

## Perfect Binder GB5000

## **Operating Instructions**



- 1 Preparation Before Using the Perfect Binder
- 2 Perfect Binding
- 3 Troubleshooting
- 4 Remarks
- 5 Appendix

Read this manual carefully before using this machine and keep it handy for future reference. For safe and correct use, be sure to read the Safety Information in this manual before using the machine.

#### Introduction

This manual contains detailed instructions and notes on the operation and use of this machine. For your safety and benefit, read this manual carefully before using the machine. Keep this manual in a handy place for quick reference.

#### Important

Contents of this manual are subject to change without prior notice. In no event will the company be liable for direct, indirect, special, incidental, or consequential damages as a result of handling or operating the machine.

#### Notes:

Some illustrations in this manual might be slightly different from the machine.

Certain options might not be available in some countries. Depending on which country you are in, certain units may be optional. For details, please contact your local dealer.

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## Note to Users in Europe

#### Electromagnetic interference conformance standards governing use of this machine

Class A ITE:

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

### Note to Users in North America

#### Note to users in the United States of America

#### Note:

This equipment has been tested and found to comply with the limits for a Class A digital devices, 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.

#### Caution:

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

#### Note to users in Canada

#### Warning:

This Class A digital apparatus complies with Canadian ICES-003.

#### Remarque concernant les utilisateurs au Canada

#### Avertissement:

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

## Safety Information

When using this machine, the following safety precautions should always be followed.

## Safety During Operation

In this manual, the following important symbols are used:

#### A WARNING:

Indicates a potentially hazardous situation which, if instructions are not followed, could result in death or serious injury.

### A CAUTION:

Indicates a potentially hazardous situation which, if instructions are not followed, may result in minor or moderate injury or damage to property.

## Safety Precautions to be Followed

This section explains safety precautions that should always be followed when using this machine.

#### Environments where the machine can be used

This section explains safety precautions about environments where the machine can be used.

#### A WARNING:

• Keep the machine away from flammable liquids, gases, and aerosols. A fire or an electric shock might occur.

- Keep the machine away from humidity and dust. Otherwise a fire or an electric shock might occur.
- Do not place the machine on an unstable or tilted surface. If it topples over, an injury might occur.
- Make sure the room where you are using the machine is well ventilated and spacious. Good ventilation is especially important when the machine is used heavily.

#### Handling power cords and power plugs

This section explains safety precautions about handling power cords and power plugs.

#### A WARNING:

- Disconnect the power plug (by pulling the plug, not the cable) if the power cable or plug becomes frayed or otherwise damaged.
- Power cords that are damaged, broken, modified, trapped under heavy objects, pulled hard, or bent severely are electric shock and fire hazards.
- Connect the machine to the power source specified in "Specifications" and do not use any other power sources. Connect the power cord directly to a wall outlet and do not use an extension cord. Power sources not specified in "Specifications" and extension cords are electric shock or fire hazards.
- If the power cord is damaged (exposure of the core, disconnection, etc.), contact your service representative to change a new one. Operating the machine with a damaged power cord may cause an electric shock or fire.

- When you disconnect the power plug from the wall outlet, always pull the plug (not the cable).
- To disconnect the power cord, pull it out by plug. Do not drag the cord itself. Doing so may result in damage to the cord, leading to fire or electric shock.
- Make sure the plug is inserted firmly in the wall outlet.

Handling the main machine

This section explains safety precautions about handling the main machine.

#### A WARNING:

- Turn off the power and disconnect the power plug (by pulling the plug, not the cable) if any of the following occurs:
  - You spill something into the machine.
  - You suspect that your machine needs service or repair.
  - The external housing of your machine has been damaged.

 Do not turn the earth leakage circuit breaker from the off to the on position. Otherwise it might lead to an electric shock, fire or smoke, or cause the circuit breakers to trip.

- Protect the machine from dampness or wet weather, such as rain and snow.
- Contact your service representative if you need to lift the machine (such as when relocating it to another floor). Do not attempt to lift the machine without the assistance of your service representative. The machine will be damaged if it topples or is dropped, resulting in malfunction and risk of injury to users. The machine's various handling areas are for service engineer use only. Do not touch these areas.
- Unplug the power cord from the wall outlet before you move the machine.
   While moving the machine, you should take care that the power cord will not be damaged under the machine.
- Do not allow paper clips, staples, or other small metallic objects to fall inside the machine.
- For environmental reasons, do not dispose of the machine or expended supply waste at household waste collection points. Disposal can take place at an authorized dealer.

#### Handling the machine's interior

This section explains safety precautions about handling the machine's interior.

#### A WARNING:

 To avoid hazardous electric shock, do not remove any covers or screws other than those specified in this manual.

#### A CAUTION:

- Fire and breakdown can result from heavy accumulation of dust inside this machine. Consult your service representative for details about and charges for cleaning the machine's interior.
- Keep your hands clear of the perfect binder and paper exit. You can trap your fingers if you do not.

#### Handling the machine's supplies

This section explains safety precautions about handling the machine's supplies.

#### A CAUTION:

• Do not use reuse stapled paper. Do not use aluminum foil, carbon-containing paper or other conductive paper. Otherwise, a fire might occur.

# Position of AWARNING and ACAUTION label

This machine has labels for  $\triangle$ WARNING and  $\triangle$ CAUTION at the positions shown below. For safety, please follow the instructions and handle the machine as indicated.



When removing bound booklets, keep your hands clear of the perfect binder's lower left tray. You might trap your fingers if you do not.

## Information on Electrical & Electronic Equipment for Users in Europe

## Users in the EU, Switzerland and Norway

Our Products contain high quality components and are designed to facilitate recycling. Our products or product packaging are marked with the symbol below.



The symbol indicates that the product must not be treated as municipal waste. It must be disposed of separately via the appropriate return and collection systems available. By following these instructions you ensure that this product is treated correctly and help to reduce potential impacts on the environment and human health, which could otherwise result from inappropriate handling. Recycling of products helps to conserve natural resources and protect the environment.

For more detailed information on collection and recycling systems for this product, please contact the shop where you purchased it, your local dealer or sales/service representatives.

## All Other Users

If you wish to discard this product, please contact your local authorities, the shop where you bought this product, your local dealer or sales/service representatives.

## How to Read This Manual

## Symbols

This manual uses the following symbols:

### A WARNING:

Indicates important safety notes.

Ignoring these notes could result in serious injury or death. Be sure to read these notes. They can be found in the "Safety Information" section of this manual.

### A CAUTION:

Indicates important safety notes.

Ignoring these notes could result in moderate or minor injury, or damage to the machine or to property. Be sure to read these notes. They can be found in the "Safety Information" section of this manual.

## ∰Important

Indicates points to pay attention to when using the machine, and explanations of likely causes of paper misfeeds, damage to originals, or loss of data. Be sure to read these explanations.

## 🖉 Note

Indicates supplementary explanations of the machine's functions, and instructions on resolving user errors.

## 

This symbol is located at the end of sections. It indicates where you can find further relevant information.

## []

Indicates the names of keys that appear on the display panel.

## []

Indicates the names of keys on the control panel.

## Guide to the Perfect Binder

This section lists the names and functions of the parts of the perfect binder.



#### 1. Upper left cover

Open to clear a paper jam.

#### 2. Interposer

Load the cover sheets here. For details about how to load cover sheets, see "Loading Cover Sheets".

#### 3. Interposer unit

Open to clear a paper jam.

#### 4. Glue container

Contains the glue used for perfect binding. For details about how to fill this container, see "Filling the Glue Container".

#### 5. Interposer cover

Open to clear a paper jam.

#### 6. Glue temperature adjustment key

Press this to adjust the glue temperature. The indicator shows the status of the glue temperature:

Lit: heating is finished and you can begin binding

Unlit: the glue will be fully heated in about six and a half minutes at the most Flashing: the glue is being heated

#### 7. Bridge unit front cover

Open to clear a paper jam.

#### 8. Earth leakage circuit breaker

Protects users from electric shock. For details about checking the earth leakage circuit breaker, see "Earth Leakage Circuit Breaker".

#### 9. Waste paper receptacle

Collects the waste created by perfect binding. For details about how to remove the paper waste, see "Removing Paper Waste".

#### 10. Front right cover

Open to clear a paper jam.

#### **11.** Lower right tray

Open to access the waste paper receptacle.

#### 12. LED

Indicates the status of the front right and front left covers:

Unlit: unlocked

Lit: locked

#### 13. Lower left tray

Perfect bound booklets are delivered here. Press the delivery key to open this tray.

#### 14. Delivery key

Press this to open the lower left tray. The indicator shows the status of the lower left tray:

Unlit: In standby mode.

Lit: There are booklets in the tray. Press this key to remove them.

Flashing: The tray mechanism is in operation.

### PReference

p.19 "Loading Cover Sheets"

p.21 "Filling the Glue Container"

- p.43 "Removing Waste Paper"
- p.48 "Earth Leakage Circuit Breaker"

#### 15. Status indicator

This indicator shows the status of the binding process: Unlit: binding is suspended Lit: binding is in progress

#### 16. Front left cover

Open to clear a paper jam.

## 1. Preparation Before Using the Perfect Binder

## **Guide to Perfect Bound Booklets**

This section defines important terms that will help you better understand perfect binding.



#### 1. Book block

The bulk of the booklet, enclosed by the cover sheet.

#### 2. Head edge

The edge that forms the booklet's top end.

#### 3. Cover

The sheet enclosing the book block.

#### 4. Spine

The booklet's bound edge.

#### 5. Tail edge

The edge that forms the bottom end of the booklet.

#### 6. Fore edge

The edge that forms the booklet's opening side.

## Paper

This section lists the paper types and sizes that are supported by the perfect binder, and paper types that are not supported.

## Supported Paper Types and Sizes

The following tables show supported types and sizes of paper for each mode.

Some of the paper sizes listed below might not be supported by your base machine. For details, see the manuals provided with your base machine.

#### **Cover sheets**

Paper type	Paper size	Paper weight
Thick paper, coated paper	• Regular A3, B4 JIS, 12 × 18, 11 × 17	90.0 - 300.0 g/m <sup>2</sup> (23.9 - 79.8 lb.)
	<ul> <li>Custom Width: 257 - 330.2 mm (10.2 - 13.0 inches) Length: 364 - 487.7 mm (14.4 - 19.3 inches)</li> </ul>	

#### 🖉 Note

□ Load cover sheets in the interposer.

□ Load cover sheets in the □ orientation only, not in any other orientation.

#### Book block paper

Paper type	Paper size	Paper weight
Plain paper, recycled paper	<ul> <li>Regular A4 D, B5 JIS D, Letter (8<sup>1</sup>/<sub>2</sub>×11) D, 7<sup>1</sup>/<sub>4</sub>×10<sup>1</sup>/<sub>2</sub> D</li> </ul>	64.0 - 163.0 g/m <sup>2</sup> (17.1 - 43.4 lb.)
	• Custom Width: 257 - 320 mm (10.2 - 12.6 inches) Length: 182 - 228.6 mm (7.2 - 9.0 inches)	

#### 🖉 Note

- □ Load book block sheets into the paper tray.
- $\Box$  Load book blocks in the  $\Box$  orientation only, not in any other orientation.

## **Unsupported Paper Types**

This section lists the paper types that are not supported by the perfect binder.

### ∰Important

□ Do not use the following types of paper. Doing so may cause malfunctions.

- Heavily curled paper
- Paper with staples or clips
- Torn paper
- Paper with holes
- Rough paper
- Smooth paper
- Thin and soft paper
- Label paper
- Paper with penciled characters or images
- Folded paper

### 🖉 Note

Even supported types of paper may cause paper jams or malfunctions if the paper is not in good condition.

## 2. Perfect Binding

## What is Perfect Binding?

Perfect binding is a binding method that applies heated glue to printed sheets to form a book block, encloses the book block in a cover sheet, and trims away excess paper to create neat edges.



You can specify the perfect binding settings using the display panel or the printer driver.

To specify the settings using the display panel, see "Specify the Settings on the Display Panel".

To specify the settings using the printer driver, see "Using the Printer Driver to Specify Perfect Binding Settings".

#### #Important

- Book blocks must be loaded in the D orientation, and cover sheets must be loaded in D orientation. For details, see "Supported Paper Types and Sizes".
- □ If the machine is being used for perfect binding, some functions might not be available. If another job cannot be performed on the machine, wait until the perfect binding job is complete, and then try again.

### 🖉 Note

- When specifying perfect binding, make sure that the number of printed sheets is not smaller than 10.
- □ Perfect binding is possible within the following limitations:
  - Book block size
    10 200 sheets (paper weight: 64.0 80.0 g/m<sup>2</sup>, 17.1 21.3 lb.)
    10 150 sheets (paper weight: 81.0 105.0 g/m<sup>2</sup>, 21.5 27.9 lb.)
    10 sheets (paper weight: 106.0 163.0 g/m<sup>2</sup>, 28.2 43.3 lb., slip sheets only)
  - Spine thickness Up to 23 mm (0.9 inch)
- If the spine of the book block exceeds maximum thickness (23 mm) during binding, the machine stops. Printed sheets are left inside the binder and must be removed by hand.
- Perfect bound booklets are delivered to the lower left tray. Up to seven booklets (of 100-sheet book blocks) can be stacked on the tray.
- The glue requires time to heat (six and a half minutes maximum) before binding can begin. To begin binding quickly, be sure to press the glue temperature adjustment key in advance.
- □ Printing cannot start while the glue temperature adjustment key is unlit or flashing.
- □ If you press the delivery key before binding finishes (before the status indicator goes off), the lower left tray will not open. Press the delivery key during binding (while the status indicator is blinking) to set the tray to open automatically when binding finishes.
- □ While "Perfect Binder Lower Left Tray is full. Remove the paper." is displayed, you cannot perform perfect binding. Remove booklets from the lower left tray.
- □ When removing booklets, be sure to clear the lower left tray completely. You cannot perform perfect binding if there are booklets remaining in this tray.
- Do not print anything on the inner side of the cover sheet (the area glued to the book block). Doing so can prevent the cover sheet and book block from adhering properly.
- □ If you open and close the front right or front left cover to remove jammed paper, binding will be suspended. To resume binding, close the front covers and wait a few minutes. Binding will restart automatically.
- □ If a misfeed occurs during perfect binding, you cannot open the front right and front left covers. Wait until the bound booklet is delivered to the lower left tray, and then open the covers.
- Waste paper produced during perfect binding might collect around the lower left tray. If this happens, clean the area when removing booklets from the lower left tray.

### Reference

- p.12 "Supported Paper Types and Sizes"
- p.22 "Specify the Settings on the Display Panel"
- p.33 "Using the Printer Driver to Specify Perfect Binding Settings"

# Estimating the Thickness of a Booklet's Spine (Back Edge)

Use the following lists to calculate approximate spine thickness and cover sheet length/size.

Note that the length/size of a cover sheet depends on the thickness of the book block's spine.

The following list shows examples for A4 size, 80 g/m<sup>2</sup> (10-micron) paper:

- 10-sheet book block: 1 mm (0.04 inch)
- 30-sheet book block: 3 mm (0.12 inch)
- 50-sheet book block: 5 mm (0.20 inch)
- 80-sheet book block: 8 mm (0.32 inch)
- 100-sheet book block: 10 mm (0.40 inch)
- 200-sheet book block: 20 mm (0.80 inch)

Specify the cover sheet size based on the thickness of the book block's spine. Use the following equation to calculate the length of the cover sheet:

Minimum length of cover sheet (mm/in) =

"length of book block sheet (mm/in)" × 2 + "thickness of spine (mm/in)"

To perfect bind a booklet of the following dimensions, specify a cover sheet length of 440 mm or longer:

- 200-sheet book block: A4 or Letter  $(8^1/_2 \times 11)$
- Spine thickness: 20 mm (0.8 inch)



### 🖉 Note

□ You cannot perfect bind a booklet if the thickness of the book block's spine exceeds 23 mm (0.9 inch).

## Orientation and Binding Position of Covers and Originals

This section explains the orientation and binding positions of covers and originals. Place covers and originals in their natural orientation (i.e. the orientation in which they would be read).

	Cover location	Original location	Binding
	Interposer	ADF	position
Left binding	RR	R –	+ ₽
Top binding	R	<b>R</b> –	→ <b>R</b>
Right binding	RR	<b>R</b> –	+ <b>R</b>

<sup>\*1</sup> Select unreadable orientation in Original Orientation and then select Top binding.

2

## Loading Cover Sheets

This section describes how to load cover sheets into the interposer.

#### #Important

- $\Box$  Load paper in the  $\Box$  orientation.
- Do not place anything on top of or leave documents on the sensor. This may lead to the paper size not being correctly scanned or paper jams.
- While lightly pinching the side fence, align it with the paper size to be loaded.



**2** Load paper face up and neatly stacked. Tightly fit the side fence to the loaded paper.



#### 🖉 Note

- The length/size of cover sheets depends on the thickness of the spine. For details, see "Confirming the Thickness of the Spine (Back Edge) of a Book".
- □ There are two trays on the interposer. Each tray can hold up to 200 sheets of paper. Do not stack paper over the limit mark.
- □ When loading thick paper of 251 g/m<sup>2</sup> or heavier in the interposer trays, make sure the grain of the paper is perpendicular to the feed direction.
- If you are loading sheets that are likely to stick together (such as sheets of coated paper), be sure to fan them thoroughly before loading. Fanning them will help prevent jams and allow them to be fed in one sheet at a time.
- □ The perfect binding process can scratch glossy paper. Bear this in mind if you are using glossy paper for the cover sheets.

#### Reference

p.17 "Estimating the Thickness of a Booklet's Spine (Back Edge)"

BES0079

## Filling the Glue Container

This section explains how to fill the glue container with binding glue.

#### ∰Important

- □ Store binding glue in a cool (-20 to 40°C), dark place, away from moisture, high temperature, direct sunlight, and naked flames.
- □ Keep binding glue out of the reach of children.
- Use of non-recommended glue can result in failed bindings and faulty adhesion of the cover sheet and book block.
- □ To be usable, the glue must first be heated. To begin the heating process, press the glue temperature adjustment key.



- Pull the glue container all the way out.
- Open the double covers.



- Add glue but make sure that the glue does not exceed the limit line.
- Close the double covers.
- Return the glue container to its normal position.

## 🔗 Note

- □ The container can hold up to 380 g (0.83 lb.) of glue (about two of the provided cups).
- You can change the heating time for the glue under "Timer Settings" in "System Settings". For details, see "Changing the Perfect Binding Settings".
- The glue requires time to heat (six and a half minutes maximum) before the binding can begin. To begin binding quickly, be sure to press the glue temperature adjustment key in advance.

### Reference

p.53 "Changing the Perfect Binding Settings"

## Specify the Settings on the Display Panel

You can specify the perfect binding settings using the display panel.

This section explains how to perfect bind originals scanned from the ADF.

You can specify the binding position, cut position, and the finishing size.

To specify the settings from the printer driver, see "Using the Printer Driver to Specify Perfect Binding Settings".

#### Important

- □ The following copier functions are not available when perfect binding output: (Some functions might not be available depending on the model of your machine.)
  - Booklet/Magazine
  - Stack
  - Sort, Rotate Sort
  - Slip Sheet
  - Separation Sheet
  - Folding (Z-fold etc.)
  - Copy Face Up
  - Staple/Staple (Centre)
  - Copying from the bypass tray
  - Auto Paper Select
  - Front Cover
  - Back Cover
  - Designate
  - Interrupt Copy

**1** Place the originals for the book block in the ADF.

### **2** Load cover sheets into the interposer.

For details, see "Loading Cover Sheets".

### **E** Select the paper tray for the book block sheets.

### Press [Output/Customize Function/Finisher].

Auto Density			_
Mixed Sizes			
Thin Paper			
Batch			
Original Orientation			
Reverse Orientation	Output/ Custornize Function/ Finisher	Stamp	Cover/ Slip She
		10333	System Statu

**5** Press [Perfect Binding].

### **6** Select one of the binding positions.



You can also specify the binding position and cut position.

**2** Specify a binding position and a cut size if necessary.

### After making all settings, press [OK].

**9** Press the **[Start]** key.

Glue heating begins.

When the glue is hot enough, binding starts.

## Press the delivery key when the status indicator goes off and the delivery key indicator lights up.



The lower left tray opens.

## **1** Remove bound booklets and close the lower left tray.

### 🖉 Note

□ When you select perfect binding mode, Sort is automatically selected.

### PReference

p.19 "Loading Cover Sheets"

## Cutting the Fore Edge

The fore edge of the copies is cut after the copies are bound.



1. 139.7 - 216 mm (5.50 - 8.50 inches)

#### 2. 6 - 50 mm (0.24 - 1.96 inches)

There are two ways of specifying the fore edge:

#### Specify Cut Size

Specify the distance from the fore edge where you want the cut to be.

#### Specify Finishing Size

Specify the size of the finished bound booklets to determine the position where you want to cut the fore edge.

#### 🖉 Note

□ When specifying the fore edge cut, be sure that the cut is at least 6 mm (0.24 inch) from the fore edge.

#### Specifying the position of the cut

Specify the distance from the fore edge where you want the cut to be.

### Press [Cut Fore Edge].

II II		
Left Bind		Ca
Do not Cut		
Cut Fore Edge		
Cut 3 Edges		
	10-0-0-0	
	System Status	Job List

**2** Make sure that [Specify Cut Size] is selected.

 ${f B}$  Enter the cut length using the number keys, and then press [#].

Left Bind		Can
Do not Cut	Fore Edge	
Cut Fore Edge	mm -+ +	
Cut 3 Edges		Clear
Specify Cut Size		(#
Specify Finishing Size		
	System Status	Job List

To change the value you entered, press [Clear] and then enter a new value.

### Press [OK] twice.

#### 🖉 Note

□ You can adjust the position of the fore edge cut from 6 to 50 mm (0.24 to 1.96 inches) in 0.1 mm (0.01 inch) increments.

#### Specifying the finishing size

Specify the size of the finished bound booklets to determine the position where you want to cut the fore edge.

### Press [Cut Fore Edge].

Left Bind	[	Can
Do not Cut		
Cut Fore Edge		
Cut 3 Edges		
		_
	system Status Job List	_

Press [Specify Finishing Size].

Enter the required finishing size using the number keys, and then press [#].

CF CF				
Left Bind				Car
Do not Cut				
Cut Fore Edge	<b>⊬</b> →			
Cut 3 Edges		↔ Horizo	ontal . mm	Clear
Specify Cut Size				(#)
Specify Finishing Size				
	MANNA Sy	stem Status	Job I	ist

To change the value you entered, press **[Clear]** and then enter a new value.

### Press [OK] twice.

#### 🖉 Note

□ You can adjust the finishing size from 139.7 to 216 mm (5.50 to 8.50 inches) in 0.1 mm (0.01 inch) increments.

## **Cut Three Edges**

Three edges of the book block are cut after it is bound.



- 1. 6 50 mm (0.24 1.96 inches)
- 2. 6 28 mm (0.24 1.10 inches)
- 3. 139.7 216 mm (5.50 8.50 inches)
- 4. 201 297 mm (7.92 11.69 inches)

There are three ways of specifying the size of a booklet by cutting the edges:

Specify Cut Size

Specify the position of the cut for each edge.

#### Specify Finishing Size (regular size)

Specify the size of the finished bound booklets and cut three edges to a regular size.

#### Specify Finishing Size (custom size)

Specify the size of the finished bound booklets and cut three edges to a custom size.

2

#### Specify the position of the cut

Specify the position of the cut for each edge.

#### Press [Cut 3 Edges].

PP		
Left Bind		Can
Do not Cut		
Cut Fore Edge		
Cut 3 Edges		
	System Status Job List	

**2** Make sure that [Specify Cut Size] is selected.

Enter the position of the cut for each edge using the number keys, and then press [#].

Left Bind		Can
Do not Cut Cut Fore Edge	Fore Edge mm	
Cut 3 Edges	Head Loge mm [	Clear
Specify Cut Size Specify Finishing Size	mm	#
	System Status Job Li	st

Press **[Head Edge]**, and then enter the cut position for the head edge using the number keys.

Press **[Tail Edge]**, and then enter the cut position for the tail edge using the number keys.

To change the value you entered, press [Clear] and then enter a new value.

### Press [OK] twice.

#### 🖉 Note

- □ You can adjust the position of the fore edge cut from 6 to 50 mm (0.24 to 1.96 inches) in 0.1 mm (0.01 inch) increments.
- □ You can shift the position of the head and tail edge cuts from 6 to 28 mm (0.24 to 1.10 inches) in 0.1 mm (0.01 inch) increments.

#### Finishing to a regular size

Specify the size of the finished bound booklets and cut three edges to a regular size.

#### Book block paper and cover sheet compatibility

If you specify finishing to a regular size, you can select one of the following sizes: A4  $\square$ , B5 JIS  $\square$ , A5  $\square$ , Letter (8<sup>1</sup>/<sub>2</sub> × 11)  $\square$ , 5<sup>1</sup>/<sub>2</sub> × 8<sup>1</sup>/<sub>2</sub>  $\square$ . We recommend that you use the cover sheet size with the book block paper sizes as shown in the following table.

Required finished size	Book block	Cover
A4	$225\times320$ mm $^{*1}$	$13 \times 19.2^{*1}$
	$226 \times 310 \text{ mm}^{*1}$	$13 \times 19^{*1}$
		$13 \times 18$
		$320 \times 450 \text{ mm}^{*1}$
B5 JIS	A4	A3
A5	B5 JIS	B4 JIS
Letter $(8^{1}/_{2} \times 11)$	$9 \times 12^{*1}$	$13 \times 19.2^{*1}$
		$13 \times 19$ <sup>*1</sup>
$5^{1}/_{2} \times 8^{1}/_{2}$	$7^{1}/_{4} \times 10^{1}/_{2}$	$11 \times 14.9$ *1

<sup>\*1</sup> Specify the paper size using **[Custom Size]** in Tray Paper Settings.



JF JF		
Left Bind		Can
Do not Cut		
Cut Fore Edge		
Cut 3 Edges		
	103333	
	System Status	Job List

## Press [Specify Finishing Size].

Select the finished size under [Regular Size].



**4** To adjust the cut position, press [Cut Position Fine Adj.].

## **5** Press [ $\uparrow$ ] and [ $\downarrow$ ] to set the top or bottom cut position, and then press [OK].

To change the value you entered, press [^] or [ $\downarrow$ ], or press [Clear], and then specify a new value.

### **6** Press [OK] twice.

#### 🖉 Note

□ You can shift the cut position from -22.0 to 22.0 mm (-0.86 to 0.86 inch) in 0.1 mm (0.01 inch) increments.

#### Finishing to a custom size

Specify the size of the finished bound booklets and cut three edges to a custom size.



Press [Specify Finishing Size].

Press [Custom Size].

4 Enter the horizontal and vertical length using the number keys, and then press [#].



Press [Vertical] to enter the vertical length using the number keys.

To change the value you entered, press [Clear] and then enter a new value.

**5** To adjust the cut position, press [Cut Position Fine Adj.].

**(**) Press [↑] and [↓] to set the top or bottom cut position, and then press [OK]. To change the value you entered, press [↑] or [↓], or press [Clear], and then specify a new value.

### Press [OK] twice.

2



- □ You can shift the horizontal cut position from 139.7 to 216 mm (5.50 to 8.50 inches) in 0.1 mm (0.01 inch) increments.
- □ You can shift the vertical cut position from 201 to 297 mm (7.92 to 11.69 inches) in 0.1 mm (0.01 inch) increments.
- □ You can shift the cut position from -22.0 to 22.0 mm (-0.86 to 0.86 inch) in 0.1 mm (0.01 inch) increments.

## Using the Printer Driver to Specify Perfect Binding Settings

You can specify the perfect binding settings using the printer driver installed on your computer.

#### ∰Important

- □ Make sure the printer driver is properly installed.
- □ The following functions are not available when perfect binding output: (Some functions might not be available depending on the model of your machine.)
  - Booklet/Magazine
  - Stack
  - Slip Sheet
  - Separation Sheet
  - Rotating Collate
  - Z-fold
  - Face-up delivery
  - Staple
  - Punch
  - Staple (Centre)
  - Bypass Tray
  - Cover Sheet
  - Front and Back Covers
  - Back Cover
  - Auto Tray Switching
  - Sub Paper Size

**1** Open the file you want to print.

**2** Display the printer driver screen from the application you are using.

- **E** Make settings for the paper.
- **4** Specify the perfect binding settings that you require.
- **b** Specify any other print settings that you require.
- Click [OK].

The printer driver screen closes.

## **2** Print the documents.

#### 🖉 Note

□ For procedures about how to specify the perfect binding settings on your printer driver, see the printer driver Help.

## 3. Troubleshooting

A message appears on the display panel if a problem occurs inside the perfect binder. Use the following procedures to resolve the problem.

## Locating Jammed Paper

This section describes how to locate jammed paper.

If a misfeed occurs, remove the misfed paper by following the procedures shown on the stickers on the perfect binder.

The misfeed has occurred in the place corresponding to the letter displayed on the display panel.

For the procedure to remove jammed paper, see "Removing Jammed Paper".



### PReference

p.36 "Removing Jammed Paper"

## **Removing Jammed Paper**

This section explains how to remove jammed paper.

#### A CAUTION:

 Keep your hands clear of the perfect binder and paper exit. You can trap your fingers if you do not.

#### ∰Important

- Do not turn off the power for the base machine when removing the paper. If the power is turned off, functions and values you set are cleared.
- When removing paper, pull it out slowly so that it does not tear. If pieces of paper remain inside the machine, they may cause another paper jam or malfunction of the machine.
- □ If paper jams occur regularly, contact your sales or service representative.

### When Mk1 or Mk2 Is Displayed



 Open the interposer and Mk1 covers.



 Open the Mk2 cover and then remove paper.



- Close the Mk2, Mk1, and interposer covers.
- Remove paper if the display reports a paper jam in Mk3-Mk5.

BES001S

## When Mk3-Mk5 Is Displayed



- Raise the interposer unit.
- Open the upper left cover (Mk3).



Raise levers Mk4 and Mk5.



· Remove paper.



- Remove paper.
- Return levers Mk4 and Mk5 to their original positions.

3

• Return the upper left cover (Mk3) and interposer unit to their original positions.



- Make sure that the LED on the front right cover of the perfect binder is unlit.
- Remove paper if the display reports a paper jam in Mk7-Mk14.

BES002S

## When Mk6 Is Displayed



- Open the bridge unit front cover on the right side of the perfect binder.
- Raise lever Mk6 and remove paper.
- Return lever Mk6.
- Close the bridge unit front cover on the right side of the perfect binder.

BES003S

## When Mk7 or Mk8 Is Displayed



- Make sure that the LED on the front right cover of the perfect binder is unlit.
- Open the front right and front left covers of the perfect binder.
- Raise lever Mk7 and remove paper.
- Return lever Mk7 to its normal position.



- Raise lever Mk8 and remove paper.
- Return lever Mk8 to its normal position.
- Close the front left and front right covers of the perfect binder.

BES004S

## When Mk9-Mk11 Is Displayed



- Make sure that the LED on the front right cover of the perfect binder goes off.
- Open the front right and front left covers of the perfect binder.
- Raise lever Mk9.



- Turn knob Mk10 clockwise to remove paper.
- Return lever Mk9 to its normal position.



 Pull down lever Mk11.



Remove paper.

- Return lever Mk11 to its normal position.
- Close the front left and front right covers of the perfect binder.

BES005S

## When Mk12-Mk14 Is Displayed



- Make sure that the LED on the front right cover of the perfect binder goes off.
- Open the front right and front left covers of the perfect binder.
- Raise lever Mk12 and remove paper.



- Pull down lever Mk14 and remove paper.
- Return Mk14 and Mk13 levers to their normal positions.
- Close the front left and front right covers of the perfect binder.



 Return lever Mk12 to its normal position.



 Turn lever Mk13 to the left.



· Remove paper.

BES006S

# When a Message Is Displayed on the Display Panel

This section describes likely causes of and possible solutions for the error messages that appear on the display panel.

If a message not described here appears, act according to the message.

Message	Cause	Solution
Adjusting the temper- ature of the binding glue.	The binding glue is being heated.	Wait until the glue has reached the correct temperature for binding.
Binding glue has been depleted.	Binding is not possible be- cause there is no glue left.	Add binding glue. See p.21 "Filling the Glue Container".
Functional problem within the Perfect Binder. Please call service.	There is a problem with the perfect binder.	Record the code number shown on the display and re- port it to your service repre- sentative. Other functions can be still used.
Number of sheets ex- ceeded or insuffi- cient for Perfect Binding.	Perfect binding is not possi- ble with the number of sheets that you have specified.	Check the number of sheets. Specify proper number of sheets. See p.12 "Paper".
Perfect Binding is not available for differ- ent paper sizes.	Mixed Sizes mode is specified.	Cancel Mixed Sizes mode, or specify the Auto Reduce/En- large function.
Perfect Binding is not available with the settings.	Perfect binding is not possi- ble under the settings that you have specified.	Check the current settings. For details about which functions are not available when perfect binding is specified, see p.22 "Specify the Settings on the Display Panel", or p.33 "Using the Printer Driver to Specify Perfect Binding Settings".
Perfect Binding is not available with this finishing size.	Perfect binding cannot be used with the finishing size that you have specified.	Select a supported finishing size.
Perfect Binding is not available with this number of sheets. Printing will be stopped.	Perfect binding is not possi- ble with the number of sheets that you have specified.	Check the number of sheets. Specify proper number of sheets. See p.12 "Paper".

Message	Cause	Solution
Perfect Binding is not available with this paper size.	Perfect binding cannot be used with the finishing size that you have specified.	Select a supported paper size. See p.12 "Paper".
The waste paper recep- tacle is full.	The waste paper receptacle is full.	Empty the waste paper recep- tacle. See p.43 "Removing Waste Paper".

## **Removing Waste Paper**

This section explains how to remove the waste paper produced by perfect binding.

### 🖉 Note

- □ While "The waste paper receptacle is full." is displayed, you cannot use the perfect binding.
- □ "The waste paper receptacle is full." is displayed until the receptacle is reinstalled.
- □ If the message is still displayed, reinstall the receptacle.

**1** Open the lower right tray.



**2** Carefully lift out the waste paper receptacle, and then empty it.



BER0225

## **3** Reinstall the receptacle.



## Close the lower right tray.

"The waste paper receptacle is full." disappears.

## 4. Remarks

This chapter explains how to maintain and operate the machine.

## Where to Put the Machine

The perfect binder's location should be carefully chosen because environmental conditions greatly affect its performance.

## Moving

Observe the following precautions when moving the machine.

A CAUTION:

 Contact your service representative if you need to lift the machine (such as when relocating it to another floor). Do not attempt to lift the machine without the assistance of your service representative. The machine will be damaged if it topples or is dropped, resulting in malfunction and risk of injury to users. The machine's various handling areas are for service engineer use only. Do not touch these areas.

## **Optimum Environmental Conditions**

Observe the following precautions when installing the machine.

A CAUTION:

• Keep the machine away from humidity and dust. Otherwise a fire or an electric shock might occur.

#### A CAUTION:

• Do not place the machine on an unstable or tilted surface. If it topples over, an injury might occur.

- Make sure the room where you are using the machine is well ventilated and spacious. Good ventilation is especially important when the machine is used heavily.
- Temperature: 15 to 30 °C / 59 to 86 °F
- Humidity: 15 to 80 %
- A strong and level base.
- The machine must be level within 5 mm (0.2 inch): both front to rear and left to right.

## **Environments to Avoid**

- Locations exposed to direct sunlight or other sources of strong light (1,500 lux or more)
- Locations directly exposed to cool air from an air conditioner or heated air from a heater (Sudden temperature changes can cause condensation to form inside the machine)
- Locations close to machines generating ammonia, such as a diazo copy machine
- · Locations where the machine will be subject to frequent strong vibration
- Dusty areas
- Areas with corrosive gases

## Access to the Machine

Place the machine near the power source, providing the clearance areas shown.



1) Rear	90 cm (35.5 inches)
<ol> <li>Front</li> </ol>	70 cm (27.6 inches)

## **Power Connection**

Observe the following precautions regarding the power supply.

#### A WARNING:

 Power cords that are damaged, broken, modified, trapped under heavy objects, pulled hard, or bent severely are electric shock and fire hazards.

#### A WARNING:

 Connect the machine to the power source specified in "Specifications" and do not use any other power sources. Connect the power cord directly to a wall outlet and do not use an extension cord. Power sources not specified in "Specifications" and extension cords are electric shock or fire hazards.

#### \land WARNING:

 If the power cord is damaged (exposure of the core, disconnection, etc.), contact your service representative to change a new one. Operating the machine with a damaged power cord may cause an electric shock or fire.

#### A CAUTION:

• When you disconnect the power plug from the wall outlet, always pull the plug (not the cable).

#### A CAUTION:

- To disconnect the power cord, pull it out by plug. Do not drag the cord itself. Doing so may result in damage to the cord, leading to fire or electric shock.
- Make sure the plug is inserted firmly in the wall outlet.

### Maintaining the Machine

#### ∰Important

- Do not use chemical cleaners or organic solvents, such as thinner or benzene. If such substances get inside the machine or melt plastic parts, malfunctions might occur.
- □ Internal parts should only be cleaned by your service representative.

#### Cleaning the machine:

Wipe the machine with a soft, dry cloth. If this does not remove the dirt, wipe the machine with a damp and tightly wrung cloth. If a damp cloth still does not remove the dirt, use a mild detergent. After wiping the machine with a damp cloth, wipe it again with a dry cloth to remove any moisture.

## Earth Leakage Circuit Breaker

This section explains how to test the earth leakage circuit breaker.

#### A WARNING:

 Do not turn the earth leakage circuit breaker from the off to the on position. Otherwise it might lead to an electric shock, fire or smoke, or cause the circuit breakers to trip.

This machine uses the following symbols for the earth leakage circuit breaker switch:

means POWER ON.

O means POWER OFF.

To prevent electric shock, this machine has an earth leakage circuit breaker. The earth leakage circuit breaker is normally in the on " | " position.

Once a month, check that it functions properly by following the procedure below.

#### ∰Important

□ If the earth leakage circuit breaker is not functioning normally, contact your sales or service representative.

#### U Turn off the main power switch for the base machine.

**2** Using the tip of a ball-point pen, press the test button of the earth leakage circuit breaker.



**B** Confirm that the earth leakage circuit breaker switch moves to the off position.



**4** Turn the switch to the on position.



## **5** Turn on the main power switch for the base machine.

### 🖉 Note

□ If the power does not come on, check if the earth leakage circuit breaker is in the off position. If so, do not turn it to the on position. Contact your sales or service representative immediately.

## 5. Appendix

## **Specifications**

This section describes specifications for the perfect binder.

Item	Specifications
Model	Perfect Binder GB5000
Paper size	Cover • Regular A3D, B4 JISD, 12 × 18D, 11 × 17D • Custom Width: 257 - 330.2 mm (10.2 - 13.0 inches) Length: 364 - 487.7 mm (14.4 - 19.3 inches)
	Book block
	<ul> <li>Regular</li> <li>A4 , B5 JIS , Letter (8<sup>1</sup>/<sub>2</sub> × 11) , 7<sup>1</sup>/<sub>4</sub> × 10<sup>1</sup>/<sub>2</sub></li> </ul>
	<ul> <li>Custom</li> <li>Width: 257 - 320 mm (10.2 - 12.6 inches)</li> <li>Length: 182 - 228.6 mm (7.2 - 9.0 inches)</li> </ul>
Paper weight	Cover
	• 90.0 - 300.0 g/m <sup>2</sup> (23.9 - 79.8 lb.)
	Book block
	• 64.0 - 163.0 g/m <sup>2</sup> (17.1 - 43.4 lb.)
Perfect binder main unit	<ul> <li>Perfect binding capacity</li> <li>Book block capacity 10 - 200 sheets (paper weight: 64.0 - 80.0 g/m<sup>2</sup>, 17.1 - 21.3 lb.) 10 - 150 sheets (paper weight: 81.0 - 105.0 g/m<sup>2</sup>, 21.5 - 27.9 lb.)</li> <li>Book block spine Up to 23 mm (0.9 inch)</li> <li>Glue capacity</li> <li>380 g (0.83 lb.)</li> </ul>
Interposer	Tray capacity • 200 sheets × 2 (height: 24 mm or less)

Item	Specifications
Lower left tray	<ul> <li>Tray capacity (paper weight: 64.0 - 80.0 g/m<sup>2</sup>, 17.1 - 21.3 lb.)</li> <li>Book block capacity 10 sheets: 26 sets 30 sheets: 17 sets 50 sheets: 13 sets 80 sheets: 8 sets 100 sheets: 7 sets 200 sheets: 4 sets</li> </ul>
Power source	<ul> <li>220 to 240 V, 50/60 Hz, 3 A (Europe and elsewhere)</li> <li>208 V, 60 Hz, 3 A (North America)</li> <li>(A separate power source is required.)</li> </ul>
Maximum power con- sumption	623 W or less
Machine dimensions $(W \times D \times H)$	1090 × 791 × 1387 mm (43.0 × 31.2 × 54.7 inches)
Weight	350 kg (771.7 lb.) or less

## **Changing the Perfect Binding Settings**

Perfect binding settings can be changed using the display panel.

#### Binding Glue Heater Auto Off Timer

Specify the time that must elapse before the glue heater turns off. You can change this setting under Timer Settings in System Settings.

#### Perfect Binding Cut Fine Adjustment

Adjust the cut size applied when perfect binding. You can change this setting under General Settings in System Settings.

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