8)

When you have more pages than can be placed in the document feeder at once, this function allows you to scan the pages in sets.

(5) [CARD SHOT] key (see page 5-26)

This function allows you to save the front and back side of a card on a single page (instead of saving each side as a separate file).

CALLING UP AND USING A FILE

Searching for and calling up a saved file

When calling up a file, you can enter the file name, folder name, or user name to quickly search for the file.
To search for a file, touch the [SEARCH] key in the main screen of document filing mode or in a screen that shows folders or files in a folder. A data search screen will appear.

■ Procedure for searching for a file

1 Touch the [SEARCH] key in the main screen of document filing mode or in a screen that shows folders or files in a folder.
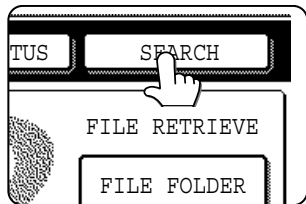
If you touch the [SEARCH] key in the screen that shows the folders in the custom folder or a screen that shows the files in a folder, the [SEARCH WITHIN CURRENT FOLDER] checkbox will appear. Select this checkbox to search for a file only in the selected folder.

2 In the data search screen, select whether you will search by [USER NAME] or [FILE OR FOLDER NAME].
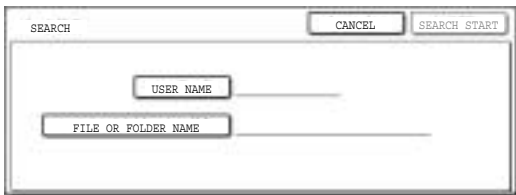
● To search by user name, follow steps 3 to 6.
● To search by file name or folder name, perform step 8.
● To stop searching, touch the [CANCEL]key.

[Searching by user name]

3 Touch the [USER NAME] key.
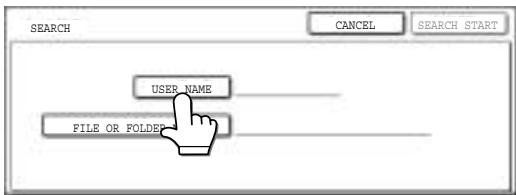
4 Touch the one-touch key of the user name that you wish to use to search for the file. If you wish to directly enter the user name, touch the [DIRECT ENTRY] key.
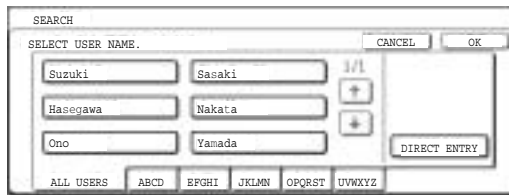
● The selected user name is highlighted.
● If you select the wrong user name, touch the key of the correct name.
● If you touch the [DIRECT ENTRY] key, a character entry screen will appear. Enter the user name.
See page 7-26 for the procedure for entering characters.

5 Touch the [OK] key.
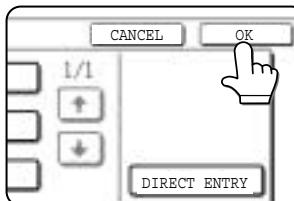
You will return to the screen of step 2 and the selected user name will appear.

6 Touch the [SEARCH START] key.

7
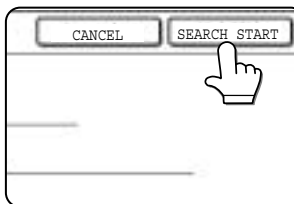
7 **The results of the user name search appear. Touch the desired file name or folder name.**
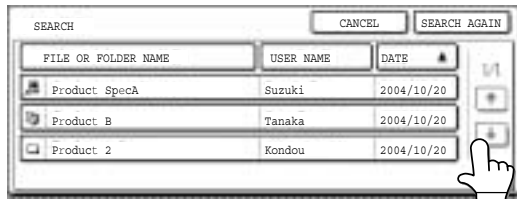
FILE OR FOLDER NAME	USER NAME	DATE ▲
Product SpecA	Suzuki	2004/10/20
Product B	Tanaka	2004/10/20
Product 2	Kondou	2004/10/20

SEARCH   CANCEL   SEARCH AGAIN

● See page 7-5 for a list of the document filing icons.
● When a file name is touched, the operation selection screen appears. **(To perform an operation using the file, go to step 5 on page 7-16.)**
● When a folder name is touched, all files in the folder are displayed. Touch the desired file. **(To perform an operation using the file, go to step 5 on page 7-16.)**
● To change the order of file display, touch the [FILE OR FOLDER NAME] key, [USER NAME] key, or [DATE] key.
If you touch a file name or folder name that has a password, a password entry screen will appear. Enter the 5-digit password with the numeric keys.

10 **The results of the file or folder name search appear. Touch the desired file name or folder name.**
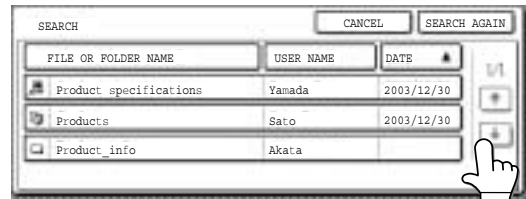
FILE OR FOLDER NAME	USER NAME	DATE ▲
Product specifications	Yamada	2003/12/30
Products	Sato	2003/12/30
Product_info	Akata	

SEARCH   CANCEL   SEARCH AGAIN

● See page 7-5 for a list of the document filing icons.
● When a file name is touched, the operation selection screen appears. **(To perform an operation using the file, go to step 5 on page 7-16.)**
● When a folder name is touched, all files in the folder are displayed. Touch the desired file. **(To perform an operation using the file, go to step 5 on page 7-16.)**
● To change the order of file display, touch the [FILE OR FOLDER NAME] key, [USER NAME] key, or [DATE] key.
If you touch a file name or folder name that has a password, a password entry screen will appear. Enter the 5-digit password with the numeric keys.

[Searching by file or folder name]

8 **Touch the [FILE OR FOLDER NAME] key.**

USER NAME
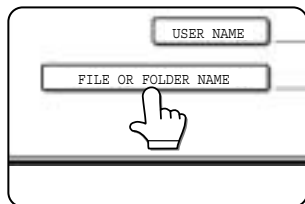
FILE OR FOLDER NAME

A character entry screen appears. Enter the file name or folder name to be used for the search. See page 7-26 to enter characters.

9 **Touch the [SEARCH START] key.**

CANCEL   SEARCH START

7-14
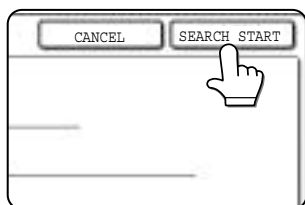
Calling up and using a saved file

A file saved with the document filing function can be called up and printed or manipulated as needed.
The following operations can be performed:
● **[Print]** : Print the file (page 7-16).
● **[Send]** : Transmit the saved file (page 7-17). The file can be transmitted by Scan to E-mail, Scan to FTP, fax, or Internet fax. (All of these methods require installation of the appropriate options.) (Page 1-11)
● **[Property change]** : Change the attribute of the saved file (page 7-18).
● **[Move]** : Move the file (page 7-19)
● **[Delete]** : Delete the file (page 7-19)
● **[Detail]** : Show details on the saved file (page 7-19).

■ General procedure for using a saved file

1 Press the [DOCUMENT FILING] key on the operation panel.

2 Touch the [FILE FOLDER] key or the [QUICK FILE FOLDER] key depending on where the file is saved.

●Touch the [FILE FOLDER] key if the file is saved in the main folder or the custom folder. Touch the [QUICK FILE FOLDER] key if the file is saved in the Quick File folder.
If you touched the [FILE FOLDER] key, the files in the main folder or the folders in the custom folder appear. If you open the wrong folder, touch the [MAIN FOLDER] key or the [CUSTOM FOLDER] key and open the correct folder.
●If the desired file is saved in the main folder, go to step 4. If the desired file is saved in a custom folder, go to step 3.
●If you touched the [QUICK FILE FOLDER] key, the files in the Quick File folder appear. Go to step 4.

3 Touch the key of the folder that contains the desired file.

If there are more custom folder keys than can appear in one screen, touch the [↓] or [↑] keys to change screens.

If a password is set for the selected folder, a password entry screen will appear. Enter the 5-digit password with the numeric keys.

4 Touch the desired file key.

7

7-15
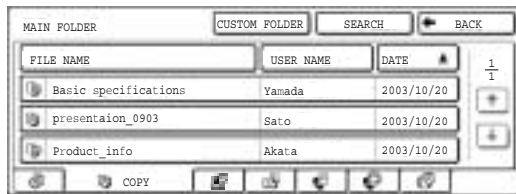
5 **Touch the key of the operation that you wish to perform.**
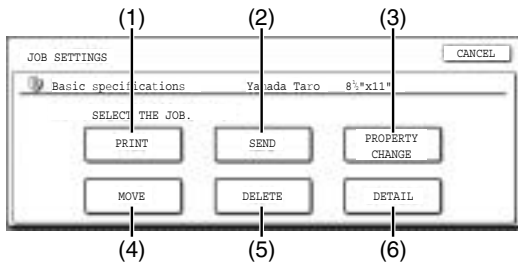
(1) **[PRINT] key** (see below)

(2) **[SEND] key** (see page 7-17)

(3) **[PROPERTY CHANGE] key** (see page 7-18)

(4) **[MOVE] key** (see page 7-19)

(5) **[DELETE] key** (see page 7-19)

(6) **[DETAIL] key** (see page 7-19)

The setting screen of the selected operation appears. See the indicated page.

■ [Print]

A saved file can be printed.

The screen below appears when the [PRINT] key is selected in the operation selection screen. To begin printing, touch the [PRINT] (7) key. Printing settings can be selected in this screen before printing. The settings that were in effect when the file was saved appear initially. The settings can be changed as needed.

NOTES
● When print settings are changed with this procedure, only the value for the number of copies is overwritten.
● The printing speed will be slower for image files saved using certain resolution settings. (See page 7-28.)
---
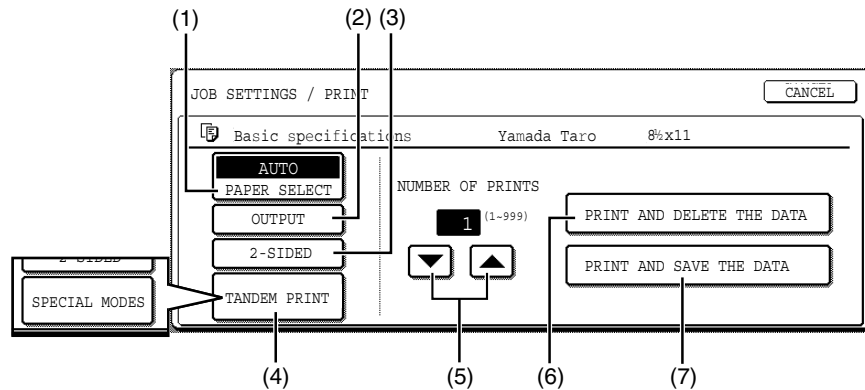
(1) [PAPER SELECT] key

Use this key to set the paper size.

(2) [OUTPUT] key

Use this key to select sort, group or staple sort functions, and to select the output tray.

(3) [2-SIDED] key

When performing two-sided printing, use this key to select the orientation of the image on the back side of the paper. To have the front and back images oriented in the same direction, touch the [2-SIDED BOOKLET] key. To have the front and back images oriented opposite to each other, touch the [2-SIDED TABLET] key. Note that the size and orientation of the saved image may cause these keys to have the opposite effect. If neither key is selected, one-sided printing will take place.

To perform two-sided printing, the optional duplex module is necessary.

(4) [TANDEM PRINT] key

If the conditions for tandem printing are met (page 5-9), touch this key to enable tandem printing. See page 5-9 for more information.

When printing a file that was saved in copy mode, this key changes to the [SPECIAL MODES] key. The [SPECIAL MODES] include [PRINT MENU] and [TANDEM PRINT]. For information on the print menu, see page 5-29.

(5) [NUMBER OF PRINTS] setting key

Use this key to set the number of copies.

(6) [PRINT AND DELETE THE DATA] key

Touch this key to print a file and then have it automatically deleted.

(7) [PRINT AND SAVE THE DATA] key

Touch this key to print a file. The file will not be automatically deleted after printing.

7-16

■ [Send]

A saved file can be transmitted by Scan to E-mail, Scan to FTP, fax, or Internet fax.
These transmission methods require installation of the appropriate options.

The following screen appears when the [SEND] key is touched. Select the destination and other settings required for transmission and then touch the [SEND] (10) key to transmit the file. Transmission settings include the resolution and transmission functions such as a timer setting. Change or select these settings as needed.

> **NOTE**
> Jobs that use the following special functions cannot be transmitted when called up. (The [SEND] key is grayed out in the operation selection screen.)
>   Pamphlet copying, covers/insert, card shot, Multi shot.
> Jobs that use the following functions can be transmitted with certain restrictions when called up:
>   Card shot:Can be transmitted if saved by scan save or image send.
>   Multi shot (2in1):Can be transmitted if saved as 2in1 using a portrait original.

[Example of E-MAIL/FTP mode]
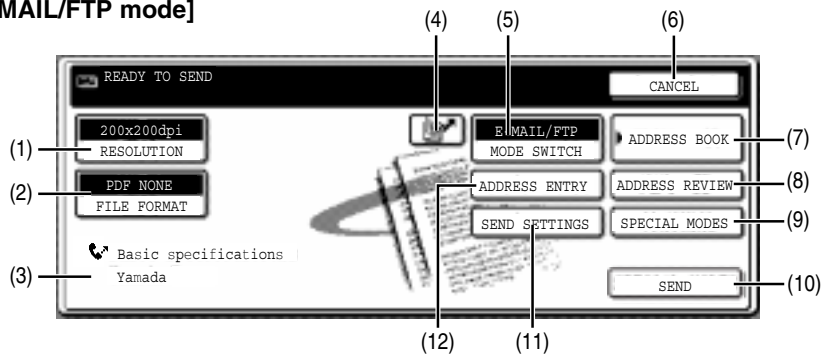
(1) [RESOLUTION] key

Use this key to set the resolution.

The resolution is set when performing Scan to E-mail/FTP and the resolution is set when performing a fax or Internet fax transmission.

(2) [FILE FORMAT] key

[FILE FORMAT] key is displayed in E-mail/FTP mode. Touch this key to set the file format of scan images that you transmit.

(3) [FILE NAME/USER NAME] display

This shows the file name and user name of the file to be transmitted.

(4) [🖋] key (Speed dial key)

Use this key to specify a destination by entering the 3-digit number that is assigned to an e-mail address or fax number when it is stored in a one-touch key or group key.

(5) [MODE SWITCH] key

Use this key to select the transmission mode (Scan to E-mail/FTP, fax, or Internet fax).

(6) [CANCEL] key

Touch this key to return to the operation selection screen.

(7) [ADDRESS BOOK] key

Touch this key to display the destinations stored in the directory.

(8) [ADDRESS REVIEW] key

Touch this key to display the destinations.

(9) [SPECIAL MODES] key

Touch this key to display the special function menu. The functions that can be selected vary depending on the transmission mode:

● Scan to E-mail/FTP

TIMER : The transmission time can be specified.

● FAX

TIMER : The transmission time can be specified.
FAX OWN ADDRESS SENDING: Your sender's information can be included on the fax pages printed out by the receiving machine.
TRANSACTION REPORT: A transaction report can be printed based on the specified conditions after a transaction ends.

● Internet FAX

TIMER : The transmission time can be specified.
I-FAX OWN ADDRESS SEND: Your sender's information can be included on the Internet fax pages printed out by the receiving machine.
TRANSACTION REPORT: A transaction report can be printed based on the specified conditions after a transaction ends.

(10) [SEND] key

Touch this key after selecting transmission settings to begin transmission. (The [START] key can also be pressed to begin transmission.)

7

7-17

(11) [SEND SETTINGS] key
[SEND SETTINGS] key is displayed in E-mail/FTP mode and Internet FAX mode.
Touch this key to set the subject and file name. In E-mail/FTP mode, sender name can also be set.

(12) [SUB ADDRESS] key or [ADDRESS ENTRY] key
● Touch this key to directly enter the destination for a Scan to E-mail/FTP or Internet fax transmission, .
● Touch this key to enter the sub-address and passcode for an F-code fax transmission.

NOTE
See the "Operation manual (for facsimile)" and "Operation manual (for network scanner)" for detailed explanations of (1), (2), (3), (4), (5), (6), (7), (8), (9), (11), and (12).

■ [Property change]

Select this operation to change the attribute of a saved file. Three attributes are available: [SHARING], [PROTECT], and [CONFIDENTIAL].
The following screen appears when the [PROPERTY CHANGE] key is selected in the operation selection screen. Note the restrictions below on changing the attribute.
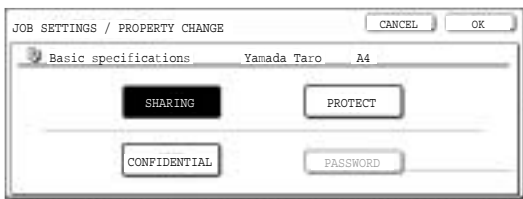
[Restrictions on changing the attribute]
● A file that is set to [SHARING] can be changed to [PROTECT] or [CONFIDENTIAL]. However, a [SHARING] file that is saved in the Quick File folder can only be changed to [PROTECT].
● A file that is set to [PROTECT] can be changed to [SHARING] or [CONFIDENTIAL]. However, a [PROTECT] file that is saved in the Quick File folder can only be changed to [SHARING].
● A file that is saved in the Quick File folder cannot be changed to [CONFIDENTIAL].

1 Touch the [PROPERTY CHANGE] key in the operation selection screen.
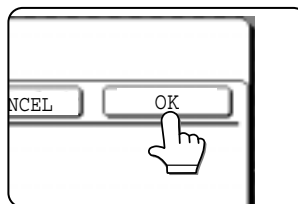
2 Touch the key of the desired attribute.
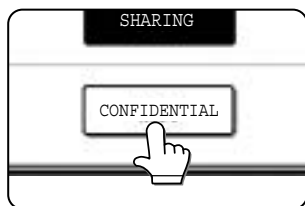
If you are changing a [SHARING] or [PROTECT] file to [CONFIDENTIAL], touch the [PASSWORD] key and enter the password.

3 Touch the [OK] key.
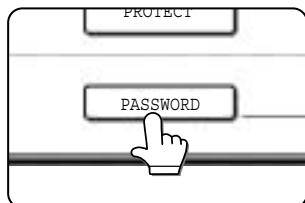
■ **[Move]**

This operation is used to move a file to a different folder.

The following screen appears when the [MOVE] key is selected.

Only [SHARING] and [CONFIDENTIAL] files can be moved. A [PROTECT] file can be moved by first using [PROPERTY CHANGE] to change the attribute to [SHARING] or [CONFIDENTIAL].

```
JOB SETTINGS / MOVE                          CANCEL
  Basic specifications      Yamada Taro    8½x11

 SELECT THE FOLDER THE FILE IS MOVED TO.

   FILE NAME   Basic specifications

   MOVE TO:
                                              MOVE
```
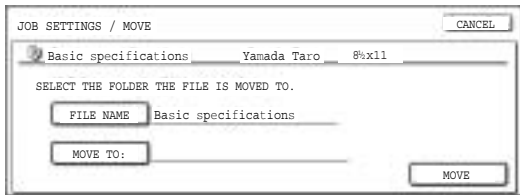
1 **Touch the [MOVE TO:] key and select the folder to which you wish to move the file.**
- Select the main folder or a folder in the custom folder. A file cannot be moved to the Quick File folder.
- The file name can be changed when moving a file. To change the name, touch the [FILE NAME] key and enter the desired file name. See page 7-26 for the procedure for entering characters.

2 **Touch the [OK] key.**

```
FOLDER      OK


                          1/1
```

3 **Touch the [MOVE] key.**

```
VED TO.
ations


                  MOVE
```
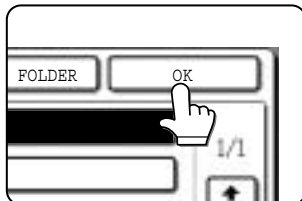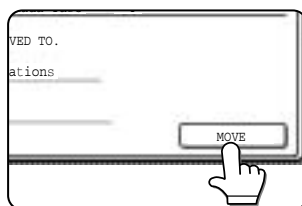
4 **Touch the [CANCEL] key.**

```
                  CANCEL



aro      8½x11
```
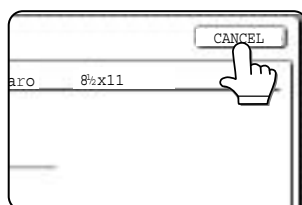
You will return to the operation selection screen.

■ **[Delete]**

This operation is used to delete the selected file.

Touch the [DELETE] key in the operation select screen. A message asking you to confirm the deletion will appear. Touch the [YES] key to delete the file.

Only [SHARING] or [CONFIDENTIAL] files can be deleted. (A [PROTECT] file can be deleted by first using [PROPERTY CHANGE] to change the attribute to [SHARING].)

■ **[Detail]**

This operation is used to show detailed information on the selected file.

Touch the [DETAIL] key to display the information. The information appears on two screens. Touch the 🔽 key or 🔼 key to move between the two screens.

The file name can be changed in the information screen. To change the name, touch the [FILE NAME] key and enter the desired file name in the character entry screen that appears. See page 7-26 for the procedure for entering characters.

7

7-19

■ Calling up and manipulating a file from the job status screen

Files saved using the "FILE" and "QUICK FILE" functions appear as keys in the finished job status screen.
You can view information on a file that appears in this screen and manipulate the file.

1 Press the [JOB STATUS] key.

The job status screen appears.

2 Touch the [COMPLETE] key.

The finished job screen appears.
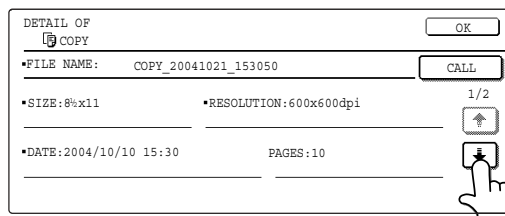
3 Touch the key of the desired file.
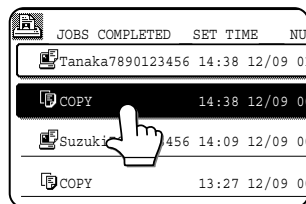
If there are more keys than can appear in one screen and the desired file does not appear, touch the ▲ key or ▼ key to change screens.

The touched key is highlighted.

4 To view information on the file, touch the [DETAIL] key.

Use the ▲ ▼ keys to change screens.

When you are finished, touch the [OK] key to return to the screen of step 3.

```
DETAIL OF                                    OK
  COPY
▪FILE NAME:     COPY_20041021_153050        CALL
▪SIZE:8½x11           ▪RESOLUTION:600x600dpi    1/2
                                             ▲
▪DATE:2004/10/10 15:30        PAGES:10       ▼
```

```
DETAIL OF                                    OK
  COPY
▪ FILE NAME     COPY_20041021_153050        CALL
▪ DATA SIZE: 21,987,543KB   ▪ DOCUMENT  1-SIDED  2/2
                              STYLE:
▪ SPECIAL                    ▪ OUTPUT:      ▲
  MODES:
▪ FILE FORMAT:
```

5 Touch the [CALL] key.
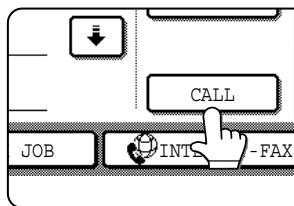
The operation selection screen appears.

Select and perform the desired operation as explained in "Calling up and using a saved file" (page 7-15).

CUSTOM SETTINGS

Creating, editing, and deleting user names and folders

This section explains how to create, edit, and delete user names and custom folders for saving files with the document filing function. User names and custom folders are created and edited at the operation panel of the machine or in the Web page.

NOTES
- A previously stored name cannot be used when creating a new user name or custom folder. However, the same password can be used more than once.
- A password cannot be omitted when creating a user name.

■ General procedure for creating, editing, and deleting user names and folders

Follow steps 1 to 3 below to create, edit, or delete a user name or custom folder. In step 3, select the key for the specific operation that you wish to perform.

1 **Press the [CUSTOM SETTINGS] key.**
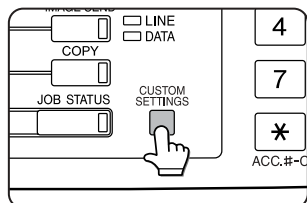
2 **Touch the [DOCUMENT FILING CONTROL] key.**
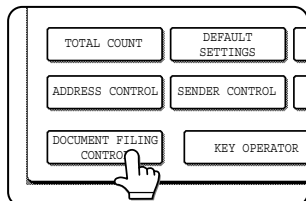
3 **Touch the key of the operation that you wish to perform.**

Go to the page indicated below for the selected operation.
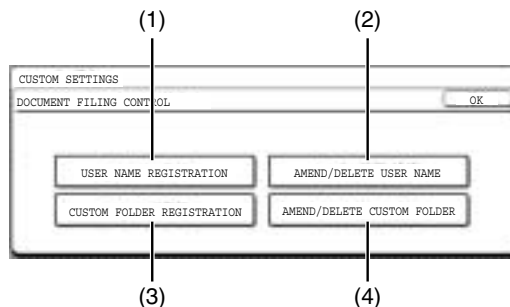
(1) **[USER NAME REGISTRATION] key**
Program a user name. (See the next page)

(2) **[AMEND/DELETE USER NAME] key**
Edit or delete a user name. (See page 7-23)

(3) **[CUSTOM FOLDER REGISTRATION] key**
Create a custom folder. (See page 7-24)

(4) **[AMEND/DELETE CUSTOM FOLDER] key**
Edit or delete a custom folder. (See page 7-25)

7

■ Programming a user name

To program a user name, follow steps 1 and 2 on page 7-21, touch the [USER NAME REGISTRATION] key in step 3, and then follow these steps:

1 Touch the [USER NAME] key.
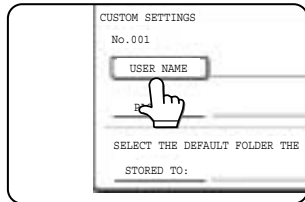
```
CUSTOM SETTINGS
No.001

USER NAME

SELECT THE DEFAULT FOLDER THE
STORED TO:
```

The lowest number that has not yet been programmed appears automatically in "No.". Touch the number to display a character entry screen and enter a user name (maximum of 16 characters). See page 7-26 for the procedure for entering characters.

2 Touch the [INITIAL] key.

```
                        NEXT

        INITIAL

R THE FILE WITH THIS USER NAME IS STORED.
```

A character entry screen appears. Enter up to 10 search characters. See page 7-26 for the procedure for entering characters.

3 Touch the [PASSWORD] key.

```
     CUSTOM
No.001
   USER NAME    Yamada

   PASSWORD

SELE     DEFAULT FOLDER THE FI
STORED TO:
```
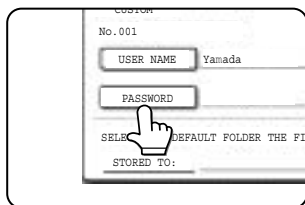
A password cannot be omitted.

4 Set a password for the user name (enter a 5-digit password with the numeric keys).

```
                        CANCEL

ENTER PASSWORD VIA THE 10-KEY PAD.
        ****−
```

This will be the password for the user name entered in step 1.
As each digit is entered, "−" changes to "✱". If you make a mistake, press the [C] key and then enter the correct number.

5 Touch the [OK] key.

```
        EXIT

  CANCEL    OK

10-KEY PAD.
```
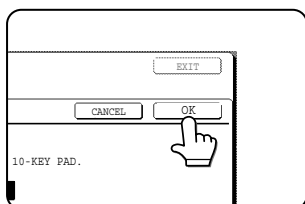
6 If you wish to specify a folder for the user name, touch the [STORED TO:] key. If you wish to use the main folder, go to step 8.

```
No.001  REGISTRATION IS COMPLETED.
   USER NAME    Yamada

   PASSWORD    *****

SELECT THE DEFAULT FOLDER THE FILE
   STORED TO:    MAIN FOLDER
```
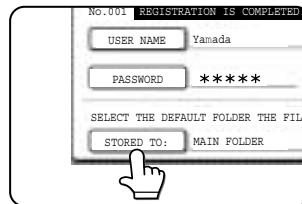
7 The folders that have been created appear. Touch the desired folder. If you wish to create a new folder, or if no folders have been created, touch the [ADD NEW] key.

```
STORED TO:                  MAIN FOLDER   ADD NEW

  CUSTOM FOLDER 1       CUSTOM FOLDER 2        1/1
  CUSTOM FOLDER 3       CUSTOM FOLDER 4        ↑
  CUSTOM FOLDER 5       CUSTOM FOLDER 6        ↓
  CUSTOM FOLDER 7       CUSTOM FOLDER 8

ALL FOLDERS  ABCD  EFGHI  JKLMN  OPQRS  UVWXY
```
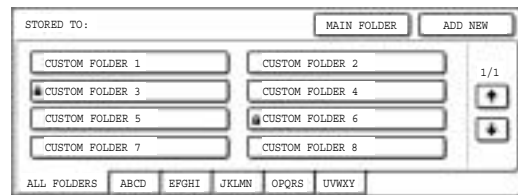
If you touched the [ADD NEW] key, program a name for the folder as explained on page 7-24.

The user name programmed in step 1 is selected as the user name of the folder.

8 Touch the [EXIT] key.

```
        EXIT

   − − − − −
```
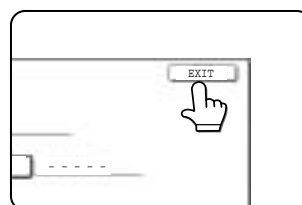
You will return to the "USER NAME REGISTRATION" screen.
"REGISTRATION IS COMPLETED." will appear highlighted next to "No.".

9 To exit, touch the [EXIT] key. To program another user name, touch the [NEXT] key.
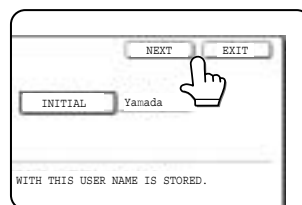
```
        NEXT    EXIT

  INITIAL   Yamada

WITH THIS USER NAME IS STORED.
```

If you touched the [EXIT] key, you will return to the screen of step 3 on page 7-21. If you touched the [NEXT] key, a new user entry screen will appear. Repeat steps 1 to 9 to program a new user.

7-22

■ Editing and deleting a user name

To edit or delete a user name, follow steps 1 and 2 on page 7-21 and then follow these steps:

1 Touch the [AMEND/DELETE USER NAME] key.

OK

AMEND/DELETE USER NAME

AMEND/DELE... OM FOLDER
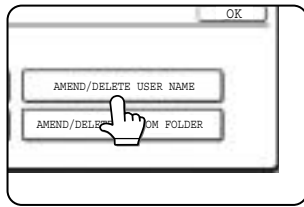
2 Touch the [USER NAME] key that you wish to edit or delete.

USER NAME / AMEND/DELETE   EXIT
SELECT USER NAME TO AMEND/DELETE.

Suzuki	Sasaki	1/1
Hasegawa	Nakata	
Ono	Yamada	

ALL USERS | ABCD | EFGHI | JKLMN | OPQRST | UVWXYZ
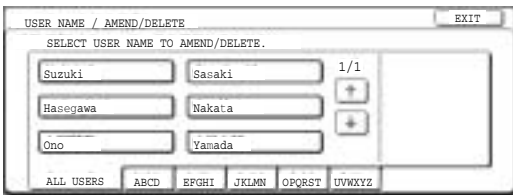
A password entry screen will appear.

3 Enter the 5-digit password with the numeric keys.

ENTER PASSWORD VIA THE 10-KEY PAD.

CANCEL

CD | EFGHI | JKLMN | OPQRST | UVWXYZ
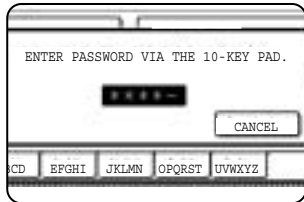
After entering the password, the following screen will appear.

USER NAME / AMEND/DELETE   DELETE   EXIT
No.001
USER NAME   Yamada   INITIAL   Yamada
PASSWORD   *****
SELECT THE DEFAULT FOLDER THE FILE WITH THIS USER NAME IS STORED.
STORED TO: MAIN FOLDER
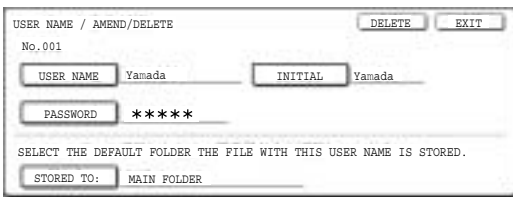
● To edit a user name, perform steps 4 and 5.
● To delete a user name, perform steps 6 and 7.

[Editing]

4 Touch the key of each item that you wish to edit (edit as explained in steps 1 to 9 in "Programming a user name" on page 7-22).

USER NAME / AMEND/DELETE
No.001 REGISTRATION IS COMPLETED.
USER NAME   Yamada   INIT
PASSWORD   *****
SELECT THE DEFAULT FOLDER THE FILE WITH
STORED TO: MAIN FOLDER
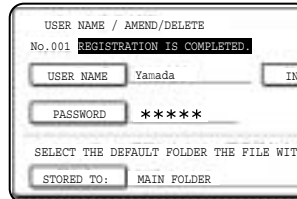
When you have finished editing the items, "REGISTRATION IS COMPLETED." will appear highlighted next to "NO.".

5 When you have finished editing the desired items, touch the [EXIT] key.

DELETE   EXIT

ITIAL   Yamada
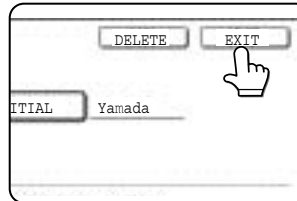
To edit another user name, repeat steps 2 to 4.

To exit, touch the [EXIT] key in the screen of step 2.

NOTE
When a user name is changed, the change is not updated to any previously saved data (files or folders).

[Deleting]

6 Touch the [DELETE] key.

DELETE   EXIT

ITIAL   Yamada

7 Touch the [YES] key.

DELETE THE USER NAME?
Yamada
NO   YES
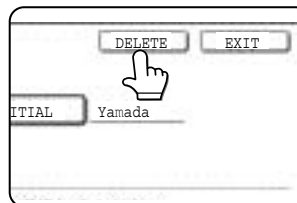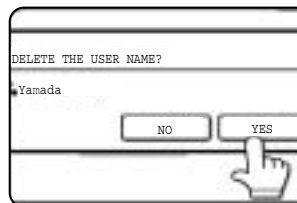
You will return to the screen of step 2. To delete another user name, repeat steps 2, 3 and 6.
To exit, touch the [EXIT] key in the screen of step 2.

7-23

■ Creating a custom folder

Up to 500 custom folders can be created. When no further folders can be created, delete unneeded folders (page 7-25) and then create a new folder. A password can be omitted when creating a folder. To create a custom folder, follow steps 1 and 2 on page 7-21, touch the [CUSTOM FOLDER REGISTRATION] key in step 3, and then follow the steps below.

1 Touch the [FOLDER NAME] key.
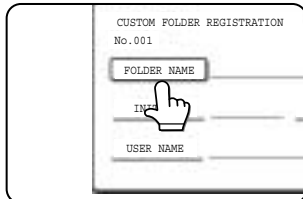
CUSTOM FOLDER REGISTRATION
No.001
FOLDER NAME
INITIAL
USER NAME

The lowest number that has not yet been programmed appears automatically in "No.". Touch the number to display a character entry screen and enter a folder name (maximum of 28 characters). See page 7-26 for the procedure for entering characters.
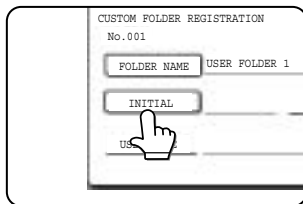
2 Touch the [INITIAL] key.

CUSTOM FOLDER REGISTRATION
No.001
FOLDER NAME   USER FOLDER 1
INITIAL
USER NAME

A character entry screen appears. Enter up to 10 search characters. See page 7-26 for the procedure for entering characters.

3 If you wish to set a password for the new folder, touch the [PASSWORD] key.

CUSTOM FOLDER REGISTRATION
No.001
FOLDER NAME   USER FOLDER 1
INITIAL   PASSWORD
USER NAME
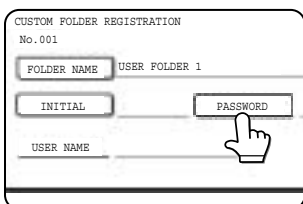
A password can be omitted.
If you are omitting a password, go to step 6.

4 Set a password for the folder (enter a 5-digit password with the numeric keys).

CANCEL
ENTER PASSWORD VIA THE 10-KEY PAD.
****−
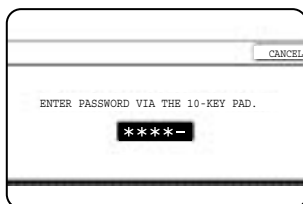
This will be the password for the folder name entered in step 1.

5 Touch the [OK] key.

EXIT
CANCEL   OK
10-KEY PAD.

6 Touch the [USER NAME] key.

No.001
FOLDER NAME   USER FOLDER 1
INITIAL   USER1   PAS
USER NAME
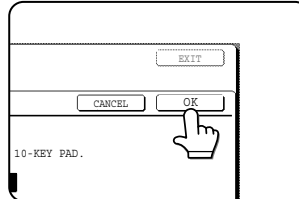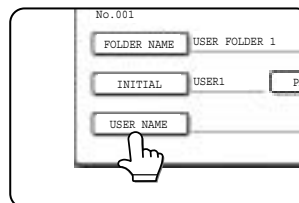
You will select a user name that will be associated with the folder name you are programming.
Selection of a user name cannot be omitted.

7 The programmed user names appear. Touch the desired user name. If you do not wish to use any of the user names that appear, touch the [ADD NEW] key to program a new user name.

CUSTOM FOLDER REGISTRATION
SELECT USER NAME.   OK
Suzuki   Sasaki   1/1
Hasegawa   Nakata   ↑
Ono   Yamada   ↓   ADD NEW
ALL FOLDERS ABCD EFGHI JKLMN OPQRST UVWXYZ
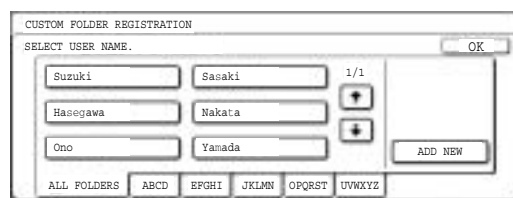
When you touch a user name, a password entry screen appears.

If you touched the [ADD NEW] key, program a user name as explained on page 7-22. The folder name programmed in step 1 will be selected as the folder for the user.

8 Enter the 5-digit password of the selected user name with the numeric keys.

ENTER PASSWORD VIA THE 10-KEY PAD.
****−
CANCEL
BCD EFGHI JKLMN OPQRST UVWXYZ
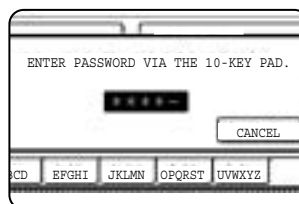
9 Touch the [OK] key.
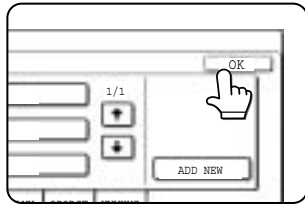
10 To exit, touch the [EXIT] key. To create another folder, touch the [NEXT] key.
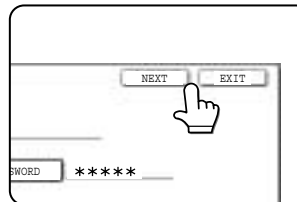
If you touched the [EXIT] key, you will return to the screen of step 3 on page 7-21. If you touched the [NEXT] key, a new folder screen will appear. Repeat steps 1 to 10 to create a new folder.

■ **Editing/deleting a custom folder**

To edit a previously created folder (change the folder name, initial, password, or user name), or to delete a folder, follow steps 1 and 2 on page 7-21 and then follow the steps below.

When deleting a folder...
A folder that contains files cannot be deleted. Either move the files to a different folder or delete them before deleting the folder.
: [MOVE] (see page 7-19)   : [DELETE] (see page 7-19)

1 Touch the [AMEND/DELETE CUSTOM FOLDER] key.

2 Touch the [FOLDER NAME] key that you wish to edit or delete.

If a password has been set for the folder, a password entry screen will appear. Enter the correct 5-digit password with the numeric keys.

3 Edit or delete the folder.

● To edit the folder, perform steps 4 and 5.
● To delete the folder, perform steps 6 and 7.
● To exit, touch the [EXIT] key.
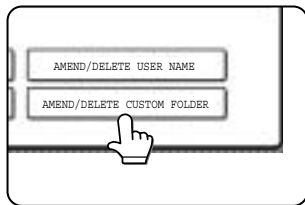
[Editing]

4 Touch the key of each item that you wish to edit (edit as explained in steps 1 to 10 of "Creating a custom folder" on page 7-24).

After editing the items and returning to the screen of step 3, "REGISTRATION IS COMPLETED." will be highlighted to the right of "No.".
To stop using a password, touch the [PASSWORD] key and then touch the [OK] key without entering anything for the password. [-] will appear and the password will be canceled.

5 When you have finished editing the items, touch the [EXIT] key.
To edit another folder, repeat steps 2 to 5.

[Deleting]

6 Touch the [DELETE] key.

7 Touch the [YES] key.

You will return to the screen of step 2.
To delete another folder, repeat steps 2, 6, and 7.
To exit, touch the [EXIT] key in the screen of step 2.

7

7-25

ENTERING CHARACTERS

To enter or edit characters in setting screens such as auto dial key programming screens, follow the steps below. Characters that can be entered are alphabetical characters, special characters, numbers, and symbols.

■ Entering alphabetical characters
(Example: Sharp äÄ)

1 Touch the [S] key.

Characters cannot be entered beyond the "◀" mark.
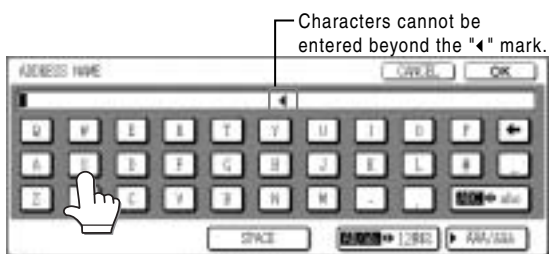
To switch between upper case and lower case, touch the [ABC ◆▶ abc] key. When ABC is highlighted, upper case letters are entered.

2 Touch the [ABC ◆▶ abc] key.
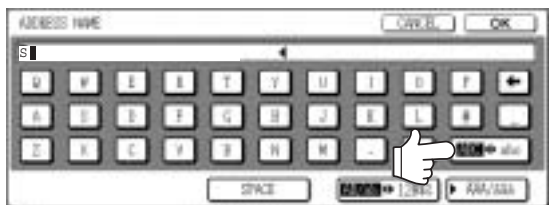
3 Touch the [h] key, [a] key, [r] key, and [p] key.
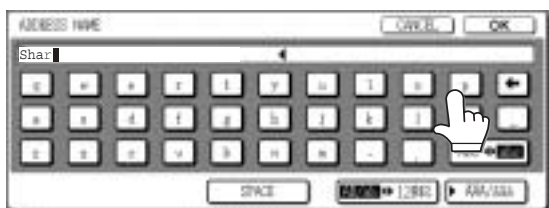
If you make a mistake, touch the ⬅ key to move the cursor (▮) back one space and then enter the correct character. You can also press the [AB/ab ◆▶ 12#$%] key during entry to enter a number or symbol.

4 Touch the [SPACE] key.
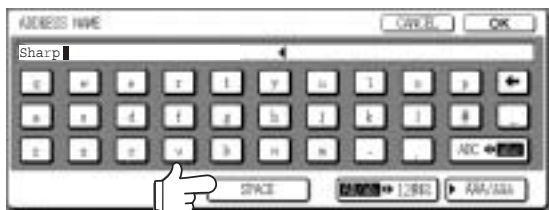
The cursor (▮) moves forward and a space is entered.

5 Touch the [▶ ÃÄÂ/ãäâ] key.
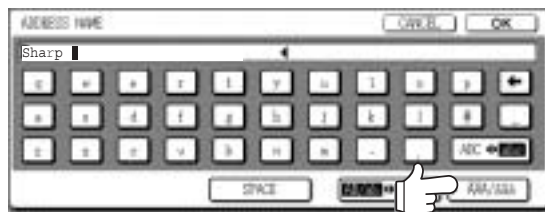
6 Touch the [ä] key.
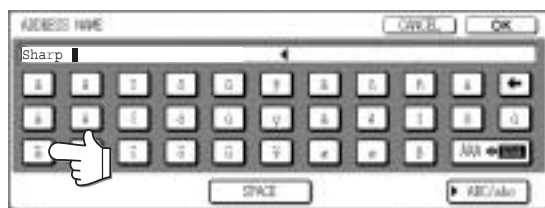
To switch between upper case and lower case, touch the [ÃÄÂ ◆▶ ãäâ] key. When ãäâ is highlighted, lower case letters are entered.

7 Touch the [ÃÄÂ ◆▶ ãäâ] key.
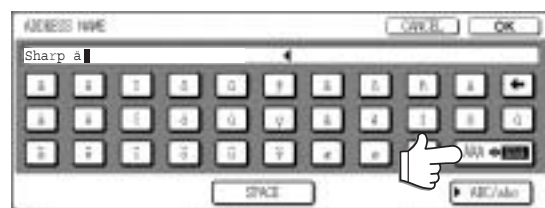
8 Touch the [Ä] key.
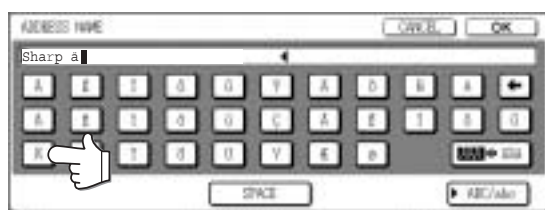
You can press the [ABC/abc] key during entry to return to alphabetical character entry. You can also enter numbers and symbols.

9 When finished, touch the [OK] key.
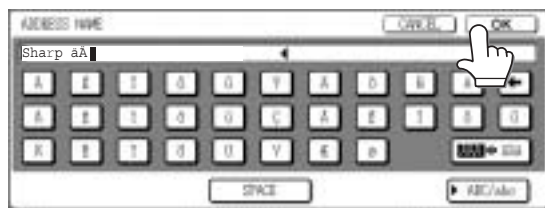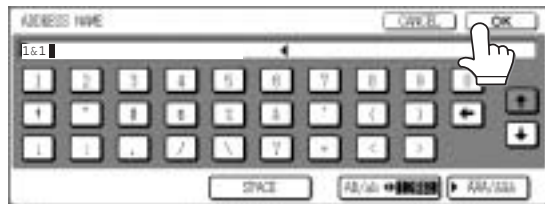
You will exit the character entry screen and return to the programming screen. If you touch the [CANCEL] key, you will return to the programming screen without storing the entered characters.

TROUBLESHOOTING

This section explains problems frequently encountered when using the document filing function. If you experience any difficulty, refer to the following table. For information on general machine problems, printer problems, fax problems, and network scanner problems, please see the troubleshooting sections of the appropriate manuals.

Problem	Check	Cause and solution
A saved file has disappeared.	Was the file called up and then printed by touching the [PRINT AND DELETE THE DATA] key?	A file that is printed using the [PRINT AND DELETE THE DATA] key is automatically deleted after being printed. To print a file without deleting it, use the [PRINT AND SAVE THE DATA] key.
A file cannot be deleted.	Is the file's attribute set to [PROTECT]?	A file cannot be deleted when its attribute is set to [PROTECT]. Change the attribute to [SHARING] and then delete the file.
A file's attribute cannot be set to [CONFIDENTIAL].	Is the file in the main or custom folder?	A file in the Quick File folder cannot be set to [CONFIDENTIAL]. Move the file to a different folder or set it to [PROTECT].
A file's attribute cannot be changed to [PROTECT].	Is the file set to [CONFIDENTIAL]?	A file cannot be simultaneously set to [CONFIDENTIAL] and [PROTECT]. If set to [CONFIDENTIAL], use [PROPERTY CHANGE] (page 7-18) to change the attribute to [PROTECT].
A name in the Quick File folder is cut off.	Was the name programmed in the advanced transmission settings?	If the name was programmed in the advanced transmission settings before the file was saved in the Quick File folder, that name will be used. However, if the name is longer than the maximum name length of the Quick File folder (30 characters), the excess characters will be discarded.
Resolution settings are not possible.	Was the file saved at low resolution?	A saved file cannot be transmitted at a resolution higher than the resolution at which it was saved.
A file name cannot be programmed or changed.	Have you entered prohibited characters in the file name?	Certain characters (symbols) cannot be used in file names. See "ENTERING CHARACTERS" (entering numbers and symbols) on page 7-26.
A custom folder name cannot be programmed or changed.	Have you entered prohibited characters in the folder name?	Certain characters (symbols) cannot be used in folder names. See "ENTERING CHARACTERS" (entering numbers and symbols) on page 7-26.
The printing speed of a saved file is slow.	The file was saved using one of the following resolution settings: • 200 x 200 dpi resolution. • STANDARD (200 x 100 dpi) or FINE (200 x 200 dpi)	When a file is saved using one of the resolutions setting at left, the printing speed will be slower than when other resolution settings are used.
Black dots appear when a file that was saved with the document filing function is printed.	Was the file saved at other than the following resolutions? • 600 x 600 dpi • 600 x 600 dpi and HALF TONE To check the resolution of the saved file, touch the [DETAIL] key in step 5 on page 7-16.	This problem can be alleviated by setting the resolution to 600x600dpi when saving a file with scan save. The problem can be further alleviated by selecting HALF TONE after setting the resolution to 600x600dpi, as light images will be printed lightly.

CHAPTER 8

SPECIFICATIONS

This chapter contains useful information about the machine.

SPECIFICATIONS

Type	Console
Print system	Electrophotographic system
Photoconductive type	OPC drum
Developer system	Dry-type two-component magnetic brush development
Fusing system	Heater roller
Resolution	Scan: 600 x 600 dpi, output: 600 x 600 dpi
Gradation	256 levels
Originals	Sheets, bound documents Maximum size: 11" x 17" or A3
Copy paper	Plain paper and special papers
Copy sizes	Max. 11" x 17" or A3, min. 5-1/2" x 8-1/2"R or A5R, Postcard Image loss: Max 21/64" or 8 mm (leading edge and trailing edge in total), max. 21/64" or 8 mm (along all other edges in total)
Warm-up time	80 seconds or less
First-copy time	AR-M351N 4.9 seconds or less* AR-M451N 4.4 seconds or less* * Conditions: The document glass is used and A4 size paper is fed horizontally from the machine tray (tray 1).
Copy ratio	Variable: 25 to 400% in 1% increments, total 376 steps Fixed presets: 25%, 50%, 64%, 77%, 100%, 121%, 129%, 200% and 400% for inch system, 25%, 50%, 70%, 81%, 86%, 100%, 115%, 122%, 141%, 200% and 400% for AB system.
Continuous copy	999 copies
Dimensions (including automatic document feeder)	32-33/64" (W) x 26-11/64" (D) x 44-23/64" (H) (826 mm (W) x 665 mm (D) x 1127 mm (H))
Weight	Approx. 220.5 lbs. (Approx. 100 kg)
Overall dimensions (When tray is extended)	37-29/32" (W) x 26-11/64"(D) (963 mm (W) x 665 mm (D))
Required power supply	For power supply requirements, see the name plate located on the back of the main unit.
Operating conditions	Temperature: 50°F to 86°F (10°C to 30°C) Humidity: 20% to 85%

Automatic document feeder

Name	B/W scanner module/DSPF
Original size	11" x 17" to 5-1/2" x 8-1/2" (A3 to A5)
Weight of originals	14 to 34 lbs. (50 to 128 g/m^2)
Number of originals	Maximum 50 sheets (maximum 30 11" x 17" or 8-1/2" x 14" (A3 or B4) size sheets*), stack height must not exceed the heights indicated below. 14 to 21 lbs. (50 to 80 g/m^2): 17/64" (6.5 mm) or less 21 to 34 lbs. (80 to 128 g/m^2): 13/64" (5 mm) or less
Power supply	Supplied from machine
Dimensions	32-7/16" (W) x 23-55/64" (D) x 7-31/64" (H) (824 mm (W) x 606 mm (D) x 190 mm (H))
Weight	Approx. 46.3 lbs. (21.0 kg)

*   Maximum of 15 sheets when originals are heavier than 28 lbs.(105 g/m^2). If the number of placed sheets exceeds
    this, scanning of the originals will not take place correctly and an extended image may result.

Some discrepancies may exist in the illustrations and content due to improvements to the machine.

Continuous copying speed (when the offset function is not used)

	AR-M355N	AR-M455N
Copy paper size	100% / Reduced / Enlarged	
11" x 17" (A3)	17 copies/min.	20 copies/min.
8-1/2" x 14" (B4)	20 copies/min.	22 copies/min.
8-1/2" x 11" (A4)	35 copies/min.	45 copies/min.
8-1/2" x 11"R (A4R)	25 copies/min.	30 copies/min.
7-1/4" x 10-1/2" (B5)	35 copies/min.	45 copies/min.
7-1/4" x 10-1/2"R (B5R)	15 copies/min.	18 copies/min.
8-1/2" x 5-1/2"R (A5R)	15 copies/min.	18 copies/min.

Center tray specifications

Output method	Face-down output
Maximum number of sheets (20lbs. ($80g/m^2$) /recommended paper)	400 sheets*
Paper type	Plain paper and special paper

* The maximum number of pages that can be held varies
  depending on ambient conditions in the installation
  location, the type of paper, and the storage conditions of
  the paper.

Acoustic Noise Emission (measurement according to ISO7779)

	Printing mode	Standby mode
Sound power level L_{wA}	6.8B or less	5.0B or less

Emission Concentration (measurement according to RAL-UZ85: Edition Mar. 2002)

Ozone	$0.02 mg/m^3$ or less
Dust	$0.075 mg/m^3$ or less
Styrene	$0.07 mg/m^3$ or less

8

LIST OF COMBINATION OF PERIPHERAL DEVICES

The table below shows the possible system configurations. Some devices require the installation of others (B) to be functional and some cannot be installed together (A).

(A) \ (B)	Multi purpose drawer	Stand/3 x 500 sheet paper drawer	Stand/MPD & 2000 sheet	Duplex module/bypass tray	Duplex module	Saddle stitch finisher	Finisher	Mail-bin stacker	Exit tray	Upper exit tray extension	Punch unit	PS3 expansion kit	Network scanner expansion kit	Facsimile expansion kit	Fax memory (8 MB)
Related to paper feed unit															
Multi purpose drawer	—	×	×			×					×		×	×	×
Stand/3 x 500 sheet paper drawer	×	—	×												
Stand/MPD & 2000 sheet paper drawer	×	×	—												
Duplex module/bypass tray	O*1			—		×					×				
Duplex module	O*1				—										
Output units															
Saddle stitch finisher	×	O*1	×	O		—	×		×						
Finisher		O*1				×	—	×			×				
Mail-bin stacker		O*1					×	—							
Exit tray				O*1	×				—		×				
Upper exit tray extension						×	×			—					
Punch unit	×	O*1	×	O	O	×			×		—				
Related to extension of functions and others															
PS3 expansion kit												—			
Network scanner expansion kit	×	O*1											—		
Facsimile expansion kit	×	O*1												—	
Fax memory (8 MB)	×	O*1												O	—

O = (A) and (B) must be installed together.

O*1 = (A) requires installation of one of the (B) units.

× = Cannot be installed together.

INDEX

8

8

NOTICE

SHARP®

KEY OPERATOR'S GUIDE

LASER PRINTER

This manual describes programs for use by the key operator. The key operator should read this manual thoroughly to gain the maximum value from these programs provide.

Be sure to become thoroughly familiar with this manual to gain the maximum benefit from the product.

Before installing this product, be sure to read the installation requirements and cautions sections of the "Operation manual (for general information and copier operation)".

Be sure to keep all operation manuals handy for reference including this manual, the "Operation manual (for general information and copier operation)" and operation manuals for any optional equipment which has been installed.

SHARP

OPERATION MANUAL
(for printer)

LASER PRINTER

Be sure to become thoroughly familiar with this manual to gain the maximum benefit from the product.

Before installing this product, be sure to read the installation requirements and cautions sections of the "Operation manual (for general information and copier operation)".

Be sure to keep all operation manuals handy for reference including this manual, the "Operation manual (for general information and copier operation)" and operation manuals for any optional equipment which has been installed.

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The display screens, messages, and key names shown in the manual may differ from those on the actual machine due to product improvements and modifications.

TABLE OF CONTENTS

CHAPTER 1

BASIC PRINTING PROCEDURES

This chapter explains how to configure printer driver settings at your computer, and provides basic information on printing.

1-1

SETTING THE PRINTER DRIVER

This section describes the method of changing the printer driver settings from your computer. If you have not yet installed the printer driver, read the accompanying "SOFTWARE SETUP GUIDE (for printer)" and install the printer driver from the CD-ROM.

Printer driver settings in Windows (selecting and setting print conditions)

Change the settings using the printer properties.

■ Windows 95/98/Me

The procedure for adjusting the settings in Windows Me is explained in the following.

1 On the [Start] menu, select [Settings] and then [Printers].

2 Right-click the installed printer driver and select [Properties] in the pop-up menu. Click the [Setup] tab in the printer driver properties.

The SHARP AR-M455N PCL6 properties is shown as an example.
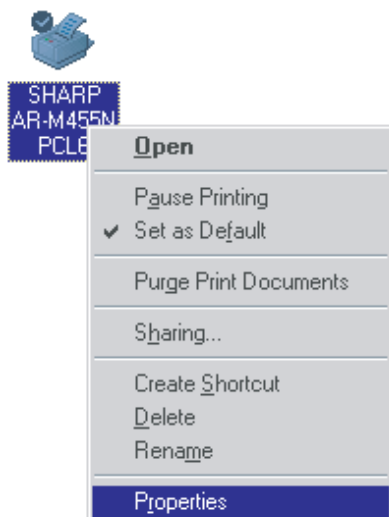
3 Set each item.

For setting items, see the printer driver help. For information on viewing Help, see the following page 1-3. An example of always using the document filing function is explained on page 1-3.

4 Click the [OK] button.

■ Windows NT4.0 / 2000 / XP / Server 2003

The procedure for adjusting the settings in Windows XP is explained in the following.

1 Select [Printers and Faxes] from the [Start] menu.

2 Right-click the installed printer driver and select [Printing Preferences].

The screen shows the example of selecting SHARP AR-M455N PCL6.
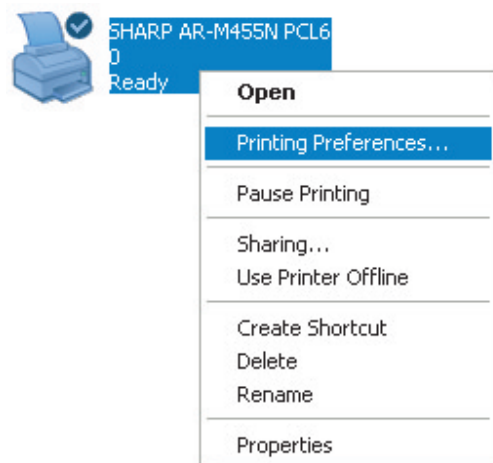
3 Set each item.

For setting items, see the printer driver help. For information on viewing Help, see the following page 1-3. An example of always using the document filing function is explained on page 1-3.

4 Click the [OK] button.

NOTE

To configure settings for installed peripheral devices such as a saddle stitch finisher, finisher, and large capacity tray, right-click the printer driver, select [Properties], and select the [Configuration] tab. (In Windows 95/98/Me, select [Properties] and then the [Configuration] tab in the [Setup] tab.) If the machine is being used as a network printer, click the [Auto Configuration] button in the [Configuration] tab to automatically set the peripheral device configuration. To display the latest tray information (paper size, paper type, and paper remaining), click the [Tray Status] button in the [Paper] tab.

■ Selecting document filing

The procedure for always using the document filing function is explained below as an example. This setting is selected in the [Job Handling] tab of the printer driver window.

1 Follow steps 1 and 2 on page 1-2.

2 Click the [Job Handling] tab.

3 Select the [Document Filing] checkbox.
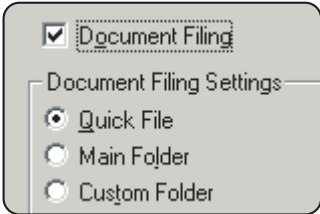
4 Enter a user name and a job name in the "Job ID" field.

5 Click the [Apply] button.
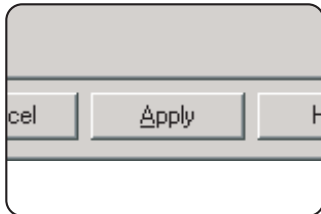
6 Click the [OK] button.

The document filing function will now be used each time you print a job.

Using the Help file to view explanations of the settings

To view on-screen explanations of the settings in the printer driver, open the Help file.

■ Opening Help in Windows

This window is the SHARP AR-M455N PCL6 Properties in Windows Me.
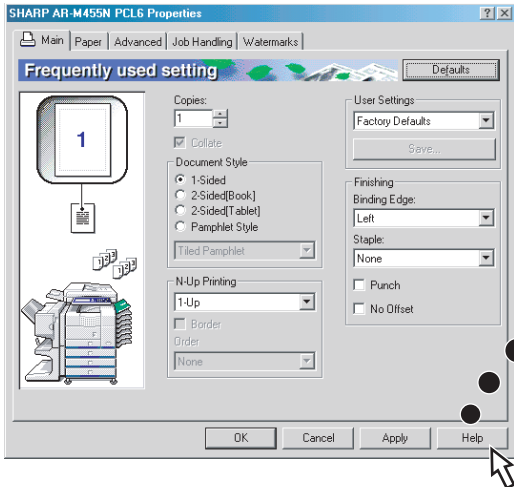
Click [Help] to display the Help screen.

You can search for information using various methods from the tabs.

Printing

The procedure for printing in WordPad*1 is explained as an example in this section. If you do not have any documents created in WordPad, create a text document in WordPad that can be printed.

*1   This is a standard accessory program in Windows

1 **Open a document created in WordPad.**
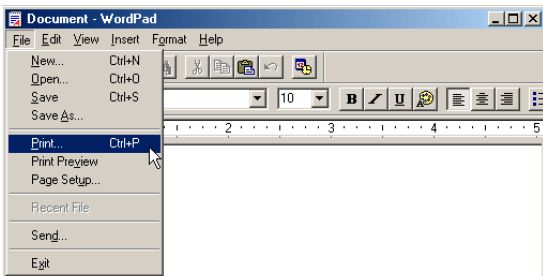
2 **Select [Print] from the WordPad [File] menu.**

3 **Select [SHARP AR-M455N PCL6] from the [Name] drop-down list.**

(1)   In Windows 95/98/Me/NT 4.0
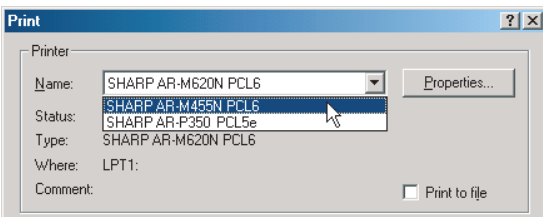
Click the [Properties] button to open the printer driver properties window.
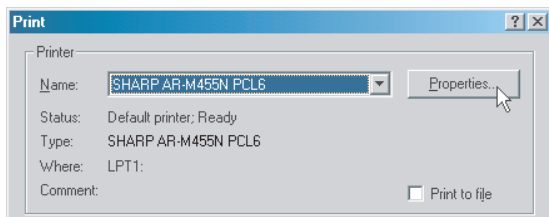
(2)   In Windows 2000/XP/Server 2003

Select the [SHARP AR-M455N PCL6] printer icon in [Select Printer].In Windows 2000, the properties consist of five tabs: [Main], [Paper], [Advanced], [Job Handling], and [Watermarks].
In Windows XP/Server 2003, click the [Preferences] button to open the printer driver properties.
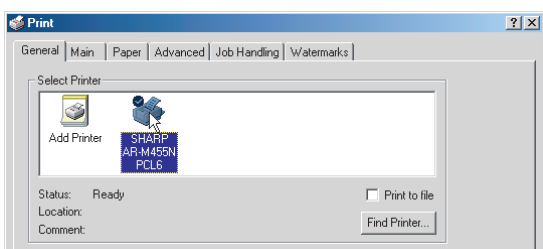
4 **Click the desired tab and configure settings.**
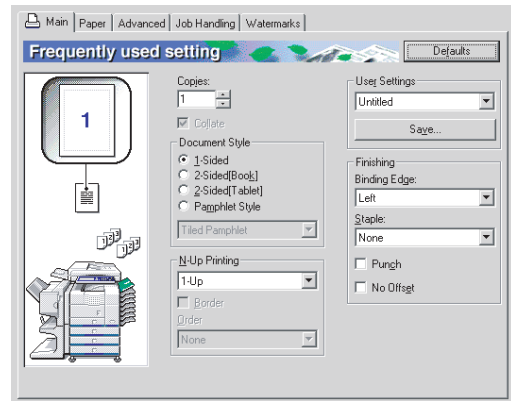
NOTES
● When the properties are opened from an application, the settings that you configure in the properties will remain in effect only while you use the application.
● For information on the settings in the properties, see "SETTING THE PRINTER DRIVER PROPERTIES" in chapter 2.

5 **To adjust the print contrast, follow the procedure below. If you do not need to adjust the print contrast, go to step 6 on the next page.**

To adjust the print contrast, click the [Image Adjustment] button in the [Advanced settings] tab. The window below will appear. Adjust the brightness and contrast in the [Image Adjustment] field.
When you are finished, go to step 6 on the next page.

1-4
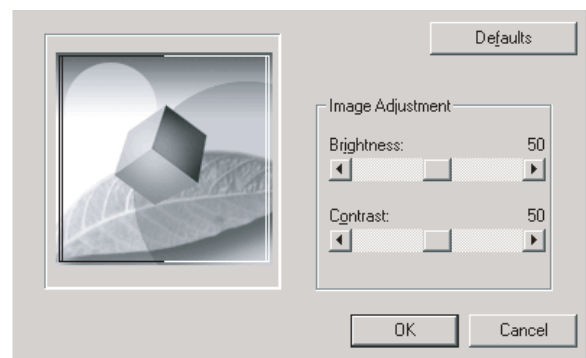
6 **Click the [Paper] tab.**
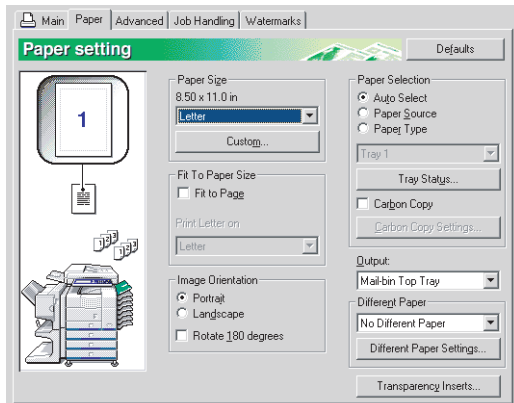
Check the paper size to make sure it is correct. Next, specify the paper feeding method in [Paper Selection]. Normally [Auto Select] is used. When finished, click the [OK] button to close the printer properties window.

7 **Click the [OK] button in the Print window in Windows 95/98/Me/NT 4.0, or the [Print] button in Windows 2000/XP/Server 2003.**

Using options to print

The procedure for using a peripheral device (option) to print is explained below using WordPad*[1] as an example. If you do not have any documents created in WordPad, create a text document in WordPad that can be printed.

*1   WordPad is a software application that is included in Windows as a standard accessory.

1 Open a document that was created in WordPad.
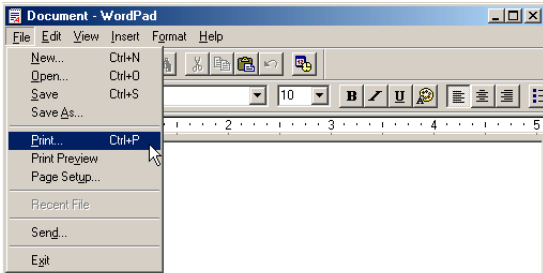
2 Select [Print] from the WordPad [File] menu.

3 Select "SHARP AR-M455N PCL6" from the [Name] drop-down list.

(1)   In Windows 95/98/Me/NT 4.0
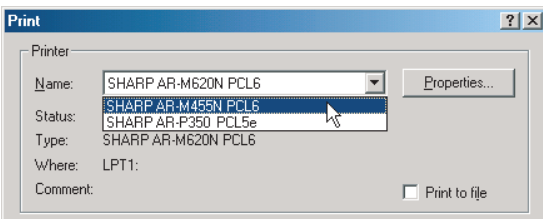
Click the [Properties] button to open the printer driver properties window.
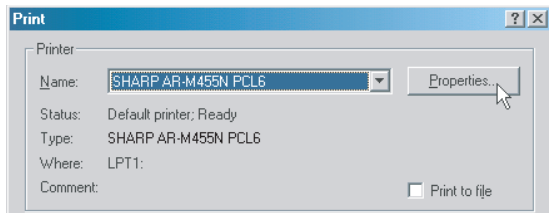
(2)   In Windows 2000/XP/Server 2003

In [Select Printer], select the "SHARP AR-M455N PCL6" printer icon.
In Windows 2000, the properties consist of five tabs: [Main], [Paper], [Advanced], [Job Handling], and [Watermarks].
In Windows XP/Server 2003, click the [Preferences] button to open the printer driver properties.
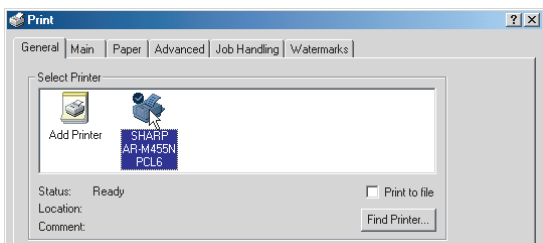
4 Click the desired tab and configure settings.
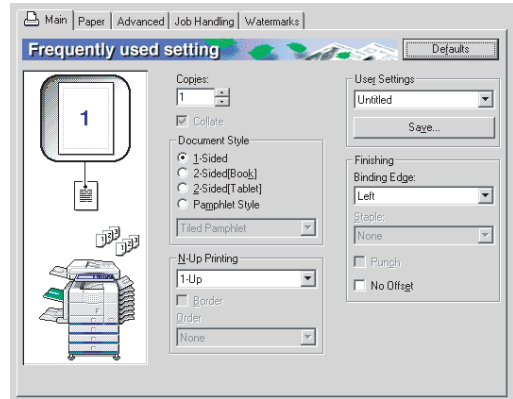
NOTES
- When the properties are opened from an application, the settings that you configure in the properties will remain in effect only while you use the application.
- For information on the settings in the properties, see "SETTING THE PRINTER DRIVER PROPERTIES" in chapter 2.

To use the optional duplex module/bypass tray to print, configure the settings in the following window:
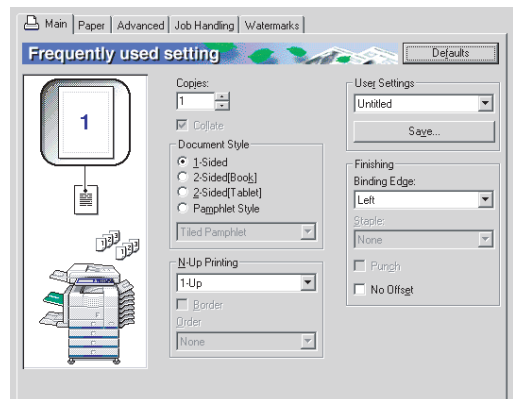
(1) To use a two-sided printing function, open the "Main" tab and select the desired two-sided printing radio button.

1-6
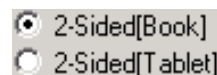
5 Click the [Paper] tab.

Make sure that the selected paper size is correct in the [Paper Size] field.

Next, select the paper feeding method in [Paper Selection]. Normally [Auto Select] is used. If you wish to use the optional paper tray, select it in the following window.
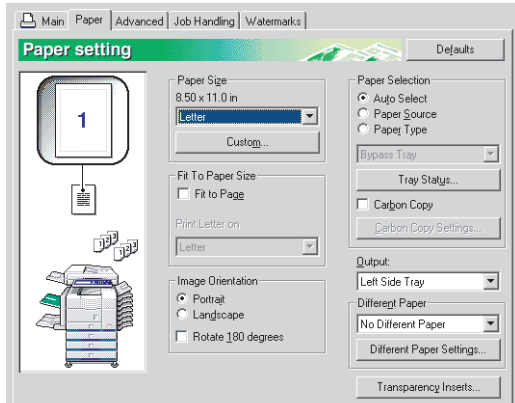
(1) To select a paper tray, select [Paper Source] in [Paper Selection] and then select the desired tray from the list.

Example: Selecting the bypass tray
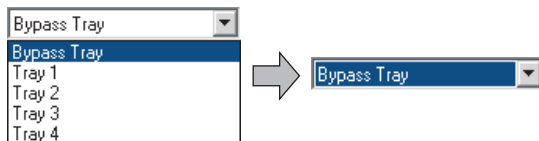
(2) To select the paper type, select [Paper Type] in [Paper Selection] and then select the desired paper type from the list.

Example: Selecting recycled paper
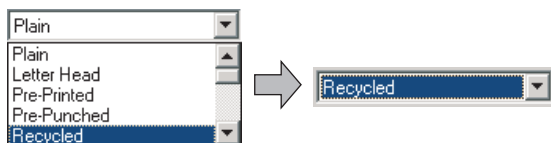
(3) To select the output tray installed on the duplex module, set [Output] to [Left side tray].
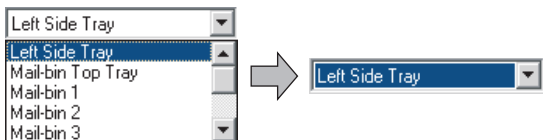
When a mail-bin stacker is installed and you wish to have output delivered to a particular mail bin:

Click the [Paper] tab and select the mail bin (each mail-bin has an assigned use) in [Output]. For general output that does not need to be sorted, you can select the mail-bin top tray.
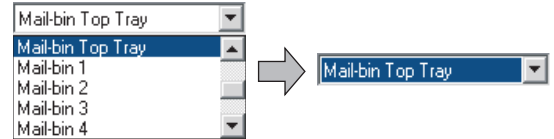
NOTE

The size and type of paper and whether or not a tray can be used for printing are set in "Paper tray setting" in the machine's custom settings. (See "Custom settings" in the "Operation manual (for general information and copier operation)".)

If you select [Paper Source] or [Paper Type], be sure to configure the tray settings in the [Configuration] tab of the printer driver properties.

6 Adjust the print contrast settings as needed (page 1-4). If you do not need to adjust the print contrast, go to step 7.

7 In Windows 95/98/Me/NT 4.0, click the [OK] button in the print window. In Windows 2000/XP/Server 2003, click the [Print] button.

CHAPTER 2

SETTING THE PRINTER DRIVER PROPERTIES

This chapter explains how to configure settings in the printer driver. The settings are changed in the software application.

SELECTING PRINTING FUNCTIONS

Almost all print functions are selected in the print driver properties window that appears when printing from an application. The print functions can also be selected in the printer driver properties window that appears when [Properties] is selected in the printer icon menu. The printer driver settings are grouped on tabs in the printer driver properties window.

The procedure for selecting settings after opening the printer driver properties from an application is explained in this section. (The windows that are shown are the AR-M455N PCL6 printer driver in Windows Me.)

The following optional peripheral devices are installed in the printer driver windows:

B/W scanner module/DSPF + Saddle stitch finisher + Mail-bin stacker + Punch module + Duplex module

Settings in the [Main] tab

The following window appears when the [Main] tab is clicked. The settings and buttons are explained below.

Click this button to return all settings to the factory default settings. This button appears on all tabs.
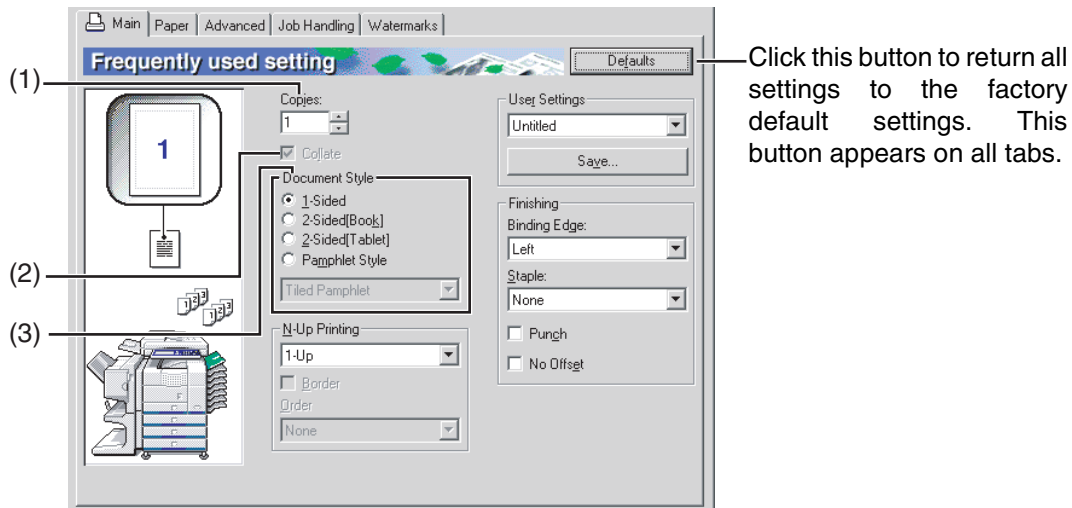
(1) Copies

Set the number of copies.
Any number from 1 to 999 can be set.
Default setting: 1

(2) Collate

Select this checkbox to collate the copies.
When the staple function or punch function is turned on, a checkmark automatically appears in the checkbox.
Default setting: Selected

(3) Document Style

Select one-sided or two-sided printing.

[1-Sided]...................Print on one side of the paper.

[2-Sided (Book)].......Print on both sides of the paper and bind at the side.

[2-Sided (Tablet)] .....Print on both sides of the paper and bind at the top.

[Pamphlet Style][*1].....Print on both sides of the paper and bind down the middle.

Default setting: 1-Sided

[*1] Four selections are available for the pamphlet format.

[Tiled Pamphlet]

Print on paper double the size of the document size selected in the application.
The page order will be rearranged as required for the middle binding format.

[2-Up Pamphlet]

The document size selected in the application will be reduced in the same way as in 2-Up printing, and printing will take place using the selected paper size.

[Multiple Tiled Pamphlet]

When using the pamphlet function, printing takes place on paper that is twice the size of the paper specified in the application. When this function is selected and the number of pages exceeds the stapling limit, the pages are divided into groups that can be stapled, and the pages in each group are arranged pamphlet style and stapled. The groups can then be put together to form a pamphlet with the correct page order.

[Multiple 2-Up Pamphlet]

When using the pamphlet function, the pages are reduced and printed 2-Up style on the size of the paper specified in the application. When this function is selected and the number of pages exceeds the stapling limit, the pages are divided into groups that can be stapled, and the pages in each group are arranged pamphlet style and stapled. The groups can then be put together to form a pamphlet with the correct page order.

(4)

(5)
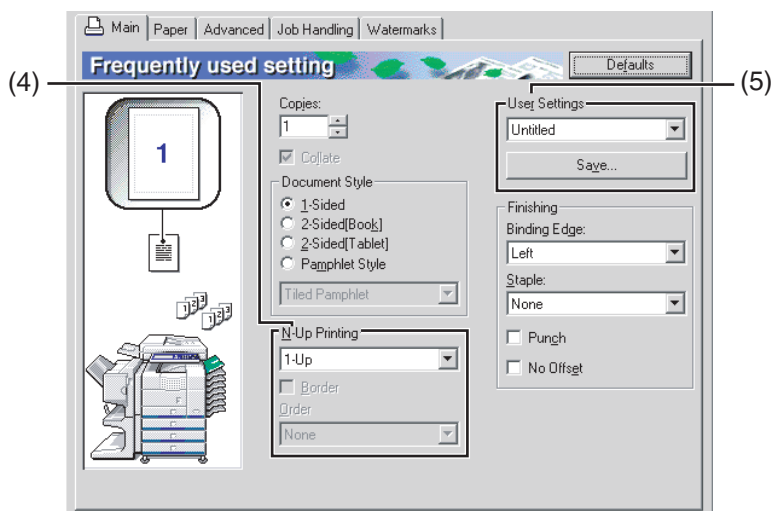
(4) N-Up Printing

Each page is reduced to allow multiple pages to be printed on each sheet. The pages are printed in "Z" order on each sheet.
The following five settings are available:
[1-Up], [2-Up], [4-Up], [6-Up], [8-Up], [9-Up], [16-Up].
Example: 4-Up [Right, and Down]
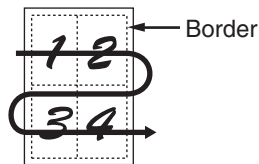
← Border

Default setting: 1-Up

[Border]

This setting is grayed out when [1-Up] is selected. Select whether or not to print a border around each page when a setting other than 1-Up is selected.
Default setting: Not selected

[Order]

This setting is grayed out when 1-Up is selected. When a setting other than 1-Up is selected, the layout of the pages on the sheet can be selected.
Example: Changing the layout of 4-Up to [Left, and Down].
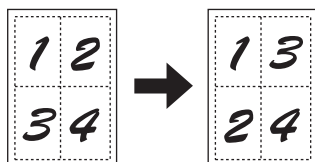
(5) User Settings

The user can store up to 30 sets of settings, allowing the settings to be easily changed by simply selecting the desired set.
Default setting: Factory Defaults

[Save]

Save the settings under the name that appears in "User Settings".
Up to 20 characters can be entered for the name. If none of the settings have been changed (the settings are still the factory defaults), this button will be grayed out.
When [Delete] appears in the button, it can be clicked to delete a stored set of user settings.

(6)
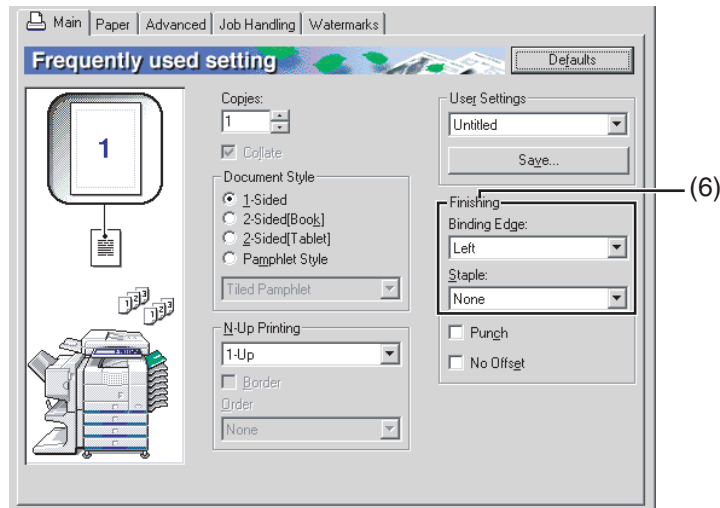
(6) Finishing

Configure settings for staple or punch finishing.

[Binding Edge]

When automatic two-sided printing is performed, the [Binding Edge] setting is used to determine how the top and bottom edges of the front and back sides are positioned. The relation between the document and each of the settings is as follows:

Original image

[Left]
Left binding

[Right]
Right binding

[Top]
Top binding

Binding edge

Binding edge

Binding edge
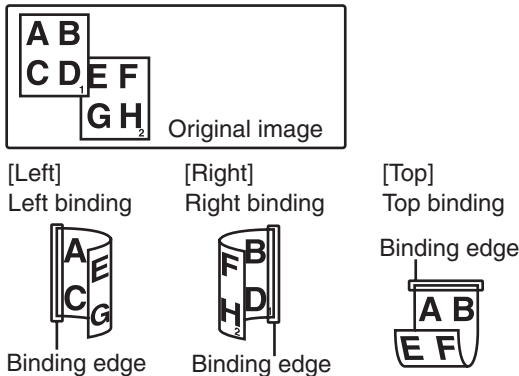
Default setting: Left

[Staple]

[None] .... Do not staple.
[1 Staple]........ Staple in one place.
[2 Staples] ...... Staple in two places.
Default setting: None

Pamphlet stapling function

The paper is stapled in two places at the centerline, folded in half as shown, and delivered to the output tray.

[Example]
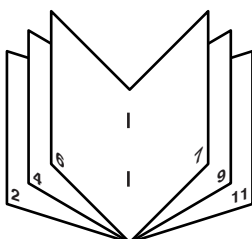
Staple sort function

Each sorted set of pages is stapled and delivered to the offset tray, or stapled at the center and delivered to the lower pamphlet tray. (Saddle stitch finisher only) The relations between stapling positions, paper feed orientations, allowed paper sizes, and stapling limits are indicated below.

Possible stapling positions

Vertical paper feeding	One staple at top left corner		Possible paper sizes: 8-1/2" x 11", A4, B5 Staple limit: 50 sheets (When a finisher is installed, up to 30 sheets can be stapled.)
	One staple at bottom left corner		Same as above
	Two staples at left edge		Same as above
	Two staples at centerline*		Pamphlet style is not possible using vertically fed paper
Horizontal paper feeding*	One staple at top left corner		Possible paper sizes: 11" x 17", 8-1/2" x 14", 8-1/2" x 13", 8-1/2" x 11" R, A3, B4, and A4R Stapling capacity: Up to 50 sheets for 8-1/2" x 11"R, A4R and B5R, and up to 25 sheets for other sizes
	One staple at bottom left corner		Possible paper sizes: 11" x 17", 8-1/2" x 14", 8-1/2" x 13", 8-1/2" x 11"R, A3, B4, A4R Stapling capacity: Up to 50 sheets for 8-1/2" x 11"R, A4R and B5R, and up to 25 sheets for other sizes
	Two staples at left edge		Possible paper sizes: 11" x 17", 8-1/2" x 13", A3, and B4 Stapling capacity: Up to 25 sheets for any sizes
	Two staples at centerline		Possible paper sizes: 11" x 17", 8-1/2" x 11"R, A3, B4, A4R Staple limit: 10 sheets

* Not possible when a finisher is installed (only possible when a saddle stitch finisher is installed).

2-4
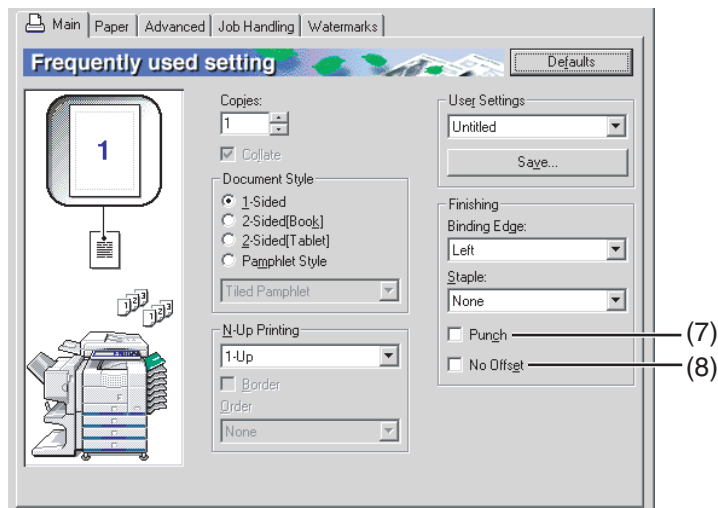
(7) [Punch]

Use this to select the punch function.

When the punch function is selected, [Collate] is automatically selected.

Default setting: Not selected

Punch function (only when a punch module is installed)

When a punch module is installed on the saddle stitch finisher, holes can be punched in the printed pages before delivery to the tray. (The punch function cannot be used in combination with the pamphlet function.) When using the punch function, the automatic image rotation function does not operate.

Paper sizes that can be punched are indicated in the specifications on page 3-15 of the "Operation manual (for general information and copier operation)".

[Example]

{Original 1}   {Punch positions}
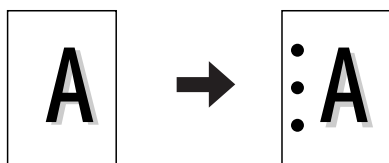
{Original 2}   {Punch positions}
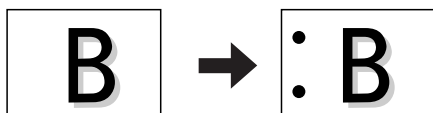
(8) [No Offset]

Select this when you do not wish sets of collated or grouped pages to be offset from each other.

Default setting: Not selected

Offset function

Each set of printed pages is offset from the previous set in the offset tray for easy separation. (The offset function operates in the finisher or saddle stitch finisher tray.) The offset function does not operate when the staple sort function is selected.

Offset mode   Non-offset mode

2-5
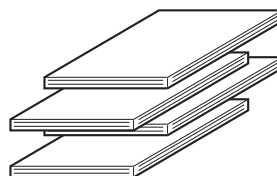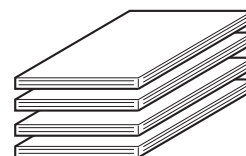
Settings in the [Paper] tab

The following screen appears when the [Paper] tab is selected. The settings and buttons in this screen are explained below.
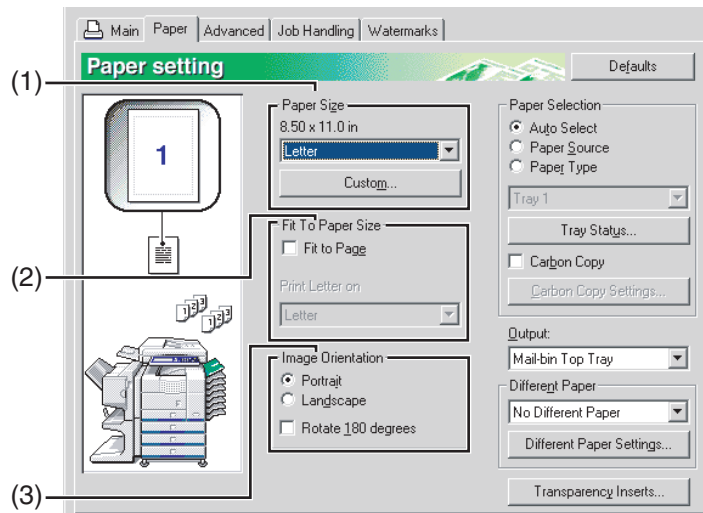
(1) Paper Size

Select the size of paper to be printed on.
Click one of the paper sizes that appear in the box.
Default setting: Letter

[Custom]

A custom paper size can also be set.
Only one custom paper size can be stored.
Click this button to open the window for setting the custom paper size.

(2) Fit To Paper Size

This field is used for the Fit to Page function. This function automatically enlarges or reduces the printed image to match the paper being used. Enlargement or reduction takes place with the image centered on the page.
To use this function, select the [Fit to Page] checkbox and then select the size of paper to be used.

NOTE

Printing normally takes place using the paper size set in the application, regardless of the paper size selected in the printer driver. When the paper size is not specified in the application, the paper size setting in the printer driver is used.

[Fit To Page]

When this checkbox is selected, the print image corresponding to the paper size selected in [Paper Size] is automatically reduced or enlarged to fit the paper selected in [Fit To Paper Size].
Default setting: Not selected

(3) Image Orientation

Set the orientation of the document.
Click the radio button for [Portrait] or the radio button for [Landscape].
[Portrait].......... Select portrait orientation.
[Landscape].... Select landscape orientation.
Default setting: Portrait

[Rotate 180 degrees]

Rotate the image 180° before printing.
Default setting: Not selected

Printing result	
⦿ **Landscape** ☑ **Rotate 180 degrees**	⦿ **Landscape** ☐ **Rotate 180 degrees**
∀ƆᗺA	ABCD
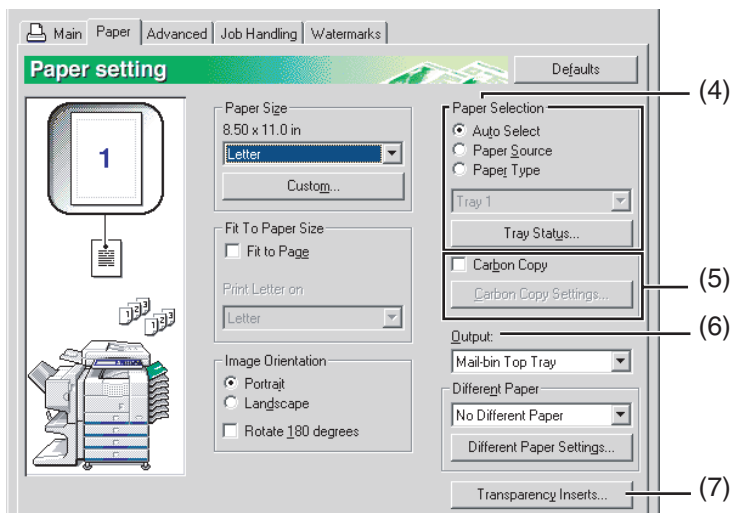
(4) Paper selection

Select the paper tray and paper type in this item.
Default setting: Auto Select

[Auto Select]

When [Auto Select] is selected, the tray containing the paper specified in [Paper Size] is automatically used.

[Paper Source]

When this is selected, paper is drawn from the specified tray regardless of the paper size setting.

[Paper Type]

When this selected, paper is fed from the tray that has the specified type of paper.
There are also 7 user type settings, and a name can be assigned to each type (maximum of 14 characters).

NOTE

The size and type of paper and whether or not a tray can be used for printing are set in "Paper tray setting" in the machine's custom settings. (See "Custom Settings" in the Operation manual (for general information and copier operation.))
If you select [Paper Source] or [Paper Type], be sure to configure the tray settings in the [Configuration] tab of the printer driver properties.

[Tray Status]

Click this button to display the paper size, paper type, and paper remaining in the machine's paper trays.
This function operates when the machine is used on a network.

(5) Carbon copy

Select this function to print multiple copies of the same document on paper from different trays. Click the [Carbon Copy Settings] button to configure the carbon copy settings. For example, if regular paper is loaded in tray 1 and colored paper is loaded in tray 2, you can print an original and a copy of an invoice. You can also load regular paper in tray 1 and recycled paper in tray 2 to print a copy for presentation and a copy for retention.

[Carbon Copy Settings]

Click this button to configure settings in the [Carbon Copy Settings] window.
Default setting: Not selected

Print job
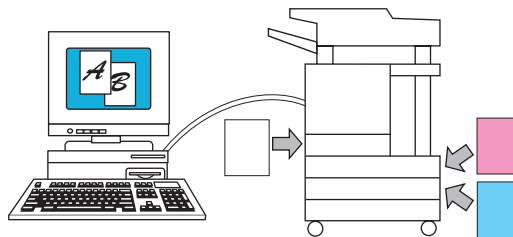
Result (when [Collate] is selected)
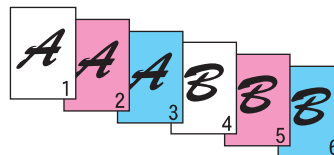
(6) Output

Use this setting to select the output tray. When the stapling function is selected, the center tray cannot be selected.
Default setting: Center Tray (This varies depending on what options are installed.)

(7) Transparency Inserts

The printer can be instructed to separate the transparencies by inserting blank sheets of paper. Click this button to open the window for selection of transparency insert settings.
This cannot be selected when two-sided printing, the staple function, or the punch function is selected.

Original

Inserts

2-7
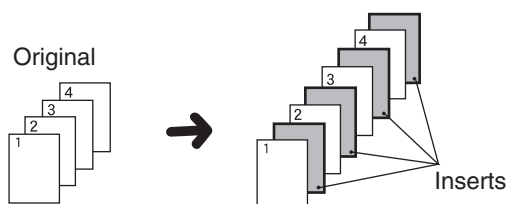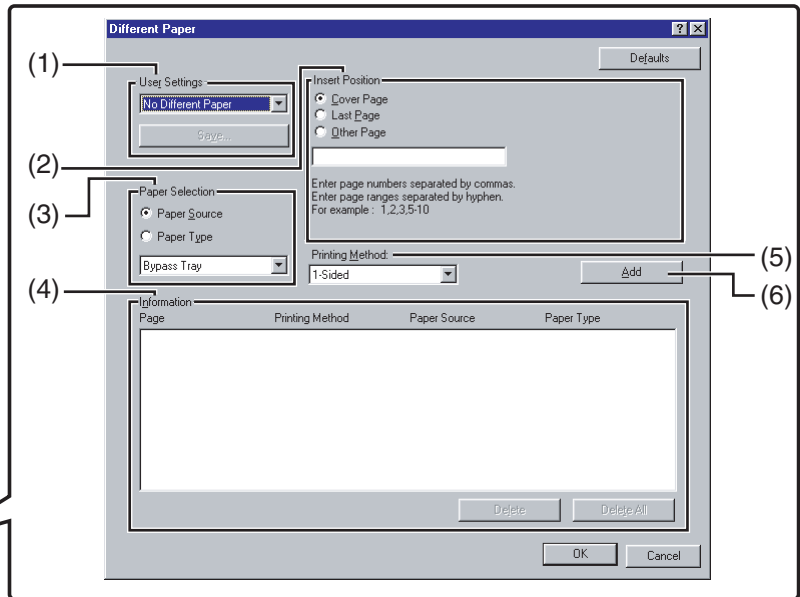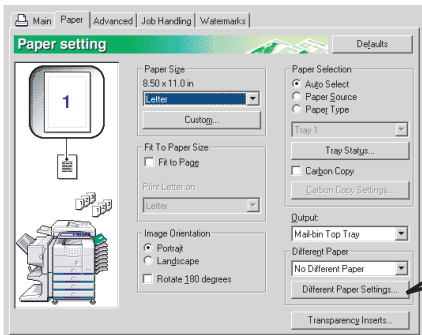
[Different Paper Settings]
These settings are used to print selected pages on a specified type of paper or on paper from a specified tray, or to have blank sheets added as inserts at specified pages.

(1) User Settings
Up to 30 sets of [Different Paper Settings] can be stored, allowing settings to be changed by simply selecting a set.
Default settings: No Different Paper

[Save]
Click this button to save a set of different paper settings. A [User Settings] window will appear. User setting text entries can be up to 20 characters long. If a [Delete] button appears, a set of user settings can be deleted by clicking this button.

(2) Insert Position
[Cover Page]
When this is selected, paper from a different paper source or a different type of paper is used for the first page of the print job. Select [Paper Source] or [Paper Type].

[Last Page]
When this is selected, paper from a different paper source or a different type of paper is used for the last page of the print job. Select [Paper Source] or [Paper Type].

[Other Page]
When this is selected, specify the pages where you wish to insert a different type of paper. If the [Printing Method] (5) is set to [Blank], the sheet will be inserted in front of the specified page. If [1-Sided] is selected, the specified page will be printed on the front side of the inserted sheet. If [2-Sided] is selected, the specified page and the following page will be printed on the front side and back side of the inserted sheet. Default setting: Cover page

(3) Paper Selection
[Paper Source]
Select this if you wish to specify a paper tray to be used for [Insert Position] (2).

[Paper Type]
Select this if you wish to specify a paper type to be used for [Insert Position] (2).
Default setting: Paper Source

(4) Information
The stored [Different Paper] settings appear here.

[Delete]
Click this button to delete the selected settings in the Information list.

[Delete All]
Click this button to delete all settings in the Information list.

(5) Printing Method
This is used to select the printing method for a cover page, last page, or other page.

[Blank]
Insert a blank sheet at the specified page.

[1-Sided]
Select this to print only on one side of the paper used for a cover page, last page, or other page. When this is selected for the [Last Page] (back cover), printing takes place on the back side of the sheet.

[2-Sided]
Select this to print on both sides of the paper used for a cover page, last page, or other page.
Default setting: No

(6) [Add]
Click this button to save a set of [Different Paper] settings. The settings will be added to the Information list.

2-8

Settings in the [Advanced] tab

The following screen appears when the [Advanced] tab is selected. The settings and buttons in this screen are explained below.
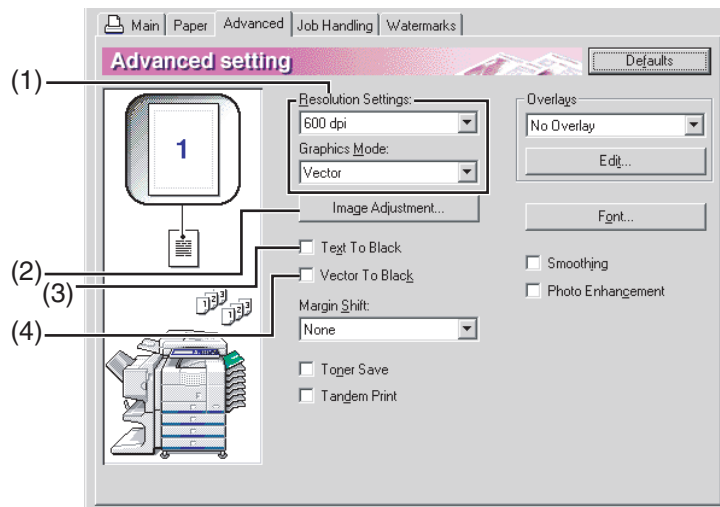
(1) Image Quality

This item is used to select the [Resolution Settings] and [Graphics Mode] for printing.

[Resolution Settings]
Select 300 dpi or 600 dpi.
Default setting: 600 dpi

[Graphics Mode]
Select [Raster] or [Vector] (HP-GL/2). [Raster] is used to print with raster graphics, and [Vector] is used to print with Vector (HP-GL/2) commands.
Default setting: Vector (HP-GL/2)

(2) Image Adjustment

This field is used to adjust the brightness and contrast.

[Brightness]
This adjusts the brightness of colors. The brightness can be set from 0 to 100. Colors will appear closer to white as the number is increased.
Default setting: 50

[Contrast]
The contrast can be set from 0 to 100. The higher the number, the higher the contrast.
Default setting: 50

(3) Text To Black

Use this setting to have all text other than white text printed in black. (This setting is useful when printing faint colored text that is difficult to read.)

Print data	Printing result	
	☐ **Text To Black**	☑ **Text To Black**
ABCD EFGH	ABCD EFGH	**ABCD EFGH**

(4) Vector To Black

Use this setting to have all lines or areas other than white lines areas printed in black. (This setting is useful when printing faint colored lines or areas that are difficult to recognize.)

Print data	Printing result	
	☐ **Vector To Black**	☑ **Vector To Black**

2-9
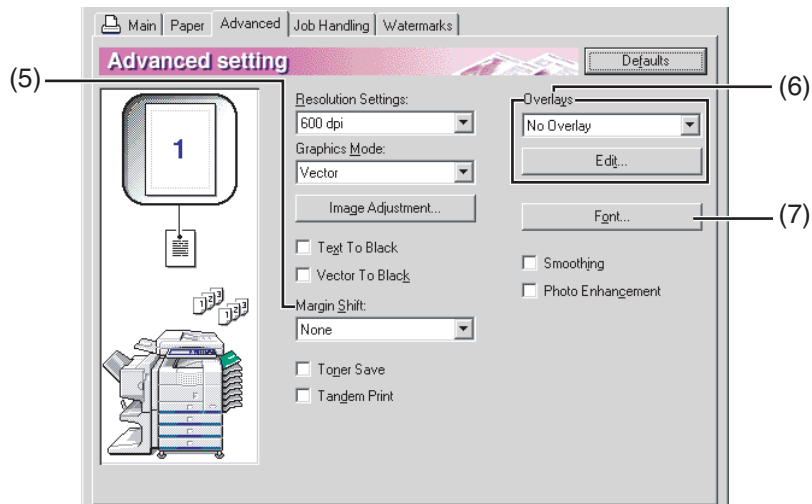
(5) Margin Shift

This is used to shift the print image to create margin at the left, right, or top of the paper. Select [None], [0.4 in.], [0.8 in.], or [1.2 in.].
Default setting: None

One-sided copying

Print data

Image shifted to the right

Image shifted to the left

Image shifted to the bottom — Margin

Margin   Margin

Two-sided copying

Print data

Image shifted to the right

Image shifted to the left

Image shifted to the bottom — Margin

Margin   Margin
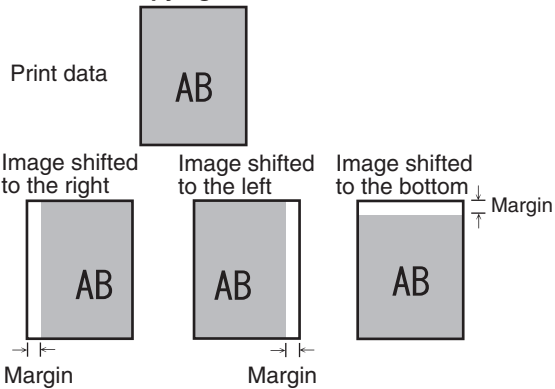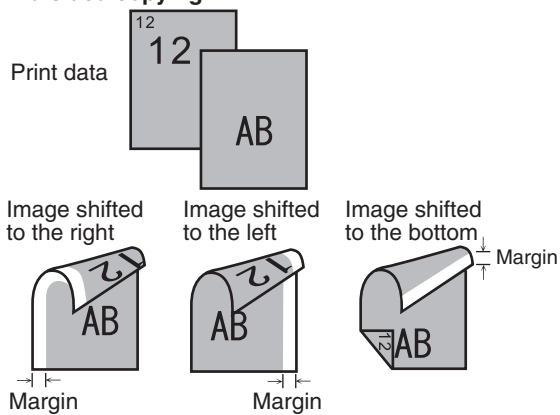
(6) Overlays

This function is used to print an image as an overlay on a previously created form. The form must be created before the function can be used.
Default setting: Not selected

[Edit]

Click this button to open the overlay settings window. The file selected in this window will be used as the overlay.

(7) Font

Click this button to configure font settings.

2-10
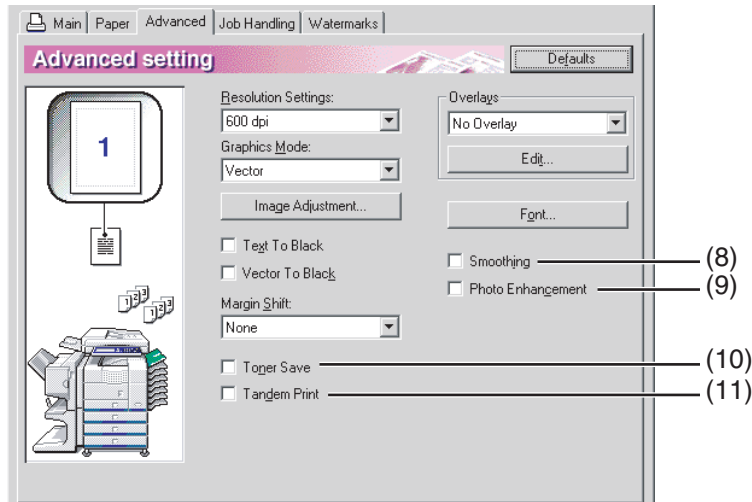
(8) Smoothing

Check "Smoothing" to smooth the edges of text or graphics and reduce jagged lines in order to obtain virtually high resolution.

(9) Photo Enhancement

This mode is most useful when printing Photographic Image. The image quality might be down for Line Art.

(10) Toner Save

Select this to save toner. Solids will be printed in halftone to reduce toner consumption.

(11) Tandem Print

Two machines that are connected in a system that allows tandem copying (sharing a large copy job between two machines) can also be used for tandem printing. To use tandem printing, settings must be configured in the key operator programs. (See "Tandem setting" in "Network settings" on page 5-7 of the key operator program.)
Default setting: Not selected

To cancel a tandem printing job
Touch the [STOP/DELETE] key in the job status screen of both the server machine and the client machine. Printing will be canceled and the job deleted.

Settings in the [Job Handling] tab

The following window appears when the [Job Handling] tab is clicked. The settings and buttons are explained below.
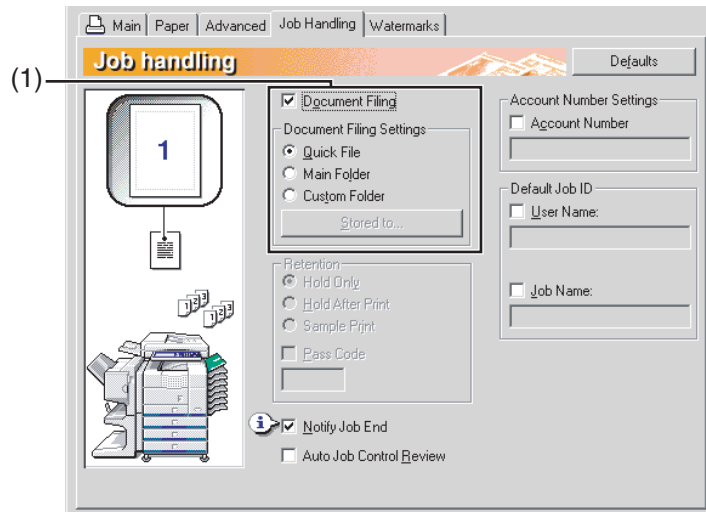
(1) Document Filing

This setting is used to save a print job as a data file in the hard disk of the machine. Two methods of saving the image are available: Automatic temporary saving [Quick File], [Main Folder] and [Custom Folder]. The saved image can be called up as needed and printed or otherwise manipulated. A name (user name, file name, etc) can be assigned to the file for easy searching.

For information on using this function at the operation panel of the machine, see chapter 7, "Document filing function", of the "Operation manual (for general information and copier operation)".

Default setting: Not selected.

[Quick File]

This setting is used to have a print job automatically saved to the automatic temporary save folder when printing is finished. A user name and job name can assigned to the file (page 2-14); however, the job cannot be saved as a confidential file with a password (page 2-13).

[Main Folder]

Select this when you wish to save a print job in the machine's "Main Folder". A user name and job name (page 2-14) can be assigned to the file. A confidential print job can be saved in this folder with a passcode (page 2-13).

[Custom Folder]

Select this when you wish to save a print job in the machine's "Custom Folder". A user name and job name (page 2-14) can be assigned to the file. A confidential print job can be saved in this folder with a passcode (page 2-13).

[Stored to]

When "Custom Folder" is selected, click this button to open the "Stored to" window. This window is used to select the folder for saving the file, and to enter a passcode if one has been established for the folder. The folder (Main Folder or Custom Folder) is selected from the list in the "Folder Selection" screen. " 🗀 " appears next to folders that have passcodes.
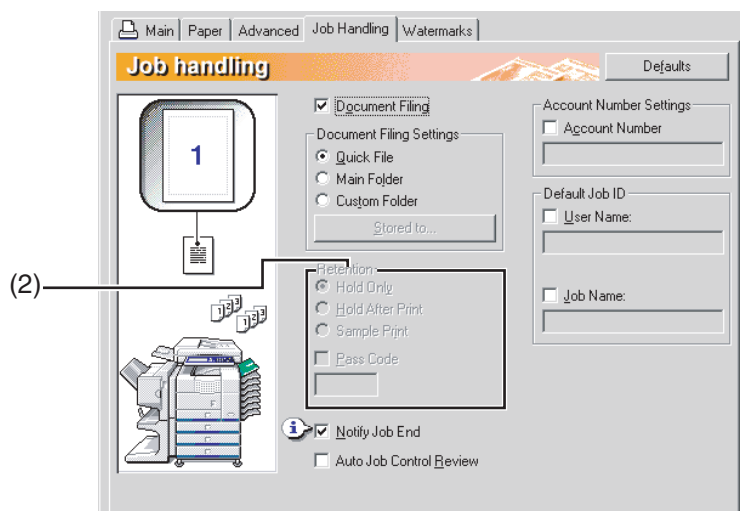
(2) Retention

[Hold Only]
This setting is used to prevent a print job from being misplaced. When a print job is sent to the computer, the machine will hold it in a Filing folder without printing it. The user can initiate printing as needed using the operation panel of the machine. The job can also be deleted without printing it.

[Hold After Print]
This setting is used to hold a print job in a Filing folder after it is printed. The file can be printed again or deleted as needed.

[Sample Print]
This setting is used to prevent the occurrence of excessive misprints when printing a large number of copies. When this setting is selected and a print job is sent to the machine, only the first set of copies is printed and then the job is stored in a Filing folder. After checking the first set of copies to make sure that the margins, staple positions, and other aspects of the job are satisfactory, the user initiates printing from the operation panel of the machine and the remaining sets are printed. (The sample set is included in the total number of sets.) If the sample set is not satisfactory, the job can be deleted.

[Pass Code] (5-digit number)
To require that a passcode be entered at the operation panel of the machine to print a job stored in a Filing folder, enter the passcode (5-digit number) in [Pass Code].

- **When a passcode is set in "Hold Only" mode**
  The passcode must be entered at the operation panel of the machine to print the job.

- **When a passcode is entered in "Hold After Print" mode**
  After the initial printing, the passcode must be entered at the operation panel of the machine to print the job again.

- **When a passcode is set in "Sample Print" mode**
  After printing the sample set, the passcode must be entered at the operation panel of the machine to print the remaining sets.
  Default setting: Hold Only

2-13
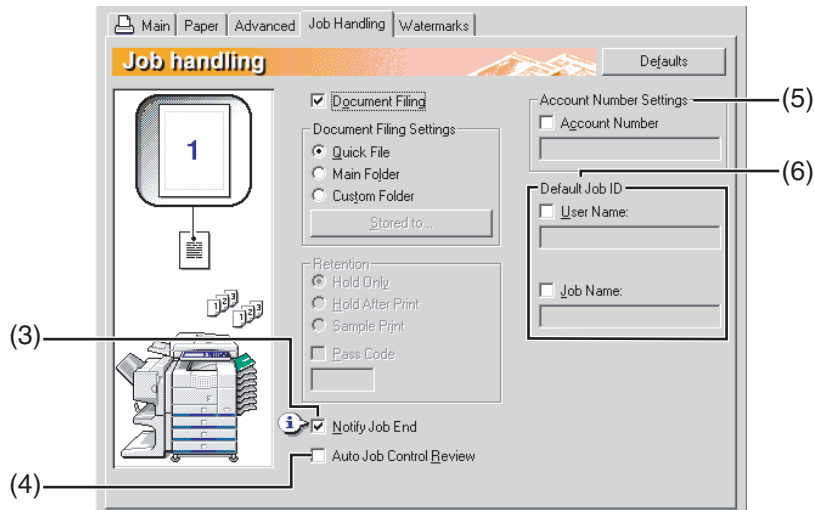
(3) Notify Job End

This is used to select whether or not you wish to be notified when a print job is finished. This setting is only effective when the printer status monitor is running.

If the printer status monitor is not running, the setting will not operate even if selected.

Default setting: Selected

(4) Auto Job Control Review

Select this to have the job control screen always open when printing from the printer driver.

If you changed the account number, user name, job name, or passcode, you can also save your changes.

Default setting: Not selected

(5) Account Number Settings

When "Auditing mode" is enabled in the key operator programs, a count is kept of the number of pages printed by each account. Enter your account number for printing that was established in the key operator programs. When the [Account Number] checkbox is selected, the number entered in this tab will be used.

To establish account numbers, see the key operator program manual.

If a limit for the number of pages that your account can print is set in the key operator programs, printing will not be possible after the limit is reached.

If "Cancel jobs of invalid accounts" is enabled in the key operator programs and an incorrect account number or no account number is entered, printing will not take place. If you do not wish to restrict use of the machine, disable the setting. Pages printed without entering a valid account number will be added to the "OTHERS" count.

(6) Default Job ID

Use this to set the default user name and job name that appear in the operation panel of the machine. Note that if [User Name] and [Job Name] are not selected, your Windows login name and the file name selected in the application will be automatically used. The names that appear in the dialog box that appears when printing is executed will appear in the operation panel of the machine.

[User Name]

Use this to set the default user name that appears in the operation panel of the machine. Select this checkbox to have the [User Name] entered in this window appear in the operation panel of the machine. If not selected, your Windows login name will be automatically used. The name that appears in [Job ID] in the [Job Control] window (which appears when printing is executed) will appear in the operation panel of the machine. Up to 16 characters can be entered for the name.

Default setting: Not selected

[Job Name]

Use this to set the default job name that appears in the operation panel of the machine. Select this checkbox to have the [Job Name] entered in this window appear in the operation panel of the machine. If not selected, the file name selected in the application will be automatically used. The name that appears in [Job ID] in the [Job Control] window (which appears when printing is executed) will appear in the operation panel of the machine. Up to 30 characters can be entered for the name.

Default setting: Not selected

Settings in the [Watermarks] tab

The following window appears when the [Watermarks] tab is clicked. The settings and buttons are explained below.
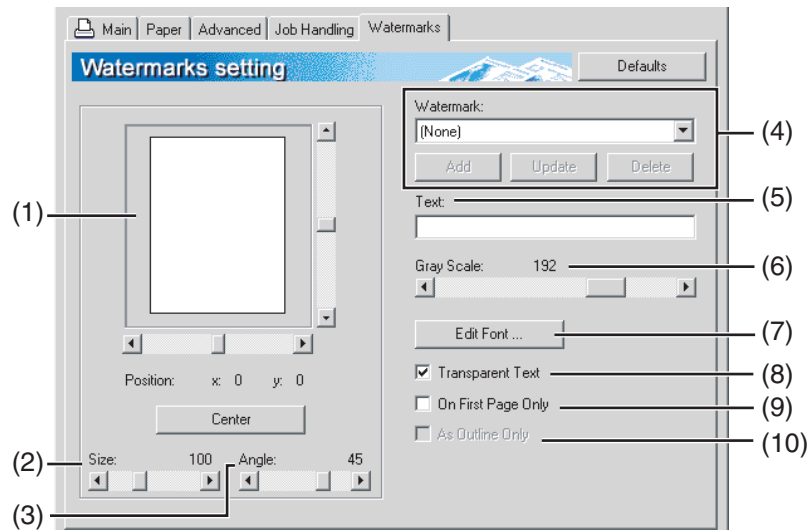
(1) Watermark preview

The watermark function is used to print a watermark (a faint, shadowlike text image) on the paper. This shows a preview of the currently selected watermark.

The position of the watermark can be adjusted by directly dragging the image with your mouse, or by using the scrollbars at the right and bottom of the preview screen.

Default setting: x: 0, y: 0

> **NOTE**
>
> The image that appears in the Watermark Preview is an approximate representation of what will appear in the print.

[Center]

Select this setting to have the watermark printed in the center of the paper.

(2) Size

Use this setting to adjust the size of the characters of the currently selected watermark.

Any number from 6 points to 300 points can be selected.

Default setting: 200 (points)

(3) Angle

Use this setting to adjust the angle of the text of the currently selected watermark.

Select any angle from -90° to 90°.

Default setting: 45°

(4) Watermark

Select a watermark from the watermarks that appear in the box.

Default setting: None

[Add]

Click this button to create a custom watermark.

[Update]

Click this button to adjust the size or angle of the text of a stored watermark.

[Delete]

Click this button to delete a stored watermark.

(5) Text

When you wish to create a custom watermark, enter the text of the watermark here. Up to 100 characters can be entered. To store the entered text as a watermark, click the [Add] button explained in (4) above.

(6) Gray Scale

Use this setting to adjust the color of the font of the currently selected watermark.

Any value from 0 to 255 points can be selected.

Default setting: 192

(7) Edit Fonts

Use this setting to select the font of the currently selected watermark.

(8) Transparent Text

Select this checkbox when you wish to have the characters of the watermark printed faintly in the background of the text.

Default setting: Selected

(9) On First Page Only

Select this checkbox when you want to have a watermark printed on only the first page of a print job.

Default setting: Not selected

(10)As Outline Only

Select this checkbox when you want to print only the outline of the characters of a watermark.

Default setting: Not selected

This setting cannot be selected when setting (8) is selected.

2-15

CHAPTER 3

WEB PAGES IN THE PRINTER

This chapter explains various functions that allow you to access the Web pages in the printer from your computer.

REMOTE OPERATION VIA A NETWORK

You can use a Web browser such as Netscape Navigator or Internet Explorer on your computer to access the Web page in the machine and configure settings.

The Web pages include both pages for users and pages for the administrator. In the user Web pages, users can monitor the machine, and directly print a file specified on a computer.

In the administrator Web pages, the administrator can configure the machine's e-mail settings, settings for print by e-mail, and passwords. Only the administrator is allowed to configure these settings.

How to access the Web page and view Help

Follow these steps to access the Web page. To view explanations of the function settings that can be configured remotely via the network using the machine's Web page, click the "General" button or the "Document Filing" button in Help in the menu frame.

1 **Start your Web browser on your computer.**

- Recommended Web browser
  Internet Explorer: 5.5 or higher (Windows),
                         5.1 or higher (Macintosh)
  Netscape Navigator: 6.0   or   higher   (or
                      equivalent)

2 **In the Address box in your Web browser, enter the IP address that is programmed in the machine.**
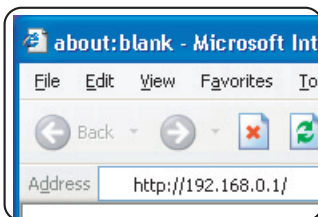
To check the IP address, see page 5-7.

When the connection is completed, the Web page will appear in your Web browser.(page 3-3)

3 **Click the "General" button or the "Document Filing" button in Help in the menu frame.**
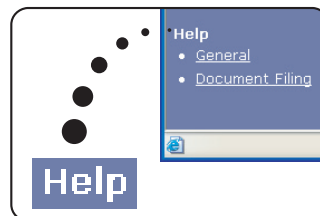
The Help page provides detailed explanations of the settings.

4 **Close the Help page**

In the menu frame, select a setting that you wish to configure.
When you have finished using the Web page, click the ☒ (close) button in the top right corner of the page.

ABOUT THE WEB PAGES (FOR USERS)

When you access the user Web pages in the machine, the following page will appear in your browser.
A menu frame appears on the left side of the page. When you click an item in the menu, a screen appears in the right frame that allows you to configure settings for that item.
When you have finished configuring settings, be sure to click [Submit] to save them. For explanations of the settings, click [General] under [Help] in the menu frame.
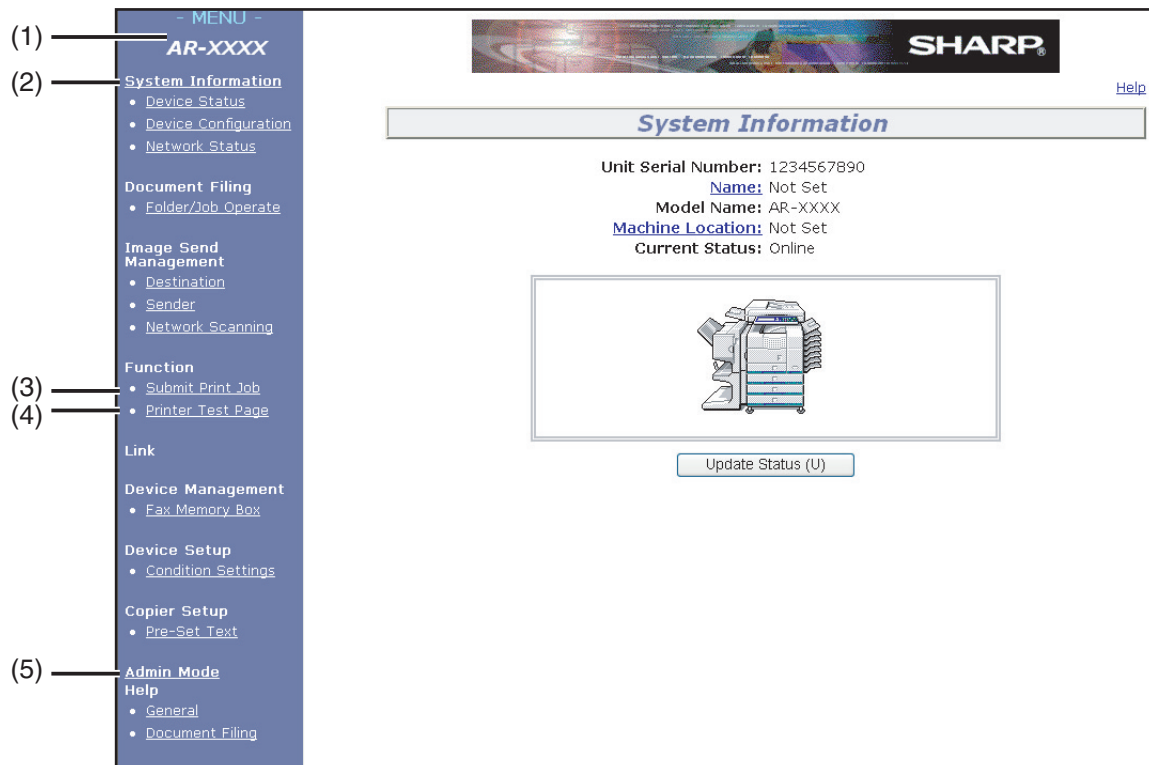
(1) Menu frame

Click a setting in the menu to configure it.

(2) System Information

Shows the current status of the machine and model name.

- Device Status

  Shows the current status of the machine, paper trays, output trays, toner and other supplies, and page counts.

  Out of paper and other warnings appear in red.

- Device Configuration

  Shows what options are installed.

- Network Status

  Shows the network status. Information on "General", "TCP/IP", "NetWare", "AppleTalk", and "NetBEUI" is shown on the respective pages.

(3) Submit Print Job

A file on a computer can be printed out.

Directly printing a file on a computer (page 3-4)

(4) Printer Test Page

The "Printer Settings List", which shows printer condition settings and key operator settings, and various font lists can be printed.

(5) Admin Mode

To open the Web pages for the administrator, click here and then enter the administrator's user name and password.

ABOUT THE WEB PAGES (FOR THE ADMINISTRATOR) (page 3-5)

Protecting information programmed in the Web page ([Passwords]) (page 3-6)

Directly printing a file on a computer

The address of a file that can be accessed from your computer can be specified to directly print the file without using the printer driver.
In addition to files on your computer, files on any other computer on the same network that can be accessed from your computer can be printed in this way.

To directly print a file on a computer, follow these steps:

1 Click [Submit Print Job] in the link menu of the menu frame.

The "Submit Print Job" page appears.

2 Select print settings in [Job Detail].

The settings are described in the table below.

3 Enter the address of the file that you wish to print in [Enter Filename].

You can also click [Browse] to browse for the file.

4 Click [Print].

Printing begins.
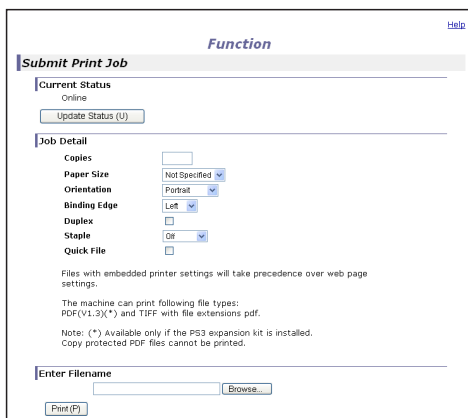
NOTE
* Only PDF and TIFF files can be printed.
* To print PDF files, the optional PS3 expansion kit must be installed. Encrypted PDF files cannot be printed.

Advanced job settings

Item	Description	Factory default setting
Copies	Set the number of copies from 1 to 999.	1
Paper Size	Select the size of paper to be used for printing.	Not Specified
Orientation	Select the printing orientation. (Portrait / Landscape)	Portrait
Binding Edge	Select the binding position for two-sided printing. (Left / Top / Right)	Left
Duplex	To print on both sides of the paper, select this checkbox. (Only for models that support the two-sided printing.)	Not selected
Staple	Select a staple setting. (Off / 1 Staple / 2 Staples)	Off
Account Number	When "AUDITING MODE" is enabled in the key operator programs, enter your 5-digit account number.	-
Quick File	To save a job using Quick File of the document filing function, select this checkbox.	-

ABOUT THE WEB PAGES (FOR THE ADMINISTRATOR)

In addition to the menus that appear for users, other menus that can only be used by the administrator appear in the administrator Web pages.

A menu frame appears on the left side of the page. When you click an item in the menu, a screen appears in the right frame that allows you to configure settings for that item. Settings that can only be configured by the administrator are explained here.
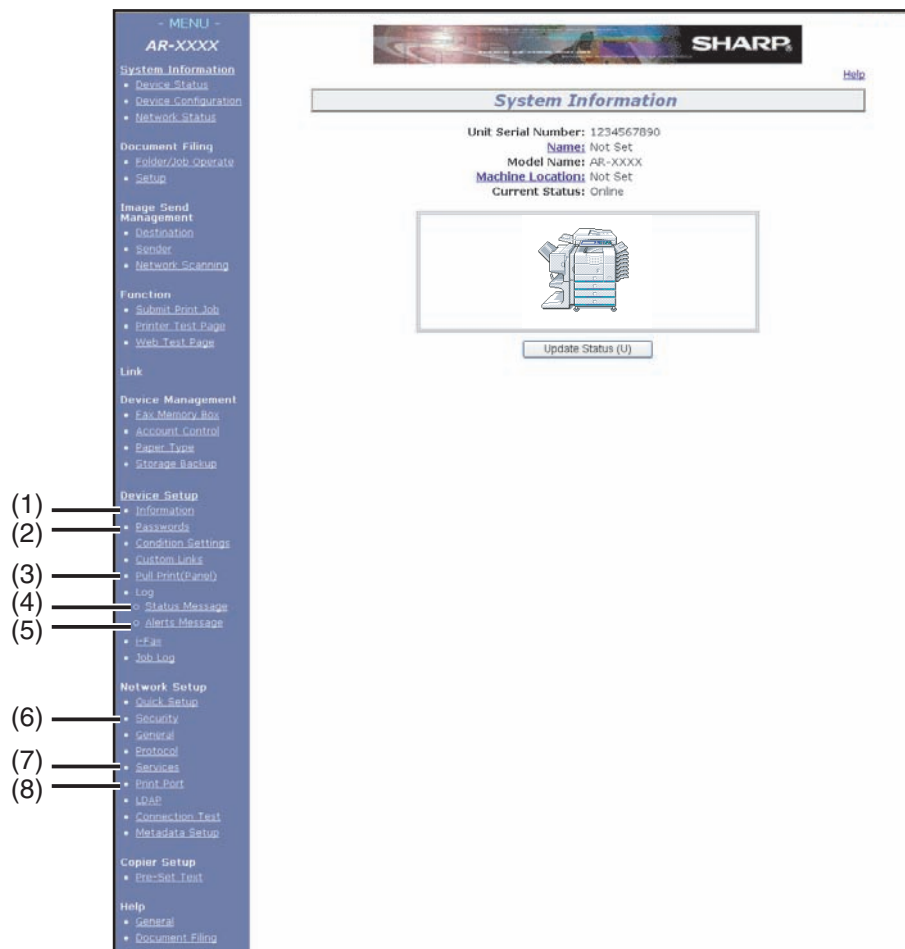
(1) Information

Configure machine identification information for the status & alert E-mail function.
(page 3-10)

(2) Passwords

Passwords can be established to allow the system administrator to protect the Web site.
Enter the passwords that you wish to establish and click the [Submit] button.
There are two types of password authentication: one for users and one for administrators.
(page 3-6)

(3) Pull print (Panel)

The machine has a direct print function that lets you print a PDF file or TIFF file from the operation panel without using the printer driver. This screen is used to enter the FTP servers that store the files. Up to four FTP servers can be entered.
(page 3-7)

(4) Status Message

Use this to set up a schedule for sending specified count information such as the total count and the output counts for the printer and copy functions. The e-mail addresses of the recipients and the schedule must be entered.
(page 3-11)

(5) Alerts Message

This is used to send information on error conditions such as when the machine runs out of paper or toner, or a misfeed or failure occurs. The e-mail addresses of the recipients of the information must be entered.
(page 3-11)

(6) Security

Unused ports can be disabled for greater security and port numbers can be changed.

(7) Services

Configure information concerning the e-mail system.
(page 3-10)

(8) Print Port

This is used to configure settings for E-mail print.
(page 3-9)

Protecting information programmed in the Web page ([Passwords])

Passwords can be set (click [Passwords] in the menu frame) to restrict Web page access and protect settings. The administrator must change the password from the factory default setting. The administrator must also take care to remember the new password. The next time the Web pages are accessed, the new password must be entered.
A password can be set for the administrator and a password can be set for users.

1 Click [Passwords] in the menu frame.

Device Setup
- Information
- Passwords
- Condition Settings
- Custom Links
- Pull Print(Panel)
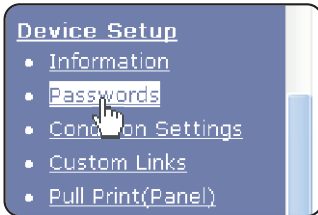
2 Enter the current password in "Admin Password".

When establishing a password for the first time, enter "Sharp" in "Admin Password".

CAUTION
Be sure to enter "S" in upper case and "harp" in lower case (passwords are case sensitive).

3 Enter passwords in "User Password" and "Admin Password".
- A maximum of 7 characters and/or numbers can be entered for each password (passwords are case sensitive).
- Be sure to enter the same password in "Confirm Password" as you did in "New Password".

4 When you have finished entering all items, click [Submit].

The entered password is stored.

After setting the password, turn the machine power off and then back on.

When prompted to enter a password, a user should enter "user" and an administrator should enter "admin" in "User Name". In "Password", the respective password for the entered user name should be entered.
For more information, click [Help] in the upper right-hand corner of the window.

Directly printing a file on an FTP server

A FTP server can be stored in the machine to enable direct printing of a file on the FTP server from the operation panel of the machine without using the printer driver.

Files with the extensions pcl, ps*, pdf*, tiff, tif, and prn can be printed.

*The PS3 expansion kit is required. (Encrypted PDF files cannot be printed, with the exception of files encrypted with a null password.)

■ Storing an FTP server

To directly print a file on an FTP server, the FTP server must be stored.
Follow these steps:

1 **Click [Pull Print (Panel)] in the link menu of the menu frame.**

The "Pull Print (Panel)" page appears.

2 **Store the FTP server information in [FTP Server Setup].**

For detailed information, click the [Help] button in the upper right-hand corner of the window.

3 **Enter the FTP server information.**

For detailed information, click the [Help] button in the upper right-hand corner of the window.

4 **Click [submit] to store the entered information.**
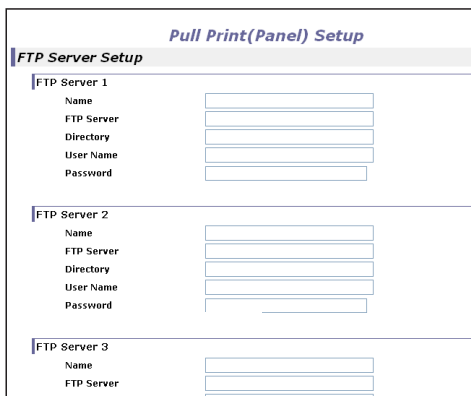
■ Printing a file on an FTP server from the operation panel of the machine

1 **Press the [DOCUMENT FILING] key twice to display the global access screen.**

2 **Touch the [FTP] key.**

This screen will not appear if an FTP server has not been stored.

3 **Select the desired FTP server.**

3-7

4 **Select the desired file or folder name.**

```
PPD1_FTP_server                              ⬆

    FILE OR FOLDER NAME                ▲
                                              1/2
  🗀 Data base                                ⬆

  🗀 User_area
                                              ⬇
  🗎 Product_info.tiff

  🗎 Reply.pdf
```
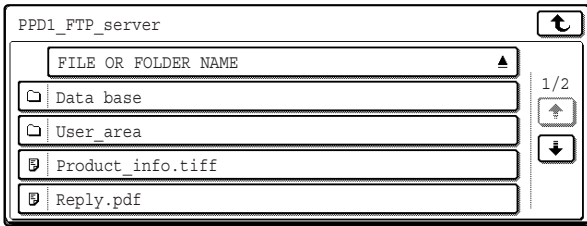
If the file or folder does not appear in the screen, press the ⬆ or ⬇ key until it appears.

To return to the global access screen, touch the ⬆ key.

When a file name (🗎) is touched, the print screen appears (step 5).

When a folder (🗀) is touched, all files in the folder appear. Touch the desired file. At this time, ⬆ and ⬆ appear in the upper right of the screen.

Touch ⬆ to move up to the preceding folder.
Touch ⬆ to move up to the root folder.

To change the order of display, touch "FILE OR FOLDER NAME".

5 **Select print settings in the print screen.**

```
PRINT                              CANCEL

Basic specifications

 AUTO A4        OUTPUT       NUMBER OF PRINTS
 PAPER SELECT
                2-SIDED          1 (1~999)
 QUICK FILE
                TANDEM PRINT    ▼   ▲
                                          PRINT
```
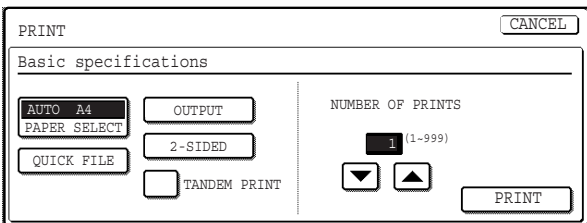
Print settings can be changed in this screen before printing. For more information on the print settings, see page 7-16 of the operation manual (for general information and copier operation).

The image printed here can be saved in the quick file folder by touching the [QUICK FILE] key.

6 **Touch the [PRINT] key.**

Printing begins. When printing finishes, you will return to the screen of step 4.

3-8

E-mail Print

When an e-mail account is set up for the machine, this function is used to have the machine periodically check the mail server and automatically print attachments to e-mails it receives without the need for the printer driver.

■ Configuring E-mail print settings

To use E-mail Print, the machine's e-mail account information must be configured in the machine. Follow these steps:

1 **Click [Print Port] in the link menu of the menu frame.**

The "Print Port Setup" page appears.

2 **Click [E-mail Print].**
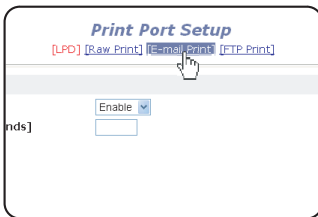
3 **Enter the E-mail print information.**

For detailed information, click the [Help] button in the upper right-hand corner of the window.

4 **Click [Submit] and store the entered information.**

■ Using E-mail Print

In the "To:" line of your e-mail program, enter the e-mail address of the machine, attach the file that you wish to print, and send the e-mail
Files with the extensions pcl, ps*, pdf*, tiff, and tif can be printed.
*The optional PS3 extension kit is required.
The number of copies and other settings can be specified by entering control commands in the message of the e-mail. The following control commands can be entered:

Function	Command	Values	Example
Number of copies	COPIES	1-999	COPIES=2
Staple	JOBSTAPLE	STAPLENO, STAPLELEFT	JOBSTAPLE=STAPLENO
Two-sided printing	DUPLEX	OFF, TOP, LEFT, RIGHT	DUPLEX=TOP
Account number	ACCOUNTNUMBER	5-digit number	ACCOUNTNUMBER=11111
File type	LANGUAGE	PCL, PCLXL, POSTSCRIPT, PDF, TIFF	LANGUAGE=TIFF
Paper	PAPER	Useable paper type (LETTER, A4, etc.)	PAPER=LETTER, PAPER=A4
Quick File	QUICKFILE	OFF, ON	QUICKFILE=ON

NOTES
● Specify "Text" for the format of the e-mail message. If rich text format (HTML) is used, the entered commands will be disregarded.
● To receive a list of the control commands, send an e-mail with "config" entered in the message.
● If nothing is entered in the message, printing will take place according to the settings in "PRINTER CONDITION SETTINGS" in the "PRINTER DEFAULT SETTINGS" menu of the user settings.
● Encrypted PDF files cannot be printed, with the exception of files encrypted with a null password.
● Only specify a file type when specifying a page description language. Normally a file type does not need to be specified.

E-mail Status and E-mail Alert settings

These functions send information on machine use (print count, copy count, etc.) and error conditions (paper misfeed, out of paper, out of toner, etc.) via e-mail to the administrator of the machine or the dealer.

■ Information setup

Machine identification information for the status and alert e-mail functions is configured in the "Information Setup" screen. The entered information will be included in status and alert e-mail messages.

1 In the menu frame, click [Information].

The "Information Setup" screen will appear.

2 Enter the machine information.

For detailed information, click the [Help] button in the upper right-hand corner of the window.

3 Click [Submit] to store the entered information.

■ SMTP setup

The status and alert e-mail functions use SMTP (Simple Mail Transport Protocol) to send e-mail. The following procedure is used to set up the e-mail environment. This must be done by the system administrator or other person familiar with the network.

1 Click [Services] in the menu frame.

The "Services Setup" screen will appear.

2 Click [SMTP].
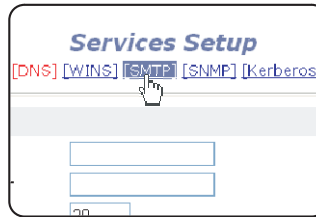
3 Enter the information required to set up the e-mail environment.

For detailed information, click the [Help] button in the upper right-hand corner of the window.

4 Click [Submit] to store the entered information.

■ Status message setup

Use the status message function to send the current counter information, including the copy count, print count, and total output count, based on the specified schedule. The destinations can be set for administrators and dealers respectively.

To set up the status message, follow these steps.

1 Click [Status Message] in the menu frame.

The "Status Message Setup" screen will appear.

- Condition Settings
- Custom Links
- Pull Print(Panel)
- Log
  - Status Message
  - Alerts Message

2 Enter the required information, including the destination addresses and time schedule.

For detailed information, click the [Help] button in the upper right-hand corner of the window.

Status Message Setup
[Standard] [Advanced]

E-mail Status Message List 1
E-mail Address

☐ Send by Schedule 1   ☐ Send by Schedule 2
Send Now (1)
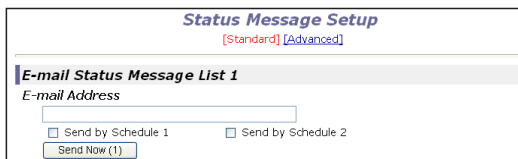
3 Click [Submit] to store the entered information.

When the E-mail Status settings are completed, printer count information will be sent periodically by e-mail to the specified e-mail addresses.

NOTE
If you quit the browser before clicking [Submit], the settings will be canceled. To send printer information immediately to the specified e-mail addresses, click [Send Now].

■ Alerts message setup

Use the alert message function to send alert information, such as empty toner and paper and trouble including paper misfeeds, to specified destinations when such problems occur. The destinations can be set for administrators and dealers respectively.

To set up the alert message, follow the procedure below.

1 Click [Alerts Message] in the menu frame.

The "Alerts Message Setup" screen will appear.

- Custom Links
- Pull Print(Panel)
- Log
  - Status Message
  - Alerts Message
- i-Fax

2 Enter the destination addresses.

For detailed information, click the [Help] button in the upper right-hand corner of the window.

Alerts Message Setup

E-mail Alert Message List 1
E-mail Address

E-mail Alert Message List 2
E-mail Address
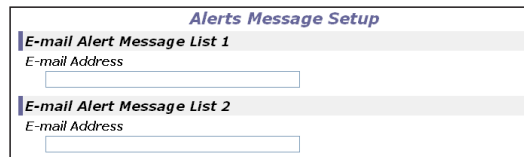
3 Click [Submit] to store the entered information.

If these parameters are set, event information for the printer will be transmitted to the specified addresses via E-mail each time a specified event occurs. The meaning of each event item is shown below.

Example:
Paper Jam: A paper misfeed has occurred.
Toner Low: Toner is low.
Toner Empty: Toner must be added.
Paper Empty: Paper must be loaded.

NOTE
If you quit the browser before clicking [Submit], the settings will be canceled.

CHAPTER 4

PRINTER BASIC SETTINGS

This chapter describes the printer configuration settings.

MAKING CONFIGURATION SETTING

The printer configuration setting allows basic printer settings to be made. The items set with the printer configuration settings are shown below.

● Printer default settings ....Basic settings used in printing (See page 4-4.)
● PCL settings ....Sets a PCL symbol set. (See page 4-5.)
● PostScript settings* ....Sets whether a PostScript error page is printed or not when a PostScript error has occurred. (See page 4-5.)

* An optional PS3 expansion kit is needed.

Operation procedure common to all printer configuration settings (items that can be set from the operation panel)

1 **Press the [CUSTOM SETTINGS] key.**
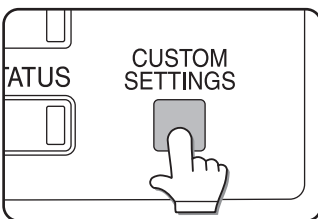
The custom setting menu screen will appear.

2 **Touch the [PRINTER CONDITION] key on the custom setting menu screen to display the printer condition setting menu screen.**
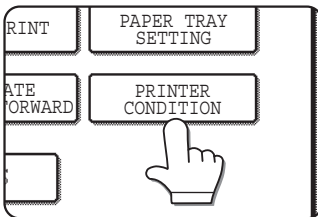
3 **Touch the key of the desired item to display its setting screen.**

```
CUSTOM SETTINGS
PRINTER CONDITION SETTINGS                    OK

        PRINTER DEFAULT SETTINGS      PCL SETTINGS

        PostScript SETTINGS
```
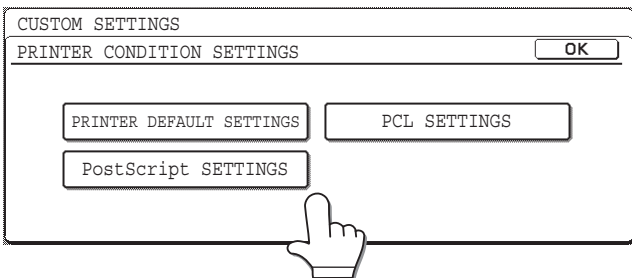
Detailed descriptions for configuration settings start on the page 4-4.

4 **Touch the desired setting item on the screen and touch the [OK] key.**

```
CUSTOM SETTINGS
PRINTER DEFAULT SETTINGS                      OK

        COPIES                  1

        ORIENTATION             PORTRAIT

        DEFAULT PAPER SIZE      A4
```
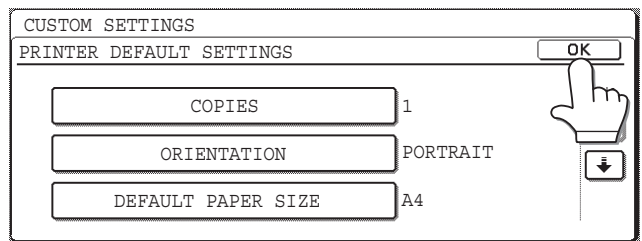
To set another item, repeat steps 3 and 4.

5 **To finish the setting operation, touch the [EXIT] key.**
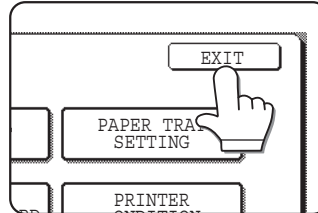
Supplementary explanation of key operation for configuration setting
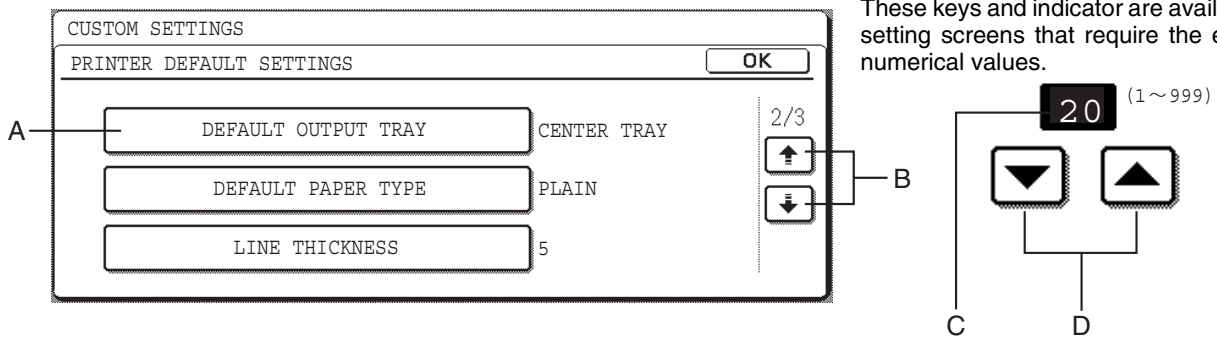
These keys and indicator are available on setting screens that require the entry of numerical values.

```
CUSTOM SETTINGS
PRINTER DEFAULT SETTINGS                        OK

   DEFAULT OUTPUT TRAY        CENTER TRAY    2/3

   DEFAULT PAPER TYPE         PLAIN

   LINE THICKNESS             5
```

A   The name of the program category or particular item to be set will appear on the touch key. A touch of the key will select the item displayed.
B   If the settings continue on the following screen(s), touch the ⬆ and ⬇ keys to move back and forth through the screens. To return to the category selection screen, touch the [OK] key.
C   The currently set numerical value is displayed.
D   Numerical values can be set by touching the ▼ and ▲ keys.

Printer Default settings

The default settings are used to set specific print conditions for printing in an environment where the print driver is not used (such as printing from MS-DOS or from a computer that does not have the provided print driver installed).

NOTE

When the printer driver is used for printing and the printer driver settings conflict with the printer default settings, the printer driver settings take precedence. For items that can be set in the printer driver, perform the settings in the printer driver.

The following settings are available:

■ Copies

COPIES sets the number of print to make.

Default setting: 1

The number of copies can be set from 1 to 999.

■ Orientation

ORIENTATION allows portrait orientation or landscape orientation to be selected for printing.

Default setting: PORTRAIT

PORTRAIT or LANDSCAPE can be set.

■ Default paper size

The paper size to be used for printing under normal conditions is set.
Printing will be performed on the specified size of paper unless otherwise specified.

Default setting: 8-1/2 x 11 or A4

11X17, 8-1/2X14, 8-1/2X13, 8-1/2X11, 7-1/4X10-1/2, 5-1/2X8-1/2, A3, B4, A4, B5 or A5 can be set.

■ Default output tray

The output tray to be used for printing under normal conditions is set. Printed sheets will be output to the specified tray unless otherwise specified by application software.

Default setting: CENTER TRAY

The trays that can be selected depend on installation of peripheral devices.

■ Default paper type

The paper type to be used for printing under normal conditions is set. Printing will be performed on the specified type of paper unless otherwise specified.

Default setting: PLAIN

PLAIN, PRE-PRINTED, RECYCLED, LETTER HEAD, PRE-PUNCHED or COLOR can be set.

■ 2-SIDED PRINT

Printing mode, 1-SIDED or 2-SIDED, to be used for printing in the normal condition is set.

Default setting: 1-SIDED

1-SIDED, 2-SIDED (BOOK) or 2-SIDED (TABLET) can be set.

■ Smoothing

SMOOTHING reduces jaggies seen at roundish curved portions of characters and images to be printed and improves pseudo resolution.

Default setting: Off

Smoothing on or off can be selected.

■ Line thickness

This setting is used to adjust the line width of vector graphics. For example, if you desire a finer line, select a value from 0 to 4. If you desire a thicker line, select a value from 6 to 9. To return to the standard line thickness, select 5. Use this setting for special applications such as CAD when lines do not appear with sufficient clarity. For regular applications, there is usually no need to change the setting.

Default setting: 5

The relation between the setting values and the change of line thickness are as follows.

Value	0	1	2	3	4	5	6	7	8	9
Thickness change	1dot [*1]	50%	75%	90%	95%	100%	105%	110%	125%	150%

*1 All lines are 1-dot lines.

PCL settings

■ PCL symbol set setting

This setting is used to select which country's characters are used for certain of the symbols in the character code table of the PCL symbol set. (Use this setting when you need to select symbols that differ by country.)

Default setting: "3" (PC-8)

See page 7-4 for the symbol set settings.
You can also print the "PCL SYMBOL SET LIST" in "LIST PRINT" (see page 2-15 of "Operation manual (for general information and copier operation)") for a table that shows correspondences between numeric values and symbol sets.

■ PCL font setting

This setting is used to select the font for printing.

Default setting: "0" (Courier) (resident font)

If the optional extended font kit is installed, you can also select from these fonts. In addition, the "PCL INTERNAL FONT LIST" in "PRINTER TEST PAGE" of "LIST PRINT" (see page 2-13 of "Operation manual (for general information and copier operation)") can be printed.

When the optional extended font kit is installed, the "PCL EXTENDED FONT LIST" can be printed.

■ PCL LINE FEED CODE

This setting is used to select how the printer responds when a line break command is received.

Default setting: 0.CR=CR; LF=LF; FF=FF

■ WIDE A4

When this setting is enabled, up to 80 characters can be printed on one line of A4 size paper using 10 CPI font (8 bit characters). When disabled, up to 78 characters can be printed.
Default setting: Disabled

PostScript settings

This setting specifies whether an error page describing the cause of an error is printed or not when a PostScript error has occurred.
Selections are available to choose printing or not printing of error pages.

Default setting: Not print

CHAPTER 5

KEY OPERATOR PROGRAMS

This chapter explains the key operator programs for the printer function. Key operators should read this chapter to ensure correct use of the key operator programs.

KEY OPERATOR PROGRAMS

Key operator programs related to the printer function are explained here. For key operator programs for general use of the machine, see the key operator's guide.

NOTE
The key operator programs that can be accessed depend upon how the product is configured with optional equipment.

Key operator program list

Procedure for using key operator programs

The procedure for configuring a key operator program is explained below.

1 **Press the [CUSTOM SETTINGS] key.**
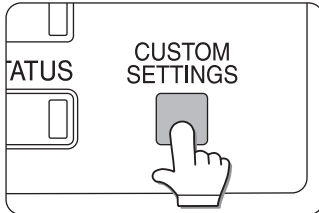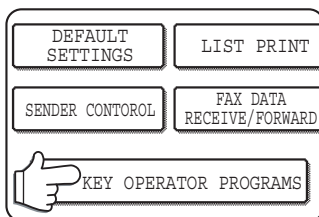
CUSTOM
SETTINGS
ATUS

2 **Touch the [KEY OPERATOR PROGRAMS] key.**

| DEFAULT SETTINGS | LIST PRINT |
| SENDER CONTOROL | FAX DATA RECEIVE/FORWARD |

☞ KEY OPERATOR PROGRAMS

3 **Use the numeric keys to enter the five-digit key operator code number.**

KEY OPERATOR CODE

＊＊＊――

The factory default setting for the key operator code is indicated on page 2 of the key operator's guide.

4 **Touch the [PRINTER SETTINGS] key.**

PRINTER
SETTINGS

KEY O▯▯ATOR
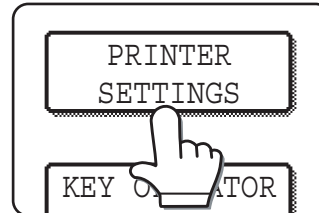
Follow these steps to select the program that you wish to use.

In the following steps, the setting screens for the selected program will appear. Refer to the program explanations on page 5-5 and following, and then follow these steps to select a setting for the program.

5 **Make desired settings for the selected program.**

Select the desired program from the programs shown on page 5-2.

Detailed descriptions for program settings start on the next page.

6 **Press the [CA] key to exit the program.**
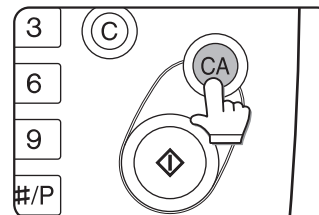
3 C
6
9
#/P
CA

Supplementary explanation of key operation for key operator programs

These keys and indicator are available on setting screens that require the entry of numerical values.

KEY OPERATOR PROGRAMS
INTERFACE SETTINGS   OK

| HEXADECIMAL DUMP MODE | I/O TIMEOUT | 20 | 1/2 |
A ☑ ENABLE PARALLEL PORT | PARALLEL PORT EMULATION SWITCHING | AUTO |
☑ ENABLE USB PORT | USB PORT EMULATION SWITCHING | AUTO |

B

20 (1～999)

▼ ▲
D   E
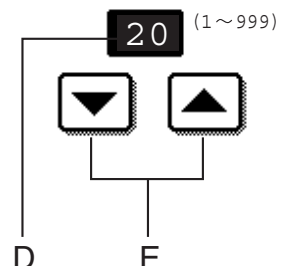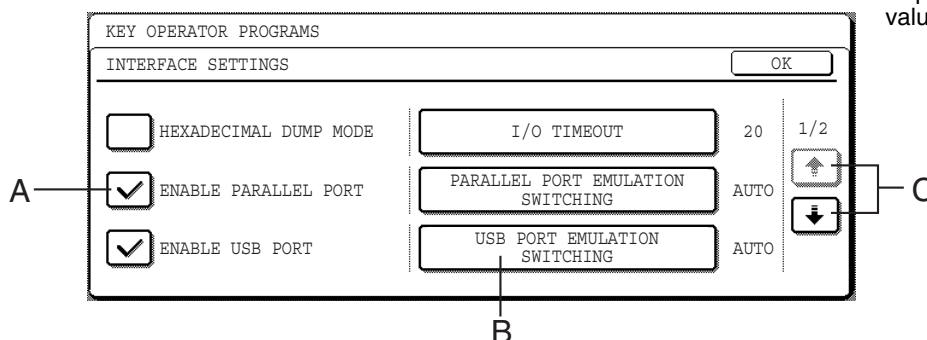
A Check mark boxes are touch keys that show the status of selections. A box with a check mark means the function is "on" (enabled) and an unchecked box means the function is "off" (disabled). Alternate touches of a box will change the on/off status.
B The name of the program category or particular item to be set will appear on the touch key. A touch of the key will select the item displayed.
C If the settings continue on the following screen (s), touch the ⬆ and ⬇ keys to move back and forth through the screens. To return to the category selection screen, touch the [OK] key.
D The currently set numerical value is displayed.
E Numerical values can be set by touching the ▼ and ▲ keys.

5-3

Key operator program menu

The key operator programs are accessed via the following menu structure.
Refer to this menu when changing the settings explained on the following pages.

Level 1	Level 2	Level 3

Enter Key Operator Code

PRINTER SETTINGS

DEFAULT SETTINGS
- PROHIBIT NOTICE PAGE PRINTING
- PRINT DENSITY LEVEL
- PROHIBIT TEST PAGE PRINTING
- A4/LETTER SIZE AUTO CHANGE

INTERFACE SETTINGS
- HEXADECIMAL DUMP MODE
- I/O TIMEOUT
- ENABLE PARALLEL PORT
- PARALLEL PORT EMULATION SWITCHING
- ENABLE USB PORT
- USB PORT EMULATION SWITCHING
- ENABLE NETWORK PORT
- NETWORK PORT EMULATION SWITCHING
- PORT SWITCHING METHOD
- PARALLEL PORT ECP SETTING

NETWORK SETTINGS
- IP ADDRESS SETTING
- ENABLE TCP/IP
- ENABLE NetWare
- ENABLE EtherTalk
- ENABLE NetBEUI
- RESET THE NIC
- TANDEM SETTING
- PING COMMAND

● For information on the following settings, see the indicated manuals.

- General settings/copy settings/document filing settings → Key operator's guide
- Image send settings → Operation manual (for facsimile) and Operation manual (for network scanner)

DESCRIPTION OF SETTING PROGRAMS

The key operator programs related to the printer function are explained here.

Printer settings

Default settings
These programs are used to adjust the settings of various printer functions.

Prohibit notice page printing
This program is used to disable notice page printing.
Turn on this program when you do not want the machine to print the notice page explained in "NOTICE PAGE PRINTING" on .
Normally this program is set to not print a notice page.

Print density level
This program is used to adjust the lightness or darkness of prints.
Five levels are provided for density adjustment. These are represented by numbers displayed on the touch panel. Among the displayed numbers, a smaller value indicates lighter density and a larger value indicates a darker density.

Prohibit test page printing
This program is used to disable test page printing.
When the program is turned on, the PRINTER TEST PAGE in the custom settings cannot be printed. (See page 2-15 of "Operation manual (for general information and copier operation)")

A4/letter size auto change
If this program is set, and printing onto A4 size paper is selected but not available, the printer will automatically substitute 8-1/2" x 11" size paper in place of A4 paper if 8-1/2" x 11" paper is available.
* A4 paper cannot be automatically selected in place of 8-1/2" x 11".

NOTE
When A4 size is specified for a document attached to an E-mail that has been transmitted from a foreign country and A4 size paper is not installed in the printer, printing cannot be done without operator intervention. If this program is set, printing will be executed without intervention if a paper tray is loaded with 8-1/2" x 11" paper.

Interface settings
These programs are used to control data transmitted to the parallel port, USB port or network port of this printer.

Hexadecimal dump mode
This program is used to output the print data from a computer in the hexadecimal dump format with corresponding characters (ASCII). This program is used to check proper transmission of print data from the computer to the printer.

Output example of hexadecimal dump mode

I/O timeout
This program is used to set the length of time to wait for an I/O to complete a job on the parallel port or the network port. If the data stream to the port does not transmit data for a length of time exceeding the timeout, the job will cancel and the next job will start processing.
The I/O timeout setting is used to set the amount of time after which an I/O timeout will occur when waiting for print data.
Default setting: 20 seconds

NOTE
The allowable range of the time is 1 to 999 seconds.

Enable parallel port

This program is used to enable or disable printing from the parallel port.
Default setting: Enable

Parallel port emulation switching

This program is used to specify a printer language to emulate when the printer is connected to a computer through the parallel port.

Setting items	Description
Auto	The printer language will switch automatically in accordance with the data from the computer.
PostScript	PostScript emulation is used to print the data from the computer. (An optional PS3 expansion kit is needed.)
PCL	PCL emulation is used to print the data from the computer.

NOTE
It is recommended to set "AUTO" (default setting) unless an error due to this setting occurs frequently.

Enable USB port

This program is used to enable or disable printing from the USB port.
Default setting: Enable

USB port emulation switching

If the machine is connected using the USB port, select the emulated printer language.
The setting items are the same as those of "Parallel port emulation switching".

NOTE
It is recommended to set "AUTO" (default setting) unless an error due to this setting occurs frequently.

Enable network port

This program is used to enable or disable printing from the network port.
Default setting: Enable

Network port emulation switching

This program is used to specify a printer language to emulate when the printer is connected to a computer through the network port.
The setting items are the same as those of "Parallel port emulation switching".

NOTE
It is recommended to set "AUTO" (default setting) unless an error due to this setting occurs frequently.

Port switching method

The machine can use the three ports shown below for printing. This program is used to select when switching between ports will take place. "SWITCH AT END OF JOB" or "SWITCH AFTER I/O TIMEOUT" can be selected. When "SWITCH AT END OF JOB" is selected, the port will be automatically selected after each print job is completed. When "SWITCH AFTER I/O TIMEOUT" is selected, the port will be automatically selected if the time set in the I/O Timeout program elapses.

● Parallel port
● USB port
● Network port

Parallel port ECP setting

This is used to enable bi-directional communication through the Centronix interface.
Select "Parallel port ECP setting" to enable data transmission both from the computer to the printer and from the printer to the computer.
Normally ECP mode is not selected.

Network settings

These programs are set when this product is used as a network printer.

After you complete the setting for one program, you must exit the key operator programs, turn off the main switch, wait briefly, and then turn on the main switch again before any other programs can be set. The program that was set will be effective after the power is turned on.

NOTE

For setting and modification of "Network settings", be sure to consult with the network administrator.

IP address setting

When using this product in a network that uses the TCP/IP protocol, use this program to set the IP address (IP address, IP subnet mask, and IP gateway) of this product. The program is set to ENABLE DHCP by factory default setting, which obtains the IP address setting automatically. When using this product on a TCP/IP network, be sure to turn on the "Enable TCP/IP" program below.

If DHCP is used, the IP address assigned to the machine may be changed automatically on occasion. If this happens, printing will not be possible.

Enable TCP/IP

When using this product in a network that uses the TCP/IP protocol, set this program. Also set the IP address using the program "IP address setting" above.
Default setting: Enable

Enable NetWare

When using this product in a network that uses the NetWare protocol, set this program.
Default setting: Enable

Enable EtherTalk

When using this product in a network that uses the EtherTalk protocol, set this program.
Default setting: Enable

Enable NetBEUI

When using this product in a network that uses the NetBEUI protocol, set this program.
Default setting: Enable

Reset the NIC

This program is used to reset all setting items of NIC (Network Interface Card) of this product to the factory default settings.

NOTE

If any of the [NETWORK SETTINGS] were changed prior to execution of this program, you must turn off the power switch after exiting the key operator program, wait briefly, and then turn on the power switch to make the factory default settings take effect.

Tandem setting

This setting is used to configure the IP address and port number of the client printer when you wish to have two machines (which are used as TCP/IP network printers) print in tandem.

Tandem printing is not possible if the other machine is a different model than your machine.

The factory default setting for the port number is [50001]. Unless you experience difficulty with this setting, it does not need to be changed.

The tandem function can also be prohibited, or the reception of tandem data from the other machine can be prohibited. (Normally this is not necessary.)

To prohibit the tandem function, select "DISABLING OF MASTER MACHINE MODE".

To prohibit reception of tandem data from the other machine, select "DISABLING OF SLAVE MACHINE MODE".

NOTE

To use the tandem function when auditing mode is enabled, the same account number must be entered on both machines. If the same account number is not entered, only the server machine may print or the printed pages may not be added to the correct account.

PING command

This program is used to check if the machine and a computer connected to the network can communicate. Enter the IP address of the computer that you wish to check and touch the [START] key. A message will appear indicating whether or not there was a response from the computer.

CHAPTER 6

TROUBLESHOOTING

This chapter provides solutions to problems you may encounter when using the machine. Be sure to read this chapter whenever you encounter a problem.

TROUBLESHOOTING

The following problems may not be due to a machine failure, so please check again before calling for service. In the event that service is required, turn off the machine main power switch and power switch, unplug the power plug from the outlet. Problems related to the printer function are described in this chapter. For troubleshooting related to general machine use, the copier function, document filing function or the network scanner function, please read "Troubleshooting" in the corresponding manuals.

Problem	Check	Solution or cause
Printer is on but data is not received.	Is the interface cable correctly connected?	Make sure the USB or parallel cable is correctly connected to the machine and your computer. For more information, consult your network administrator.
	Has the printer driver been installed correctly?	Install the appropriate printer driver. (See the "SOFTWARE SETUP GUIDE (for printer)".)
	Is the printer driver correctly selected? / Has it been configured in the network (when using as a network printer)?	Make sure that this printer is selected in the software application software or use an appropriate utility to check that the printer is registered on the network. For more information, consult your network administrator.
Data is received but not printed.	Has the specified size and type of paper been loaded?	Load paper, select another paper size or cancel printing.
Printer cannot be selected from computer.	Has the printer driver been installed correctly?	Install the appropriate printer driver. (See the "SOFTWARE SETUP GUIDE (for printer)".)
The orientation of the image is incorrect on the print.	Are the print orientation settings in the printer driver correct?	Correct the orientation in the printer driver.
The printed image is cut off.	An incorrect ratio has been selected.	Select a suitable ratio when printing.
The edges of the printed image are missing.	There are margins around the edges of the paper where printing is not possible. Does the image overlap those margins?	Change the print area.
Printer prints in reverse order.	Has reverse page order been selected in the software application?	Cancel the reverse order printing in the application software.
Printer stops in the middle of a print job.	Has the tray full sensor activated and stopped printing because too many pages are in the exit tray?	Remove the paper from the exit tray.
	Is the tray out of paper?	Load paper. (see page 2-2 of "Operation manual (for general information and copier operation)")
Printing is not on desired paper size.	Has paper selection been set to Automatic in the printer driver?	Ensure that the desired paper is set in a paper tray of the printer and select "Auto Select" in the paper selection of the printer driver.
Printer write error occurs when printing from the parallel port.	Is the timeout setting for the printer driver too short?	Set a longer time in the timeout setting in the printer driver.
Password entry is requested.	Did you enter a password for the retention function?	Password is needed when executing printing. If the password is not known, printing cannot be executed.

Problem	Check	Solution or cause
The printer driver cannot be installed.	Is there sufficient free space on your hard drive?	Delete any unneeded files and applications to increase free space on your hard drive.
	Are you using an operating system that is not supported?	Make sure your operating system is supported. (See the SOFTWARE SETUP GUIDE (for printer) that accompanied the machine.)
Two-sided printing is not possible.	Is [2-Sided (Book)] or [2-Sided (Tablet)] selected in the "Main" tab of the printer driver?	Select [2-Sided (Book)] or [2-Sided (Tablet)] (page 2-2).
	Has two-sided printing been prohibited in the key operator programs?	"Disabling of Duplex" has been enabled in the key operator programs. Consult the key operator.
Not all of the image is printed.	Are multiple applications running at once?	Quit all applications that you are not using and try printing again.
Stapling does not take place.	Has use of the staple been prohibited in the key operator programs?	"Disabling of Stapler" has been enabled in the key operator programs. Consult the key operator. The inserter does not operate (when an inserter is installed).
	Did you attempt to staple more than the maximum number of pages?	Check the maximum number of pages that can be stapled (page 2-4).
The mail-bin stacker cannot be used.	Has the mail-bin stacker been disabled in the key operator programs?	"DISABLING OF MAIL-BIN STACKER" has been enabled in the key operator programs. Consult your key operator and take action accordingly.
Punching does not take place (when a punch module is installed).	Is the "Punch" checkbox selected in the "Main" tab of the printer driver?	Select the "Punch" checkbox. (page 2-5)
	Has use of the punch module been prohibited in the key operator programs?	"Disabling of punch" has been enabled in the key operator programs. Consult the key operator.
Document filing is not possible.	Has the printer driver been set to use the document filing function?	Select the "Document Filing" checkbox in the "Job Handling" tab of the printer driver. (page 2-12)
	Do user folders created in the machine appear in "Folder Information"?	Click the "Get Folder Name" button in the document filing screen to call up the folders created in the machine. (page 2-12)
	Does the user folder have a password?	Enter the password in "Folder Pass Code" in the document filing screen. (page 2-12)

Checking the IP address

There are three ways to check the IP address:

1. **Using [LIST PRINT] in [CUSTOM SETTINGS] in the operation panel**
   Select NIC PAGE to print a list of the machine settings. The IP address that has been set for the machine can be found in this list. Follow the procedure below to check the IP address using NIC PAGE.
2. **Using the key operator programs**
   The IP address can be verified using the key operator programs. To use this procedure, consult your key operator.
3. **Using the NIC Manager utility in the Software CD-ROM (2)**
   The NIC Manager utility in the Software CD-ROM (2) can be used to check the IP address. For details, see the online manual (Print Server Card Users Manual) in the Software CD-ROM (2).

Checking the IP address from the [CUSTOM SETTINGS] screen of the operation panel

1 Press the [CUSTOM SETTINGS] key.

The custom setting menu screen will appear.

2 Touch the [LIST PRINT] key.

3 Touch the [PRINTER TEST PAGE] key.
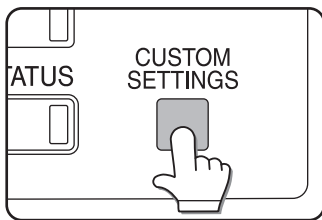
4 Touch the [NIC PAGE] key.
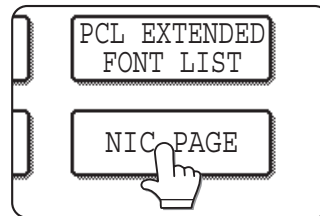
PROCESSING PRINT DATA appears in the message screen and printing begins. To cancel printing, touch the [CANCEL] key.
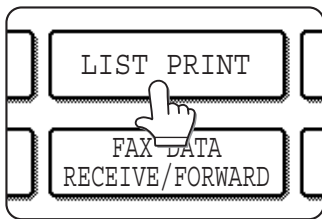
NOTE

There are a variety of different types of network environments. When using the machine in a network environment, refer to the detailed explanations in the online manual (Print Server Card Users Manual) in the Software CD-ROM (2).

CHAPTER 7

APPENDIX

This chapter contains product specifications and other technical information.

PRINTER SPECIFICATIONS

Memory capacity (standard)	Standard 128MB
DIMM slots for additional memory	One (64 MB to 256 MB memory can be mounted.)
Page description language	PCL6, PCL5e, PS3 emulation*
Resident font	For PCL: Outline fonts: 80 Barcode fonts (option): 28 Bitmap font: 1 PostScript compatible fonts (option): 136
Interface	IEEE-1284 compatible parallel interface (P1284B connector) USB1.1 (Windows98/ME/2000/XP/Server 2003) USB2.0 (Windows2000/XP/Server 2003)
LAN connection	10Base-T/100Base-TX Supported protocols: IPX/SPX, TCP/IP, EtherTalk, NetBEUI For detailed network specifications, see the manual for the print server card. (The manual is provided in PDF format in the Software CD-ROM (2).)
Operating system	IBM PC/AT or compatible computer: Windows® 95/98/Me, Windows NT® 4.0 (ServicePack5 or later), Windows® 2000 Server/Professional, Windows® XP Professional/Home Edition, Windows® Server 2003 Macintosh series*: Mac OS 8.6 to 9.2.2, 10.1.5, and 10.2 to 10.2.8 (except 10.2.2), 10.3 to 10.3.3
Continuous print speed	AR-M355N: 35 pages/min, AR-M455N: 45 pages/min (Print speed during printing of the second sheet and following sheets when using 8-1/2" x 11" (A4) plain paper and performing continuous one-sided printing of the same page; excluding use of offset output.)
Resolution	Data processing: 600 x 600 dpi Printing: 600 x 600 dpi, 1200 dpi equivalent x 600 dpi

* An optional PS3 expansion kit is needed.

Some discrepancies may exist in the illustrations and content due to improvements to the machine.

NOTICE PAGE PRINTING

A notice page will be printed when the current print job cannot be run due to a system limitation and an explanation of the limitation is too lengthy to be shown in the message display. A notice page will describe the limitation and other possible ways instead of possibilities to run the job.

Printing of the notice page is initially disabled in the key operator programs (see "PROHIBIT NOTICE PAGE PRINTING" on).

A notice page will be printed in the following cases.

- When the print data of a single job is so large that it cannot be held in memory. (When there are other jobs occupying memory, notice pages may tend to be printed more frequently even for jobs with small amounts of data.)
- When different paper sizes have been selected for printing within a print job and one or more of the sizes cannot be delivered to the selected exit tray or to the stapler compiler. In these cases printed paper will be delivered partly to the specified destination (tray or compiler) and partly to another exit tray.
- When a function is selected that has been disabled using the key operator programs, such as disabling of two-sided printing, disabling of the staple function, or disabling of a specified exit tray.
- An invalid account number is entered when the auditing mode has been set.

PRINT AREA

The print area of this product is shown below.

Approx. 11/64" (4.2mm)

Approx. 11/64" (4.2mm)*

Approx. 11/64" (4.2mm)*

Approx. 11/64" (4.2mm)

Paper size

Printable area
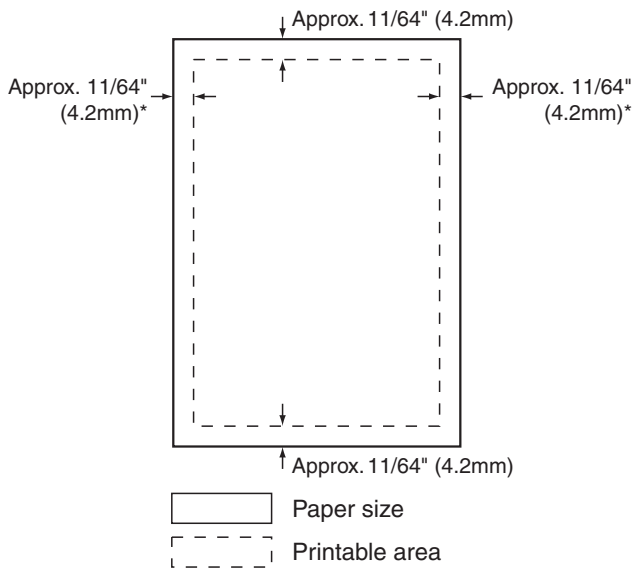
● The print area is the entire page excluding a margin of 11/64" (4.2 mm) at each edge. The actual print area may vary depending on the printer driver used and the type of software application.

PCL symbol set

No.	symbol set
1	Roman-8
2	ISO 8859-1 Latin 1
3	PC-8
4	PC-8 Danish/Norwegian
5	PC-850
6	ISO 6 ASCII
7	Legal
8	ISO 21 German
9	ISO 17 Spanish
10	ISO 69 French
11	ISO 15 Italian
12	ISO 60 Norwegian v1
13	ISO 4 United Kingdom
14	ISO 11 Swedish : names
15	PC1004 (OS/2)
16	DeskTop
17	PS Text
18	Microsoft Publishing
19	Math-8
20	PS Math

No.	symbol set
21	Pi Font
22	ISO 8859-2 Latin 2
23	ISO 8859-9 Latin 5
24	ISO 8859-10 Latin 6
25	PC-852
26	PC-775
27	PC Turkish
28	MC Text
29	Windows 3.1 Latin 1
30	Windows 3.1 Latin 2
31	Windows 3.1 Latin 5
32	Windows Baltic (not 3.1)
33	Windows 3.0 Latin 1
34	Symbol
35	Wingdings

● These symbol sets are trademarks or registered trademarks of their respective owners.

Contents   page

> The display screens, messages, and key names shown in the manual may differ from those on the actual machine due to product improvements and modifications.

PURPOSE OF THE KEY OPERATOR PROGRAMS

The key operator programs are used by the administrator of the machine to enable or disable functions to suit the needs of your workplace.

This manual explains programs related to general use of the machine, programs for the copy function, and programs for the document filing function. For programs related to the printer function, fax function, network scanner function, and internet fax function, see the following manuals:

● Printer . . . . Operation manual (for printer), chapter 5
● Fax . . . . Operation manual (for facsimile), chapter 8
● Network scanner / Internet fax . . . . Operation manual (for network scanner), page 53

Key operator programs can only be accessed after a key operator code number has been entered.

Programs for general use of the machine

These programs are used to enable auditing mode, adjust power consumption, and manage peripheral devices. Auditing mode can be enabled separately for the copy, printer, fax/Internet fax/network scanner, and document filing functions. When auditing mode is enabled for a function, a valid account number must be entered in order to use the function.

When auditing mode is enabled for the printer function, an account number is entered at the user's computer when the print command is selected. (Depending on the setting of "Cancel jobs of invalid accounts" (page 8), a job may be printed even if an incorrect account number is entered.)

* The account number is a 5-digit number, and up to 500 accounts can be created.

Programs for the copy function

These programs are used to change the factory default copy settings to settings that better suit the needs of your workplace.

When auditing mode is enabled for the copy function,

● A valid account number must be entered to make a copy.
   (Copying is not possible unless a valid account number is entered.)
● A count is kept of the number of copies made by each account. This allows you to monitor copier usage by each account. (The counts can be totaled.)
● A limit can be set for the number of copies that can be made by each account.

> **NOTE**
>
> An account number must also be entered to print a document that was saved during copying using the document filing function. (Printing is not possible unless an account number is entered.) The number of pages printed is added to the copy count.

Programs for the document filing function

These programs are used to change the factory default settings for the document function to settings that better suit the needs of your workplace.

When auditing mode is enabled for the document filing function,
- An account number must be entered to print an image that was scan-saved.
  (Printing is not possible unless an account number is entered.)
- A count is kept of the number of pages printed by each account, making it possible to monitor each account's usage of the document filing function (a document filing count is kept).
- A limit can be set for the number of scan-saved image file pages that can be printed.

Programming a key operator code

The key operator code is a 5-digit number that must be entered in order to access the key operator programs. The key operator (administrator of the machine) should change the default key operator code that was set at the factory to a new 5-digit number. Be sure to remember the new key operator code, as it must be entered each time the key operator programs are subsequently used. (Only one key operator code can be programmed.)
The key operator code is initially set to "00000" at the factory.
To change the key operator code, see "USING THE KEY OPERATOR PROGRAMS" on page 4.

KEY OPERATOR PROGRAM LIST

Programs for general use of the machine, the copy function, and the document filing function are shown in the following list.

The key operator code must be entered in order to use these programs.

> **NOTE**
> The key operator programs that can be accessed depend on the optional equipment that is installed.

● General Programs

● Programs for Copy Mode

● Document filing programs

USING THE KEY OPERATOR PROGRAMS

The procedure for configuring the key operator programs is explained below using the "Key operator code change" program as an example. Follow the same steps to configure the programs that are explained beginning on page 7.

1 Press the [CUSTOM SETTINGS] key.
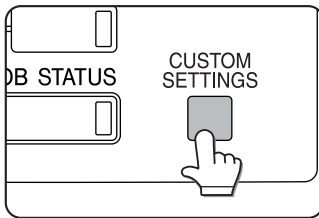
JB STATUS   CUSTOM
             SETTINGS

2 Touch the [KEY OPERATOR PROGRAMS] key.

SENDER CONTROL   FAX DATA
                  RECEIVE/FORWARD

KEY OPERATOR PROGRAMS
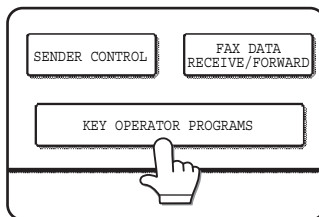
3 Use the numeric keys to enter the five-digit key operator code.

KEY OPERATOR CODE

* * * — —
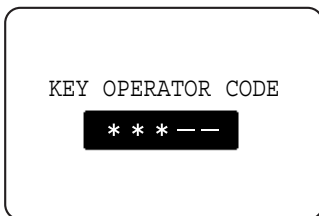
Each time a number is entered, the dashes (-) in the display will change to asterisks (✱). The factory default setting for the key operator code number is 00000.

4 Touch the [KEY OPERATOR CODE CHANGE] key .

IGS   PRINTER
       SETTINGS

KEY OPERATOR
CODE CHANGE
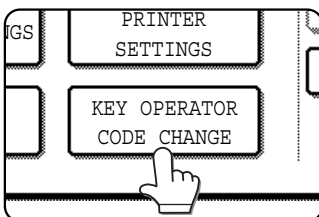
If you wish to configure a different program, select the program in this step.

A setting screen for the selected program will appear. See the explanation of the program on page 7.

5 Use the numeric keys to enter the new 5-digit key operator code.

00000 ➔ - - - - -
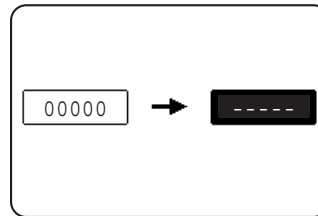
Use a number for the key operator code that has not been programmed as an account number for auditing mode (a number that has been programmed as an account number cannot be used). The entered number will be the new key operator code. Be sure to remember this number.

6 Touch the [OK] key. You will return to the screen of step 4.

OK
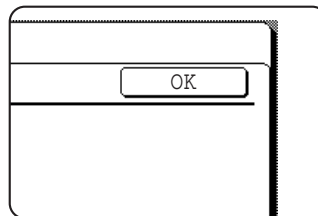
This completes the procedure for changing the key operator code. If you wish to configure another program, touch the key of the desired program in the screen of step 4.

7 Press the [CA] key to exit the program.

3 Ⓒ
6   CA
9
#/P
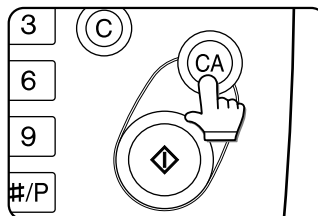
You will exit the key operator programs and return to the main screen.

4

Supplementary explanation of key operation for key operator programs

These keys and indicator are available on setting screens that require the entry of numerical values.

```
KEY OPERATOR PROGRAMS
DEVICE CONTROL                              OK

A   ORIGINAL SIZE DETECTOR SETTING    □ DISABLING OF DOCUMENT      1/3
                                        FEEDER                      ⬆

    □ DISABLING OF DUPLEX             □ DISABLING OF STAPLER        ⬇    C

B   □ DISABLING OF PUNCH             □ DISABLING OF OPTIONAL
                                        PAPER DRAWER
```

20 (1～999)

▼ ▲

D   E
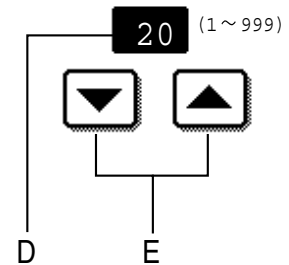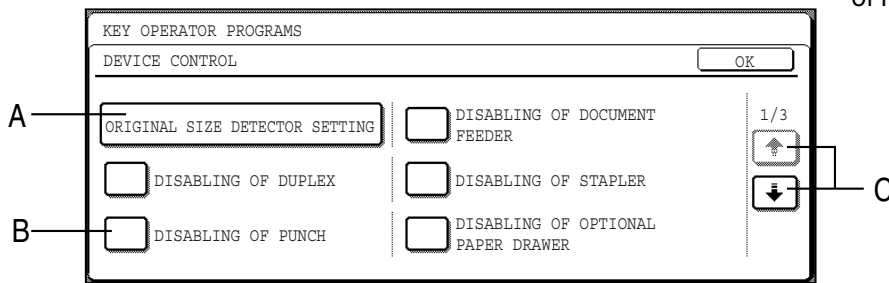
A   When a key that appears in the form ⬚ XXX ⬚ is touched, the setting screen of that key will appear.

B   When a checkbox (□) appears in front of a setting, a checkmark (☑) will appear when the checkbox is touched. This indicates that the setting is enabled. If a checkbox with a checkmark (☑) is touched, the checkmark is cleared (□) and the setting is disabled.

C   If the settings continue on the following screen(s), touch the ⬆ and ⬇ keys to move back and forth through the screens. To return to the category selection screen, touch the [OK] key.

D   The currently set numerical value is displayed.

E   Numerical values can be set by touching the ▲ and ▼ keys.

5

Key operator program menu

The key operator programs are arranged in the following menu.

Refer to this menu when enabling or disabling the settings that are explained beginning on the following page.

* Some programs contain an additional level of settings (setting screen).

Level 1	Level 2	
	Level 1	
ACCOUNT CONTROL	AUDITING MODE	ACCOUNT NUMBER CONTROL
	TOTAL PAGES PER ACCOUNT	ACCOUNT NUMBER SECURITY
	RESETTING ACCOUNT	CANCEL JOBS OF INVALID ACCOUNTS
	ACCOUNT LIMIT SETTING	
JOB LOG CONTROL	CLEAR ALL JOB LOG DATA	
ENERGY SAVE	TONER SAVE IN PRINTER MODE	AUTO POWER SHUT-OFF TIMER
	TONER SAVE IN COPY MODE	PREHEAT MODE SETTING
	AUTO POWER SHUT-OFF	
OPERATION SETTINGS	KEYS TOUCH SOUND	DISPLAY LANGUAGE SETTING
	AUTO CLEAR SETTING	KEY OPERATION SETTING
	DISABLING OF JOB PRIORITY OPERATION	DISABLING SWITCHING OF DISPLAY ORDER
	MESSAGE TIME SETTING	DISABLING OF CLOCK ADJUSTMENT
	DISABLING OF BYPASS PRINTING	
DEVICE CONTROL	ORIGINAL SIZE DETECTOR SETTING	DISABLING OF MAIL-BIN STACKER
	DISABLING OF DOCUMENT FEEDER	DISABLING OF COVERS/INSERTS MODE
	DISABLING OF DUPLEX	SADDLE STITCH POSITION ADJUST
	DISABLING OF STAPLER	HIGH SPEED STACKING
	DISABLING OF PUNCH	AUTO PAPER SELECTION SETTING
	DISABLING OF OPTIONAL PAPER DRAWER	OPTIMIZATION OF A HARD DISK
	DISABLING OF FINISHER	
LIST PRINT		
KEY OPERATOR CODE CHANGE		
PRODUCT KEY	PS3 EXPANSION KIT	E-MAIL ALERT AND STATUS
	NETWORK SCANNER EXPANSION KIT	SERIAL NUMBER
INITIALIZE AND/OR STORE SETTINGS	RESTORE FACTORY DEFAULTS	RESTORE CONFIGURATION
	STORE CURRENT CONFIGURATION	
COPY SETTINGS	INITIAL STATUS SETTINGS	ERASE WIDTH ADJUSTMENT
	EXPOSURE ADJUSTMENT	CARD SHOT SETTINGS
	ROTATION COPY SETTING	SETTING A MAXIMUM NUMBER OF COPIES
	ADD OR CHANGE EXTRA PRESET RATIOS	DISABLING DELETION OF JOB PROGRAMS
	600dpi x 600dpi SCANNING MODE FOR DOCUMENT FEEDER	DISABLING OF BYPASS-TRAY IN DUPLEX COPY
	QUICK SCAN FROM DOCUMENT GLASS	DISABLING OF AUTO PAPER SELECTION
	INITIAL MARGIN SHIFT SETTING	
DOCUMENT FILING SETTINGS	DEFAULT MODE SETTINGS	DEFAULT OUTPUT TRAY
	THE NUMBER OF USER NAME DISPLAYED SETTING	DELETE ALL QUICK FILES
	SORT METHOD SETTING	SCAN COMPLETE SOUND SETTING
	DOCUMENT OUTPUT OPTIONS	INITIAL RESOLUTION SETTING
	KEY OPERATOR AUTHORITY SETTING	DEFAULT EXPOSURE SETTINGS

(left margin label spanning the Level 1 column: **Enter Key Operator Code**)

● For the following settings, see the indicated manuals.

- Network settings → Operation manual (for printer)
- Printer settings → Operation manual (for printer)
- Fax / Image send settings → Operation manual (for facsimile) and Operation manual (for network scanner)

6

GENERAL PROGRAMS

Key operator programs for general use of the machine are explained in this section.

Account control

"Account control" consists of the following programs.
- ● Auditing mode
- ● Total pages per account
- ● Resetting account
- ● Account limit setting
- ● Account number control
- ● Account number security
- ● Cancel jobs of invalid accounts

NOTE

Some items in the programs may not be available depending on your machine and what options are installed.

Auditing mode

When AUDITING MODE is enabled, a count is kept of the pages printed by each account (up to 500 accounts can be established). The page counts can be viewed in the display. To use the machine, a valid 5-digit account number must be entered.
This function is initially disabled.

Touch the [AUDITING MODE] key to display the following screen.

```
KEY OPERATOR PROGRAMS
AUDITING MODE                              OK

  [ ] COPIES           [ ] PRINTS

  [ ] DOCUMENT FILING  [ ] IMAGE SEND
```

● Auditing mode is enabled for functions that have checkmarks in the checkboxes. If you need to disable auditing mode for a function, touch its checkbox to remove the checkmark.

NOTE

To enable Auditing mode, program an account number as explained in "Account number control" on page 8.

Total pages per account

This program is used to display or print the total number of prints of each account. Misfed paper is not counted. When using the network scanner feature and fax feature, the number of transmitted pages can also be displayed or printed. (Touch the [IMAGE SEND] key to change screens.)
Touch the [TOTAL PAGES PER ACCOUNT] key to display the following screen.

```
KEY OPERATOR PROGRAMS
TOTAL PAGES PER ACCOUNT                          OK
  ACCOUNT                            DOCUMENT
  NUMBER      COPIES      PRINTS      FILING
  00001  : 00,005,678  00,045,678  00,000,678   1/2   PAPER OUTPUT
 MAXIMUM : 20,000,000  40,000,000  --,---,---          IMAGE SEND
  00002  : 00,045,678  00,045,678  00,000,678   [↑]
 MAXIMUM : 20,000,000  40,000,000  --,---,---
  00003  : 00,000,678  00,005,678  00,000,678   [↓]
 MAXIMUM : 20,000,000  40,000,000  --,---,---          PRINT
```

● **Printing out all accounts**
  Touch the [PRINT] key to print out the total pages of all accounts. If the [CANCEL] key appears, this key can be touched to cancel printing.

● **Displaying only selected accounts**
  If the account that you wish to view does not appear in the screen, touch the [↑] key or [↓] key until it appears.

Resetting account

This program is used to reset the print count and transmitted page count of an account to "0".

Touch the [RESETTING ACCOUNT] key to display the following screen.

```
KEY OPERATOR PROGRAMS
RESETTING ACCOUNT                                        OK
ACCOUNT
NUMBER     COPIES      PRINTS      DOCUMENT
                                   FILING
 00001    00,005,678  00,045,678  00,000,678   1/2    PAPER OUTPUT
                                                      IMAGE SEND
 00002    00,045,678  00,045,678  00,000,678    ↑
                                                      ALL ACCOUNTS
 00003    00,000,678  00,005,678  00,000,078    ↓     RESET
```
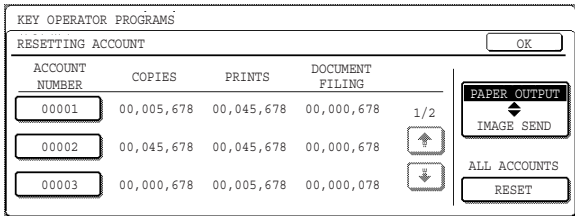
● **Resetting one account at a time**
Touch the key of the account that you wish to reset, and then select [YES] in the confirmation screen that appears. If the account that you want to reset is not displayed, touch the ↑ or ↓ key to scroll through the screens until the desired account appears. When finished, touch the [OK] key.

● **Resetting all accounts**
Touch the [RESET] key and then select [YES] in the confirmation screen that appears.
When finished, touch the [OK] key.

Account limit setting

A limit for the number of copies that can be made can be set for a single account or for all accounts at once. The maximum limit that can be entered is 99,999,999. Touch the [ACCOUNT LIMIT SETTING] key to display the following setting screen.

```
KEY OPERATOR PROGRAMS
ACCOUNT LIMIT SETTING                                   OK
ACCOUNT
NUMBER    COPIES      PRINTS     DOCUMENT
                                 FILING
-----   INPUT ACCOUNT NUMBER.                      PAPER OUTPUT
                                                   IMAGE SEND
 TOTAL  :
MAXIMUM : --,---,---   --,---,---   --,---,---
ALL ACCOUNTS                           ENTER
```
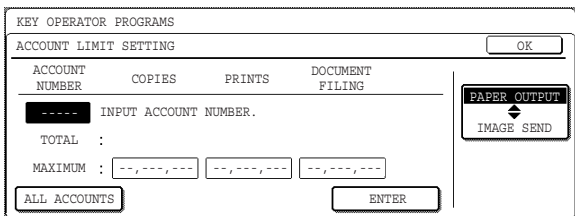
● **Limiting the number of copies per account**
Enter the number of the desired account with the numeric keys, and then enter limits for the copy, printer, and document filing functions. After entering each limit, touch the [ENTER] key. When finished, touch the [IMAGE SEND] key and then enter limits for fax send, E-MAIL/FTP and Internet-fax send.
If you enter the number of an account that already has a limit set, the limit will appear in the limit display. Press the [C] key to change the limit to a hyphen (-), and then enter a new limit.
When finished, touch the [OK] key to exit.

● **Limiting the number of copies of all accounts**
Touch the [ALL ACCOUNTS] key. [ALL] appears in the account number entry screen.
The limits for all accounts are entered in the same way as the limits for the individual accounts.
When finished, touch the [OK] key to exit.

Account number control

This program is used to set, delete, and change account numbers used for copy and other modes, as well as print a list of the set account numbers. Up to 500 account numbers can be set.

● Each account number has 5-digit. When you have finished setting one account number, you can continue setting other account numbers.

● Two methods are available for deleting account numbers: deleting an individual account number, and deleting all account numbers at once.

● To change an account number, enter the account number to be changed and then enter a new account number. After an account number is changed, another account number can be selected to be changed. Changes for unregistered account numbers will not be registered.

Account number security

This program is used to prevent attempts to guess an account number. When enabled, a warning message will appear and account number entry will be prohibited for one minute if an incorrect account number is entered three times in a row.

Cancel jobs of invalid accounts

When this program is enabled and auditing mode is enabled for the printer function, a print job will not be printed if an incorrect account number is entered or no account number is entered. If this program is not set, printing will be done and the number of prints will be accumulated as "OTHERS" in the print total.

Job log control

Clear all job log data

The machine keeps a log of the jobs it has run. The job log can be used to check general use of the machine. The job log can be written to your computer in CSV format using a Web browser. This program is used to clear the job log. There is normally no need to use the program.

Energy save

"Energy save" provides the following programs to reduce your power costs. From an environmental perspective, this also helps conserve natural resources and reduce pollution.

● Toner save in printer mode
● Toner save in copy mode
● Auto power shut-off
● Auto power shut-off timer
● Preheat mode setting

Toner save in printer mode

Printing in the toner save mode will reduce toner consumption. If toner save is set, black solid areas will be printed as halftone. (This setting is effective only for printing without use of the dedicated printer driver. If the printer driver is used, the printer driver setting will override the setting of this program.)
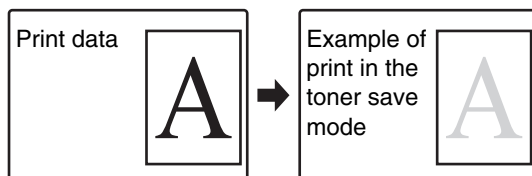
Toner save in copy mode

This program is used to save toner in copy mode. This program functions the same way as toner save in printer mode.

Auto power shut-off

If the machine is not used for a set duration of time, auto power shut-off activates to enable maximum conservation of energy.

This function allows you to reduce power costs, and at the same time helps conserve natural resources and reduce pollution.

This program is used to enable or disable auto power shut-off. To disable the function, remove the checkmark from the checkbox. Use this program if you prefer that auto power shut-off does not operate.

> **NOTE**
>
> If you prefer that auto power shut-off activates as little as possible, it is recommended that you try lengthening the time setting after which activation takes place rather than disabling the function altogether. (The time setting is changed using the following "AUTO POWER SHUT-OFF TIMER" program.)

Auto power shut-off timer

This program is used to set the time after which auto power shut-off activates.

The time can be set to as long as 240 minutes in increments of one minute.

> **NOTE**
>
> ● We suggest you set the most appropriate time according to your usage pattern.
> ● If you use the program "Auto power shut-off" to disable the auto power shut-off mode, the time set with this program will be ignored.

Preheat mode setting

If the printer is not used for the length of time set with this program after printing is finished, it will enter preheat mode. This function reduces your power costs, and at the same time helps conserve natural resources and reduce pollution.

Select the most suitable setting to match your pattern of use of the printer.

The time can be set to as long as 240 minutes in increments of one minute. (Preheat mode cannot be disabled.)

Operation settings

The "Operation settings" are related to basic operation of the machine and consist of the following programs:

- ● Keys touch sound
- ● Auto clear setting
- ● Disabling of job priority operation
- ● Message time setting
- ● Disabling of bypass printing
- ● Display language setting
- ● Key operation setting
- ● Disabling switching of display order
- ● Disabling of clock adjustment

Keys touch sound

This program is used to adjust (or turn off) the volume of the beep that sounds when you touch a key. You can also have three beeps sound at base values when setting the ratio in copy mode or adjusting the exposure in any mode.

Volume: Low   Volume: High   Off
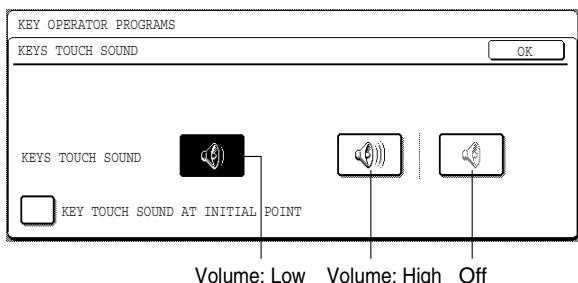
To change the volume, touch the desired volume key.

When "KEY TOUCH SOUND AT INITIAL POINT" is selected, three beeps will sound at the base setting values indicated below.

Screen in which setting is effective	Base value
Ratio setting screen in main screen of copy mode	Ratio = 100%
Exposure adjustment screen in main screen of copy mode	Exposure level3 (middle level)
Exposure adjustment screen in main screen of fax, Internet fax, and network scanner modes	
Exposure adjustment screen in [SCAN TO HDD] in main screen of document filing mode	

Auto clear setting

If the machine is not used for a certain duration of time, the auto clear function will clear any settings that have been selected and return the screen to the main screen of copy mode or the job status screen. This program is used to set the duration of time after which auto clear operates. The time can be set from 10 seconds to 240 seconds in increments of 10 seconds, or the auto clear function can be disabled. (Note that auto clear can only be disabled for copy mode.)

Disabling of job priority operation

This program is used to prohibit use of the [PRIORITY] key in the job status screen.

Message time setting

This program is used to set the length of time that messages appear in the display (this applies to messages that appear for a certain length of time and then automatically disappear.)

The time can be set to as long as 12 seconds in increments of one second.

Disabling of bypass printing

When a job cannot be printed because there is no suitable paper and there is a subsequent job that can be printed, the subsequent job will be printed ahead of the job that cannot be printed[*1] (page 1-15 of the "Operation manual (general information and copier operation)"). This program can be used to disable printing of subsequent jobs in this situation.

*1 Except when paper runs out in the middle of a job

Display language setting

This program is used to select the display language.

Key operation setting

These programs are used to set the length of time a key in the touch panel must be touched before the key input is registered, and to prevent repeated key input when a key is touched continuously.

- Time until key input is registered

  The time can be set from 0 seconds to 2 seconds in increments of 0.5 seconds. Normally the time is set to 0 seconds so that key input is immediately registered when a key is touched. By lengthening the time setting, key input can be prevented when a key is touched accidentally. Keep in mind, however, that when a longer setting is selected more care is required when touching keys to ensure that key input is registered.

- Prohibit key repeat

  The touch panel contains keys such as the zoom keys (for setting the ratio) that can be touched continuously to make a value change until it reaches a desired value.

  This feature whereby a value changes continuously while a key is touched is called key repeat.

  Key repeat is normally enabled. If you wish to prohibit key repeat, select the "DISABLE AUTO KEY REPEAT" checkbox.

Disabling switching of display order

This program is used to disable the function that changes the display order of tabs when a selected tab is touched repeatedly in screens that have tabs such as the custom folder selection screen and folder selection screen of the document filing function and the address book screen of fax/image send mode.

Disabling of clock adjustment

This program is used to prohibit changes to the clock adjust setting. When the program is enabled, "Clock" in the custom settings cannot be used. To adjust the date and time, this program must first be disabled (remove the checkmark).

Device control

Use these programs when a peripheral device on the machine has failed or when you wish to temporarily disable a device. The programs can also be used to change the function setting of a device as required by your conditions of use.

"Device control" consists of the following programs:

- Original size detector setting
- Disabling of document feeder
- Disabling of duplex
- Disabling of stapler
- Disabling of punch
- Disabling of optional paper drawer
- Disabling of finisher
- Disabling of mail-bin stacker
- Disabling of covers/inserts mode
- Saddle stitch position adjust
- High speed stacking
- Auto paper selection setting
- Optimization of a hard disk

Original size detector setting

This program is used to select the standard original sizes that can be detected by the original size detection function. Select one of the four groups indicated below. The factory default setting is "INCH-1 (AB-1)". Original size detection by the document glass can also be disabled.

	Group	Detectable original sizes	
		Document feeder tray (for automatic document feeder)	
		Document glass	
1	INCH-1	11" x 17", 8-1/2" x 14", 8-1/2" x 11", 8-1/2" x 11"R, 5-1/2" x 8-1/2"	A3, A4
2	INCH-2	11" x 17", 8-1/2" x 13", 8-1/2" x 11", 8-1/2" x 11"R, 5-1/2" x 8-1/2"	A3, A4
3	AB-1	A3, A4, A4R, A5, B4, B5, B5R	11" x 17", 8-1/2" x 11", 216x330
4	AB-2	A3, A4, A4R, A5, B5, B5R, 216x330	11" x 17", 8-1/2" x 11", B4

If "CANCEL DETECTION AT DOCUMENT GLASS" is set, originals will be regarded as EXTRA for all copier functions and no original size will be displayed.

Disabling of document feeder

This program is used to prevent use of the reversing automatic document feeder when it malfunctions. In this case, scanning can still be performed using the document glass.

Disabling of duplex

This program is used to disable duplex printing when the duplex module malfunctions. If this program is set, only one-sided printing can be performed.

Disabling of stapler

This program is used to disable stapling when the stapler unit of the finisher or the saddle stitch finisher malfunctions.

Disabling of punch

Use this program when you wish to prohibit punching or when the punch unit of the finisher or saddle stitch finisher has failed.

Disabling of optional paper drawer

This program is used to disable use of the stand/3 x 500 sheet paper drawer or stand/MPD & 2000 sheet paper drawer when it malfunctions.

Disabling of finisher

Use this program when you wish to prohibit use of the finisher or saddle stitch finisher, or when either has failed.

Disabling of mail-bin stacker

This program is used to disable use of the mail-bin stacker when it malfunctions.

Disabling of covers/inserts mode

Use this program when you wish to prohibit use of the covers/inserts mode.

Saddle stitch position adjust

This program is used to adjust the stapling position (folding position) when using the saddle stitch function of the optional saddle stitch finisher.

The value can be adjusted in 0.1 mm increments within ±3.0 mm from the reference position for each paper size.

Reference position
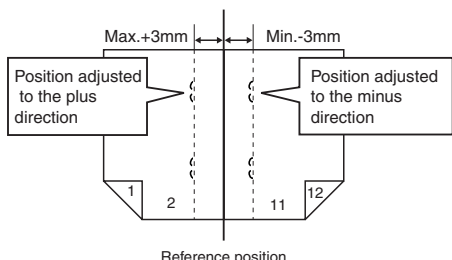
[AUTOMATIC SADDLE STITCH] checkmark

The saddle stitch print function can normally be divided into the following three general steps.

1. The pages of the original are automatically reordered to allow saddle stitch binding (saddle stitch function).
2. The pages are folded at the center.
3. The paper is stapled at the center in two places (saddle stitch stapling).

The [AUTOMATIC SADDLE STITCH] checkbox is selected by default.

Selection of the checkbox assumes the use of the above saddle stitch printing function (three steps).

Saddle stitch stapling exceptions

Depending on the purpose of saddle stitch stapling, it may be necessary to perform saddle stitch stapling on printed matter that has already been bound by saddle stitching. In this case, it is necessary to disable step 1 above. If you frequently perform this type of exceptional saddle stitch stapling that requires disabling step 1, remove the checkmark from the [AUTOMATIC SADDLE STITCH] checkbox.

High speed stacking

This program is used to have print speed priority, which is available for printing in the offset mode with the saddle stitch finisher.

When this program is on, slight decrease of stacking performance might occur.

This program is set in the factory default setting.

Auto paper selection setting

Use this program to select the paper type* for which the automatic paper selection function operates. Selections are "PLAIN PAPER", "PLAIN AND RECYCLE PAPER", and "RECYCLE PAPER".

* The paper type set for each paper tray in the paper tray settings of the user settings (page 2-5 of the "Operation manual (for general information and copier operation)").

Optimization of a hard disk

This is used to optimize the "Main folder" and "Custom folder" that are used for the document filing function. When this program is executed, a message will appear asking if it is okay to stop the job in progress. Touch the [YES] key to stop the job and begin optimization. When optimization ends, the machine will restart if the power switch is switched on, or turn off if the power switch is switched off.

CAUTION

If the power switch is switched off or the power plug is unplugged while optimization is in progress, the hard drive may be damaged and stored data or received data may be lost.

NOTES

● **About stopped jobs**

Printing of received faxes and Internet-Faxes and transmission of stored fax jobs will automatically resume after the machine restarts.

For jobs other than the above (copy jobs, print jobs, document filing print jobs, etc.), the job information is not retained and thus the stopped job must be executed again manually (for example, the original for a copy job must be placed again and the copy operation repeated).

● **Operation after optimization starts**

Until optimization finishes (or the [CANCEL] key is touched to cancel optimization),
- The operation panel cannot be used, with the exception of the [CANCEL] key.
- Operation from the Web page is not possible.
- Faxes and Internet-Faxes cannot be received.
- Print jobs will not be accepted.
- The power will not turn off even if the power switch is switched off.
- Auto power shut-off mode will not activate even if the set time elapses. (Preheat mode will activate.)

List print

This program is used to print lists and reports that can only be printed from the key operator programs.
- Touch the [KEY OPERATOR PROGRAMS LISTS] key to print one of the following groups:
  Copy, printer, fax/image send, document filing, general, security, all program lists
- Touch a key other than the [KEY OPERATOR PROGRAMS LISTS] key to begin printing a list or report.

Key operator code change

This program is used to change the key operator code that must be entered to configure the key operator programs. When the machine is first used, the key operator should change the key operator code that was set at the factory to the desired 5-digit code. Only one key operator code can be programmed.
The factory default setting for the key operator code is 00000.

Product key

Use these programs to enter the product keys for the following options.

PS3 expansion kit

This program is used to enter the product key for the PS3 expansion kit (this allows the machine to be used as a PostScript compatible printer).
Ask your dealer for the product key.

Network scanner expansion kit

This program is used to enter the product key for the network scanner expansion kit.
Ask your dealer for the product key.

E-mail alert and status

This program is used to enter the product key for E-MAIL ALERT AND STATUS, which enables customer product support via a network system.
Ask your dealer for the product key.

Serial number

This program is used to check the serial number of the machine.

Initialize and/or store settings

These programs are used to return the key operator programs to the factory default settings, to store the current key operator program settings, and to restore stored key operator program settings. (Note that this also includes printer configuration settings.)
The following programs are available:
 ● Restore factory defaults
 ● Store current configuration
 ● Restore configuration

Restore factory defaults[*1]

This program is used to return the key operator program settings (including the printer configuration settings) to the factory default settings. If you need a record of the settings prior to restoration of the default settings, print the key operator program list "List print" (page 12).

> **NOTE**
> After this program is set, exit the key operator program, turn off the power switch, and then turn on the power switch again after at least 3 seconds. The program will be effective at this time.

Store current configuration[*1]

This program is used to return the key operator program settings (including the printer configuration settings) to the factory default settings. The stored settings will remain in memory even if the power switch is turned off. To read the stored settings, use the following "Restore configuration" program.

Restore configuration[*1]

This program is used to read the configuration that was stored using the "Store current configuration" program and restore it as the current configuration.
The currently set configuration will change to the configuration read from memory.

> **NOTE**
> A confirmation message will appear at the end of the setting procedure of programs marked by *1. If you need to cancel execution of the program, touch the [NO] key.

PROGRAMS FOR COPY MODE

This chapter explains the key operator programs that are used for copy mode.

Copy settings

"Copy settings" consists of the following programs:
- Initial status settings
- Exposure adjustment
- Rotation copy setting
- Add or change extra preset ratios
- 600dpi x 600dpi scanning mode for document feeder
- Quick scan from document glass
- Initial margin shift setting
- Erase width adjustment[*1]
- Card shot settings[*1]
- Setting a maximum number of copies
- Disabling deletion of job programs
- Disabling of bypass-tray in duplex copy
- Disabling of auto paper selection

*1 Default settings selected with these programs apply to all functions of the machine (not just the copy function).

Initial status settings

The copy settings revert to the default settings when the power switch is turned on, when the [CA] key is pressed, or when the auto clear time elapses. This program is used to change the default settings, or return changed default settings to the initial factory default settings.
Defaults for the following copy settings can be changed:
Paper tray/Exposure tray/Copy ratio/2-sided copy/Output (auto, sort, staple sort, group, output tray)

> **NOTE**
>
> If this program is used to change the default setting for the duplex function to other than "one-sided" → "one-sided" and the automatic document feeder fails or is disabled, the setting will revert to "one-sided" → "one-sided".
> * DISABLING OF DOCUMENT FEEDER (page 11)
>   DISABLING OF DUPLEX (page 11)

Exposure adjustment

This program is used to adjust the exposure level when "Auto" is used for the copy exposure.
The factory setting is "5". "1" indicates lighter density and "9" indicates darker density on the touch panel.

Rotation copy setting

If this program is set, the image of originals will rotate when the orientation of the originals does not match that of the copy paper.
(Rotation copy will function only if the auto paper select or auto image mode has been selected.)

> **NOTE**
>
> For copying from 5-1/2" x 8-1/2" or A5 size originals onto 5-1/2" x 8-1/2"R or A5R paper, this program must be set.

Add or change extra preset ratios

When using inch sizes, there are normally four preset enlargement ratios and four preset reduction ratios. When using AB sizes, there are normally five preset enlargement ratios and five preset reduction ratios.
This program allows you to add two more preset enlargement ratios and two more preset reduction ratios. This program also allows you to change a preset ratio.

> **NOTE**
>
> Only an added preset ratio can be changed.

600dpi x 600dpi scanning mode for document feeder

Use this program to change the original scanning resolution of the automatic document feeder from 600 x 300 dpi to 600 x 600 dpi.
If this mode is set, the copy quality for fine characters and fine lines will be improved but the original scanning speed will be slower.

> **NOTE**
>
> If the original scanning speed is more important than higher resolution, do not set this program.

Quick scan from document glass

Use this program to change the original scanning resolution on the document glass from 600 x 600dpi to 600 x 300 dpi.
If you set this program, the first copy time will be shorter but the copy image will become a little more coarse.

> **NOTE**
>
> If the copy image quality is more important than first copy time, do not set this program.

Initial margin shift setting

This program is used to set the initial margin shift amount.

The initial margin shift amount can be set from 0" to 1" (0 mm to 20 mm) in increments of 1/8" (1 mm).

Normally the margin shift is set to 1/2" (10 mm) for both the front and back of the paper.

Erase width adjustment

This program is used to set the initial width of edge erase copying.

The edge erase width can be set from 0" to 1" (0 mm to 20 mm) in increments of 1/8" (1 mm).

The edge erase and center erase widths are normally set to 1/2" (10 mm).

Card shot settings

This program is used to set the initial original size for the card shot function.

Enter the X dimension (width) first and then the Y dimension (length).

Both the X and Y dimensions can be set from 1" to 8-1/2" (25 mm to 210 mm) in increments of 1/8" (1 mm).

Setting a maximum number of copies

This program is used to set the maximum number of copies that are allowed per original.

Any number from 1 to 999 can be set for the maximum.

The maximum number of copies is initially set to 999.

Disabling deletion of job programs

This program is used to prohibit the deletion and changing of copy settings stored in job programs.

Disabling of bypass-tray in duplex copy

This program is used to disable the use of the bypass tray when making duplex copies.

The bypass tray is often used to feed label sheets, transparency film, and other special papers for which two-sided copying is prohibited. If one of these special papers enters the reversing unit, a misfeed or damage to the unit may result. If special papers for which two-sided copying is prohibited are often used, it is recommended that you enable this program to prevent feeding of special papers from the bypass tray into the reversing unit during two-sided copying.

Disabling of auto paper selection

This program is used to disable the auto paper selection function.

When this program is enabled, paper that is the same size as the original placed on the document glass or in the automatic document feeder is not automatically selected.

DOCUMENT FILING PROGRAMS

This section explains key operator programs for the document filing function.

Document filing settings

"Document filing settings" consists of the following programs:

- ● Default mode settings
- ● The number of user name displayed setting
- ● Sort method setting
- ● Document output options
- ● Key operator authority setting
- ● Default output tray
- ● Delete all quick files
- ● Scan complete sound setting
- ● Initial resolution setting
- ● Default exposure settings

Default mode settings

This program is used to select the initial state of the confidential checkbox (selected or not selected) in the detailed settings screen of the document filing function. Touch the [CONFIDENTIAL MODE] in this program if you wish the confidential checkbox to be initially selected. Touch the [SHARING MODE] key if you wish the confidential checkbox to not be initially selected. Normally the check box is not initially selected.

The number of user name displayed setting

The number of user names displayed in one screen of the user name list can be changed from 8 (this is the normal setting) to 6 or 12.
Touch [6], [8], or [12] to select the number.

> **NOTE**
>
> When 6 or 8 names per screen is selected, each displayed key name can be up to 18 characters long. When 12 names per screen is selected, each key name can only be up to 10 characters long.

Sort method setting

This program is used to select how lists of files stored in the "MAIN FOLDER", "CUSTOM FOLDER", and "QUICK FILE FOLDER" are ordered. Select ordering by [FILE NAME], [USER NAME], or [DATE].

Document output options

This program is used to select the operations (print and send) that are allowed for stored files.

- The [PRINT] key in the [DOCUMENT OUTPUT SETTINGS] screen controls printing from the [JOB SETTINGS] screen.
  For example, if the [PRINT] key in this program is touched and only the [COPY] and [FAX SEND (INCL.PC-FAX)] checkboxes are selected in the screen that appears, only stored files of copy jobs and fax jobs can be printed from the [JOB SETTINGS] screen of document filing. Files saved in modes that are not selected cannot be printed from the [JOB SETTINGS] screen.
- Similarly, the [SCAN TO E-MAIL/FTP], [FAX SEND], and [I-FAX SEND] keys control the corresponding transmission operations in the [JOB SETTINGS] transmission screen.

Key operator authority setting

When a password has been established for a file, user name or folder, this program is used to allow the key operator code to be entered instead of the password to enable deletion. This is only for deletion; editing is not possible.

Default output tray

This program is used when a finisher is installed to select the output tray for printing of stored files.

Delete all quick files

This program is used to delete all files except protected files from the Quick File Folder.
File deletion begins when you touch the [DELETE] key and then touch the [YES] key in the message that appears.
To have all files (except protected files) automatically deleted from the Quick File Folder each time the power is turned on, select the [DELETE QUICK FILES AT POWER UP. (PROTECTED FILES EXCLUDED)] checkbox.

Scan complete sound setting

The volume of the beep that alerts you when scanning of an original has finished can be adjusted to two levels.
The beep can also be turned off.

Initial resolution setting

This is used to change the default resolution setting for "SCAN TO HDD" of the document filing function. The default resolution is initially set to "600x600dpi". To change the default resolution, touch the key of the desired resolution.

Default exposure settings

This is used to change the default exposure level for "SCAN TO HDD" of the document filing function. The default exposure is initially set to "AUTO". If changed to "MANUAL", the exposure level can be adjusted to five levels. Level 1 is the lightest level and level 5 is the darkest level.

SHARP®

SHARP
Laser Printer
AR-351/355/451/455 Series
Software CD-ROM(1)

COMPACT
disc

SOFTWARE SETUP GUIDE
(for printer)

LASER PRINTER

Be sure to become thoroughly familiar with this manual to gain the maximum benefit from the product.

Before installing this product, be sure to read the installation requirements and cautions sections of the "Operation manual (for general information and copier operation)".

Be sure to keep all operation manuals handy for reference including this manual, the "Operation manual (for general information and copier operation)" and operation manuals for any optional equipment which has been installed.

Warranty

While every effort has been made to make this document as accurate and helpful as possible, SHARP Corporation makes no warranty of any kind with regard to its content. All information included herein is subject to change without notice. SHARP is not responsible for any loss or damages, direct or indirect, arising from or related to the use of this operation manual.

Trademark Acknowledgments

The display screens, messages, and key names shown in the manual may differ from those on the actual machine due to product improvements and modifications.

INTRODUCTION

Thank you for purchasing this product. This manual explains how to install the printer driver and utilities required for the printer function. To use the printer function, please read the following manuals.

Software setup guide (for printer) (this manual)

This explains the contents of the accompanying CD-ROMs (1) and (2) and the procedure for installing the software.

Manuals for use of the printer function

● **Operation manual (for printer)**
This manual can be found in the "Software CD-ROM (1)".
This contains information on using the printer function, including printer settings, how to print, printing from the operation panel of the machine, troubleshooting, and key operator programs for the printer function.

Help files installed with the software in the "Software CD-ROM (1)"

● **Printer Status Monitor Help file**
● **Printer Administration Utility Help file**

Online Manual contained in the "Software CD-ROM (2)"

● **Print Server Card Online Manual**

SOFTWARE LICENSE

The SOFTWARE LICENSE will appear when you install the software from the CD-ROM. By using all or any portion of the software on the CD-ROM or in the machine, you are agreeing to be bound by the terms of the SOFTWARE LICENSE.

Manuals for use of the network scanner function

● **Operation manual (for network scanner)**
This manual can be found in the "Software CD-ROM (1)".
Read this manual for information on using Scan to FTP, Scan to E-mail, and other network scanner functions.

This operation manual is described based on the American spelling standard.

ABOUT THE CD-ROMS

This product comes with two CD-ROMs: the "Software CD-ROM (1)" and the "Software CD-ROM (2)".
These two CD-ROMs contain the following software:

1. "SOFTWARE CD-ROM (1)"

This CD-ROM contains a wizard-type installer for installation of the following utilities, and online manuals.

- **Printer Driver:**
  The printer driver that is required for use of this product.
  "Software CD-ROM (1)" contains PCL5e and PCL6.
- **Printer Administration Utility*1:**
  When using the printer in a network environment, this administration utility makes it possible to configure printer settings and monitor the printer from a computer. (This utility is for use by system administrators.)
- **Printer Status Monitor*1:**
  When using the printer in a network environment, this provides messages and displays that allow you to monitor the status of the printer.
- **PC-FAX Driver*2:**
  This lets you conveniently fax a document directly from your computer via the machine (when the optional fax expansion kit is installed).
- **NICManager**
  Use this program to configure and check the IP address when the machine is connected to a network.
- **Acrobat Reader 5.0**
  This program is used to view the online manuals on your computer screen.
- **Online Manuals (see the previous page)**
  Manuals in PDF format that are viewed using Adobe Acrobat Reader.

To view online manuals, specify the path as follows (where "R" represents the letter of your CD-ROM drive):

    R:\Printer_Manual\EnglishA*3\Prn_AR_451N_M455N.pdf

    R:\Scanner_Manual\EnglishA*3\Scn_AR_451N_M455N.pdf

  *1 To use the printer status monitor and the printer administration utility, the machine must be connected to a network.
  *2 To use the PC-FAX driver, Internet Explorer 4.0 or later must be installed on your computer.
  *3 "English A" in North America. "English" in Europe.

2. "Software CD-ROM (2)"

This CD-ROM contains manuals and utilities for using the machine as a network printer.

- **Please read before using (Readme):**
  This contains information on the contents of the "Software CD-ROM (2)", how to use the utilities, how to view the online manuals, and limitations.
- **Print Server Card Quick Setup:**
  This is a wizard-type utility for Windows 95, Windows 98, Windows Me, Windows NT 4.0, Windows 2000, Windows XP and Windows Server 2003 that allows you to conveniently configure the print server.
- **Print Server Card Standard Setup:**
  This installs and launches "NICManager", which enables administration and configuration of advanced print server settings.
- **SC-Print2000 Install:**
  This installs software for direct printing from Windows 95, Windows 98 and Windows Me to the machine. LPR (only for this machine) or IPP can be selected.
- **Online Manual:**
  PDF manual that explains how to use and configure the settings in "Software CD-ROM (2)".

INSTALLING THE PRINTER DRIVER AND UTILITIES (SOFTWARE INSTALLATION)

The procedures for installing the printer driver and utilities (hereafter called "software") required for use of the machine as a printer are explained in this section. There are two ways of installing the printer driver: using the installer in the "SOFTWARE CD-ROM (1)", and using the "Add printer wizard".
To print from a Macintosh environment, the optional PS3 Expansion Kit is required.

1. Installation using the installer

The software programs installed and the steps for installation vary depending on the version of Windows you are running and the type of connection to your computer. Refer to the table below and select the installation method that matches your environment.

Windows version Type of connection to printer	Windows XP[1]/Server 2003[1]	Windows NT 4.0[1]/2000[1]	Windows Me	Windows 95/98
LAN cable connection	Installation method 1			
USB cable connection[2]	Installation method 2	Installation method 3		
Parallel cable connection		Installation method 4		

Installation method 1   Follow the procedure from page 4 to page 9.
Installation method 2   Follow the procedure on page 10 to page 11.
Installation method 3   Follow the procedure on page 12 to page 13.
Installation method 4   Follow the procedure on page 14 to page 15.

[1]   To install the software from the CD-ROM, you must have administrator rights.
[2]   Windows 95 and Windows NT 4.0 are not supported.

2. Installation of the printer driver using the "Add printer wizard"

Installation of the printer driver using the "Add printer wizard" is performed using basic Windows procedures.
To install the printer driver by this method, see page 16.
In case of upgrading the version of currently installed printer driver, delete the currently installed printer driver first and then install the new printer driver.
To uninstall the printer driver, see page 15.

3. About network environments

There are several types of network environments. The explanations in this manual assume that your operating system is Windows and that TCP/IP protocol is used in your network environment.

Installation method 1

Use this procedure to install the software in the following environments:
1. Printer connected by LAN cable
2. Windows version: Windows 95/98/Me/NT4.0/2000/XP/Server 2003

The following procedure uses Windows XP as an example. Follow the same steps to install the software on other operating systems.

Before installing the software, make sure that the machine is connected to the network with a network cable.

About network environments

There are several types of network environments. Typical environments include the following:

● Windows network environment
● NetWare network environment
● UNIX network environment
● Macintosh network environment

This manual explains peer-to-peer and server-client network connections in a Windows environment. If the machine is used in a different network environment, see the online manual (Print Server Card User's Manual) on the "Software CD-ROM (2)".

Network connection examples

Peer-to-peer

Computer running Windows

Computer running Windows

Computer running Windows

To install the printer driver, see "Installing the printer driver (standard installation)" and "Installing the printer driver (custom installation)" on pages 5 to 8.

Server-client

Example: Windows Server 2003 environment

To configure server settings when the machine is used on a server-client type network, see the operating system manual or Help.

Computer running Windows

Computer running Windows

Computer running Windows

Computer running Windows

To install the printer driver, see "Using the machine as a shared printer via a server" on page 9.

■ ■ ■ ■ ■ ■ ■ ■ **TCP/IP protocol**
━━━━━━━ **Microsoft Printing Protocol**

■ Set the IP address of the machine

Before installing the printer driver, set the IP address of the machine using the appropriate key operator program. For this procedure, see Key Operator Programs (page 5-7) in the "Operation manual (for printer)" (in PDF format) in the "SOFTWARE CD-ROM (1)". The factory default setting for the IP address is "DHCP", which means that the IP address is set automatically.

If you are not using the machine in a DHCP environment, ask your network administrator for the IP address, Subnet mask, and Default gateway to be used for the machine, and then program this information.

NOTE

If DHCP is used, the IP address assigned to the machine may be changed automatically on occasion. If this happens, printing will not be possible.

To use DHCP on this machine, please configure a DHCP reservation. Or, if you make fixed IP address setting, the problem will be resolved.

■ Installing the printer driver (standard installation)

The procedure for a standard installation of the printer driver is explained below. This procedure is normally used when the printer driver will be used with a network connection.

To use the machine as a network printer in Windows NT 4.0, "TCP/IP Protocol" and "Microsoft TCP/IP Printing" must be installed on your computer. Make sure these are installed. If either is not installed, install as explained in Windows NT 4.0 Help.

NOTE

When installing the printer driver, if you wish to install a display font or specify the IP address of the machine by direct entry, select [Custom installation]. (page 7)

1 Insert the "SOFTWARE CD-ROM (1)" that accompanied the machine into your CD-ROM drive.

2 Click the [start] button, click [My Computer], and then double-click the CD-ROM icon.

In Windows 95/98/Me/NT 4.0/2000, double-click [My Computer], and then double-click the CD-ROM icon.

3 Double-click the [SETUP] icon.

4 The License Agreement window will appear. Make sure that you understand the contents of the license agreement, and then click the [Yes] button.

5 After confirming the message in the "Welcome" window, click the [Next] button.

6 Click the [Printer Driver] button.

To view detailed information on the software, click the [Display Readme] button.

● If you wish to install the printer status monitor or the PC-FAX driver, click the [Utility Software] button in this window and then click the [Printer Status Monitor] or [PC-FAX Driver] button and follow the on-screen instructions.

● If you wish to install the printer administration utility, click the [Administrator Tools] button in this window and then click the [Printer Administration Utility] button and follow the on-screen instructions.

7 Click the [Next] button.

5

8 **Click the [Standard installation] button.**
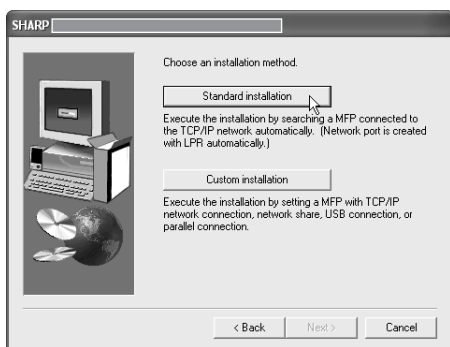
9 **The printers that are connected to the network are found. Select the machine and click the [Next] button.**

If the machine is not found, make sure that the machine is powered on and connected to your computer and then search again. If the machine is still not found, use the custom installation procedure to directly specify the IP address (page 7).

10 **A confirmation window will appear. Read the contents and click the [Next] button.**

11 **When you are asked to select the printer driver to be installed, select the printer driver and click the [Next] button.**

Click the checkbox of the printer driver to be installed so that a checkmark appears.
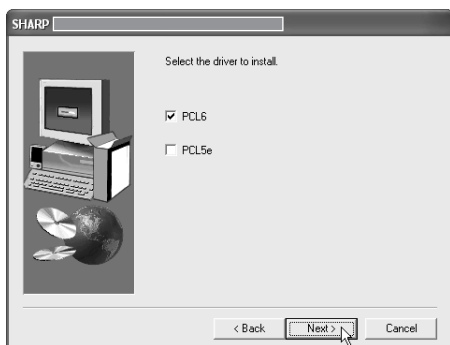
12 **Select the printer driver being installed as the default printer and click the [Next] button.**

13 **Check the contents of the window and click the [Next] button.**

Installation of the printer driver begins.

NOTE

When you are using Windows 2000/XP/Server 2003 If a warning message regarding the Windows logo test or digital signature appears, be sure to click the [Continue Anyway] or [Yes] button.

14 **When the finish setup window appears, click the [OK] button.**

15 **Click the [Close] button.**

NOTE

A message prompting you to restart your computer may appear after installation is finished. If this message appears, click [Yes] to restart your computer.

This completes the installation.

■ Installing the printer driver (custom installation)

The procedure for a custom installation of the printer driver is explained here. Select [Custom installation] if you wish to install a display font or directly specify the IP address of the machine.

1 Insert the "SOFTWARE CD-ROM (1)" that accompanied the machine into your CD-ROM drive.

2 Click the [start] button, click [My Computer], and then double-click the CD-ROM icon.

In Windows 95/98/Me/NT 4.0/2000, double-click [My Computer], and then double-click the CD-ROM icon.

3 Double-click the [SETUP] icon.

4 The License Agreement window will appear. Make sure that you understand the contents of the license agreement, and then click the [Yes] button.

5 After confirming the message in the "Welcome" window, click the [Next] button.

6 Click the [Printer Driver] button.

To view detailed information on the software, click the [Display Readme] button.

● If you wish to install the printer status monitor or the PC-FAX driver, click the [Utility Software] button in this window and then click the [Printer Status Monitor] or [PC-FAX Driver] button and follow the on-screen instructions.

● If you wish to install the printer administration utility, click the [Administrator Tools] button in this window and then click the [Printer Administration Utility] button and follow the on-screen instructions.

7 Click the [Next] button.

8 Click the [Custom installation] button.

9 Select the [LPR Direct Print] and click the [Next] button.

10 The printers that are connected to the network are found. Select the machine and click the [Next] button.
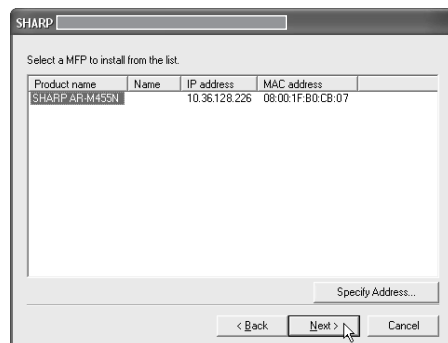
If you wish to directly specify the IP address, click the [Specify Address] button, enter the IP address, and click the [Search] button.
Be sure to ask your network administrator for the correct IP address to be entered.

11 A confirmation window will appear. Read the contents and click the [Next] button.

12 **When you are asked to select the printer driver to be installed, select the printer driver and click the [Next] button.**

Click the checkbox of the printer driver to be installed so that a checkmark appears.

13 **Select the printer driver being installed as the default printer and click the [Next] button.**

14 **When the printer name window appears, click the [Next] button.**

If you wish to change the printer name, enter the desired name.

15 **When you are asked if you wish to install the display font, select an answer and click the [Next] button.**
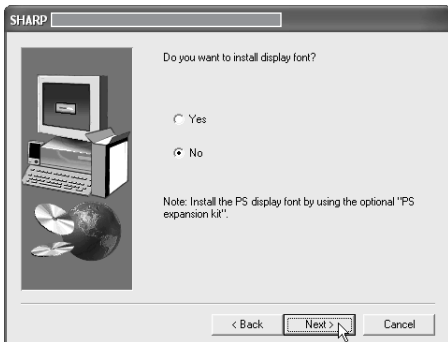
16 **Check the contents of the window and click the [Next] button.**

Installation of the printer driver begins.

NOTE

When you are using Windows 2000/XP/Server 2003
If a warning message regarding the Windows logo test or digital signature appears, be sure to click the [Continue Anyway] or [Yes] button.

---

17 **When the finish setup window appears, click the [OK] button.**

18 **Click the [Close] button.**

NOTE

A message prompting you to restart your computer may appear after installation is finished. If this message appears, click [Yes] to restart your computer.

This completes the installation.

■ Using the machine as a shared printer via a server

If the printer server in a Windows NT server environment, NetWare server environment, or other environment is configured to share the printer (the machine), follow the steps below to install the printer driver in each client computer.

Ask your network administrator for the server name and printer name of the machine on the network.

NOTE

For the procedure for configuring settings in the printer server, see the operating system manual or Help. The "printer server" explained here is a computer that is connected to the machine, and "clients" are other computers connected to the same network as the printer server.

---

1 Perform steps 1 through 8 of "Installing the printer driver (Custom installation)" on page 7.

2 Select the [Shared Printer] and click the [Next] button.

3 When you are asked to select the printer port to be used, click the [Add Network Port] button.

4 Select the network printer that is shared and click the [OK] button.

Ask your network administrator for the server name and printer name of the machine on the network.

5 In the printer port selection window, verify the network printer that is shared and click the [Next] button.

6 When you are asked to select the model name, select the model that you are using and click the [Next] button.

7 Perform step 12 through 18 of "Installing the printer driver (custom installation)" on page 8.

This completes the installation.

Installation method 2

Use this procedure to install the software in the following environments:
1. The printer is connected by USB cable or parallel cable.
2. Windows version: Windows XP/Server 2003

NOTE
To install this software, you must have administrator's rights.

Installing the software in Windows XP/Server 2003 (USB/parallel interface)

Install the software as follows.
Before starting the installation, make sure the USB or parallel interface cable is not connected to the machine.

1 Insert the "SOFTWARE CD-ROM (1)" that accompanied the machine into your CD-ROM drive.

2 Click the [start] button, select [My Computer], and then double-click the CD-ROM icon.

3 Double-click the [SETUP] icon.

4 The License Agreement window will appear. Make sure that you understand the contents of the license agreement, and then click the [Yes] button.

5 After confirming the message in the "Welcome" window, click the [Next] button.

6 Click the [Printer Driver] button.
To view detailed information on the software, click the [Display Readme] button.

● If you wish to install the PC-FAX driver, click the [Utility Software] button in this window and then click the [PC-FAX Driver] button and follow the on-screen instructions.

7 Click the [Next] button.

8 Click the [Custom installation] button.

9 Click the [Connected to this computer] and click the [Next] button.

10 When you are asked if you wish to install the display font, select an answer and click the [Next] button.

11 **Follow the on-screen instructions to install the printer driver.**

If a warning message regarding the Windows logo test appears while the printer driver files are being copied (the warning message may appear several times), be sure to click the [Continue Anyway] button.

12 **When the finish setup window appears, click the [OK] button.**

13 **When the finish installation window appears, click the [Close] button.**

When the message "Now connect the interface cable to the PC. This will finalize the driver's installation and settings." appears, click the [OK] button.

NOTES

A message prompting you to restart your computer may appear after installation is finished. If this message appears, click [Yes] to restart your computer.
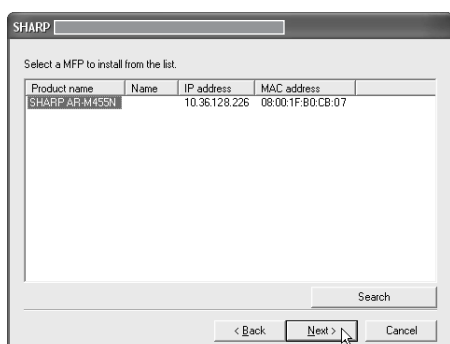
14 **Connect the machine to your computer an interface cable (page 18).**

● If you are using a USB cable, make sure the machine power is turned on and then connect the cable.

● If you are using a parallel cable, turn off both the machine power and the computer power and then connect the cable. Turn the machine power on first and then turn on your computer.
The machine is found and a plug and play window appears.

15 **Installation of the printer driver begins.**

The printer name will appear in the "Found New Hardware Wizard". Select "Install the software automatically (Recommended)" and click the [Next] button. Follow the on-screen instructions to install the printer driver.

This completes the installation.

Installation method 3

Use this procedure to install the software in the following environments:

1. The printer is connected by USB cable.
2. Windows version: Windows 98/Me/2000*1

NOTE
*1 To install the software using the installer, you must have administrator's rights.

Installing the software in Windows 98/Me or Windows 2000 (USB/interface)

Install the software as follows.
Before starting the installation, make sure the USB interface cable is not connected to the machine.
The procedure for installing the printer driver is explained here using Windows Me as an example.

1 Insert the "SOFTWARE CD-ROM (1)" that accompanied the machine into your CD-ROM drive.

2 Double-click [My Computer], and then double-click the CD-ROM icon.

3 Double-click the [SETUP] icon.

4 The License Agreement window will appear. Make sure that you understand the contents of the license agreement, and then click the [Yes] button.

5 After confirming the message in the "Welcome" window, click the [Next] button.

6 Follow the on-screen instructions.

7 Click the [Printer Driver] button.

To view detailed information on the software, click the [Display Readme] button.

● If you wish to install the PC-FAX driver, click the [Utility Software] button in this window and then click the [PC-FAX Driver] button and follow the on-screen instructions.

8 Click the [Next] button.

9 Click the [Custom installation] button.
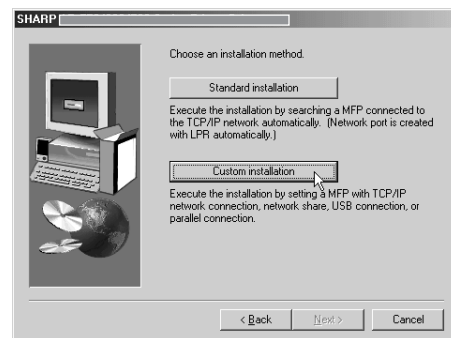
10 Click the [Connected to this computer] and click the [Next] button.

11 When you are asked to select the interface, select [USB] and click the [Next] button.

12 **When you are asked if you wish to install the display font, select an answer and click the [Next] button.**
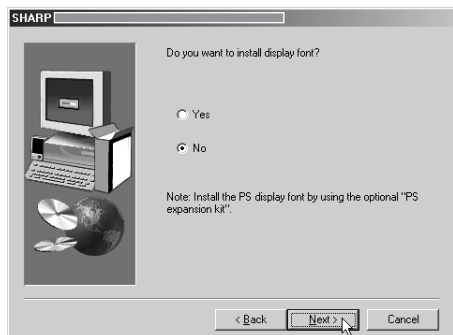
13 **Follow the on-screen instructions to install the printer driver.**

If you are using Windows 2000 and a warning message regarding the digital signature appears while the printer driver files are being copied (the warning message may appear several times), be sure to click the [Continue Anyway] button.

14 **When the finish setup window appears, click the [OK] button.**

15 **When the finish installation window appears, click the [Close] button.**

When the message "Now connect the interface cable to the PC. This will finalize the driver's installation and settings." appears, click the [OK] button.

NOTE

A message prompting you to restart your computer may appear after installation is finished. If this message appears, click [Yes] to restart your computer.

16 **Make sure that the machine power is turned on and connect the machine to your computer with a USB cable (page 18).**

The machine is found and a plug and play window appears.

17 **Follow the instructions in the plug and play window to install the printer driver.**

This completes the installation.

13

Installation method 4

Use this procedure to install the software in the following environments:
   1. The printer is connected by parallel cable.
   2. Windows version: Windows 95/98/Me/NT 4.0*1/2000*1

> **NOTE**
> *1 To install the software using the installer, you must have administrator's rights.

Installing the software in Windows 95/98/Me or Windows NT 4.0/2000 (Parallel interface)

Install the software as follows.
Before starting the installation, make sure the parallel interface cable is not connected to the machine.
The procedure for installing the printer driver is explained here using Windows Me as an example.

1 Insert the "SOFTWARE CD-ROM (1)" that accompanied the machine into your CD-ROM drive.

2 Double-click [My Computer], and then double-click the CD-ROM icon.

3 Double-click the [SETUP] icon.

4 The License Agreement window will appear. Make sure that you understand the contents of the license agreement, and then click the [Yes] button.

5 After confirming the message in the "Welcome" window, click the [Next] button.

6 Click the [Printer Driver] button.

To view detailed information on the software, click the [Display Readme] button.

● If you wish to install the PC-FAX driver, click the [Utility Software] button in this window and then click the [PC-FAX Driver] button and follow the on-screen instructions.

7 Click the [Next] button.

8 Click the [Custom installation] button.

9 Click the [Connected to this computer] and click the [Next] button.

10 When you are asked to select the interface, select [Parallel] and click the [Next] button.

11 Select the printer port and click the [Next] button.

Select [LPT1] for the printer port.
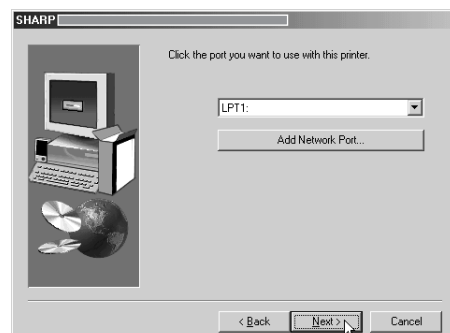
12 When you are asked to select the model name, select the model that you are using and click the [Next] button.

13 Check the contents of the window and click the [Next] button.

Installation of the printer driver begins.

NOTE

When you are using Windows 2000/XP/Server 2003
If a warning message regarding the Windows logo test or digital signature appears, be sure to click the [Continue Anyway] or [Yes] button.

14 Select the printer driver being installed as the default printer and click the [Next] button.

15 When the printer name window appears, click the [Next] button.

If you wish to change the printer name, enter the desired name.

16 When you are asked if you wish to install the display font, select an answer and click the [Next] button.
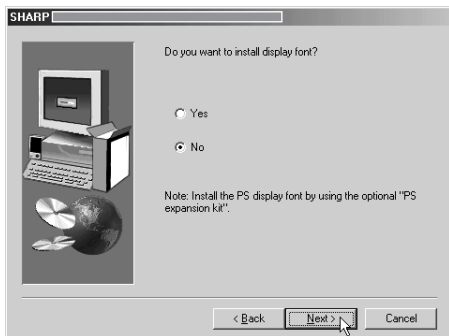
17 Follow the on-screen instructions to install the printer driver.

18 When the finish setup window appears, click the [OK] button.

19 When the finish installation window appears, click the [Close] button.

When the message "Now connect the interface cable to the PC. This will finalize the driver's installation and settings." appears, click the [OK] button.

NOTE

A message prompting you to restart your computer may appear after installation is finished. If this message appears, click [Yes] to restart your computer.

20 Turn off both the machine power and the computer power and then connect the parallel cable (page 18).

After connecting the cable, turn the machine power on first and then turn on your computer.

This completes the installation.

UNINSTALLING PRINTER DRIVERS AND PRINTER UTILITIES

When uninstalling a printer driver that has been installed from the Add Printer wizard, right-click the printer to be deleted from "Printers" of "Control Panel" and select [Delete]. When uninstalling a printer driver that has been installed using the installer, the Printer Administration Utility or the Printer Status Monitor, use "Add/Remove Programs" of "Control Panel". Use the Windows standard operation for each case.

INSTALLING PRINTER DRIVERS USING THE "ADD PRINTER WIZARD"

Before installation

Before installing the printer drivers, check the following items.
● Ensure that your computer system meets the following requirements.

Computer type:
IBM PC/AT or compatible computer
Hardware requirements of the operating system must be satisfied.

Operating system:
Microsoft Windows 95
Microsoft Windows 98
Microsoft Windows Me
Microsoft Windows 2000 Server/Professional
Microsoft Windows NT 4.0 (Service Pack 5 or later)
Microsoft Windows XP Professional/Home Edition
Microsoft Windows Server 2003

When using the "Add Printer Wizard" to install printer drivers, enter the directory name indicated below as a source directory.

Path for using PCL5e driver in Windows 2000/XP/Server 2003
R:\Drivers\Printer\EnglishA*\PCL5e\2kxp

Path for using PCL5e driver in Windows 95/98
R:\Drivers\Printer\EnglishA*\PCL5e\9x

Path for using PCL5e driver in Windows me
R:\Drivers\Printer\EnglishA*\PCL5e\me

Path for using PCL5e driver in Windows NT 4.0
R:\Drivers\Printer\EnglishA*\PCL5e\nt40

Path for using PCL6 driver in Windows 2000/XP/Server 2003
R:\Drivers\Printer\EnglishA*\PCL6\2kxp

Path for using PCL6 driver in Windows 95/98
R:\Drivers\Printer\EnglishA*\PCL6\9x

Path for using PCL6 driver in Windows me
R:\Drivers\Printer\EnglishA*\PCL6\me

Path for using PCL6 driver in Windows NT 4.0
R:\Drivers\Printer\EnglishA*\PCL6\nt40

* "English A" in North America. "English" in Europe.

■ **Example of installation of a printer driver using the "Add Printer Wizard" in Windows XP**

The method for installing a printer driver using the "Add Printer Wizard" in Windows XP is shown below.
The installation example assumes that the printer is connected as a local printer (see "CONNECTING THE MACHINE TO YOUR COMPUTER" on page 18) and that the CD-ROM drive is drive "R". The procedure may differ depending on the system environment.

1 Start Windows XP.

2 Insert the supplied CD-ROM into the CD-ROM drive.

3 Click the [start] button, click [Control Panel], click [Printers and Other Hardware], and then click [Printers and Faxes].

4 Click [Add a printer] in [Printer Tasks].

5 Follow the on-screen instructions.

To specify the printer driver path, enter the following path:

R:\Drivers\Printer\English A*\PCL5e\2kxp or
R:\Drivers\Printer\English A*\PCL6\2kxp

* "English A" in North America. "English" in Europe.

■ **Installing PCL Display Fonts**

The PCL display fonts are fonts displayed on your computer screen. The "SOFTWARE CD-ROM (1)" contains the PCL display fonts that correspond to the resident fonts in the machine. These display fonts can be installed to your computer (Windows 95/98/Me/NT 4.0/2000/XP/Server 2003) from the installer. When installing the PCL display fonts using the Windows installation procedure instead of the installer ([Start] - [Settings] - [Control Panel] - [Fonts] - [Install] - [New Font]), specify the following path.
R:\Drivers\Printer\Font\PCLFont (Where "R" represents the letter of your CD-ROM driver.)

CONNECTING THE MACHINE TO YOUR COMPUTER

■ Connection with a network connector

To use the machine as a network printer, read the online manual on the "Software CD-ROM (2)".
Use a network cable that is shielded.
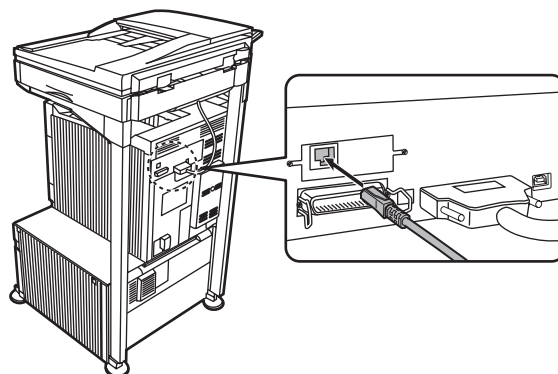
■ Connection with a USB cable

Please purchase a USB cable (shielded) that complies with the following standard.
The USB interface on the machine complies with the USB1.1 and USB2.0 standards.
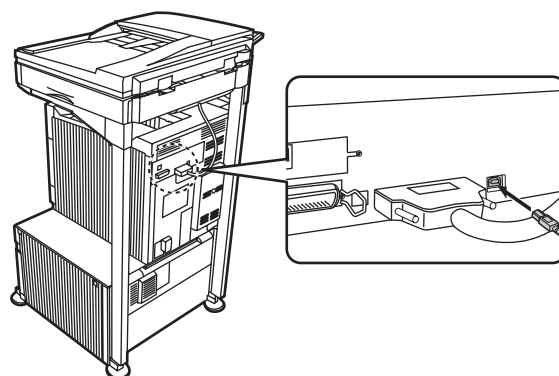
■ Connection with a parallel interface cable

Please purchase a Centronics cable (shielded) that complies with the following standard.
The parallel interface on the machine complies with IEEE-STD-1284-1994 ECP.

Connector type (on machine):
36-pin DDK 57LE-40360-730B (D29) female connector

SHARP

MODEL

AR-FX12
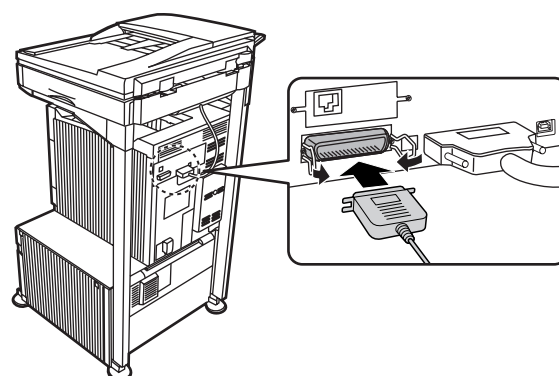
FACSIMILE EXPANSION KIT

OPERATION MANUAL

Be sure to become thoroughly familiar with this manual to gain the maximum benefit from the product.

Before installing this product, be sure to read the installation requirements and cautions sections of the "Operation manual (for general information and copier operation)".

Be sure to keep all operation manuals handy for reference including this manual, the "Operation manual (for general information and copier operation)" and operation manuals for any optional equipment which has been installed.

■ CAUTION:
To reduce the risk of fire, use only UL-Listed No.26 AWG or larger telecommunication line cord.

■ WARNING:
FCC Regulations state that any unauthorized changes or modifications to this equipment not expressly approved by the manufacturer could void the user's authority to operate this equipment.

■ FAX interface cable and Line cable:
These special accessories must be used with the device.

■ NOTE:
This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

INTRODUCTION

Thank you for purchasing this product. This manual only explains the facsimile functions of the product. For safety precautions and general information on using the machine such as loading paper, clearing misfeeds, and handling peripheral units, see the "Operation manual (for general information and copier operation)". For other functions, see the following manuals as appropriate:

Copier function: See "Operation manual (for general information and copier operation)".

General and copier-related key operator programs: See the key operator's guide.

Printer function: See "Operation manual (for printer)". (if the printer option is installed)

Network scanner function: See "Operation manual (for network scanner)". (if the network scanner option is installed)

The explanations in this manual assume that certain peripheral units are installed.

CONTENTS

CHAPTER 5
USING CONVENIENT FUNCTIONS 3
CONVENIENT METHODS OF USE

CHAPTER 6
PROGRAMMING

CHAPTER 7
TROUBLESHOOTING

CHAPTER 8
KEY OPERATOR PROGRAMS

CHAPTER 9
APPENDIX

TO USE THIS PRODUCT CORRECTLY AS A FACSIMILE

Several points must be kept in mind when using this product as a facsimile.
Please note the following:

■ Line connection

Use the telephone cable supplied to connect the machine to a telephone line. Insert the end of the line cord with the core into the LINE jack on the machine as shown. Insert the other end into the telephone line jack.

Line jack

Core
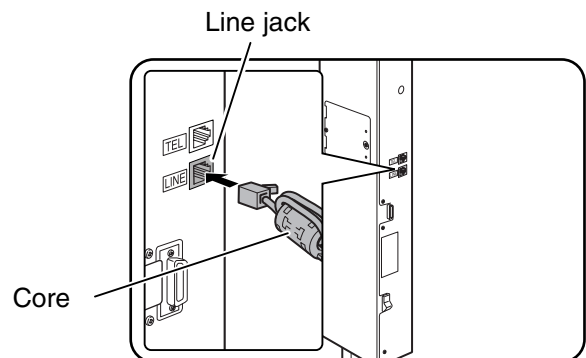
■ Fax power switch

When using the machine, be sure to keep the fax power switch turned on at all times. The fax power switch must be turned on to receive faxes at night or send timer transmission faxes at night.

ON

OFF

Fax power switch
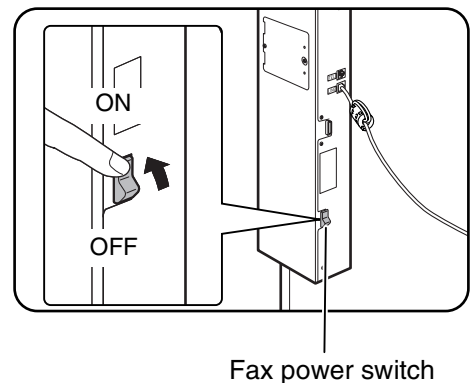
■ Setting the date and time and programming your sender's name and number

Before using the fax function, you must set the date and time and program your sender's name and number in the machine. This procedure is explained in "POINTS TO CHECK AND PROGRAM AFTER INSTALLATION" on page 1-2 of this manual.

■ Lithium battery

A lithium battery inside the machine keeps key operator program settings for the fax function in memory.

● When the battery dies, key operator program settings will be lost. Be sure to keep a written record of the key operator program settings.

● The life of the lithium battery is approximately 5 years if the machine power switch and fax power switch are kept continually off.

● When the battery dies, please consult your dealer or your nearest Sharp customer assistance center. When the lithium battery dies, a message will appear in the display and the unit will no longer function.

■ Other information

● If a thunderstorm occurs, we recommend that you unplug the power cord from the power outlet. Information will be retained in memory even if the power cord is unplugged.

FCC NOTICE TO USERS

This equipment complies with Part 68 of the FCC rules and the requirements adopted by the ACTA.

On this equipment is a label that contains, among other information, a product identifier in the format US:AAAEQ##TXXXX.

If requested, this information must be provided to the telephone company.

A plug and jack used to connect this equipment to the premises wiring and telephone network must comply with the applicable FCC Part 68 rules and requirements adopted by the ACTA.

A compliant telephone cord and modular plug is provided with this product.

It is designed to be connected to a compatible modular jack that is also compliant. See installation instructions for details.

This equipment connects to the telephone network through a standard USOC RJ-11C network interface jack.

The REN is used to determine the number of devices that may be connected to a telephone line.

Excessive RENs on a telephone line may result in the devices not ringing in response to an incoming call.

In most but not all areas, the sum of the RENs should not exceed five (5.0).

To be certain of the number of devices that may be connected to your line, as determined by the total RENs, contact your local telephone company.

For products approved after July 23, 2001, the REN for this product is part of the product identifier that has the format US:AAAEQ##TXXXX.

The digits represented by ## are the REN without a decimal point (e.g., 03 is a REN of 0.3).

For earlier products, the REN is separately shown on the label.

If this equipment causes harm to the telephone network, your telephone company may disconnect your service temporarily.

If possible, They will notify you in advance.

If advance notice is not practical, you will be notified as soon as possible.

You will also be advised of your right to file a complaint with the FCC.

Your telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the operation of your equipment.

If this happens, the telephone company will provide advance notice in order for you to make necessary modifications to maintain uninterrupted service.

If the equipment is causing harm to the telephone network, your telephone company may ask you to disconnect the equipment until the problem resolved.

If you have any questions or problems which cannot be solved by reading this manual, please contact

> Sharp Electronics Corporation
> P.O. Box 650
> Mahwah, NJ 07430-1163
> Telephone: 1-800-BE-SHARP

This equipment may not be used on coin service provided by the telephone company.

Connection to party lines service is subject to state tariffs.

Contact your state's public utility commission, public service commission or corporation commission for more information.

If your home has specially wired alarm equipment connected to the telephone line, ensure the installation of this equipment does not disable your alarm equipment.

If you have questions about what will disable alarm equipment, consult your telephone company or a qualified installer.

ABOUT THE TELEPHONE CONSUMER PROTECTION ACT OF 1991

The Telephone Consumer Protection Act of 1991 makes it unlawful for any person to use a computer or other electronic device, including FAX machines, to send any message unless such message clearly contains 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 machine or such business, other entity, or individual.
(The telephone number provided may not be a 900 number or any other number for which charges exceed local or long-distance transmission charges.)

In order to program this information into your FAX machine, you should complete the following steps:
See CHAPTER 8 of this instruction manual.

IMPORTANT SAFETY INFORMATION

- If any of your telephone equipment is not operating properly, you should immediately remove it from your telephone line, as it may cause harm to the telephone network.
- The AC power outlet should be installed near the equipment and should be easily accessible.
- Never install telephone wiring during a lightning storm.
- Never install telephone jacks in wet locations unless the jack is specifically designed for wet locations.
- Never touch uninsulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.
- Use caution when installing or modifying telephone lines.
- Avoid using a telephone (other than a cordless type) during an electrical storm. There may be a remote risk of electric shock from lightning.
- Do not use a telephone to report a gas leak in the vicinity of the leak.
- Do not install or use the machine near water, or when you are wet.
  Take care not to spill any liquids on the machine.

NOTICE FOR USERS IN CANADA

NOTICE : This product meets the applicable Industry Canada technical specifications.

NOTICE : The Ringer Equivalence Number is an indication of the maximum number of devices allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the RENs of all the devices does not exceed five.

> The REN of this equipment is indicated on the label of the equipment.

AVIS POUR NOS UTILISATEURS AU CANADA

AVIS : Le présent matériel est conforme aux spécifications techniques applicables d'Industrie Canada.

Remarque : L'indice d'équivalence de la sonnerie (IES) sert à indiquer le nombre maximal de terminaux qui peuvent être raccordés à une interface téléphonique. La terminaison d'une interface peut consister en une combinaison quelconque de dispositifs, à la seule condition que la somme d'indices d'équivalence de la sonnerie de tous les dispositifs n'excède pas 5.

> Le nombre REN (Ringer Equivalence Number) de cet appareil est indiqué sur l'étiquette de l'appareil.

Sharp Electronics of Canada Ltd.
335 Britannia Road East,
Mississauga, Ontario, L4Z 1W9
Canada

CHAPTER 1

BEFORE USING THE FAX FEATURE

This chapter contains basic information that you should know before using the fax function of the machine. Please read this chapter before using the fax features.

POINTS TO CHECK AND PROGRAM AFTER INSTALLATION

After installing the unit and before using it as a fax machine, check the following points and program the required information.

■ Make sure the fax power switch is turned on

In addition to the machine power switch (see page 1-17 of the "Operation manual (for general information and copier operation)"), the machine also has a fax power switch (see "Fax power switch" on page 0-4). When using the machine, be sure to keep the fax power switch turned on at all times.

■ Make sure the correct date and time have been set

Make sure the correct date and time have been programmed in the unit (refer to page 2-12 of "Operation manual (for general information and copier operation)"). If the date and time are wrong, please correct them.
It is important to set the correct date and time because they are used for such features as Timer Transmission (page 3-6).

■ Program the sender's name and sender's number

The name and fax number of the user of the machine is programmed in "Fax own number and name set" (page 8-5) in the key operator programs.
The programmed name and number are printed at the top of each transmitted fax page. The sender's number is also used as an identification number when you use the Polling function to request transmission from another fax machine (See "USING THE POLLING FUNCTION" on page 3-14).

CONNECTING AN EXTENSION PHONE

You can connect a telephone to the machine and use it as an extension phone to place and receive calls like any normal phone. When the other party has made the call, the extension phone can be used to activate fax reception. (remote operation)

> **NOTES**
> ● If you connect a combination telephone/answering machine to the machine, you will not be able to use the answering machine function.
> ● You can place calls from the phone even during a power failure.

CONNECTING AN EXTENSION PHONE

1 **Insert the end of the extension phone cord into the extension phone jack on the rear of the machine.**

Extension phone jack
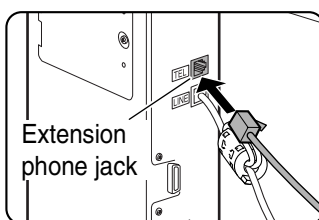
Make sure you hear a "click" sound indicating that the cord is securely connected.

A LOOK AT THE OPERATION PANEL

The operation panel used for the fax function is described below.
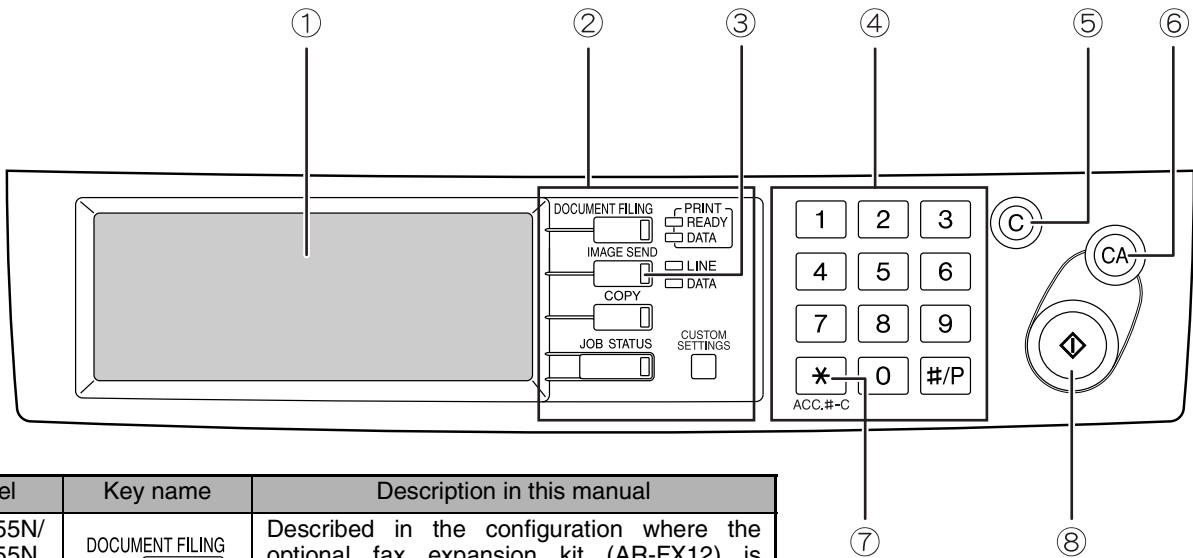
Model	Key name	Description in this manual
AR-M355N/ AR-M455N	DOCUMENT FILING	Described in the configuration where the optional fax expansion kit (AR-FX12) is installed on the AR-M355N/AR-M455N models.
AR-M355U/ AR-M455U	PRINT	No functions related to document filing or Internet fax reception are described in this manual.

① **Touch panel (following page)**

- Messages and keys appear in the touch panel. Touch the displayed keys to select functions and enter settings.
- When a key in the touch panel is touched, a beep sounds and the key is highlighted.
- Keys that cannot be selected in a screen are grayed out. If touched, a double-beep will sound to alert you that the key cannot be selected.

② **Mode select keys (page 2-2)**

Use these keys to change modes.

③ **[IMAGE SEND] key**

Press to switch to fax mode. The main screen of fax mode will appear.
The screen that appears when this key is selected can be changed with "Default display settings" in the key operator programs (page 8-4).

④ **Numeric keys**

Use to enter fax numbers, sub-addresses, passcodes, and numerical settings. (See "MEMORY BOXES AND SUB-ADDRESSES/ PASSCODES REQUIRED FOR F-CODE TRANSMISSION" on page 4-2.)

⑤ **[C] key (clear key)**

Use to clear a mistake when entering fax numbers, sub-addresses, passcodes, and numerical settings. One digit is cleared each time you press the key.
When an original is being scanned, this key can also be used to cancel scanning.

⑥ **[CA] key (clear all key)**

Use to cancel a transmission or programming operation. When this key is pressed, the operation is canceled and you return to the main screen described on the following page.
This key is also used to cancel resolution, paper size and special mode settings.

⑦ **[＊] key (page 5-3)**

This is used to produce tone signals when you are on a pulse dial line.

⑧ **[START] key (page 2-3)**

Press to begin scanning an original for fax transmission.

NOTE

For the names and functions of the parts of the machine, see page 1-9 of the "Operation manual (for general information and copier operation)".

FAX MODE (CONDITION SETTINGS SCREEN)

The condition settings screen of fax mode is displayed by pressing the [IMAGE SEND] key while the document filing mode (printer mode), copy mode, or job status screen appears in the touch panel. In the explanations that follow, it is assumed that the initial screen that appears after pressing the [IMAGE SEND] key is the condition settings screen (shown below). If you have set the display to show the address book screen (following page) when the [IMAGE SEND] key is pressed, touch the [CONDITION SETTINGS] key in the address book screen to display the condition settings screen.
"Default display settings" (page 8-4) in the key operator programs can be used to select whether the condition settings screen (below) appears or the address book screen (next page) appears when the [IMAGE SEND] key is pressed.
   • When the network scanner option is installed, you can select whether the "E-MAIL/FTP" screen or the "INTERNET FAX" screen appears when the [IMAGE SEND] key is pressed (the selection is made in the key operator programs).

■ Condition settings screen

The display is initially set (factory setting) to show the following condition settings screen as the initial screen.
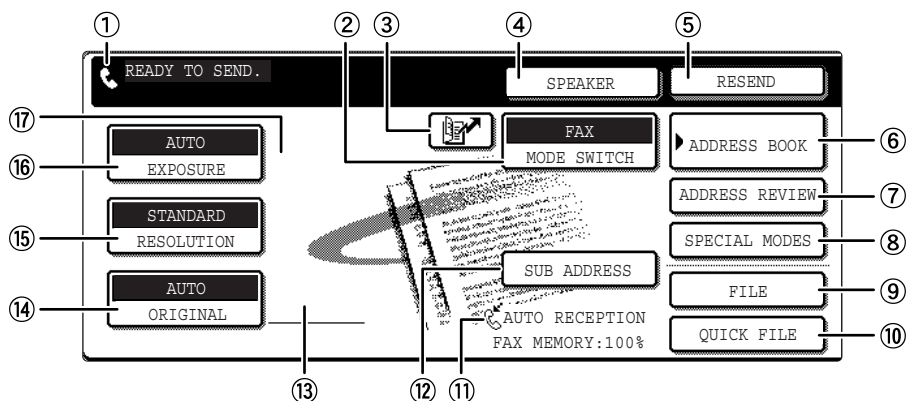
① **Message display**

Messages appear here to indicate the current status of the machine. The icon at left (📞) indicates fax mode.

② **[MODE SWITCH] key**

Use this key when the network scanner option is installed to switch between the "E-MAIL/FTP" and "INTERNET FAX" screens

③ **[📠] key (Speed dial key) (page 1-12)**

When a one-touch dial key or group key is stored in the address book, the machine automatically assigns it a 3-digit number (called a Speed Dial number in this manual). This key and the Speed Dial number can be used to abbreviate the transmission procedure (see Speed Dialing on page 2-4).

④ **[SPEAKER] key (page 1-12)**

Touch the [SPEAKER] key to dial and transmit a fax manually.
During dialing it changes into the [PAUSE] key, and after pressing the [SUB ADDRESS] key it changes into the [SPACE] key.

⑤ **[RESEND] key (page 1-12)**

Touch this key to redial the number most recently dialed with the numeric keys or a one-touch dial key. After dialing, this key changes into the [NEXT ADDRESS] key.

⑥ **[ADDRESS BOOK] key (page 2-4)**

Touch this key to display the address book screen (next page). Touch this key when you want to use an auto-dial number (one-touch dialing or group dialing).

⑦ **[ADDRESS REVIEW] key (page 3-3)**

When performing a broadcast transmission, touch this key to check your selected destinations. The selected destinations will appear and any unneeded destinations can be deleted.

⑧ **[SPECIAL MODES] key**

Touch this key to select one of the following special functions:
   • Edge erase (page 3-4)   • Dual page scan (page 3-5)
   • Timer transmission (page 3-6) • 2in1 (page 3-7)
   • Card shot (page 3-8)   • Job build mode (page 3-10)
   • Polling (page 3-13)   • Memory box (page 3-15)
   • Program (page 3-17)
   • Transaction report (page 3-12)

⑨ **[FILE] key***

Touch this key to store a document image that you are transmitting in the hard disk (this includes selecting a user name, file name, and location).

⑩ **[QUICK FILE] key***

Touch this key to store a document image that you are transmitting in the temporary storage folder.

⑪ **Memory and reception mode display**

This shows the amount of fax memory that is free and the currently selected reception mode.

* Can only be used on the AR-M355N/AR-M455N. The AR-M355U/AR-M455U models do not have this function.

1-4

1

⑫ **[SUB ADDRESS] key (page 4-3)**

Touch this key to enter a sub-address and passcode when using F-code transmission.

⑬ **Two-sided scanning icon display (page 2-7)**

Icons appear here when you touch the [ORIGINAL] key and select two-sided scanning. The icons can be touched to open function selection screens.

⑭ **[ORIGINAL] key (page 1-8)**

Touch this key when you wish to manually set the size of the original to be scanned or scan both sides of the original.

⑮ **[RESOLUTION] key (page 1-10)**

Touch this key to change the resolution setting for the original to be scanned. The selected resolution setting will be highlighted above the key. The initial factory setting is [STANDARD].

⑯ **[EXPOSURE] key (page 1-11)**

Touch this key to change the exposure setting for the original to be scanned. The selected exposure setting will be highlighted above the key. The initial factory setting is AUTO.

⑰ **Special mode icon display (page 5-2 of "Operation manual (for general information and copier operation)")**

When a special mode such as polling or dual page scan is selected, a special mode icon appears here.

■ Address book screen (alphabetically ordered)

The screen below appears initially when the address book is set as the initial screen using "Default display settings" (page 8-4) in the key operator programs.

● The screen below is the alphabetical index screen. You can also have the user index screen initially. (See "Default display settings" on page 8-4.)

● The screen appears as shown below when the network scanner option is not installed.
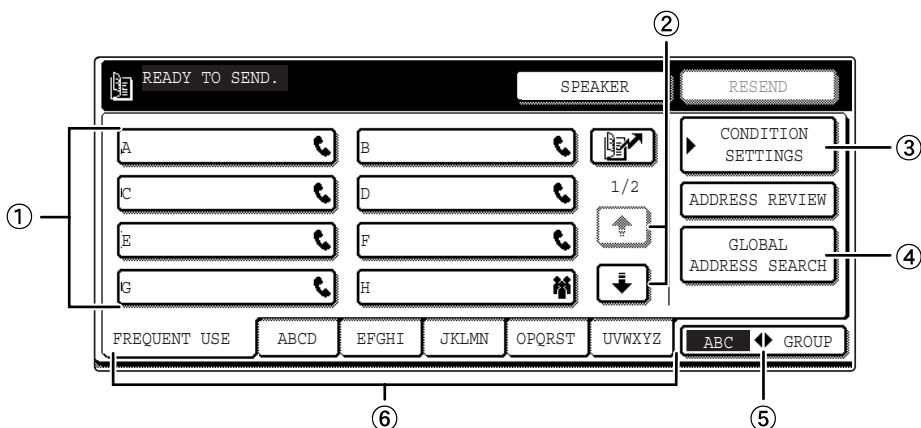
① **One-touch key display**

This shows the one-touch keys that have been stored on the selected "index card". The key type is indicated by the icon at the right. One-touch keys in which a fax number is stored are indicated by a " " icon. The display is initially set to show 6 keys. This can be changed to 8 or 12 using the key operator program. (See "The number of direct address/sender keys displayed setting" on page 8-4.)

Display illustrations in this manual show the display set to eight keys.

② **Display switching keys**

When more one-touch keys are stored than can be displayed in one screen, touch the 🔼 🔽 keys to change screens.

③ **[CONDITION SETTINGS] key**

This displays the condition settings screen (previous page), which is used to set various conditions.

④ **[GLOBAL ADDRESS SEARCH] key**

Touch this key to search for a fax number on an LDAP server (page 2-5).

⑤ **[ABC ◀▶ GROUP] key**

Touch this key to switch between the alphabetical index and the group index.

⑥ **Index keys**

One-touch key destinations are stored on each of these index cards (alphabetical index or group index). Each time the selected tab is touched, the key display order changes from the order of storing (the initial display order), to ascending order, to descending order. As this is done, the icon on the tab indicates the current display order.

Storing order (initially selected)	Ascending order	Descending order
FREQUENT USE ABCD	FREQUENT USE ▲ ABCD	FREQUENT USE ▼ ABCD

Group indexes make it possible to store one-touch keys by group with an assigned name for easy reference. This is done with the custom settings (refer to pages 6-3 and 6-9). Frequently used one-touch key destinations can be stored on the FREQUENT USE card for convenient access.

NOTE

When the network scanner option is installed and a destination other than a fax numbers is stored in a one-touch key, one of the following icons will appear.

📠 :Scan to E-mail destination

🖥 :Scan to Desktop destination

📡 :Internet fax destination

👥 :Multiple destinations (Scan to E-mail, fax, etc.)

📟 :Scan to FTP destination

ORIGINALS
ORIGINALS THAT CAN BE FAXED

■ Original sizes

	Minimum original size	Maximum original size
Using the automatic document feeder	8-1/2" (width) x 5-1/2" (length) (A5: 210 mm (width) x 148 mm (length))	11" (width) x 31-1/2" (length) (297 mm (width) x 800 mm (length))
Using the document glass	5-1/2" (width) x 8-1/2" (length) (A5R: 148 mm (width) x 210 mm (length))	11" (width) x 17" (length) (297 mm (width) x 431.8 mm (length))

NOTE
Originals that are not a standard size (5-1/2"x8-1/2", 8-1/2"x11", 8-1/2"x11"R, 8-1/2"x14", 11"x17", A5, B5, B5R, A4, A4R, B4, A3) can also be faxed.

■ Automatic reduction of faxed document

If the size (width) of the faxed document is greater than the receiving machine's paper size, the size will be automatically reduced.

Faxed document width	Receiving machine's paper width	Reduced size	Ratio (Area ratio)
11"x17" (A3)	8-1/2"x14" (B4)	8-1/2"x14" (B4)	1 : 0.64 (1 : 0.78)
11"x17" (A3)	8-1/2"x11" (A4)	8-1/2"x11"R (A4R)	1 : 0.5 (1 : 0.5)

A document can also be faxed without reducing its size. In this case, the left and right edges will not be transmitted. (See "Auto reduction sending setting" on page 8-7.)

LOADING A DOCUMENT

A document can be loaded in the automatic document feeder or on the document glass. Use the automatic document feeder when faxing a large number of sheet originals. Use the document glass to fax originals that cannot be scanned using the automatic document feeder such as thick or thin sheet originals or bound originals such as books.

USING THE AUTOMATIC DOCUMENT FEEDER

1 Lift the document glass cover and make sure a document is not placed on the document glass. Gently close the cover.
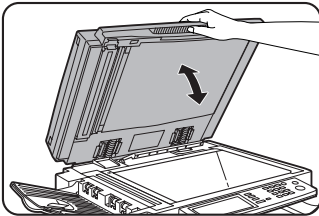
2 Adjust the document guides on the automatic document feeder to the width of the document.
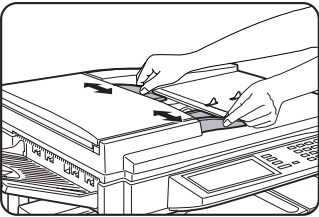
3 Align the edges of the document pages and then insert the stack in the document feeder so that the first page is face down.
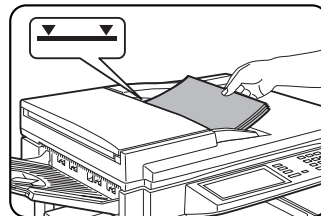
Insert the stack into the automatic document feeder until it stops. The stack should not be higher than the indicator line (maximum 50 pages, or 30 pages for 8-1/2"x14" or larger documents).

NOTES
● Use the automatic document feeder for long originals. The document glass cannot be used.
● When faxing a long original, touch the [LONG SIZE] key in step 3 of "MANUALLY SETTING THE SCANNING SIZE" (page 1-8).

USING THE DOCUMENT GLASS

1 Open the document glass cover, and place the document face down on the document glass. Gently close the cover.

Original size detector
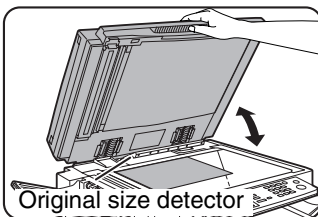
NOTE
Do not place any objects under the original size detector plate. Closing the document glass cover with an object underneath may damage the original size detector plate and prevent correct detection of the document size.

Regardless of the size of the original, place the original in the far left corner of the document glass. (Align the upper left-hand corner of the original with the tip of the ◄ mark.)

Document glass scale
◄ mark

5-1/2"x8-1/2"
8-1/2"x14"
8-1/2"x11"   11"x17"

Document glass scale
◄ mark

8-1/2"x11"R
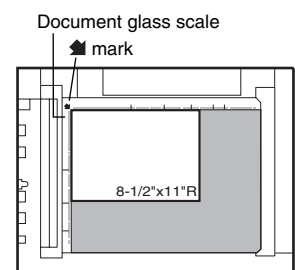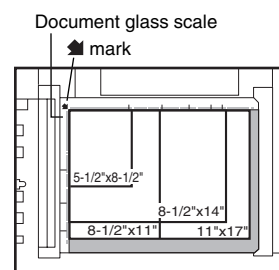
CHECKING THE SIZE OF A LOADED ORIGINAL

When a standard-size* original is placed, the original size is automatically detected (automatic original detection function) and displayed in the top half of the [ORIGINAL] key. Check the key to make sure that the original size has been correctly detected.
①:[AUTO] appears when the automatic original detection function is operating.
②:Displays the original size.
If a non-standard size original is placed or if you wish to change the scanning size, follow the steps below to manually set the original scanning size.

```
        STANDARD
        RESOLUTION

①──── AUTO  8½X11
②────      ORIGINAL
```
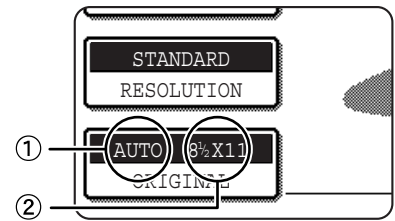
> **NOTE**
> * **Standard sizes that can be detected are as follows:**
> 5-1/2"x8-1/2", 8-1/2"x11", 8-1/2"x11"R, 8-1/2"x14", 11"x17", A5, B5, B5R, A4, A4R, B4, A3. If a non-standard size original is loaded (including special sizes), the closest standard size may be displayed, or the original size may not appear at all.

MANUALLY SETTING THE SCANNING SIZE

If you load an original that is not a standard size (such as an AB size), or if the size is not detected correctly, you must touch the [ORIGINAL] key and set the original size manually. Perform the following steps after loading the document in the automatic document feeder or on the document glass.

1 Touch the [ORIGINAL] key.

```
        STANDARD
        RESOLUTION


        AUTO  8½X11
             ORIGINAL
```
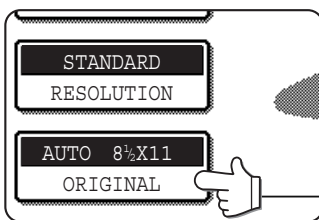
If the address book screen appears, touch the [CONDITION SETTINGS] key to display the condition settings screen (page 1-5).

2 Touch the key under [SCAN SIZE].
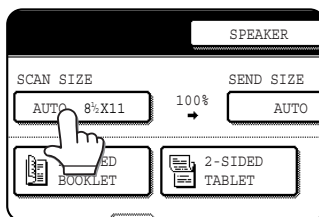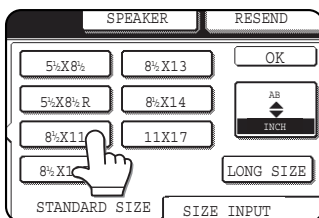
```
                        SPEAKER

SCAN SIZE           SEND SIZE
 AUTO  8½X11   100%     AUTO
                    →
  ─ED           2-SIDED
  BOOKLET        TABLET
```

3 Touch the desired original size key.

```
   SPEAKER      RESEND
 5½X8½    8½X13       OK
 5½X8½R   8½X14      AB
 8½X11    11X17      INCH
 8½X1            LONG SIZE
 STANDARD SIZE   SIZE INPUT
```

[AUTO] is no longer highlighted. [MANUAL] and the original size key you touched are highlighted.
If you placed a long original, touch the LONG SIZE key.

If you wish to select an AB size, touch the [AB/INCH] key and then touch the desired original size key.

```
          SPEAKER    RESEND
 8½X11    A5    A4       OK
 AUTO     A5R   A4R     AB
 MANUAL   B5    B4     INCH
 TOM     B5    A3   LONG SIZ
 E    STANDARD SIZE   SIZE INPUT
```
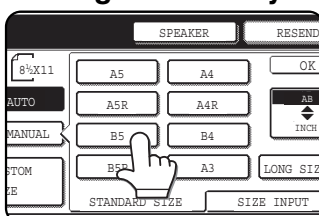
[AB] is highlighted and AB size keys are displayed. To return to the inch palette, touch the [AB/INCH] key once again.

If you placed a non-standard size original on the document holder or on the document glass, touch the [SIZE INPUT] tab and then enter the width (X) and length (Y) of the original with the ▲▼ keys.
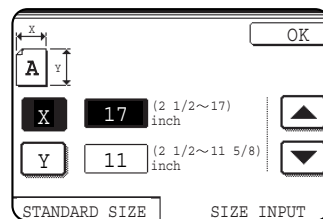
```
  X                    OK
  A  Y

  X    17  (2 1/2~17)
              inch      ▲
  Y    11  (2 1/2~11 5/8)
              inch      ▼
 STANDARD SIZE   SIZE INPUT
```

X (width) is initially selected. Enter X and then touch the Y (Y) key to enter Y. A width of 2-1/2 to 17 inch (64 to 432 mm) can be entered in X, and a length of 2-1/2 to 11-5/8 inch (64 to 297 mm) can be entered in Y.

If you frequently send documents that are the same non-standard size, you can store the dimensions as explained in "STORING, DELETING, AND USING ORIGINAL SIZES" on the following page. This will allow you to omit entry of X and Y each time you send that size of document.

4 Touch the outer [OK] key.

Touch the [OK] key to return to the screen of step 2.

5 Touch the outer [OK] key.

```
 SPEAKER        RESEND

 SEND SIZE        OK
  AUTO

 -SIDED
```
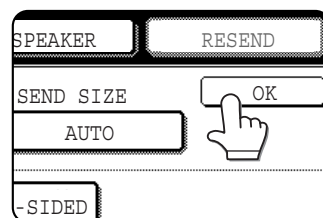
6 The selected size appears in the top half of the [ORIGINAL] key.
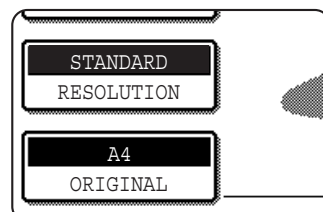
```
        STANDARD
        RESOLUTION


           A4
          ORIGINAL
```

STORING, DELETING, AND USING ORIGINAL SIZES

Up to 9 special original sizes can be stored. Stored sizes can be easily called up and are not erased if the power is turned off. Storing a frequently used original size saves you the trouble of manually setting the size each time you fax that size of document.

● To cancel an original size storing, using, or deleting operation, press the [CA] key or touch the [ORIGINAL] key on the screen.

STORING OR DELETING AN ORIGINAL SIZE

1 **Touch the [ORIGINAL] key.**

STANDARD
RESOLUTION

AUTO   8½X11
ORIGINAL

2 **Touch the key under [SCAN SIZE].**

SCAN SIZE
AUTO   8½X11   100%

2-SIDED   2-
BOOKLET   TA

3 **Touch the [CUSTOM SIZE] key.**

MANUAL   5½X8½

CUSTOM   5½X8½R
SIZE
               STANDARD S

4 **Touch the [STORE/DELETE] key.**

RECALL   STORE/DELETE

5 **Touch the original size key (☐) that you wish to store or delete.**

X5½ Y10⅛

RECALL   STORE/DELETE
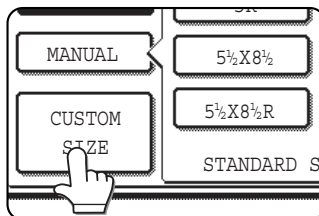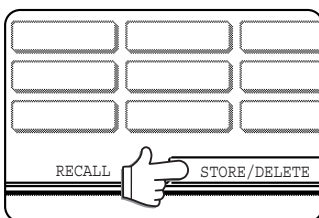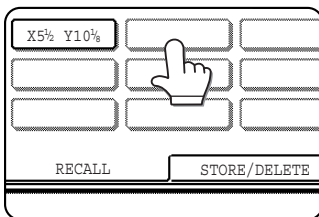
To store an original size, touch a key that does not show a size (☐).
Keys that already have an original size stored will show the stored size (X5½Y10⅛).

To delete or change a stored size, touch the key that shows the size that you wish to delete or change.

- ●If you are storing an original size, go to step 6.
- ●If you are deleting an original size, go to step 8.
- ●If you are changing an original size, go to step 8 and touch the [AMEND] key.

6 **Enter the X (width) and Y (length) dimensions of the original with the ▲▼ keys.**
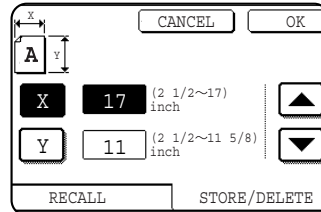
CANCEL   OK

X   17   (2 1/2~17) inch   ▲

Y   11   (2 1/2~11 5/8) inch   ▼

RECALL   STORE/DELETE

X (width) is initially selected.
Enter X and then touch the (Y) key to enter Y. A width of 2-1/2 to 17 inch (64 to 432 mm) can be entered in X, and a length of 2-1/2 to 11-5/8 inch (64 to 297 mm) can be entered in Y.

7 **Touch the [OK] key.**

The original size entered in step 6 is stored in the key selected in step 5.

To exit, touch the [ORIGINAL] key.

8 **When you touch a key that shows an original size in step 5, a message screen appears that contains the keys [CANCEL], [DELETE], and [AMEND].**

- ●To cancel the procedure, touch the [CANCEL] key.
- ●To delete the selected original size, touch the [DELETE] key.
- ●To change the original size stored in the key, touch the [AMEND] key. The screen of step 6 will appear to let you change the size.

9 **To exit, touch the [ORIGINAL] key.**

USING A STORED ORIGINAL SIZE

1 **Follow steps 1 to 3 of "STORING OR DELETING AN ORIGINAL SIZE".**

2 **Touch the original size key that you wish to use.**

X5½ Y10⅛

RECALL   STORE/DELETE
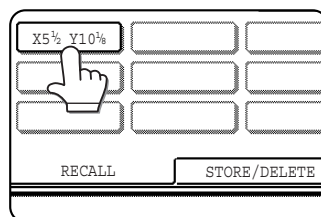
3 **Touch the [OK] key.**

The stored original size is called up.

SELECTING RESOLUTION AND EXPOSURE SETTINGS

After loading an original, you can adjust the resolution and exposure settings to match the condition of the original-for example, if it has small or faint characters, or if it is a photo. After loading the original in fax mode, adjust the settings as explained below.

SELECTING THE RESOLUTION

The initial resolution setting is STANDARD. To change the setting, follow these steps:

■ Change the resolution.

1 Touch the [RESOLUTION] key.

```
STANDARD
RESOLUTION

AUTO   8½X11
ORIGINAL
```
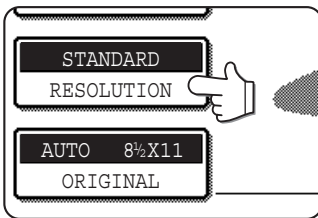
2 Touch the [STANDARD] key, [FINE] key, [SUPER FINE] key, or [ULTRA FINE] key.

```
STANDARD

FINE

SUPER FINE        HALF TONE

ULTRA FINE
```
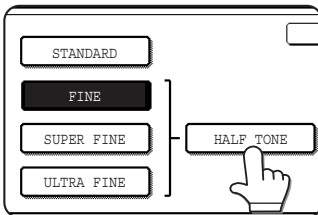
The selected key is highlighted.
If you touched the [FINE] key, [SUPER FINE] key, or [ULTRA FINE] key, you can also select halftone by touching the [HALF TONE] key.

3 Touch the [OK] key.

```
                    OK
ARD

NE

FINE        HALF TONE

FINE
```
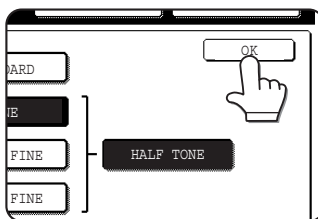
You will return to the initial screen.

■ Resolution settings

Standard	Touch this key if your original consists of normal-sized characters (like those in this manual).
Fine	Touch this key if your original has small characters or diagrams. The original will be scanned at twice the resolution of the [STANDARD] setting.
Super fine	Touch this key if your original has intricate pictures or diagrams. A higher-quality image will be produced than with the [FINE] setting.
Ultra fine	Touch this key if your original has intricate pictures or diagrams. This setting gives the best image quality. However, transmission will take longer than with the other settings.

Half tone	Touch this key if your original is a photograph or has gradations of color (such as a color original). This setting will produce a clearer image than [FINE], [SUPER FINE], or [ULTRA FINE] used alone. Half tone cannot be selected if [STANDARD] has been selected.

NOTES
● The factory default setting for the initial resolution is [STANDARD]. The initial resolution can be changed to a different setting in the key operator programs (see "Initial resolution setting" on page 8-4).
● When using the automatic document feeder, the resolution setting cannot be changed once scanning has begun.
● When a fax is sent at [ULTRA FINE], [SUPER FINE], or [FINE] resolution, a lower resolution will be used if the receiving machine does not have that resolution.

SELECTING THE EXPOSURE

The initial exposure setting is AUTO. To change the setting, follow these steps:

■ Change the exposure.

1 Touch the [EXPOSURE] key.
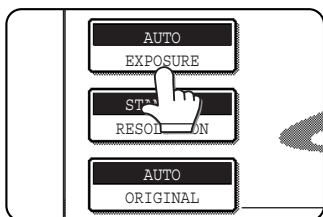
2 Touch the desired exposure key.
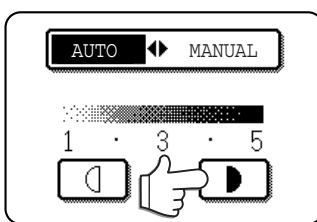
To darken the exposure, touch the ▶ key. To lighten the exposure, touch the ◀ key. When the ▶ or ◀ key is touched, [AUTO] is not highlighted and [MANUAL] is highlighted. To return to auto exposure, touch [AUTO].

3 Touch the [OK] key.

You will return to the initial screen.

1
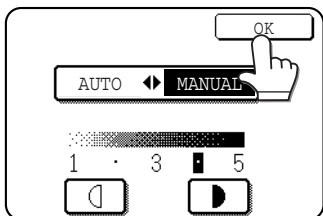
NOTES
● When using the document glass to scan pages an original, the exposure setting can be changed each time you change pages. When using the automatic document feeder, the exposure setting cannot be changed once scanning has begun.
● The default (initial) exposure setting can be changed in "Default exposure settings" (page 8-5) in the key operator programs.
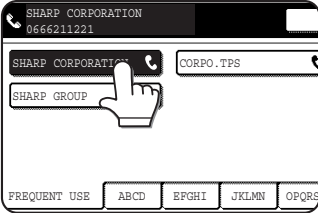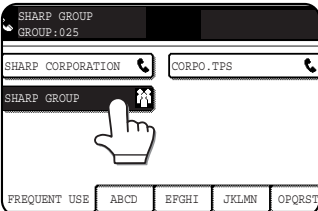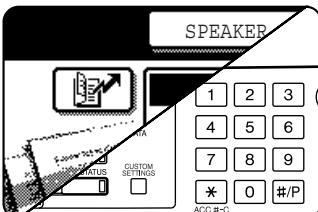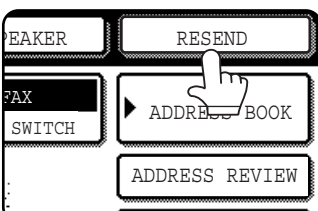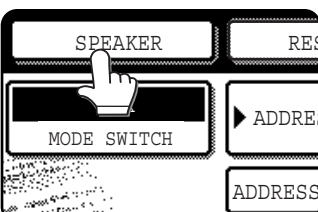
■ Exposure settings

1 to 2	Select this setting if your original consists Originalmostly of dark characters.
Auto	This setting automatically adjusts the exposure for light and dark parts of the original.
4 to 5	Select this setting if your original consists Originalmostly of faint characters.

CONVENIENT DIALING METHODS

The fax function includes a convenient auto dial feature (one-touch dialing and group dialing). By programming frequently dialed numbers, you can call and send documents to these locations by means of a simple dialing operation (refer to page 2-4). There are two types of auto-dialing: one-touch dialing and group dialing. To program auto-dial numbers, refer to pages 6-3, 6-6.

● One-touch dialing Simply press a one-touch key and then press the [Start] key to dial the programmed location. A name of up to 36 characters can be programmed for the location (a maximum of 18 characters are displayed). When using F-code transmission, a sub-address and passcode can also be programmed (refer to page 4-2).		Touch the [ADDRESS] key in the initial screen to display the left screen.
● Group dialing Multiple one-touch dial locations can be programmed into a single one-touch key. This is convenient for successively sending a document to multiple locations. • Full fax numbers entered with the numeric keys can also be stored in group keys.		Touch the [ADDRESS] key in the initial screen to display the left screen.
● Speed dialing When a one-touch key or group key is stored in the address book, the machine automatically assigns it a 3-digit speed dial number. The ⌨ key and 3-digit Speed Dial number can be used to abbreviate the transmission procedure.		
● Redialing The machine keeps the last fax number dialed with the numeric keys in memory. You can redial the last number dialed by simply touching the [RESEND] key. • If numeric keys were pressed during a phone conversation, the [RESEND] key may not dial the correct number. • If the previous transmission was a broadcast transmission in which one-touch keys were used, the [RESEND] key cannot be used.		
● On-hook dialing This is a dialing function. This feature allows you to dial without lifting an extension phone connected to the machine. Touch the [SPEAKER] key, listen for the dial tone through the speaker, and then dial. • Faxes must be sent manually when using on-hook dialing. • On-hook dialing is not possible using a one-touch key that includes a sub-address and passcode, or a group dial key.		

NOTES
- ● Programmed one-touch keys and group dial keys are stored on "index cards". A one-touch key or group key can be easily accessed by touching the index key. (Refer to ⑤ on page 1-5.)
- ● To prevent calling or sending a fax to a wrong number, look carefully at the touch panel and make sure you program the correct number when programming an auto-dial number. After storing a number, you can also print out the stored number (Refer to page 6-14) to make sure it was stored correctly.

CHAPTER 2

BASIC OPERATIONS

This chapter explains basic operations such as sending faxes.

SENDING A FAX
BASIC PROCEDURE FOR SENDING FAXES

1 Make sure the machine is in fax mode.
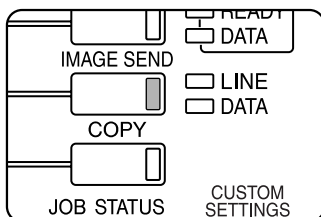
When the [IMAGE SEND] key light is on, the machine is in fax mode. If the light is not on, press the [IMAGE SEND] key.

If the network scanner option is installed, touch the [MODE SWITCH] key and then the [FAX] key to switch to fax mode.

When fax mode is selected, "FAX" appears in the top half of the [MODE SWITCH] key.

2 Load the original.

● Using the automatic document feeder: Page 1-7
● Using the document glass: Page 1-7

If you are using the document glass to send multiple pages, load the first page first.

NOTE

You cannot load documents in both the automatic document feeder and on the document glass and send them in a single fax transmission.

---

3 Check the original size.
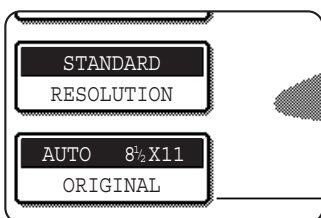
If the address book screen appears, touch the [CONDITION SETTINGS] key to display the condition settings screen (page 1-5).

If the original is not a standard size or the size was not detected correctly, touch the [ORIGINAL] key to specify the original size. (See "MANUALLY SETTING THE SCANNING SIZE" on page 1-8.)

4 If needed, adjust the resolution setting. (Refer to page 1-10.)
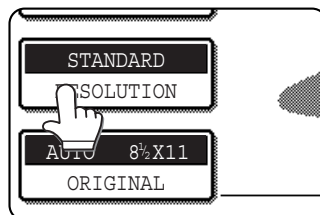
5 If needed, adjust the exposure setting. (Refer to page 1-11.)
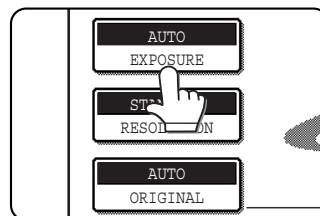
6 If desired, touch the [FILE] key or the [QUICK FILE] key.*

* Can only be used on the AR-M355N/AR-M455N. The AR-M355U/AR-M455U models do not have this function.
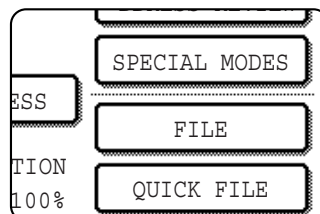
These keys are used to store the scanned image in the machine's hard disk. The stored image can be printed or transmitted again at a later time.

For information on this function, see "Document filing functions" in chapter 7 of the Operation Manual (for general information and copier operation).

If the [FILE] key is grayed out, only the [QUICK FILE] key can be selected.

When you touch the [QUICK FILE] key, a message asking you to confirm the save will appear. Touch the [OK] key in the message screen and go to the next step.

If you wish to cancel the save, touch the [QUICK FILE] key after touching the [OK] key so that the [QUICK FILE] key is no longer highlighted.

2-2

7 **Dial the fax number.**
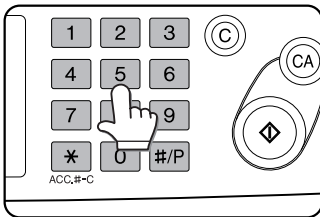
The number that you entered appears in the message display (See "Condition settings screen" on page 1-4.). If it is not correct, press the [C] key and re-enter the number. You can also use the [RESEND] key (page 1-12) or an auto-dial number (following page).

Entering a pause.
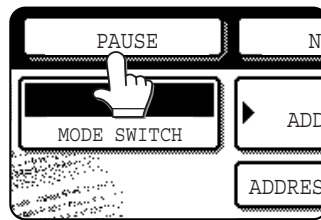
If you need to insert a pause between digits when dialing out from a PBX or when dialing an international number, touch the [PAUSE] key in the upper right corner of the screen.

Each time you touch the [PAUSE] key, a hyphen ("-") appears and a 2-second pause* is inserted.

The [PAUSE] key is also be used to link numbers together (this is called chain dialing). Enter a number, touch the [PAUSE] key to enter a hyphen "-", and then enter another number with the numeric keys or by pressing a one-touch key. The linked numbers will be dialed as one number.

* The duration of each pause can be changed with the key operator program. ("Pause time setting" on page 8-6.)

2

Using the automatic document feeder

8 **Press the [START] key.**
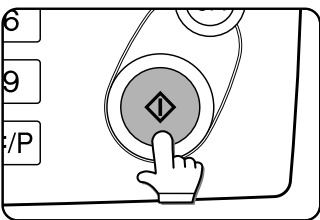
Scanning begins.
If there are no previous jobs in progress and the line is free, the machine will dial the receiving machine and begin transmission as soon as the first page is scanned. Transmission will take place while any remaining pages are scanned (Quick on-line transmission: see page 2-8).

If there is a previously stored job or a job is in progress, or if the line is being used, all pages of the document are scanned into memory and stored as a transmission job. (This is called memory transmission: the destination is automatically called and the document transmitted after previously stored jobs are completed.)

If scanning is completed normally, the machine makes a beep sound to inform you that the transmission job is stored and "JOB STORED." appears in the message display.

Using the document glass

8 **Press the [START] key.**
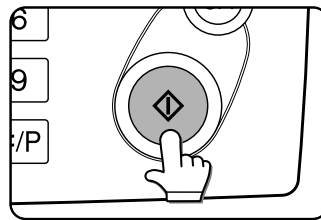
The original is scanned and the [READ-END] key appears in the touch panel.

9 **If you have another page to scan, change pages and then press the [START] key.**
Repeat this sequence until all pages have been scanned. You can change the resolution and exposure settings as needed for each page (refer to pages 1-10 and 1-11).
If the [START] key is not pressed within approximately one minute, scanning will end automatically and the transmission will be stored.

10 **After the last page is scanned, touch the [READ-END] key.**
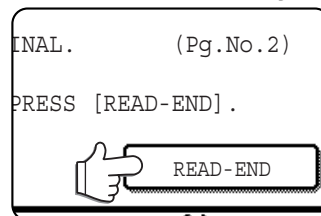
The machine makes a beep sound to inform you that the transmission job is stored and "JOB STORED." appears in the message display. (The destination is automatically called and the document transmitted after previously stored jobs are completed.) Open the document glass cover and remove the document.

NOTES
● **Canceling transmission**
To cancel transmission while "SCANNING ORIGINAL..." appears in the display or before the [READ-END] key is pressed, press the [C] key or the [CA] key. To cancel a transmission job that is already stored, press the [JOB STATUS] key and cancel the job as explained on page 2-9.
● If the machine makes two beeps during or at the end of transmission and an error message appears in the message display, refer to page 7-3 to fix the problem.
● If the power is turned off or a power failure occurs while a document is being scanned in the automatic document feeder, the machine will stop and a document jam will occur. After power is restored, remove the document as explained on page 2-22 of "Operation manual (for general information and copier operation)".
● A job number appears in the display with "JOB STORED." when a transmission job is stored. If you make a note of this number, you can use the number to easily locate the job when checking the results of the transmission in the job status screen for a broadcast transmission, or in the transaction report (page 7-2) or activity report (page 7-3) for other types of transmission jobs.

TRANSMISSION BY AUTO-DIALING (ONE-TOUCH DIALING AND GROUP DIALING)

Fax numbers can also be dialed by automatic dialing (one-touch dialing and group dialing). Follow the steps below to send a fax using an auto dial number. To use an auto dial number, the name and fax number of the destination must first be stored. For information on auto dial numbers, see page 1-12. To store an auto dial number, see pages 6-3 and 6-6.

1 Perform steps 1 through 6 of "BASIC PROCEDURE FOR SENDING FAXES" (page 2-2).

2 Touch the [ADDRESS BOOK] key.
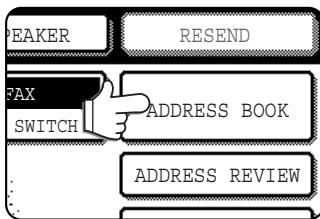
The address book screen appears.
This step is not necessary if the address book already appears. Go to step 3.

3 Touch the one-touch key for the desired destination.
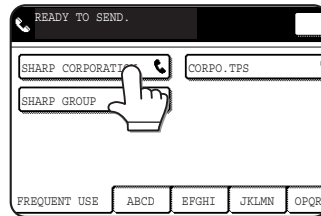
Refer to page 1-5 for information on using the address book screen.
The key you touched is highlighted. If you touch the wrong key, touch the key again to cancel the selection. The key display will return to normal.

4 Continue from step 8 of "BASIC PROCEDURE FOR SENDING FAXES" (page 2-3).

SENDING A FAX BY SPEED DIALING

In addition to one-touch dialing and group dialing, you can also send a fax by touching the [⬚] key (Speed Dial key) and entering a 3-digit Speed Dial number. Follow the steps below to send a fax by Speed Dialing. The 3-digit Speed Dial number is automatically assigned by the machine when a one-touch key or group key is stored. (See Speed Dial numbers on pages 6-3 and 6-6.)

1 Perform steps 1 through 6 of "BASIC PROCEDURE FOR SENDING FAXES" (page 2-2).

2 Touch the [⬚] key (Speed Dial key).
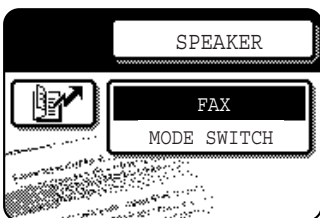
3 Enter the 3-digit Speed Dial number.
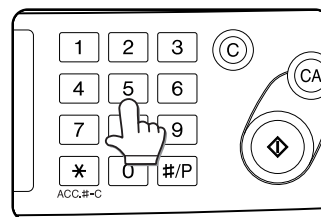
Enter the 3-digit Speed Dial number that was automatically assigned by the machine when the destination was stored in a one-touch key or a group key. (See Speed Dial numbers on pages 6-3 and 6-6.)
Zeros at the beginning of the number (such as 001) can be omitted. Touch the [⬚] key (Speed Dial key).
If you enter the wrong number, press the [C] key to clear it. If you enter a 3-digit number that is not stored in the machine, press the [C] and then enter the correct number. If you do not know the 3-digit number, print the stored destination list (See "PRINTING PROGRAMMED INFORMATION" on page 6-14.)

4 Continue from step 8 of "BASIC PROCEDURE FOR SENDING FAXES" (page 2-3).

FAX NUMBER ENTRY WITH GLOBAL ADDRESS SEARCH

If the machine is configured as a network printer that can use LDAP service, the machine can be used to access the LDAP server* and search for the fax number. If the search returns the desired fax number, the number can be selected as a destination fax number and/or stored in the address book.
* The LDAP server must be available for use and a fax number search service must be in operation.

1 Touch the [GLOBAL ADDRESS SEARCH] key.
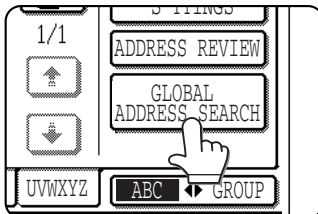
The server change screen is displayed. If only one LDAP server has been set, the global address search screen is displayed. Proceed to step 4.

2 Touch the desired LDAP server key.
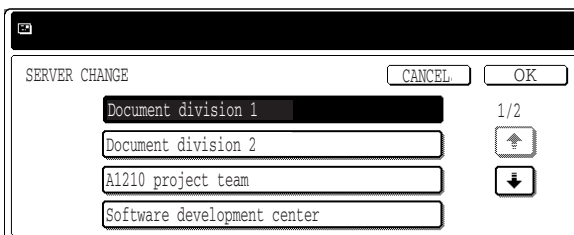
To search the highlighted server, proceed to step 3.

3 Touch the [OK] key.
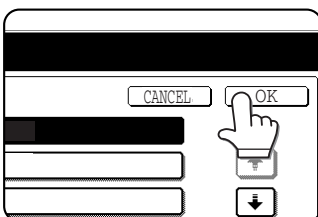
4 Enter a keyword for search.
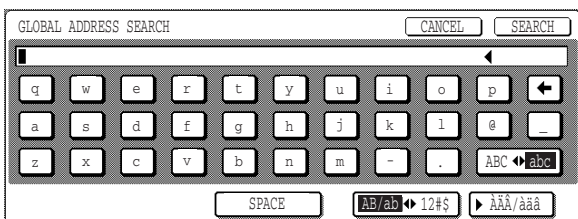
5 Touch the [SEARCH] key.
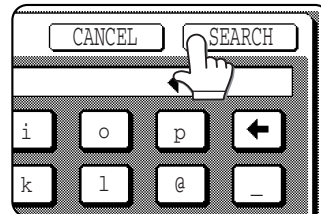
The search results appear as destination keys.
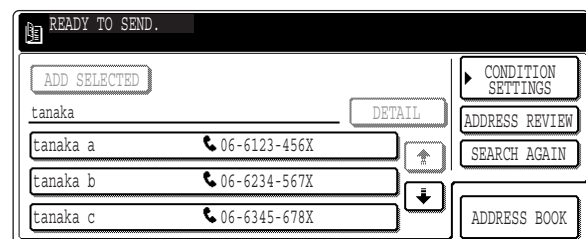
If matching addresses are not found, a message indicating the result is displayed. In this case, touch the [OK] key and touch the [SEARCH AGAIN] key to return to step 4.

6 Touch the desired destination key.
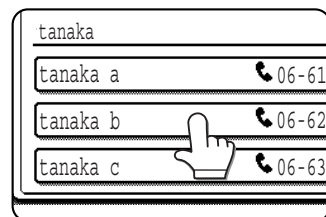
To display the remaining destinations, touch the [[↓]] key.
For detailed information on the selected destination, touch the [DETAIL] key. You can also register the destination fax number to the address book by touching the [REGISTER] key.

2

ENLARGING/REDUCING THE IMAGE BEFORE TRANSMISSION

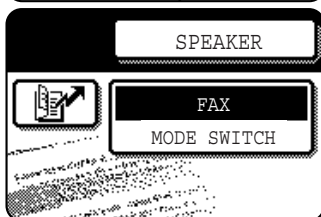Follow these steps to enlarge or reduce the scanned image before transmission.

1 Make sure the machine is in fax mode.
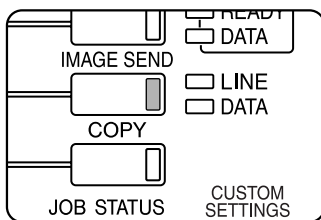
When the [IMAGE SEND] key light is on, the machine is in fax mode. If the light is not on, press the [IMAGE SEND] key.

If the network scanner option is installed, touch the [MODE SWITCH] key and then the [FAX] key to switch to fax mode.

When fax mode is selected, "FAX" appears in the top half of the [MODE SWITCH] key.

2 Load the original.

● Using the automatic document feeder: Page 1-7
● Using the document glass: Page 1-7

If you are using the document glass to send multiple pages, load the first page first.

NOTE

You cannot load documents in both the automatic document feeder and on the document glass and send them in a single fax transmission.

3 Touch the [ORIGINAL] key.
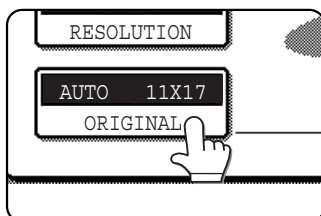
4 Check the original size.
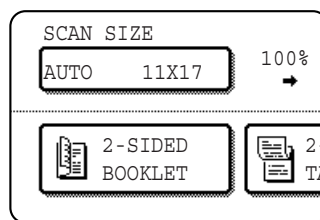
If the original size has not been correctly detected, touch the key under [SCAN SIZE] and specify the original size. (See "MANUALLY SETTING THE SCANNING SIZE" on page 1-8)

NOTE

A long size, stored size, or non-standard size cannot be specified for the original scanning size.

5 Touch the key under [SEND SIZE].
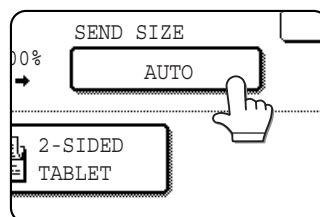
If the key under [SEND SIZE] is grayed out, specify a standard original size in step 4.

6 Touch the key of the desired enlargement or reduction size.
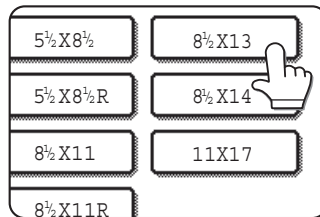
The [AUTO] key is no longer highlighted. The [MANUAL] key and the selected size key are highlighted.

7 Touch the OK key.

8 Check the enlargement or reduction ratio and touch the [OK] key.
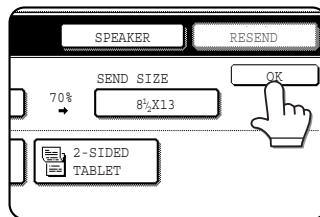
9 Continue from step 4 of "BASIC PROCEDURE FOR SENDING FAXES" (pages 2-2 to 2-3).

NOTE

After the transmission is stored, the [CA] key can be pressed to cancel enlargement/reduction transmission.

FAXING A TWO-SIDED ORIGINAL

A two-sided document can be automatically transmitted using the automatic document feeder. Follow the steps below to automatically send a two-sided document.

1 **Make sure the machine is in fax mode.**
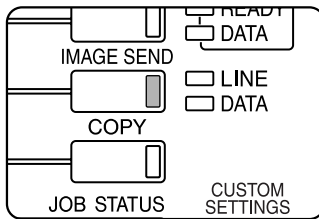
When the [IMAGE SEND] key light is on, the machine is in fax mode. If the light is not on, press the [IMAGE SEND] key.
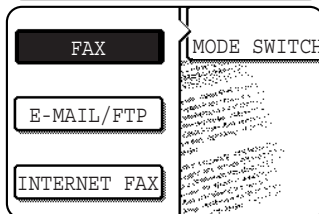
If the network scanner option is installed, touch the [MODE SWITCH] key and then the [FAX] key to switch to fax mode.
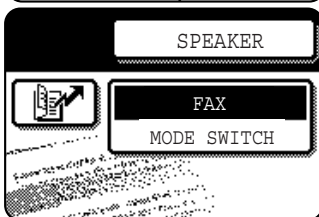
When fax mode is selected, "FAX" appears in the top half of the [MODE SWITCH] key.

2 **Place the original in the automatic document feeder (see "USING THE AUTOMATIC DOCUMENT FEEDER" on page 1-7) .**

3 **Touch the [ORIGINAL] key.**
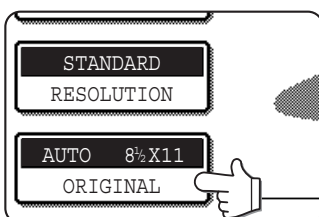
If the address book screen appears, touch the [CONDITION SETTINGS] key to display the condition settings screen (see page 1-5).

When you touch the [ORIGINAL] key, check the original size that appears in the key. If the size was not detected correctly, specify the correct size. (See "MANUALLY SETTING THE SCANNING SIZE" on page 1-8.)

4 **Touch the [2-SIDED BOOKLET] key or the [2-SIDED TABLET] key as appropriate for the original you loaded.**
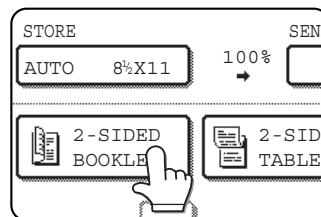
5 **Touch the [OK] key.**
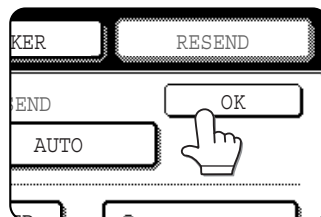
You will return to the initial screen.
A two-sided original icon appears next to the [ORIGINAL] key.
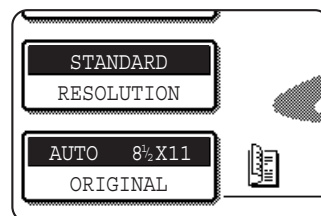
Example:
The icon that appears when the [2-SIDED BOOKLET] key is touched.

6 **Continue from step 4 of "BASIC PROCEDURE FOR SENDING FAXES" (pages 2-2 to 2-3).**

NOTES

● Booklets and tablets
  Two-sided originals that are bound at the side are booklets, and two-sided originals that are bound at the top are tablets.
● Two-sided scanning turns off after the document is stored in memory. Pressing the [CA] key will also cancel two-sided scanning.

Booklet   Tablet
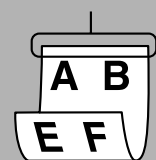
■ Quick On-line

When you use the automatic document feeder to send a multi-page document and there are no previously stored jobs waiting or in progress (and the line is not being used), the machine dials the destination after the first page is scanned and begins transmitting scanned pages while the remaining pages are being scanned. This transmission method is called Quick On-line. The messages "SCANNING ORIGINAL." and "SENDING." both appear until scanning of the final page is completed.

If the receiving party is busy, the transmission will switch to a memory transmission. (Refer to the following section, "Storing transmission jobs (memory transmission)".)

NOTES
- The machine is initially set (factory setting) to perform Quick On-line transmission. If desired, you can turn off this function with the key operator program (See "Quick on line sending" on page 8-8).
- When a document is transmitted using the following methods, the job will be stored in memory (Quick On-line transmission will not be performed):
  - Sending from the document glass ● Broadcast transmission (page 3-2) ● Timer transmission (page 3-6)
  - 2 in 1 (page 3-7) ● Card shot (page 3-8) ● Job build (page 3-10) ● F-code transmission (Chapter 4)

■ Storing transmission jobs (memory transmission)

When a document is sent from the document glass, or when the telephone line is in use, the document is scanned into memory and then automatically transmitted after previously stored transmission jobs are completed. This means that transmission jobs can be stored in memory by performing a transmission operation while the machine is occupied with another transmission/reception operation. This is called memory transmission, and up to 97 (maximum of 50 on the AR-M355U/AR-M455U) jobs can be stored in memory at once, including the job currently being executed. After transmission, the scanned document data is cleared from memory. (However, when the document filing function is used, the scanned document image is stored in the machine's hard disk. For information on managing stored images, see "Document filing function"* in chapter 7 of the "Operation manual (for general information and copier operation)".)

* Can only be used on the AR-M355N/AR-M455N. The AR-M355U/AR-M455U models do not have this function.

NOTES
- You can check transmission jobs stored in memory in the job status screen. (Refer to page 1-15 of "Operation manual (for general information and copier operation)".)
- If the memory becomes full while a document is being scanned, a message will appear in the display. You can cancel the transmission by touching the [CANCEL] key, or send only the pages already scanned by touching the [SEND] key. The page that was being scanned when the memory became full will be cleared from memory. If the memory becomes full while scanning the first page of a document, the transmission job is automatically canceled.
- The number of jobs that can be stored will depend on the number of pages in each job and the transmission conditions. The number of storable jobs will increase if the optional expansion memory (AR-MM9) is installed.

■ If the receiving party is busy

If the receiving party is busy, the transmission is temporarily canceled and then automatically re-attempted after a brief interval (two attempts are made at an interval of 3 minutes*). If you do not want the machine to re-attempt the transmission, cancel the job in the job status screen. (See following page.)
*This setting can be changed with the key operator program (See "Recall in case of line busy" on page 8-8.).

■ If a transmission error occurs

If an error occurs that prevents transmission or the receiving machine does not answer the call within 45 seconds*, then transmission is stopped and then automatically re-attempted later. (one recall attempt is made at an interval of 1 minute*) Automatic recalling can be stopped by pressing the [JOB STATUS] key and canceling as explained on the following page. This machine also supports error correction mode (ECM) and is set to resend any part of a fax that is distorted due to noise on the line. (See "ECM" on page 8-7)
* The settings can be changed in the key operator programs. (See "Call timer at memory sending" and "Recall in case of communication error" on page 8-8).

■ Image rotation

The machine is initially set to rotate a vertically-placed (▤)document 90° so that it is oriented horizontally(▥) before transmission (8-1/2"x11" (A4) originals are rotated to 8-1/2"x11"R (A4R) and 5-1/2"x8-1/2"R (B5R or A5R) originals are rotated to 5-1/2"x8-1/2" (B5 or A5)). 8-1/2"x11"R (A4R) originals and 5-1/2"x8-1/2" (B5 or A5) originals are not rotated. If desired, you can turn this function off with the key operator program as explained in "Rotation sending setting." on page 8-7.

NOTE
Place 5-1/2"x8-1/2" (A5) size originals so that they are oriented vertically (▤). If oriented horizontally (▥5-1/2"x8-1/2"R (A5R) orientation), the original size will be detected as 8-1/2"x11" (A4) size on the document glass, or 5-1/2"x8-1/2"R (A5R) size in the automatic document feeder, and thus the original size must be set manually by touching the [ORIGINAL] key and then the [5-1/2"x8-1/2"R] ([A5R]) key. (See "MANUALLY SETTING THE SCANNING SIZE" on page 1-8.)

PRIORITY TRANSMISSION OF A STORED JOB

If you have an urgent transmission job and multiple transmission jobs have already been stored, you can give priority to the urgent job so that it will be transmitted immediately after the job currently being executed. This is done from the job status screen. For details on using the job status screen, refer to page 1-15 of "Operation manual (for general information and copier operation)".

1 **Press the [JOB STATUS] key.**
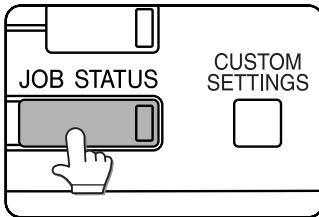
2 **Touch the [FAX JOB] key.**
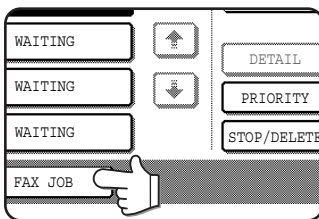
3 **Touch the key of the job to which you wish to give priority.**

The touched key is highlighted.

4 **Touch the [PRIORITY] key.**
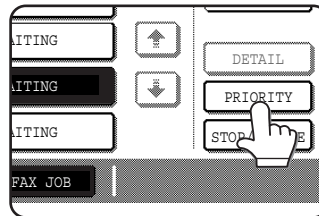
The selected job moves up to the next position after the job currently being executed.
When the current job is completed, execution begins of the job selected in step 3.

NOTE

If the job in progress is a broadcast transmission job (see page 3-2) or a serial polling job (see page 3-13), the priority job will temporarily interrupt the job after the transmission currently in progress is finished. When the priority job is finished, the broadcast transmission or serial polling job will resume. However, if the priority job is also a broadcast transmission or serial polling operation, the job is begun after all transmissions of the current broadcast or serial polling job are completed.

CANCELING A FAX TRANSMISSION

You can cancel a transmission job that is in progress or has been stored. Cancellation is done from the fax job status screen. (Printing of a received fax cannot be canceled.)

1 **Press the [JOB STATUS] key.**
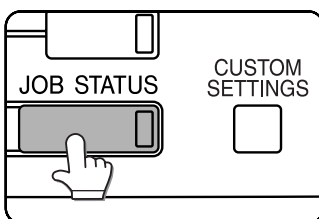
2 **Touch the [FAX JOB] key.**
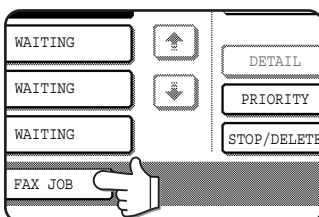
3 **Touch the key of the job that you wish to cancel.**

The touched key is highlighted.

4 **Touch the [STOP/DELETE] key.**
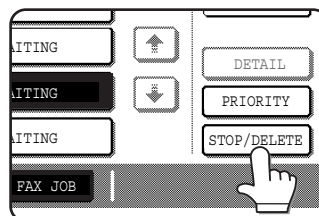
A message appears to confirm the cancellation. Touch the [YES] key to delete the selected job key and cancel the transmission.

NOTES

● If you do not wish to cancel the transmission, touch the [NO] key.
● "CANCEL" will appear in the Transaction Report of a job that is canceled.

CANCELING ON-HOOK DIALING

To cancel on-hooking dialing (dialing by touching the [SPEAKER] key and then the numeric keys) when you need to redial the number or because transmission was interrupted, touch the [SPEAKER] key once again.

RECEIVING FAXES

When another fax machine sends a fax to your machine, your machine will ring*, automatically receive the fax, and begin printing (this is called automatic reception).

NOTES
- You can store a transmission job while fax reception is in progress. (See "Storing transmission jobs (memory transmission)" on page 2-8.)
- To receive faxes, sufficient paper must be loaded in the paper tray. Refer to pages 2-2 to 2-11 of "Operation manual (for general information and copier operation)" to load appropriate paper. Incoming faxes will be automatically adjusted to the orientation of the printing paper, so there is no need to load both horizontally (▥) and vertically (▤) oriented paper. However, if you receive a fax that is smaller than 8-1/2"x11" (A4 or B5) size, the paper size used to print the fax will depend on how the original was oriented (vertically or horizontally) in the sending fax machine.

RECEIVING A FAX

1 The machine will ring* and reception will automatically begin.

*Number of rings

The machine has been set to ring twice before beginning automatic reception. You can use the key operator program to change the number of rings to any number from 0 to 15. (See "Number of calls in auto reception" on page 8-9.)
If the number of rings is set to 0, the machine will receive faxes without ringing.

2 Reception ends.
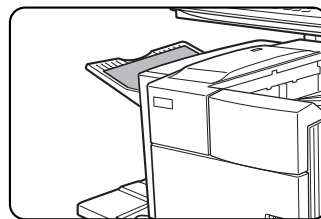
When reception ends, the machine makes a "beep" sound.
The received fax is delivered to the top tray.

NOTE

If the machine has multiple output trays, the key operator program can be used to change the output tray for fax reception. (See "Fax output tray setting" on page 8-9.)

■ If received data cannot be printed

If the machine is out of paper or toner, or if a paper jam occurs or the machine is busy printing a copy or print job, received faxes will be stored in memory until printing is possible. When printing is possible, the faxes will print automatically (however, if the machine has run out of paper, touch the [OK] key in the touch panel after adding paper). When a received fax is stored in memory, the "DATA" light to the right of the [IMAGE SEND] key will blink.
You can also use the transfer function to have another fax machine print the received data (See "USING THE TRANSFER FUNCTION" on page 3-18.).
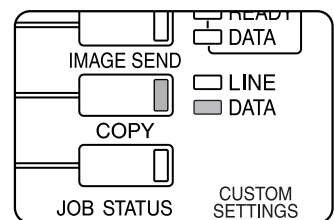
NOTE
If a double beep sounds during or after reception and an error message appears in the touch panel, clear the error as explained in "WHEN AN ALARM SOUNDS AND A WARNING MESSAGE IS DISPLAYED" on page 7-3.

CHAPTER 3

USING CONVENIENT FUNCTIONS 1
ADVANCED TRANSMISSION METHODS

This chapter explains convenient functions for sending faxes. Please read those sections that are of interest to you.

SENDING THE SAME DOCUMENT TO MULTIPLE DESTINATIONS IN A SINGLE OPERATION (BROADCAST TRANSMISSION)

This feature is used to send a document to multiple destinations in a single operation. The document to be transmitted is scanned into memory and then successively transmitted to the selected destinations. This feature is convenient for such purposes as distributing a report to company branches in different locations. Up to 500 (maximum of 300 on the AR-M355U/AR-M455U) destinations can be selected.

NOTES
- If you frequently use broadcasting to send documents to the same group of destinations, it is convenient to program those destinations into a group key. A group key is a one-touch key in which multiple destinations are programmed. The procedure for programming group keys is explained on page 6-6.
- When using a group key to send a fax, the destinations programmed in the group key are counted as broadcasting destinations. For example, if five destinations are programmed in a group key and the key is touched for a broadcast transmission, the broadcast transmission will have five destinations.
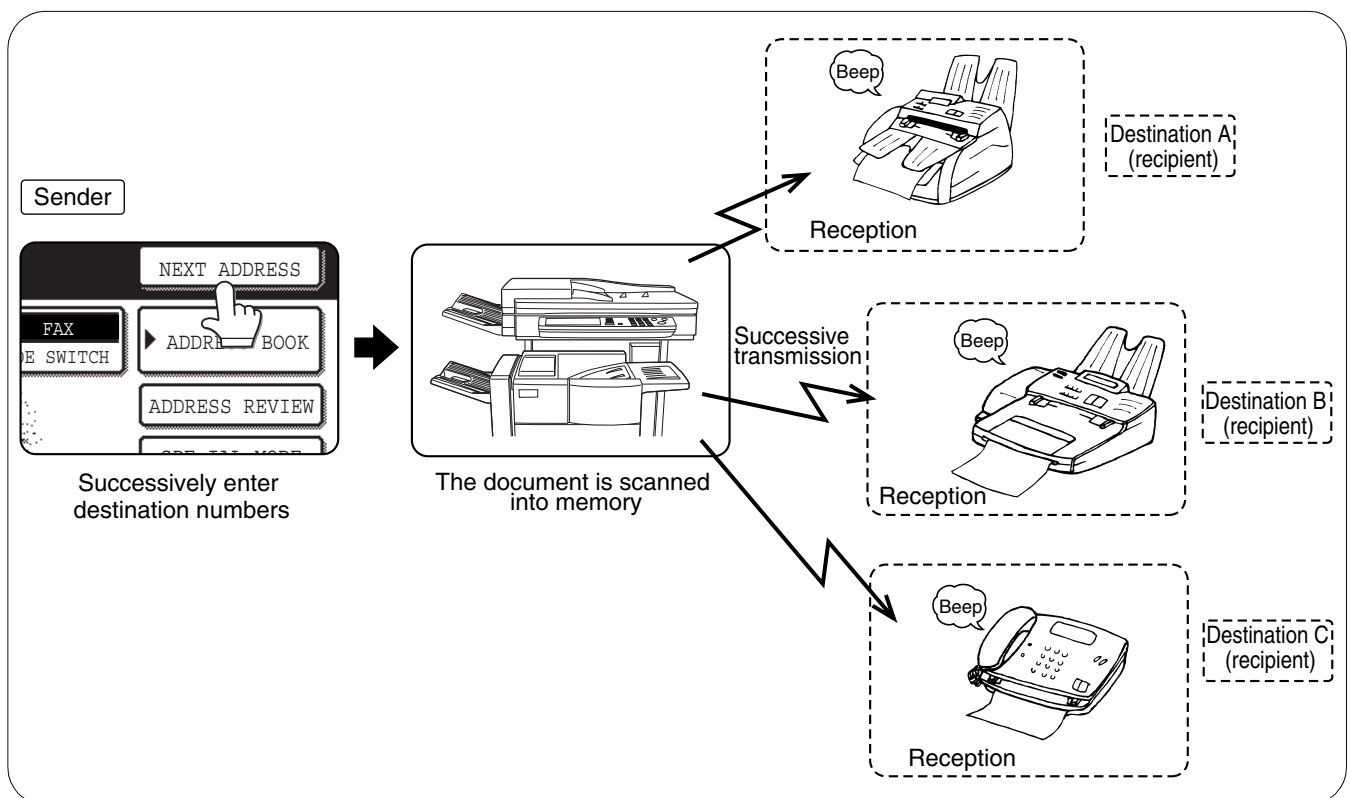
USING BROADCAST TRANSMISSION

1 Perform steps 1 through 6 of "BASIC PROCEDURE FOR SENDING FAXES" (page 2-2).

2 Dial the fax number of the first destination or touch an auto-dial key (one-touch key, group key or speed dial key). (Refer to page 2-4.)
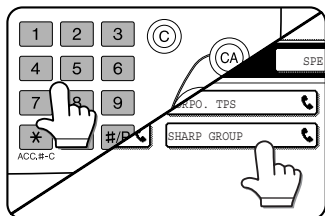
If the condition settings screen appears, touch the [ADDRESS BOOK] key to display the address book screen. (See page 1-4.)
An auto-dial key is highlighted when touched.

3 Touch the [NEXT ADDRESS] key and then dial the fax number of the next destination or touch an auto-dial key.
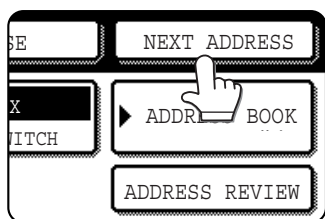
Repeat this step for each of the remaining destinations.

NOTES

● **If you enter an incorrect number**

If you make a mistake while entering a number, press the [C] key and then re-enter the correct digit(s).
If you have already completed entry of a fax number, you can delete the number using steps 4 and 5.

● **If you select an incorrect auto-dial key**

Simply touch the incorrect key one more time to cancel the selection.

● The [NEXT ADDRESS] key only needs to be pressed when successively dialing fax numbers with the numeric keys

Example:

XXXX (NEXT ADDRESS) XXXX

    Dial   ↑   Dial
            Cannot be omitted.

XXXX (NEXT ADDRESS) (One-touch) (NEXT ADDRESS) (One-touch)

Dial   ↑   ↑
    Can be omitted.   Can be omitted.

If desired, you can use the key operator program to set the machine so that the [NEXT ADDRESS] key must always be pressed (refer to page 8-4).

4 Touch the [ADDRESS REVIEW] key to display the list of destinations.
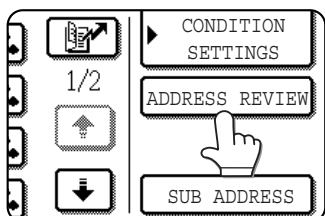
When the [ADDRESS REVIEW] key is touched, only the entered and selected destinations are displayed.

5 Check the destinations.
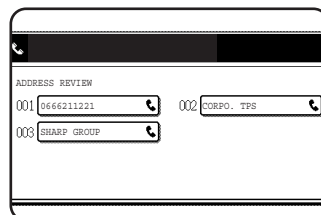
When you have finished checking the destinations, touch the [OK] key to return to the screen of step 4.
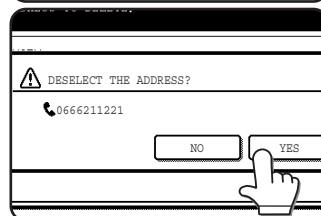
If you wish to delete a destination, touch the displayed one-touch key. A message will appear to confirm the deletion. Touch [YES] and the destination will be deleted from the destination list. To cancel instead of deleting, touch the [NO] key.

6 Continue from step 8 of "BASIC PROCEDURE FOR SENDING FAXES" (page 2-3).

NOTE

To cancel a broadcast transmission
To cancel a broadcast transmission when selecting destinations, press the [CA] key. To cancel after all steps of the transmission have been completed, see "CANCELING A FAX TRANSMISSION" on page 2-9.

Checking the results of a broadcast transmission and resending when an error occurs

The results of a broadcast transmission can be viewed in the following screen, which is opened by touching the [BROADCAST: XXXX] key (where "XXXX" is the number of the job; see "NOTES" on page 2-3) in the finished job screen and then the [DETAIL] key.
* Can only be used on the AR-M355N/AR-M455N. The AR-M355U/AR-M455U models do not have this function.
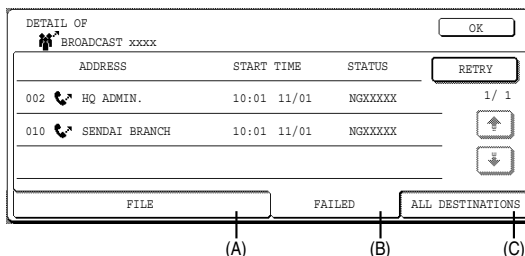
(A) [FILE] tab
This only appears if the job was stored using the filing function. If the job was stored and transmission to a destination was not successful, the document image can be resent without scanning the document again. To call the destination and resend the image, switch to the [FAILED] or [ALL DESTINATIONS] tab.

(B) [FAILED] tab
This shows destinations to which transmission failed due to an error or other reason. The name of the destination, starting time, and transmission status appear. To call the destinations again, touch the [RETRY] key.

(C) [ALL DESTINATIONS] tab
This shows the name, starting time, and transmission status of all of the destinations of the broadcast transmission. All destinations can be called again by touching the [RETRY] key in this screen.

3-3

ERASING EDGE SHADOWS (EDGE ERASE)

The erase function is used to erase the shadow lines on copies produced when copying thick originals or books. The erase modes that can be selected are shown below. The erase width is approximately 1/2" (10 mm) in it's initial setting.

Your machine	The other machine
EDGE ERASE Erases shadows at edges that appear when faxing thick originals or books.	Using edge erase
CENTER ERASE Eliminates shadow lines produced by the bindings of bound documents.	Transmission to other machine
EDGE + CENTER ERASE Eliminates shadow lines around the edges of copies and eliminates the shadow at the center of copies.	Combining "edge erase" with "Dual page scan" on the following page
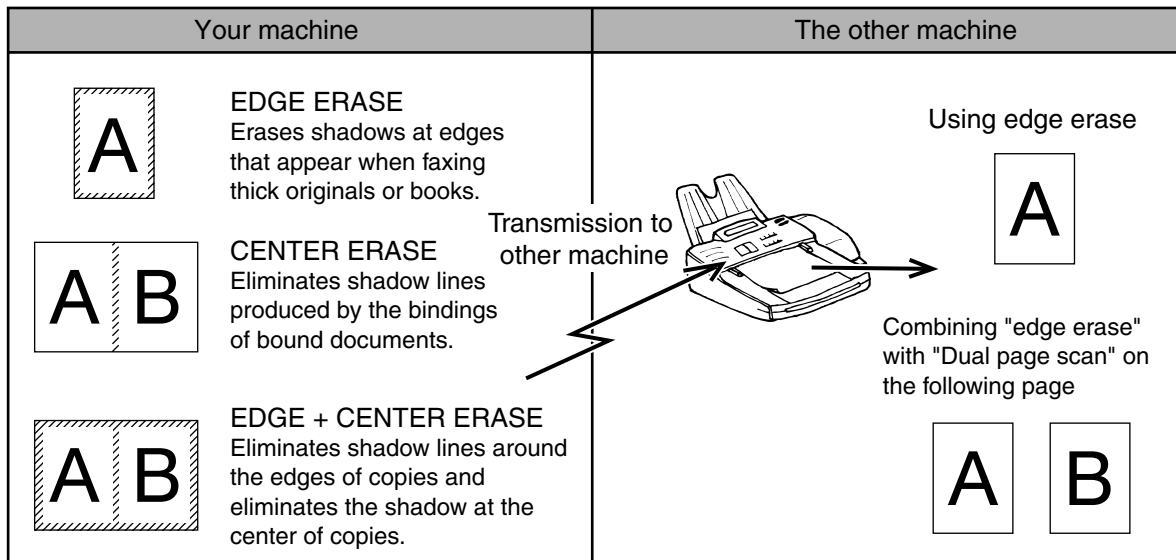
USING EDGE ERASE

1 **In fax mode, touch the [SPECIAL MODES] key.**
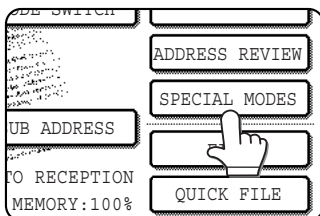
If the address book screen appears, touch the [CONDITION SETTINGS] key to display the condition settings screen (page 1-5).

2 **Touch the [ERASE] key.**

3 **Select the desired erase mode.**
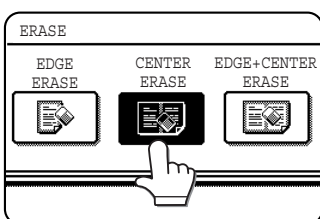
Select one of the three erase modes. The selected key will be highlighted.

4 **If desired, set the width of the edge to be erased (touch the ▼ key or the ▲ key to set the width).**
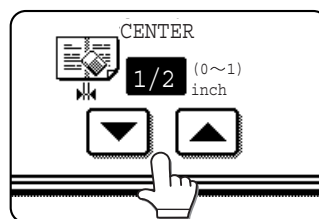
The erase width can be set from 0" to 1" in 1/8" (0 to 20mm in 1mm) increments.

5 **Touch the outer [OK] key.**
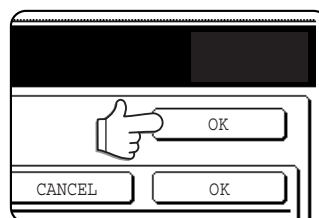
You will return to the screen of step 1 and an edge erase icon will appear next to the [EXPOSURE] key.
To cancel the erase, touch the [CANCEL] key.

6 **Send the fax as explained in "BASIC PROCEDURE FOR SENDING FAXES" (pages 2-2 to 2-3).**

NOTE

To cancel the erase function, touch the [CANCEL] key on the erase setting screen. (step 4)

FAXING A DIVIDED ORIGINAL (DUAL PAGE SCAN)

When an open book is scanned and faxed, you can use this function to divide the two open pages of the book into two separate fax pages.

This function can only be used when the original is scanned using the document glass.

Your machine	The other machine

Book or sheet original

Printed out as two separate pages

When page division is set,

Transmission to other machine

the original is divided into two pages when scanned into memory

[Example]

Scanned original size	Transmitted document
11"x17" (A3)	Two 8-1/2"x11" (A4) pages

3
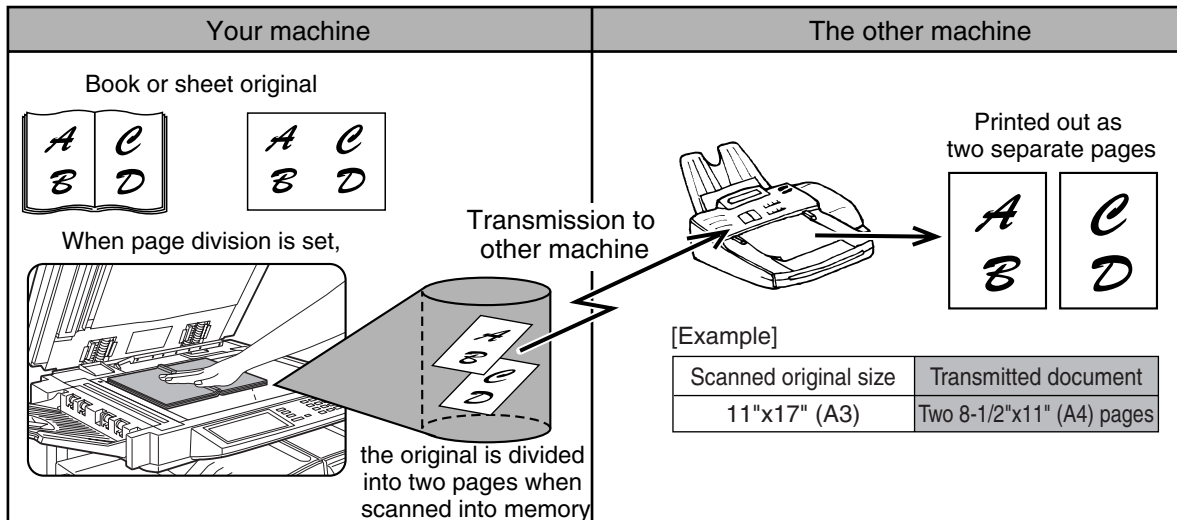
■ Selecting Dual Page Scan

Follow the steps below and then send the fax.

1 **In fax mode, touch the [SPECIAL MODES] key.**
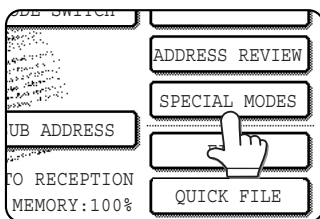
If the address book screen appears, touch the [CONDITION SETTINGS] key to display the condition settings screen (page 1-5).

2 **Touch the [DUAL PAGE SCAN] key.**
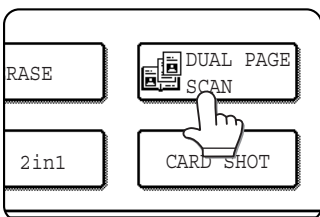
The [DUAL PAGE SCAN] key is highlighted.
To cancel the selection, touch the key once again so that it is not highlighted.

3 **Touch the [OK] key.**
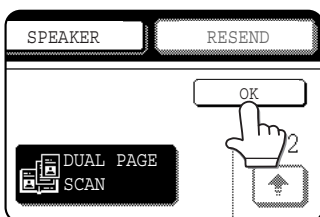
You will return to the screen of step 1.

4 **Place the original on the document glass (page 1-7), and perform the transmission operation.**

If you have more originals to scan after pressing the [START] key and scanning the first original, change originals and repeat scanning until all originals have been scanned. When finished, touch the [READ-END] key that appears in the message display. (See step 8 of "Using the document glass" on page 2-3.)

NOTE
To cancel Dual Page Scan...
Press the [CA] key.

AUTOMATIC TRANSMISSION AT A SPECIFIED TIME (TIMER TRANSMISSION)

This feature enables you to set up a transmission or polling operation to be performed automatically at a specified time up to a week in advance. This allows you to take advantage of off-peak phone rates without having to be there when the transmission is performed. A combined total of 97 (maximum of 50 on the AR-M355U/AR-M455U) timer transmission and memory transmission jobs can be stored.

NOTES
- To perform a timer transmission, the document must be scanned into memory. It is not possible to leave the document in the auto document feeder or on the document glass and have it scanned at the specified time of transmission.
- To set the date and time in the machine, refer to page 2-12 of "Operation manual (for general information and copier operation))". You can check the machine's currently set time in the screen of steps 3 and 4 below.
- Only one polling timer operation can be set up at a time. If you wish to set up multiple timer polling operations, combine the machines to be polled into a serial polling operation with a timer setting. (Refer to 3-13.)
- After a timer transmission is performed, the information (image, destination, etc.) is automatically cleared from memory. (However, when the document filing function* is used, the scanned document image is stored in the machine's hard disk. For information on managing stored images, see "Document filing function" in chapter 7 of the "Operation manual (for general information and copier operation)".)
- * Can only be used on the AR-M355N/AR-M455N. The AR-M355U/AR-M455U models do not have this function.

SETTING UP A TIMER TRANSMISSION

1 In fax mode, touch the [SPECIAL MODES] key.
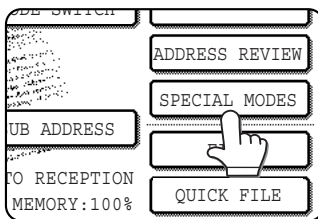
If the address book screen appears, touch the [CONDITION SETTINGS] key to display the condition settings screen (page 1-5).

2 Touch the [TIMER] key.
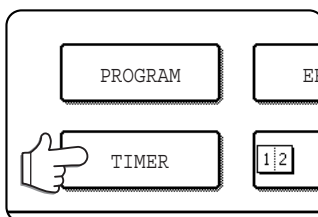
The timer transmission screen appears.

3 Select the day of the week. (Touch the ▲ key or the ▼ key until the desired day is selected.)
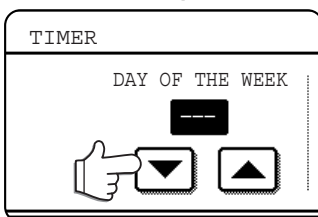
The initial setting is "---" (no selection). If you select this setting, the transmission will be performed as soon as the specified time arrives.

4 Select the time. (Touch the ▲ key or the ▼ key until the desired time appears.)
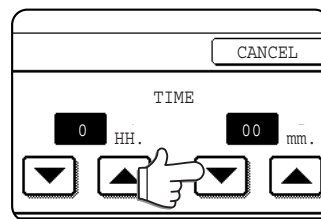
Select the time in 24-hour format.
Example:
11:00 P.M. → 23:00

5 Touch the outer [OK] key.
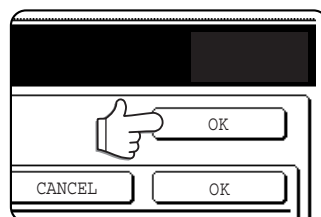
You will return to the screen of step 1 and a timer transmission icon will appear next to the [EXPOSURE] key.
To cancel timer, touch the [CANCEL] key.

6 Perform the desired transmission operation.
The steps that follow will depend on the type of transmission. The following operations can be performed in a timer transmission:
- Normal transmission (page 2-2)
- Broadcast transmission (page 3-2)
- Polling (page 3-13)
- Serial polling (page 3-13)
- F-code polling (page 4-5)
- F-code confidential transmission (page 4-6)
- F-code relay request transmission (page 4-8)

NOTES
- Other operations can be performed after a timer transmission is set up. If another operation is in progress when the specified time arrives, the timer transmission will begin when the job in progress is completed.
- If a timer transmission job is given priority in the fax job status screen (See "PRIORITY TRANSMISSION OF A STORED JOB" on page 2-9.), the time setting will be canceled and the job performed as soon as the current job is completed.

TRANSMITTING TWO ORIGINAL PAGES AS A SINGLE PAGE (2in1)

This function allows you to reduce the size of original pages by one half to fit two pages evenly on one page when sending a fax.

Your machine	The other machine
Originals Portrait original · Landscape original	Reduced to two pages before printing Transmission to other machine 1st page · 2nd page
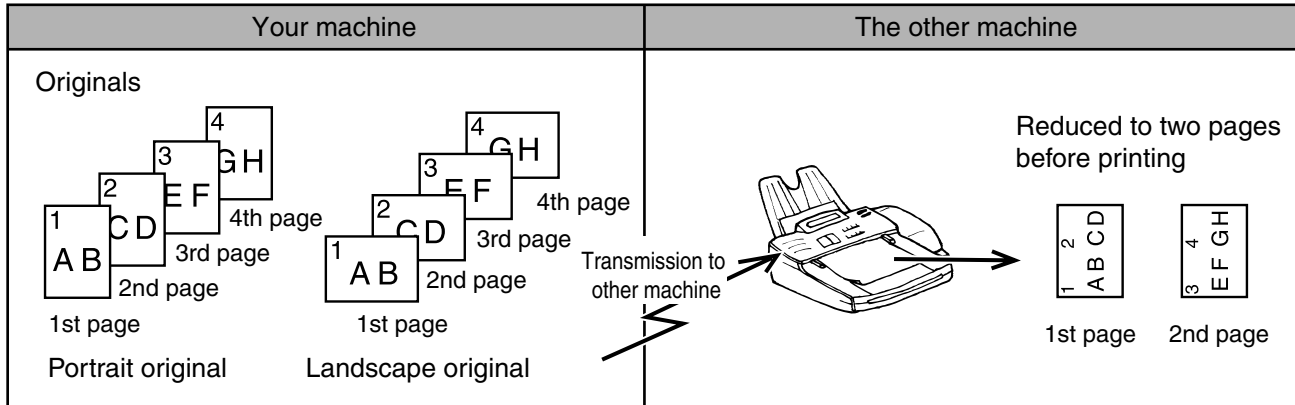
11"x17" and 8-1/2"x14" (A3 and B4) sizes cannot be transmitted when using the 2 in 1 function. 8-1/2" x 11" (A4) and smaller sizes can be used. (Transmission is not possible if the image is too large to fit into the transmission size.) There are restrictions on how the originals are placed. Both portrait and landscape oriented originals should be placed vertically as shown below.

USING THE AUTOMATIC DOCUMENT FEEDER

8-1/2" x 11"

USING THE DOCUMENT GLASS

8-1/2" x 11"
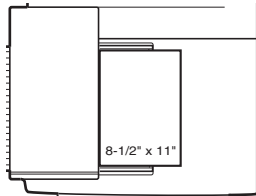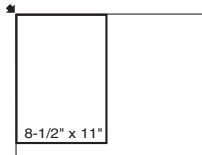
Place the original vertically ▯. If placed horizontally ▭, an alarm will appear.

Your machine	The other machine	
Portrait original 1 A B · 2 C D · 3 E F · 4 G H 1st page 2nd page 3rd page 4th page	2 A B C D / 4 E F G H 1st page 2nd page 2 C D A B / 4 G H E F 1st page 2nd page	The arrangement of the images on the printed fax varies depending on how the original is placed in the transmitting machine.
Landscape original 1 A B · 2 C D · 3 E F · 4 G H 1st page 2nd page 3rd page 4th page	2 C D / 1 A B — 4 G H / 3 E F 1st page 2nd page C D A B / G H E F 1st page 2nd page	The arrangement of the images on the printed fax varies depending on how the original is placed in the transmitting machine.

USING 2in1

1 In fax mode, touch the [SPECIAL MODES] key.
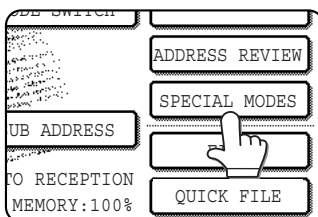
ADDRESS REVIEW
SPECIAL MODES
UB ADDRESS
TO RECEPTION
MEMORY:100%
QUICK FILE

If the address book screen appears, touch the [CONDITION SETTINGS] key to display the condition settings screen (page 1-5).

2 Touch the [2in1] key.

ERASE
1 2 2in1
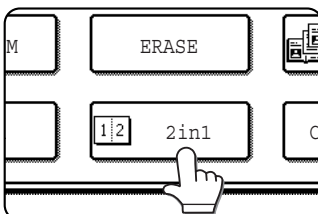
The [2in1] key is highlighted.
To cancel the selection, touch the key once again so that it is not highlighted.

3 Touch the [OK] key.

SPEAKER   RESEND
OK
DUAL PAGE SCAN
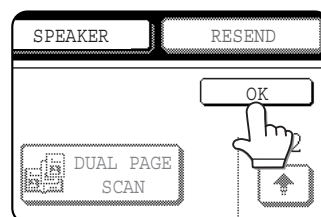
You will return to the screen of step 1.

4 Send the fax as explained in "BASIC PROCEDURE FOR SENDING FAXES" (pages 2-2 to 2-3).

NOTE
To cancel 2in1...
Press the [CA] key.

FAXING THE FRONT AND BACK SIDES OF A CARD ON ONE SHEET OF PAPER (CARD SHOT)

When faxing a card, this function allows you to combine the front and back sides on a single sheet of paper. To use this function, the original must be scanned on the document glass.

Your machine	The other machine
CARD SHOT — Transmission using the "card shot" special mode	
Transmission to other machine	A B C
Original	E F G
A B C — Front of card	
E F G — Back of card	The front and back of the card are printed on one sheet of paper.
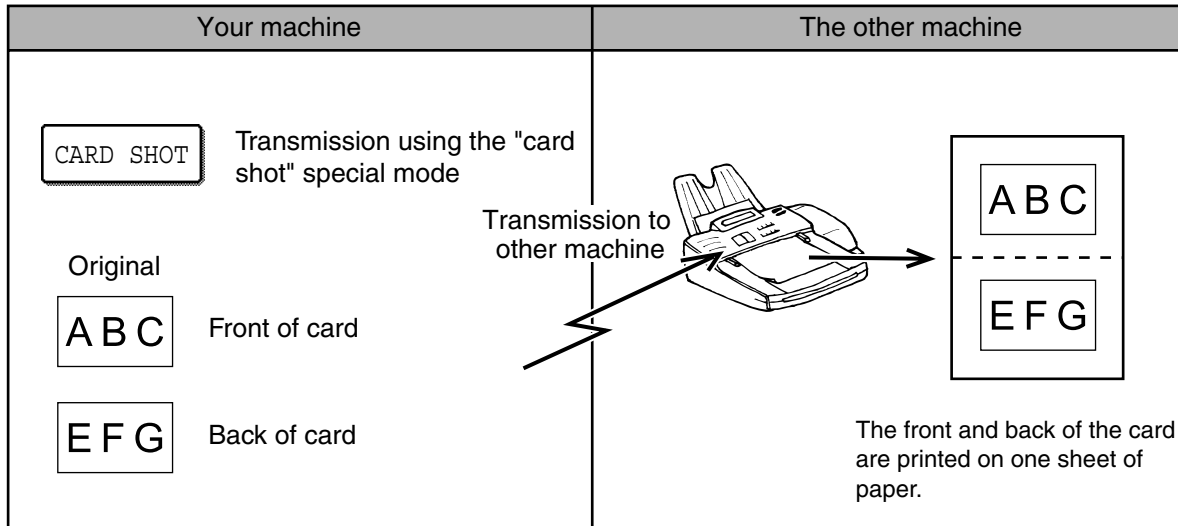
NOTE

A ratio cannot be specified and the image cannot be rotated when using this function. Transmission is not possible if the image is too large to fit into the transmission size.

USING CARD SHOT

1 **In fax mode, touch the [SPECIAL MODES] key.**
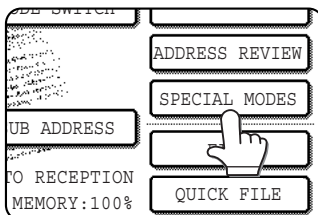
ADDRESS REVIEW
SPECIAL MODES
UB ADDRESS
TO RECEPTION
MEMORY:100%
QUICK FILE

If the address book screen appears, touch the [CONDITION SETTINGS] key to display the condition settings screen (page 1-5).

2 **Touch the [CARD SHOT] key.**

RASE
DUAL PAGE SCAN
2in1
CARD SHOT
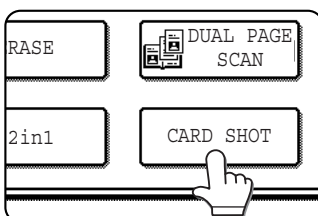
The card shot screen appears.

3 **Enter the X dimension (width) and Y dimension (length) of the original with the ▲▼ keys.**

CANCEL   OK
SIZE RESET
FIT TO SEND SIZE
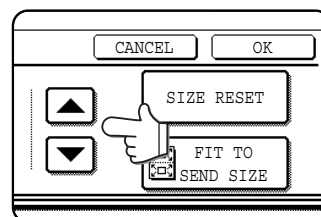
● X (width) is initially selected. Enter X and then touch the Y (Y) key to enter Y.
● To return the X and Y values to the initial settings configured in the key operator programs, touch the [SIZE RESET] key. ("CARD SHOT SETTINGS" on page 15 of key operator's guide)
● To have the images enlarged or reduced by a suitable ratio based on the entered original size and transmission size so that the front and back sides fit into the transmission size, touch the [FIT TO SEND SIZE] key. Even if a large transmission size is selected and the original is extremely small, the image will be enlarged to 400% or less.
● To cancel the card shot function, touch the [CANCEL] key.

4 **Touch the outer [OK] key.**

OK

CANCEL

SIZE RESET

FIT TO
SEND PAGE
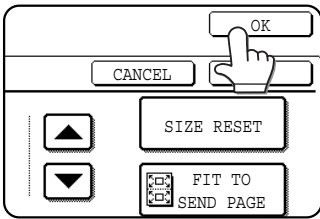
You will return to the screen of step 1 and a card shot icon will appear next to the [EXPOSURE] key.

5 **Place the original on the document glass.**
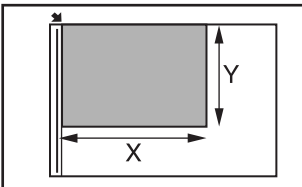
Y

X

Place the front side of the original face down and close the document cover.

6 **Follow steps 4 through 7 of "BASIC PROCEDURE FOR SENDING FAXES" (pages 2-2 to 2-3).**

7 **Press the [START] key.**
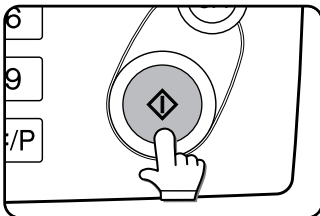
The front side of the card is scanned.

8 **Place the back side of the original face down on the document glass. (see step 5)**

9 **Press the [START] key.**
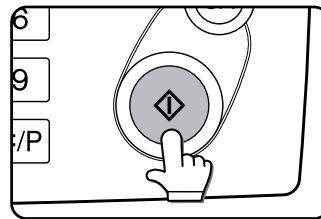
The back side of the card is scanned.

10 **Touch the [READ-END] key.**

A beep will sound to inform you that the transmission was stored.

NOTE

To cancel card shot...

Press the [CA] key.

3

FAXING A LARGE NUMBER OF PAGES (JOB BUILD MODE)

The maximum number of pages that can be loaded in the automatic document feeder is 50. When you need to fax more pages than can be loaded in the automatic document feeder, use Job Build mode. This function allows you to scan the pages in sets.

If the memory becomes full while scanning the pages, a message will appear. To cancel the transmission, touch [CANCEL]. To transmit only the pages that have been scanned, touch [SEND].

Example: Scanning 100 8-1/2" x 11" (A4) size pages

Original

Page 1   Page 51
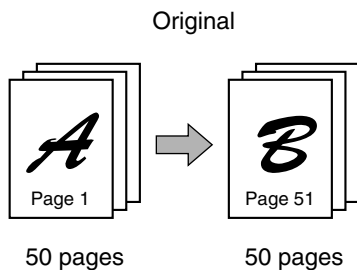
50 pages   50 pages

* Divide the original pages into sets of 50 pages or less, and scan the sets in order beginning from the set with the first page (first A then B in the above example).

1 In fax mode, touch the [SPECIAL MODES] key and then touch the ⊡ key.
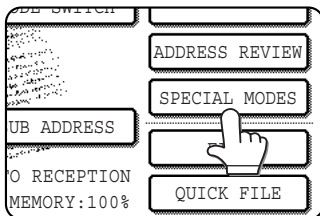
If the address book screen appears, touch the [CONDITION SETTINGS] key to display the condition settings screen (page 1-5).

**2** Touch the [JOB BUILD] key.
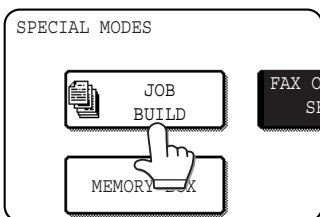
The [JOB BUILD] key is highlighted.
To cancel the selection, touch the key once again so that it is not highlighted.

3 Touch the [OK] key.
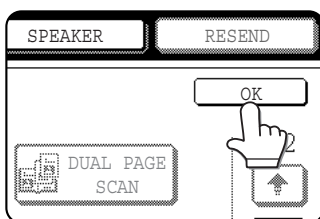
You will return to the screen of step 1.

4 Place the original in the automatic document feeder. (See page 1-7.)

5 Follow steps 4 through 7 of "BASIC PROCEDURE FOR SENDING FAXES". (See pages 2-2 to 2-3.)

6 Press the [START] key.
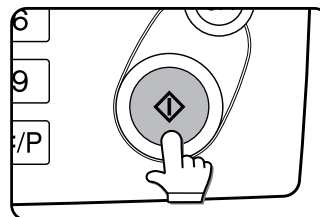
The pages are scanned. When scanning is finished, the [READ-END] key appears in the touch panel.

7 Place the next set of pages in the automatic document feeder. (See page 1-7.)

8 Press the [START] key. (See step 6.)

9 Repeat steps 7 and 8 until all pages have been scanned, and then touch the [READ-END] key.

OWN NUMBER SENDING

This function prints the date, time, your programmed name, your programmed fax number, and the transmitted page number at the top center of each page that you fax. All pages that you fax include this information.

Example of fax page printed out by the receiving machine

OCT/10/2003/FRI 03:00 PM	SHARP PLANNING DIV.	FAX No. 0666211221	P. 001/001
↑	↑	↑	↑
(1)	(2)	(3)	(4)

(1) Date and time: The date and time, and the font used to print the date and time, are set in the custom settings. (page 2-12 of "Operation manual (for general information and copier operation))").

(2) Own name: programmed with the key operator program. (See "Fax own number and name set" on page 8-5.)

(3) Own fax number: programmed with the key operator program (See "Fax own number and name set" on page 8-5.).

(4) Transmitted page number: 3-digit number appearing in the format, "page number/total pages" (only the page number appears if you use manual transmission or Quick On-Line transmission). If desired, you can use the key operator program to omit the page number. (See "Printing page number at receiver" on page 8-7.)

■ Position of sender's information

The key operator program can be used to select whether the sender's information is added outside the original data or inside the data. (See "Date/own number print position setting" on page 8-8). The initial factory setting is outside the data.

Direction of transmission

Outside scanned data
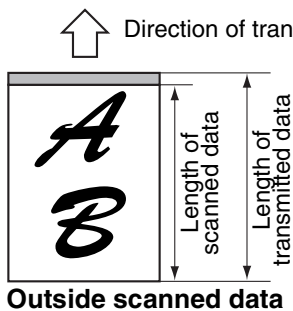
None of the transmitted image is cut off; however, the transmitted data is longer than the scanned data, and thus when both the sender and the receiver use the same size of paper, the printed fax may either be reduced or split up and printed on two pages.

Direction of transmission

Inside scanned data
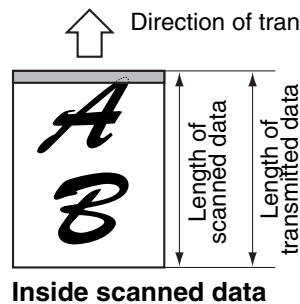
The top edge of the scanned data will be cut off by the sender's information; however, when both the sender and the receiver use the same size of paper, the printed fax will neither be reduced nor split up and printed on two pages.

PRINTING OUT THE RESULT OF A TRANSACTION REPORT (TRANSACTION REPORT)

You can choose whether or not to have a transaction report printed out after each transmission to inform you of the result of the transmission. This is done using "Transaction report print select setting" (page 8-6) in the key operator programs, and the setting is selected separately for single sending, broadcasting, receiving, and confidential reception. Even if the transaction report is set to not print out after transmission using the above program, you can still have it printed out after a transmission by following the steps below during the transmission operation. (If the transaction report is set to print out, you can also follow the steps below to have it not print out after the transmission.)

NOTE

The contents of the transaction report are explained in "WHEN A TRANSACTION REPORT IS PRINTED" (page 7-2).

1 In fax mode, touch the [SPECIAL MODES] key.
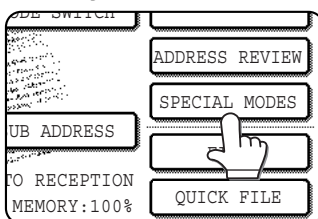
If the address book screen appears, touch the [CONDITION SETTINGS] key to display the condition settings screen (page 1-5).

2 Touch the [TRANSACTION REPORT] key.
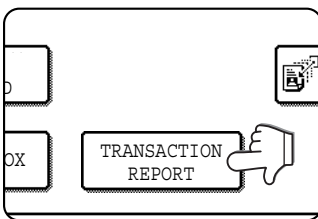
3 Setting the transaction report to print out (or not print out).
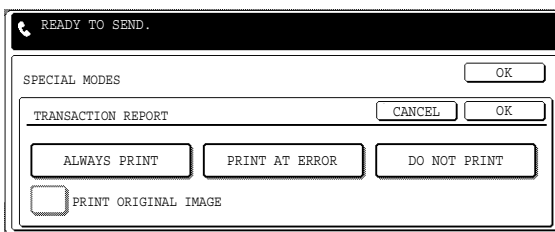
If you want the transaction report to print regardless of whether the transmission succeeds or fails, touch the [ALWAYS PRINT] key. If you want the report to print only if the transmission is not successful, touch the [PRINT AT ERROR] key. If "Transaction report print select setting" (page 8-6) in the key operator programs is set to print a report and you do not want to print a report, touch the [DO NOT PRINT] key.

About the [PRINT ORIGINAL IMAGE] checkbox

When a transaction report is set to print, you can select this checkbox to have part of the first page of the transmission printed on the transaction report.

4 Touch the outer [OK] key.
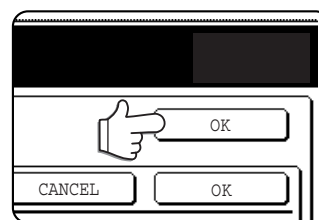
You will return to the screen of step 1.
To cancel the transaction report setting, touch the [CANCEL] key.

5 Send the fax as explained in "BASIC PROCEDURE FOR SENDING FAXES" (pages 2-2 to 2-3).

NOTE

To cancel the transaction report function, touch the [CANCEL] key on the transaction report setting screen. (step 4)

TRANSMISSION AND RECEPTION USING THE POLLING FUNCTION

This function can only be used if the other machine is a Super G3 or G3 machine and supports the polling function. The polling function allows your machine to call a fax machine that has document data set and initiate reception of the document. You can also perform the reverse operation: scan a document into the memory of your machine so that another machine can call your machine and initiate reception of the document.

This function whereby your machine calls the sending machine and asks the sending machine to begin transmission of a loaded document is called the polling function. Scanning a document into memory and automatically sending it when the receiving machine calls and "polls" your machine is called polling memory.

NOTE

For information on polling and polling memory using F-codes, refer to page 4-4. This section only explains normal polling and normal polling memory.

■ Polling

This function allows your machine to call a sending machine and initiate reception of a document loaded in that machine. A timer setting can also be established to have the operation take place at night or another specified time (refer to 3-6 page).

Your machine	The other machine
1) Polling (ask other machine to send document)	2) Permits polling
4) Document data is automatically sent to your machine	3) Document data previously scanned into memory
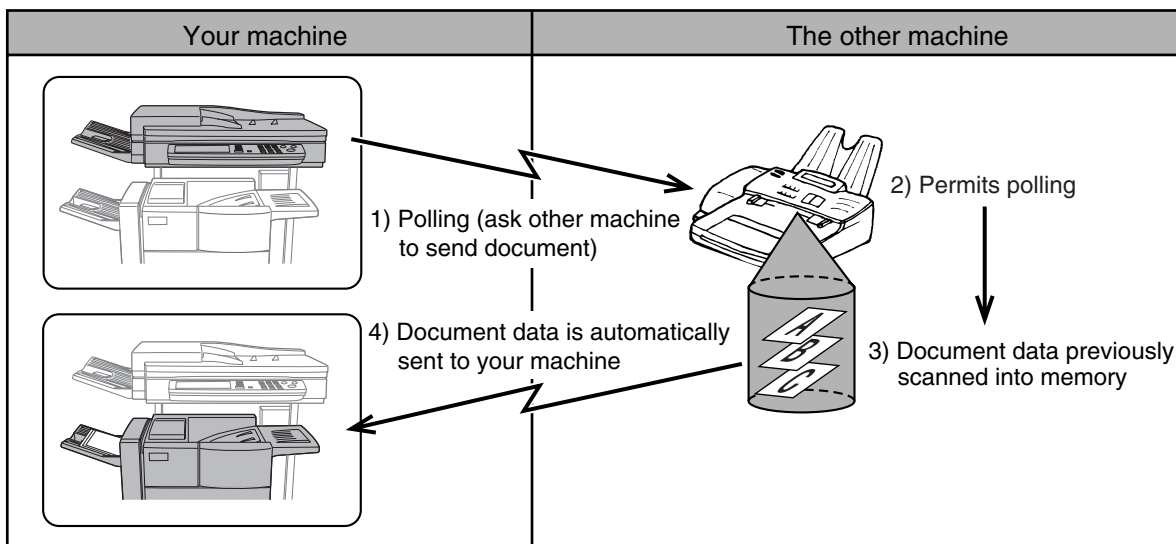
Serial Polling: Group keys and the broadcast transmission function (page 3-2) can be used to successively poll multiple fax machines in a single operation. Up to 500 (maximum of 300 on the AR-M355U/AR-M455U) machines can be polled. In this case, the sequence of operations in the above diagram is successively repeated for each sending machine selected.

NOTE

The receiving machine bears the expense (phone charges) of polling transmission.

■ Polling memory

This feature allows your machine to automatically send a document previously scanned into memory when another machine calls and polls your machine.

Your machine	The other machine
2) Permits polling	1) Polling (request transmission)
3) Document data previously scanned into memory	4) Document data is automatically sent to other machine
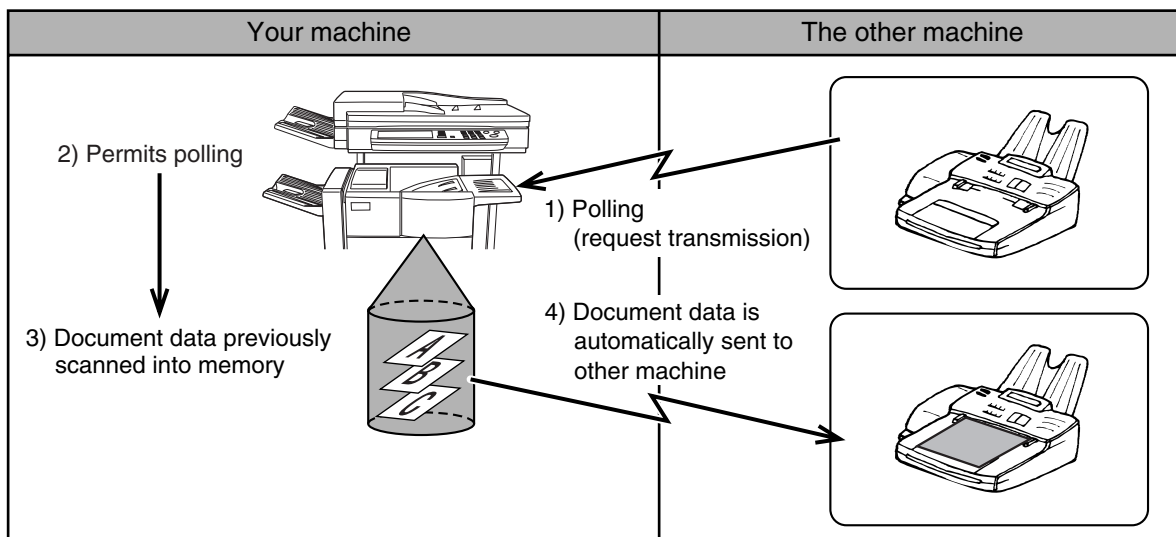
USING THE POLLING FUNCTION

A document should not be loaded in the machine when the following operation is performed. When used in conjunction with the timer transmission function, only one polling job can be stored.

NOTE

If the other machine has a polling security function (refer to page 3-16), use the key operator program to program your own fax number (refer to page 8-5), and ask the operator of the other machine to appropriately program your fax number in that machine.

1 In fax mode, touch the [SPECIAL MODES] key and then touch the ⊞ key.
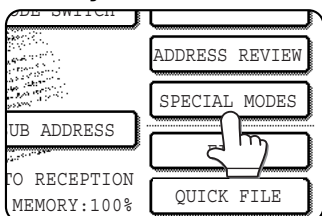
If the address book screen appears, touch the [CONDITION SETTINGS] key to display the condition settings screen (page 1-5).

2 Touch the [POLLING] key and then touch the [OK] key.
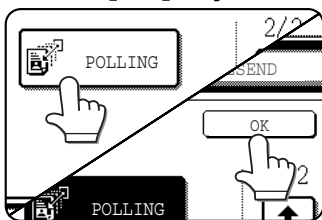
The [POLLING] key is highlighted and the polling icon appears.

To cancel polling, touch the [POLLING] key once again to cancel the selection.

You will return to the initial screen.

3 Dial the number of the other fax machine or touch an auto-dial key (one-touch key, group key or speed dial key) (refer to page 2-4).
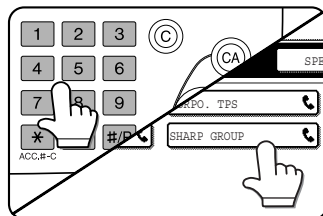
If the condition settings screen appears, touch the [ADDRESS BOOK] key to display the address book screen. (See 1-4 page.)

If you are performing serial polling, touch the [NEXT ADDRESS] key and repeat this step. (See step 3 on Page 3-3)

NOTE

When performing serial polling, an auto-dial key that includes a sub-address or passcode (page 4-2) cannot be selected.

4 When you have finished entering the destination(s), press the [START] key.
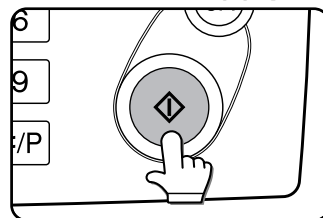
"POLLING." appears in the touch panel.
The fax is received from the other machine and printed out.

NOTE

To cancel the operation
Press the [JOB STATUS] key and then cancel the operation. (See "CANCELING ON-HOOK DIALING" on page 2-9.)

■ Manual polling

A document should not be loaded in the machine when the following operation is performed. Manual polling is begun on the signal of the other party.

1 Touch the [SPEAKER] key in fax mode, and dial the number of the other machine.
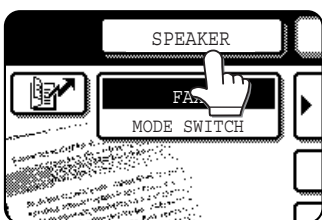
A one-touch key or the [RESEND] key can also be used.

2 Touch the [SPECIAL MODES] key and then touch the ⊞ key.
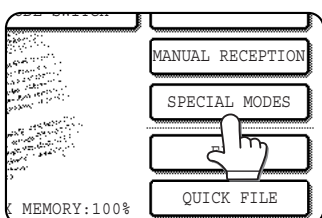
If the address book screen appears, touch the [CONDITION SETTINGS] key to display the condition settings screen (page 1-5).

3 When you hear the fax tone from the other machine, touch the [POLLING] key.
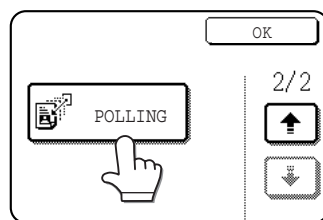
"POLLING." appears in the touch panel.

4 Polling reception begins.

Your machine prints the document after receiving it from the sending machine.

NOTE

Serial polling cannot be performed manually. When polling reception ends, repeat steps 1 through 4.

USING POLLING MEMORY

This function sends a document previously scanned into memory to a receiving machine when the receiving machine calls and polls your machine. (If desired, you can restrict polling to fax machines whose fax number you have programmed in your machine. (See "Polling security setting" on page 8-10.) This machine has "memory box", which is memory used for such functions as the normal polling memory function, F-code polling memory, F-code confidential transmission, and F-code relay transmission (refer to page 4-2). The polling memory function explained here uses a memory box called the "PUBLIC BOX".

NOTE
When using the polling memory function, do not set the reception mode to MANUAL RECEPTION.

■ Scanning a document into memory (Public Box) for polling memory

This procedure is for scanning a document into the Public Box. If other document data has already been stored in the Public Box, the new document will be added after that data. If the previously stored data is no longer needed, delete that data (refer to the following page) before scanning a new document data.

1 **Make sure the machine is in fax mode.**
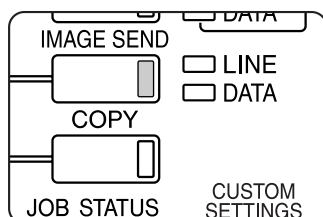
When the [IMAGE SEND] key light is on, the machine is in fax mode. If the light is not on, press the [IMAGE SEND] key.
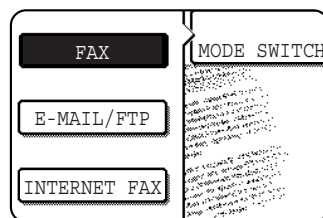
If the network scanner option is installed, touch the [MODE SWITCH] key and then the [FAX] key to switch to fax mode.
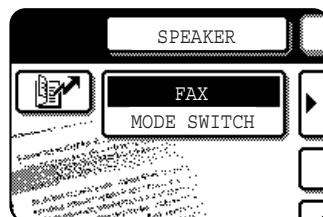
When fax mode is selected, "FAX" appears in the top half of the [MODE SWITCH] key.

2 **Place the original in the automatic document feeder. (See page 1-7.)**

3 **In fax mode, touch the [SPECIAL MODES] key and then touch the ⊡ key.**
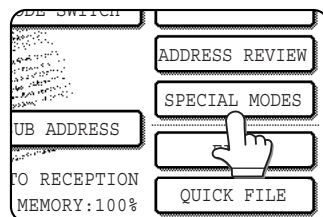
If the address book screen appears, touch the [CONDITION SETTINGS] key to display the condition settings screen (page 1-5).

4 **Touch the [MEMORY BOX] key and then touch the [DATA STORE] key.**
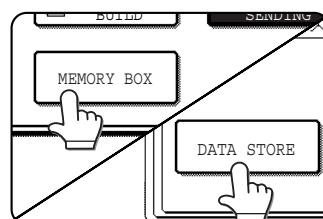
To cancel the operation, touch the [CA] key.

5 **Touch the [PUBLIC BOX] key.**
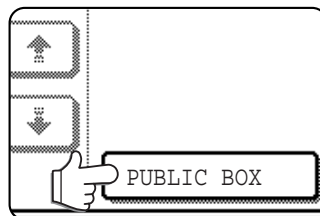
This specifies that the document will be scanned into the Public Box.

6 **Setting the number of times that a document in the public box can be polled.**
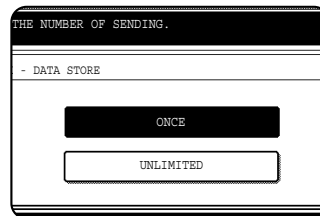
If you want the document to be cleared after polling takes place once, touch the [ONCE] key. If you want to allow polling an unlimited number of times, touch the [UNLIMITED] key.
Note that if another document is already in the public box, the new number of times setting will apply to that document as well.

7 **Touch the [OK] key.**
You will return to the initial screen.

8 **Set the original size, resolution, exposure and other scanning conditions as needed. (See "MANUALLY SETTING THE SCANNING SIZE" on page 1-8, pages 1-10 to 1-11.)**

9 **Press the [START] key.**
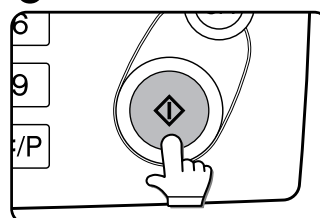
The document is scanned. If other document data has previously been stored, the new data will be added on after the old data.

If you used the document glass and have another page to scan, change the pages and then press the [START] key again. Repeat this procedure until all pages have been scanned, and then touch the [READ-END] key that appears in the message screen. When the document data has been stored in the Public Box, "JOB STORED." appears on the screen, after which you will return to the initial screen.

NOTE
To cancel scanning
To cancel scanning of a document while scanning is in progress, press the [C] key. To delete a document that has already been scanned, see "Deleting document data from the Public Box" on the following page.

3-15

■ Printing document data in the Public Box

To check a document that is stored in the public box, follow these steps to print it out.
If no documents have been stored, the [PUBLIC BOX] key will be grayed out.

1 In fax mode, touch the [SPECIAL MODES] key and then touch the ⊕ key.
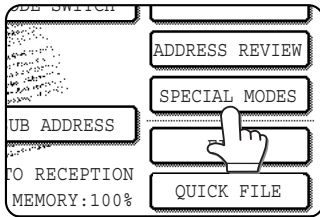
If the address book screen appears, touch the [CONDITION SETTINGS] key to display the condition settings screen (page 1-5).

ADDRESS REVIEW
SPECIAL MODES
UB ADDRESS
TO RECEPTION
MEMORY:100%   QUICK FILE

2 Touch the [MEMORY BOX] key and then touch the [PRINT DATA] key.

MEMORY BOX   POLLING
PRINT DATA
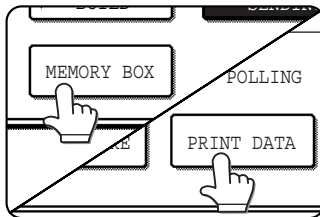
3 Touch the [PUBLIC BOX] key.
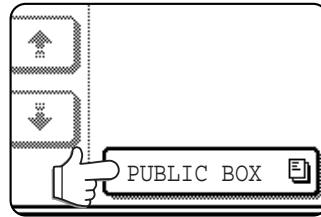
Touching the [CANCEL] key will return you to the screen of step 2.

PUBLIC BOX

4 Press the [START] key.
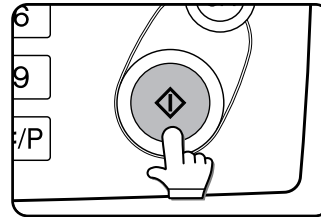
The message screen appears and the Public Box data is stored as a print job.
To cancel printing, touch the [CANCEL] key.

■ Deleting document data from the Public Box

This procedure is used to delete document data from the Public Box when it is no longer needed.

1 In fax mode, touch the [SPECIAL MODES] key and then touch the ⊕ key.
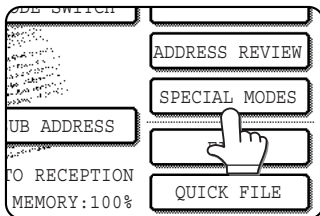
If the address book screen appears, touch the [CONDITION SETTINGS] key to display the condition settings screen (page 1-5).

ADDRESS REVIEW
SPECIAL MODES
UB ADDRESS
TO RECEPTION
MEMORY:100%   QUICK FILE

**2** Touch the [MEMORY BOX] key and then touch the [DELETE DATA] key.

MEMORY BOX
DELETE DATA
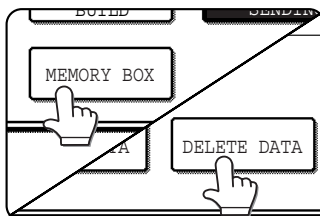
3 Touch the [PUBLIC BOX] key.

The message screen appears.

PUBLIC BOX

4 Touch the [YES] key.

DELETE THE DATA IN THE MEMORY BOX?
PUBLIC BOX
NO   YES
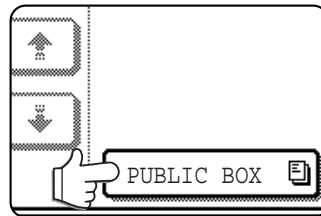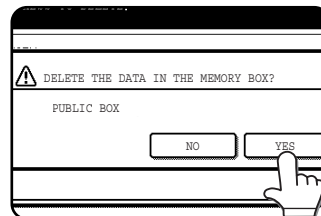
All data in the Public Box is deleted and you return to the screen of step 2.
If you touch the [NO] key, you will return to the screen of step 2 without deleting the data.

■ Restricting polling access (polling security)

If you wish to prevent unauthorized fax machines from polling your machine, turn on the polling security function. When this function is turned on, polling permission will only be granted if the fax number of the polling machine (as programmed in that machine) matches one of the fax numbers you have programmed in your machine as passcode numbers. Up to 10 fax numbers can be programmed as passcode numbers.

To turn on the polling security function and program passcode numbers, use the key operator program as explained in "Passcode number setting" on page 8-10.

NOTES
● If you do not use the polling security function, the document will be sent to any fax machine that polls you.
● To use polling memory with polling security enabled, the sender's number of the polling machine must be programmed in that machine and in your machine

3-16

PROGRAMMING FREQUENTLY USED OPERATIONS

This function allows you to store the steps of an operation, including the destination and scanning settings, into a program. This function is convenient when you frequently send documents, such as a daily report, to the same destination. Up to eight programs can be stored.

Programs can be stored using the custom settings, and a name up to 18 characters long can be assigned.

For information on storing, editing, and deleting programs, refer to "storing a program", and "Editing and deleting programs" on page 6-8.

The following settings can be stored in a program:

- Destination fax number
- Polling
- Erase
- Dual Page Scan
- 2in1
- Card shot
- Resolution and exposure

Auto-dial keys (one-touch key, group key or speed dial key) are used to store the destination fax number. A full number cannot be entered. When storing a broadcast transmission or serial polling operation in a program, up to 500 (maximum of 300 on the AR-M355U/AR-M455U) destination fax numbers can be stored.

NOTES

- A program differs from a timer transmission (page 3-6) in that it is not cleared from memory after transmission takes place. A program thus allows you to repeatedly perform the same type of transmission. Note, however, that programs do not allow you to establish a timer setting for transmission.
- With the exception of polling, reception operations cannot be stored in a program.

USING A PROGRAM

1 **In fax mode, load the document (page 1-7).**
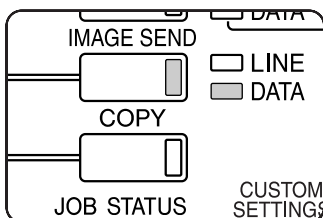
Do not load a document if you are performing a polling operation.
If you are going to use Dual Page Scan (page 3-5) and card shot (page 3-8), place the document on the document glass.

2 **Touch the [SPECIAL MODES] key and then the [PROGRAM] key.**
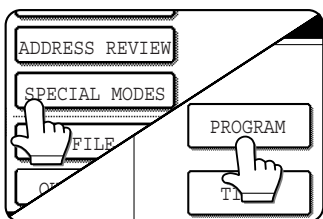
If the address book screen appears, touch the [CONDITION SETTINGS] key to display the condition settings screen (page 1-5).

3 **Touch the program key you wish to execute. Make sure the key is highlighted and then touch the [OK] key.**
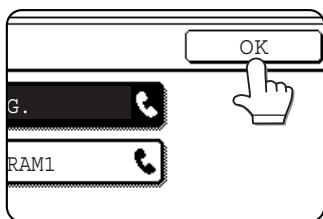
The program key you touched is selected and you return to the screen of step 2.
The [PROGRAM] key is highlighted.

4 **Touch the [OK] key.**
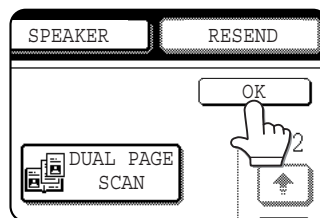
You will return to the initial screen.

5 **If needed, set the original size and other settings, and then press the [START] key.**

Transmission takes place according to the program.

NOTE

Select functions that cannot be stored in a program before you press the [START] key in step 5. These functions include specifying the original size (See "MANUALLY SETTING THE SCANNING SIZE" on page 1-8.), two-sided scanning (See "FAXING A TWO-SIDED ORIGINAL" on page 2-7.), and timer transmission. (See "TIMER TRANSMISSION" on page 3-6.)

3-17

TRANSFERRING RECEIVED FAXES TO ANOTHER MACHINE WHEN PRINTING IS NOT POSSIBLE (FORWARDING FUNCTION)

When printing is not possible because of a paper, toner, or other problem, you can transfer received faxes to another fax machine if that machine has been appropriately programmed in your machine. This function can be conveniently used in an office or other workplace where there is another fax machine connected to a different phone line. When a fax has been received to memory, the DATA light to the right of the IMAGE SEND key (See "If received data cannot be printed" on page 2-10.) blinks.
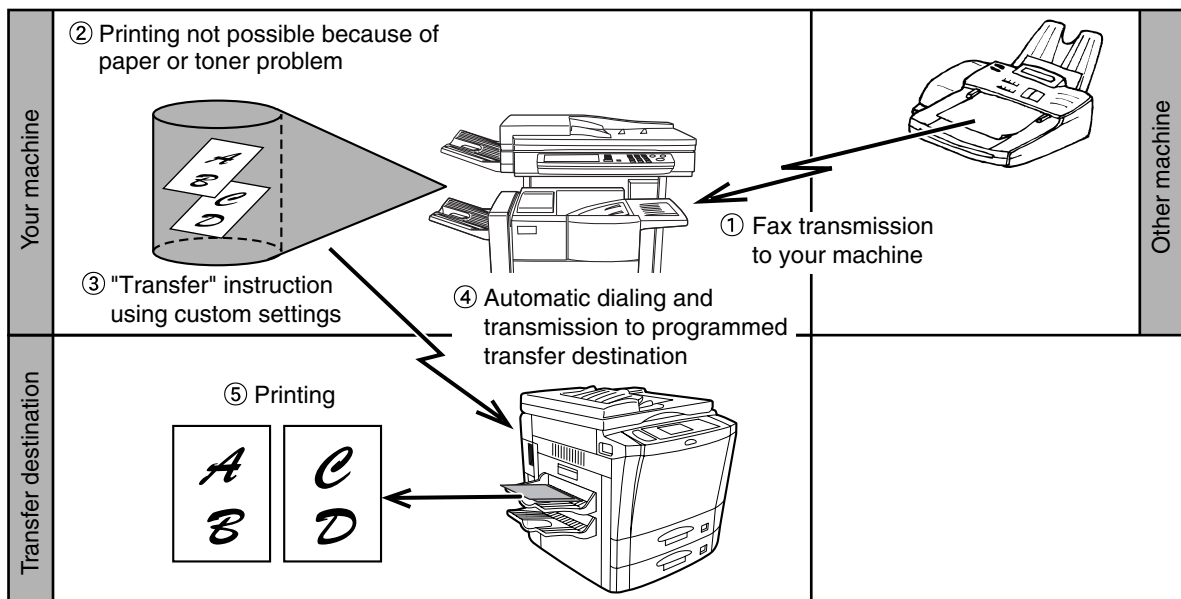
NOTES

● When the transfer instruction is issued, all data that has been received in memory to that point is transferred. The page that was being printed when the problem occurred and all following pages will be transferred.
● Data cannot be selected for transfer. Data received to a confidential memory box (See "F-CODE CONFIDENTIAL TRANSMISSION" on page 4-6.) cannot be transferred.
● The result of transfer is indicated on an activity report. (See "VIEWING THE COMMUNICATION ACTIVITY REPORT" on page 7-3.)

USING THE TRANSFER FUNCTION

■ Program the fax number of the transfer destination

Use the key operator program to program the number of the transfer destination. (See "Set the telephone number for data forwarding" on page 8-9.) Only one fax number can be programmed. The transfer function cannot be used unless a number is programmed.

■ Transferring received data

1 Press the [CUSTOM SETTING] key and then touch the [FAX DATA RECEIVE/FORWARD] key.
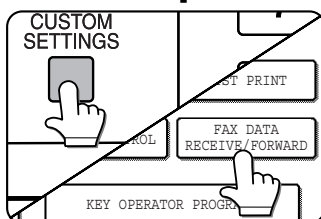
2 Touch the [FAX DATA FORWARD] key.
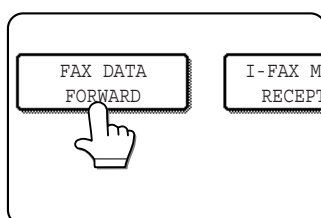
If there is no data to transfer or a transfer number has not been programmed (See "Set the telephone number for data forwarding" on page 8-9.), a message will appear and transfer will not be possible.

3 Touch the [YES] key.
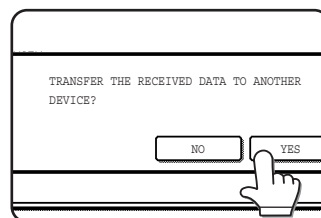
The machine automatically dials the transfer destination programmed with the key operator program and begins transfer.
If you do not wish to transfer the data, touch the [NO] key.

NOTES

● **To cancel transfer**
Press the [JOB STATUS] key, and then cancel the transfer in the same way as a transmission. (See "CANCELING A FAX TRANSMISSION" on page 2-9.) The data that was going to be transferred will return to print standby status in your machine.
● If the transfer is not possible because the line is busy or a transmission error occurs, the data returns to print standby status in your machine.

FAXING DIRECTLY FROM A COMPUTER (PC-FAX FUNCTION)

This feature can only be used when the printer function is a standard feature or has been installed as an option.

The PC-FAX driver can be installed in your computer to enable documents created on your computer to be faxed directly from your computer screen. This eliminates the bother of printing the document and faxing it from the machine.
The PC-FAX driver is contained on the CD-ROM that accompanied the machine or the printer expansion kit.

NOTES
● This function can only be used in a Windows environment.
● This function can only be used for transmission. Faxes cannot be received to your computer.
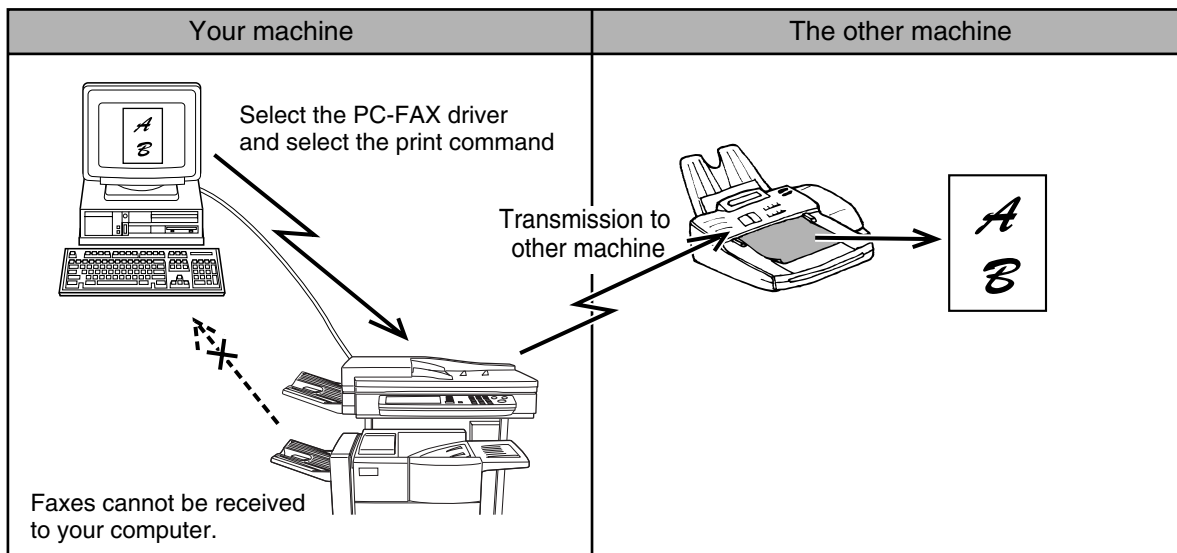
■ **Installing the PC-FAX driver**

The installer on the CD-ROM that accompanied the machine or the printer expansion kit is used to install the PC-FAX driver in the same way as for the PCL5e or PCL6 printer driver.

■ **Using the PC-FAX function**

To fax a document using the PC-FAX function, select the PC-FAX driver as the printer driver on your computer and "print" the document. Fax data will be created and the fax will be transmitted.
For more information, see the Help file for the PC-FAX driver.

CHAPTER 4

USING CONVENIENT FUNCTIONS 2 TRANSMISSION USING F-CODES

This chapter explains F-code transmission, which gives you a convenient means of performing advanced operations such as relay broadcast transmission and confidential transmission. Normally these functions require that the other fax machine be a similar Sharp machine; however, F-code transmission enables these functions to be performed with any other machine that supports F-code transmission. Please read those sections which are of interest to you.

TRANSMISSION BETWEEN MACHINES SUPPORTING F-CODES

This machine supports the "F-code" standard as established by the ITU-T*.

Operations such as relay broadcast transmission and confidential transmission previously could only be performed with another Sharp fax machine; however, F-Code communication makes it possible to perform these operations with fax machines of other manufacturers that support F-Code communication.

Before using the functions explained in this chapter, make sure that the other fax machine supports F-Code communication and has the same functions as your machine. (the other machine may use a different name for the function).

* The ITU-T is a United Nations organization that establishes communications standards. It is a department of the International Telecommunication Union (ITU), which coordinates global telecommunications networks and services.

MEMORY BOXES AND SUB-ADDRESSES/PASSCODES REQUIRED FOR F-CODE TRANSMISSION

"Memory boxes" can be created in the memory of fax machines that support F-Code communication. These boxes are used to store faxes received from other machines and documents to be transmitted when a polling request is received. Fax machines that support F-code transmission enable the creation of a **"memory box"** in the unit's memory. The memory box is used to store documents received from another fax machine or documents to be sent when another machine polls that machine. Up to 100 memory boxes can be created for a variety of purposes, and a name can be assigned to each box. A **"sub-address"** that indicates the box's location in memory must be programmed, and if desired, a **passcode** can also be programmed to control access to the box.
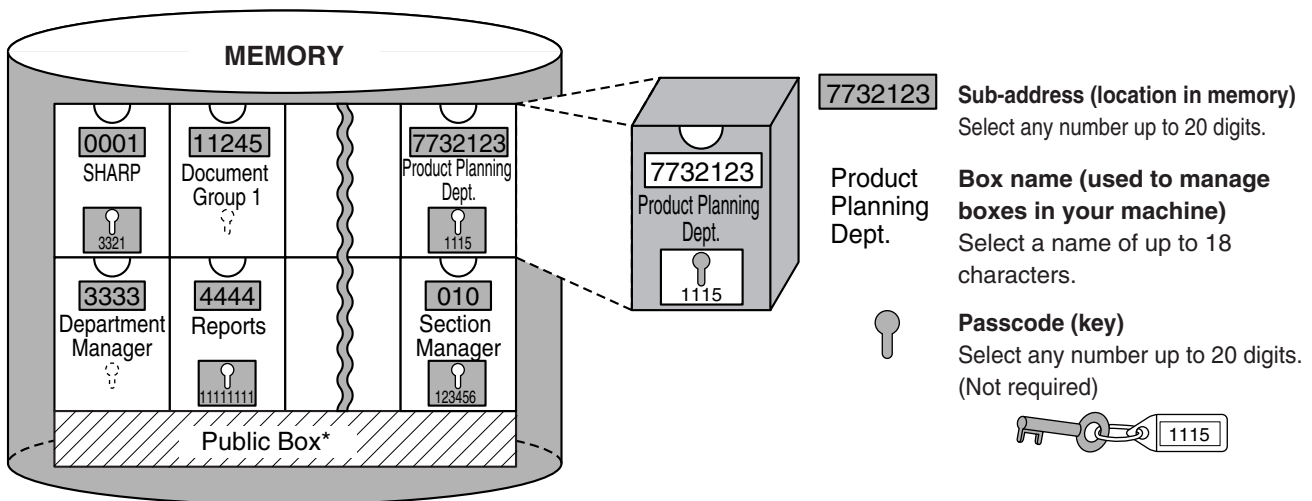
*The Public Box is used for normal serial polling (See "USING POLLING MEMORY" on page 3-15).

When communication occurs involving a memory box, the communication will only take place if the sub-address and passcode that the other machine sends match the sub-address and passcode programmed in your machine for that box. Therefore, to allow communication, you must inform the other party of the sub-address and passcode of the memory box. Likewise, to send a document to a memory box in another machine or use polling to retrieve a document from that memory box, you must know the sub-address and passcode of that memory box. (Box names are used only to manage boxes in the machine; you do not need to inform the other party of a box name the other party only needs to know the sub-address and passcode.)

This machine uses the term "sub-address" for the location of the memory box and the term "passcode" for the password that allows communication; however, other fax machines of other manufacturers may use different terms. When asking the other party for a sub-address and passcode, you may find it useful to refer to the 3-character alphabetical terminology used by the ITU-T.

This machine	ITU-T		
	F-code polling memory box	F-code Confidential box	F-code Relay Broadcast Function
Sub-address	SEP	SUB	SUB
Passcode	PWD	SID	SID

ENTERING (DIALING) A FAX NUMBER WITH A SUB-ADDRESS AND PASSCODE

When transmitting to a memory box in another fax machine, the sub-address and passcode must be entered after the other machine's fax number. Enter the other machine's fax number as explained for a normal transmission (page 2-2) or for a polling operation (page 3-14), and then enter the sub-address and passcode as follows:

1 Dial the fax number of the other machine, or touch a one-touch key or the speed dial key.
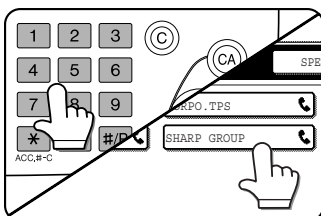
If the condition settings screen appears, touch the [ADDRESS BOOK] key to display the address book screen (refer to page 1-4).

If the sub-address and passcode have been programmed into the one-touch key, the following steps are not needed.

2 Touch the [SUB ADDRESS] key.
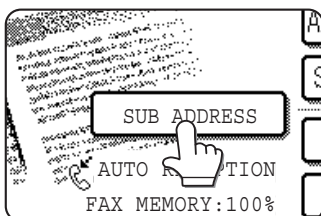
A slash "/" appears at the end of the fax number. If you make a mistake, press the [C] key to clear the mistake.

3 Use the numeric keys to enter the sub-address of the other machine's memory box (max. 20 digits)
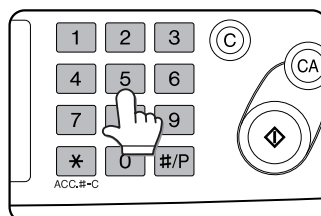
If you make a mistake, press the [C] key and re-enter the correct digit(s).

4 Touch the [SUB ADDRESS] key once again.

A slash "/" appears at the end of the sub-address.

5 Use the numeric keys to enter the passcode of the other machine's memory box (max. 20 digits)

If a passcode has not been established for the other box, this step is not necessary.

4

NOTES
● You can program a sub-address and passcode into a one-touch dial key along with the fax number (refer to page 6-3).
● Manual transmission (on-hook dialing or lifting an extension phone connected to the machine) using a sub-address and passcode is not possible.

CREATING A MEMORY BOX FOR F-CODE TRANSMISSION

Operations that use F-Code memory boxes include F-Code polling memory (following page), F-Code confidential transmission (page 4-6), and F-Code relay broadcast transmission (page 4-8). To perform these operations, a memory box for each type of transmission must be created.
Memory boxes are created in the custom settings. Up to 100 boxes can be created.

The information programmed in each memory box varies slightly depending on the type of operation. Refer to pages 6-10 to 6-14 for the procedures for creating, editing, and deleting memory boxes.

After you have programmed a memory box, inform the other party of the box's sub-address and passcode.

NOTE
If you attempt to create a box when 100 boxes have already been created, a message will appear and you will not be able to create the box. First delete an unused box (See "EDITING AND DELETING A MEMORY BOX" on page 6-14.), and then create the new box.

F-CODE POLLING MEMORY

F-code polling memory allows one fax machine to call another fax machine and activate reception of a document that has been scanned into the other machine's F-code polling memory box. Calling another machine and activating reception is called F-code polling, and scanning a document into a memory box for another machine to retrieve by polling is called F-code polling memory. This function is approximately the same as normal polling explained on page 3-13; however, it uses an F-code polling memory box and is always protected by means of the sub-address and passcode.

■ How F-code polling memory works
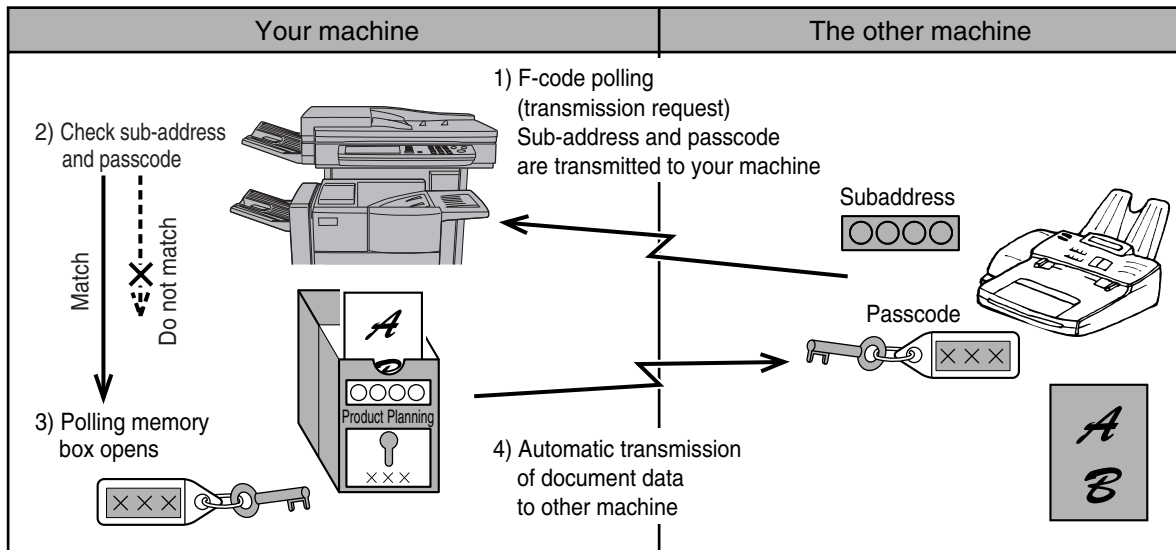
F-code polling is when your machine calls another machine and retrieves a document that was scanned into the polling memory box of that machine (the reverse of the above diagram).

NOTES
- To perform polling or polling memory without using an F-code, refer to page 3-13.
- To create an F-code memory box for polling memory, refer to page 6-10 and "Number of transmissions" on page 6-11.
- Unlike normal polling, the other machine's fax number is not programmed as a passcode for F-code polling memory. The sub-address and passcode of the polling memory box are always used for polling security.
- The receiving machine bears the expense (phone charges) of the transmission.

USING F-CODE POLLING MEMORY

In order for another machine to retrieve a document from your machine, you must first scan the document into the F-code polling memory box.
You can check scanned document data by printing it out (refer to "Checking and clearing document data in a memory box" on the following page).

NOTE
When using F-code polling memory, do not set the reception mode to manual reception.

■ Scanning a document into an F-code polling memory box

The procedure for scanning a document into an F-Code polling memory box (page 6-11) is similar to the procedure for scanning a document into the polling memory public box. Instead of touching the [PUBLIC BOX] key in step 5 of "Scanning a document into memory (Public Box) for polling memory" on page 3-15, touch the key of the memory box that you wish to use. If document data has already been stored in that box, a new document data will be added on to the existing data. If you no longer need the existing data, delete it as explained in "Checking and clearing document data in a memory box" on the following page.

When you touch the memory box into which you wish to scan the document, the key is highlighted and selected as the scanning destination.

NOTE
When creating the memory box, you can select whether to have the scanned document data automatically cleared after polling, or left it in the box to allow repeated polling.
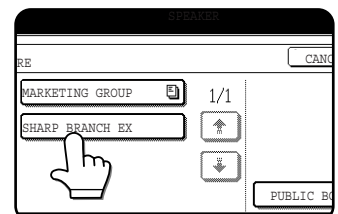
■ Checking and clearing document data in a memory box

The procedure for checking document data in an F-code polling memory box by printing it and the procedure for clearing data from a box are almost the same as the procedures for printing and clearing document data from the Public Box.

Instead of touching the [PUBLIC BOX] key in step 3 of "Printing document data in the Public Box" or "Deleting document data from the Public Box" on page 3-16, touch the key of the desired memory box.

If a document icon (🗒) appears to the right of a memory box key, document data has been stored in that box and you can print it out.

However, the contents cannot be printed or deleted while the memory box is being used for transmission.
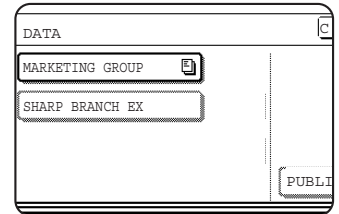
PROCEDURE FOR F-CODE POLLING

Make sure that a document has not been loaded in the auto document feeder or on the document glass, and then follow the steps below.

NOTES
● You must know the sub-address (SEP) and passcode (PWD) of the other machine's F-code polling memory box.
● Serial polling (selecting multiple fax machines to be polled using a group key or by touching the [NEXT ADDRESS] key) is not possible with F-code polling.

1 In fax mode, touch the [SPECIAL MODES] key and then the ▾ key.
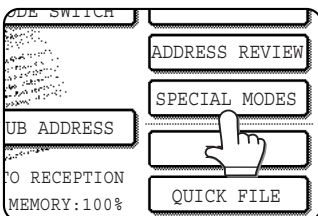
If the address book screen appears, touch the [CONDITION SETTINGS] key to display the condition settings screen (page 1-5).

2 Touch the [POLLING] key and then touch the [OK] key.
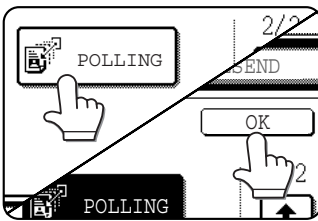
The [POLLING] key is highlighted and the polling icon appears.

To cancel polling, touch the [POLLING] key once again to cancel the selection.

You will return to the initial screen.

3 Enter the fax number, sub-address, and passcode of the other fax machine.
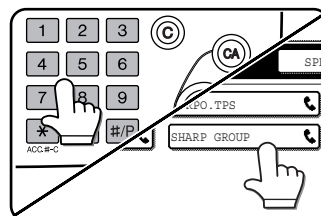
To use a one-touch key, touch the [ADDRESS BOOK] key to display the address book.

Refer to steps 2 through 5 on page 4-3 for the procedure for entering sub-addresses and passcodes.

4 Press the [START] key.
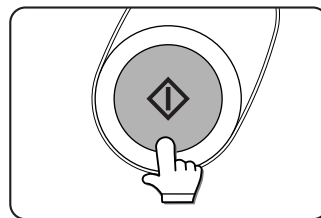
"POLLING." appears on the screen.

After communicating with the other machine, your machine prints the received document data.

NOTES
● **Canceling a transmission**
Press the [JOB STATUS] and cancel the transmission in the same way as when canceling a stored transmission. (See "CANCELING A FAX TRANSMISSION" on page 2-9)
● Only one F-code polling timer operation can be stored (see page 3-6).

4-5

F-CODE CONFIDENTIAL TRANSMISSION

F-Code confidential transmission provides a secure means of faxing confidential documents. The sub-address and passcode programmed in the memory box restrict the recipients of the fax, and once received in the memory box, the fax can only be printed by someone who knows the print passcode (PRINT PIN. see page 6-12).
This function is convenient when sending important documents that you only want a specific person to see, or when multiple departments share a single fax machine.
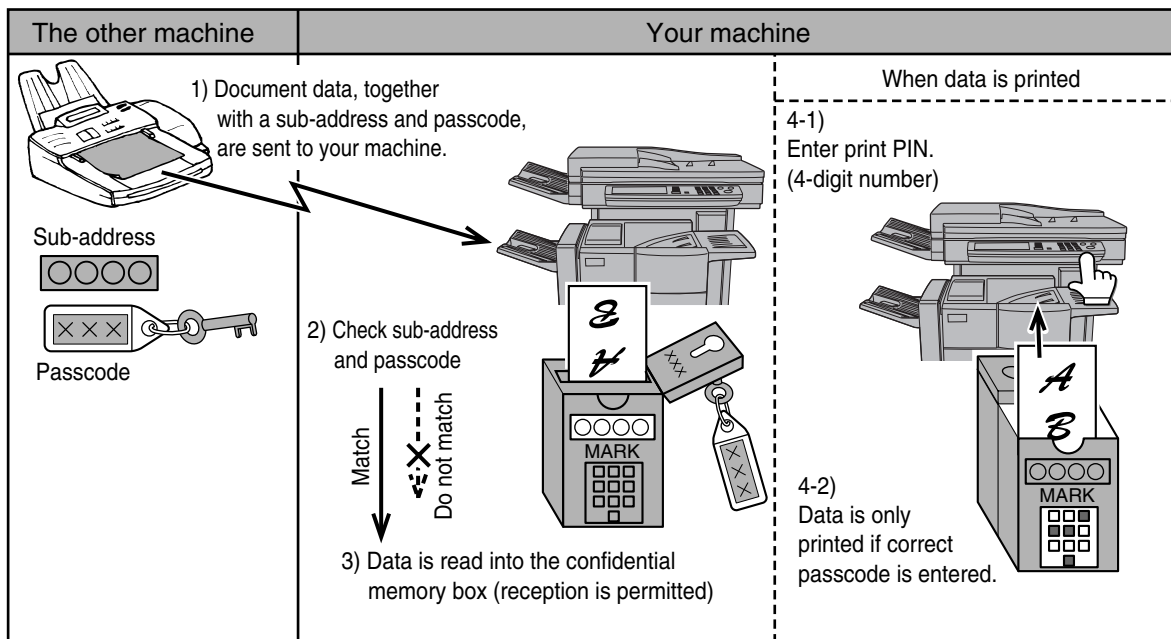
As the above diagram shows, receiving document data to the machine's F-code confidential memory box is called F-code confidential reception, and sending document data to another machine's F-code confidential memory box is called F-code confidential transmission.

NOTES
● This machine does not support Sharp's previous confidential transmission function, which uses the programmed sender's fax number and ID code.
● Refer to pages 6-10 through 6-13 for the procedures for creating, editing, and deleting F-code confidential memory boxes.
● Take care not to forget the print PIN. programmed in the F-code confidential memory box. If you forget the passcode, consult your dealer.

F-CODE CONFIDENTIAL TRANSMISSION

F-code confidential transmission is performed in the same way as a normal transmission (refer to chapter 2); however, you must enter the sub-address (SUB) and passcode (SID) after the fax number of the other machine. (Omit the passcode if the other machine does not use a passcode.)
For the procedure for entering sub-addresses and passcodes, see "ENTERING (DIALING) A FAX NUMBER WITH A SUB-ADDRESS AND PASSCODE" on page 4-3.
F-code confidential reception is performed in the same way as normal reception (see chapter 2); however, you must inform the other party of the sub-address (SUB) and passcode (SID) of your confidential memory box. (If a passcode is not programmed in the confidential memory box, only inform the other party of the sub-address (SUB).)

NOTE
An F-code confidential transmission can be used in combination with the broadcast transmission function (page 3-2) or timer transmission function (page 3-6), and can be stored in a program (page 6-8).

PRINTING A DOCUMENT RECEIVED TO AN F-CODE CONFIDENTIAL MEMORY BOX

Faxes received in an F-Code confidential memory box are printed out by entering the PRINT PIN 4-digit passcode (0000 to 9999) that was programmed when the box was created. Printing of the confidential faxes takes precedence over any other stored jobs.

NOTES
- You can have a transaction report printed each time a fax is received in an F-Code confidential box to inform you of the reception. This setting is enabled in the key operator programs (see "Transaction report print select setting" on page 8-6).
- Document data received to an F-code confidential memory box is automatically cleared after printing.
- When a new fax is received to an F-code confidential box while a previously received fax is still stored in the box, the new fax is added on after the previous fax.

---

1 **In fax mode, touch the [SPECIAL MODES] key and then touch the ⊡ key.**
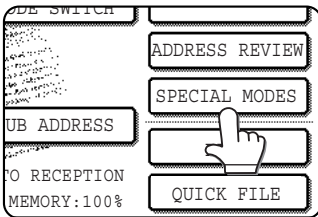
If the address book screen appears, touch the [CONDITION SETTINGS] key to display the condition settings screen (page 1-5).

2 **Touch the [MEMORY BOX] key and then touch the [PRINT DATA] key.**
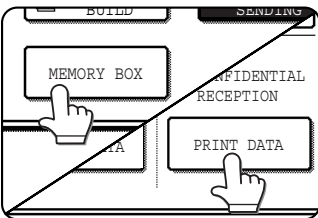
The memory box menu screen appears.

To cancel the operation, touch the [CANCEL] key.

3 **Touch the memory box key that has the document data you wish to print.**
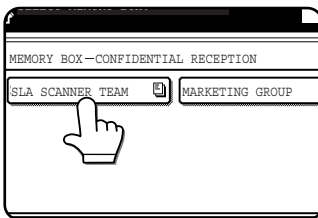
A 🗐 mark appears to the right of memory boxes that have received document data.
A memory box cannot be selected while it is being used for transmission.

4 **Press the numeric keys to enter the 4-digit print PIN.**
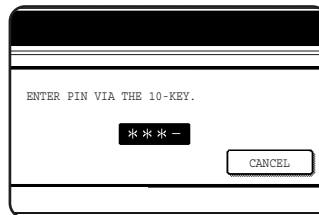
As each digit is entered, "-" changes to " ✳ ".
If the print PIN you entered is correct, the message "PRESS [START] TO PRINT DATA." appears.

ENTER PIN VIA THE 10-KEY.

✳✳✳−   CANCEL

If the passcode is not correct, the message "PIN IS NOT VERIFIED." appears and you return to the entry screen.
To return to the screen of step 3, touch the [CANCEL] key.

5 **Press the [START] key.**
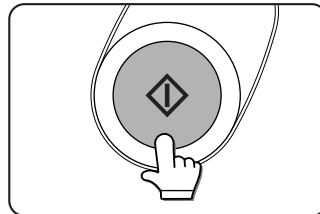
Printing begins. If another print job is already is progress, the confidential data is printed after that job is completed.

NOTE
If received data remains in an F-code confidential memory box, the memory box cannot be deleted.

F-CODE RELAY BROADCAST TRANSMISSION

The F-Code relay broadcast function allows the machine to act as a relay machine for a broadcast transmission. The end receiving machines are stored in the machine's F-Code relay memory box, and when the machine receives a relay request from another F-Code machine, it will relay the fax to all of the stored end receiving machines.

The relay machine and the originating machine that requests the relay transmission must both support F-codes; however, the end receiving machines programmed in the F-code relay broadcast memory box do not need to support F-codes.

Relay request machine (sends document)	Relay machine (your machine)

1) Document is sent from machine requesting relay transmission

Sub-address
○○○○

Passcode
×××

2) Check sub-address and passcode

Match / Does not match

S.F.
×××

3) Document data is read into relay broadcast memory box (reception is permitted).

4) Document is successively transmitted to end receiving machines programmed in the relay broadcast memory box.

Receiving machine A   Receiving machine B   Receiving machine C

The machine that originally sends the document is called the relay request machine, and the machine that has a memory box containing the end receiving machines and which relays the received document to those machines is called the relay machine.

The relay machine also prints the document sent by the relay request machine.

For example, corporate headquarters in Seattle wants to send the same document to branch offices in San Francisco, Oakland, Berkeley, and San Jose. If the San Francisco office creates a relay broadcast memory box and programs the Oakland, Berkeley, and San Jose offices as end receiving destinations, the overall phone charges will be lower than if the Seattle office uses the normal broadcast transmission function (page 3-2). This function can also be combined with a timer setting (page 3-6) to take advantage of off-peak rates, allowing a further reduction in phone charges.

Transmission by the relay machine is called "F-code relay broadcast transmission", and transmission from the relay request machine to the relay machine is called "relay request transmission".

NOTES
- This machine does not support Sharp's previous relay broadcast function, which uses the programmed sender's number and relay ID code.
- To create an F-code relay broadcast memory box and program, edit, and delete end receiving machines, refer to pages 6-10 to 6-14. When creating a box, a passcode (SID) can be omitted.
- The relay request machine only bears the expense of sending the document to the relay machine. The relay machine bears the expense of sending the document to each of the end receiving machines.

USING THE F-CODE RELAY BROADCAST FUNCTION

(your machine is the relay machine)

When a document is received from a relay request machine, the F-code relay broadcast function transmits the document to the end receiving machines using a memory box only if the sub-address and passcode sent by the relay request machine are correct.

Refer to pages 6-10 through 6-14 for the procedures for creating, editing, and deleting memory boxes.

Up to 30 end receiving machines (30 one-touch keys or group keys) can be programmed in the F-code relay broadcast memory box.

A document received from a relay request machine is initially stored in the memory box of your machine. Your machine (the relay machine) also prints the document, thus the document is first stored as a print job and then as transmission jobs to each of the programmed end receiving machines. The document data is automatically cleared after transmission to all end receiving machines is completed.

USING THE F-CODE RELAY REQUEST FUNCTION

(your machine requests a relay broadcast)

Ask the operator of the other F-Code machine (the relay machine) to create an F-Code relay broadcast memory box that contains the end receiving machines to which you wish to send a fax, and ask for the sub-address (SUB) and passcode (SID) of that box.

When you dial the relay machine to send the fax, enter the sub-address and passcode after the fax number. The fax will be sent to the relay machine's memory box, and the relay machine will call each of the programmed end receiving machines and relay the fax to those machines. (If a passcode (SID) is not programmed in the memory box , enter only the password when dialing.)

Aside from the method of dialing the relay machine, the transmission procedure is the same as for a normal transmission (refer to chapter 2).

Refer to "ENTERING (DIALING) A FAX NUMBER WITH A SUB-ADDRESS AND PASSCODE" on page 4-3 for the procedure for entering a sub-address and passcode after the fax number of the other machine.

4

CHAPTER 5

USING CONVENIENT FUNCTIONS 3
CONVENIENT METHODS OF USE

This chapter explains functions that widen the scope of use of the fax machine. Please read those sections that are of interest to you.

USING AN EXTENSION PHONE

You can connect a telephone to the machine and use it as an extension phone to place and receive calls like any normal phone. You can also activate fax reception from the phone (remote operation).

> **NOTE**
> If you connect a combination telephone/answering machine to the machine, you will not be able to use the answering machine function.

USING AN EXTENSION PHONE TO RECEIVE A FAX

The machine normally receives faxes automatically after ringing (page 2-10); however, when an extension phone is connected, you can set the reception mode to "MANUAL RECEPTION". This will allow you to talk to the other party first and then receive a fax.

This is convenient when you only have one telephone line and receive more voice calls than faxes. You must answer all calls on the extension phone, and activate fax reception after you verify that a call is a fax transmission.

> **NOTES**
> ● The reception mode is initially set to "AUTO RECEPTION". If you have not connected an extension phone, keep the reception mode set to "AUTO RECEPTION".
> ● If you hear beeps during reception or at the end of reception and an error message appears in the display, refer to page 7-3.

■ Changing the reception mode to "MANUAL RECEPTION"

1 Press the [CUSTOM SETTINGS] key. Then touch the [FAX DATA RECEIVE/ FORWARD] key .
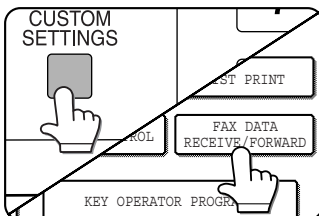
2 Touch the [RECEIVE MODE] key.
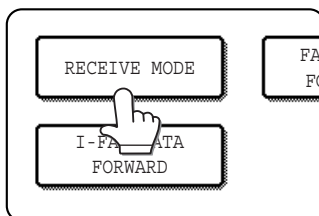
3 Touch the [MANUAL RECEPTION] key.
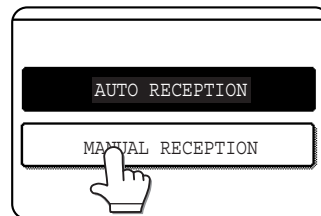
The [MANUAL RECEPTION] key is highlighted.
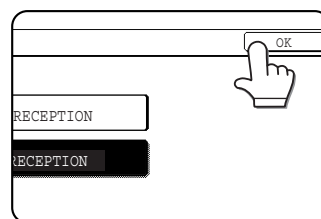
4 Touch the [OK] key.

The reception mode is set to "MANUAL RECEPTION".

You will return to the screen of step 2.

Touch the [OK] key in the screen of step 2, and then touch the [EXIT] key in the [CUSTOM SETTINGS] screen to return to the main screen.

> **NOTE**
> To return the reception mode to AUTO RECEPTION, touch the [AUTO RECEPTION] key in step 3 above.

RECEIVING A FAX AFTER TALKING (MANUAL RECEPTION)

When an extension phone is connected to the machine and you have set the reception mode to "MANUAL RECEPTION", you can talk to a person sending a fax manually and then begin fax reception without breaking the connection.

■ When the machine is in Fax mode

A fax can be received manually even when transmission is in progress.

1 **When the machine rings, lift the extension phone and speak.**

If you hear a fax tone through the extension phone, do not speak and proceed to the next step.

2 **With the extension phone still lifted, touch the [MANUAL RECEPTION] key.**
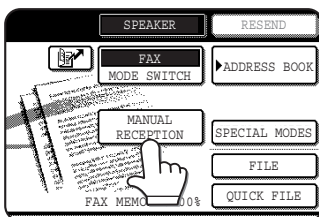
Reception begins when the other party begins transmission.

3 **Replace the extension phone.**

The received fax will be printed after previously stored jobs have been printed. When printing is completed, you will hear a "beep" sound.

NOTES
- If there are stored print jobs, the fax is printed after the stored print jobs.
- You can also talk on the extension phone and manually receive a fax while the machine is printing.

  If the machine rings during printing, lift the extension phone and speak. To receive a fax, press the [IMAGE SEND] key with the extension phone still lifted. When you hear a fax tone through the extension phone, touch the [MANUAL RECEPTION] key.

■ Activating fax reception from an extension phone (remote reception)

After speaking on the extension phone, you can activate fax reception from the extension phone. This is called "remote reception". After speaking, or when you hear a fax tone through the extension phone, perform the following procedure with the extension phone still lifted. ("Remote reception" is only possible when the call is made by the other party.)

NOTE

The following procedure is not possible if you are on a pulse dial line and your extension phone cannot produce tone signals. To find out whether your extension phone can produce tone signals, refer to the manual for your extension phone.

1 **If you are on a pulse dial line, set your phone to issue tone signals.**

Refer to your phone's manual to set the phone to issue tone signals.

If your phone is already set to issue tone signals, proceed to the next step.

2 **Press the 5 key on the extension phone's keypad, and then press the ✱ key twice.**

Fax reception is activated.

3 **Replace the extension phone.**

NOTE

The one-digit number that is used to activate fax reception from an extension phone (initially set to "5") is called the "remote reception number". You can change this number to any number from 0 to 9 with the key operator program. (See "Remote reception number setting" on page 8-6.)

5

SENDING A FAX AFTER TALKING (MANUAL TRANSMISSION)

If the other fax machine is set to manual reception, you can talk to the other party and then send a fax without breaking the connection. This procedure is called manual transmission.

NOTE

Automatic redialing (see "If the receiving party is busy" on page 2-8) will not take place if the line is busy.

1 **Make sure the machine is in fax mode.**
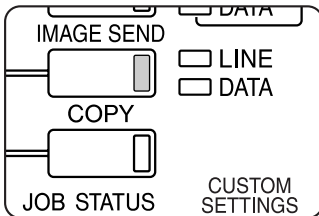
When the [IMAGE SEND] key light is on, the machine is in fax mode.
If the light is not on, press the [IMAGE SEND] key.
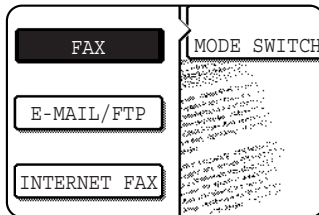
If the network scanner option is installed, touch the [MODE SWITCH] key and then the [FAX] key to switch to fax mode.

When fax mode is selected, "FAX" appears in the top half of the [MODE SWITCH] key.

2 **Load the original. (see page 1-7)**

NOTE

If you have loaded the original on the document glass, you can only send one page by manual transmission.

3 **Set the original size, resolution, exposure and other scanning conditions as needed.**

- ● MANUALLY SETTING THE SCANNING SIZE (see page 1-8)
- ● SELECTING THE RESOLUTION (see page 1-10)
- ● SELECTING THE EXPOSURE (see page 1-11)

4 **Lift the extension phone.**

5 **Dial the number of the other party or touch a one-touch key.**
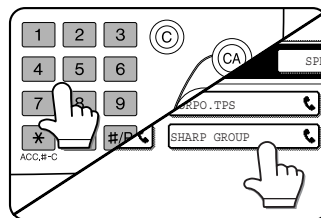
If the address book screen appears, touch the [CONDITION SETTINGS] key to display the condition settings screen (see page 1-4).

You cannot use a group key or a one-touch key that includes a sub-address and passcode.

6 **Speak to the other party when they answer.**

7 **After the other party switches to fax reception, press your [START] key.**
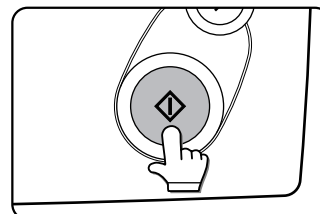
Transmission begins.

8 **Replace the extension phone.**

CHAPTER 6

PROGRAMMING

This chapter explains the procedures for programming and the information programmed in auto dial keys (one-touch and group keys), programs, user indexes, and memory boxes.

PROGRAMMING

Auto dial numbers (one-touch keys and group keys), user indexes, and memory boxes are stored, edited and deleted at the operation panel of the machine.

STORING, EDITING, AND DELETING AUTO DIAL KEYS AND PROGRAMS

This section explains the procedures for storing, editing, and deleting auto-dial keys (one-touch keys and group keys) and programs, which simplify the transmission procedure. (The procedure for using one-touch keys and group keys is explained in "TRANSMISSION BY AUTO-DIALING" on page 2-4 and the procedure for using programs is explained in "USING A PROGRAM" on page 3-17.)

A combined total of 999 (maximum of 500 on the AR-M355U/AR-M455U) one-touch keys and group keys can be stored, and eight programs can be stored. If you attempt to store more than this, a warning message will appear. In this case, delete any auto-dial keys or programs that are no longer needed (refer to pages 6-5, 6-7 and 6-8), and then store the new auto-dial key or program.

NOTE

To cancel a storing, editing, or deleting operation, press the [CA] key. You will return to the main screen.

To store, edit, or delete an auto-dial key (one-touch key or group key) or program, first follow steps 1 through 4 below. In the screen of step 4, touch the appropriate key for storing, editing, or deleting.

1 Press the [CUSTOM SETTINGS] key.
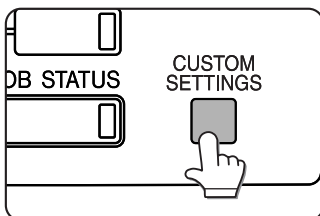
2 Touch the [ADDRESS CONTROL] key.
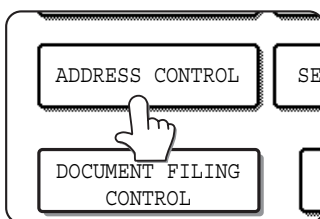
3 Touch the [DIRECT ADDRESS / PROGRAM] key.
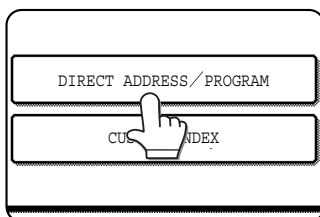
The direct address / program menu appears.

4 Touch the desired key and perform the programming operation.
Refer to the pages indicated below for the operation you wish to perform.
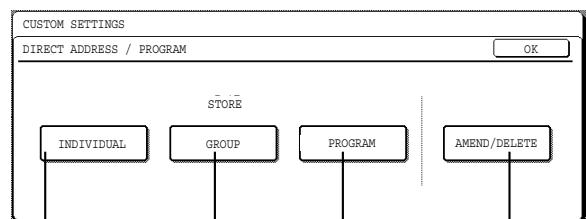
[INDIVIDUAL] key
Store a one-touch dial key (following page)

[PROGRAM] key
Store a program key (page 6-8)

[GROUP] key
Store a group key (page 6-6)

[AMEND/DELETE] key
• One-touch key (page 6-5)
• Group key (page 6-7)
• Program (page 6-8)

NOTE

Destinations in programs must be stored using one-touch keys. For this reason, if no one-touch keys have been stored, the [PROGRAM] key will be grayed out.

STORING ONE-TOUCH DIAL KEYS

To store a one-touch key, follow steps 1 to 3 on page 6-2, touch the [INDIVIDUAL] key in step 4, and then follow these steps.

1 Make sure the [FAX] key is checked.
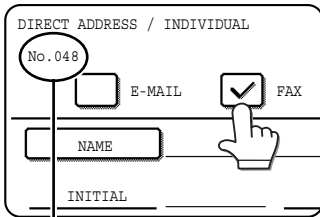
```
DIRECT ADDRESS / INDIVIDUAL
No.048
         E-MAIL      ✓  FAX

     NAME

     INITIAL
```
(a)

If a FAX checkmark (☑) does not appear, touch the checkbox.
(a) The lowest number (No.048) from 001 to 999 that has not been stored appears automatically. This number is used for dialing with the speed dial key (Speed Dial number).

2 Touch the [NAME] key.

```
DIRECT  DDRESS / INDIVIDU L
No.048
         E-MAIL      ✓  FAX

     NAME

     INITIAL
```
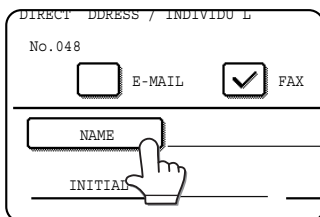
The text entry screen appears. Enter the name of the destination (max. 36 characters).
For information on entering characters, see chapter 7 of the "Operation manual (for general information and copier operation)."

3 Touch the [INITIAL] key

```
NO.048
         E-MAIL      ✓  FAX

     NAME      SHARP CORPORATION

     INITIAL

     FAX No.
```

4 Touch a letter key.

```
INITIAL                        CANCEL     OK
  █         ◄
  Q   W   E   R   T   Y   U   I   O   P   ←
  A   S   D   F   G   H   J   K   L
  Z   X   C   V   B   N   M        ABC ◄► abc
              SPACE
```
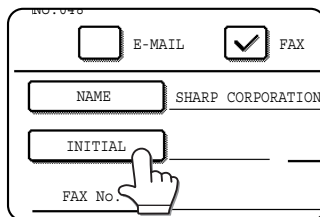
Up to 10 search characters can be entered. If you make a mistake, touch the ← key to delete the mistake and then enter the correct character.

NOTE
The initial you enter here determines the position of the one-touch key in the ABC index. For information on the ABC index, refer to ⑤ Index keys on page 1-5.

5 Touch the [OK] key.

```
                    CANCEL      OK
  Y   U   I   O   P
  H   J   K   L
  N   M              ABC ◄► abc
PACE
```

6 Touch the [INDEX] key.

```
  ✓  FAX          INTERNET-F

ARP CORPORATION

         INDEX
```

7 Touch an index key.

```
DIRECT ADDRESS / INDIVIDUAL          NEXT      EXIT
  No.048
   INDEX                                  OK
SELECT THE CUSTOM INDEX WHERE YOU REGISTER THIS ADDRESS.
 USER 1   USER 2   USER 3   USER 4   USER 5   USER 6
DO YOU REGISTER THIS ADDRESS AT THE [FREQUENT USE], TOO?
                          YES        NO
```
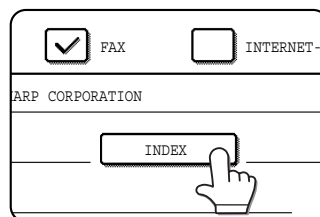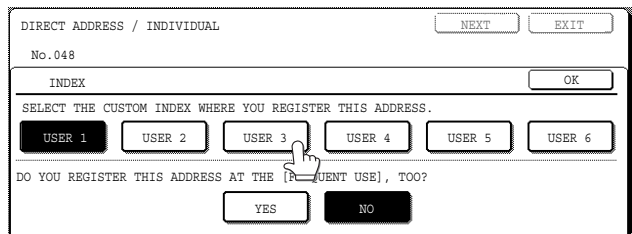
● Select one of the upper row of keys ([USER 1] through [USER 6]) to determine the location of the one-touch key when the GROUP index is displayed instead of the ABC index (refer to page 1-5).
● The lower keys are for selecting whether to include the one-touch key in the [FREQUENT USE] index. It is convenient to include frequently dialed destinations in the [FREQUENT USE] index.

8 Touch the [OK] key.

9 Touch the [FAX No.] key.

```
     NAME      SHARP CORPORAT

     INITIAL    S

     FAX No.
```
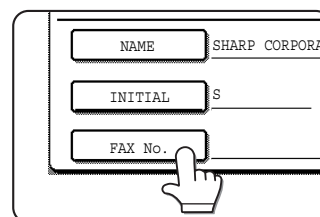
The fax number entry screen appears.

6

10 **Use the numeric keys to enter the fax number.**

```
DIRECT ADDRESS / INDIVIDUAL                    NEXT      EXIT

  No.048

FAX No.                                       CANCEL     OK

ENTER OWN FAX NO. VIA THE 10 KEY-PAD,THEN PRESS [OK].


       ☎:   0666211221                                PAUSE


                                                   SUB ADDRESS
```
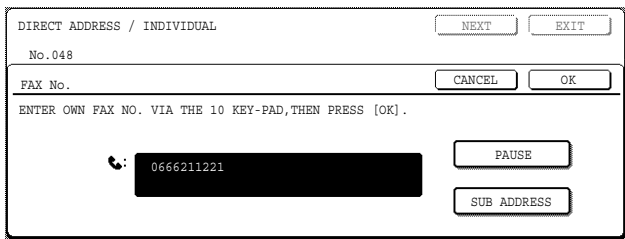
- To insert a pause between digits of the number, touch the [PAUSE] key. The pause appears as a hyphen "-". Refer to page 8-6 to set the duration of the pause.
- If you make a mistake, press the [C] key to clear one digit at a time, and then enter the correct digit(s).
- If you are not going to enter a sub-address and password after the fax number, proceed to step 13.

NOTES
- For information on sub-addresses and passcodes, see "MEMORY BOXES AND SUB-ADDRESSES/ PASSCODES REQUIRED FOR F-CODE TRANSMISSION" on page 4-2.
- A maximum of 64 digits can be entered, including the fax number, sub-address, passcode, any pauses (hyphens), and slashes "/" (to separate the sub-address and passcode).

11 **If you need to enter a sub-address, touch the [SUB ADDRESS] key and then enter the sub-address with the numeric keys.**

```
            CANCEL        OK

PRESS [OK].


                        PAUSE


                     SUB ADDRESS
```
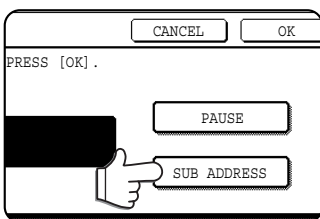
When you touch the [SUB ADDRESS] key, a slash is entered after the fax number. Continue by entering the sub-address (max. 20 digits).
If you do not wish to enter a passcode, proceed to step 13.

12 **If you wish to enter a passcode, touch the [SUB ADDRESS] key once again and enter the passcode with the numeric keys.**

```
DDRESS / PASS CODE VIA THE 10-KEY PAD


   0666211221/3456/
```
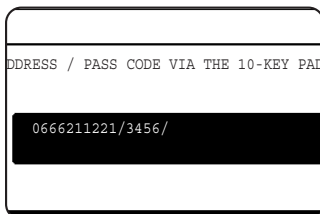
When you touch the [SUB ADDRESS] key, a slash is entered after the sub-address. Continue by entering the passcode (max. 20 digits).

13 **Touch the [OK] key.**
You will return to the one-touch key programming screen and "REGISTRATION IS COMPLETED." will appear in the touch panel.
The number (Speed Dial number) that appears next to [No.] is used for Speed Dialing. This number is useful when you frequently send faxes to the same destination.

NOTE
The "FAX No." line only shows 32 digits, regardless of how many digits actually programmed.

6-4

14 **Touch the ⊡ key, and then check the key name.**
The characters appearing next to the [NAME] key will be displayed in the key. Only the first 9 characters of the name entered in step 1 will be displayed.
If you need to change the name that will be displayed in the key, touch the [KEY NAME] key.

```
DIRECT ADDRESS / INDIVIDUAL

  No.048 REGISTRATION IS COMPLETED

         E-MAIL     ✓ FAX


    KEY NAME     SHARP CORPORATION


    MODE         33.6kbps/NONE
```
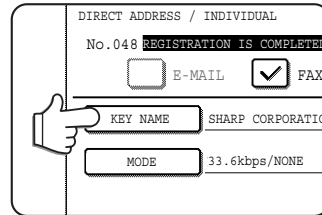
If you do not wish to change the name, this step is not necessary.
Refer to chapter 7 of the "Operation Manual (for general information and copier operation) for the procedure for entering characters.

15 **Check the transmission settings.**
The initial transmission settings are "TRANSMISSION SPEED: 33.6 kbps" and "INTERNATIONAL CORRESPONDENCE MODE: NONE". To change either of the settings, touch the [MODE] key.

```
DIRECT ADDRESS / INDIVIDUAL

  No.048 REGISTRATION IS COMPLETED

         E-MAIL     ✓ FAX


    KEY NAME     SHARP CORPORATIO


    MODE         33.6 kbps/NONE
```
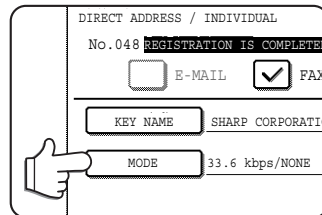
If you do not wish to change the settings, this step is not necessary.
After touching the [MODE] key, you can change either of the two settings. When finished, touch the [OK] key.

Transmission speed
Speed selections are 33.6 kbps, 14.4 kbps, 9.6 kbps, and 4.8 kbps. The higher the number, the faster the transmission speed.

NOTE
Set the transmission speed only when you know what speed is most suitable, such as when you are sending a fax to a foreign country and telephone line conditions are bad. If you do not know the line condition, do not change this setting.

International correspondence mode
Selections are NONE, MODE 1, MODE 2, and MODE 3.

NOTES
- When sending a fax to a foreign country, telephone line conditions can sometimes distort the fax or interrupt the transmission. Selecting the right international correspondence mode can help alleviate these problems.
- If errors frequently occur when sending a fax to a foreign country, try each of modes 1 to 3 and select the mode that enables the best transmission.

16 **When you have finished programming the one-touch key, touch the [EXIT] key.**
If you wish to program another one-touch key, touch the [NEXT] key.

```
            NEXT      EXIT


   INTERNET-FAX


                          1/2

                          ⬆

OX     USER 3             ⬇
```
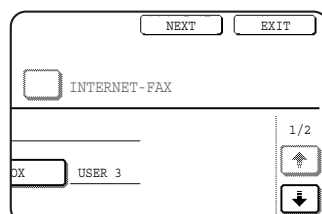
Pressing the [EXIT] key returns you to the screen of step 4 on page 6-2.
Touching the [NEXT] key returns you to the screen of step 1 on page 6-3.

EDITING AND DELETING ONE-TOUCH KEYS

If you wish to delete a one-touch key or change the fax number, name, or other information programmed in a one-touch key, follow steps 1 through 3 on page 6-2 and then perform the following procedure.

1 Touch the [AMEND/DELETE] key.

AMEND/DELETE
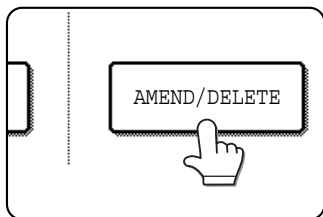
2 Touch the one-touch key that you wish to edit or delete.
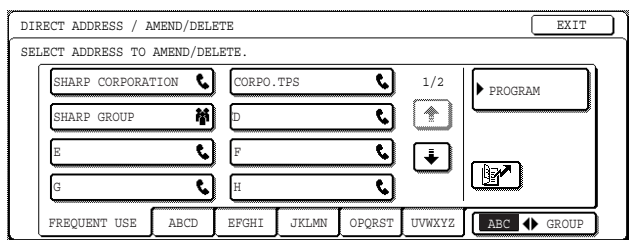
DIRECT ADDRESS / AMEND/DELETE — EXIT
SELECT ADDRESS TO AMEND/DELETE.
SHARP CORPORATION | CORPO.TPS | 1/2 | PROGRAM
SHARP GROUP | D
E | F
G | H
FREQUENT USE | ABCD | EFGHI | JKLMN | OPQRST | UVWXYZ | ABC ◀▶ GROUP

You can also use the [ ] key (speed dial key) to open the settings screen of the desired one-touch key (the screen of step 3). (See "SENDING A FAX BY SPEED DIALING" on page 2-4.)
● To edit a one-touch key, follow steps 3 and 4.
● To delete a one-touch key, follow steps 5 and 6.
● When you have finished editing or deleting, touch the [EXIT] key.

3 Touch the key corresponding to the information you wish to change (change the information in the same way as you stored the information on page 6-3).

DIRECT ADDRESS / AMEND/DELETE | DELETE | EXIT
No.048
☐ E-MAIL | ✓ FAX | ☐ INTERNET-FAX
NAME | SHARP CORPORATION | 1/2
INITIAL | S | INDEX | USER 3
FAX No. | 0666211221/3456/

4 Make sure that your changes are correct, and then touch the [EXIT] key.

NEXT | EXIT
-FAX
1/2

You will return to the screen of step 2.
If you wish to change another one-touch key, repeat steps 2 through 4.

5 To delete a one-touch key, touch the [DELETE] key in the screen of step 3.

DELETE | EXIT
-FAX
1/2

6 Touch the [YES] key.

DELETE THE ADDRESS?
SHARP CORPORATION
NO | YES
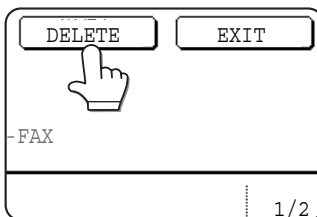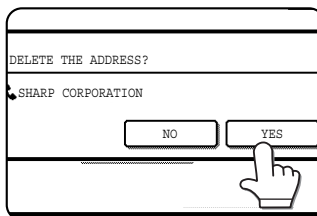
You will return to the screen of step 2.
If you wish to delete another one-touch key, repeat steps 2, 5, and 6.

6

NOTE

If you cannot edit or delete a one-touch key
If you attempt to edit or delete a one-touch key in the following situations, a warning message will appear and editing/deletion will not be possible.
● The one-touch key you wish to edit or delete is currently being used for transmission or is used in a currently stored transmission job (including a timer transmission).
● The one-touch key is included in a group key. (See "EDITING AND DELETING GROUP KEYS" on page 6-7.)
● The one-touch key is included in a group of end receiving machines for an F-code relay broadcast operation. (See "EDITING AND DELETING A MEMORY BOX" on page 6-14.)
● The one-touch key is included in a program. (See "EDITING AND DELETING PROGRAMS" on page 6-8.)
If the key is being used for a current transmission or currently stored transmission, cancel the transmission or wait until it is completed and then change or delete the key. If the key is included in one of the above groups, delete the key from the group and then change or delete the key.

STORING A GROUP KEY

A group of numbers can be stored in a group key. The numbers can be stored by touching one-touch keys (see "STORING ONE-TOUCH DIAL KEYS" on pages 6-3 to 6-4) or by directly entering full numbers with the numeric keys. Up to 500 (maximum of 300 on the AR-M355U/AR-M455U) destinations can be stored in a group key.

To program a group key, follow steps 1 through 3 on page 6-2, touch the [GROUP] key in step 4, and then follow these steps.

1 **Follow the same steps 1 through 8 of "STORING ONE-TOUCH DIAL KEYS" (pages 6-3 to 6-4) to enter a [GROUP NAME], [INITIAL], and [INDEX].**

  * In step 2 on page 6-3, touch the [GROUP NAME] key instead of the [NAME] key.

2 **Touch the [ADDRESS] key.**
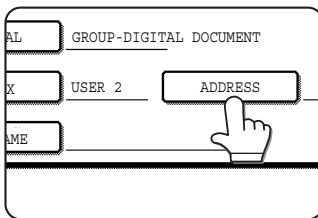
3 **Touch one-touch keys of the destinations that you wish to store in the group. Touch index keys and the ⬆ ⬇ keys as needed.**
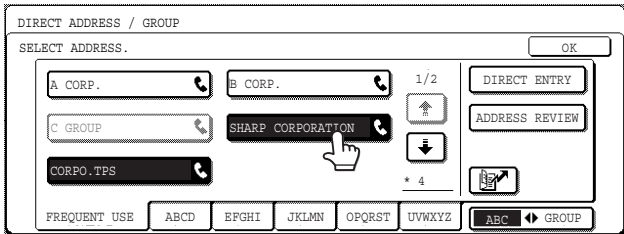
  ● The selected destinations are highlighted and stored in the group key.
  ● If you touch the wrong key, simply touch it again to cancel the highlighting and remove the destination from the group.

> **NOTE**
>
> Keys that are grayed out are group keys. Group keys cannot be selected.

  ● You can also use the [🖉] key (speed dial key) to store a one-touch key. (See "SENDING A FAX BY SPEED DIALING" on page 2-4.)
  ● To enter a full fax number with the numeric keys, touch the [DIRECT ENTRY] key and then the [FAX] key and enter the number.
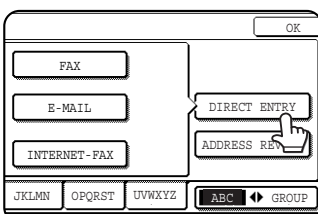
● Enter the fax number and then a sub-address and transmission settings (if desired) as explained in steps 10 to 13 and 15 of "STORING ONE-TOUCH DIAL KEYS" on pages 6-3 to 6-4, and then touch the [OK] key twice to return to the screen of step 3.
● To check the destinations that you have stored in the group, touch the [ADDRESS REVIEW] key.
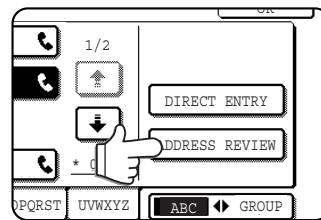
A list of the destinations appears.
To delete a destination, touch the key of the destination and then touch the [YES] key in the message that appears.

4 **Touch the [OK] key in the screen of step 3.**

  ● You will return to the screen of step 2. The number of selected destinations will appear next to the [ADDRESS] key.

5 **Check the name of the key (refer to step 14 on page 6-4).**

The characters appearing next to the [KEY NAME] key will be displayed in the group key. To change these characters, touch the [KEY NAME] key. This step is not necessary if you do not wish to change the characters.
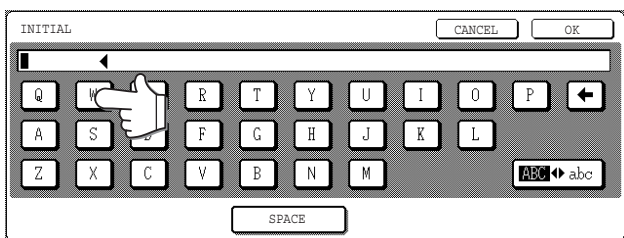
For information on entering characters, see chapter 7 of the "Operation Manual (for general information and copier operation)".
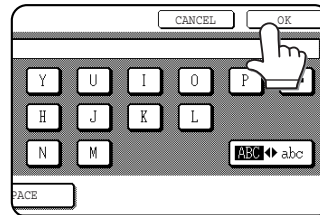
6 **Touch the [EXIT] key when you have finished programming the group key. If you wish to program another group key, touch the [NEXT] key.**

When you touch the [EXIT] key, you will return to the screen of step 4 on page 6-2.

To store another group, touch the [NEXT] key.

EDITING AND DELETING GROUP KEYS

If you need to delete a group key or change its name or a one of its stored destinations in a group key, first follow steps 1 through 3 on page 6-2, and then perform the following procedure.

1 Touch the [AMEND/DELETE] key.

```
┌─────────────────────────────┐
│                             │
│       AMEND/DELETE          │
│                             │
│            ᕕ                │
│                             │
└─────────────────────────────┘
```
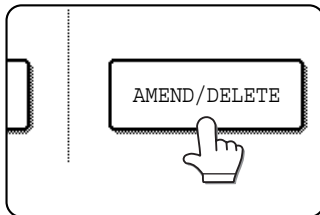
2 Touch the group key that you wish to edit or delete.
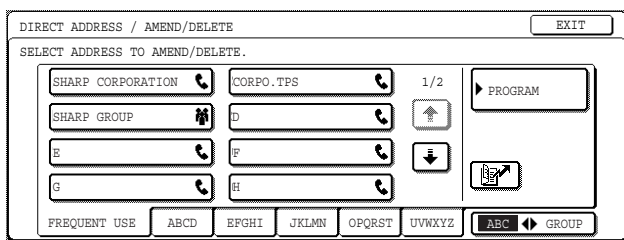
```
┌──────────────────────────────────────────────┐
│ DIRECT ADDRESS / AMEND/DELETE          EXIT   │
│ SELECT ADDRESS TO AMEND/DELETE.               │
│ ┌─────────────────┐ ┌──────────────┐ 1/2  ┌────────┐ │
│ │ SHARP CORPORATION│ │ CORPO.TPS   📞│     ▸│PROGRAM │ │
│ │ SHARP GROUP      │ │ D           📞│  ⬆  └────────┘ │
│ │ E               📞│ │ F           📞│  ⬇           │
│ │ G               📞│ │ H           📞│             │
│ FREQUENT USE  ABCD  EFGHI  JKLMN  OPQRST  UVWXYZ  ABC◀▶GROUP │
└──────────────────────────────────────────────┘
```

You can also use the [🗒] key (speed dial key) to open the settings screen of the desired one-touch key (the screen of step 3). (See "SENDING A FAX BY SPEED DIALING" on page 2-4.)

● To edit a group key, follow steps 3 and 4.
● To delete a group key, follow steps 5 and 6.
● When you have finished editing or deleting, touch the [EXIT] key.

3 Touch the key of the item you wish to change (to edit the item, follow the same steps as for one-touch keys on page 6-3)

```
┌──────────────────────────────────────────────┐
│ DIRECT ADDRESS / AMEND/DELETE   DELETE  EXIT  │
│ No.010                                        │
│ ┌──────────┐                                  │
│ │GROUP NAME│ SHARP GROUP                      │
│ └──────────┘                                  │
│ ┌──────────┐                                  │
│ │ INITIAL  │ S                                │
│ └──────────┘                                  │
│ ┌──────────┐         ┌─────────┐              │
│ │  INDEX   │ USER 2  │ ADDRESS │ 4 ADDRESS    │
│ └──────────┘         └─────────┘              │
│ ┌──────────┐                                  │
│ │ KEY NAME │ SHARP GROUP                      │
│ └──────────┘                                  │
└──────────────────────────────────────────────┘
```
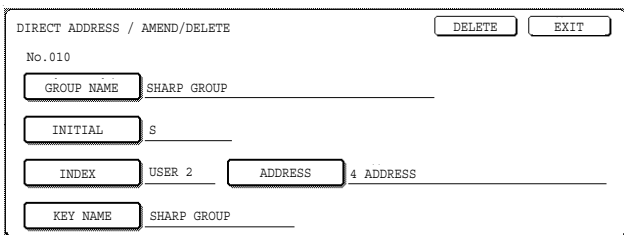
● To edit the destinations stored in the group key, touch the [ADDRESS] key. The following screen appears.

```
┌──────────────────────────────────────────────┐
│ DIRECT ADDRESS / GROUP                        │
│ SELECT ADDRESS.                        OK     │
│ ┌─────────────┐  ┌──────────────┐ 1/1         │
│ │ A CORP.    📞│  │ B CORP.     📞│      ┌──────────────┐│
│ │ C GROUP    📞│  │SHARP CORPORATION📞│ ⬆ │ DIRECT ENTRY ││
│ │ CORPO.TPS  📞│  │066620121/3456/ 📞│ ⬇ ├──────────────┤│
│ │             │  │              *4│   │ADDRESS REVIEW││
│ FREQUENT USE ABCD EFGHI JKLMN OPQRST UVWXYZ ABC◀▶GROUP │
└──────────────────────────────────────────────┘
```
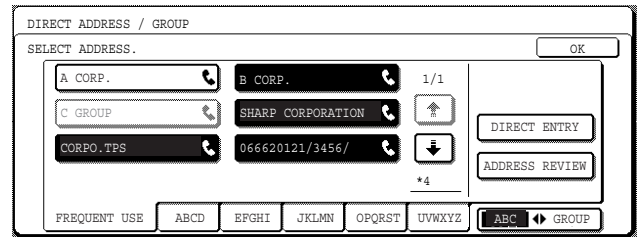
● The one-touch keys stored in the group are highlighted. To add another one-touch key to the group, touch the key to highlight it.
● To delete a one-touch key from the group, touch the key so that it is no longer highlighted.
● To show a list of the destinations stored in the group key, touch the [ADDRESS REVIEW] key. Full numbers entered with the numeric keys cannot be changed in this screen. To change a number, you must delete the existing number and then add a new number.

4 When you have finished editing the group key, touch the [EXIT] key in the screen of step 3.

If you wish to edit another group key, repeat steps 2 through 4.

[Deleting a group key]

5 Touch the [DELETE] key in the screen of step 3.

```
┌─────────────────────────────┐
│                             │
│  ┌────────┐  ┌────────┐     │
│  │ DELETE │  │  EXIT  │     │
│  └────────┘  └────────┘     │
│       ᕕ                     │
│                             │
└─────────────────────────────┘
```

6 Touch the [YES] key.

```
┌─────────────────────────────┐
│                             │
│ DELETE THE ADDRESS?         │
│ 📞SHARP GROUP               │
│        ┌────┐  ┌────┐       │
│        │ NO │  │YES │       │
│        └────┘  └────┘       │
│                  ᕕ          │
└─────────────────────────────┘
```
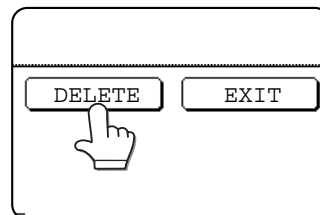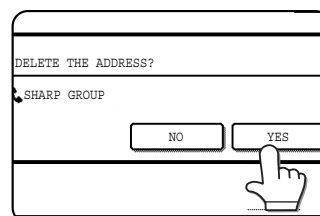
If you wish to delete another group key, repeat steps 2, 5, and 6.

NOTE

If you cannot edit or delete a group key

If you attempt to edit or delete a group key in the following situations, a warning message will appear and editing/deletion will not be possible.
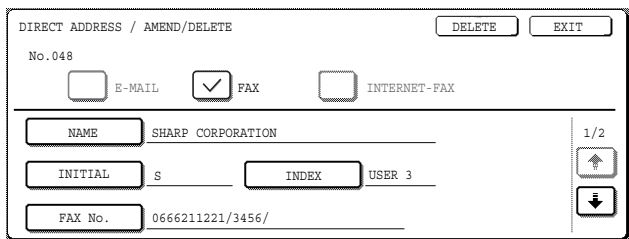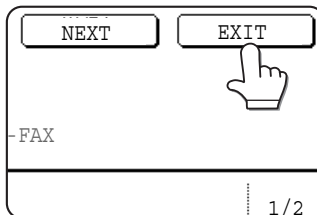
If the key is being used for a current transmission or currently stored transmission, cancel the transmission or wait until it is completed and then edit or delete the key. If the key is included in a program or in the end receiving machines for an F-code relay broadcast operation, delete the key from the program or operation and then edit or delete the key.

● The one-touch key you wish to change or delete is currently being used for transmission or is used in a currently stored transmission job (including a timer transmission). (See "CANCELING A FAX TRANSMISSION" on page 2-9.)
● The group key is included in the end receiving machines for an F-code relay broadcast operation. (See "EDITING AND DELETING A MEMORY BOX" on page 6-14.)
● The group key is included in a program. (See "EDITING AND DELETING PROGRAMS" on page 6-8.)

STORING A PROGRAM

You can store a destination fax number, speed dialing, polling, erase, dual page scan, 2in1, card shot, and resolution and exposure settings in a program. This enables you to call up the program and perform the transmission by means of a simplified operation. (See "USING A PROGRAM" on page 3-17.)

NOTE
A timer setting (page 3-6) cannot be included in a program.
When storing a program for an F-Code operation, one touch keys for destinations must include sub-addresses.

To store a program key, follow steps 1 through 3 on page 6-2, touch the [PROGRAM] key in step 4, and then follow these steps.

1 Touch the [PROGRAM NAME] key.

PROGRAM
No.1
PROGRAM NAME
TTINGS   ▪ADDRESS   :
          ▪RESOLUTION :
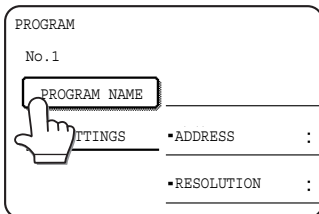
The "No." that automatically appears is the lowest number from 1 to 8 that has not yet been programmed. When the [PROGRAM NAME] key is touched, the letter-entry screen appears. Enter up to 18 characters for the name. Refer to chapter 7 of "Operation manual (for general information and copier operation)" for the procedure for entering letters.

2 Touch the [SETTINGS] key.

No.1
PROGRAM NAME   PROGRAM FOR SHARP
SETTINGS   ▪ADDRESS   :
            ▪RESOLUTION :
            ▪SPECIAL MODES :

3 Touch the keys for the settings you wish to store.

ENTER PROGRAM YOU REQUIRE.   CANCEL   OK
AUTO EXPOSURE   FAX MODE SWITCH   ▸ADDRESS BOOK
STANDARD RESOLUTION   ADDRESS REVIEW
                                               SPECIAL MODES

For the detailed procedures for each of the settings, refer to the explanations of those features on the following pages.
[RESOLUTION](page 1-10) [EXPOSURE](page 1-11)
[SPEED DIAL](page 2-4)   [ADDRESS BOOK] (page 3-3)
[SPECIAL MODES]
● ERASE (page 3-4) ● DUAL PAGE SCAN (page 3-5)
● 2in1 (page 3-7) ● CARD SHOT (page 3-8)
● POLLING (page 3-13)

NOTE
Up to 500 (maximum of 300 on the AR-M355U/AR-M455U) destinations can be stored in a program. However, you cannot directly enter fax numbers with the numeric keys. A destination must be programmed in an auto dial key (one-touch key or group key) before it can be stored in a program.

4 Touch the [OK] key.

5 Your settings are displayed. Make sure they are correct.

PROGRAM   NEXT   EXIT
No.1   REGISTRATION
PROGRAM NAME   SHARP PROGRAM
SETTINGS   ▪ADDRESS   :2 ADDRESSES
            ▪RESOLUTION   :FINE   ▪EXPOSURE :AUTO
            ▪SPECIAL MODES :DUAL PAGE SCAN
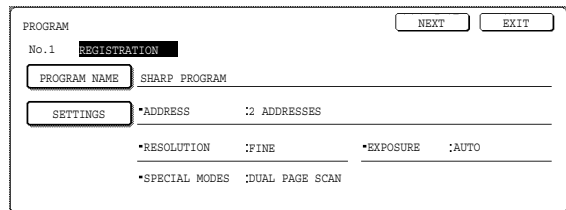
6 When you are finished, touch the [EXIT] key. If you wish to store another program, touch the [NEXT] key.

Touching the [EXIT] key returns you to the screen of step 4 on page 6-2.
Touching the [NEXT] key returns you to the screen of step 1.

EDITING AND DELETING PROGRAMS

To edit or delete a previously stored program, follow steps 1 to 3 on page 6-2, touch the [AMEND/DELETE] key in the screen of step 4, and then follow these steps.

1 Touch the [PROGRAM] key.

                          EXIT
☎ 1/2   ▸ PROGRAM
☎   ⬆
☎   ⬇
☎

2 Touch the program you wish to edit or delete.

DIRECT ADDRESS / AMEND/DELETE   EXIT
SELECT ADDRESS TO AMEND/DELETE.
PROGRAM
PROGRAM FOR SHARP   EMAIL NEWS GROUP ☎   ▸ADDRESS BOOK
ABYS FAX FORMAT A

● When you touch the program name, the edit/delete screen for the selected program appears.
● Touching the [ADDRESS BOOK] key returns you to the screen of step 1.

3 To edit the program, follow the same procedure as for storing the program. To delete the program, touch the [DELETE] key and then touch the [YES] key in the confirmation screen that appears.

STORING A GROUP INDEX

Auto dial keys (one-touch keys and group keys) are normally stored in the ABC index. To make auto dial keys more convenient to use, you can store a group of auto dial keys in a group index and assign a name to that index. When you switch to the group indexes, [USER 1], [USER 2], [USER 3], [USER 4], [USER 5], and [USER 6] appear. You can assign any name up to 6 characters long to each of the USER indexes.

The procedure for storing auto dial numbers in a group index is explained on page 6-3, and the procedure for switching between the ABC index and the group indexes is explained on page 1-5.

1 Press the [CUSTOM SETTINGS] key, and then touch the [ADDRESS CONTROL] key (refer to steps 1 and 2 on page 6-2).

2 Touch the [CUSTOM INDEX] key.

```
┌─────────────────────────────────┐
│                                 │
│  ┌───────────────────────────┐  │
│  │  DIRECT ADDRESS / PROGRAM │  │
│  └───────────────────────────┘  │
│  ┌───────────────────────────┐  │
│  │       CUSTOM INDEX        │  │
│  └───────────────────────────┘  │
│                                 │
└─────────────────────────────────┘
```
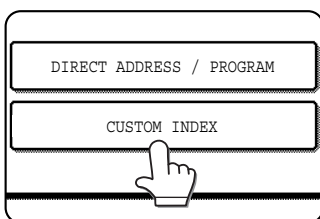
3 Touch an index key ([USER 1] to [USER 6]).

You can enter a name for the selected index.

```
┌──────────────────────────────────────────────────┐
│ CUSTOM SETTINGS                                    │
│ CUSTOM INDEX                              ┌─────┐   │
│                                           │ OK  │   │
│                                           └─────┘   │
│ SELECT THE KEY TO BE CUSTOM NAMED.                 │
│                                                    │
│ ┌──────┐ ┌──────┐ ┌──────┐ ┌──────┐ ┌──────┐ ┌──────┐│
│ │USER 1│ │USER 2│ │USER 3│ │USER 4│ │USER 5│ │USER 6││
│ └──────┘ └──────┘ └──────┘ └──────┘ └──────┘ └──────┘│
│                                                    │
└──────────────────────────────────────────────────┘
```
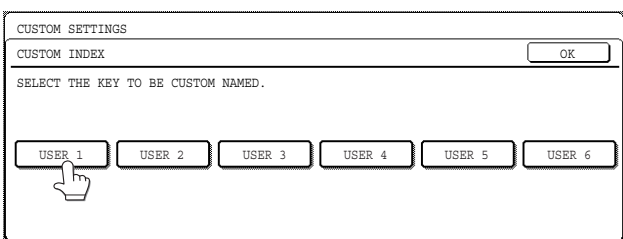
● When touched, the letter entry screen appears.

4 Enter a maximum of 6 characters for the index name.

Use the ⌫ key to clear the displayed name and then enter the desired name. For information on entering characters, see chapter 7 of the "Operation Manual (for general information and copier operation)".

When finished, touch the [OK] key. The new name appears in the screen of step 3.

5 If you wish to program another index name, repeat steps 3 and 4.
When finished, touch the [OK] key.

To change a user index name, re-enter the name as explained in step 3 and 4.

6

PROGRAMMING, EDITING, AND DELETING F-CODE MEMORY BOXES

The procedure for programming a memory box for F-code transmission is explained here. There are three types of F-code memory boxes: F-code polling memory (page 4-4), F-code confidential transmission (page 4-6), and F-code relay broadcast (page 4-8). Memory boxes are programmed, edited, and deleted as follows.

PROGRAMMING AN F-CODE MEMORY BOX

A box name, sub-address/passcode, and function must be programmed in a memory box.

NOTES
- When programming a new memory box, a sub-address that is being used for another box cannot be used. The passcode, however, can be the same as a passcode used in another box.
- A passcode can be omitted.
- Up to 100 F-code memory boxes can be programmed. If 100 F-code memory boxes have already been programmed, a warning message will appear and you will not be able to program a new box. First delete an unused F-code memory box (page 6-13) and then program the new box.

---

1 Press the [CUSTOM SETTINGS] key and then touch the [ADDRESS CONTROL] key (refer to steps 1 and 2 on page 6-2).

2 Touch the [F-CODE MEMORY BOX] key.
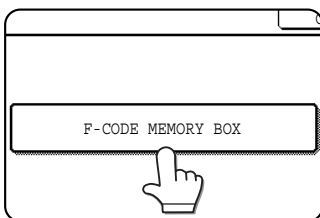
F-CODE MEMORY BOX

3 Touch one of the memory box keys ([POLLING MEMORY], [CONFIDENTIAL], or [RELAY BROADCAST]) on the store (upper) line.

CUSTOM SETTINGS
F-CODE MEMORY BOX   OK

STORE   POLLING MEMORY   CONFIDENTIAL   RELAY BROADCAST

AMEND/DELETE POLLING MEMORY CONFIDENTIAL   RELAY BROADCAST
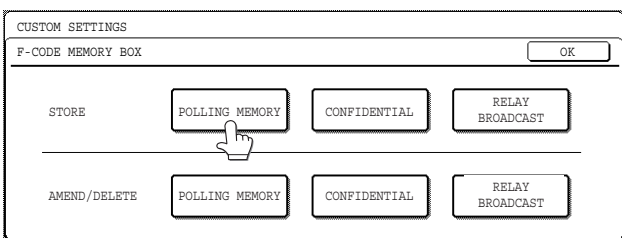
([POLLING MEMORY] is touched in the example here.)
- The F-code memory box programming screen appears.

4 Touch the [BOX NAME] key.

F-CODE MEMORY BOX / POLLING MEMORY
No.001
BOX NAME
SUB
POLLING TIMES
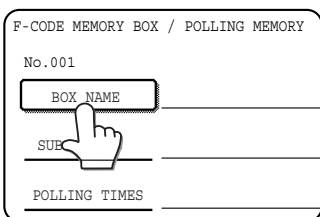
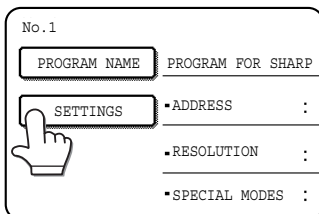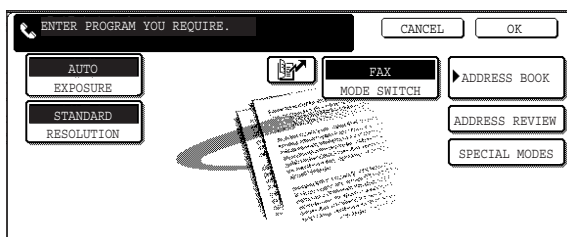The "No." that automatically appears is the lowest number from 001 to 100 that has not yet been programmed. When the [BOX NAME] key is touched, the letter-entry screen appears. Enter up to 18 characters for the name. For information on entering characters, see chapter 7 of the "Operation Manual (for general information and copier operation)".

5 Touch the [SUB ADDRESS] key.

F-CODE MEMORY BOX / POLLING MEMORY
No.001
BOX NAME   FAX INFORMATION
SUB ADDRESS
POLL... ...ES
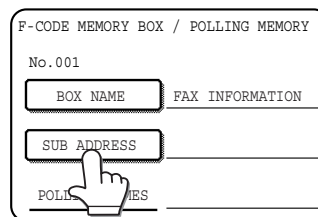
The sub-address/passcode entry screen appears.

6 Use the numeric keys (0 through 9) to enter a sub-address (max. 20 digits).

F-CODE MEMORY BOX / POLLING MEMORY   NEXT   EXIT
No.001
SUB ADDRESS / PASS CODE   CANCEL   OK
ENTER THE SUB ADDRESS / PASS CODE VIA THE 10-KEY PAD,THEN PRESS [OK].

📞: 214341434
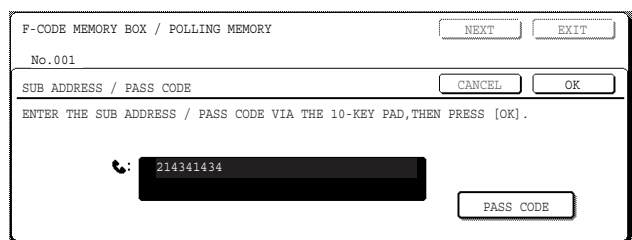
PASS CODE

- The characters " ✳ " and "#" cannot be used in a sub-address.
- If you enter an incorrect digit, press the [C] key and re-enter the correct digit.
- If you do not wish to enter a passcode, proceed to step 9.

7 To set a passcode, touch the [PASS CODE] key.

CANCEL   OK
KEY PAD,THEN PRESS [OK].
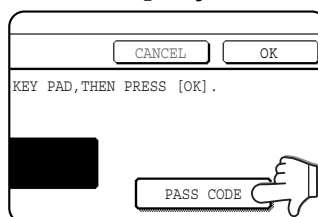
PASS CODE

A slash (/) appears after the sub-address.

If you enter an incorrect digit, press the [C] key and re-enter the correct digit

8 **Use the numeric keys to enter a passcode (max. 20 digits).**

```
F-CODE MEMORY BOX / POLLING MEMORY          [ NEXT ]  [ EXIT ]
  No.001
SUB ADDRESS / PASS CODE                      [ CANCEL ]  [ OK ]
ENTER THE SUB ADDRESS / PASS CODE VIA THE 10-KEY PAD,THEN PRESS [OK].

       📞:   214341434/351212


                                              [ PASS CODE ]
```
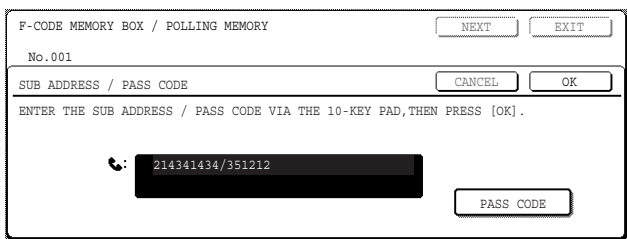
- In addition to numbers, the characters " ✳ " and "#" can be used in a passcode.
- If you make a mistake, press the [C] key to clear the mistake.

9 **Touch the [OK] key.**

```
          [ CANCEL ]  [ OK ]

KEY PAD,THEN PRESS [OK].



                [ PASS CODE ]
```
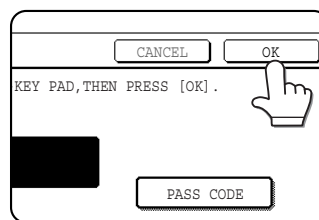
You will return to the memory box programming screen. The entered sub-address and passcode are displayed. "REGISTRATION IS COMPLETED." appears to the right of the box number. (Only for F-Code polling memory.)

Continue programming the settings that are particular to each type of memory box. Go to the appropriate page below:

- **F-code polling memory (Polling times: this page)**
- **F-code confidential transmission (Print PIN: following page)**
- **F-code relay broadcast transmission (Recipient: page 6-13)**

SETTING FOR F-CODE POLLING MEMORY BOXES (POLLING TIMES)

You can select whether to have document data that was scanned into an F-code polling memory box automatically cleared after one transmission, or to leave the document data in the box and allow an unlimited number of transmissions when polled. (The initial setting is "ONCE". Change the setting as needed.)

1 **Touch the [POLLING MEMORY] key in step 3 of "PROGRAMMING AN F-CODE MEMORY BOX" on the previous page and store a box name, sub-address, and passcode.**

2 **Touch the [POLLING TIMES] key.**

```
 [ BOX NAME ]      FAX INFORMATION

 [ SUB ADDRESS ]   214341434/351212

 [ POLLING TIMES ] ONCE
```
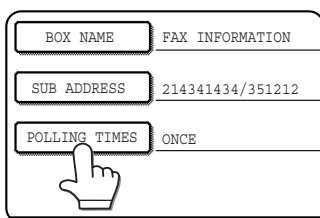
3 **Touch the key for the desired polling times.**

If you do not wish to erase the document after polling takes place, touch the [UNLIMITED] key so that it is highlighted.

```
F-CODE MEMORY BOX / POLLING MEMORY          [ NEXT ]  [ EXIT ]
  No.001
POLLING TIMES                                          [ OK ]


                  [ ONCE ]

                 [ UNLIMITED ]
```
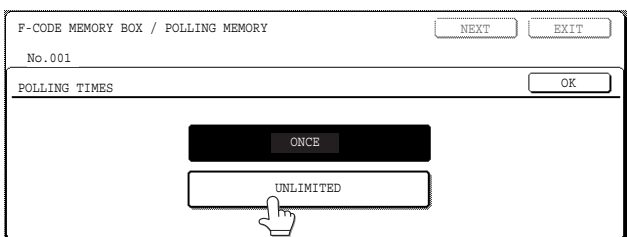
4 **Touch the [OK] key.**

You will return to the screen of step 2 and the selected polling times will appear.

5 **To exit, touch the [EXIT] key.**
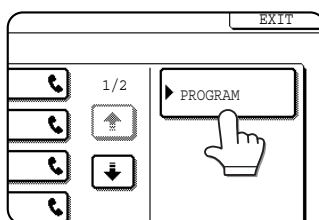**To program another memory box, touch the [NEXT] key.**

```
   [ NEXT ]    [ EXIT ]
```

Touching the [EXIT] key returns you to the screen of step 3 on page 6-10.
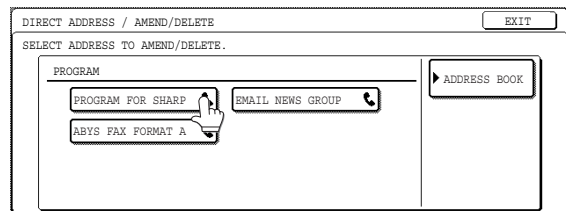
Touching the [NEXT] key returns you to the screen for programming a new memory box (the screen of step 4 on page 6-10).

6

SETTING FOR F-CODE CONFIDENTIAL TRANSMISSION MEMORY BOXES (PRINT PIN)

Program the print PIN (Personal Identification Number) that is used to print a document that has been received to an F-code confidential memory box. For information on using a print PIN, refer to "PRINTING A DOCUMENT RECEIVED TO AN F-CODE CONFIDENTIAL MEMORY BOX" on page 4-7.

NOTES
● Program a 4-digit number for the print PIN. The characters " ✳ " and "#" cannot be used.
● The print PIN can not be omitted.
● Take care not to forget the print PIN that you have programmed. If you forget the passcode, consult your Sharp dealer.

1 **Touch the [CONFIDENTIAL] key in step 3 of "PROGRAMMING AN F-CODE MEMORY BOX" on pages 6-10 to 6-11 and store a box name, sub-address, and passcode.**

2 **Touch the [PRINT PIN] key.**

```
┌─────────────────────────────────────────┐
│  ┌───────────┐                           │
│  │ BOX NAME  │  FAX INFORMATION          │
│  └───────────┘                           │
│  ┌───────────┐                           │
│  │SUB ADDRESS│  55112233/481221          │
│  └───────────┘                           │
│  ┌───────────┐                           │
│  │ PRINT PIN │                           │
│  └───────────┘                           │
│       ᕙ                                   │
└─────────────────────────────────────────┘
```

3 **Use the numeric keys to enter a 4-digit number.**

```
┌──────────────────────────────────────────────────┐
│ F-CODE MEMORY BOX / CONFIDENTIAL   ┌─────┐ ┌─────┐│
│                                    │NEXT │ │EXIT ││
│  No.003                            └─────┘ └─────┘│
│ ─────────────────────────────────────────────────│
│ PRINT PIN                         ┌──────┐ ┌────┐ │
│                                   │CANCEL│ │ OK │ │
│ ENTER THE PRINT PIN VIA THE 10-KEY PAD,THEN PRESS [OK]. │
│                                                   │
│                    ▇3456▇                          │
│                                                   │
└──────────────────────────────────────────────────┘
```
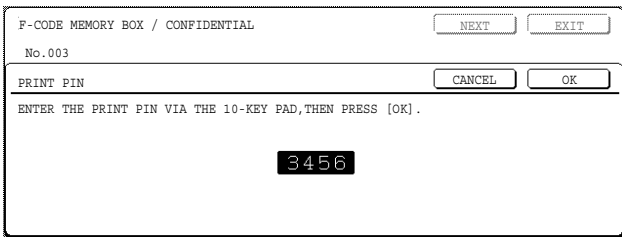
● If you make a mistake, press the [C] key. All digits will be cleared, so you will need to re-enter the number from the first digit.
● To cancel entry of the print PIN, touch the [CANCEL] key. You will return to the screen of step 2 without programming a print PIN.

4 **Touch the [OK] key.**
You will return to screen of step 2 and the entered print PIN will appear.

5 **To exit, touch the [EXIT] key.**
To program another memory box, touch the [NEXT] key.
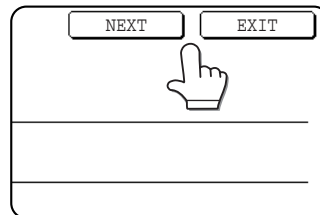
```
┌─────────────────────────────────┐
│  ┌─────────┐  ┌─────────┐        │
│  │  NEXT   │  │  EXIT   │        │
│  └─────────┘  └─────────┘        │
│        ᕙ                         │
│ ────────────────────            │
│                                  │
└─────────────────────────────────┘
```

Touching the [EXIT] key returns you to the screen of step 3 on page 6-10. Touching the [NEXT] key returns you to the screen for programming a new memory box (the screen of step 4 on page 6-10).

SETTING FOR F-CODE RELAY BROADCAST MEMORY BOXES (RECIPIENT)

Program the end receiving machines to which document data received in the F-code relay broadcast memory box will be transmitted when your machine is a relay machine.

Up to 30 end receiving machines can be programmed. If you attempt to program more than this number, a message will appear and programming will not be possible.

1 Touch the [RELAY BROADCAST] key in step 3 of "PROGRAMMING AN F-CODE MEMORY BOX" on pages 6-10 to 6-11 and store a box name, sub-address, and passcode.

2 Touch the [RECIPIENT] key.

BOX NAME	FAX INFORMATION
SUB ADDRESS	123456/987654
RECIPIENT	
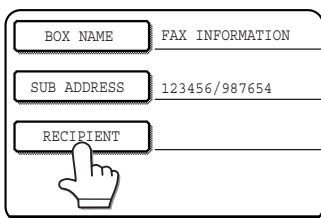
The address selection screen appears.

3 Touch the one-touch keys you wish to include as end receiving machines.
Touch indexes and the ⬆ ⬇ keys as needed.

```
F-CODE MEMORY BOX / RELAY BROADCAST
SELECT ADDRESS.                                    OK
A ☎        B ☎     1/1    DIRECT ENTRY
C GROUP ☎   CLIFF QUIROGA ☎          ADDRESS REVIEW
DANIEL ERNY ☎                  * 2
FREQUENT USE  ABCD  EFGHI  JKLMN  OPQRST  UVWXYZ   ABC ◀▶ GROUP
```
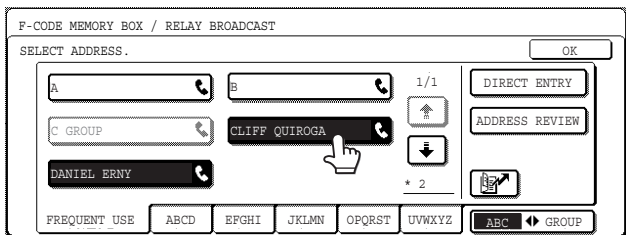
● The selected one-touch keys are highlighted and programmed as end receiving machines.
● If you touch an incorrect key, touch the key again to remove the highlighting and delete the destination.
● You can also use the [📇] key (speed dial key) to store a one-touch key. (See "SENDING A FAX BY SPEED DIALING" on page 2-4.)
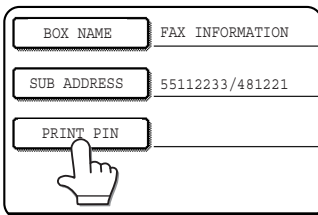● To enter a fax number that has not been stored in a one-touch key, to enter a full fax number with the numeric keys, touch the [DIRECT ENTRY] key and then the [FAX] key and enter the fax number.
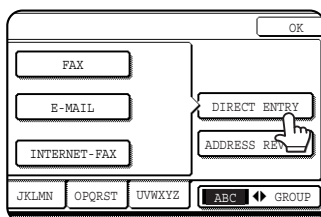
```
                                    OK
FAX
E-MAIL              DIRECT ENTRY
INTERNET-FAX        ADDRESS REV
JKLMN  OPQRST  UVWXYZ   ABC ◀▶ GROUP
```

● Enter the fax number and then a sub-address and transmission settings (if desired) as explained in steps 10 to 13 and 15 of "STORING ONE-TOUCH DIAL KEYS" on pages 6-3 to 6-4, and then touch the [OK] key twice to return to the screen of step 3.

4 To check the destinations that have been selected as end receiving machines, touch the [ADDRESS REVIEW] key.

```
              OK
☎  1/2
☎    ⬆
         DIRECT ENTRY
   ⬇
         ADDRESS REVIEW
   * 0
OPQRST  UVWXYZ   ABC ◀▶ GROUP
```
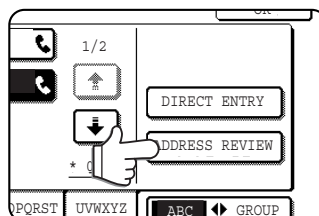
The destinations selected as end receiving machines are displayed.
You can delete a destination by touching it. When the confirmation message appears, touch the [YES] key to delete the destination.

5 Touch the [OK] key in the screen of step 3.

You will return to the screen of step 2 and the number of stored as end receiving machines will appear.

6 To exit, touch the [EXIT] key. To program another memory box, touch the [NEXT] key.

Touching the [EXIT] key returns you to the screen of step 3 on page 6-10.
Touching the [NEXT] key returns you to the screen for programming a new memory box (the screen of step 4 on page 6-10).

6

6-13

EDITING AND DELETING A MEMORY BOX

**1** Press the [CUSTOM SETTINGS] key and then touch the [ADDRESS CONTROL] key (refer to steps 1 and 2 on page 6-2).

2 Touch the [F-CODE MEMORY BOX] key. (refer to step 2 on page 6-10)

3 Touch one of the memory box keys ([POLLING MEMORY], [CONFIDENTIAL], or [RELAY BROADCAST]) on the amend/delete line (lower line) (see step 3 on page 6-10)

4 Touch the memory box key that you wish to edit or delete.

```
MEMORY BOX / AMEND/DELETE                    EXIT
SELECT MEMORY BOX TO AMEND/DELETE.

  POLLING MEMORY

    REPORT           FAX INFORMATION      1/1
```
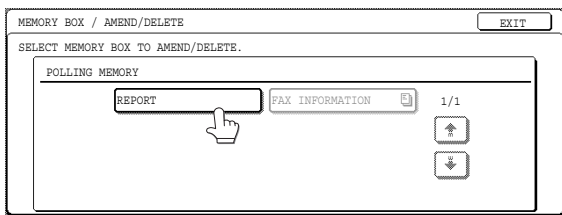
● The memory box edit/delete screen appears.
● (🗐) mark indicates that data has been stored.
● A memory box cannot be edited or deleted when data is stored in the box.

5 Touch the keys as needed to edit or delete the information.

```
F-CODE MEMORY BOX / POLLING MEMORY    DELETE    EXIT

  No.005

    BOX NAME      REPORT

    SUB ADDRESS   22233311/351212

    POLLING TIMES  ONCE
```
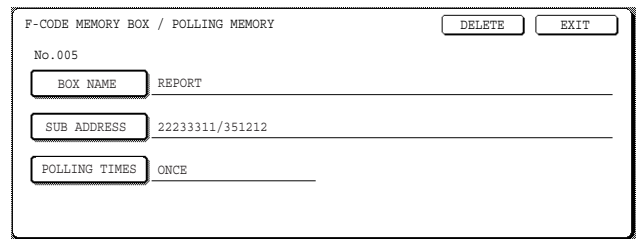
● Edit a memory box in the same way as you programmed it.
● To delete a memory box, touch the [DELETE] key at the upper right of the screen (a message will appear asking you to confirm the deletion).
● The print PIN must be entered to edit or delete a confidential memory box.
● A memory box cannot be edited or cleared while it is being used for transmission.

PRINTING PROGRAMMED INFORMATION

You can print out lists of the One-touch keys, Group keys, Programs, Memory boxes that have been stored in the machine.

1 Press the [CUSTOM SETTINGS] key.

```
DB STATUS    CUSTOM
             SETTINGS
```

2 Touch the [LIST PRINT] key.

```
        LIST PRINT

        FAX DATA
     RECEIVE/FORWARD
```
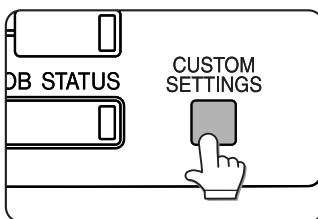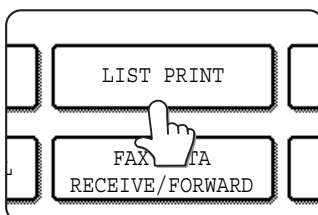
3 Touch the [SENDING ADDRESS LIST] key.

```
    ALL CUSTOM SETTING LIST

    SENDING ADDRESS LIST
```

4 Touch the key of the list you wish to print.

```
ADDRESS LIST

  INDIVIDUAL   GROUP LIST   PROGRAM LIST
  LIST
  MEMORY BOX
  LIST
```
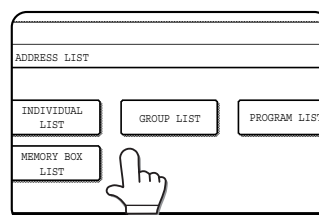
Printing begins.
To cancel printing after it has begun, touch the [CANCEL] key in the message screen.

NOTES
● The list is printed before other print jobs are printed.
● If you attempt to print a list when no data exists, a warning message will appear.

CHAPTER 7

TROUBLESHOOTING

This chapter contains information to help you make efficient use of the fax features of the machine, including solutions to common problems.

WHEN A TRANSACTION REPORT IS PRINTED

The machine has been set to automatically print a Transaction Report when a transmission is not successful or when the Broadcast transmission function is used. The Transaction Report informs you of the result of the operation. When the machine prints a Transaction Report, be sure to check the contents.

The initial settings (factory settings) for printing Transaction Reports are indicated by shading ▓▓▓ below. You can use the key operator program to change the settings (See "Transaction report print select setting" on page 8-6).

- ● Single sending: Print out all report / Print out error report only / No printed report
- ● Broadcasting: Print out all report / Print out error report only / No printed report
- ● Receiving: Print out all report / Print out error report only / No printed report
- ● Confidential reception: Print out notice page / Not print out notice page

Regardless of this setting, at the time of transmission you can use "Transaction report" in the special modes to change the condition for printing (or select no printing) for that transmission (page 3-12).

The Transaction Report shows the date of transmission, the time transmission began, the other party's name, the duration of the operation, the number of pages, and the result.

> **NOTES**
> ● The list count appears in the "#" column of the Transaction Report and a serial number appears in the FILE column. (These numbers are not related to the transaction.)
> ● If desired, you can have part of the document printed on the transaction report. This setting is enabled in the key operator programs. (See "Original print on transaction report" on page 8-6)

■ Information appearing in the TYPE/NOTE column

Information such as the type of transmission and type of error appears in the TYPE/NOTE column of the Transaction Report or Activity Report. The following notes may appear.

Note	Explanation
OK	The transaction was completed normally.
G3	Communication took place in G3 mode.
ECM	Communication took place in G3 ECM mode.
SG3	Communication took place in Super G3 mode.
FW.	The received data was forwarded.
NO RESPONSE	No response from the receiving party.
BUSY	Transmission was not possible because the other party was already using the line.
CANCEL	A transmission was canceled while in progress, or a stored transmission job was canceled.
MEMORY OVER	The memory became full during quick on-line transmission.
MEM. FULL	The memory became full during reception.
LENGTH OVER	The transmitted document was over 59" (1.5 m) long and therefore could not be received.
ORIGINAL ERROR	Manual transmission was not successful because a jam occurred.
PASS# NG	The connection was broken because the polling passcode was not correct.
NO RX POLL	The machine that was polled does not have a polling function.
RX POLL FAIL	The other machine refused the polling operation, or your machine broke the connection when polled because no data was in memory.
NO F-CODE POLL	The other machine refused an F-code polling operation, or your machine broke the connection when polled because no data was in its F-code memory polling box.
RX POLL# NG	Your machine broke the connection because the other machine specified an F-code polling sub-address that does not exist in your machine.
F PASS# NG	Your machine broke the connection because an incorrect passcode was sent for an F-code transmission.
BOX NO. NG	Your machine broke the connection because the specified sub-address for an F-code memory box does not exist.
F POLL PASS# NG	Your machine broke the connection because the other machine sent an incorrect passcode for F-code polling.
RX NO F-CODE POLL	F-code polling was attempted, however, the other machine did not have an F-code polling memory box.
NO F FUNC	F-code transmission was attempted, however, the other machine does not support F-code communication.
NO F-CODE	An F-code transmission was refused by the other machine because of an incorrect sub-address or other reason.
M. BOX: [xxxxxx] ＊＊＊＊＊＊	Data was received to a confidential or relay broadcast memory box, or data was sent from a memory polling box. The name of the memory box appears in [xxxxxx], and the type of F-code operation (relay request reception, polling memory transmission, or confidential reception) appears in ＊＊＊＊＊＊.
FAIL xx(xxxx)	The communication handshake signals or image signals were distorted due to line conditions or other reasons, and communication was not successful. First two digits of communication error number: Error code from 00 to 31 appears. Last four digits of communication error number: Codes for use by service technicians.
REJECTED	A fax was sent from a party that has been blocked by the anti junk fax function.

VIEWING THE COMMUNICATION ACTIVITY REPORT

Your machine keeps a record of the most recent 99 transactions (both transmissions and receptions) that were performed. The record includes the date of the transaction, the other party's name, the duration, and result. You can have the report automatically printed when the number of transactions exceeds 99, or at a specified time. This allows you to check the machine's activity at regular intervals.

The machine is initially set (factory setting) to not print the report. To have the report printed, change the setting with the key operator program (See "Activity report print select setting" on page 8-6).

NOTES
● After printing, the data is cleared from memory, so the report cannot be printed a second time.
● Refer to the table in "When a Transaction Report is printed" on the previous page for the notes that appear in the TYPE/NOTE column.

WHEN AN ALARM SOUNDS AND A WARNING MESSAGE IS DISPLAYED

When an error occurs during a transaction, an alarm will sound and a message will appear in the display. Take action as explained in the following table.

Message screen (Alarm)	Meaning of message	Action	Page
OPEN TRAY x AND ADD xxxxxxxx PAPER.	A received fax cannot be printed because there is no suitable paper.	Add the indicated paper.	Operation manual (for general information and copier operation), page 2-2.
CHANGE THE TONER CARTRIDGE.	The machine is out of toner and the received document cannot be printed.	Replace the toner cartridge.	Operation manual (for general information and copier operation), page 2-15.
PLEASE RETURN xx ORIGINALS TO THE DOCUMENT FEEDER, THEN PRESS [START].	An original misfeed occurred in the automatic document feeder during scanning.	Reload the indicated original.	"USING THE AUTOMATIC DOCUMENT FEEDER", page 1-7.
THE MEMORY BECOMES FULL. SEND SCANNED DATA? OR CANCEL THE JOB?	The memory became full while the original was being scanned.	Send only the pages that were already scanned, or cancel the entire transmission.	"Storing transmission jobs (memory transmission)", page 2-8.
POLLING IS NOT POSSIBLE WITH THE AVAILABLE MEMORY.	Polling is not possible because there is not enough space in memory.	Try polling again after currently stored jobs are completed.	"Polling", page 3-13.
MANUAL RECEIVE IS DISABLED. DUE TO OUT OF MEMORY.	Manual reception was not possible because there was not enough free space in memory.	Try manual reception again after currently stored jobs have been completed.	_
CLOSE THE xxxx COVER. CLOSE THE DOCUMENT FEEDER. CLOSE THE LOWER LEFT SIDE COVER.	The indicated cover is open.	Close the indicated cover.	_
CALL FOR SERVICE. CODE:xx-xx	The self-diagnosis function has activated and automatically stopped operation. An error code appears in xx-xx.	Turn off the power and then turn it back on. If the same message still appears, contact your dealer.	_

7

PROBLEMS AND SOLUTIONS

If you experience a problem with the fax function, first check the following table. If you cannot solve the problem using the following table, see chapter 6 of the Operation Manual (for general information and copier operation).

Problem	Check	Solution	Page
The machine does not operate.	Is the fax power switch turned on?	Turn on the fax power switch.	"Fax power switch", page 0-4.
Dialing is not possible.	Is the correct dial mode set for your line?	Check your line and set the correct dial mode.	"Dial mode setting (Setting your line type)", page 8-5.
	Is the telephone line properly connected?	Check the connections.	"Line connection", page 0-4.
	Is the machine power switch turned on?	Turn the machine power switch on.	Operation manual (for general information and copier operation), page 1-17.
	Is the machine in fax mode?	Press the [IMAGE SEND] key to set the machine to fax mode.	"BASIC PROCEDURE FOR SENDING FAXES", page 2-2.
The receiving machine does not receive your fax.	Does the receiving fax machine have paper?	Check with the operator of the receiving machine.	_
	Does the receiving machine support G3 transmission?		
	Are the sub-address and passcode correct?		
	Is the receiving machine ready to receive?		
	Was the original size detected correctly?	Check the transmittable sizes.	"CHECKING THE SIZE OF A LOADED ORIGINAL", page 1-8.
The transmitted image prints out blank at the receiving side.	Was the original placed so that the correct side is scanned?	Make sure the original is placed so that the correct side is scanned.	"LOADING A DOCUMENT", page 1-7.
	If the receiving machine is using thermal paper, was the thermal paper loaded with the wrong side out?	Check with the operator of the other machine.	_
The transmitted image is distorted.	Were line conditions poor due to thunder or another reason?	Try the transmission again.	_
	Were the resolution and exposure settings suitable?	Check the resolution and exposure settings.	"SELECTING RESOLUTION AND EXPOSURE SETTINGS", pages 1-10 and 1-11.
Transmission does not take place at the specified time.	Is the machine's clock set to the correct time?	Set the clock to the correct time.	Operation manual (for general information and copier operation), page 2-12.

7-4

Problem	Check	Solution	Page
Printing does not take place after reception.	Does a message appear in the display instructing you to add toner or paper? (Printing is not possible.)	Restore printing capability as instructed by the display message. Printing will begin.	"WHEN AN ALARM SOUNDS AND A WARNING MESSAGE IS DISPLAYED", page 7-3.
A received image prints out blank.	Was the wrong side of the original scanned in the transmitting machine?	Check with the operator of the transmitting machine.	–
The received image is faint.	Is the original faint?	Ask the other party to re-send the document using a suitable exposure setting.	–
The received image is distorted.	Were line conditions poor due to thunder or another reason?	Ask the other party to send the document again.	–
White or black lines appear in the transmitted image.	Is the document glass dirty?	Clean the document glass .	Operation manual (for general information and copier operation), page 6-2.
A dial tone is not heard through the speaker.	Is the volume set to "low"?	Set the speaker volume to "medium" or "high".	"Speaker volume settings", page 8-6.
A ringing sound is not made.	Has the ringer volume been turned off?	Set the ringer volume to "low", "medium", or "high".	"Speaker volume settings", page 8-6.

7

CHAPTER 8

KEY OPERATOR PROGRAMS

This chapter explains the key operator programs that are used by the administrator of the machine to customize certain functions and settings.

KEY OPERATOR PROGRAMS

This chapter explains key operator programs that are related to the fax function. For key operator programs that are related to general use of the machine, see the key operator programs manual.

> **NOTE**
> You may not be able to use all of the programs in the key operator program list. Programs that you can use will depend on what peripheral devices are installed on the machine.
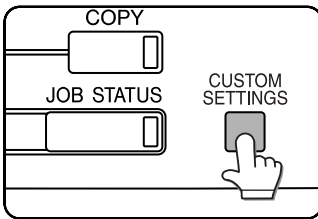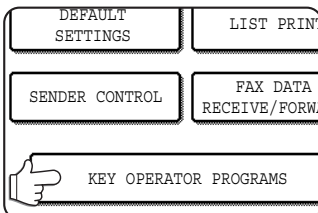
KEY OPERATOR PROGRAM LIST

USING THE KEY OPERATOR PROGRAMS

Follow these steps to configure the settings in the key operator programs.

1 **Press the [CUSTOM SETTINGS] key.**

COPY

JOB STATUS   CUSTOM
SETTINGS

2 **Touch the [KEY OPERATOR PROGRAMS] key.**

| DEFAULT SETTINGS | LIST PRINT |
| SENDER CONTROL | FAX DATA RECEIVE/FORWA |

KEY OPERATOR PROGRAMS

3 **Use the numeric keys to enter the five-digit key operator code number.**

KEY OPERATOR CODE

* * * — —

For the factory default setting for the key operator code number, see page 2 of the key operator's guide.

4 **Touch the [IMAGE SEND SETTINGS] key.**

CONTROL   CONTROL

| DEVICE CONTROL | COPY SETTINGS |
| IMAGE SEND SETTINGS | DOC. FILING SETTING |
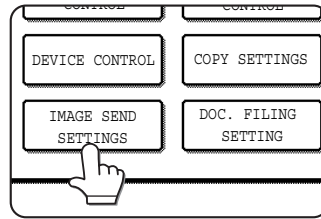
5 **Touch the [OPERATION SETTINGS] key or the [FAX SETTINGS] key to display the key operator programs.**

SEND SETTINGS

OPERATION SETTINGS

FAX SETTINGS

I-FAX SETTINGS
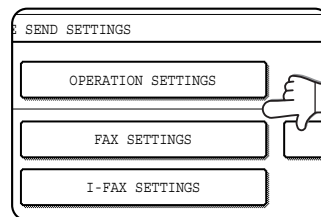
6 **Select the desired program and configure the setting.**

Page 8-2 shows the programs that can be selected. The settings for each of the programs are explained on the following pages.

7 **Press the [CA] key to exit the program.**
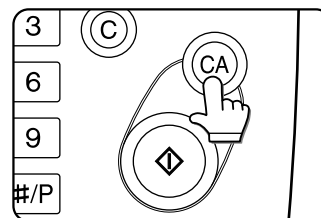
3 C
6   CA
9
#/P

■ **Supplementary explanation of key operation for key operator programs**

These keys and indicator are available on setting screens that require the entry of numerical values.

KEY OPERATOR PROGRAMS

OPERATION SETTINGS   OK

A — DEFAULT DISPLAY SETTINGS   THE NUMBER OF DIRECT ADDRESS/ SENDER KEYS DISPLAYED SETTING   6   1/2

B — MUST INPUT NEXT ADDRESS KEY AT BROADCAST SETTING   THE NUMBER OF FILE NAME/ SUBJECT KEYS DISPLAYED SETTING   6 — C

INITIAL RESOLUTION SETTING

15 (1～15)

D   E
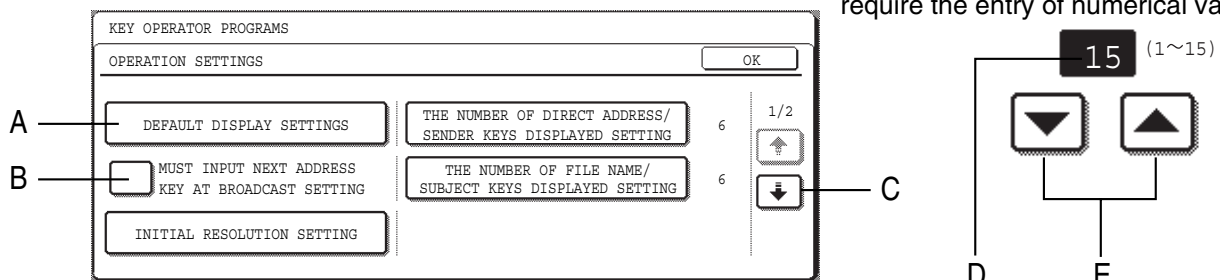
A   The name of the program category or particular item to be set will appear on the touch key. The displayed item is selected by touching the key.

B   Check mark boxes are touch keys that show the status of selections. A box with a check mark means the function is "on" (enabled) and an unchecked box means the function is "off" (disabled). The on/off status changes each time the box is touched.

C   If the settings continue on the following screen(s), touch the ⊞ and ⊞ keys to move back and forth through the screens. To return to the category selection screen, touch the [OK] key.

D   The currently set numerical value is displayed.

E   Numerical values can be set by touching the ▼ and ▲ keys.

8

KEY OPERATOR PROGRAMS

The key operator programs for the fax function of the machine are explained here.

For key operator programs that are related to the copy function and general use of the machine, see the key operator's guide. For programs related to the printer and network scanner functions, see the corresponding manuals.

NOTE

Settings established with the key operator programs can be verified by printing them out (page 8-11).

OPERATION SETTINGS

- ● Default display settings
- ● The number of direct address/sender keys displayed setting
- ● Must input next address key at broadcast setting
- ● The number of file name/subject keys displayed setting (when the network scanner option is installed)
- ● Initial resolution setting
- ● Scan complete sound setting
- ● Default exposure settings

Default display settings

You can select the initial display that appears when you press the [IMAGE SEND] key to change to fax mode or when you press the [CA] key in fax mode. Normally the initial display is set to the condition settings screen (page 1-4).

- ● [ADDRESS BOOK] (ABC)
- ● [ADDRESS BOOK] (Group)
- ● [FAX]
- ● [E-MAIL/FTP] (when the network scanner option is installed)
- ● [INTERNET-FAX] (when the network scanner option is installed)

When an address book (ABC or Group) is selected, the selected index of that address book screen (page 1-5) is set as the initial screen.

When [SWITCH AUTOMATICALLY TO COPY MODE SCREEN] is selected, the display will automatically switch to the copy mode screen if no action is taken in the fax / image send mode screen for 20 seconds.

The number of direct address/sender keys displayed setting

The number of one-touch keys displayed in each address book screen can be changed from 6 (the normal setting) to 8 or 12.

Touch 6, 8, or 12 to select the desired number.

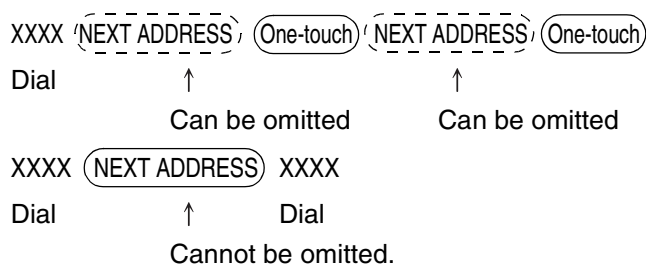(When the network scanner option is installed, the selections are 6 and 9.)

NOTE

For the key name that appears in each one-touch key, a maximum of 18 characters can appear when the number of one-touch keys displayed is set to 6 or 8. A maximum of 10 characters can appear when the number of one-touch keys displayed is set to 9 or 12.

Must input next address key at broadcast setting

You can select whether the [NEXT ADDRESS] key must be pressed before entering the next destination when performing a broadcast transmission (page 3-2). Normally the machine is set so that touching the [NEXT ADDRESS] key can be omitted except when the numeric keys are used to enter one full fax number after another full fax number.

Example: Normal setting (factory setting)

XXXX (NEXT ADDRESS) (One-touch) (NEXT ADDRESS) (One-touch)

Dial   ↑   ↑

            Can be omitted   Can be omitted

XXXX (NEXT ADDRESS) XXXX

Dial   ↑   Dial

         Cannot be omitted.

If the box is checked, it will no longer be possible to omit the [NEXT ADDRESS] key as shown in the above example. Even if the next destination to be entered is a one-touch key, the [NEXT ADDRESS] key must be touched before the one-touch key can be entered. If an operator attempts to enter the next destination without touching the [NEXT ADDRESS] key, an alarm will sound.

The number of file name/subject keys displayed setting (when the network scanner option is installed)

This program is used to select the number of file name / subject keys that are displayed in the screen. The number of keys can be set to 3 or 6. Touch 3 or 6 to select the desired number.

Initial resolution setting

This program is used to set the initial resolution in fax mode. Touch the [FAX] key and then change the setting from "STANDARD" to "FINE", "SUPER FINE", or "ULTRA FINE". "HALF TONE" can also be selected. "STANDARD" is normally selected for the initial resolution setting.

If you wish to select HALF TONE for the selected resolution setting, touch the [HALF TONE] key to highlight it.

Select [APPLY THE RESOLUTION SET WHEN STORED] to use the resolution setting of a stored fax image when resending the image.

Scan complete sound setting

You can select whether or not a beep sound is made after an original is scanned on the scanner unit.

Normally a beep sound is made.

You can select "High" or "Low" for the volume of the beep.

Default exposure settings

This program is used to set the default exposure level for scanning originals in fax / image send mode, and for scan save in document filing mode*. This program is initially set to "AUTO". If changed to "MANUAL", the exposure level can be adjusted to five levels. Level 1 is the lightest level and level 5 is the darkest level.

* Can only be used on the AR-M355N/AR-M455N. The AR-M355U/AR-M455U models do not have this function.

FAX SETTINGS

■ Fax default settings

The default fax settings can be changed as necessary to meet your faxing needs.

The "Fax default settings" are as follows:

- Fax own number and name set
- Dial mode setting (Setting your line type)
- Auto wake up print
- Pause time setting
- Speaker volume settings
- Original print on transaction report
- Remote reception number setting (only when extension phone is connected)
- Transaction report print select setting
- Activity report print select setting
- ECM (This setting is only effective if the other machine is a G3 machine that supports ECM)
- Distinctive ring detection
- Disable of fax number direct entry

Fax own number and name set

Use this setting to enter the fax number of the machine and the name of the user. The entered name and number are printed at the top of each fax page you send. The number is also used as a passcode when performing polling reception (see "USING THE POLLING FUNCTION" on page 3-14).

1 **Touch the [NAME] key and enter the name.**

The name entry screen appears.

Up to 20 characters can be entered for the name. For information on entering characters, see chapter 7 of the "Operation Manual (for general information and copier operation)".

2 **Touch the [FAX No.] key and enter the fax number.**

Enter up to 20 digits for the number using the numeric keys.

To enter a "+", press the " ✳ " key.
To enter a hyphen, touch the [PAUSE] key. To enter a space, touch the [SPACE] key.
If you make a mistake, press the [C] key and re-enter the correct digit.

NOTE

If a hyphen is entered, it will be changed to a space at the time of transmission.

3 **Touch the [OK] key.**

You will return to the OWN NUMBER AND NAME SET screen. The number you entered appears. Make sure it is correct.

Dial mode setting
(Setting your line type)

Select the appropriate setting for your line type. "Tone" is normally selected.

It is also possible to have the machine automatically select the line type. Make sure that the telephone line is connected to the machine, and then touch the [AUTO SELECT] key at the lower right. The machine will automatically select "Tone" for a tone dial line, or "Pulse" for a pulse dial line.

Auto wake up print

Use this setting to select how the machine responds if a fax is received when the power switch is turned off (the fax power switch is turned on).

Auto wake up print is normally turned on, which means that the machine automatically activates and prints the received fax. If you turn off this setting, received faxes will not be printed until the power switch is turned on.
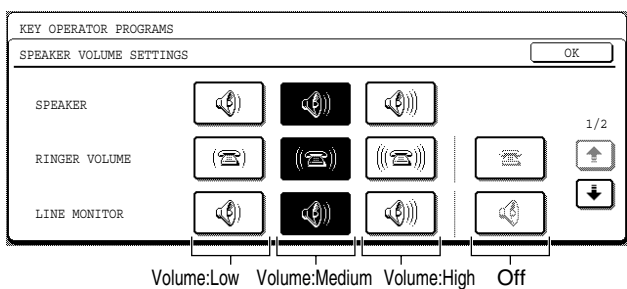
8

Pause time setting

This setting is used to select the duration of pauses that are inserted in destination fax numbers. Normally the setting is 2 seconds, which means that each time the [PAUSE] key is touched when dialing or storing a fax number, a pause of 2 seconds is inserted.

The pause time can be set to any number of seconds from 1 to 15.

Speaker volume settings

This program is used to adjust the volume of the five following sounds that are emitted from the speaker: 1.speaker, 2. ringer volume, 3. line monitor, 4. fax receive signal, 5. Fax communication error signal.

```
KEY OPERATOR PROGRAMS
SPEAKER VOLUME SETTINGS                      OK

                                                     1/2
SPEAKER          🔊    🔊    🔊

RINGER VOLUME    (☎)   (☎)   ((☎))    ☎    ⬆

LINE MONITOR     🔊    🔊    🔊        🔊    ⬇
```

Volume:Low   Volume:Medium   Volume:High   Off

To change the volume, touch the desired volume key.

Original print on transaction report

This program is used to have part of the first page of the fax printed on the transaction report . This program is used in conjunction with the transaction report print select setting (at right), and is not effective when printing of the transaction report is disabled.

This program is normally configured so that part of the fax is printed on the transaction report when a transmission is not successful.

Remote reception number setting

(only when extension phone is connected)

When a call is received (not made) on an extension phone connected to the machine, fax reception can be activated by entering a one-digit number and pressing "✳" twice on the phone's keypad. This number is called the remote reception number, and you can set it to any number from "0" to "9". The number is normally set to "5".

Transaction report print select setting

This program is used to select the condition for printing a transaction report. The condition is set separately for normal transmission, broadcast transmission, reception, and confidential reception.

SINGLE SENDING	BROADCASTING
PRINT OUT ALL REPORT	PRINT OUT ALL REPORT
PRINT OUT ERROR REPORT ONLY	PRINT OUT ERROR REPORT ONLY
NO PRINTED REPORT	NO PRINTED REPORT

Touch the ⬇ key to display the next two settings. Select the print conditions for receptions and confidential receptions

RECEIVING	CONFIDENTIAL RECEPTION
PRINT OUT ALL REPORT	PRINT OUT NOTICE PAGE
PRINT OUT ERROR REPORT ONLY	NOT PRINT OUT NOTICE PAGE
NO PRINTED REPORT	

The normal settings are indicated by shading ☐ above.

Activity report print select setting

This program is used to have the activity report stored in the machine's memory printed out at regular intervals.

You can choose to have the report automatically printed each time the number of stored transactions exceeds 99, or have the report printed at a specified time every day (only once per day). The report is normally set to not print out. Select "AUTO PRINT AT MEMORY FULL" to have the report automatically printed when the number of stored transactions (the combined total of transmissions and receptions) exceeds 99. To have the report automatically printed at a specified time, check the "PRINT DAILY AT DESIGNATED TIME" box and then select the time with the "HOUR" and "MINUTE" keys that appear.

```
KEY OPERATOR PROGRAMS
ACTIVITY REPORT PRINT SELECT SETTING          OK

☑  AUTO PRINT AT MEMORY FULL
                                      HOUR    MINUTE
☑  PRINT DAILY AT DESIGNATED TIME     13      01   👉

                                      ▼  ▲
```
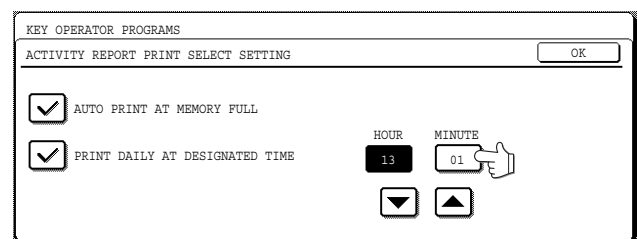
Touch the "HOUR" and "MINUTE" keys and then set the hour by touching the ▼ and ▲ keys. Set the minute in the same way. When finished, touch the [OK] key.

NOTES

● If you only select the "PRINT DAILY AT DESIGNATED TIME" setting and the number of recorded transactions exceeds 99 before the specified time, each new transaction will delete the oldest transaction (the oldest transaction will not be printed).

● The activity report can also be printed out on demand (see "PRINTING OUT SETTINGS" on page 8-11).

ECM

(This setting is only effective if the other machine is a G3 machine that supports ECM)

Line conditions can sometimes distort a transmitted fax image. When ECM (Error Correction Mode) is turned on, pages that are distorted are automatically re-transmitted. This setting is initially turned on. If turned off, distorted images will be transmitted without being corrected.

NOTE

If the other machine supports Super G3, ECM will function regardless of the setting.

Distinctive ring detection

If multiple telephone numbers have been assigned to your telephone line, the number called can be identified by its ringing pattern. By using one number for voice calls and another number for faxes, you can tell which type of call you are receiving by the ringing pattern. You can set your machine to automatically receive faxes when your fax number is called by setting the pattern that corresponds to your fax number. Six selections are available. Normally OFF is selected.

Disable of fax number direct entry

When the fax function is enabled, this program is used to prohibit dialing of a destination fax number by direct entry with the numeric keys. To prohibit dialing by direct entry with the numeric keys, touch the checkbox to select it. When this is done, faxes can only be sent to destinations that have been stored, and thus this program can be used to restrict fax destinations and prevent accidental transmission to an incorrect number. The following operations are also prohibited:
● Storing one-touch dial numbers
● Direct entry of fax numbers when storing a group
● Direct entry of fax numbers of relay destinations in a relay broadcast memory box

■ Fax send settings

The fax transmission settings allow you to adjust certain parameters for sending faxes to better suit your needs.
The fax send settings are as follows:
● Auto reduction sending setting
● Rotation sending setting
● Printing page number at receiver
● Call timer at memory sending
● Date/own number print position setting
● Quick on line sending
● Recall in case of line busy
● Recall in case of communication error

Auto reduction sending setting

This setting lets you select whether to have a transmitted document reduced to match the size of the other machine's printing paper. Auto reduction is normally turned on. If the setting is turned off, documents are sent in their original size. Because the size is not adjusted to match the size of the printing paper, part of the received document may be cut off.

Rotation sending setting

When transmitting a document, this setting allows you to rotate a vertically oriented 8-1/2"x11" (A4) document to a horizontal orientation (8-1/2"x11"R (A4R)), or rotate a 5-1/2"x8-1/2R" (A5R) document to 5-1/2"x8-1/2" (A5). The setting is normally turned on, and documents are rotated counterclockwise. (8-1/2"x11"R (A4R) documents are not rotated.)

Rotation settings can be separately established for different document sizes. To turn off a rotation setting, touch the checkbox of the appropriate setting to remove the checkmark.

Printing page number at receiver

This setting lets you select whether page numbers are printed at the top of fax pages by the receiving machine. The normal setting is to have page numbers printed.

8

Call timer at memory sending

When sending a fax by automatic transmission (See "Storing transmission jobs (memory transmission)" on page 2-8.), this setting lets you select the amount of time that the machine waits before breaking the connection when the other machine does not respond to your machine's calling tone. If the other machine does not respond within this set time, your machine will automatically break the connection. Time selections are 30 seconds, 45 seconds, and 60 seconds. This setting is normally set to 45 seconds.

Date/own number print position setting

This setting lets you select the position (inside or outside the original image) of the sender's name and number that are printed at the top of each fax page you send. Normally OUTSIDE THE ORIGINAL IMAGE is selected. To have your name and number printed inside the original image, select INSIDE THE ORIGINAL IMAGE. For more detailed information on the position of each setting, refer to "Position of sender's information" on page 3-11.

Quick on line sending

When this setting is turned on, the machine will call the other machine and start transmitting the document as soon as the first page is scanned. Transmission therefore takes place at the same time as any further pages are being scanned. Normally this setting is turned on.

If you turn the setting off, transmission will not begin until all pages of the document have been scanned. Note that this setting does not apply to manual transmission. (See "Storing transmission jobs (memory transmission)" on page 2-8.)

Recall in case of line busy

This program is used to set the number of recall attempts and the interval between recall attempts when a transmission is not successful due to the line being busy or other reason.

Normally the machine is set to make 2 recall attempts at intervals of 3 minutes.

The number of recall attempts can be set to any number from 1 to 14, and the interval between attempts can be set to any number of minutes from 1 to 15.

If you do not wish recalling to take place, select [TURN OFF RECALL].

NOTE
Even if this setting is turned on, your machine will not re-attempt the call when a document is sent by manual transmission.

Recall in case of communication error

When sending a document, this setting is used to select whether your machine will re-attempt the call if the transmission fails due to a line error.

Normally the machine is set to make 1 recall attempts at intervals of 1 minute.

The number of recall attempts can be set to only 1 time, and the interval between attempts can be set to any number of minutes from 1 to 15. If you do not wish recalling to take place, select [TURN OFF RECALL].

NOTE
Even if this setting is turned on, your machine will not re-attempt the call when a document is sent by manual transmission.

■ Fax receive settings

The fax reception settings allow you to adjust certain parameters for receiving faxes to better suit your needs. Settings that can be adjusted depend on the peripheral devices installed.

The "Fax receive settings" are as follows:
- Auto receive reduce setting
- Number of calls in auto reception
- Duplex reception setting (only when the duplex module option is installed)
- Print style setting
- Set the telephone number for data forwarding
- Fax output tray setting
- Anti junk fax setting

Auto receive reduce setting

When you receive a fax that includes the sender's name and number, the received image is slightly larger than the standard size*. This setting lets you select whether or not the received image is automatically reduced before printing to fit the standard size. Normally automatic reduction is turned on.

NOTE

If auto receive reduce is disabled, an image larger than the standard size will be cut off. However, the image is clearer because it is printed at the same size as the original.

* Standard sizes are sizes such as 8-1/2"x11" and 8-1/2"x5-1/2" (A4 and B5).

Number of calls in auto reception

This setting is used to select the number of rings on which the machine automatically receives a call and begins fax reception when the reception mode is set to auto. (See "RECEIVING A FAX" on page 2-10.) You can select a number of rings from 0 to 15. Normally "2" is selected.

NOTE

If you select "0" for the number of rings, the machine will immediately answer and begin fax reception without ringing in auto reception mode.

However, do not select "0" when an extension phone is connected to the machine.

When "0" is selected, the extension phone cannot be used to make a call.

Duplex reception setting

(only when the duplex module option is installed)

You can use this setting to select whether received documents are printed on both sides of the paper. Normally this setting is turned off. If turned on, received documents will be printed on both sides of the paper whenever the received document consists of two or more pages of the same paper size.

Print style setting

This setting determines the selection condition for paper when printing received documents. Select one of the three conditions below. AUTO SIZE SELECT is normally selected.
- PRINT ACTUAL SIZE CUT OFF DISABLED
  The received fax image is printed at its actual size (without dividing it onto multiple sheets of paper). If the same size of paper or larger paper is not loaded, the fax will be received in memory and will not be printed until a suitable size of paper is loaded.
- PRINT ACTUAL SIZE CUT OFF ENABLED
  Each received image is printed at actual size. If necessary, the image is split onto multiple sheets of paper.
- AUTO SIZE SELECT
  Each received image is printed at actual size when possible. When not possible, the image is automatically reduced before printing.

Set the telephone number for data forwarding

When a problem prevents the machine from printing a received fax, the transfer function (page 3-18) can be used to forward the received fax to another fax machine. Use this setting to program the fax number of the destination fax machine. Only one fax number can be programmed (maximum of 64 digits).

If you wish to specify an F-code confidential memory box in the destination machine, touch the [SUB ADDRESS] key after entering the fax number to enter a slash "/", and then enter the sub-address. Enter a passcode as well if needed. (See steps 9 to 12 of "STORING ONE-TOUCH DIAL KEYS" on page 6-3 to 6-4.)

Fax output tray setting

This setting is used to select the output tray for received faxes. The trays that can be selected will vary depending on what peripheral devices have been installed.

8

Anti junk fax setting

This program is used to enter fax numbers from which you wish to block fax reception. Up to 50 (maximum of 30 on the AR-M351U/AR-M451U/ AR-M355U/AR-M455U) numbers can be entered. This program is normally disabled.

To block reception from the entered fax numbers, touch the [VALID] key.

Entering anti junk fax numbers

1 **Touch the [ENTER] key.**

The passcode entry screen appears.

```
KEY OPERATOR PROGRAMS
ANTI JUNK FAX SETTING

                ENTER

                DELETE
```
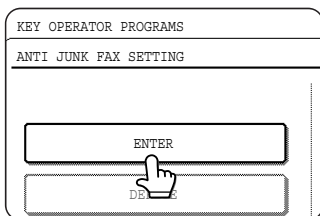
2 **Enter the fax number with the numeric keys.**

Up to 20 digits can be entered.
When you have finished entering the number, touch the [NEXT] key to store the number. A new number entry screen will appear. Enter the next number with the numeric keys.

3 **Touch the [OK] key.**

Deleting an anti junk fax number

1 **Touch the [DELETE] key.**
The deletion screen will appear.

2 **Touch the number key that you wish to delete.**

A message will appear. Touch the [YES] key to delete the number.
To cancel the deletion, touch the [NO] key.

■ Fax polling security

These settings are for using the Public Box for polling memory. Note that they do not apply to F-code polling memory. (see "USING THE POLLING FUNCTION" on page 3-14)
The "Fax polling security" are as follows:
● Polling security setting
● Passcode number setting

Polling security setting

When performing polling memory (See "polling security" on page 3-16), this setting is used to select whether any machine will be allowed to poll your machine, or only machines that have been programmed in your machine. Polling security setting is normally turned on (a checkmark appears in the box).

To allow any machine to poll your machine, touch the box to remove the checkmark.

NOTE

If polling security setting is enabled, enter the numbers of the fax machines to be allowed to poll your machine in "Passcode number setting" below.

Passcode number setting

When the polling security setting is turned on, use this setting to program (or delete) the fax numbers of the machines that are allowed to poll your machine. Programmed fax numbers are called passcodes. Up to 10 fax numbers can be programmed.

Programming passcode numbers

1 **Touch the [ENTER] key.**
The passcode entry screen appears.

```
KEY OPERATOR PROGRAMS
PASSCODE NUMBER SETTING                    OK

         ENTER              DELETE
```
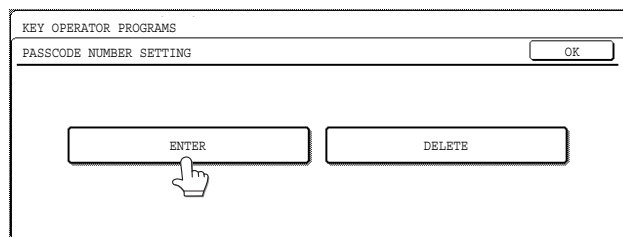
2 **Touch a blank key (a key in which no number appears).**

```
KEY OPERATOR PROGRAMS
PASSCODE NUMBER SETTING
ENTER                      CANCEL    OK

                                              1/2
                      0743535521
                                               ↑
         0666211                              ↓
```
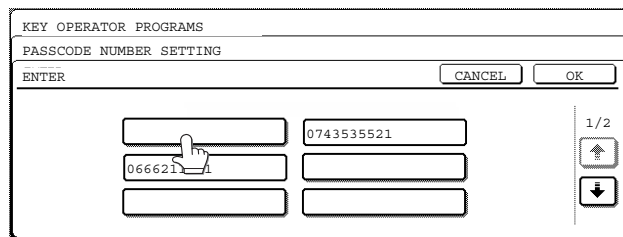
Keys with numbers cannot be touched.

If numbers have been stored in all of the keys, a message will appear and no further numbers can be stored. First delete a number that is no longer needed and then store the new number.

3 **Press the numeric keys to store the fax number.**

Up to 20 digits can be entered.
To enter a "+", press the " ✳ " key.
To enter a hyphen, touch the [PAUSE] key. To enter a space, touch the [SPACE] key.
If you make a mistake, press the [C] key and re-enter the correct digit.

4 **Touch the [OK] key.**

You will return to the screen of step 2 and the stored fax number will appear. To store another number, repeat steps 2 through 4.

Deleting a passcode

1 **Touch the [DELETE] key.**

The passcode delete screen appears.

2 **Touch the key of the number you wish to delete.**

Touch the [YES] key in the message that appears to delete the number. If you touch the [NO] key, you will return to the passcode delete screen without deleting the number.

PRINTING OUT SETTINGS

Settings established with the key operator programs can be verified by printing them out.

1 **Press the [CUSTOM SETTINGS] key.**
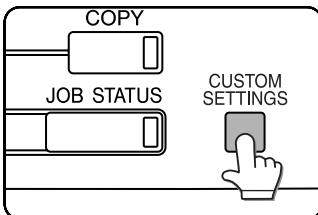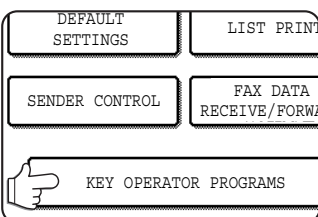
COPY
JOB STATUS   CUSTOM SETTINGS

2 **Touch the [KEY OPERATOR PROGRAMS] key.**

DEFAULT SETTINGS   LIST PRINT
SENDER CONTROL   FAX DATA RECEIVE/FORWA
KEY OPERATOR PROGRAMS

3 **Use the numeric keys to enter the five-digit key operator code number.**

KEY OPERATOR CODE
✳ ✳ ✳ ─ ─

For the factory default setting for the key operator code number, see page 2 of the key operator's guide.

4 **Touch the [LIST PRINT] key.**
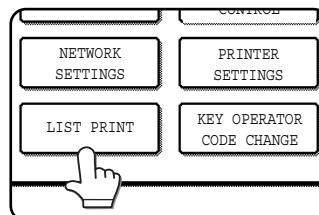
CONTROL
NETWORK SETTINGS   PRINTER SETTINGS
LIST PRINT   KEY OPERATOR CODE CHANGE

5 **Touch the [KEY OPERATOR PROGRAMS LIST] key.**

KEY OPERATOR PROGRAMS LIST
SENDING ACTIVITY REPORT (FAX)
ANTI JUNK FAX NUMBER LIST

6 **Touch the [IMAGE SEND] key.**

IMAGE SEND   DOCUMEN
ALL KEY OPERATOR PROGRA
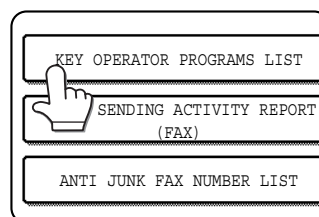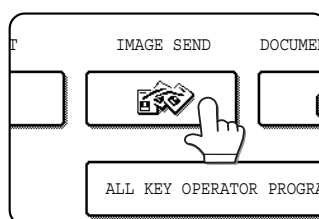
"KEY OPERATOR PROGRAMS LIST PROCESSING PRINT DATA." appears in the message screen and printing begins.
To cancel printing, touch the [CANCEL] key.

NOTES

● The list is printed before other jobs waiting to be printed.
● In the screen of step 5, you can touch the [IMAGE SENDING ACTIVITY REPORT (FAX)] key to print an activity report (transmissions and receptions). Print this list when you wish to check the activity record. (see "Activity report print select setting" on page 8-6)

8

CHAPTER 9

APPENDIX

This chapter contains reference information regarding the fax features of the machine.

SPECIFICATIONS

For information on power requirements, power consumption, dimensions, weight, and other specifications that are common to all features of the machine, refer to page 8-2 of "Operation manual (for general information and copier operation)".

Applicable telephone line	Public switched telephone network
Compression method	MH, MR, MMR, JBIG
Transmission modes	Super G3, G3 (the machine can only send faxes to and receive faxes from machines that support G3 or Super G3)
Scanning method	CCD flatbed scanning
Scanning resolution (Supports ITU-T standards)	8 x 3.85 lines/mm (Standard) 8 x 7.7 lines/mm (Fine, Fine-Halftone) 8 x 15.4 lines/mm (Super Fine, Super Fine - Halftone) 16 x 15.4 lines/mm (Ultra Fine, Ultra Fine - Halftone)
Printing method	Electrophotographic system (laser)
Transmission speed	33.6 kbps 2.4 kbps Automatic fallback
Transmission time *1	2 seconds (Super G3 mode / 33.6 kbps, JBIG), 6 seconds (G3 ECM mode / 14.4 kbps, MMR)
Paper sizes	11"x17" to 5-1/2"x8-1/2", A3, B4, A4, B5, A5
Effective print width	11.5" max. (11"x17" printing) or 293 mm max. (A3 printing)
Input document size	11"x17" to 5-1/2"x8-1/2" or A3 to A5 (5-1/2"x8-1/2" or A5: Vertically-oriented feeding); Maximum length: 31-1/2" or 800 mm (using Automatic document feeder) Refer to "Image rotation" page 2-8 for transmission of 5-1/2"x8-1/2" (A5) size documents.
Effective scanning width	11.7" (297 mm) maximum
Halftone transmission	Yes (256 levels)
Contrast adjustment	Automatic (5 levels by manual adjustment)
Extension telephone connection	Possible (1 telephone)
Auto dialing	Combined total of 999 (500 on the AR-M355U/AR-M455U) one-touch and group keys, redialing (automatic)
Timer transmission	Yes
Program function	Yes (8 programs)
F-code support	Yes (can transmit and receive SUB/SEP (sub-address) and SID/PWD (passcode) signals)
Image memory	2 MB *2
Error Correction Mode (ECM)	Yes

*1   Transmission speed is for an 8-1/2"x11" or A4 document (SHARP standard) with approximately 700 characters at standard resolution (8x3.85 lines/mm) sent in high speed mode (33.6 kbps (JBIG) or 14.4 kbps (MMR)). This is only the time required to transmit the image information; the time required to send protocol signals is not included. Actual transmission times will vary depending on the contents of the document, the receiving machine type, and telephone line conditions.

*2   Image memory can be expanded by installing the optional fax expansion memory (AR-MM9).

Some discrepancies may exist in the illustrations and content due to improvements to the machine.

INDEX

9

■ **T**

■ **U**

■ **V**

■ **W**

9