

Duplo

from print to documents

INSTRUCTION MANUAL

DUPRINTER

DP - A120

Be sure to read this manual prior to use.
Please leave this manual at the site of use for easy reference.

Introduction

Thank you for your purchase of the DUPRINTER DP-A120.

To ensure safe and efficient prolonged use of this machine, read and thoroughly understand this manual before using this machine.

After using this manual, be sure to keep it in a handy place to reference.

- Macintosh and Mac OS are trademarks of Apple Computer, Inc., registered in the U.S. and other countries.
- Microsoft, Windows NT, Windows 2000, Windows XP and Windows Vista are trademarks of Microsoft Corporation, registered in the U.S. and other countries.

Precautions for printing and duplicating

There are restrictions on what you may print on the printer.

Please be aware that there are some printed materials that are illegal even to possess.

1. Printed matters banned by law

- Paper money, currency, government bonds and national and local bonds cannot be duplicated, even if they are stamped with the "sample" seal.
- Paper money, currency and bonds, etc. that are valid in foreign country cannot be duplicated.
- Unused postage stamps and postcards cannot be duplicated without governmental consent.
- Government-issued papers pertaining to stamps, liquor and sales tax laws cannot be duplicated.

2. Printed matters that require caution

- Printed-issued securities (stocks, bills and checks, etc.), passes and tickets require caution in duplicating unless a business is duplicating them for required number for their own business needs.
- Government-issued passports, public- and private-issued driver's licenses, permits, IDs, passes, food stamps, etc. require caution in duplicating.

3. Copyrighted materials

- Books, music, artwork, prints, maps, diagrams, movies, photography, etc. are banned from duplicating outside the limits of private home use and their related non-sale usage.



As an ENERGY STAR® Partner, we have determined that these products meet the ENERGY STAR Guidelines for energy efficiency.

Complies with the provisions defined by the regulations listed below.

EC Low Voltage Directive (2006/95/EC)

EC Electromagnetic Compatibility Directive (89/336/EEC)

PLEASE NOTE

In the interest of upgrading our products, specifications and other data given in this manual are subject to change without notice. If the manual contains anything that you do not understand, contact the dealer for clarification.



Disposal of Old Electrical & Electronic Equipment

This symbol (the symbol of the crossed out wheeled bin) indicates that in European countries this product should not be disposed of as household waste.

Please recycle where facilities exist by checking with your local authority or supplier for recycling advice.

By ensuring this product is disposed of correctly through proper treatment, recovery and recycling, you will help prevent potential negative effects on the environment and human health.

En



Entsorgung von alten elektrischen und elektronischen Ausrüstungsteilen

Dieses Symbol (das Symbol mit dem durchgekreuzten fahrbaren Müllbehälter) zeigt an, dass dieses Produkt in europäischen Ländern nicht als Haushaltsmüll entsorgt werden darf. Bitte informieren Sie sich bei Ihren örtlichen Behörden oder bei Ihrem Händler hinsichtlich einer Empfehlung für die Entsorgung und führen Sie die betreffenden Teile dort, wo solche Einrichtungen vorhanden sind, einem Recycling-Prozess zu.

Indem sie sicherstellen, dass das betreffende Produkt durch richtige Behandlung, Rückführung und Recycling entsorgt wird, tragen Sie dazu bei, möglichen negativen Auswirkungen auf die Umwelt und die menschliche Gesundheit vorzubeugen.

Ge



Elimination du matériel électronique et électrique usagé

Ce symbole (une poubelle marquée d'une croix) indique que dans les pays européens, ce produit ne doit pas être éliminé comme des ordures ménagères.

Recyclez-le dans les sites adaptés qui vous seront indiqués par les autorités locales ou renseignez-vous auprès de votre fournisseur.

En veillant à ce que ce produit soit éliminé correctement avec un traitement, une collecte et un recyclage adaptés, vous contribuez à éviter son action nocive potentielle sur l'environnement et la santé humaine.

Fr



Smaltimento di attrezzature elettriche ed elettroniche consumate

Questo simbolo (il simbolo della pattumiera con rotelle barrata) indica che nei paesi europei questo prodotto non deve essere buttato nei rifiuti domestici.

Per favore smaltire in luogo addetto al riciclo, dove esistente, chiedendo informazioni alle autorità locali o a chi fornisce consulenza a proposito.

Garantendo uno smaltimento adeguato di questo prodotto (trattamento, recupero e riciclo corretto), aiuterete a prevenire effetti negativi sull'ambiente e sulla salute dell'uomo.

It



Eliminación de residuos de aparatos eléctricos y electrónicos

Este símbolo (un cubo de basura tachado) indica que en los países europeos este producto no deberá eliminarse como si se tratara de un residuo doméstico. Solicite asesoramiento sobre reciclaje a las autoridades locales o a su distribuidor, y siga la normativa en materia de gestión medioambiental y reciclaje de este tipo de residuos.

Si toma las medidas pertinentes para que este producto se elimine mediante un tratamiento, recuperación y reciclaje adecuados, contribuirá a evitar posibles efectos negativos en el medio ambiente y la salud humana.

Sp

● Pictorial Symbols and Other Notations Used in This Manual

IMPORTANT

: Introduces instructions for correct operation of the machine.
If these instructions are ignored, the machine may not be able to operate at optimum performance or may break down.

REFERENCE

: Introduces information that is useful for operation and maintenance of the machine, or information about the machine's performance, etc.



: Indicates that the description of the operating sequence is continued on the next page.

(See Page→ P.00 "xxx") : Indicates the page number and item containing related information.

Notes on Safety (Please Read and Observe)

Safety Precautions

Various symbols and pictures are used in this manual and on the labels affixed to the machine. These symbols and pictures provide warnings and instructions to prevent danger to you or other personnel, and to prevent damage to office property. The meanings of these symbols and pictures are explained below.



WARNING

Indicates a high degree of potential danger. If the warning is ignored, death or serious injury may result.



CAUTION

Indicates a medium degree of potential danger. If the caution is ignored, medium injury or damaged to property may result.

<Examples of Pictorial Symbols>



⊘ A circle with a line through it indicates a prohibited action. The particular act prohibited is indicated by a picture inside the circle. (In the example shown here, the prohibited act is disassembly.)



● A black disc indicates an instruction, or sometimes a prohibited action. The instruction itself is indicated by pictorial symbols drawn in white on the disc. (In the example shown here, the instruction is 'Remove the plug from the outlet.')

● Precautions for use



WARNING



- If the machine is used after foreign matter (metal fragments, water, or liquid) has entered the machine, this may result in fire or electric shock.
→ Turn the main unit's power switch OFF, and then remove the power plug from the outlet. Contact the sales distributor.



- If the machine is used after heat, smoke, strange smell, or other abnormality is detected, this may result in fire or electric shock.
→ Turn the main unit's power switch OFF, and then remove the power plug from the outlet. Contact the sales distributor.



- Do not insert or drop metal, flammable material, or other matter through the ventilation holes into the machine interior.
→ Doing so may result in fire or electric shock.



- Do not place flower vases, flowerpots, cups, or water containers (including metal containers) on top of the machine.
→ Fire or electric shock may result if liquid spills inside the machine.

• **Caution for Grounding (Be sure to use the supplied power cord)**

 WARNING



- Use only the power cord that is provided among the accessories.
Insert the power cord plug firmly into the socket, so that proper electrical contact is effected.
→ Use of any other power cord could result in imperfect grounding.
If grounding is imperfect and electrical leakage occurs, fire or electric shock could result.

• **Caution for Power Supply and Power Cord**

 WARNING



- Do not use a source voltage other than that specified.
Do not connect two or more loads to a single outlet.
→ Doing so may result in fire or electric shock.



- Be sure to remove dust on the power plug and/or the outlet.
Using these without removing dust may have minute electric current flow to the surface due to the humidity and cause a fire due to the heat.
→ It may cause a fire or electric shock.



- Do not remove or insert the power plug with wet hands.
→ Doing so may result in electric shock.



- Do not damage, break, or modify the power cord.
Do not place heavy objects on, tug, or unnecessarily bend the power cord.
→ Doing so may result in fire or electric shock.



- Remove the power plug itself, not the cord.
→ Tugging the cord may damage it (expose conductors, or cause disconnections, etc.), resulting in fire or electric shock.

Notes on Safety (Please Read and Observe)

• Prohibition of Disassembly or Modification

WARNING



- Do not modify the machine.
→ Doing so may result in fire or electric shock.



- Do not remove the rear lid, cabinet, or covers from the machine.
→ The inside of the machine contains high-voltage parts, which may cause electric shock.

• Caution for Location

WARNING



- Do not place the machine in a humid or dusty area.
→ Doing so may result in fire or electric shock.



- Install the machine on the optional cabinet.
- Do not use any other desks or table than optional cabinet.
- Do not place the machine on the desk.
→ If the machine is dropped or falls over, this could result in personal injury.



- Once the machine is in position, secure in place using the casters.
→ If the machine falls over, this could result in personal injury.

CAUTION



- Before moving the machine, remove the power plug from the outlet.
→ If the cord is damaged, this may result in fire or electric shock.



- Do not place the machine in an unstable position, such as on an unsteady support or sloping area.
→ If the machine is dropped or falls over, this could result in personal injury.

 CAUTION



- Do not place the machine in a place subject to direct sunlight or heating equipment such as a stove.
→ It may degrade ink quality and affect printing. The machine also may malfunction.
- Avoid placing the machine in a place subject to high or low temperature or high humidity.
→ The paper absorbs moisture and it may cause paper jam or creasing.



- Leave the power supply cord unplugged when the machine is not used for a long period.
→ Insulation may deteriorate and cause an electrical fire.

• **Cleaning**

 CAUTION



- Before cleaning the machine, turn off the power switch and unplug the power supply cord.
→ If the machine is activated accidentally, injury may result.



- Do not use flammable sprays or solvents inside or near the machine.
→ Gas may accumulate inside the machine causing a fire or explosion.

Notes on Safety (Please Read and Observe)

• Notes on Ink

CAUTION



- If ink gets into eyes or mouth, immediately wash it away with water and contact a doctor.



- If ink comes into contact to skin, immediately wash it away with soap and water.



- Keep ink away from children.

Ink pack:

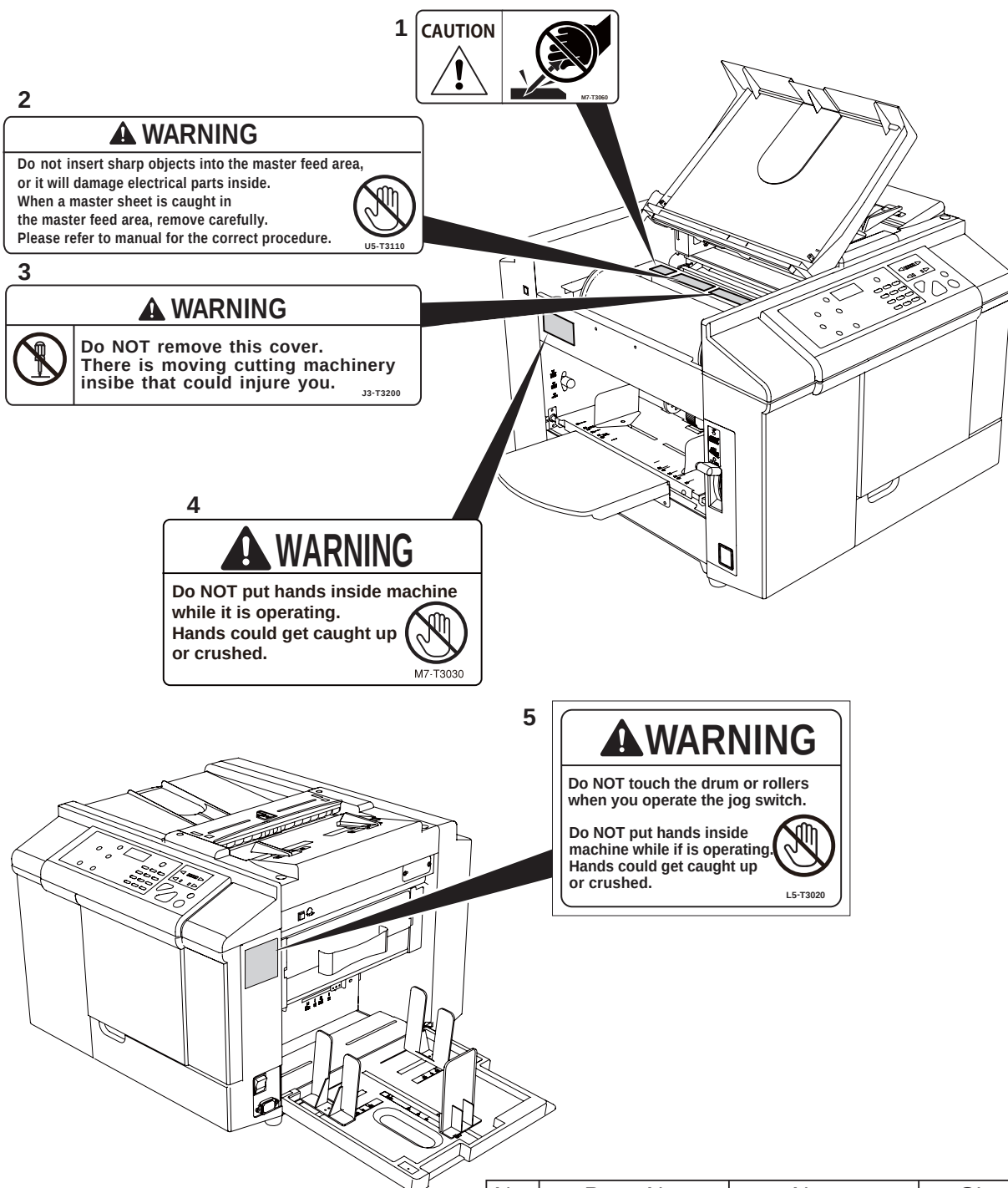
- Refer to "Chapter 5 Replacing Consumables" for handling the ink pack.
Replacing the Ink Pack → See page 44.

Storage conditions:

- Store in a cool and dry place avoiding direct sun light.
Adequate storage temperature: from -5 to 40 degrees (C)
- Never put ink pack close to fire.

• Locations of Warning Labels

- Keep the WARNING and CAUTION labels clean at all times. If labels become damaged or come off, please call our service person.



No.	Parts No.	Name	Q'ty
1	M7-T3060	Caution Label	1
2	U5-T3110	Warning Label	1
3	J3-T3200	Warning Label	1
4	M7-T3030	Warning Label	1
5	L5-T3020	Warning Label	1

Contents

Introduction	i
Notes on Safety (Please Read and Observe)	iv
⚠ Safety Precautions	iv
Locations of Warning Labels	ix

Chapter 1 Before Use

Part Names and Their Functions	2
Printer Appearance	2
Control Panel	6
Turning Power ON/OFF.....	10
Turning Power ON	10
Turning Power OFF	10
Standard Mode	11
Document / Printing Paper Specifications.....	12
Acceptable Document	12
Acceptable Printing Paper	12
How Master Making and Printing are Performed	13
Master Making	13
Printing	13

Chapter 2 Basic Operations

Preparing for Printing.....	16
How to set paper	16
How to Adjust Paper Feed Pressure	17
How to set the Print Try	18
Loading Documents	19
Loading Documents	19
How to Load Document	19
Basic Printing	20
Enlargement and Reduction	23
Enlargement and reduction from standard-size documents to standard-size paper	23
94% Reduction	25
Printing Photographs and Color Documents	26
Text/Photograph Mode	26

Chapter 3 Printing with Useful Functions

"2 IN 1" Layout	28
Adjusting Master Darkness.....	31
Batch Printing	32

Chapter 4 Printing with Various Functions

Confidential Safeguard Function	36
Total Counter Display Function.....	37
Print Speed Adjustment Function	38
Print Position Adjustment Function	39
Online Print Function (Available Only With Interface Kit Installed)	41
Automatic Power Off Function (Option)	42

Chapter 5 Replacing Consumables

Replacing the Ink Pack	44
Replacing the Master	47
Disposing of Used Master	50
Replacing the Drum Unit	51
Removing the Drum Unit.....	51
Installing the Drum unit	52

Chapter 6 **Troubleshooting**

Countermeasures to Troubles	56
Power Does Not Turn ON	56
Master making/Printing is Not Possible	56
Error Messages	57
Supplying or Changing Paper While Printing	60
If Paper Runs Out While Printing	60
Supplying Paper While Printing	60
Paper Jams	62
Removing a Paper Jam on the Feed Tray Side	62
Removing a Paper Jam on the Print Tray Side.....	63
When a "Master Ejection Error" Has Occurred	66
When a "Master Setting Error" Has Occurred	68

Chapter 7 **Maintenance**

Daily Maintenance	72
-------------------------	----

Chapter 8 **Specifications**

Specifications	74
----------------------	----

Chapter 1

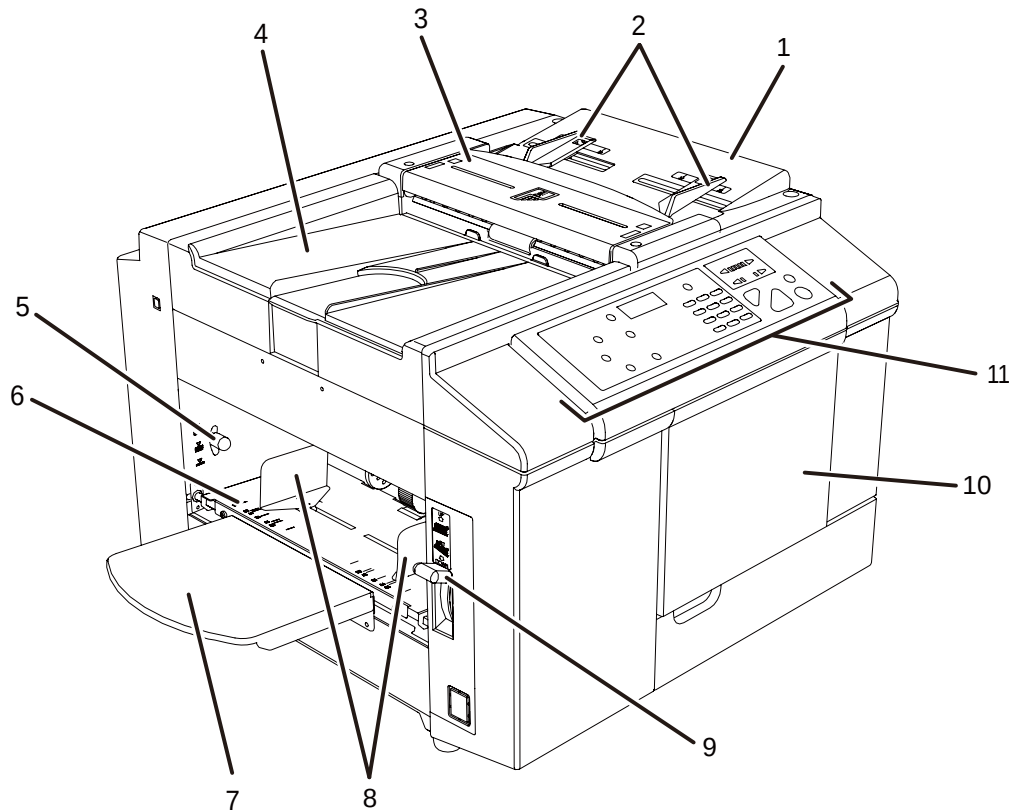
Before Use

This chapter contains essential information such as the names of the machine parts, the names and functions of keys, etc., on the control panel, and the sizes of documents and printing papers that you can use. Please be sure to read this chapter carefully before attempting to use the printer.

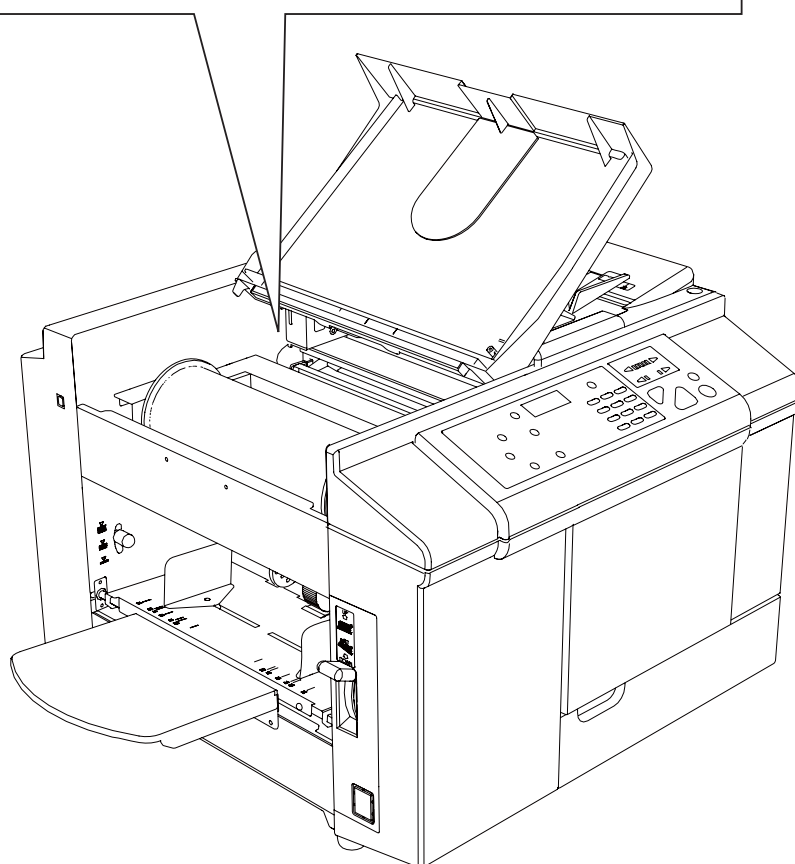
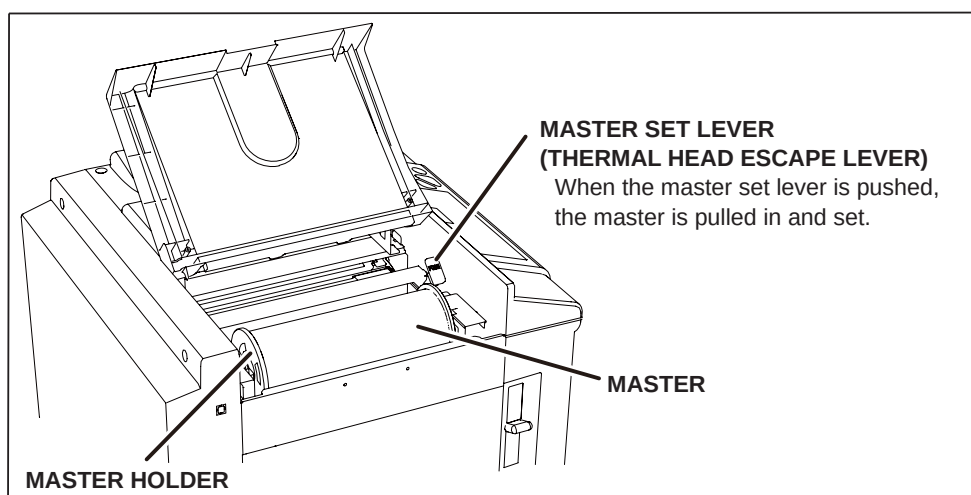
.....	
Part Names and Their Functions	2
Printer Appearance	2
Control Panel	6
Turning Power ON/OFF.....	10
Turning Power ON	10
Turning Power OFF	10
Standard Mode	11
Document / Printing Paper Specifications.....	12
Acceptable Document	12
Acceptable Printing Paper	12
How Master Making and Printing are Performed	13
Master Making	13
Printing	13
.....	

Part Names and Their Functions

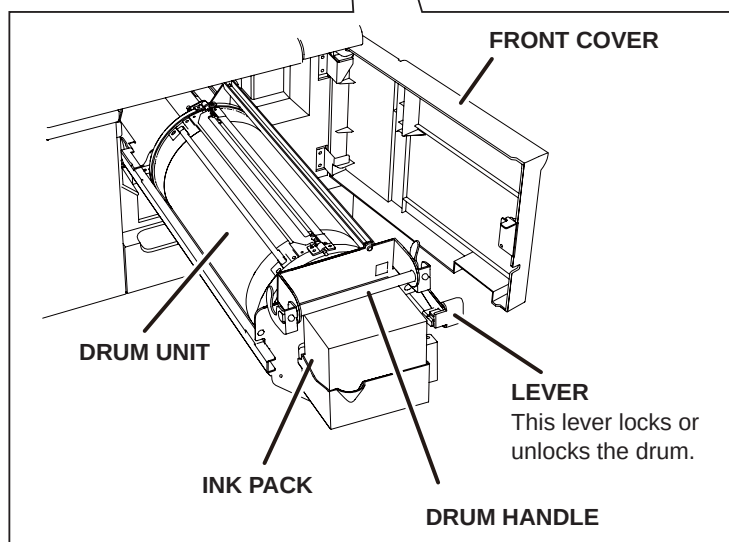
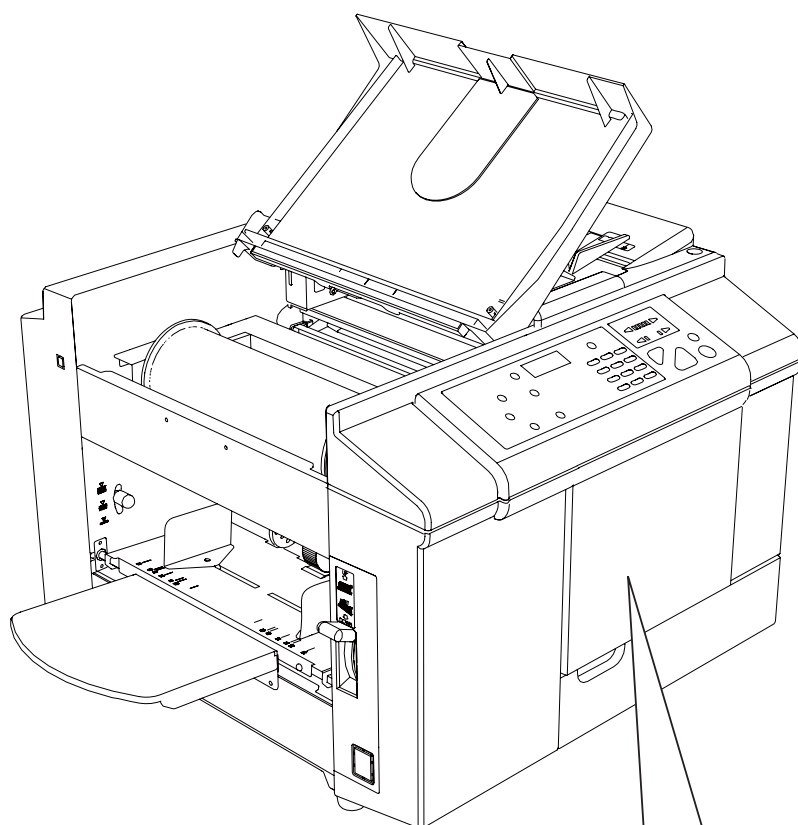
Printer Appearance

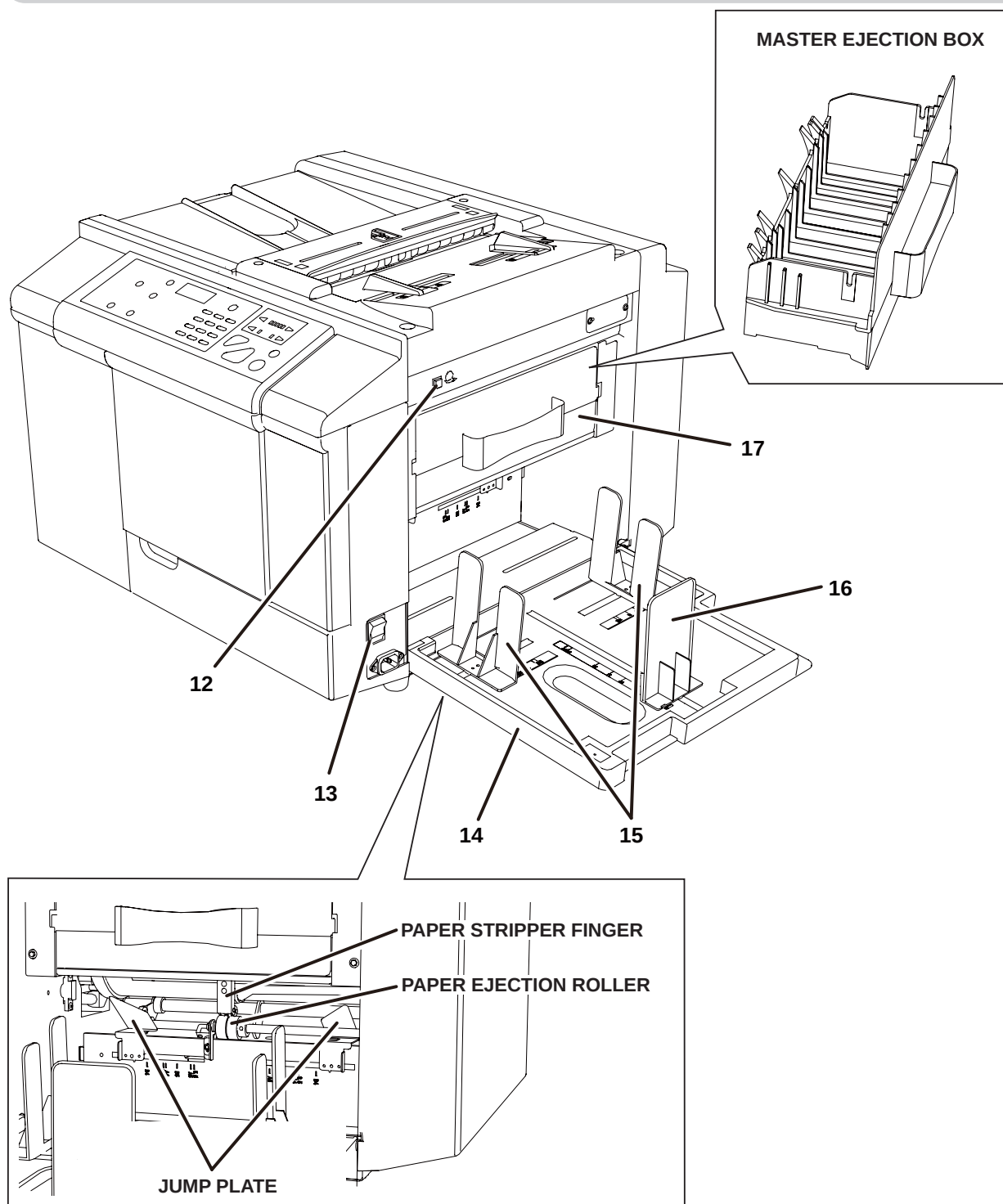


No.	Name	Function	Reference page
1	Document tray	Place the document on this tray.	19
2	Document guide	Slide to match the width of the document.	19 , 20
3	ADF	Feeds one document of sheet type at a time for master making.	19
4	Upper cover	Open to replace the master roll, etc.	47
5	Feed pressure adjuster lever	Use to adjust the paper feed pressure.	17
6	Feed tray	Load paper on this tray.	16
7	Support tray		—
8	Side guides	Slide to match the width of the paper.	16
9	Paper set lever	Lower this lever down before loading paper on the feed tray. Raise it up after loading paper correctly.	16
10	Front cover	Open to replace ink pack and drum unit, etc.	44 , 2
11	Control panel	Displays operations and status, and sets functions.	6



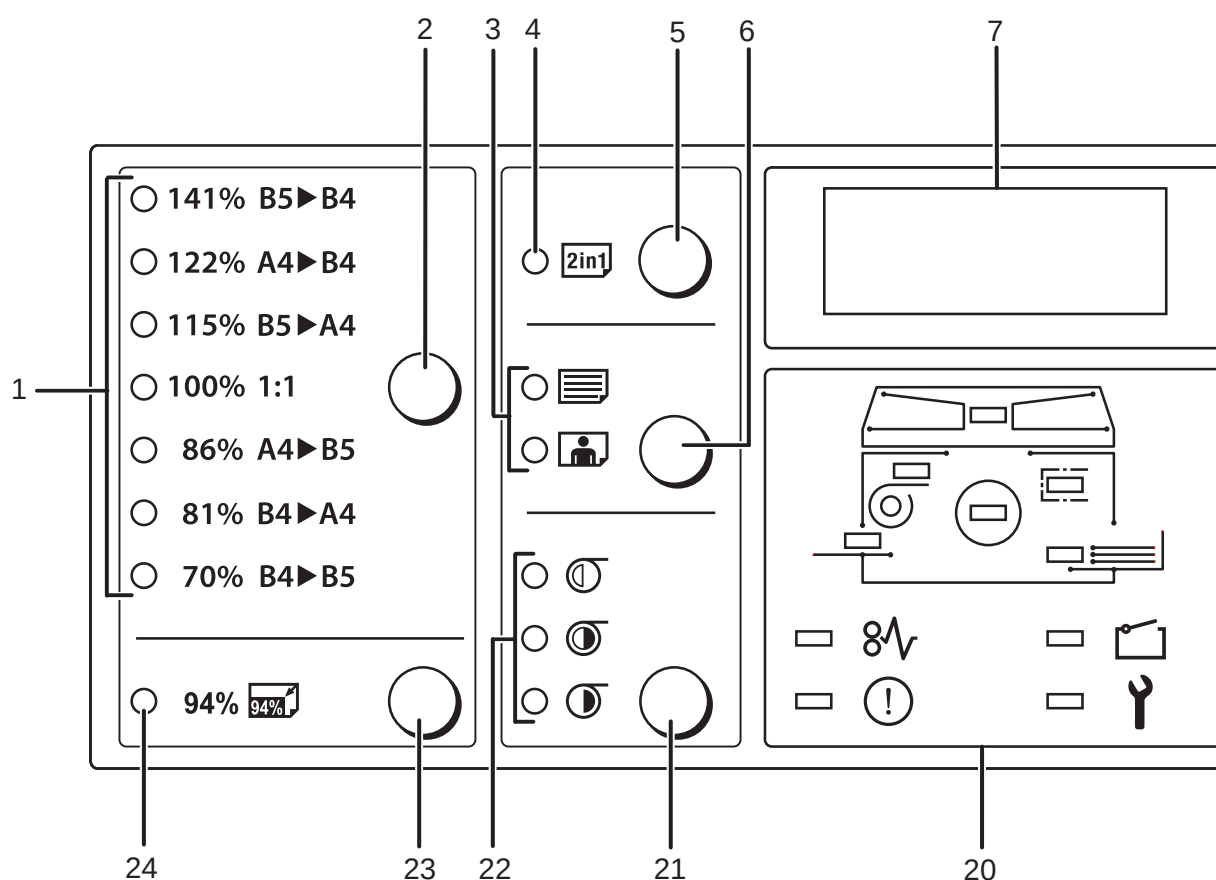
Part Names and Their Functions



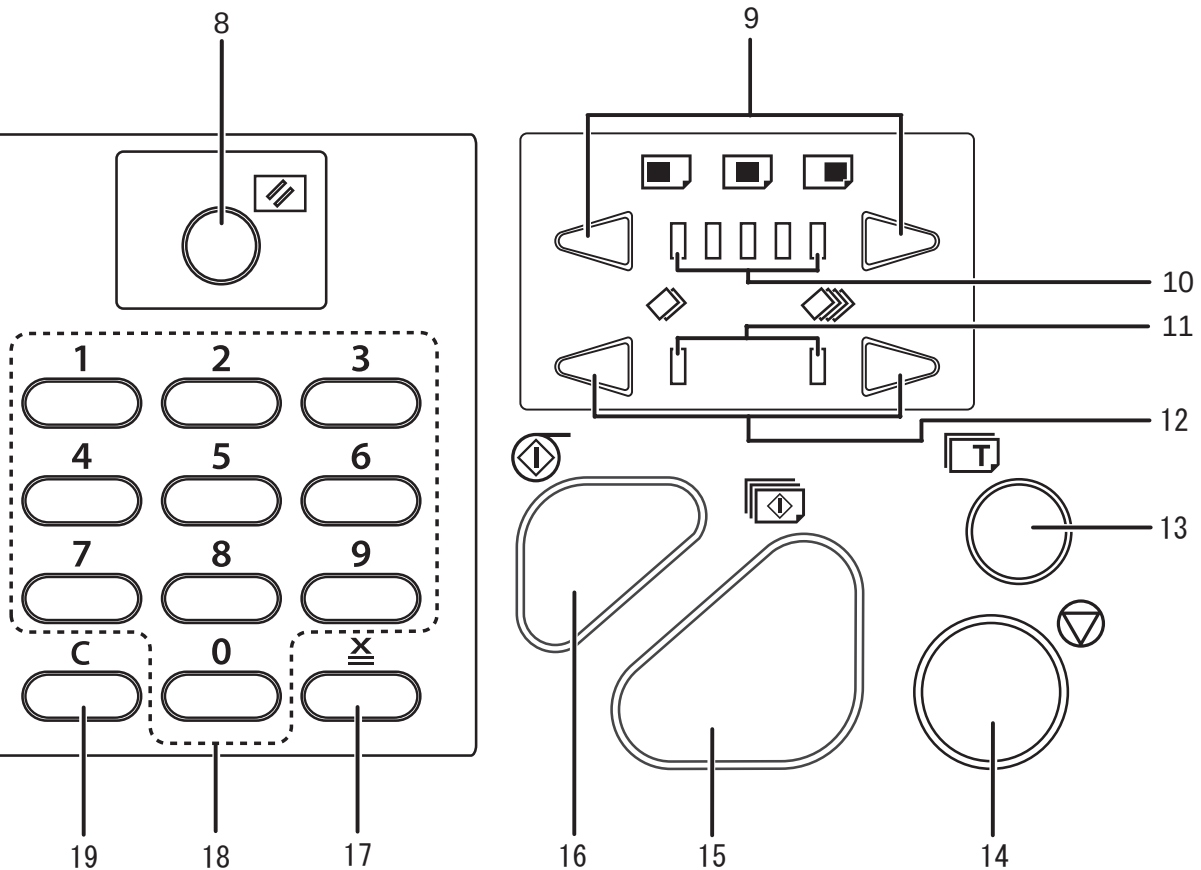


No.	Name	Function	Reference page
12	JOG switch	Press and hold to rotate the drum for a set time. Use to remove paper jams, etc.	—
13	Power switch	Press to turn the power on and off.	10
14	Print tray	Printed paper is ejected to this tray.	18
15	Paper stacker guide	Slide to match the size of printed paper.	18
16	Paper stopper	Slide to match the size of printed paper.	18
17	Master ejection box	Used master is stored in this box. Pull out it when it is full.	50

Control Panel (European paper sizes)



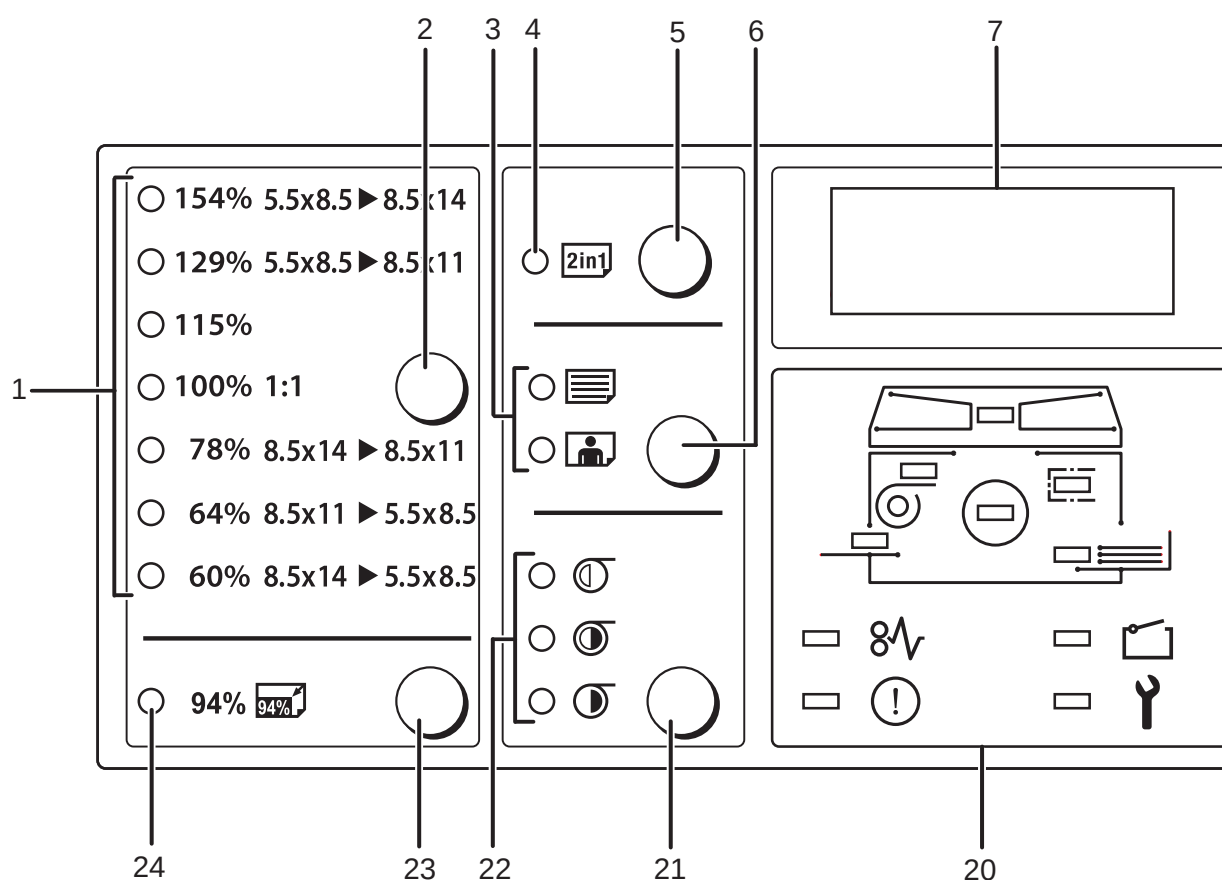
No.	Name	Function	Reference page
1	Zoom indicator lamp	Indicates the position of enlargement and reduction.	24
2	ENLARGEMENT and REDUCTION key	Press this key to change enlargement and reduction. Each press of this key moves the position of the lit lamp that indicates the selected enlargement or reduction.	24
3	Document mode indicator lamp	The lamp of the selected mode lights up.	26
4	2 IN 1 indicator lamp	Lights up when "2 IN 1" is set.	28
5	2 IN 1 key	Press this key to set "2 IN 1".	28
6	DOCUMENT MODE SWITCH key	Press to switch between Text Mode and Photograph Mode. Each press of this key moves the position of the lit lamp that indicates the selected document mode.	26
7	Counter/Error display panel	Displays the number of printed sheets. Also displays an error message when an error occurs.	57
8	RESET key	Returns the control panel settings to the "Standard Mode" settings. Press and hold for at least 0.5 seconds.	11
9	PRINT POSITION keys	Adjust print position.	39
10	Print position indicator lamp	The lamp of the specified print position lights up.	39
11	Print speed indicator lamp	The lamp of the specified print speed lights up.	38
12	PRINT SPEED keys	Adjusts print speed.	38



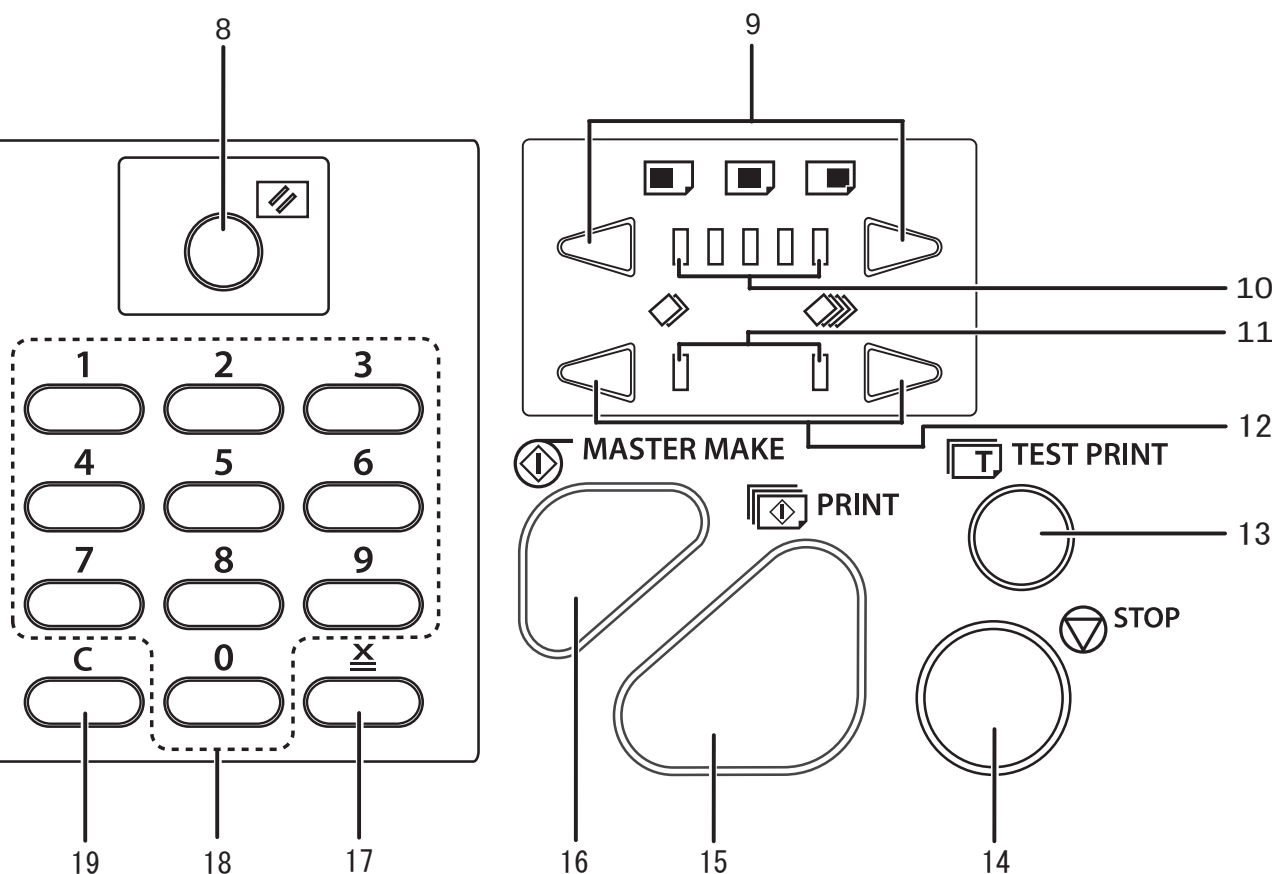
	Name	Function	Reference page
13	TEST PRINT key	Prints 1 copy to check the image position and density.	—
14	STOP key	Stops printing. When this key is pressed and held down while the machine is not running, total number of printed sheets and the total number of masters are displayed on the Counter/Error display panel.	37
15	PRINT key	Starts printing. This key does not start making a master.	22
16	MASTER MAKING key	Starts making a master.	21
17	$\cong$ key	Enters the number of printed sheets and the number of sets in batch printing.	33
18	NUMERIC keys	Enters the number of printed sheets.	—
19	CLEAR key	Returns the number of printed sheets to 0. Other settings on the control panel are not changed.	—
20	OK monitor	Flashes to display the content of the trouble and lights up to indicate the part that caused the trouble in the machine.	57
21	MASTER DARKNESS key	Adjusts the master darkness.	31
22	Master darkness indicator lamp	The lamp for the specified MASTER darkness lights up.	31
23	94% key	Reduces image to 94%.	25
24	94% indicator lamp	Lights up when 94% reduction is on.	25

Control Panel

(U.S. paper sizes)



No.	Name	Function	Reference page
1	Zoom indicator lamp	Indicates the position of enlargement and reduction.	24
2	ENLARGEMENT and REDUCTION key	Press this key to change enlargement and reduction. Each press of this key moves the position of the lit lamp that indicates the selected enlargement or reduction.	24
3	Document mode indicator lamp	The lamp of the selected mode lights up.	26
4	2 IN 1 indicator lamp	Lights up when "2 IN 1" is set.	28
5	2 IN 1 key	Press this key to set "2 IN 1".	28
6	DOCUMENT MODE SWITCH key	Press to switch between Text Mode and Photograph Mode. Each press of this key moves the position of the lit lamp that indicates the selected document mode.	26
7	Counter/Error display panel	Displays the number of printed sheets. Also displays an error message when an error occurs.	57
8	RESET key	Returns the control panel settings to the "Standard Mode" settings. Press and hold for at least 0.5 seconds.	11
9	PRINT POSITION keys	Adjust print position.	39
10	Printing position indicator lamp	The lamp of the specified print position lights up.	39
11	Print speed indicator lamp	The lamp of the specified printing speed lights up.	38
12	PRINT SPEED keys	Adjusts print speed.	38



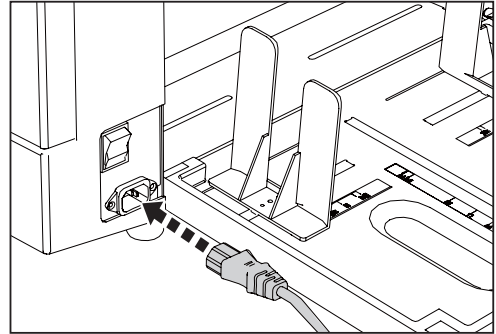
	Name	Function	Reference page
13	TEST PRINT key	Prints 1 copy to check the image position and density.	—
14	STOP key	Stops printing. When this key is pressed and held down while the machine is not working, total number of printed sheets and the total number of masters are displayed on the counter/error display panel.	37
15	PRINT key	Starts printing. This key does not start making a master.	22
16	MASTER MAKING key	Starts making a master.	21
17	$\times$ key	Enters the number of printed sheets and the number of sets in batch printing.	33
18	NUMERIC keys	Enters the print volume.	—
19	CLEAR key	Returns the number of printed sheets to 0. Other settings on the control panel are not changed.	—
20	OK monitor	Flashes to display the content of the trouble and lights to indicate the part that caused the trouble in the machine.	57
21	MASTER DARKNESS key	The Master darkness is adjusted with this key.	31
22	Master darkness indicator lamp	The lamp for the specified MASTER darkness lights up.	31
23	94% key	Reduces image to 94%.	25
24	94% indicator lamp	Lights up when 94% reduction is on.	25

Turning Power ON/OFF

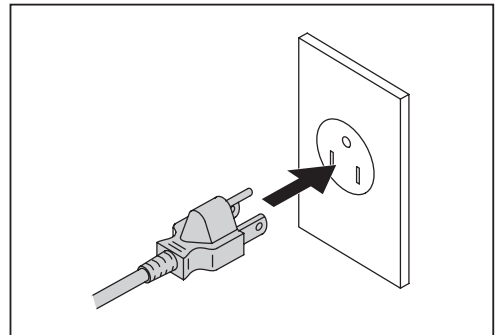
This section describes how to turn the power ON and OFF.

Turning Power ON

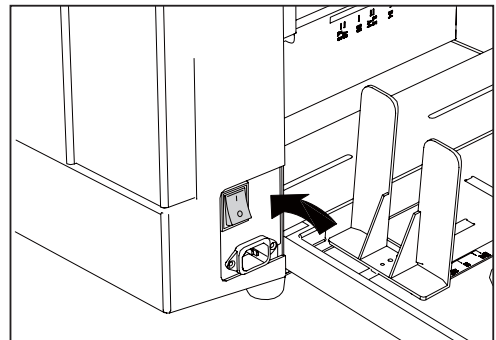
- 1 Connect the “female plug” of the power supply cord to the “inlet”.



- 2 Connect the “male plug” of the power supply cord to the “outlet”.

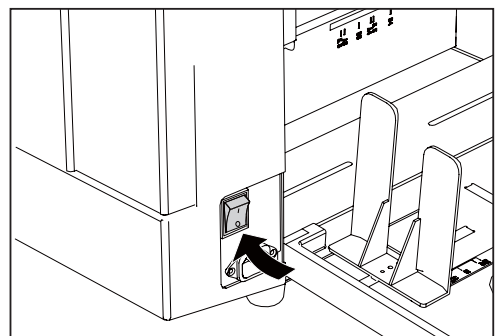


- 3 Press the “I” side on the “power switch”. The printer is turned on.



Turning Power OFF

- 1 Press the “O” side on the “power switch”. The printer is turned off and the panel display goes out.



Standard Mode

When the printer power is first turned ON or the  "RESET" key is pressed, the functions are reset to Standard Mode.

Standard Mode settings are as follows:

- Print quantity : 0
- Print position : Standard
- Print speed : Low
- Zoom : 100%
- 2 IN 1 : OFF
- Document mode : TEXT
- Master size : B4 (European)
8.5"×14" (U.S.)
- Master Darkness : NORMAL
- × 94 : OFF

1

Before Use

Document / Printing Paper Specifications

Acceptable Documents

Document thickness	: 64gsm - 128gsm 17 - 34lb(bond)
Document size	: max. 271mm x 393mm, min.100mm x 148mm max. 10.6" x 15.5", min. 4" x 6"
Stacking capacity in document tray	: 1 sheet

IMPORTANT

- To make a new master from the document from which a master has already been made, remove and then reload the document.

The following types of document cannot be used:

- Documents with large file-binding holes, tears, or missing parts
- Documents with staples or paper clips attached
- Documents with markedly curling ends/sides, or marked folds
- Documents with tears or rough edge
- Chemically treated documents with such as thermal paper, carbon paper and so on
- Highly transparent documents such as OHP film, tracing paper and so on
- Documents which surface is slippery such as art paper, coated paper and so on
- Documents with correction fluid, glue and so on
- Documents with smaller pieces of glued paper

Acceptable Printing Paper

	DP-A120
Paper thickness	53gsm -128gsm 14lb - 34lb(bond)
Paper size	max.271mm x 393mm , min.100mm x148mm max.10.6" x 15.5" , min.4" x 6"
Paper stacking capacity	Feed tray : 500 sheets (80gsm high-quality paper) Print tray : 500 sheets (80gsm high-quality paper)

IMPORTANT

The following types of paper cannot be used:

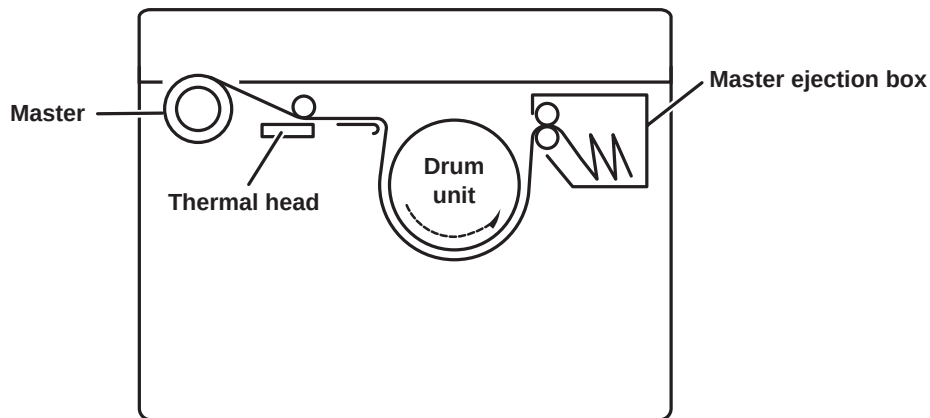
- Paper with large file-binding holes
- Paper with staples or paper clips attached
- Paper with markedly curling ends/sides, or marked folds
- Documents with tears or rough edge
- Chemically treated papers such as thermal paper, carbon paper and so on
- Highly transparent papers such as OHP film, tracing paper and so on
- Paper which surface is slippery such as art paper, coated paper and so on
- Paper with correction fluid, glue and so on
- Paper with smaller pieces of glued paper

How Master Making and Printing are Performed

The machine performs two processes: “master making” and “printing”.

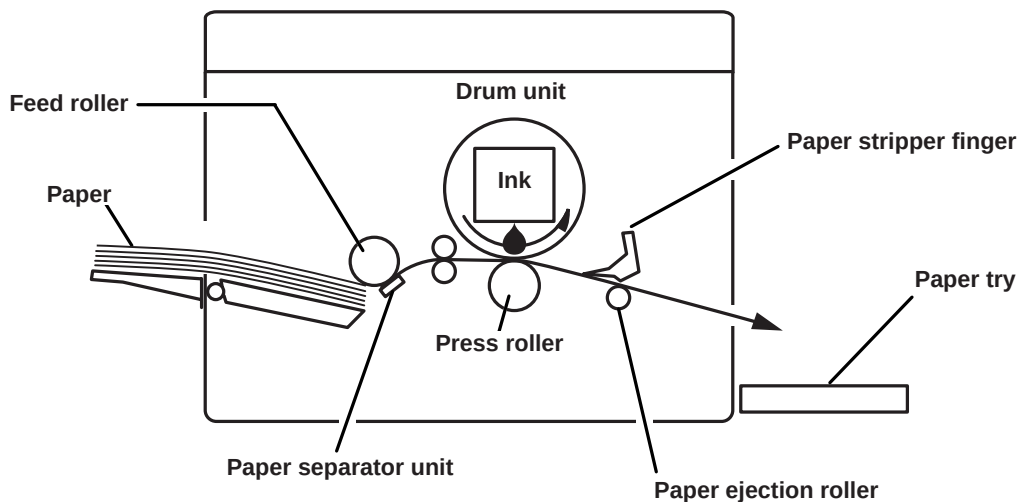
Master Making

In the “master making” process, the old master on the drum is removed while the thermal head creates the scanned image on the new master and transfers it onto the drum.



Printing

In the “printing” process, paper separated from the feed tray by the feed roller and paper separator unit is pressed against the drum unit by the press roller. There are small holes over only the image area of the master that is attached to the drum, and ink that seeps from these holes is transferred to the paper. The paper is then peeled from the master by the paper stripper finger. Then it is ejected from the machine to the paper tray.



Chapter 2

Basic Operations

This chapter describes how to make prints using the basic functions, including how to load the document, set zoom ratio, etc.

2

Basic Operations

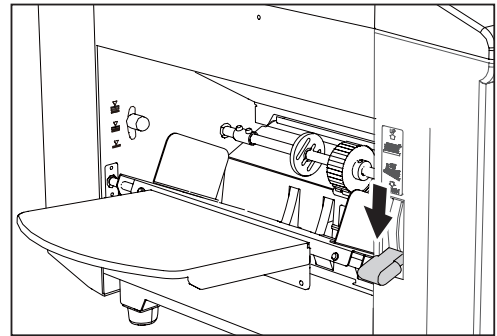
.....	
Preparing for Printing.....	16
How to set paper	16
How to Adjust Paper Feed Pressure	17
How to set the Print Try	18
Loading Documents	19
Loading Documents	19
How to Load Document	19
Basic Printing	20
Enlargement and Reduction	23
Enlargement and reduction from standard-size documents to standard-size paper	23
94% Reduction	25
Printing Photographs and Color Documents	26
Text/Photograph Mode	26
.....	

Preparing for Printing

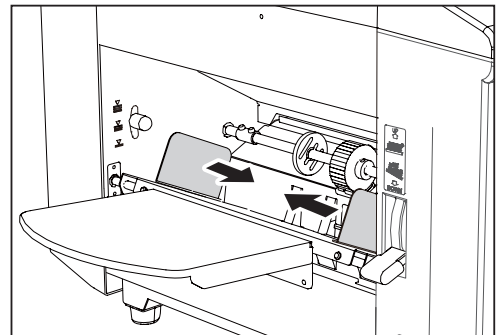
How to Set Papers

This section describes how to load the printer with paper. You can load about 500 sheets in this printer.

- 1 Lower the "paper set lever".



- 2 Adjust the "side guides" to the paper size.

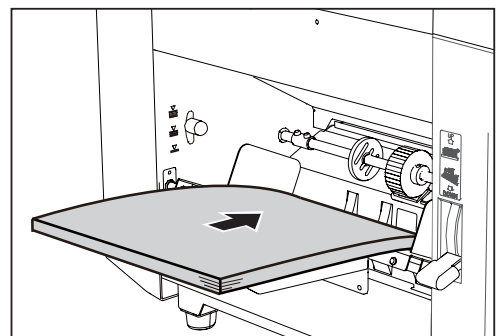


- 3 Fan the papers and align them.

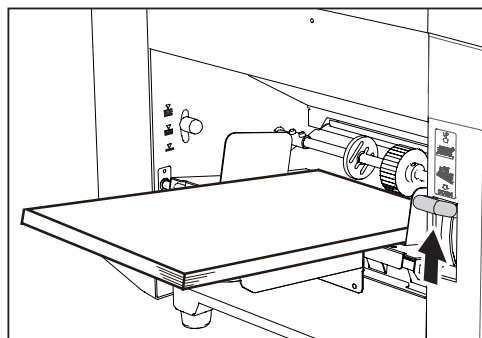
- 4 Put the papers between the "side guides" and push them to the inside.

IMPORTANT

- About 500 sheets of 80gsm high-quality paper can be loaded.



- 5 Raise the "paper set lever" to set the feed tray.



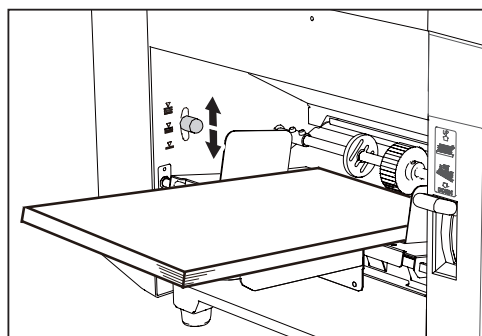
2

Basic Operations

How to Adjust Paper Feed Pressure

Adjust the paper feed pressure if an feeding error occurs when using thick or thin paper.

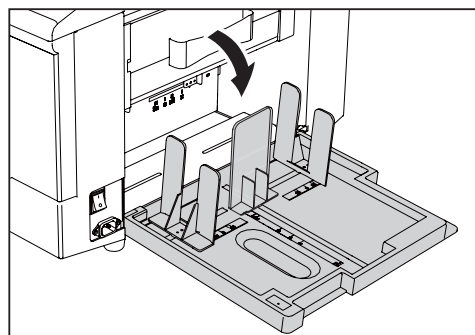
- **When no thick paper is fed**
Adjust the "feed pressure adjuster lever" to ≡ "HIGH".
- **When two pieces of thin paper are fed**
Adjust the "feed pressure adjuster lever" to ≡ "LOW".



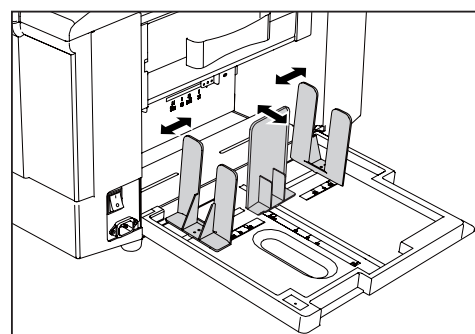
How to Set the Print Tray

This section describes how to set the print tray.

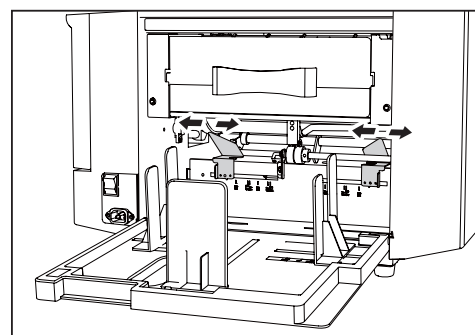
- 1 Open out the "print tray".



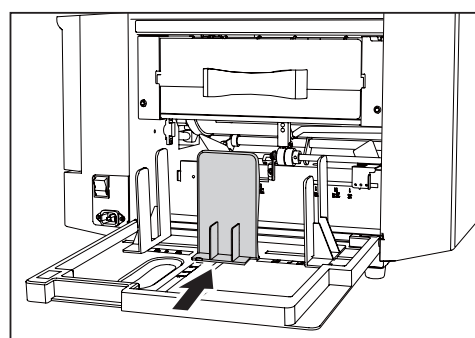
- 2 Adjust the "paper stacker guides" and "paper stopper" to the size of the printing paper.



- 3 Adjust the "jump plate" to the paper size.



- After using the print tray, push the "paper stopper" inward as far as it will go, and close the "print tray" back up.



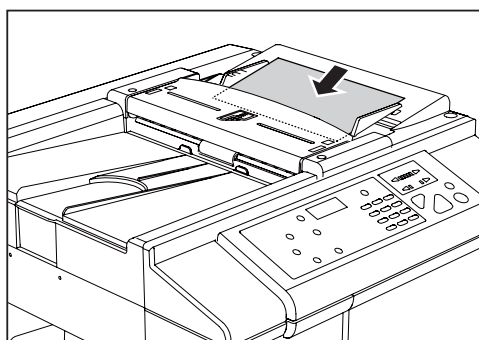
Loading Documents

Loading Documents

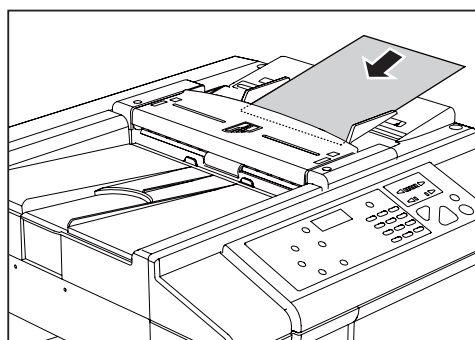
The document can be loaded in the "portrait" or "landscape" position.

IMPORTANT

- B5 and A5-size documents can be loaded in the "portrait" or "landscape" position.
- Use the landscape position when enlarging or reducing from standard-size documents to standard-size paper, such as A5 to A4.
- B4 and A4 documents can only be loaded in the landscape position.



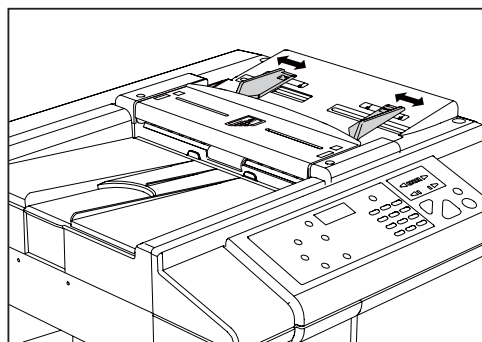
Portrait (Vertical) Placement



Landscape (Lateral) Placement

How to Load Document

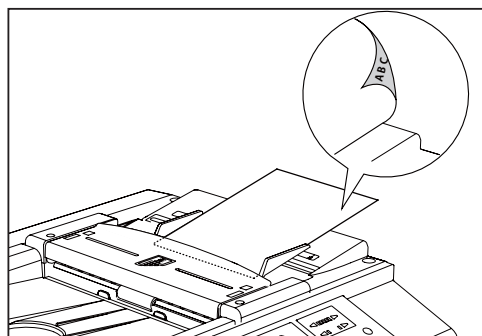
- 1 Align the "document guide" with the marks for the size of document to be loaded.



- 2 Place the document face-down in the "document tray". The document that can be set at a time is 1 sheet.

IMPORTANT

- The document that can be set at a time is 1 sheet.
- Do not attempt to remove or add to the document in the document tray while "master making" and "printing" are in progress.



Basic Printing

This section describes how to print using the basic functions.

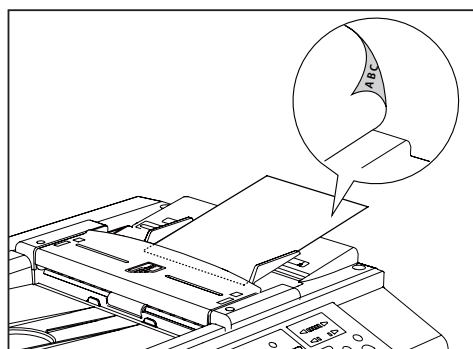
- 1 Turn ON the power. (See Page→P.10 "Turning Power ON/OFF")

REFERENCE

- If the power is already ON, press  "RESET" key.

- 2 Load papers.
See page→P.16 "How to Set Papers"

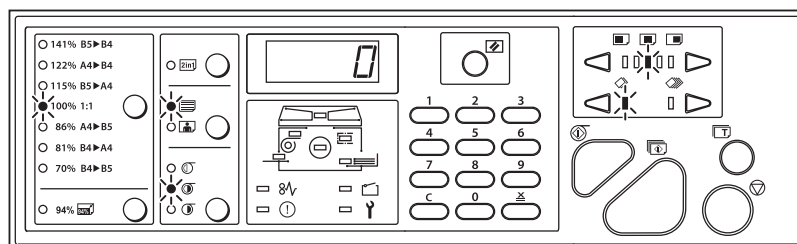
- 3 Load a document.
See page→P.19 "Loading Documents"
Adjust the "document guide" to the marks for the size of the document.
Place the document face down in the "document tray".
The document that can be set at a time is 1 sheet.



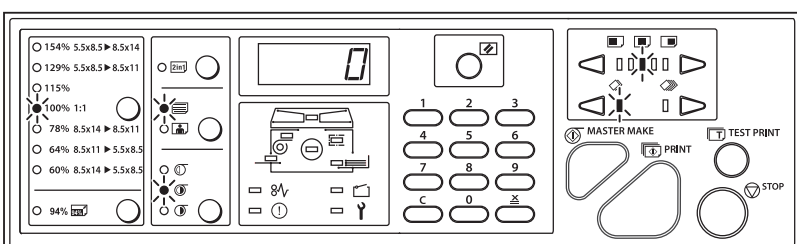
- 4 Set the "print tray".
See page →P.18 "How to Set the Print Tray"

- 5 Check the control panel. When the power is ON, the control panel displays the initial settings.
Zoom, document mode, and master darkness can be changed as needed.

European paper sizes



U.S. paper sizes



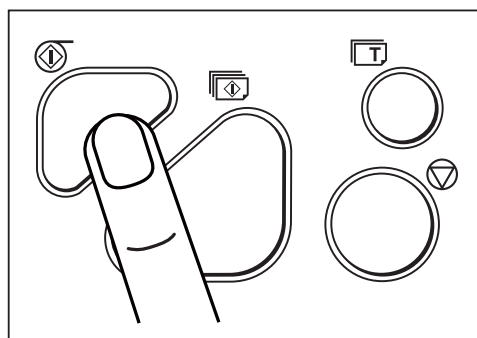
- 6** Press the  "MASTER MAKING" key.
The document will be automatically fed and master making will begin.
When the master has been made, one test print is automatically made.

IMPORTANT

- The test print is for verification purposes only and may be fainter than the final print.

REFERENCE

- You can enter the number of preferred prints before pressing the  "MASTER MAKING" key to immediately print the required number of copies.



- 7** Check the 'printing finish'.
Check if the print is made in the optimal position and with optimal darkness.

REFERENCE

If the following settings are changed, return the document to the original position and make the master again.

Zoom → 100%, 94%, 86%, 81%, 70%, 115%, 122%, 141% (European paper sizes)
100%, 94%, 78%, 64%, 60%, 115%, 129%, 154% (U.S. paper sizes)

(See page→P.23)

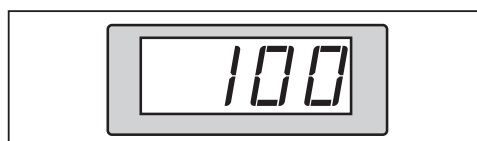
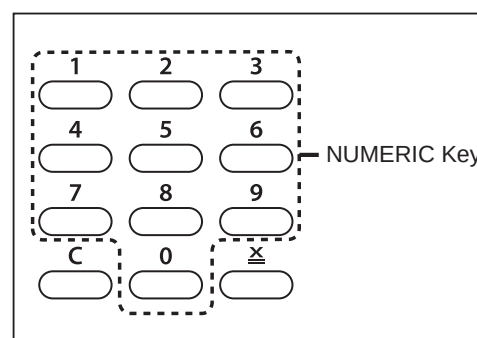
Document mode → Text/Photograph (See page→P.26)

Master darkness → Dark/Normal/Light (See page→P.31)

- 8** Use the "NUMERIC" keys to enter the number of prints.

REFERENCE

- You can specify up to 9999 prints.
- If you want to change the number of prints, press the  "CLEAR" key and then enter the correct number.



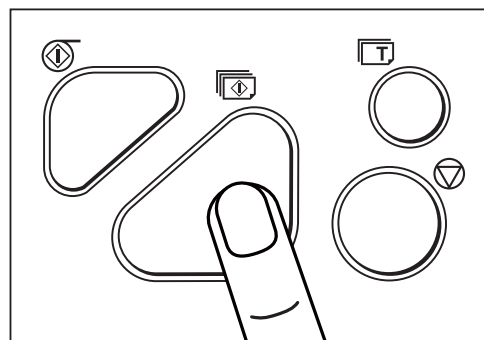
Continue Page ...

Basic Printing

- 9** Press the  "PRINT" key.
The number of prints displayed on the Counter/Error display panel decreases at each print.
The printed sheets are output to the print tray.

REFERENCE

- When you want to stop a print run, press the  "STOP" key.
- To restart the print run, press the  "PRINT" key again.



- 10** Repeat the steps 3 to 9 to print multiple documents.

Enlargement and Reduction

Enlargment/Reducing from Standard-Size Document to Standard-Size Paper

You can enlarge or reduce a standard-size document onto the standard-size printing paper.

The following zoom ratios are available when enlarging or reducing a standard-size document onto the standard-size printing paper.

■ Enlargements

You can enlarge a standard-size document onto the standard-size paper using the following zoom ratios:

European paper sizes

141% B5→B4

122% A4→B4

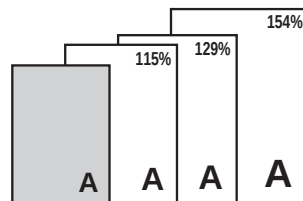
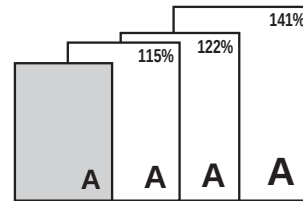
115% B5→A4

U.S. paper sizes

154% 5.5 x 8.5→8.5 x 14

129% 5.5 x 8.5→8.5 x 11

115%



■ Reductions

You can reduce a standard-size document onto the standard-size paper using the following zoom ratios:

European paper sizes

86% A4 → B5

81% B4 → A4

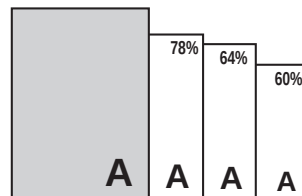
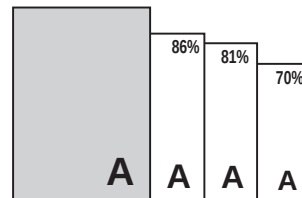
70% B4 → B5

U.S. paper sizes

78% 8.5 x 14→8.5 x 11

64% 8.5 x 11→5.5 x 8.5

60% 8.5 x 14→5.5 x 8.5



Enlargement and Reduction

- 1 Proceed with the steps 1 to 5 of the sequence described in "Basic Printing".
See Page→P.20 "Basic Printing"

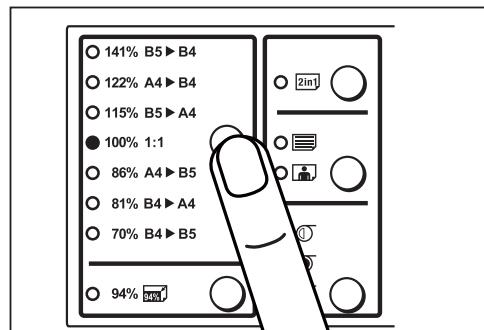
- 2 Press the "ENLARGEMENT/REDUCTION" key several times to select the preferred ratio. Each time the "ENLARGEMENT/REDUCTION" key is pressed, the lamp moves as follows.

European paper sizes

[100%]→[86%]→[81%]→[70%]→
[141%]→[122%]→[115%]→[100%]...

U.S. paper sizes

[100%]→[78%]→[64%]→[60%]→
[154%]→[129%]→[115%]→[100%]...



IMPORTANT

- Set the preferred zoom ratio before starting "master making".

REFERENCE

To return to "100%", use one of the following two methods:

- Press the "ENLARGEMENT/REDUCTION" key several times to "100%".
- Press the  "RESET" key. In this case, all settings are reset to Standard Mode.
See Page→P.11 "Standard Mode"

94% Reduction

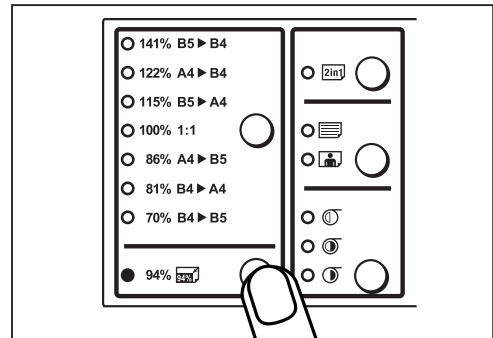
In this mode, the copy is printed at 94% of the size of the document.
When it is not possible to print the edges of the document image, this mode allows you to make a minor reduction so that the edges of the image are included.

IMPORTANT

- Select "94% Reduction" before starting "master making".

1

Press the "94%" key.



2

Paper size selection screen is displayed on the Counter/Error display panel.
Press the "94%" key several times to select paper size.

Each time the "94%" key is pressed, the display move as follows.

European paper sizes

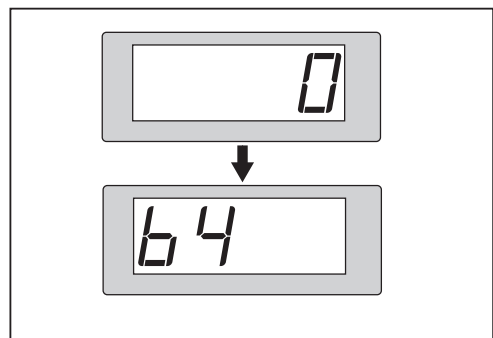
[B4]→[A4]→[B5]→[A5]→[POST]→[OFF]

U.S. paper sizes

[8.5×14]→[8.5×11]→[5.5×8.5]→

[POST]→[8.5×5.5]→[B4*]→[OFF]

* Maximum paper size cannot be displayed in the 'paper sizes' on this machine, it is displayed in European paper sizes instead.



IMPORTANT

- When "94%" reduction and "2 IN 1" function are set at the same time, the paper size will be the last selected one.

REFERENCE

To return to "100%", use one of the following two methods:

- Press the "94%" key several times to select "OFF".
- Press the "RESET" key. In this case, all settings are reset to standard mode.



You (See page 94) 1. "Standard Mode")
In this case, the zoom ratio will be "selected zoom ratio x 94%".

2

Basic Operations

Printing Photographs and Color Documents

Text/Photograph Mode

When you want to make a beautiful printing of the subtle graduations of photograph or light images from color document, make a master in Photograph Mode.

Text Mode: Enhances the printing of text documents.

Documents suited for text mode:

- Text documents
- Documents that include black and white photos that have already been screen processed.

Photograph Mode: Enhances the printing of the subtle graduations of photographs and light images from color documents.

Document suited for Photograph Mode:

- Light-colored color documents
- Color photographs
- Documents with non-screened black and white photographs

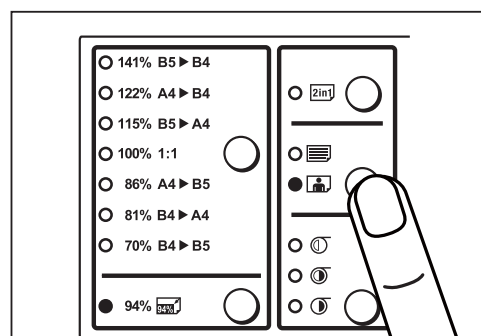
IMPORTANT

- Select "Text/Photograph Mode" before starting "master making".

Proceed with the steps 1 to 5 of the sequence described in "Basic Printing".
(See Page→P.20 "Basic Printing")

1

Press the "DOCUMENT MODE SWITCH" key.
The document mode indicator lamp lights up at the position of the Photograph Mode.



REFERENCE

To return to standard, use one of the following two methods:

- Press the "DOCUMENT MODE SWITCH" key and select TEXT.
- Press the  "RESET" key. In this case, all settings are reset to Standard Mode.
See Page→P.11 "Standard mode"

Proceed with the steps 5 to 10 of the sequence described in "Basic Printing".
(See Page→P.20 "Basic Printing".)

Chapter 3

Printing with Useful Functions

This chapter describes how to make prints using the various printer functions.

3

Printing with Useful Functions

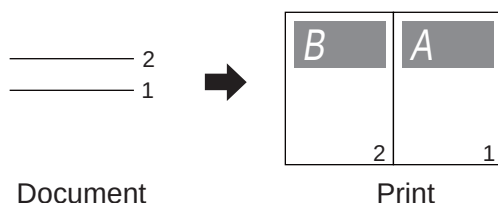
.....	
"2 IN 1" Layout	28
Adjusting Master Darkness.....	31
Batch Printing	32
.....	

"2 IN 1" Layout

Two-in-one (2 IN 1) Function allows you to print two small documents on one page and also easily print for creating booklets that will be saddle stitched.

When you use "2 IN 1" function, the layout is as follows:

■ 2 IN 1 Function



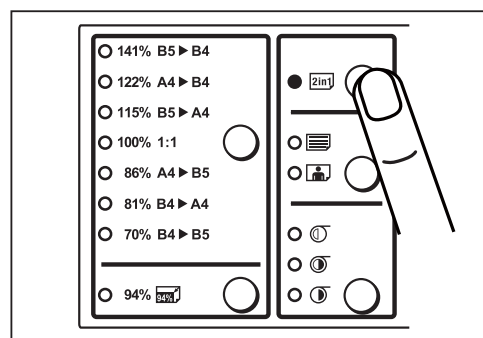
IMPORTANT

- If you are printing the documents at 100%, select a printing paper that is the size of the two documents.
- When you enlarge or reduce two documents size by side, select a zoom ratio so that the documents fit exactly on one page.
- Select "2 IN 1" function before starting master making.
- Correct layout may not be obtainable with other than standard-size papers.

Note the followings when using "2 IN 1" Function:

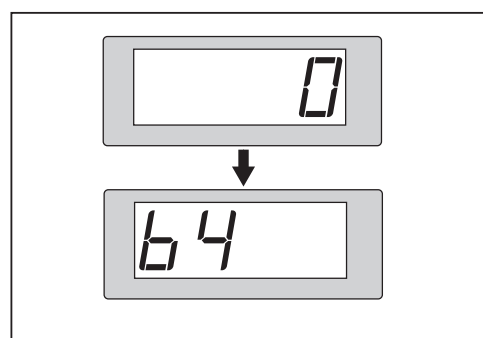
- You must load the document in the ADF in portrait orientation.
- You must select a paper size and zoom ratio that will accommodate two documents.

- 1 Press the **2in1** "2 IN 1" key.



- 2 Paper size selection screen is displayed on the Counter/Error display panel.
Press the "2 IN 1" key several times to select the paper size.

Each time the **2in1** "2 IN 1" key is pressed, the display moves as follows.



European paper sizes

[B4]→[A4]→[B5]→[A5]→[POST]→[OFF]

U.S. paper sizes

[8.5×14]→[8.5×11]→[5.5×8.5]→
[POST]→[8.5×5.5]→[B4*]→[OFF]

* Maximum paper size cannot be displayed in the 'paper sizes' on this machine, it is displayed in European paper sizes instead.

IMPORTANT

- When "94%" reduction and "2 IN 1" function are set at the same time, the paper size will be the last selected one.

- 3 Select the preferred ratio.
(See Page→P.23 "Enlargement and Reduction")

- 4 Set the first document and press the  "MASTER MAKING" key.
After a half of the master is made, the document is ejected and the machine stops.

REFERENCE

- After "master making" of the first document is finished, "2 IN 1" is displayed on the Counter/Error display panel.



Continue Page...

3

Printing with Useful Functions

2-in-1 Layout

- 5** Set the second document and press the  "MASTER MAKING" key. The remaining half of the master is made and printing starts.

REFERENCE

- If the  "MASTER MAKING" key is pressed for the second time even after a certain time (1.5 minutes) passes, the rest of the "master making" is automatically performed and "printing" starts.

REFERENCE

To return to standard, use one of the following two methods:

- Press the  "2 IN 1" key several time to select "OFF".
- Press the  "RESET" key. In this case, all settings are reset to Standard Mode.
See Page→P.11 "Standard Mode"

Adjusting Master Darkness

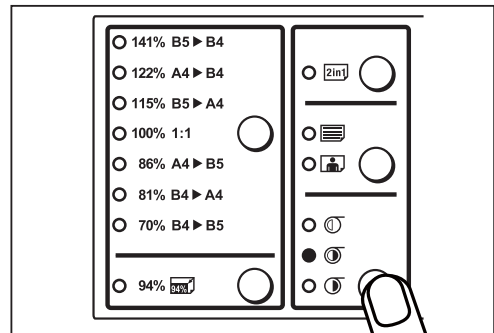
The master darkness can be adjusted in 3 steps.

Make the master “darker” if the document is light, or “lighter” if the document is dark.

IMPORTANT

- Set the “Master Darkness” before starting “master making”.
- When master darkness is changed, start from “master making”.

1 Press the “MASTER DARKNESS” key.



2 Press the “MASTER DARKNESS” key several times to select the preferred master darkness.

“Each time the “MASTER DARKNESS” key is pressed, the lamp moves as follows.

“NORMAL”→“DARK”→“LIGHT”

REFERENCE

To return to standard mode, use one of the following two methods:

- Press the “MASTER DARKNESS” key several times to select the NORMAL.
- Press the  “RESET” key. In this case, all settings are reset to Standard Mode.

See Page→P.11 “Standard Mode”

3

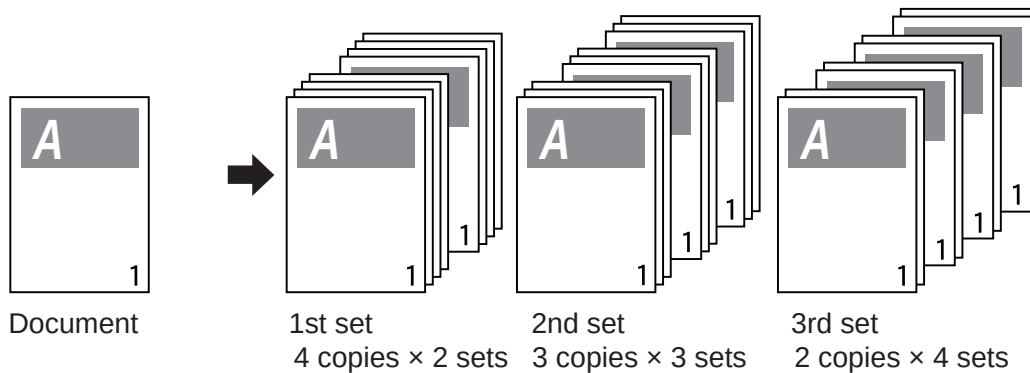
Printing with Useful Functions

Batch Printing

In this mode, each set comprises the specified number of prints and the machine prints the specified number of sets, stopping after each set.

You can enter up to 15 groups of the specified number of prints x number of sets.

■ Batch print

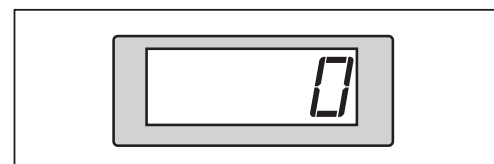
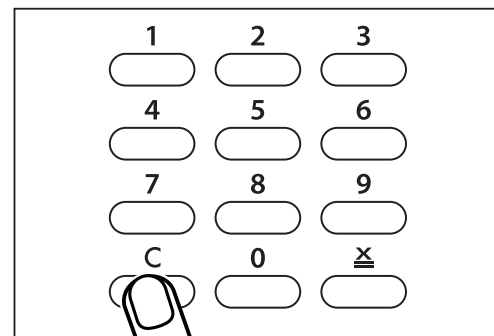


IMPORTANT

- Set "batch printing" after starting "master making".

Proceed with the steps 1 to 5 of the sequence described in "Basic Printing".
(See Page→P.20 "Basic Printing")

- 1 Press the  "CLEAR" key to clear the number of prints.

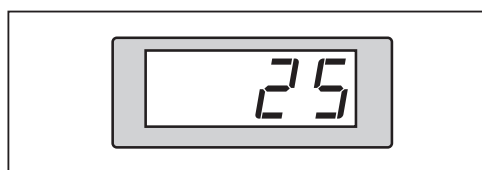
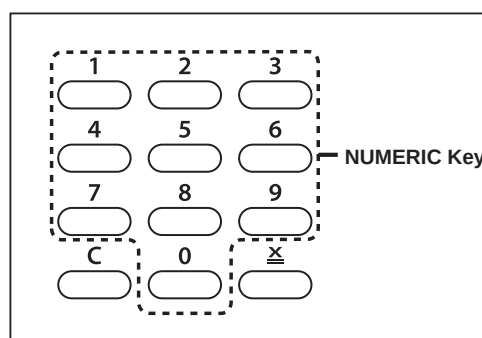


- 2** Enter the number of prints using the “NUMERIC” keys.

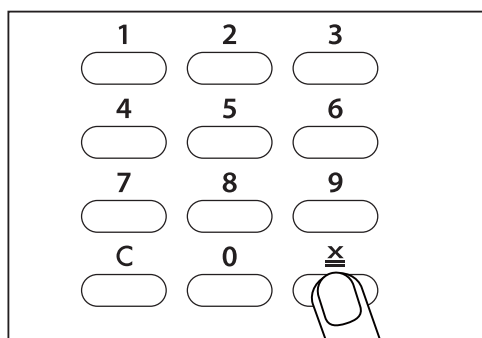
Example: 25 sheets

REFERENCE

- If you make a mistake, start over again by pressing the  “CLEAR” key and start from the beginning. When you press the  “CLEAR” key, both the number of prints and the number of sets are cancelled.



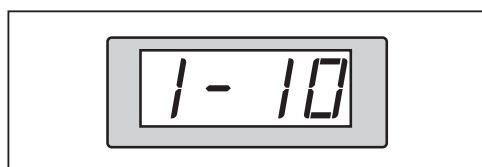
- 3** Press the  “ ∞ ” key. The number of prints is set.



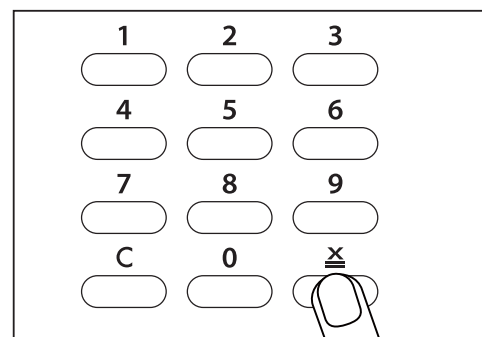
- 4** Enter the number of sets using the “NUMERIC” keys. Example: 10 sets

REFERENCE

- If you make a mistake, start over again by pressing the  “CLEAR” key and start from the beginning. When you press the  “CLEAR” key, both the number of prints and the number of sets are cancelled.



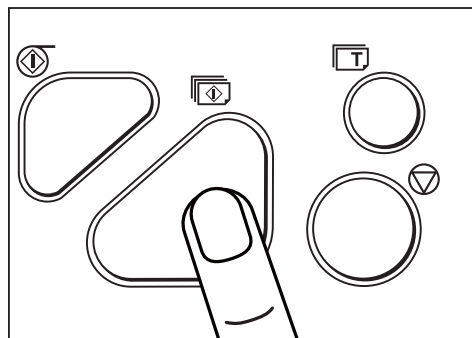
- 5** Press the  “ ∞ ” key.



- 6** Repeat the steps 2 to 5. Up to 15 sets can be entered.

Batch Print

- 7** Press the  "PRINT" key.
Printing starts from the last-entered print and set quantities, and stops after the first set of printouts.



- 8** When a set of print is completed, printing stops.
Insert interleaving paper as a mark, or remove the printed papers.

- 9** Press the  "PRINT" key.
Printing starts again.

- 10** Repeat the steps 8 and 9 until the entered sets are completed.

IMPORTANT

- The  "MASTER MAKING" key will not work until all the sets have been printed.
- Press the  "STOP" key and then the  "CLEAR" key to stop the print run.

Chapter 4

Printing with Various Functions

This chapter describes miscellaneous functions such as the confidential safeguard function, and the print speed and print position adjustments.

.....	
Confidential Safeguard Function	36
Total Counter Display Function	37
Print Speed Adjustment Function	38
Print Position Adjustment Function	39
Online Print Function (Available Only With Interface Kit Installed)	41
Automatic Power Off Function (Option)	42
.....	

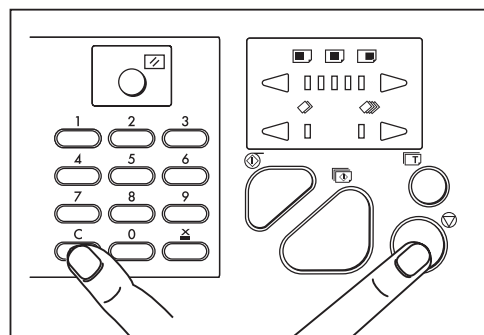
Confidential Safeguard Function

Confidential safeguard function, which prevents printing unless master making has been completed, is a simple means of prohibiting others from printing sensitive documents.

IMPORTANT

- When confidential safeguard function is ON, printing cannot be performed with the  "PRINT" key or  "TEST PRINT" key.
Other operations can be performed as normal.
- Turning the power OFF does not turn Confidential Safeguard function OFF.
- Once master making is carried out, Confidential Safeguard function is cleared.
- Master making still functions even if Confidential Safeguard function is ON.

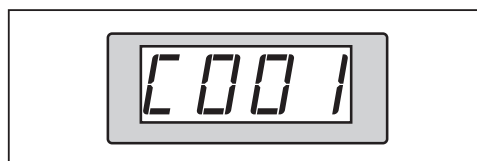
- 1 Press the  "STOP" key while also pressing the  'CLEAR' key.
The machine beeps and the Confidential Safeguard function is activated.



- 2 Press the  "PRINT" key and the  "TEST PRINT" key to check that no print is made.

REFERENCE

- While the Confidential Safeguard function is ON, the message "C001" is displayed on the Counter/Error display panel and the machine will not print when the  "PRINT" key or the  "TEST PRINT" key is pressed.
- When you want to cancel the Confidential Safeguard function, perform "master making" by pressing the  "MASTER MAKING" key.



IMPORTANT

While the Confidential Safeguard function is ON, this function is not set to OFF unless making a master.

Total Counter Display Function

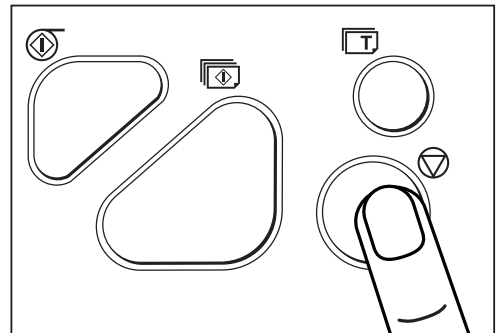
This function displays the total numbers of prints and masters on the Counter/Error display panel.

- 1 Check that the machine is not printing.

IMPORTANT

- If the machine is printing, press the  "STOP" key to stop the print run.

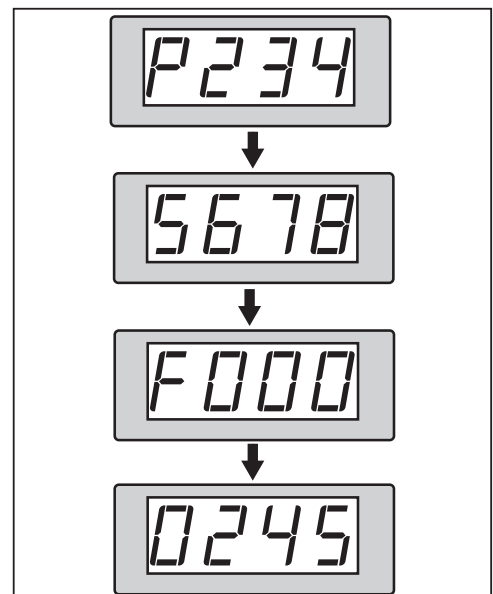
- 2 Press the  "STOP" key.
The total numbers of prints and masters are displayed while the  "STOP" key is pressed and held.



The numbers of prints and masters are displayed on the Counter/Error display panel.

Example:

In this example, the total number of prints is 2345678, and the total number of masters is 245.



4

Printing with Various Functions

Print Speed Adjustment Function

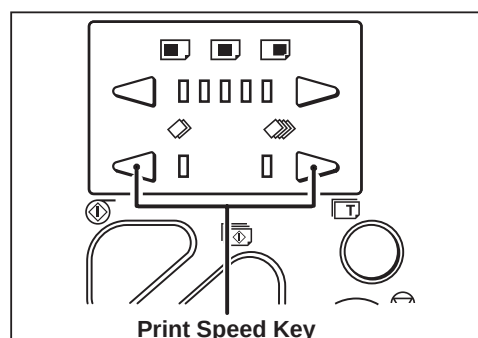
Print speed can be adjusted in 2 steps, 60 pages or 90 pages per minute.
The default setting when the power is turned ON is about 60 pages per minute (standard speed).

REFERENCE

- Paper jam may occur more frequently and the paper stacking may deteriorate at high and low speeds with certain types of paper and with certain image.
Use the "LOW" or "HIGH" key to select the optimum print speed.
- The prints may be slightly lighter at high speeds and slightly darker at slow print speeds.
- You can adjust the print speed while the machine is printing.

- 1 Press the ◀ "LOW" or ▶ "HIGH" key to adjust the speed.

Press the ◀ "LOW" key to decelerate printing.
Print speed indicator lamp moves to the left.
Press the ▶ "HIGH" key to accelerate printing.
The print speed indicator lamp to the right.



REFERENCE

To return to Standard Mode (about 60 pages per minute), use one of the following two methods:

- Press the ◀ "LOW" key to move the speed indicator lamp to the "LOW".
- Press the  "RESET" key. In this case, all settings are reset to Standard Mode.
(See Page→P.11 "Standard Mode")

Do not press the  "RESET" key while printing.

Print Position Adjustment function

After "master making" has finished, you can fine-tune the position of the printed image in $\pm 10\text{mm}$ in the horizontal direction.

REFERENCE

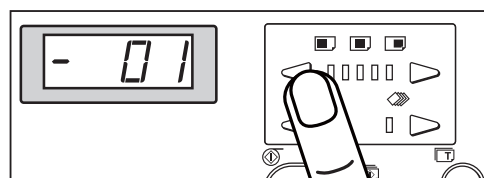
- You can adjust the print position while the machine is printing.

- Press the ◀ or ▶ "PRINT POSITION" key to adjust print position.

Each time the ◀ or ▶ "PRINT POSITION" key is pressed, the print position indicator lamp moves and the display on the Counter/Error display panel changes.

Print position changes smoothly while the ◀ or ▶ "PRINT POSITION" key is pressed and held.

If the key is not pressed for a certain time (1.5 seconds), the screen will return to the set initial one.

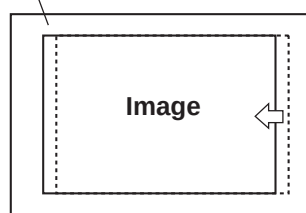


- To move print position to the left direction, press the ◀ key.

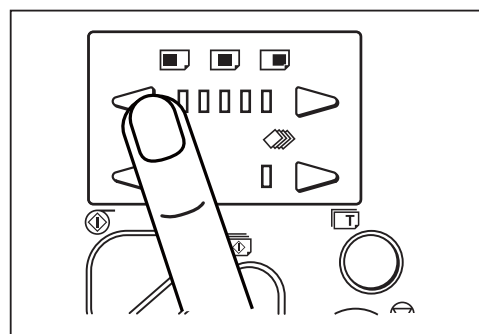
Display on the Counter/Error display panel

0→1→2→3→4→5→6→7→8→9→10

Paper



⇒ Direction of paper movement



- To move print position to the right, press the ▶ key.

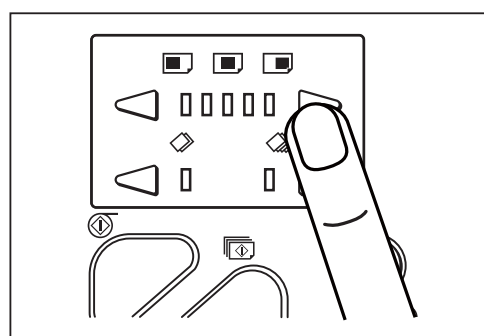
Display on the Counter/Error display panel

0→1→2→3→4→5→6→7→8→9→10

Paper



⇒ Direction of paper movement



Continue Page ...

4

Printing with Various Functions

REFERENCE

To return to standard, use one of the following two methods:

- Press the ◀ or ▶ “PRINT POSITION” key several times to adjust print position to “0”.
- Press the  “RESET” key. In this case, all settings are reset to Standard Mode.
(See Page→P.11 “Standard Mode”)
- Do not press the  “RESET” key while printing.

Online Print Function (Available Only With Interface Kit Installed)

This function allows you to make prints of documents using personal computer.

IMPORTANT

- PC interface kit is required to connect this machine to a personal computer.
- Please contact our serviceperson on information regarding installation and settings.

1

Check that the standard screen is displayed.

2

Use the print command of the computer applications according to the manual.
"Master making" and "Printing" start automatically.

REFERENCE

When "master making" ends and "printing" starts, you can again use the keys on the control panel.

4

Printing with Various Functions

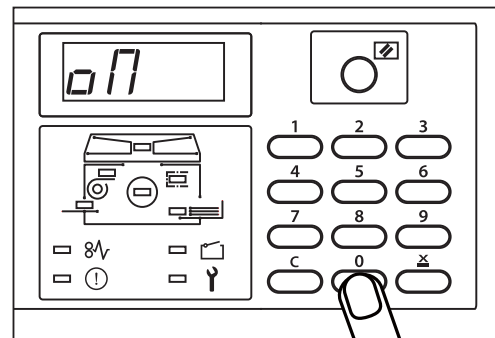
Automatic Power OFF Function (Option)

This function automatically turns off the machine when the machine has not operated for a specified period of time.

IMPORTANT

Automatic Power OFF function does not work when an error has occurred.

- 1 Press the  "0" key for a longer time. Automatic Power OFF function is set.



REFERENCE

The specified period of time can be set between 1 to 10 minutes.
When you want to change the time, please contact our serviceperson.

REFERENCE

When you want to turn the Auto Power OFF function to OFF:

- Press the  "0" key for a longer time to set this function to "OFF".

Chapter 5

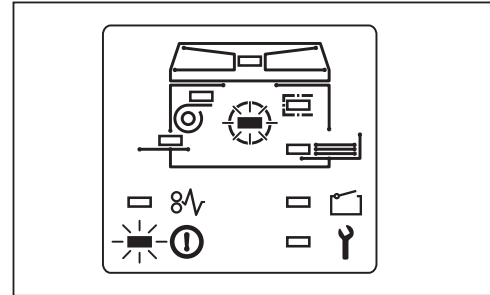
Replacing Consumables

This chapter describes how to supply paper, ink pack, and other consumables.

.....	
Replacing the Ink Pack	44
Replacing the Master	47
Disposing of Used Master	50
Replacing the Drum Unit	51
Removing the Drum Unit	51
Installing the Drum Unit	52
.....	

Replacing the Ink Pack

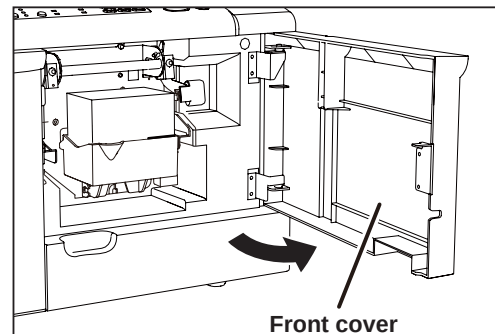
When the remaining ink is low, the OK monitor displays the message as show on the right.
Replace the ink pack according to the following procedure.



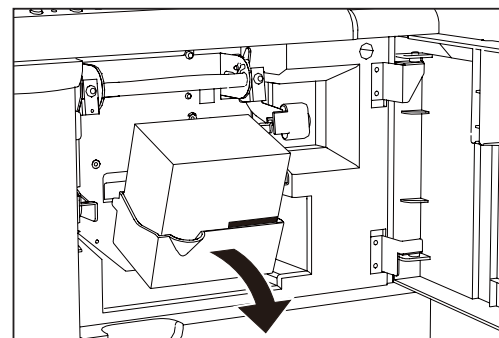
IMPORTANT

- Only use ink packs designed for this machine.
- Dispose of used ink pack according to local environmental regulations.

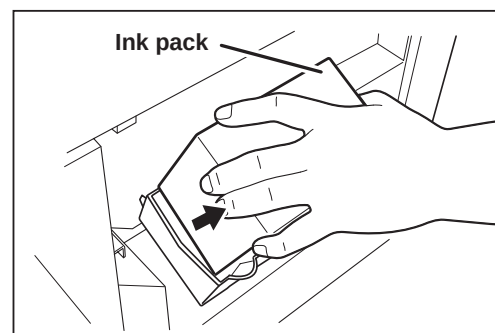
- 1 Open the "front cover".



- 2 Grasp the "ink pack holder" and pull it down.



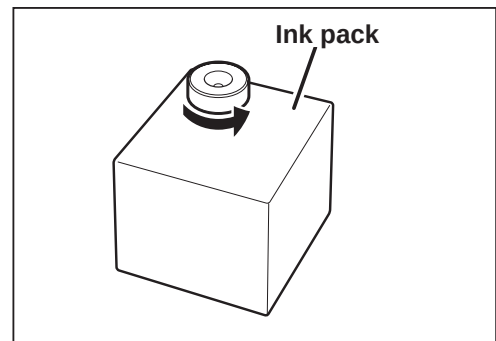
- 3 Lift out the "empty ink pack".



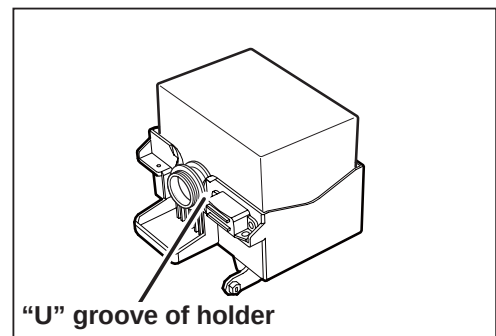
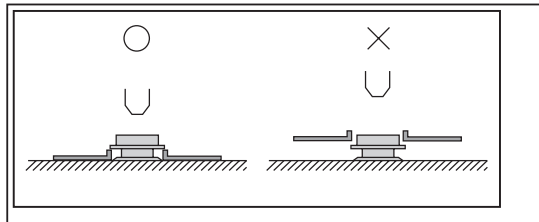
- 4** Remove the "cap" from a new ink pack.

IMPORTANT

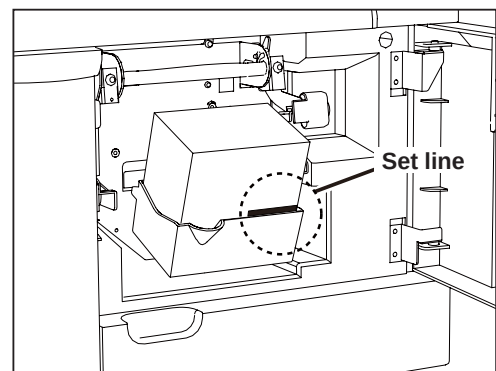
Do not leave an ink pack uncapped for longer than necessary.



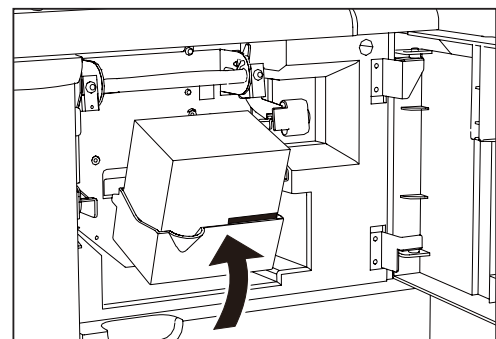
- 5** Insert the "ink pack" so that the groove on the lip fits onto the "U" groove of the holder.



- 6** Push the "ink pack" in to the "set line" on the ink pack.

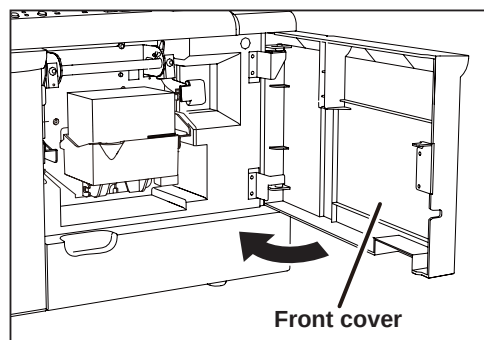


- 7** Push the "ink holder" back.



Replacing the Ink Pack

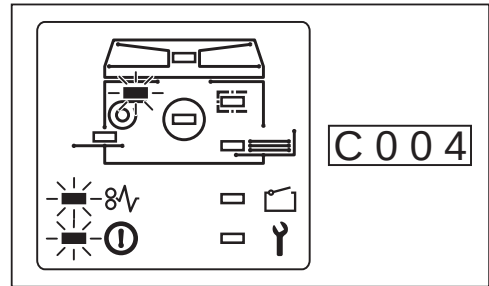
- 8 Close the "front cover".



Replacing the Master

When the master roll is used up, the Counter/Error display panel and the OK monitor displays the messages as show on the right.

Replace the master roll according to the following procedure.



IMPORTANT

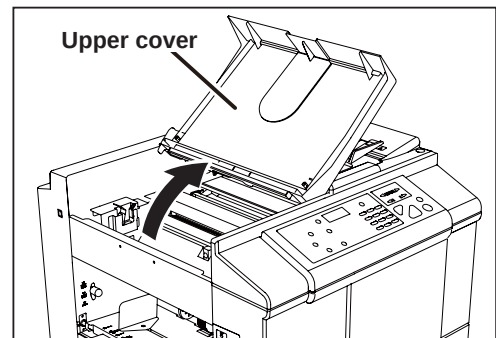
- Only use a master roll designed for this machine.

1 Turn the power OFF.

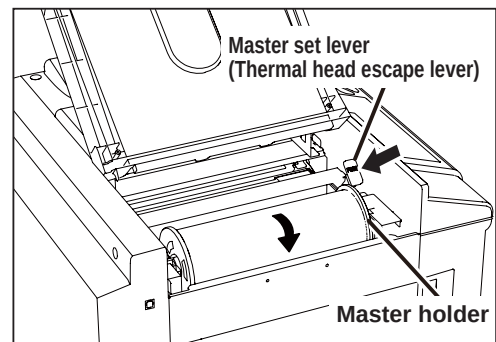
2 Open the "upper cover".

IMPORTANT

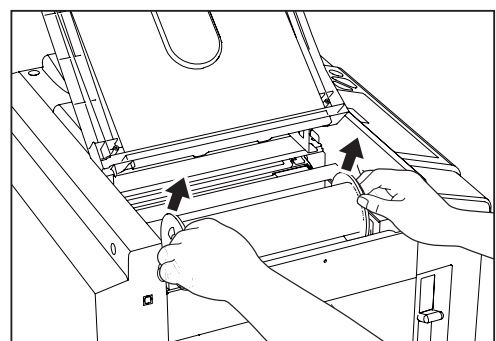
- Do not touch the heat generator of thermal head.
Doing so may cause damages, leading to a malfunction of "master making".



3 Turn the "master holders" toward you while pushing the "master set lever" (thermal head escape lever). Pull out the "master".



4 Lift out the "master roll".



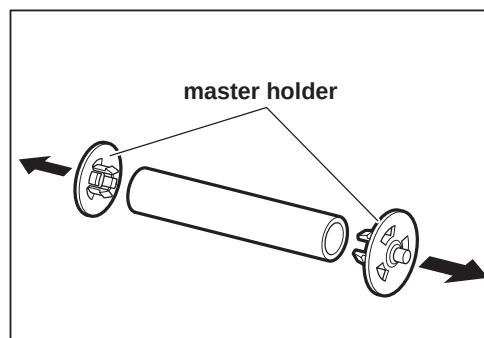
Continue Page ...

5

Replacing Consumables

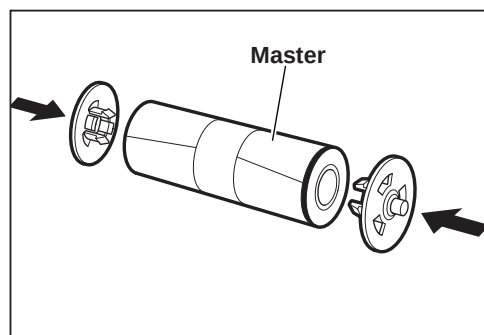
Replacing the Master

- 5** Remove the "master holders" from the master roll.

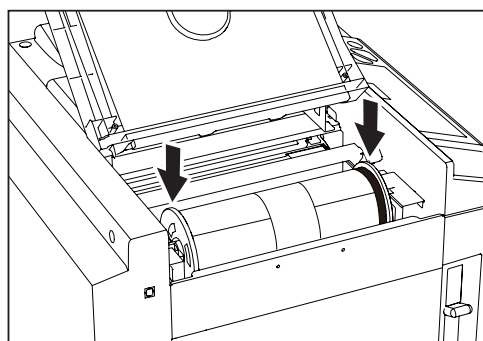


- 6** Take out a "new master" from the bag.

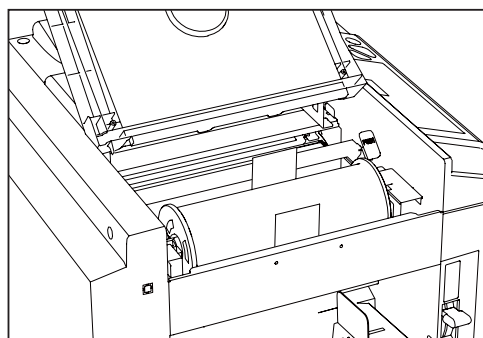
- 7** Insert the "master holders" deeply into both ends of the master roll. (Holders are interchangeable.)



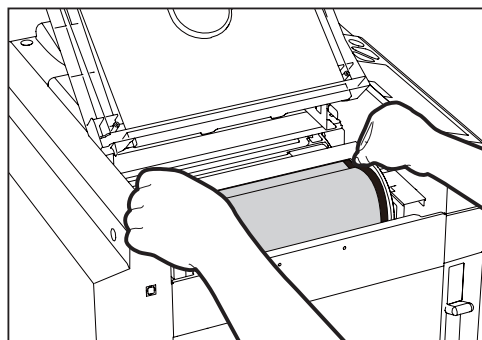
- 8** Set the "master roll" in the direction as shown in the illustration on the right.



- 9** Peel off and pull out the "seal".
(Check that a black line is on the operation side.)



- 10** Pull out the "master" and insert the edge of the master in until it contacts the roller.



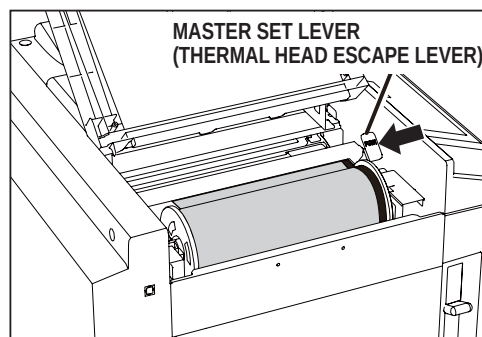
- 11** Turn the power ON.

- 12** Push the "master set lever" (thermal head escape lever). The master will be automatically pulled in.

If the master is not pulled in, gently press it as far as possible.

REFERENCE

- If the master is wrinkled, turn the power OFF and pull out the "master roll", and then set the master again.
The wrinkle on the master can be removed by pushing the "master set lever" (thermal head escape lever) again while setting the master.
- When the 'master set lever' is pushed while the leading edge of the master reaches the master stand-by position, the roller reverses and the master returns.
- When the 'master set lever' is pushed again while the master is correctly set, the roller reverse and the master returns.
- If the leading edge of the master does not reach the master stand-by position within a specified time, the roller reverses and the master returns.

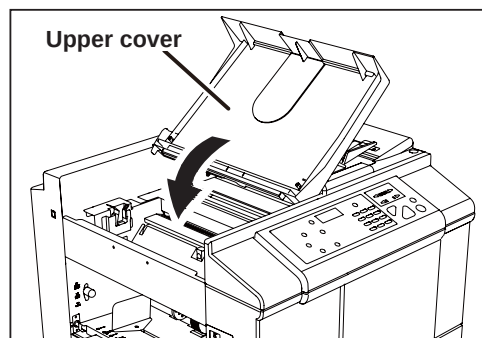


- 13** Close the upper cover.



WARNING

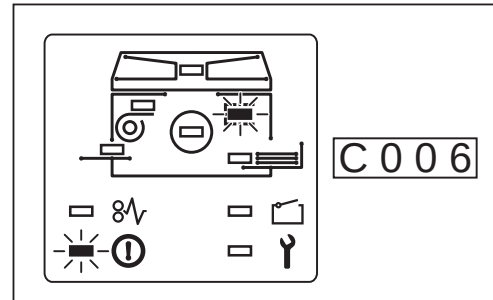
- Do not remove the cover affixed with Warning Label .
- Personnel may be injured by the movable cutter inside the machine.



Disposing of Used Master

When the master ejection box is filled with the used master, the Counter/Error display panel and the OK monitor display the messages as shown on the right.

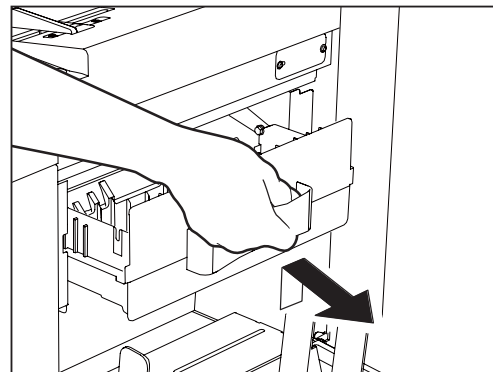
Dispose of the used master in the master ejection box according to the following procedure.



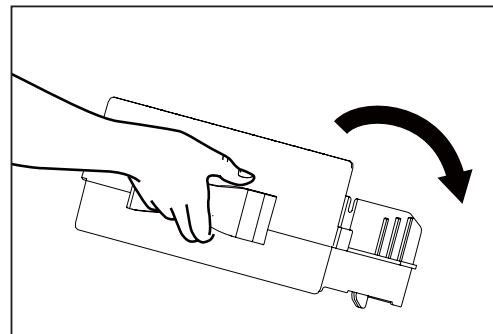
- 1 Hold the "handle" on the master ejection box and take out the "master ejection box" while pulling it toward you, lifting.

IMPORTANT

Make sure to carry the "master ejection box" with holding the "handle". Otherwise the used master in the box may drop and smear your clothes and floor.



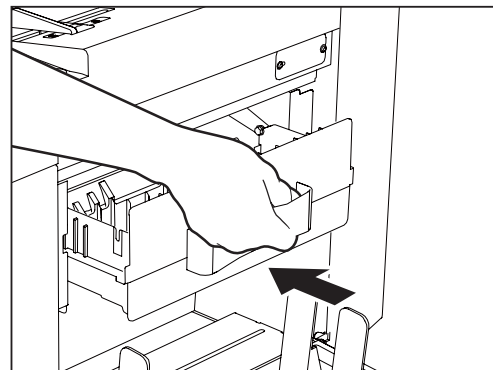
- 2 Dispose of the "used master" in the master ejection box with holding the "handle".



- 3 Insert the "master ejection box" in until it stops inside the machine with holding the "handle".

IMPORTANT

Ink adheres to the master ejection box (used master). Take care to prevent ink from getting onto your clothes.



Replacing the Drum Unit

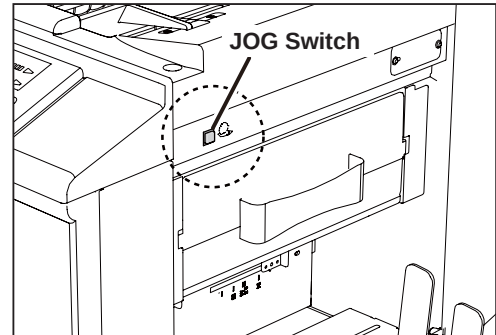
Removing the Drum Unit

- 1 Press and hold the "JOG switch" until the drum comes to a stop with a beep.

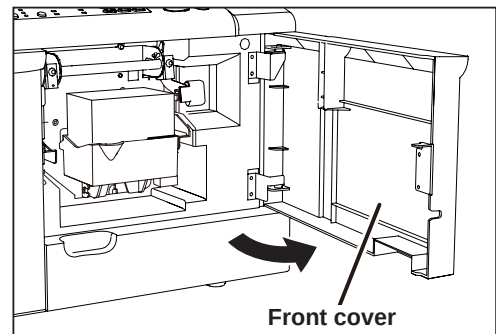


WARNING

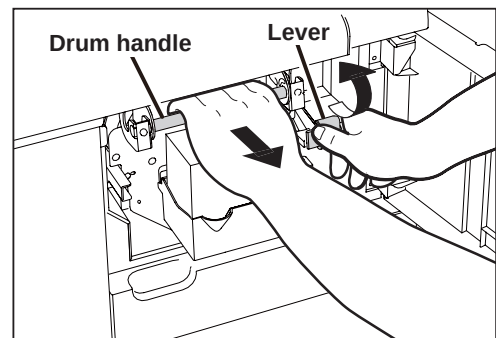
- Do not touch the drum or rollers when you operate the JOG switch.
- Do not put your hands or fingers inside the machine while it is operating. They could be caught up or crushed, resulting in injury.



- 2 Open the "front cover".



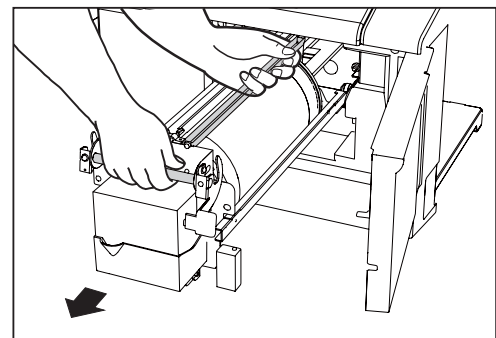
- 3 Lift up the "lever". While lifting it up, pull out the "drum handle" straight toward you until it stops.



- 4 Grip the "drum shaft" at the upper part of the drum with your other hand, and pull out the "drum unit" toward you while slightly lifting the near end of the "drum".

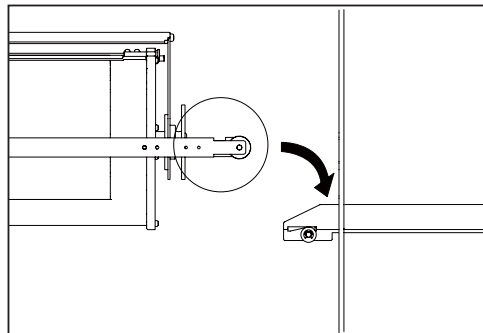
IMPORTANT

- Do not touch the drum surface. Ink may transfer to your clothes.
- Hold the drum unit level and place it on a flat, stable surface.

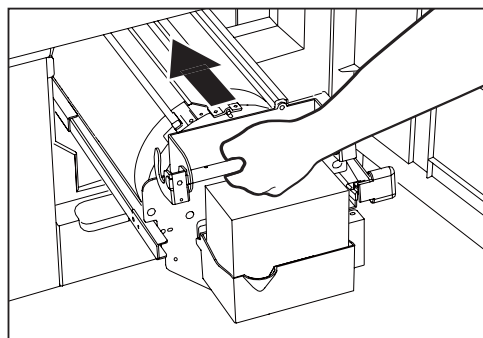


Installing the Drum Unit

- 1 Hold the "drum unit" level and place the "drum guide roller" onto the "rail" in the machine.

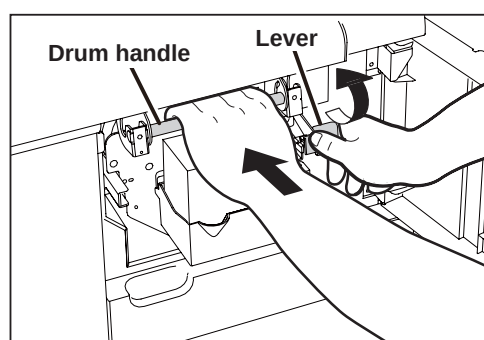


- 2 Release the "drum handle" at the far end of the drum and push the "drum unit" in about 10cm while lifting up the front end slightly.

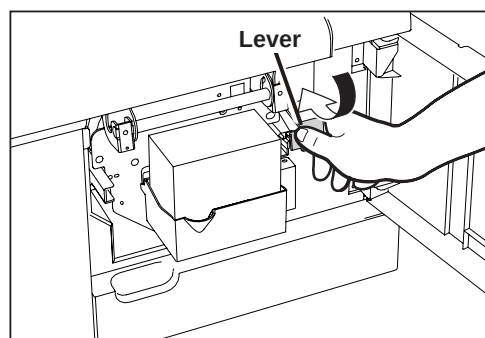


- 3 Hold the "drum unit" level and push it in gently until it comes to a stop.

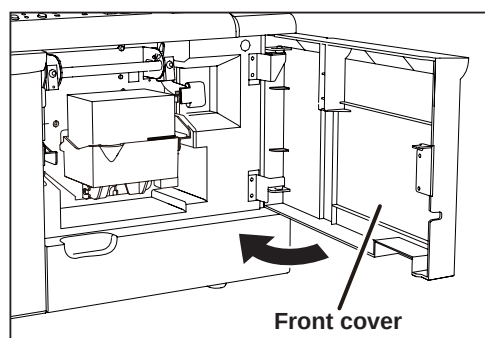
- 4 Lift the "lever" toward you while pushing the drum in.



- 5** Push the "lever".



- 6** Close the "front cover".



Chapter 6

Troubleshooting

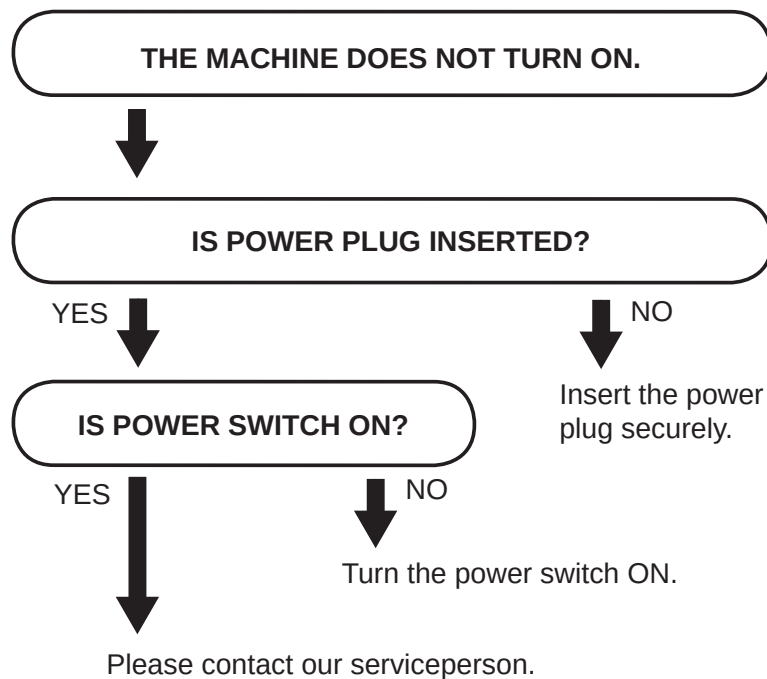
This chapter describes what to do when an error has occurred and how to deal with paper jams and error messages.

.....	
Countermeasures to Troubles	56
Power Does Not Turn ON	56
Master making/Printing is Not Possible	56
Error Messages	57
Supplying or Changing Paper While Printing	60
If Paper Runs Out While Printing	60
Supplying Paper While Printing	60
Paper Jams	62
Removing a Paper Jam on the Feed Tray Side	62
Removing a Paper Jam on the Print Tray Side	63
When a "Master Ejection Error" Has Occurred	66
When a "Master Setting Error" Has Occurred	68
.....	

Countermeasures to Troubles

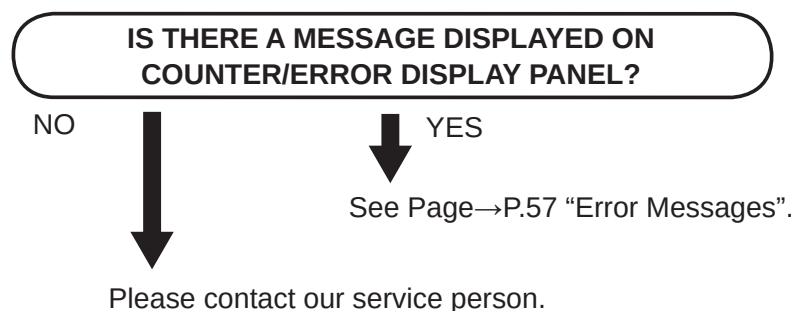
Power Does Not Turn ON

If the power does not turn ON, check the following.



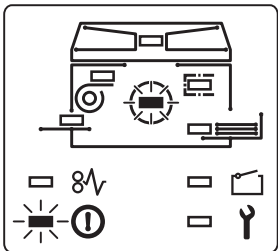
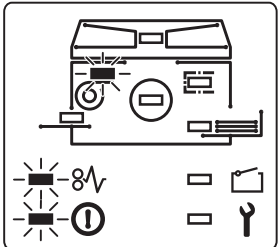
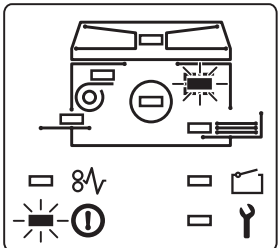
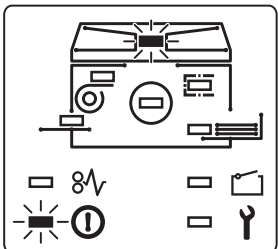
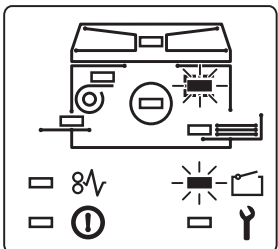
Master making/Printing is Not Possible

If master making/printing is not possible, check the following.

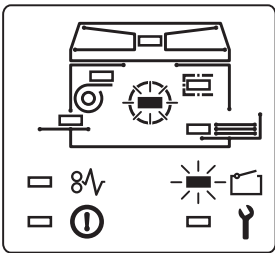
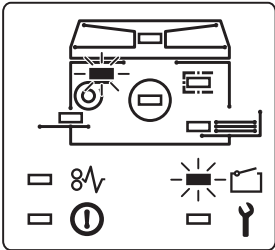
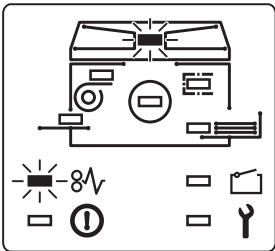
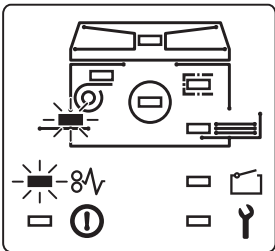
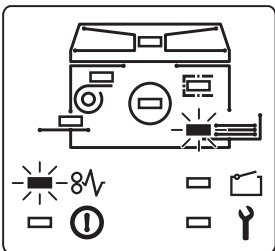


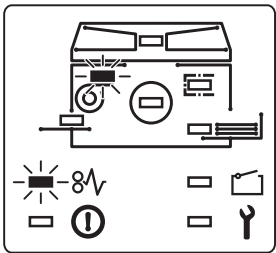
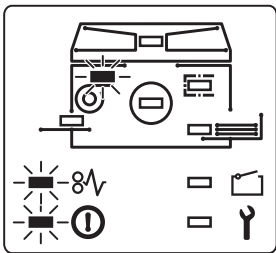
Error Messages

The Counter/Error display panel and the OK monitor show messages and countermeasures. When a message has appeared, take appropriate countermeasures according to the solution in the table below. Message is displayed either both on the Counter/Error display panel and the OK monitor, or only on the OK monitor.

Message	Cause and Solution
	Cause : There is no ink. Solution : Replace the old ink pack with a new one. (See page→ P.44 "Replacing the Ink Pack")
	Cause : There is no master. Solution : Replace the master roll with a new one. (See page→P.47 "Replacing the master")
	Cause : The master ejection box is full. Solution : Dispose of the used master. (See page→P.50 "Disposing of Used Master")
	Cause : There is no document. Solution : Set a document. Press the  "STOP" key to clear the display.
	Cause : The master ejection box is not installed or is not installed correctly. Solution : Install the master ejection box correctly.

Error Messages

Message	Cause and Solution
	Cause : The front cover is open or a drum is not installed. Solution : Close the front cover. Install a drum in the machine. See Page→P.51 "Replacing the Drum Unit")
	Cause : The upper cover is open. Solution : Close the upper cover.
	Cause : The document is jammed on the ADF. Solution : Remove the jammed document.
	Cause : There is no paper on the feed tray. The feed tray is not set. Paper jam has occurred in the feed tray. Solution : Load the feed tray with printing paper. See Page→P.16 "How to set paper") Lift the paper set lever. Check the feed tray to remove the jammed paper. See Page→P.62 "Removing a Paper Jam on the Feed Tray Side"
	Cause : Paper jam has occurred on the print tray side. Solution : Check the print tray side to remove the jammed paper. See Page→P.63 "Removing a Paper Jam on the Print Tray Side"

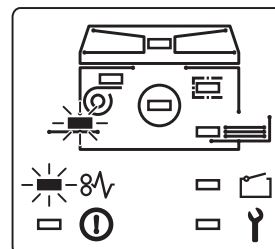
Message	Cause and Solution
	Cause : A trouble has occurred in the process of master making. Solution : Open the upper cover and remove the remained master in the master feed section and set master roll properly. See Page→P.68 Removing a "Master Setting Error"
	Cause : This is not proper master roll. There are several types of master depending on models. Solution : Check master roll No. and set correct master roll.

Message	Cause and Solution
C 0 0 0	Cause : The upper cover or front cover is open due to an error. The master ejection box is not installed correctly. Solution : Close the upper cover and front cover. Install the master ejection box correctly.
C 0 0 1	Cause : Printing cannot be performed. Confidential Safeguard function is ON. Solution : This message is displayed if the  "PRINT" key or  "TEST PRINT" key is pressed without making a master. Perform "master making" first.
C 0 0 3	Cause : This message is displayed when the  "MASTER MAKING" key is pressed while printing is not complete. Solution : Either press the  "PRINT" key to resume printing, or press the  "CLEAR" key first and then press the  "MASTER MAKING" key.
E * * *	Cause : An error has occurred inside of the machine. Solution : Turn off the power and then turn on the power again after a few seconds. If the problem still persists, take note of error code (E***) and contact our serviceperson.

Supplying or Changing Paper While Printing

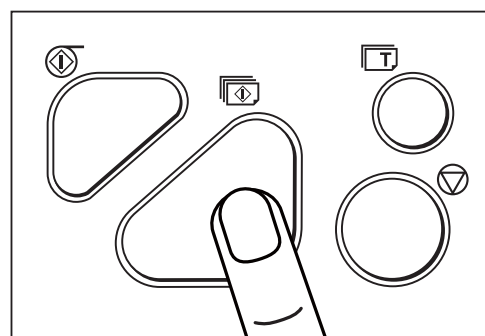
If Paper Runs Out While Printing

- 1 If paper runs out while printing, printing stops and a message is displayed on the OK monitor. Follow the procedure below to set paper.



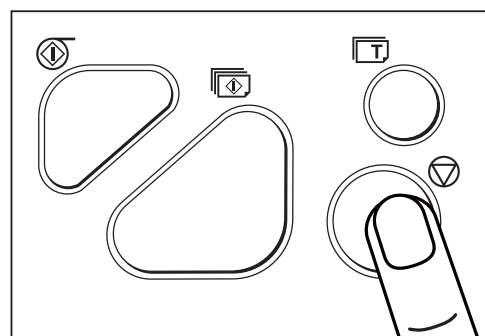
- 2 Set papers. See Page→P.16 "How to set papers"

- 3 Press the  "PRINT" key. Printing starts again.

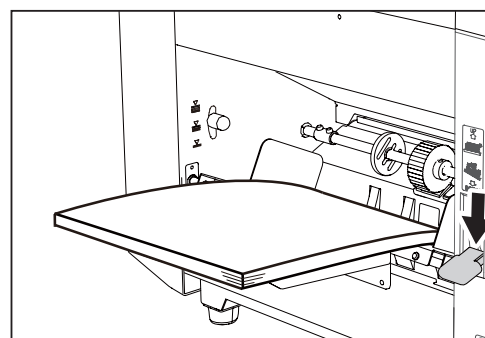


Supplying Paper While Printing

- 1 Press the  "STOP" key. Printing stops.



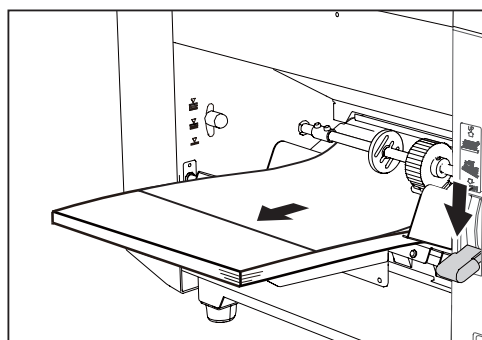
- 2 Lower the "paper set lever".



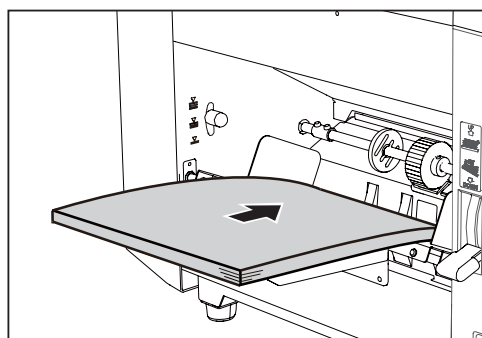
Supplying or Changing Paper While Printing

IMPORTANT

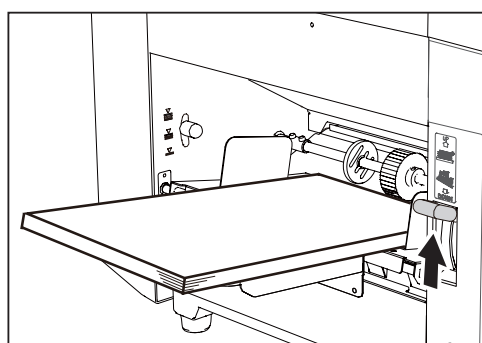
- If the paper remains under the feed roller, pull it out and align it with the stack.



- 3** Align the stack to be added and place it on the top of the existing stack. Push the stack lightly toward the machine.



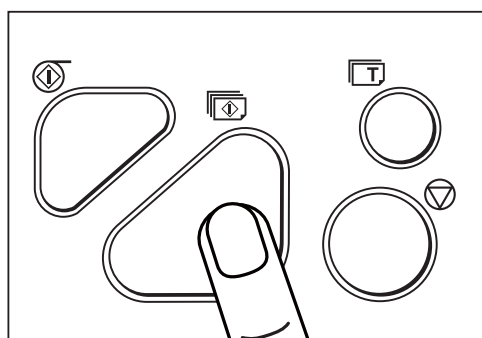
- 4** Raise the "paper set lever" to set the feed tray.



- 5** Press the  "PRINT" key. Printing starts again.

REFERENCE

When the  "STOP" key is pressed, printing stops.



6

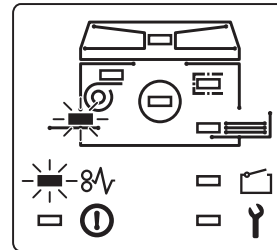
Troubleshooting

Paper Jams

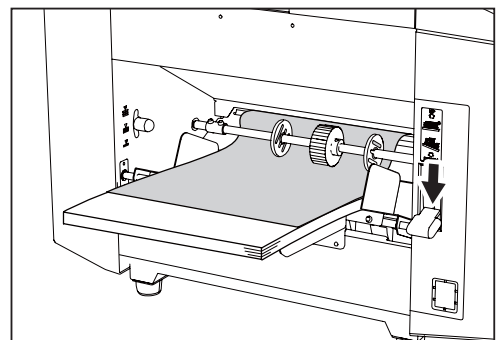
Removing a Paper Jam on the Feed Tray Side

When a paper jam has occurred on the feed tray side, the message shown on the right is displayed on the OK monitor.

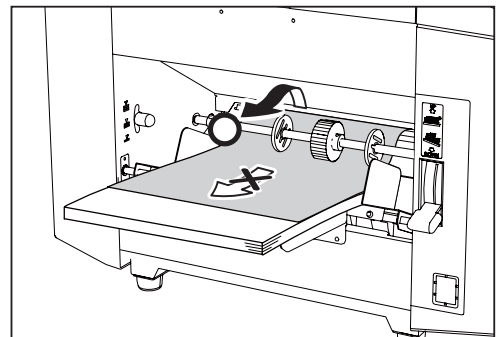
Follow the procedure below to remove the jammed paper.



- 1 Push down the "paper set lever".



- 2 Pull out the "jammed paper" as shown in the illustration.

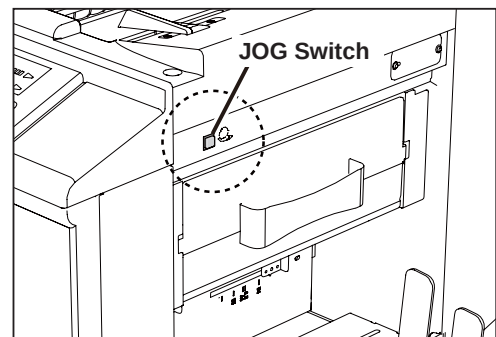


- 3 Press the "JOG switch" until the drum comes to a stop with a beep.



WARNING

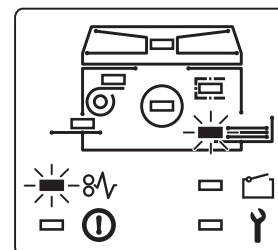
- Do not touch the drum or rollers when you operate the JOG switch.
- Do not put your hands or fingers inside the machine while it is operating. They could be caught up and crushed, resulting in injury.



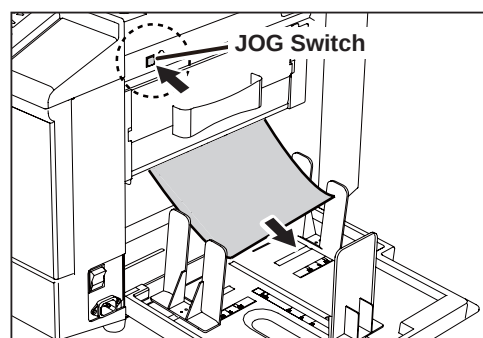
Removing a Paper Jam on the Print Tray Side

When a paper jam has occurred on the print tray side, the message shown on the right is displayed on the OK monitor.

Follow the procedure below to remove the jammed paper.



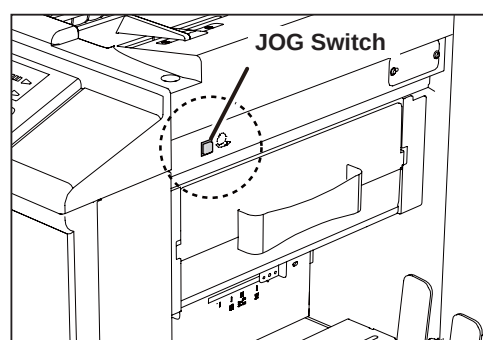
- 1 Remove the "jammed paper".
Press the "JOG switch" to eject the partially printed paper.



- 2 Press the "JOG switch" until the drum comes to a stop with a beep.

WARNING

- Do not touch the drum or rollers when you operate the JOG switch.
- Do not put your hands or fingers inside the machine while it is operating.
They could be caught up and crushed, resulting in injury.



Paper Adhering to Drum

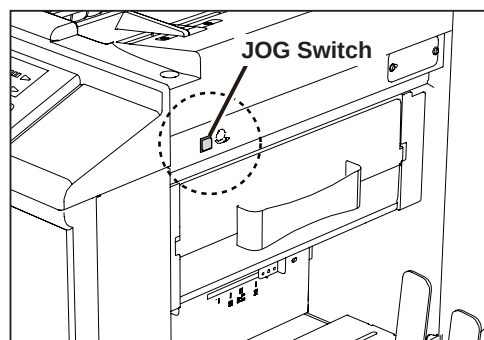
If a paper has adhered to the drum, follow the procedure below to remove it.

- 1 Press the "JOG switch" until the drum comes to a stop with a beep.



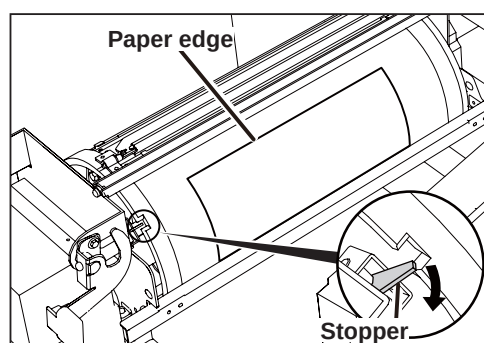
WARNING

- Do not touch the drum or rollers when you operate the JOG switch.
- Do not put your hands or fingers inside the machine while it is operating. They could be caught up or crushed, resulting in injury.

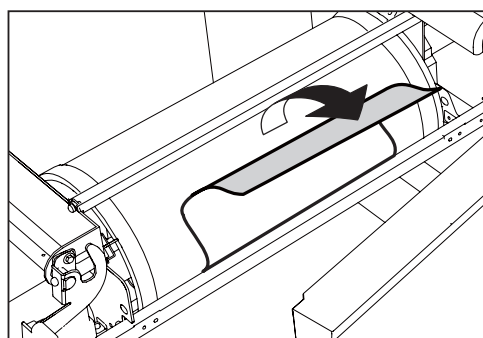


- 2 Pull out the "drum unit".
See Page→P.51 "Removing the Drum Unit"

- 3 Lift up the "drum stopper".
Turn the "drum" by hand to find the edge of the paper and then stop at the position as shown in the illustration.



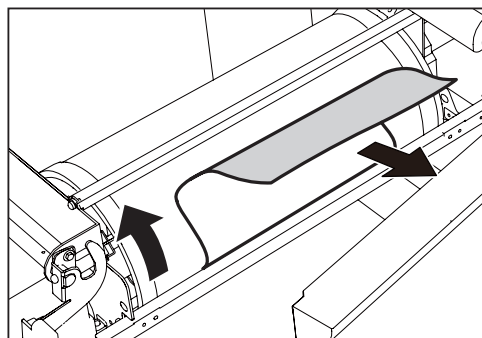
- 4 Peel off the "edge of the paper" from the drum.



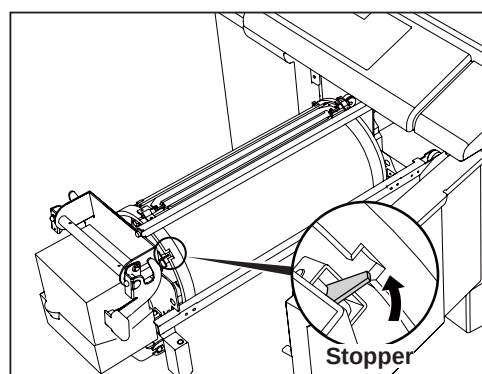
- 5 Peel off the "paper" by turning the drum by hand while pulling the paper.

IMPORTANT

- Make sure that the peeled paper does not stick to your clothes.



- 6 Turn the "drum" by hand until the "drum stopper" fits into the groove.



- 7 Set the "drum unit".
See Page→P.52 "Installing the Drum Unit"

- 8 Perform "master making" again.

When a “Master Ejection Error” Has Occurred

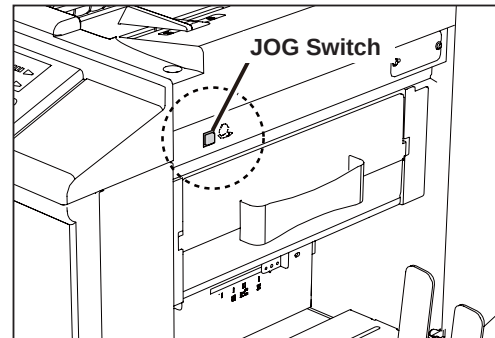
When the old master remains on the drum, causing master ejection error, follow the procedure below to remove it.

- 1 Hold the "JOG switch" down until the drum comes to a stop with a beep.



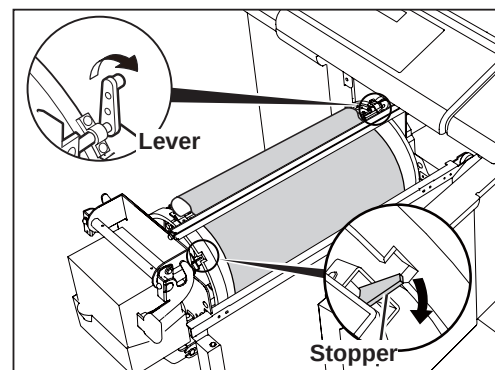
WARNING

- Do not touch the drum or rollers when you operate the JOG switch.
- Do not put your hands or fingers inside the machine while it is operating. They could be caught up and crushed, resulting in injury.

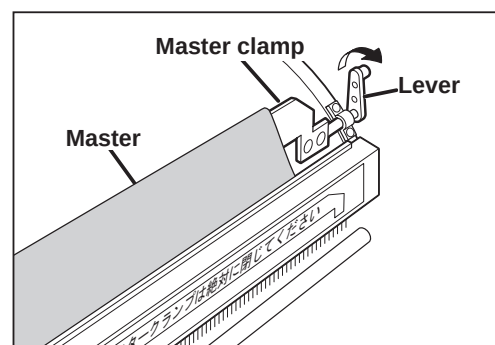


- 2 Pull out the "drum unit".
See Page→P.51 “Removing the Drum Unit”

- 3 Lift up the "drum stopper", and turn the "drum" by hand to set the lever in 4 to an easily operable position.



- 4 Lift the "lever" toward you.
The master clamp opens and the edge of the master will be released from the clamp.
If the master is stuck, release it manually.

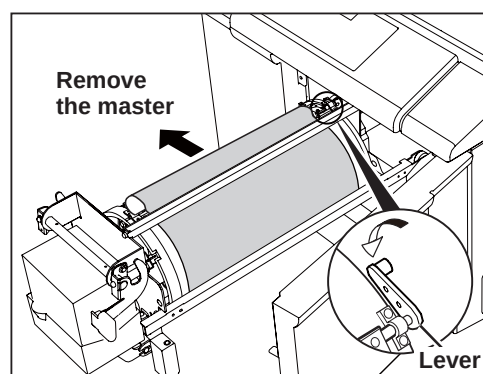


Removing a "MASTER EJECTION ERROR"

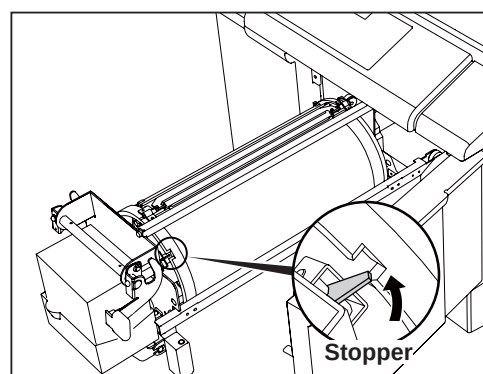
- 5 Return the "lever" to its original position. Turn the "drum" by hand to remove the "master". Continue the above steps until the "master" is removed completely.

IMPORTANT

- Dispose of the old master, making sure that it does not touch your clothes.

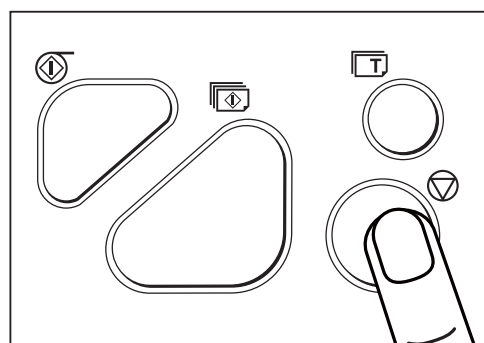


- 6 Turn the "drum" by hand until the "drum stopper" fits into the groove.



- 7 Set the "drum unit".
See Page→P.52 "Installing the Drum Unit"

- 8 Press the  "STOP" key.



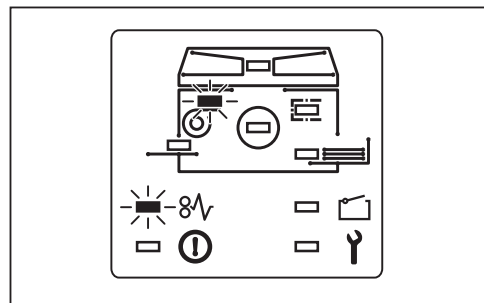
- 9 Perform "master making" again.

6

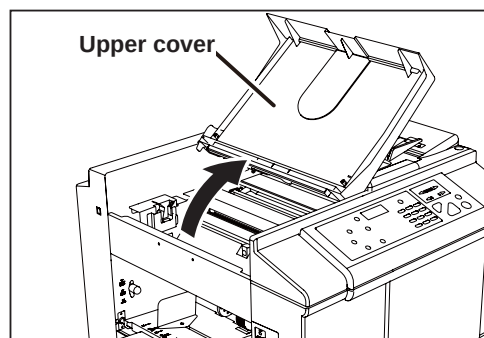
Troubleshooting

When a "Master Setting Error" Has Occurred

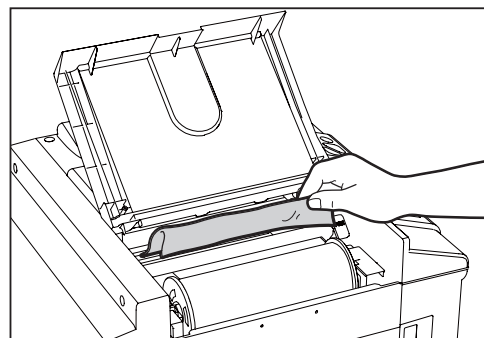
When a "master setting error" has occurred, the message shown on the right is displayed on the OK monitor. Follow the procedure below to remove the jammed master and perform "master making".



- 1 Open the "upper cover".

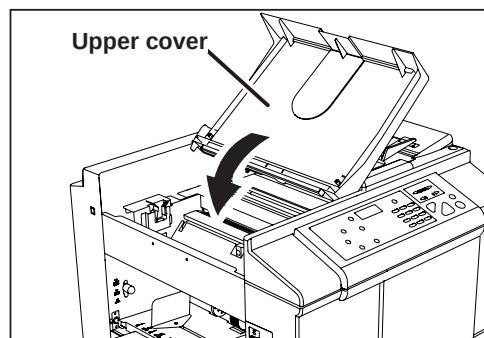


- 2 Remove the "master" left in the master feeder.



- 3 Turn the power OFF and pull out the "master". Turn Power ON and set the "master" again.

- 4 Close the "upper cover".



- 5 Perform "master making" again and then perform "printing".

IMPORTANT

- If the  "PRINT" key is pressed without "master making", message "C002" is displayed.

Chapter 7

Maintenance

This chapter describes how to maintain the machine.

.....	
Daily Maintenance	72
.....	

Daily Maintenance

◦How to maintain the machine

Check the machine periodically to maintain its performance.



WARNING

- Before cleaning, be sure to turn the power off, wait until the machine cools off and unplug the power cord. Otherwise, fire or electric shock may occur.
- Never remove covers on the machine or modify them. Do not spill water or any liquid inside of the machine. It may cause fire or electric shock. If it happens, contact our serviceperson.

Clean the exterior in the following procedures.

1. Use soft cloth with water or mild detergent.
2. Wipe the exterior.
3. Wipe off the liquid with dry soft cloth.

- Gently wipe off the dust on the glass with dry soft cloth.
- Gently wipe off the dust on the Panel with dry soft cloth. Never use wet cloth. It may cause damage.



WARNING

- Never use alcohol or solvent cleaner. It may tarnish or damage the exterior finish.
- Do not put diluted petroleum or insecticide. It may cause fire.

Dust accumulation may cause the machine to malfunction. Clean it periodically. Contact our dealer as for cleaning of inside of the machine.

Chapter 8

Specifications

This chapter lists the machine specifications.

.....	
Specifications	74
.....	

Specifications

Product name/ model No.	Duprinter DP-A120
Model	Table top
Master making method	Thermal digital master making
Master making interval	45 seconds
Resolution	Scan (input) resolution: 300dpi×360 dpi Print (output) resolution: 300dpi×360 dpi *(Master punch density: 300dpi×360dpi)
Scanning method	Automatic document feeder(ADF)
Document weight	64gsm - 128gsm 17lb - 34lb(bond)
Document capacity	1 sheet
Printing method	Stencil print
Document type	Sheet
Document size	MAX. 271mm×393mm , MIN. 100mm×148mm MAX. 10.6"×15.5", MIN. 4"×6"
Scanning area	MAX. 250mm×350mm (11.4"×16.6")
Image area	MAX. 250mm×350mm (11.4"×16.6")
Feeding capacity	500 Sheet (80gsm)
Stacker capacity	500 Sheet (80gsm)
Paper size	MAX. 271mm× 393mm, MIN. 100mm×148mm MAX. 10.6"×15.5", MIN. 4"×6"
Paper weight	53gsm - 128gsm 14lb - 34lb(bond)
Print speed	60ppm/90ppm (2 steps)
Zoom	<u>European paper sizes</u> 100% Preset reduction/enlargement : 70,81,86,115,122,141% Margin adjustment : 94% <u>U.S. paper sizes</u> 100% Preset reduction/enlargement : 60,64,78,115,129,154% Margin adjustment : 94%
Printing position adjustment	Vertical +/-10mm Horizontal +/-10mm (manual)
Image mode	Text mode/Photograph mode
Contrast control	Master density : 3 steps
Ink supply method	Automatic control (600ml)
Color print	By replacing drum unit

Product name/ model No.	Duprinter DP-A120
Master Feeding method	Roll master automatic feed
Master ejection method	Automatic ejection
Used master capacity	10 masters
Other function	Feed pressure adjustment (3 steps) 2 IN 1 Function
Detection	Master roll detection Used master roll full detection Ink detection
Online	Optional USB interface kit (USB2.0 Full-Speed)* Printer driver must be installed in computer. • Windows 2000 Professional • Windows XP Professional/Home Edition • Windows Vista x86 (32-bit) • MacOSX10.3/10.4/10.5 *USB cable must be 3 m or shorter. Optional network server FS-100U (USB LAN unit) • Windows 2000 Professional • Windows XP Professional/Home Edition • Windows Vistax86 (32-bit) • MacOSX10.3/10.4/10.5
Options	Drum unit Small paper stacker guides Auto power OFF kit USB interface USB LAN unit (FS-100U)
Power source	100-240V, 50/60Hz, 0.8-0.4A
Power consumption	43W (Master making), 50W (Printing), 18W (Standing by)
Dimensions	In use : 1050mm (W) × 610mm (D) × 475mm (H) Folded : 760mm (W) × 610mm (D) × 475mm (H)
Weight	41kg
Operating temperature	10 - 30 degrees (C) (50-86 degrees (F))

* Specifications are subject to change without prior notice.

Duplo Corporation

www.duplo.com

4-1-6, Oyama, Sagamihara-shi, Kanagawa 229-1180, Japan

TEL: +81-42-775-3602

FAX: +81-42-775-3606

E-mail: info@duplo.com

Duplo

U5-Y1040
2009.08