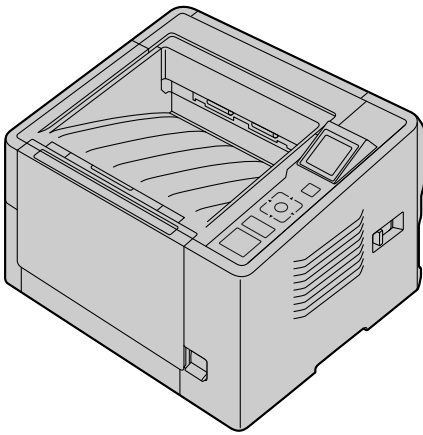


# Panasonic®

## Operating Manual Document Scanner

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Model No. **KV-S2087**



These instructions contain information on operating the scanner. Before reading these instructions, please read the Quick Installation Guide enclosed with this unit.

Keep all documentation in a safe place for future reference.

**Current model availability depends on your country/area. Please contact your dealer.**

# Introduction

Thank you for purchasing a Panasonic Document Scanner.

## Feature Highlights

### High-speed Double Sided Scanning

- This scanner can scan documents at high speed, regardless of the image type (monochrome / color).

### Background Color Switch Function

- Using the software, you can switch the background color of scanned images between white and black.

### Double Feed Detection Function

- This scanner contains an ultrasonic sensor for the detection of double feeding. Double feeding can be detected even if you scan documents that contain paper of various thicknesses.

### Double Feed Skip (DFS) Function

- If scanning has been stopped because a double feed was detected, you can easily resume scanning by pressing the Skip button. When you scan documents that include items that you do not want to be detected as double feeding (for example, documents that have receipts attached, envelopes, etc.), the double feed detection function can be enabled and still scan these documents.

### Push Scan

- This scanner has a push scan function to perform scanning without operating a computer. Scanning settings should be registered as Jobs in advance. You can start scanning by pressing the OK button or Start/Stop button after selecting a job with the cursor buttons. This scanner also has a function that starts scanning when documents are simply placed on the feed tray (Touch Free Scanning).

### Other Features

- The paper feed path can be opened widely to easily remove jammed paper and perform maintenance.
- User Utility helps you perform maintenance for the scanner.
  - You can configure and check the counters that indicate the approximate time for cleaning and replacement of the rollers.
  - You can clear notification messages for the rollers after cleaning or replacing the rollers.
  - You can enable Cleaning Mode. During Cleaning Mode, the conveyor rollers rotate a small amount every time the Start/Stop button on the scanner is pressed. You do not have to rotate the rollers by using your fingers in order to clean the entire surface of each roller.
  - You can configure the time until the scanner enters sleep mode following a period of non-operation.

## Abbreviations

- Windows® refers to the Microsoft® Windows® operating system (hereafter Windows).
- Windows® XP refers to the Microsoft® Windows® XP operating system (hereafter Windows XP).
- Windows Vista® refers to the Microsoft® Windows Vista® operating system (hereafter Windows Vista).
- The explanations and screen shots in this manual are based on the Windows 7 operating system.
- The screen shots used in this manual may differ from the screens displayed on your computer.
- The illustrations in this manual are based on the KV-S2087.

## Trademarks

- Microsoft, Windows, and Windows Vista are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.
- ISIS is a registered trademark or trademark of EMC Corporation in the United States and/or other countries.
- IBM is a trademark of International Business Machines Corporation, registered in many jurisdictions worldwide.
- Intel and Intel Core are trademarks of Intel Corporation in the U.S. and/or other countries.
- Adobe and Reader are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries.
- All other trademarks identified herein are the property of their respective owners.

### About the Documentation

The scanner documentation consists of 2 manuals: the Operating Manual (this manual), and the Quick Installation Guide.

<b>Operating Manual</b> (this manual)	This manual provides information about the operation of the unit.
<b>Quick Installation Guide</b>	The Quick Installation Guide explains about safety precautions and other important information, and outlines brief installation procedures of the unit and software.

### About the Software Help

Each software contains help files.

For details about viewing the help files, see "3.4.2 To view the help" (page 21).

### Software / Manual CD-ROM Contents

<b>Drivers</b>	Device Driver
	TWAIN
	ISIS
<b>Applications</b>	Image Capture Plus <sup>*1</sup>
<b>Utilities</b>	User Utility
	Scan Button Setting Tool
<b>Documents<sup>*2</sup></b>	Operating Manual
	Control sheet <sup>*3</sup>

<sup>\*1</sup> Image Capture Plus is a Panasonic original application for configuring advanced scanning settings.

<sup>\*2</sup> Each document is a PDF document. To view documents correctly, install Adobe® Reader®.

<sup>\*3</sup> For details about the control sheet, see "4.4 Using Control Sheets" (page 38).

## System Requirements

<b>Computer</b>	IBM® PC/AT or compatible machine with a CD-ROM drive
<b>CPU</b>	Intel® Core™ 2 Duo 1.8 GHz or higher
<b>Interface</b>	USB 2.0 / USB 3.0

### Note

- For details about the system requirements, refer to [Read me first] in the Software / Manual CD-ROM.
- The scanning speed differs depending on the host computer's operating environment or the application used.
- Due to the slower speed of USB 1.1, it is recommended to use a USB 2.0 / USB 3.0 interface.
- If you connect the unit to a USB hub, it is not guaranteed to work.

## About Consumables and Optional Accessories

### Consumables

Part Name	Part Number	Notes
Roller exchange kit	KV-SS063	See "6.3 Replacing the Rollers" (page 51).
Roller cleaning paper	KV-SS03	See "Roller Cleaning Paper" (page 9).
Ink cartridge	KV-SS021	See "7.1 Installing the Imprinter Unit and Ink Cartridge" (page 57).

### Optional Accessories

Part Name	Part Number	Notes
Imprinter unit	KV-SS020	See "7.1 Installing the Imprinter Unit and Ink Cartridge" (page 57).
Carrier sheet	KV-SS076	See "4.1.2 Carrier Sheet" (page 25).

### Note

- To purchase separately sold items, contact your dealer.

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# 1 Before You Start

## 1.1 Precautions

### Illegal Duplication

It is unlawful to make duplication of certain documents. Duplicating certain documents may be illegal in your country/area. Penalties of fines and/or imprisonment may be imposed on those found guilty. The following are examples of items that may be illegal to duplicate in your country/area.

- Currency
  - Bank notes and checks
  - Bank and government bonds, and securities
  - Passports, licenses, official or private documents, identification cards, and the like
  - Copyright materials, or trademarks without the consent of the owner
  - Postage stamps, and other negotiable instruments
- This list is not inclusive, and no liability is assumed for either its completeness or accuracy. In case of doubt, contact your legal counsel.

### Notice

Install your machine near a supervised area to prevent illegal duplication from being made.

### Installation

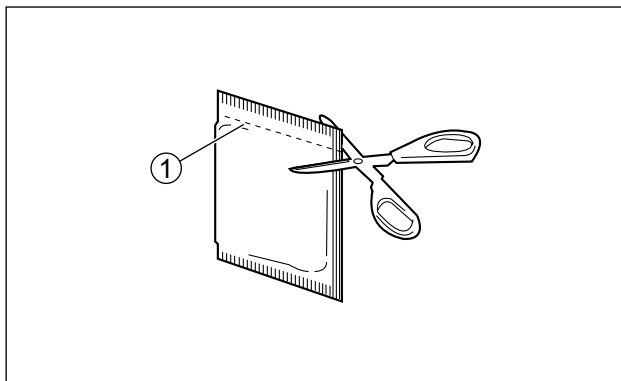
- Do not place the unit in direct sunlight, in a cold draft, or near heating apparatus.
- Do not place the unit near apparatus which generate electronic or magnetic noise.
- Protect the unit from static electricity.
- Do not move the unit immediately from a cold place to a warm place. It may cause dew.
- When the unit is not used over an extended period of time, turn the unit off, and unplug the power cord. The unit consumes approximately 0.5 W of electricity even when the main unit is turned off.
- Do not turn ON the unit's power before installing the software.

### CD-ROM

- Do not write or stick paper on the front and/or back of CD-ROM.
- Do not touch the data side of the CD-ROM. When handling the CD-ROM, be careful not to leave fingerprints or otherwise damage the CD-ROM.
- Do not leave the CD-ROM where it is directly exposed to sunlight or near a heater for extended periods.
- Do not throw or bend the CD-ROM.

## Roller Cleaning Paper

Using a pair of scissors, open the bag along the dotted line (①), and take out the roller cleaning paper.



## Notice

- Keep the roller cleaning paper out of reach of small children.
- Do not store the roller cleaning paper in direct sunlight or in a place with a temperature over 40 °C (104 °F).
- Only use the roller cleaning paper to clean the rollers.
- For details about the roller cleaning paper, please refer to the Material Safety Data Sheet (MSDS). Please ask your Panasonic sales company about obtaining the Material Safety Data Sheet.

## Note

- If the bag is left opened for a long period of time before using it, the alcohol will evaporate. Please use the roller cleaning paper immediately after opening the bag.
- To purchase the roller cleaning paper (KV-SS03), please contact your dealer, or call our Supplies and Accessories department at 1-800-726-2797 (U.S.A. only).

KEEP AWAY FROM FIRE.

## Security Notice

The management of documents and scanned data is the responsibility of the user. In particular, pay attention to the following points.



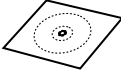

- Make sure you have the same number of pages for important documents both before and after scanning, and take care not to leave any pages in the scanner.
- Periodically back up important data.
- When having your computer or hard disk serviced, or when disposing of your computer or hard disk, completely erase any stored image data.

## Others

- Make sure to remove paper clips and staples from documents before scanning. Failing to do so can damage the unit, document, or both.
- Do not use thinner, benzene, or cleaners containing abrasives or surfactants, for cleaning the outside of scanner.

# 1.2 Check the Accessories

Check that all accessories are included before installing the unit. In the event that an item is missing, please contact your dealer.

Accessories	Name	Notes
	Power cord	Two power cords may be included. Use the power cord appropriate for where you use the unit.
	USB cable	—
	Software / Manual CD-ROM	Drivers, Applications, Utilities, Documents
	Quick Installation Guide	—

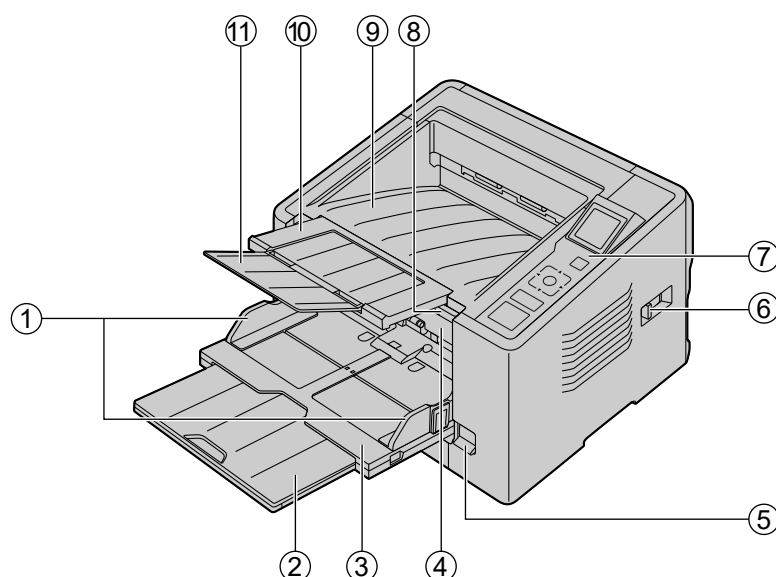
**Note**

- It is highly recommended to keep the original carton and all packing materials. They are necessary when repacking.

## 2 Location of Controls

### 2.1 Main Unit

#### 2.1.1 Front



**① Document guides**


**② Feed extension tray**


**③ Feed tray**

**④ ADF door**

**⑤ Manual feed selector**

You can select the document feeding method.


 : Manual feeding

 : Automatic feeding

**⑥ Paper path selector**

You can select the paper path for documents.

 : U-turn path (front exit)

 : Straight path (rear exit)

**⑦ Operation panel**

For details, see "2.2 Operation Panel" (page 13).

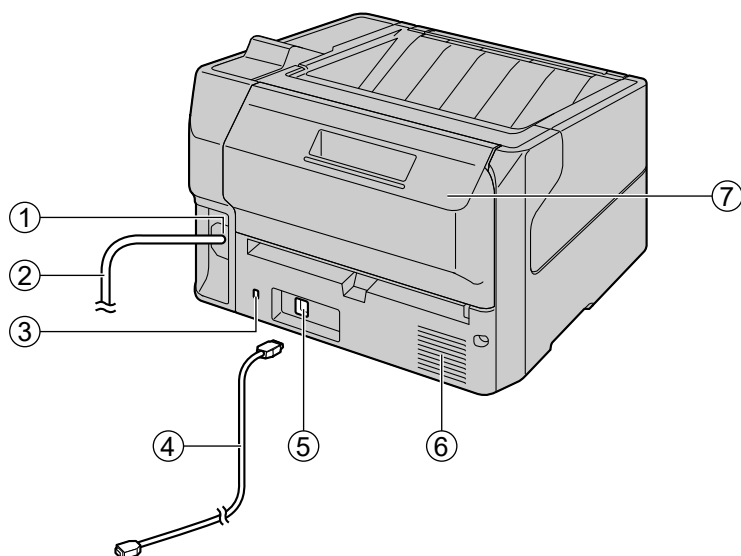
**⑧ ADF door release**

**⑨ Exit tray**

**⑩ Exit extension tray 1**

**⑪ Exit extension tray 2**

## 2.1.2 Rear



① **AC inlet**

② **Power cord**

③ **Security slot**

Use a commercially available security cable.

④ **USB cable**

⑤ **USB connector**

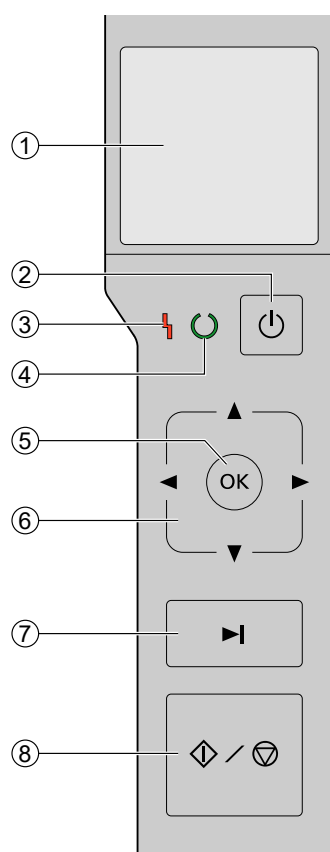
⑥ **Fan exhaust vent**

⑦ **Imprinter door**

You open this door when installing an imprinter unit (sold separately) or ink cartridge.

For details about installing an imprinter unit, refer to "7.1 Installing the Imprinter Unit and Ink Cartridge" (page 57).

## 2.2 Operation Panel



### ① LCD

Selected jobs, error codes, notification messages, and the scanner status are displayed.

### ② Power button

Press the power button for more than one second to turn the unit off.

### ③ LED (Red)

Lights when an error occurs.

### ④ LED (Green)

Shows the scanner's status.

### ⑤ OK button

### ⑥ Cursor button

If you are using the scanner with Image Capture Plus, you can perform a push scan using the LCD. You can start push scanning by pressing the OK button or Start/Stop button after selecting a job with the cursor buttons.

### ⑦ Skip button

If you press this button after a double feed or a dog-eared document is detected and scanning has been paused, the document (or documents) detected as a double feed or the dog-eared document will be scanned, and then ejected from the scanner. Scanning will continue after the document is scanned and ejected.

### ⑧ Start/Stop button

- During scanning, pushing this button stops scanning.
- If you press this button after a double feed or a dog-eared document is detected and scanning has been paused, the document (or documents) detected as a double feed or a dog-eared document will be ejected from the scanner without being scanned. Scanning will stop.
- If you set [Wait Key] for "Manual Feed Mode" in your application software, pushing this button starts scanning. For details about "Manual Feed Mode", refer to the Image Capture Plus, TWAIN, or ISIS help.

## 2.2.1 About LED

The status of the scanner is displayed by the LED (Red) (①) and the LED (Green) (②), as shown in the table below:

①LED (Red)	②LED (Green)	Status
OFF	OFF	Power OFF <sup>*1</sup>
OFF	Blinking (Fast)	Warming up
OFF	ON	Ready mode or Scanning
Blinking (Slow)	ON	Notification mode
OFF	Blinking (Slow)	Sleep mode <sup>*2</sup> or Cleaning mode
Blinking (Slow)	Blinking (Slow)	Sleep mode <sup>*2</sup> and Notification mode
ON	OFF	Error <sup>*3</sup>
OFF	Blinking (Fast, 2 times consecutively)	Double feed skip mode
OFF	Blinking (Fast, 3 times consecutively)	Dog-ear Detection Skip mode

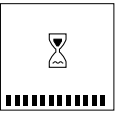
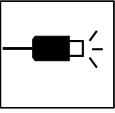
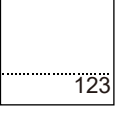
<sup>\*1</sup> If the power off feature in sleep mode is enabled, and if no operation is performed for a certain period of time, the scanner will be turned off automatically. Press the power button of the scanner to turn it on. You can enable/disable the power off feature, and change the time until the scanner turns off in User Utility.

<sup>\*2</sup> If no operation is performed for 15 minutes or longer, the scanner will enter sleep mode automatically to conserve energy. Press any button (except the power button) on the scanner's operation panel to return to ready mode. The time until the scanner enters sleep mode can be changed in User Utility.

<sup>\*3</sup> For details about the error, refer to "8.2 Error Messages" (page 68) or check in User Utility.

## 2.2.2 About LCD

The status of the unit is displayed on the LCD as follows.

LCD	Status
	The scanner is warming up.
	The USB cable is not connected.
	The Scanner status and scanning counter are displayed.

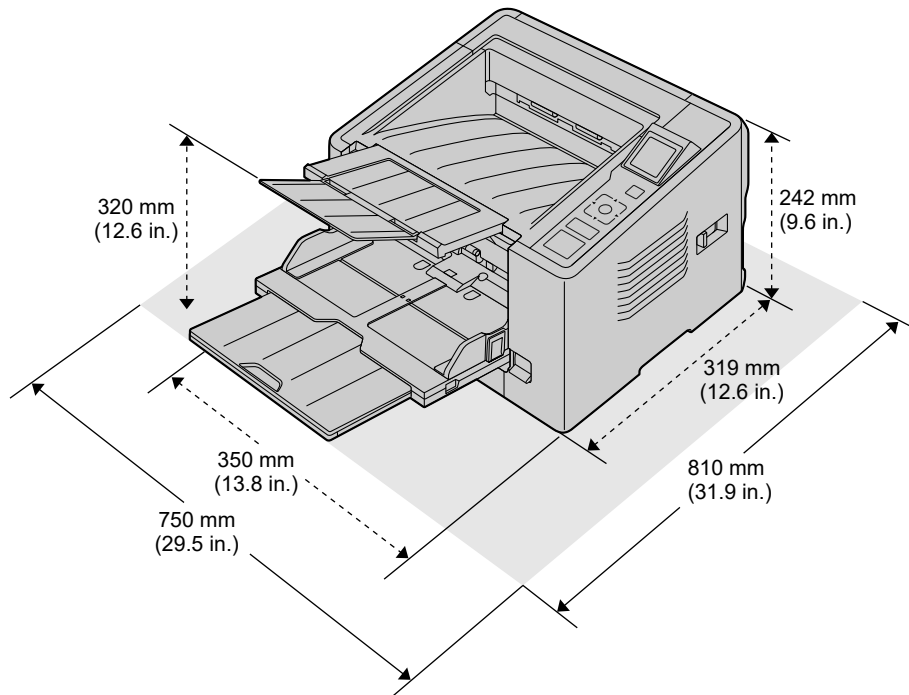
Examples of displays of scanner statuses are as follows.

G: nn GROUP NAME	Group number (two-digit) and Group name of job
J: nn JOB NAME	Job number (two-digit) and Job name
U: nn MESSAGE	Error number (two-digit) and Error message

# 3 Installation

## 3.1 Required Space Around the Scanner

In order to ensure proper operation, install the unit maintaining the proper distances from surrounding objects, as shown in the following illustration.



### Notice

- Do not move the unit immediately from a cold place to a warm place. It may cause condensation, which may damage the unit.
- If you use the straight path (rear exit) for documents, space behind the unit is required for documents to exit.

## 3.2 Installing the Software

### Notice

- Make sure to connect the unit to your computer after installing the software. Connecting the unit to your computer and turning on the unit's power before installing the software may influence the software installation. If you connect the unit to your computer and turn on the unit's power before installing the software by mistake, install the software after disconnecting the unit from your computer.
- Make sure to log on as an administrator to install the software.

The software on the enclosed Software / Manual CD-ROM can be installed on your computer. You can select from the 2 installation methods below, depending on your needs.

**a. Complete:** Install all the drivers, applications, utilities and Operating Manual.

**b. Custom:** Install one of the software or Operating Manual.

### Note

- Normally, it is recommended to select [Complete].
1. Check that the unit has been turned off.
    - If the power is turned on, press and hold the power button for more than one second to turn the unit off.
  2. Insert the Software / Manual CD-ROM into the CD/DVD drive on your computer.
    - The setup window will appear.

### Note

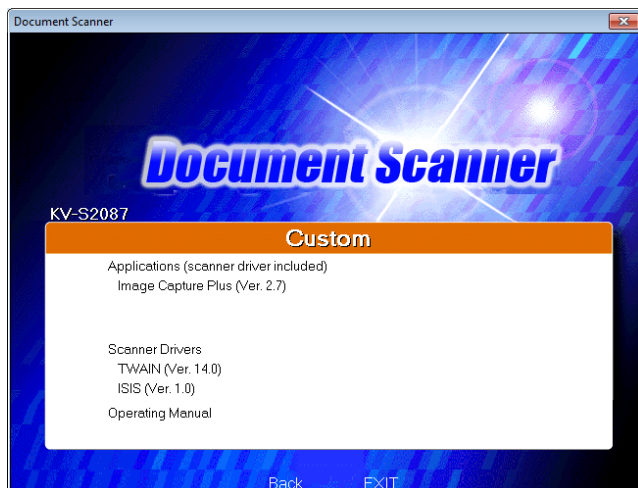
- If the AutoPlay dialog box is displayed, select [CDRun.exe].
  - If the setup window does not appear, double-click [CDRun.exe] in the Software / Manual CD-ROM.
3. Check the [Read me first] file.



## 3.2 Installing the Software

---

4. Select the desired installation methods from "Software" on the left side of the screen.
  - If you selected [Complete], continue to step 6.
  - If you selected [Custom], continue to step 5.
5. If you selected [Custom] for the installation type in step 4, select the item that you want to install.

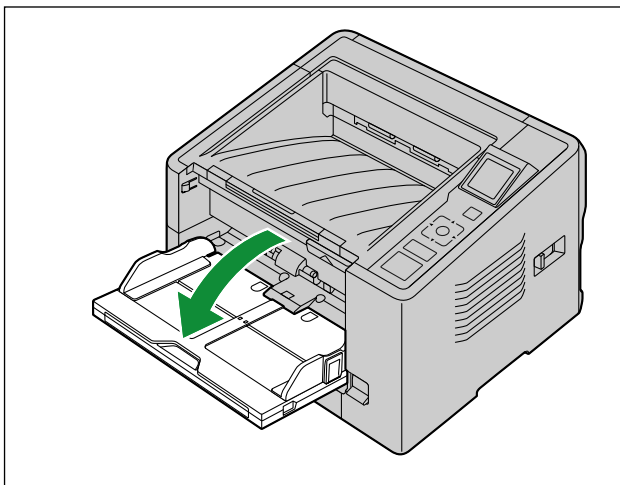


### Note

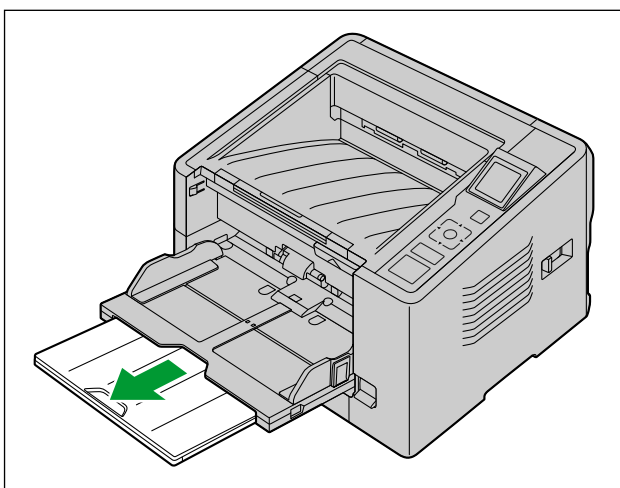
- If you select TWAIN or ISIS, Image Capture Plus will also be installed.
6. Follow the instructions on the screen and complete the installation.
    - Restart your computer if you are prompted to do so.

## 3.3 Installing the Unit

1. Remove all packing tapes.
2. Open the feed tray.



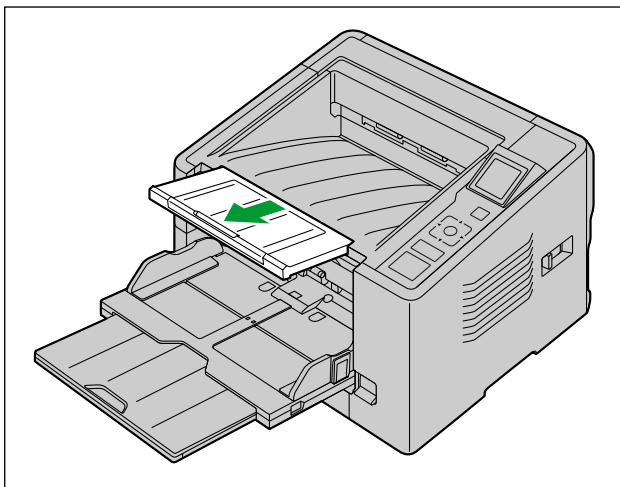
3. Pull out the feed extension tray.



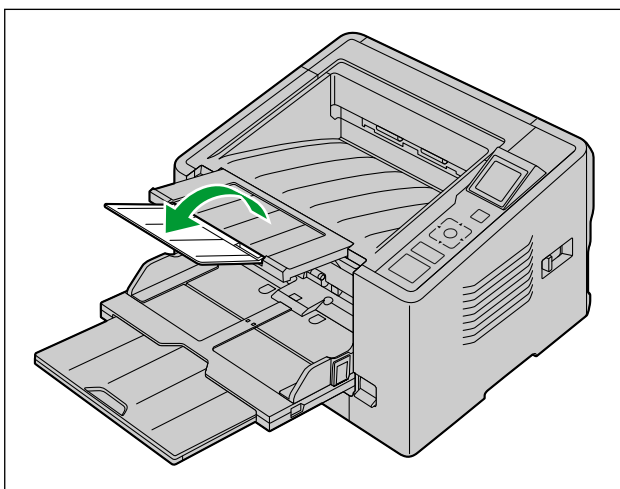
### 3.3 Installing the Unit

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4. Pull out the exit extension tray 1.



5. Open the exit extension tray 2.



6. Plug in the power cord and connect the USB cable.
7. Press the power button to turn ON the unit's power.
  - The LED (Green) will flash and then turn on.
  - If the hardware wizard appears, follow the on-screen instructions to complete installation.

## 3.4 Viewing Operating Manual and Help Installed

You can view the Operating Manual and the software help installed on the computer.

### 3.4.1 To view the Operating Manual

1. Select [All Programs] → [Panasonic] → [Scanner Manuals].
2. Select the manual.
  - The manual will open.

#### Note

- In Windows 8, select the [Panasonic Document Scanner] section on the Apps screen.

### 3.4.2 To view the help

#### 3.4.2.1 For Image Capture Plus

1. Select [All Programs] → [Panasonic] → [Image Capture Plus] → [Image Capture Plus Help].

#### 3.4.2.2 For User Utility or Scan Button Setting Tool

1. Select [All Programs] → [Panasonic] → [Scanner Tools].
2. Select that item's help.

#### Note

- In Windows 8, select the [Panasonic Document Scanner] section on the Apps screen.

#### 3.4.2.3 For TWAIN or ISIS

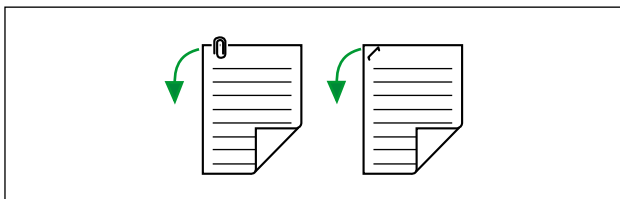
1. Click the help button on any driver screen.

## 4 Operation

### 4.1 Preparing Documents

#### Notice

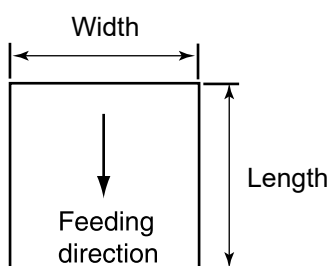
- Make sure to remove paper clips and staples from documents before scanning. Failing to do so can damage the unit, document, or both.



- Before feeding, ensure that the document is not creased or folded. If the document is creased or folded, a paper jam or damage to the document may occur.
- When scanning important documents, confirm that the number of scanned images matches the number of pages in the feed tray. Also, check the condition of the scanned documents.
- Remove documents from the exit tray after they have been scanned.

## 4.1.1 Compatible Paper

### Paper size:



The compatible paper sizes for this unit are as follows.

Width	48 mm – 216 mm (1.9 in. – 8.5 in.)
Length	Manual feeding: 70 mm – unlimited (2.8 in. – unlimited) <sup>*1</sup> Automatic feeding: 70 mm – 356 mm (2.8 in. – 14 in.)

<sup>\*1</sup> Using "Long Paper", you can scan a long document to a series of split scanned images. For details about "Long Paper", refer to the Image Capture Plus, TWAIN, or ISIS help.

### Paper thickness:

0.04 mm – 0.66 mm (1.6 mils – 25.98 mils)

### Note

1 mil = 0.001 in.

### Paper weight:

20 g/m<sup>2</sup> – 546 g/m<sup>2</sup> (5 lb. – 145.4 lb.)

#### 4.1.1 Compatible Paper

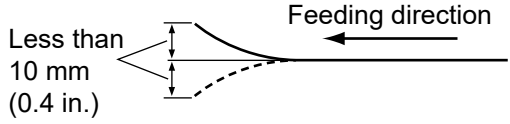
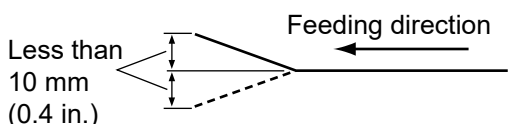
##### Paper types:

- High-quality woodfree paper
- Bond paper
- Newspaper
- Bank checks
- Post card

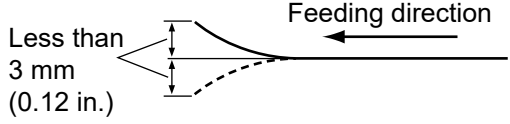
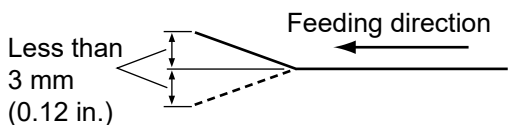
##### Note

- High-quality woodfree paper is the recommended paper type.
- Documents must also meet the following conditions:

**Paper weight: 20 g/m<sup>2</sup> (5 lb.) – less than 157 g/m<sup>2</sup> (42 lb.)**

<b>Curl</b>	 <p>Less than 10 mm (0.4 in.)</p>
<b>Folding</b>	 <p>Less than 10 mm (0.4 in.)</p>

**Paper weight: 157 g/m<sup>2</sup> (42 lb.) – 546 g/m<sup>2</sup> (146 lb.)**

<b>Curl</b>	 <p>Less than 3 mm (0.12 in.)</p>
<b>Folding</b>	 <p>Less than 3 mm (0.12 in.)</p>

##### Paper capacity for the feed tray:

Number of sheets	Paper weight	Paper types
220	64 g/m <sup>2</sup> (17 lb.)	High-quality woodfree paper
200	80 g/m <sup>2</sup> (21 lb.)	High-quality woodfree paper

## 4.1.2 Carrier Sheet

You can use an optional carrier sheet (KV-SS076) to scan incompatible documents like very thin paper, curled or wrinkled documents, photographs etc. When using carrier sheet, please note following conditions for the documents.

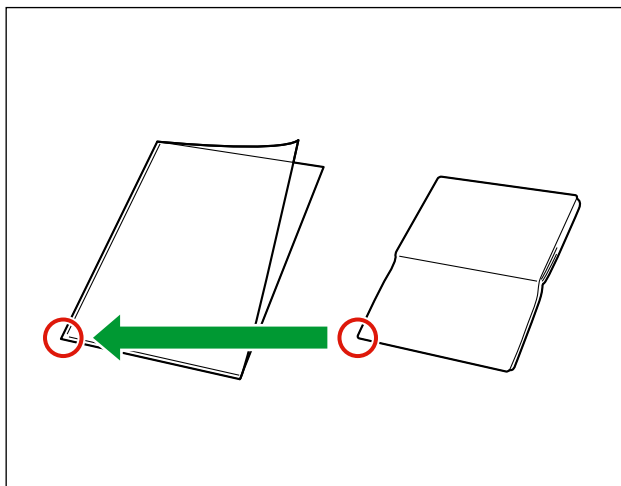
**Carrier sheet (including the documents):**

Width: 150 mm (5.91 in.)

Length: 200 mm (7.87 in.)

Thickness: 2 mm (0.08 in.) or less

The corner of the document should be adjusted to match the corner of the carrier sheet.



**Note**

- When using a carrier sheet, please refer to "4.2.6 Using Carrier sheet" (page 34).

## 4.1.3 Incompatible Documents

### Notice

#### **Do not scan the following types of paper:**

- Documents out of specified size, thickness, and weight
- Thermal or photosensitive paper
- Cloths or metallic sheets
- Transparent or partially transparent documents such as OHP sheet, tracing paper, plastic film, etc.
- Documents containing hard attachments such as metal or plastic (ex. clips or staples)
- Document with wet ink or cinnabar seal ink
- Damaged or notched documents
- Damaged or notched cards

#### **The following types of documents may not be scanned properly:**

- Torn or frayed documents
- Curled, wrinkled or folded documents
- Carbon paper
- Perforated or punched paper
- Non-rectangular or irregularly shaped paper
- Coated paper
- Bound or glued documents
- Chemical paper such as carbonless copy paper
- Paper with wood content
- Photographs
- Extremely smooth, shiny paper, or paper that is highly textured

### Note

- Paper with a glossy surface such as coated paper or photographs that are susceptible to damage such as scratching.
- If you scan following types of documents, the rollers will need to be cleaned frequently and the lifetime of the rollers may be shortened.
  - Documents with toner or graphite (pencil) powder
  - Documents treated chemically or containing impurities

## 4.1.4 Notes about Documents for Scanning

- Depending on the paper type, scanning results may be poor when you scan incompatible documents, or even documents that should be compatible.

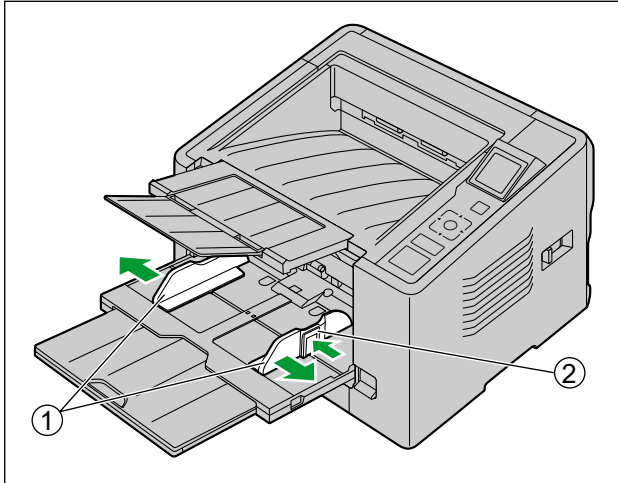
If scanned images are skewed, paper jams occur, or double feeding occurs, try scanning again after doing the following:

- Cleaning the Inside of the Scanner. Refer to "6.2 Cleaning the Inside of the Scanner" (page 44).
- Reduce the number of sheets of paper loaded on the feed tray.
- Change the orientation (portrait/landscape) of the placed documents.
- In the scan settings, set "Feeding Speed" to [Slow].<sup>\*1</sup>
- Scan the documents using manual feeding.
- Scan the documents using straight path (rear exit) document path.

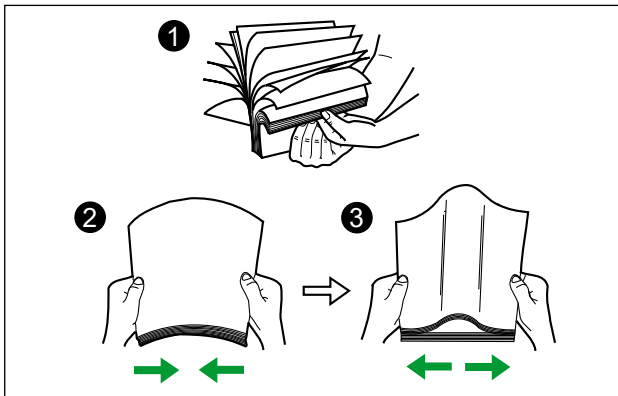
<sup>\*1</sup> For details about configuring the scan settings, refer to the Image Capture Plus, TWAIN, or ISIS help.

# 4.2 Scanning Documents

1. Adjust the document guides (①) slightly larger than the actual size of the documents.
  - Move the document guide while pressing the lever (②) of the document guide.



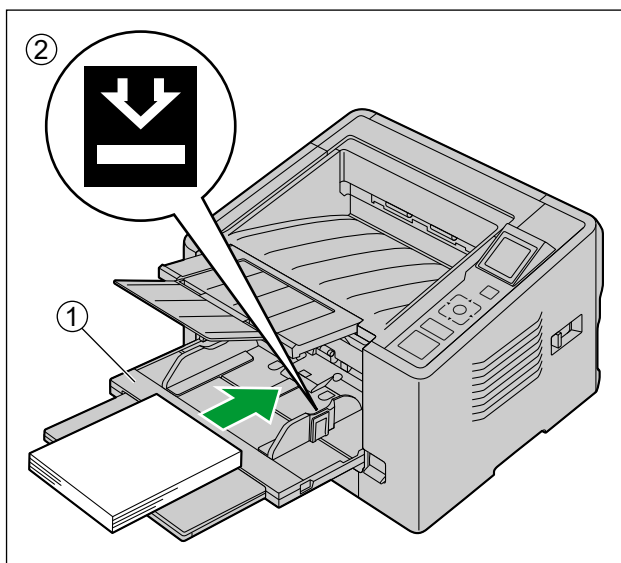
2. Fan the documents.
  - Documents that have been stapled together or stacked together (as in a file folder) will need to be separated.
  - ① Fan the stack of documents to separate all the edges.
  - ② Hold both ends and bend the documents as shown in the illustration.
  - ③ To flatten the documents, hold firmly and pull them apart as shown in the illustration.



Repeat these steps as necessary.

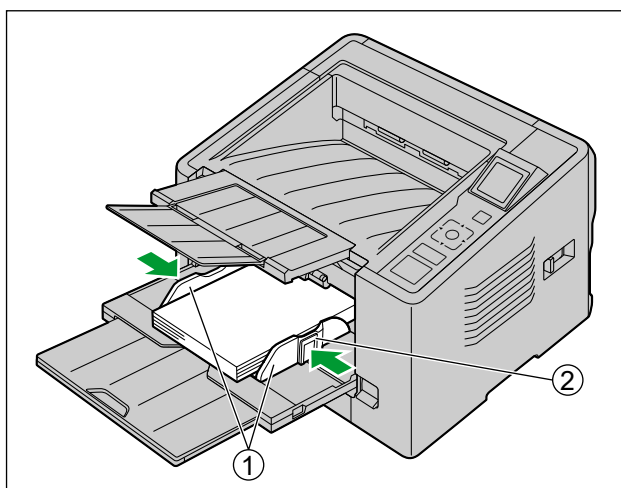
3. Carefully align the documents.

4. Place the documents on the feed tray (①) with the side to be scanned facing up. Then push the documents in the direction of the arrow until they stop.

**Notice**

- The height of the documents should not exceed the limit mark (②) on the document guide. Exceeding the limit mark may cause a paper jam or skewing.

5. Slide the document guides (①) to match the width of the document to be scanned.
  - Move the document guide while pressing the lever (②) of the document guide.





6. Open your scanning application and scan the documents.
  - For details about the application, refer to the help of each application.
  - You can also start up applications automatically to scan documents (Push Scan). For details about Push Scan, see "4.3 Using Push Scan" (page 35).

## 4.2.1 Switching the Background Color of Scanned Images

Using the software, you can switch the background color of scanned images between white and black. For details, refer to the Image Capture Plus, TWAIN, or ISIS help.

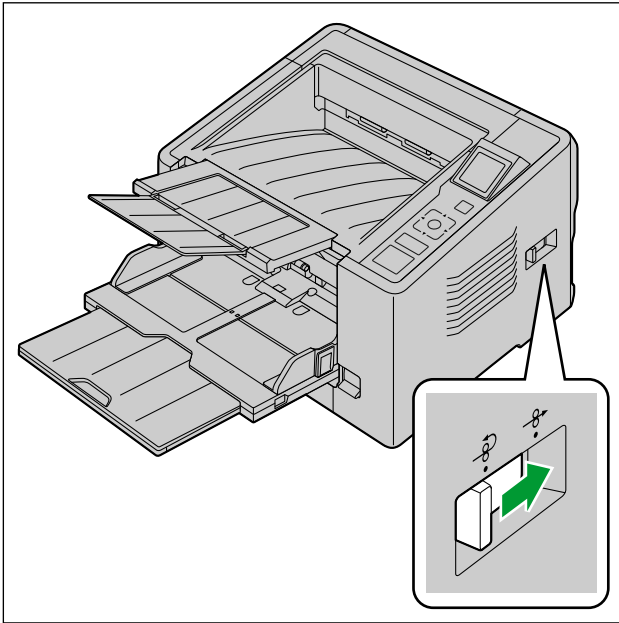
## 4.2.2 Using the Straight path (rear exit)

You can select Straight path (rear exit) with the Paper path selector.

-  : U-turn path (front exit)
-  : Straight path (rear exit)

Straight path (rear exit) is recommended to scan stiff or thick documents.

U-turn path (front exit) is recommended for normal use.





### Notice

If you select straight path (rear exit), please note following.

- Enough space behind the unit is required to exit the documents.
- When using the carrier sheet, use manual feeding.
- The optional imprinter unit (KV-SS020) is not available.
- The order documents exit may be affected.
- Return the paper path selector to the U-turn path (front exit) after scanning the documents.

## 4.2.3 Using Manual feeding

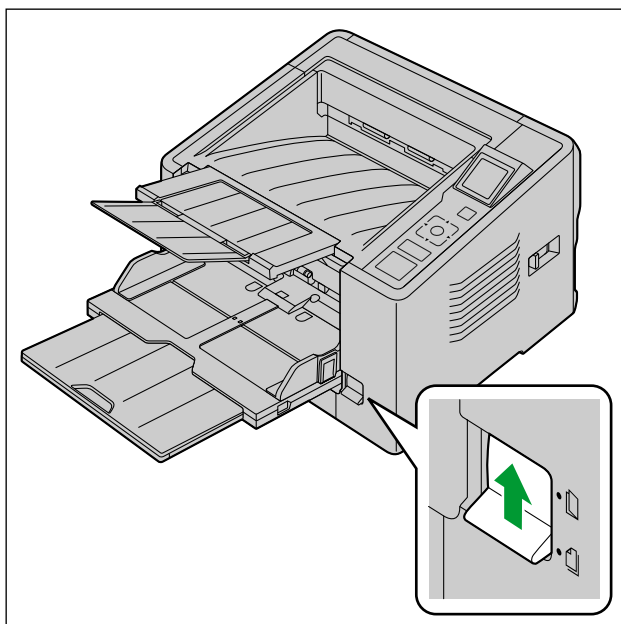
You can select Manual feeding with the Manual Feed Selector.

-  : Manual feeding
-  : Automatic feeding

When using manual feeding, the documents are scanned without separation. Place the documents on the feed tray one by one.

Manual feeding is recommended to scan important documents or bound documents.

Automatic feeding is recommended for normal use.



### Note

Double feed detection is not available when using manual feeding.

## 4.2.4 Feeding method and paper path by document type

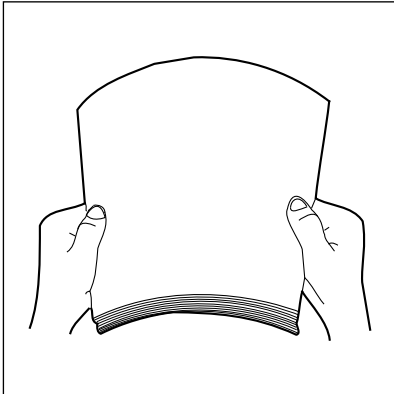
Select the paper path and feeding method according to the document type.

Feeding method	Paper path	Recommended Document type
Automatic feeding	U-turn path (front exit)	Normal documents
	Straight path (rear exit)	Stiff or thick documents Documents that caused a paper jam in the U-turn path (front exit).
Manual feeding	U-turn path (front exit)	Bound documents Important documents that require care in handling.
	Straight path (rear exit)	Thick documents Envelopes Thin booklets Documents that caused a paper jam in the U-turn path (front exit). Plastic cards (ISO format, portrait orientation only) Carrier sheets (KV-SS076)

## 4.2.5 When feeding stiff or thick documents

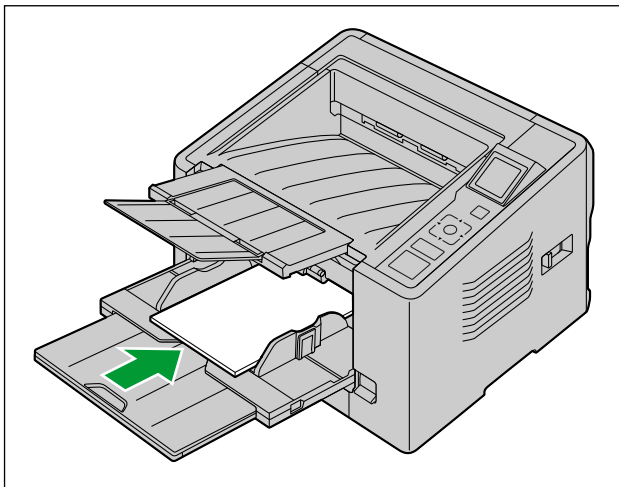
When feeding stiff or thick documents, please note following.

- If the document is curled, correct and flatten the documents.



- If paper is not feeding well when Manual feeding and Straight path (rear exit) are used, feed documents using the following procedure.

1. Start scanning.
2. Insert the document as shown in the illustration until the paper feed roller rotates.

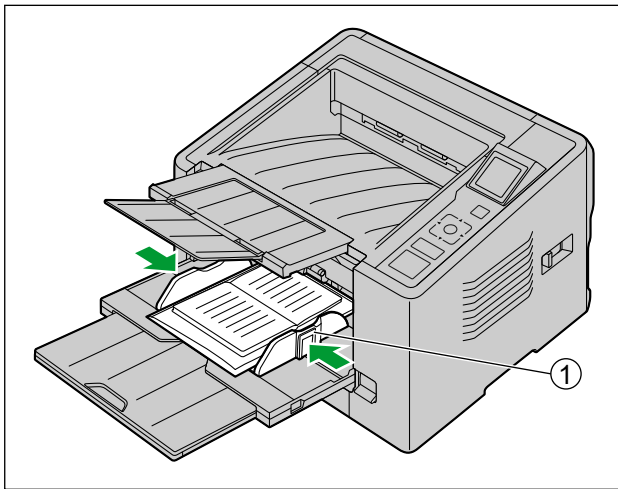


3. Insert the document further until the paper feed roller picks up the document, then let go of the document.

## 4.2.6 Using Carrier sheet

You can use an optional carrier sheet (KV-SS076) to scan incompatible documents like very thin paper, curled or wrinkled documents, photographs etc. For the conditions for documents when using the carrier sheet, please refer to "4.1.2 Carrier Sheet" (page 25).

1. Set the paper path selector to Straight path (rear exit).
2. Set the manual feed selector to Manual feeding.
3. Place the carrier sheet on the feed tray with the surface to be scanned facing up.
  - Adjust the document guides to the size of the carrier sheet.
  - Move the document guide while pressing the lever (①) of the document guide.



4. Start scanning.

### Note

- If the rollers are dirty, the scanned image will be stretched or distorted. In such cases, clean the rollers.
- If vertical streaks appear on the scanned image, clean the scanning glasses and the carrier sheet. Vertical streaks that appear may be caused by scratches on the carrier sheet. If vertical streaks appear after cleaning the scanning glasses and the carrier sheet, flip over the carrier sheet to the other side, or replace the carrier sheet, and then scan the documents.
- If the carrier sheet does not feed well, please refer "4.2.5 When feeding stiff or thick documents" (page 33).

## 4.3 Using Push Scan

This scanner has a push scan function for starting scanning without operation through a computer.

### 4.3.1 Setting the scanning conditions


Scanning conditions are set on the setting screen of each application. For details about the setting screen of each application, refer to the manual or help for that application.

#### Note

- Press and hold the OK button or Start/Stop button for more than 2 seconds to open the application setting screen.
- If the unit is in sleep mode, press any button (except the power button) on the scanner's operation panel to return to ready mode first.

### 4.3.2 Selecting the behavior of push scan

Select the behavior of push scan using the Scan Button Setting Tool.

1. Double click the () icon in the notification area of the task bar to open the Scan Button Setting Tool.
  - In Windows 8, open the Scan Button Setting Tool on the Desktop screen.
2. Select [Touch Free Scanning] or [Single Touch Scanning].

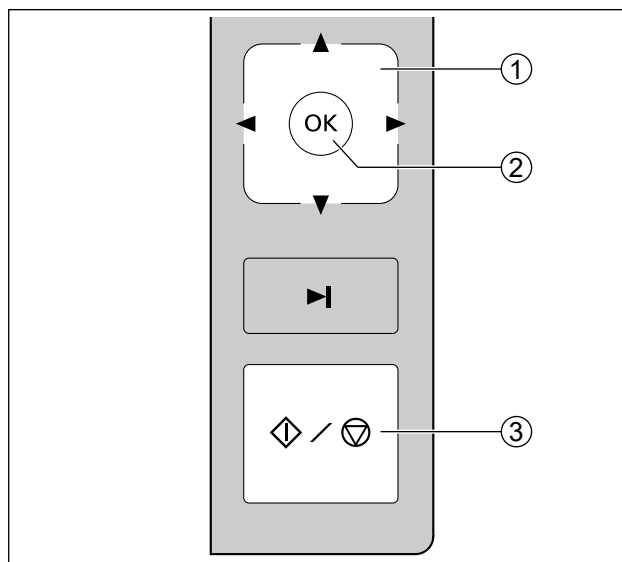
#### Note

- In Image Capture Plus and Scan Button Setting Tool, [Single Touch Scanning] means performing push scanning using the LCD.
- For details about the Scan Button Setting Tool, refer to the Scan Button Setting Tool help.

### 4.3.2.1 Performing push scan

#### Note

- Register jobs in advance. For details about registering jobs, refer to the Image Capture Plus help.



1. Use ◀ or ▶ of the cursor button (①) to select a group.
2. Use ▲ or ▼ of the cursor button (①) to select a job.
3. Place the documents on the feed tray.
  - When [Touch Free Scanning] is selected, scanning will start.
  - When [Single Touch Scanning] is selected, press the OK button (②) or Start/Stop button (③) to start scanning.

## 4.3.3 Checking events

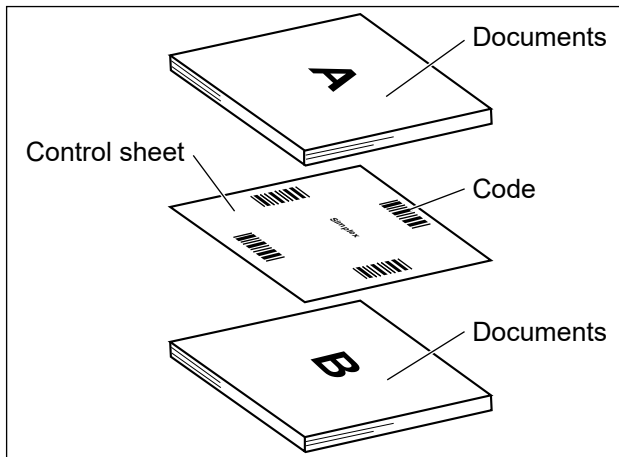
Check the following if an application does not start up after being set by the Scan Button Setting Tool.

1. Display the Scan properties screen.
  - If you are using Windows 8 / Windows 7:  
[Control Panel] → [View devices and printers], right-click the scanner icon, and display the [Scan properties] screen.
  - If you are using Windows Vista:  
[Control Panel] → [Scanners and Cameras], select the scanner icon, and then click the Properties button.
  - If you are using Windows XP:  
[Control Panel] → [Scanners and Cameras], right-click the scanner icon, and display the Properties screen.
2. Click the [Events] tab.
3. Check that Scan Button Setting Tool is selected as the program to start for each event.
  - If an application other than Scan Button Setting Tool is selected, change the application to Scan Button Setting Tool.
4. Click [OK].
5. Restart the computer.

# 4.4 Using Control Sheets

Placing a control sheet in the middle of documents lets you change the scanning conditions for pages scanned after the control sheet. Also, you can change the folder used to save the scan data of documents scanned after the control sheet.

- Print out control sheets from the included CD-ROM.



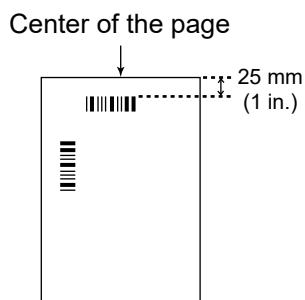
## 4.4.1 Control sheet functions

Simplex, Duplex, Binary, 256 level gray, Color, Dynamic Threshold, Dither, Error diffusion, Function #1-#9, Separation Sheet

- For details about control sheets, refer to "Detect Control Sheet" in the Image Capture Plus, TWAIN, or ISIS help.
- For details about separation sheets, refer to "Detect Separation Sheet" in the Image Capture Plus, TWAIN, or ISIS help.

## 4.4.2 About Printing Control Sheets

- Print the control sheet at the specified size; do not enlarge or reduce the size.
- When printing the control sheet, make sure that the pattern is 25 mm (1 in.) from the top of the page and centered horizontally.



<Example A4 printout>

- Use the control sheet that is the same size as the document you are scanning.
- Be careful not to get the control sheet dirty. Do not fold or crease the control sheet. Scanning will not be performed properly.

- For details about control sheets, refer to "Detect Control Sheet" in the Image Capture Plus, TWAIN, or ISIS help.

### 4.4.2.1 Printing control sheets

#### Note

- In order to print control sheets, Adobe Reader must be installed on your computer.
  - Refer to the instruction manual for your printer for details about changing print settings.
1. Insert the included CD-ROM into the CD/DVD drive on your computer.
    - The setup window will appear.

#### Note

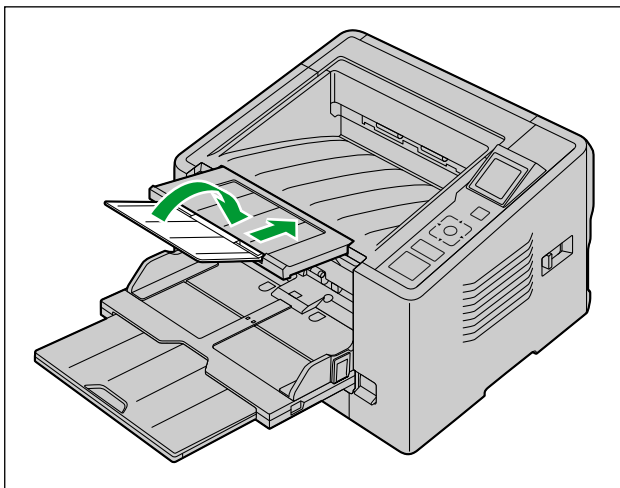
- If the AutoPlay dialog box is displayed, select [CDRun.exe].
  - If the setup window does not appear, double-click [CDRun.exe] in the Software / Manual CD-ROM.
2. Select [Control Sheet] from "Documents" on the right side of the screen.
  3. Print the control sheets at the same size as your document.

## 5 Clearing Paper Jams

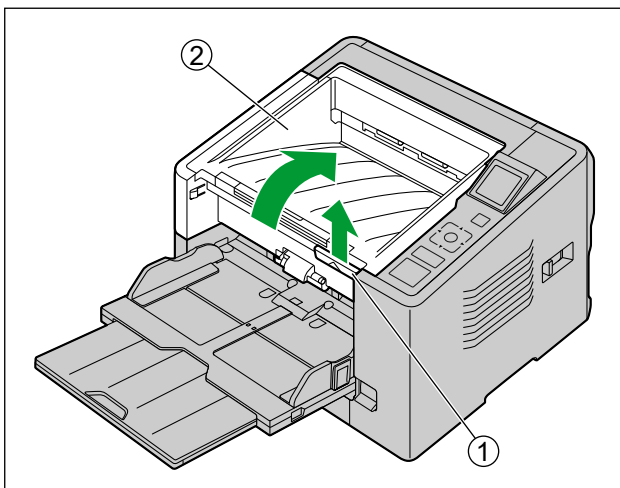
### 5.1 Clearing Paper Jams

If a paper jam occurs, remove the jammed sheet according to the following procedure.

1. Remove all documents from the exit tray.
2. Close the exit extension trays.

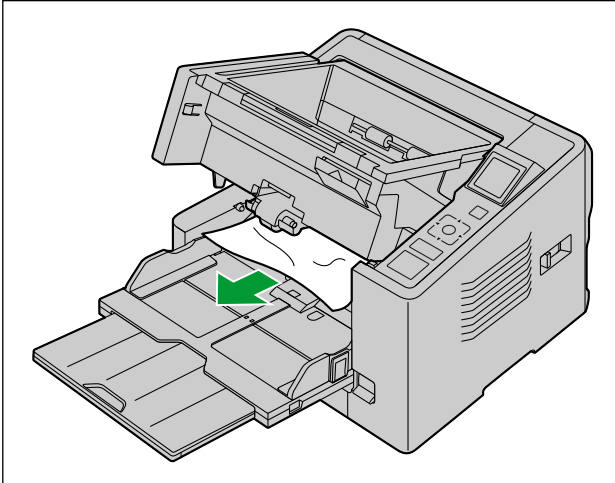


3. Press the ADF door release (①), and open the ADF door (②).

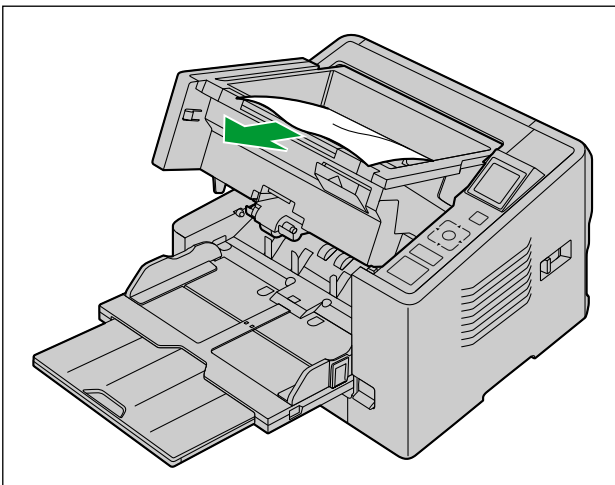


### 4. Remove the jammed document.

- If the document is jammed inside the scanner, remove it from the inside of the ADF door as shown in the illustration.



- If the document is jammed in the exit area, pull it forward as shown in the illustration.

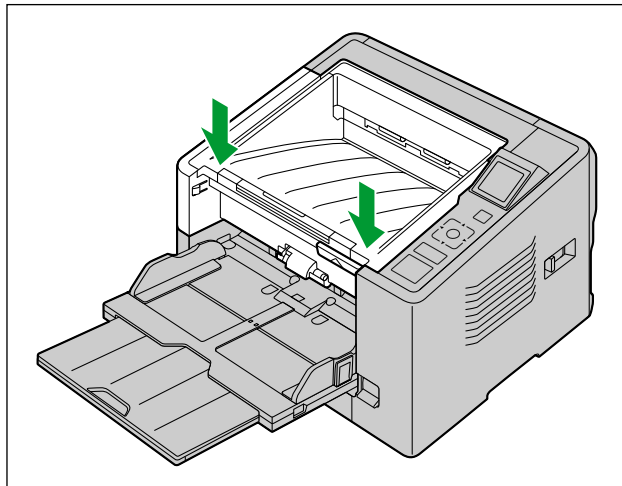


## 5.1 Clearing Paper Jams

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### 5. Close the ADF door.

- Push both sides of the ADF door down slowly until it clicks into place.



### Notice

- Close the ADF door after confirming that no documents remain inside the unit.

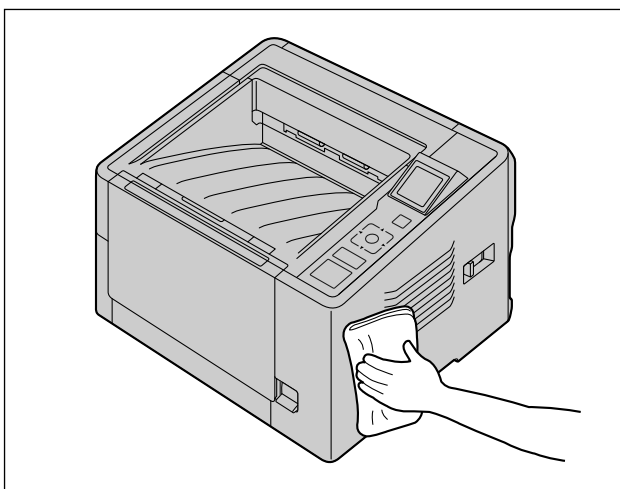
## 6 Care and Maintenance

### 6.1 Cleaning the Outside of the Scanner

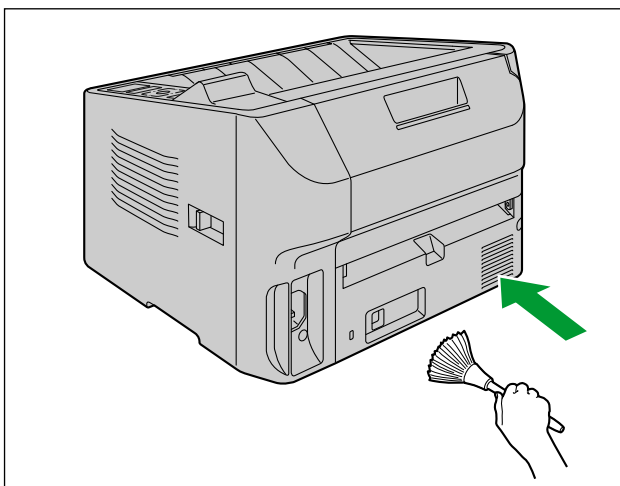
#### Notice

- Before moving the unit, be sure to unplug the power cord and USB cable.
- Do not use commercially available cleaners, detergent, thinner, or benzine. (Doing so may cause deformation, discoloration or damage.)
- Clean the scanner at least once a month.

1. Clean the outside of the scanner with a soft, slightly damp cloth.



2. Remove dirt and dust from the fan exhaust vent with a brush.



# 6.2 Cleaning the Inside of the Scanner

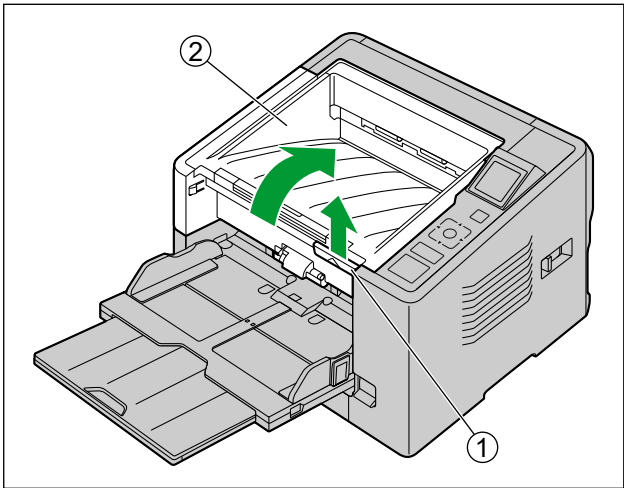
Notice

- Be sure to disconnect the power cord and USB cable from the unit before cleaning it.
- Clean the inside of the scanner when approximately 20,000 sheets have been scanned. The time for cleaning may differ depending on documents you scan. To maintain proper scanning, clean the scanner parts frequently.
- Clean the rollers if paper jamming or double feeding occurs frequently.
- If double feed detection does not function properly, clean the double feed detectors.
- Clean the scanning glasses when vertical streaks appear on the scanned images.
- Be careful not to damage any parts of the unit.
- Do not use flammable aerosol cleaners.

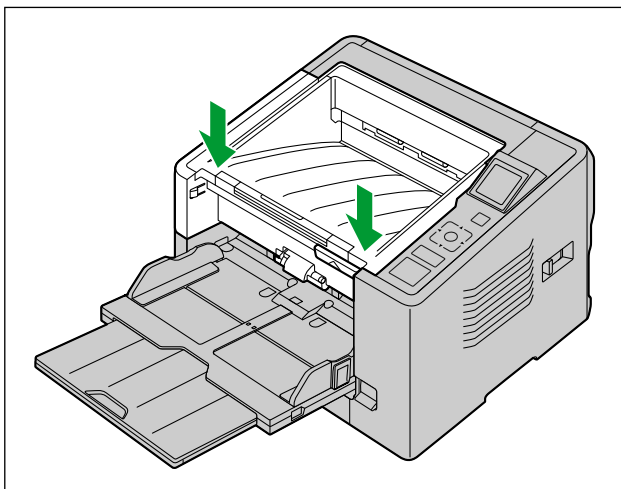
1. Prepare the following cleaning supplies.

Soft and dry cloth	Used to clean the conveyor and scanning glasses.
Thin cotton swab	Used to clean the sensors.
Roller cleaning paper (KV-SS03)	Use of the roller cleaning paper is recommended. If you do not have the roller cleaning paper, use a soft cloth with a small amount of isopropyl alcohol or water. Do not use commercially available cleaners, detergent, thinner, or benzine. (Doing so may cause deformation, discoloration or damage.)

2. Press the ADF door release (①), and open the ADF door (②).



3. Clean the conveyor, sensors, rollers, and scanning glasses.
  - Clean the parts in the following order: conveyor and scanning glasses, sensors, rollers.
  - For details about cleaning, refer to the following:
    - "6.2.1 Cleaning the Conveyor and Scanning Glasses" (page 46)
    - "6.2.2 Cleaning the Sensors" (page 47)
    - "6.2.3 Cleaning the Rollers" (page 48)
4. Close the ADF door.
  - After cleaning, push both sides of the ADF door down slowly until it clicks into place.

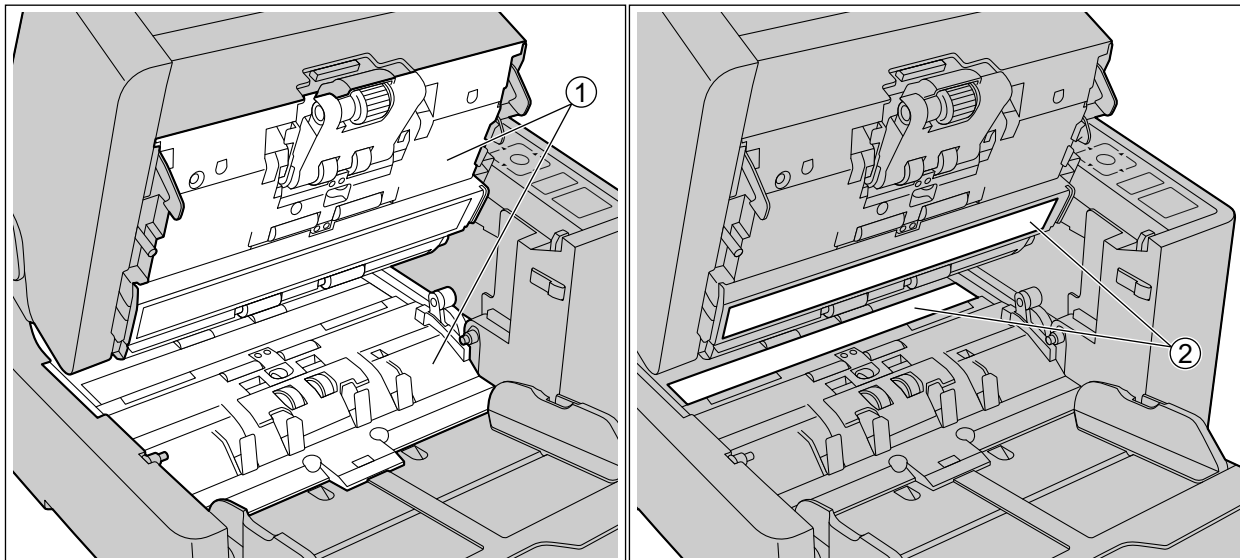


### Note

- If roller cleaning notifications via the After Clean Roller Counter are enabled, reset the After Clean Roller Counter in User Utility to 0 after turning ON the unit's power. For details, refer to the User Utility help.

### 6.2.1 Cleaning the Conveyor and Scanning Glasses

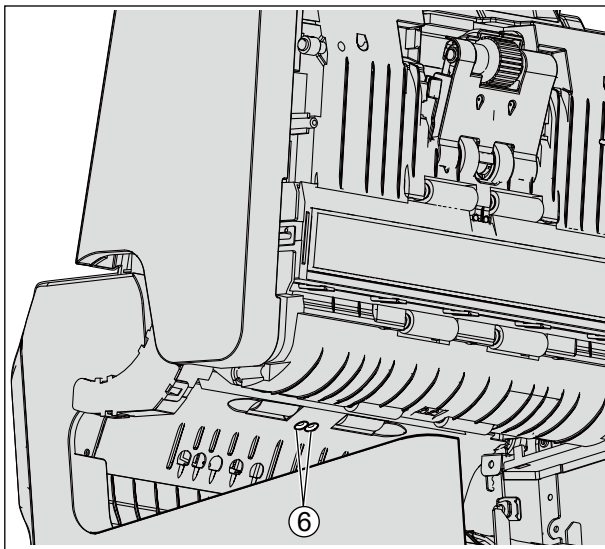
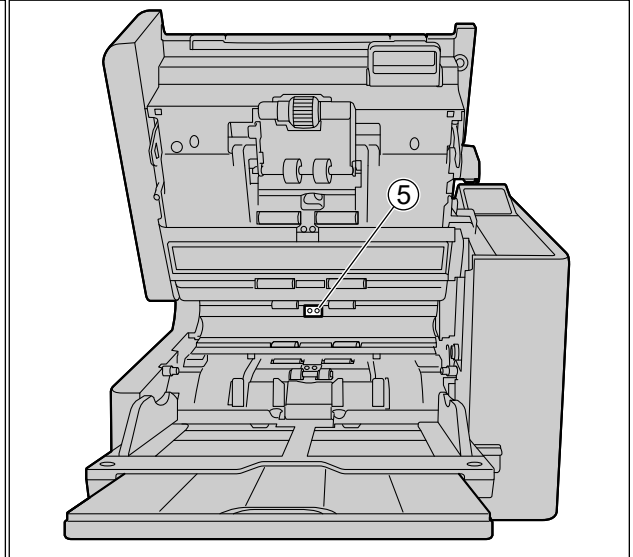
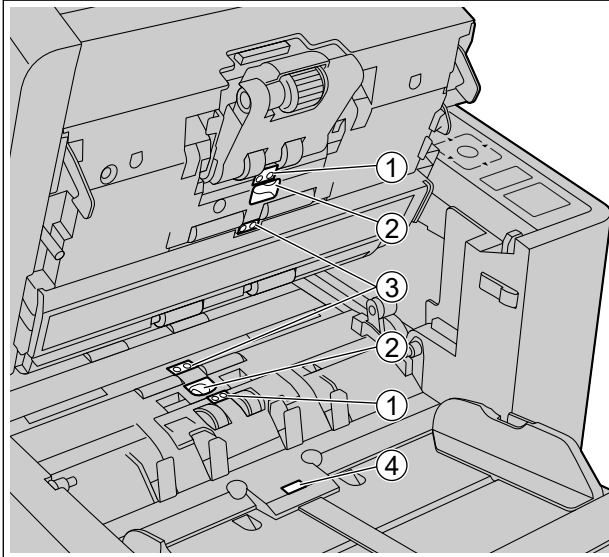
1. With a soft and dry cloth, wipe off any dirt on the conveyor (①) and scanning glasses (②).



- ① Conveyor
- ② Scanning Glasses

## 6.2.2 Cleaning the Sensors

1. Remove dust from the sensors with a cotton swab.

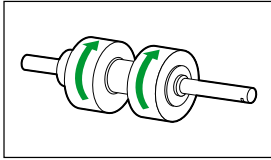


- ① Waiting sensor
- ② Double feed detector
- ③ Starting sensor
- ④ Paper sensor
- ⑤ Paper jam sensor
- ⑥ Exit sensor

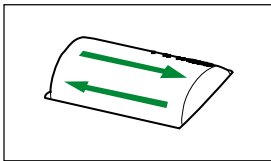
### 6.2.3 Cleaning the Rollers

1. Use the Roller Cleaning Paper (page 9) to wipe the dirt from the surfaces of all rollers.

#### Direction to wipe rollers



Double feed prevention roller, Separation roller

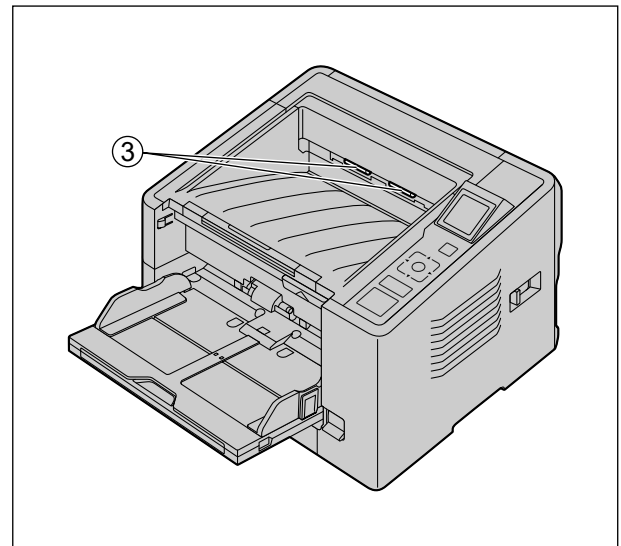
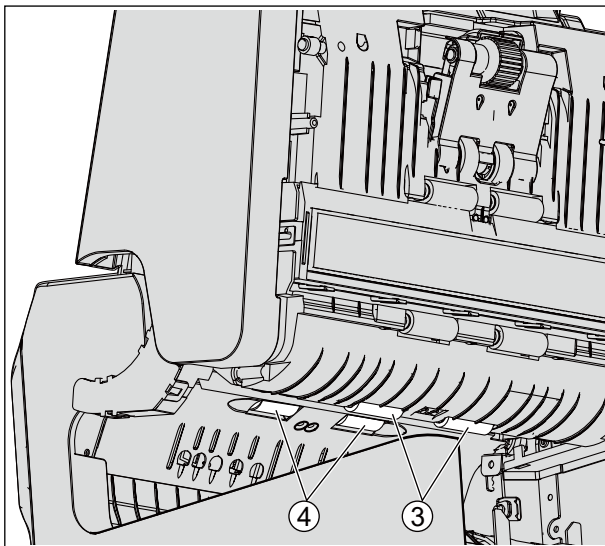
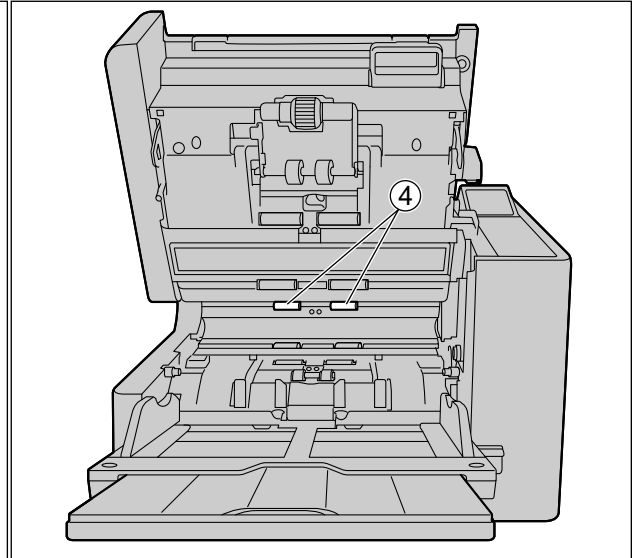
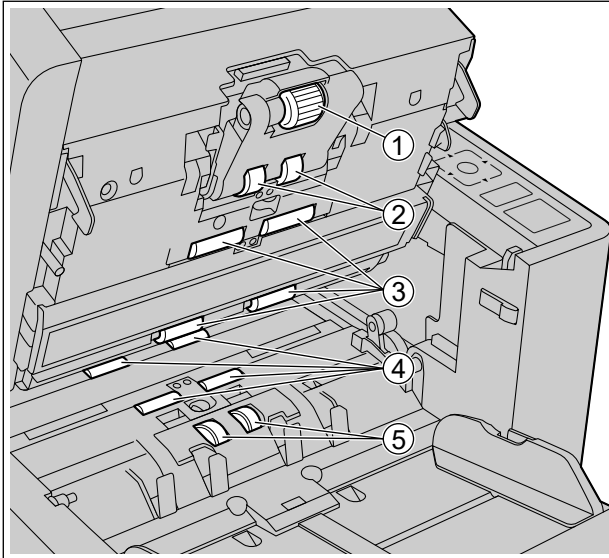


Other rollers

#### Notice

- After removing the double feed prevention roller, gently wipe dirt from the surface of the roller in the direction indicated by the arrows in the illustration. If you wipe too hard, you may damage or misalign the roller.  
For instructions on how to remove the double feed prevention roller, see "6.3 Replacing the Rollers" (page 51).
- Wipe dirt off of the other rollers in the directions indicated by the arrows in the illustration. Use your finger to rotate the roller and wipe dirt off of the entire surface of the roller. If the roller rotates when wiping it, gently hold it in place with your finger.

### 6.2.3.1 Location of Rollers



- ① Paper feed roller
- ② Separation roller
- ③ Free rollers
- ④ Conveyor rollers
  - For details about cleaning the conveyor rollers, see "6.2.4 Cleaning Mode" (page 50).
- ⑤ Double feed prevention roller

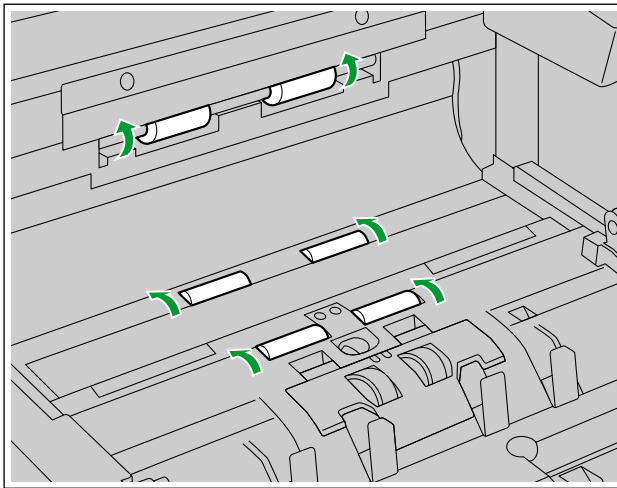
### 6.2.4 Cleaning Mode

Cleaning Mode can be used to help cleaning the conveyor rollers. During Cleaning Mode, the conveyor rollers rotate a small amount every time the Start/Stop button on the scanner is pressed. So, you do not have to rotate the conveyor rollers by using your fingers in order to clean the entire surface of each roller.

#### Notice

- Do not touch the conveyor rollers while they are rotating.
- Use Cleaning Mode only to clean the conveyor rollers.

1. Close the ADF door.
2. Plug in the power cord and connect the USB cable.
3. Press the power button to turn ON the unit's power.
4. Start the User Utility.
5. Select Cleaning Mode in User Utility.
6. Press the ADF door release, and open the ADF door.
7. Enter Cleaning Mode in User Utility.
8. Clean the conveyor rollers.
  - a. Use the Roller Cleaning Paper (page 9) to wipe the dirt from the surfaces of the conveyor rollers.
  - b. Press the Start/Stop button on the scanner to rotate the conveyor rollers a small amount.
  - c. Repeat these steps until all surfaces of all conveyor rollers are cleaned.

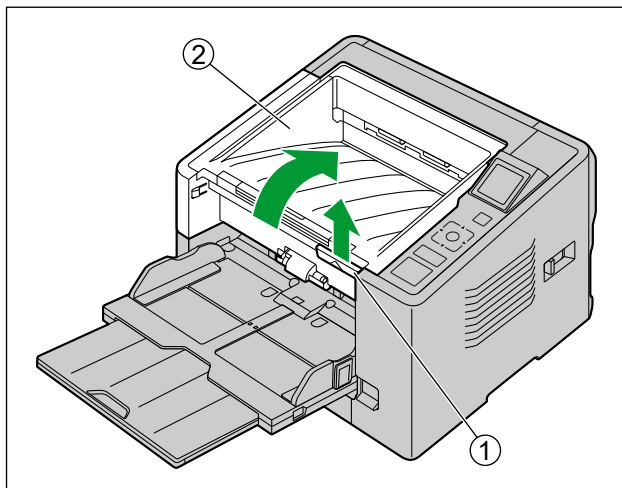


9. Exit Cleaning Mode after cleaning is completed.

## 6.3 Replacing the Rollers

As a rough guideline, we recommend to replace the paper feed roller module and double feed prevention roller after scanning 350,000 sheets of paper. ("350,000 sheets" is based on scanning high-quality woodfree paper. Depending on the type of paper and other factors, the actual lifetime for the rollers may be shorter.) In User Utility, you can check the number of sheets that have been scanned.

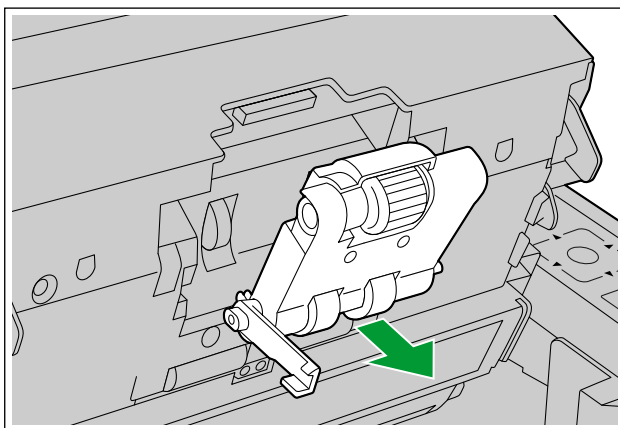
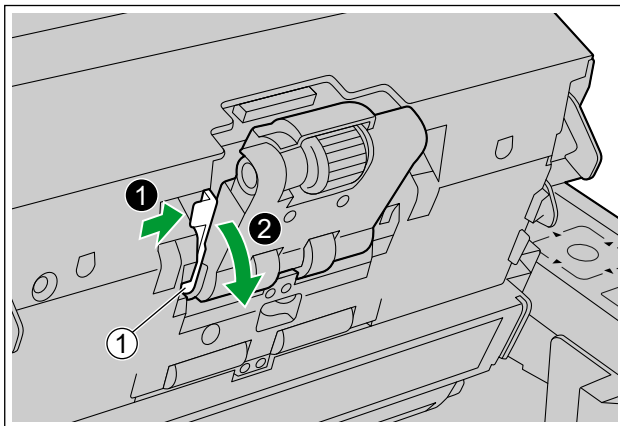
1. Press and hold the power button for one second or more to turn off the unit's power.
2. Push the ADF door release (①) upwards, and open the ADF door (②).



### 6.3 Replacing the Rollers

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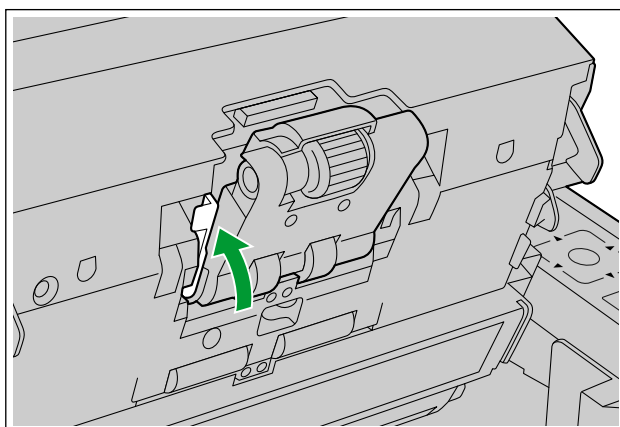
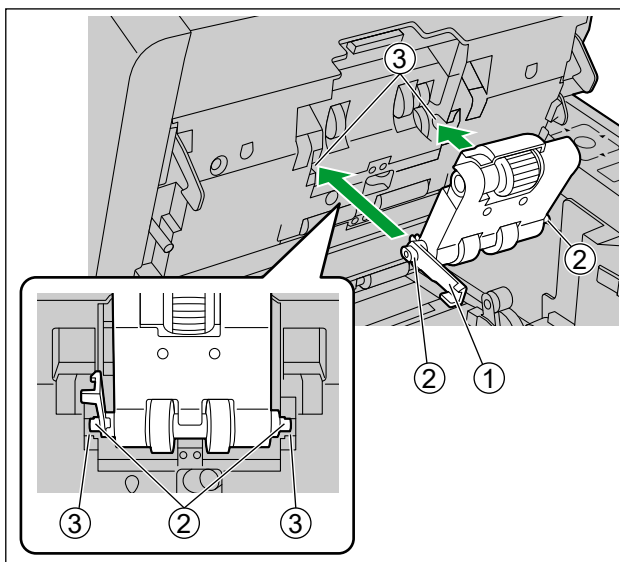
3. Move the lever (①) of the paper feed roller module in the order indicated by the arrow (①, ②), and then pull out the module towards you.



4. Open the "Roller exchange kit (KV-SS063)" (sold separately) and take out the new paper feed roller module.

**5. Install the new paper feed roller module.**

- With the lever (①) of the paper feed roller module lowered, insert both protrusions (②) into the grooves (③), and then slowly raise the lever in the direction indicated by the arrow until it clicks into place.

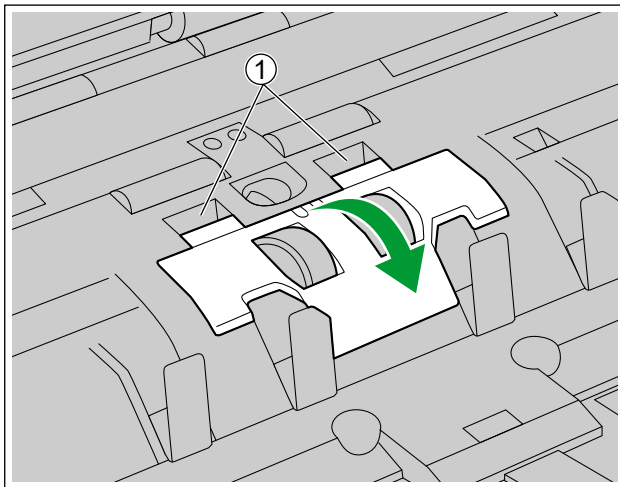
**Notice**

- Make sure that the paper feed roller module's lever is firmly set. If the lever is not firmly set, the lever or the paper feed roller module might become damaged or might not function correctly.

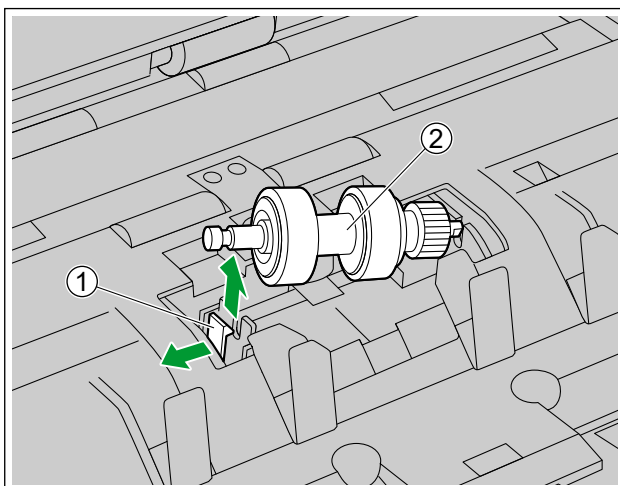
### 6.3 Replacing the Rollers

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6. Use the indents (①) to pull the double feed prevention roller cover towards you to open it.



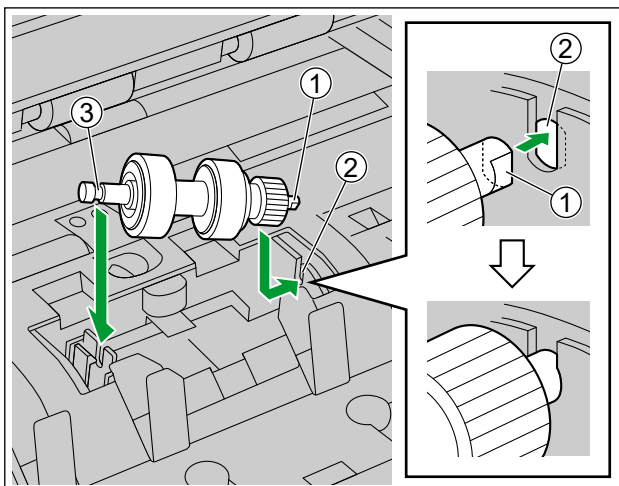
7. While pulling the tab (①) in the direction indicated by the arrow, lift the double feed prevention roller (②) in the direction of the arrow. Then, pull out the right shaft (when facing it) from the notch in the roller mount.



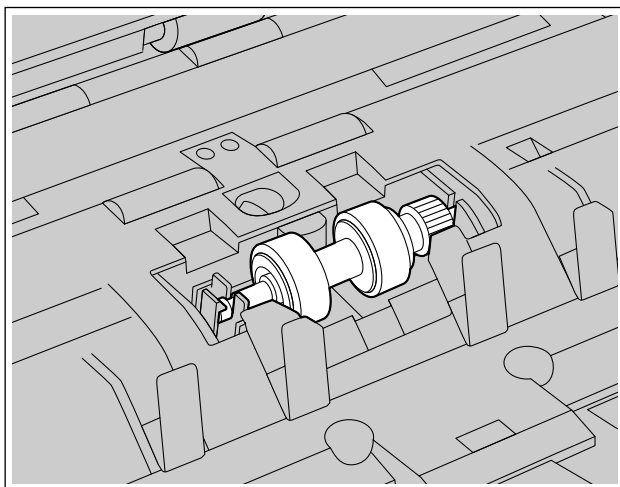
8. Open the "Roller exchange kit (KV-SS063)" (sold separately) and take out the new double feed prevention roller.

**9. Install the new double feed prevention roller.**

- Align the shaft that is shaped as indicated by ① with the notch in the roller mount (②), and then insert the shaft in the notch. Push the shaft on the opposite side (③) until it clicks into place.

**Notice**

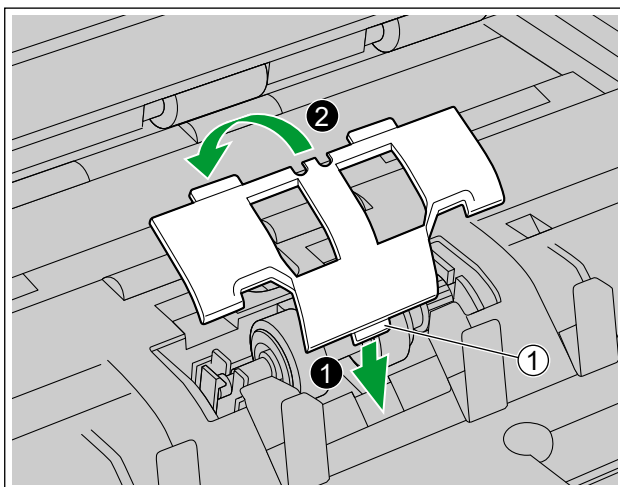
- After you install the double feed prevention roller, make sure that the shaft is inserted into the tab. If the roller is not installed correctly, it may cause double feeding or a paper jam.



### 6.3 Replacing the Rollers

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- 10.** Insert the tab (①) into the notch as shown in the illustration, and then push the double feed prevention roller cover until it clicks into place to close it.

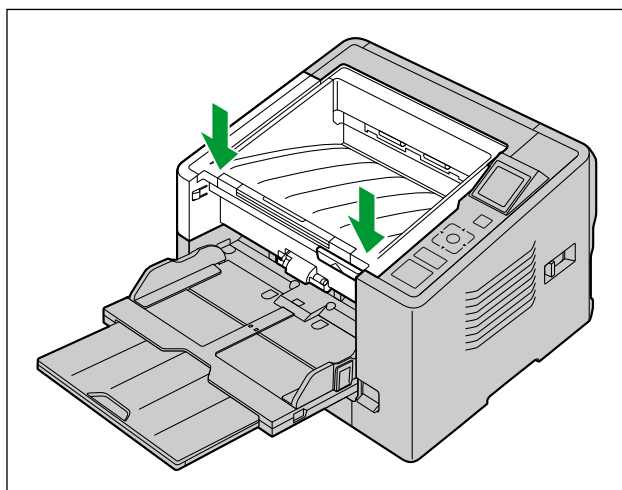


#### Notice

- Make sure that the double feed prevention roller cover does not stick up.  
If the double feed prevention roller cover is closed incompletely, damage or paper jams can occur.

- 11.** Close the ADF door.

- Push both sides of the ADF door down slowly until it clicks into place.



- 12.** Press the power button to turn on the unit's power.

- 13.** Reset the After Replace Roller Counter in User Utility to 0.

- For details, refer to the User Utility help.

## 7 Optional Imprinter Unit

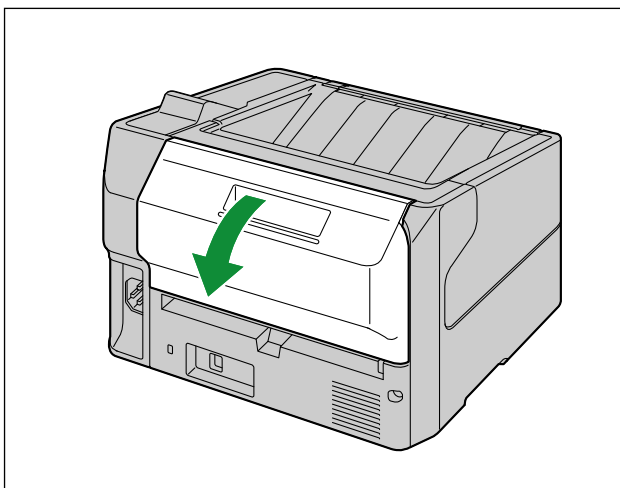
### 7.1 Installing the Imprinter Unit and Ink Cartridge

The imprinter unit can be used to print information such as a name, the date and time, or a serial number on the rear side of the document after scanning.

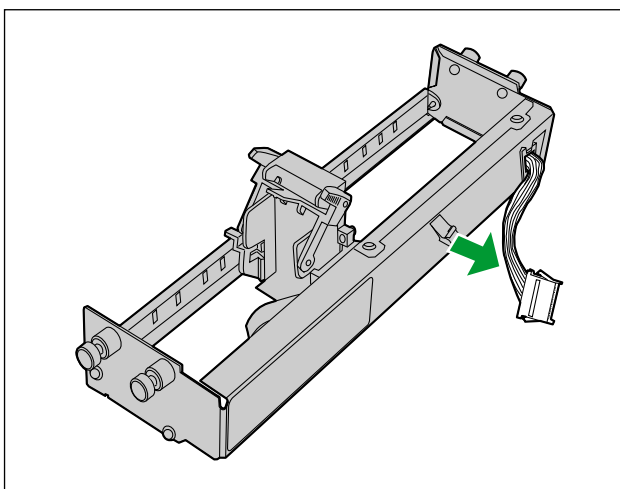
#### Notice

- Do not use the imprinter to print on water-repellent documents such as film, coated paper, some kinds of copy paper, etc. These documents repel ink, and the ink may stain the inside of the scanner (for example, the rollers). If imprinter ink has stained the parts of the scanner, clean it by using the Roller cleaning paper (KV-SS03).

1. Press and hold the power button for one second or more to turn off the unit's power.
2. Open the imprinter door.



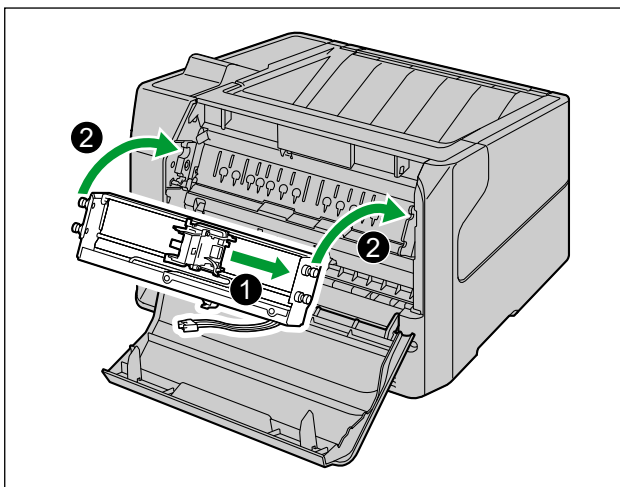
3. Remove the cables from the clamper.



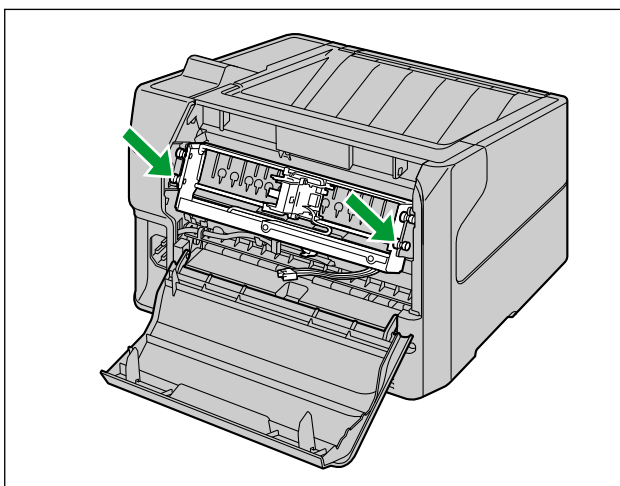
## 7.1 Installing the Imprinter Unit and Ink Cartridge

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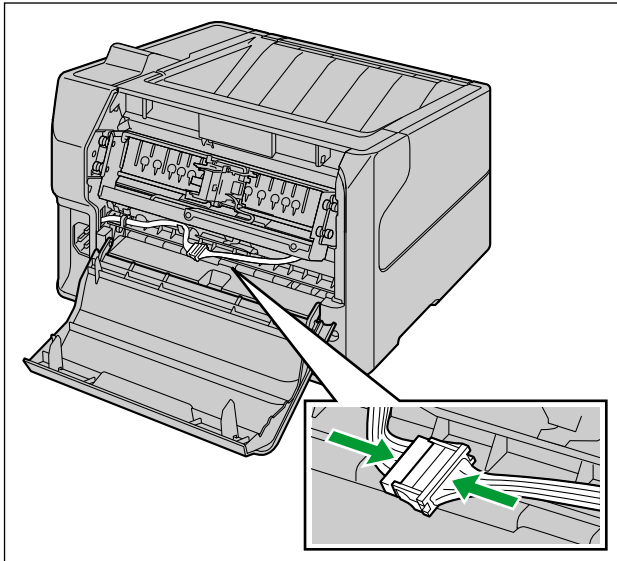
4. Slide the carriage to one end, and then insert the upper pins to the guides by matching the gloves with the guides.



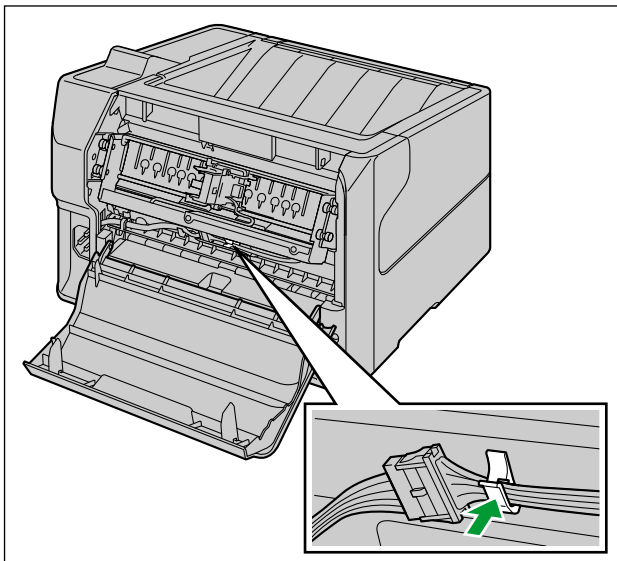
5. Insert the lower pins to the guides until they are locked.



6. Connect the cables.

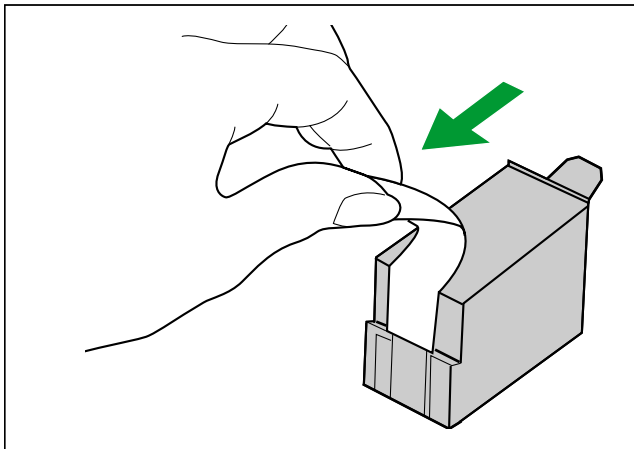


7. Insert the cables in the clamber.

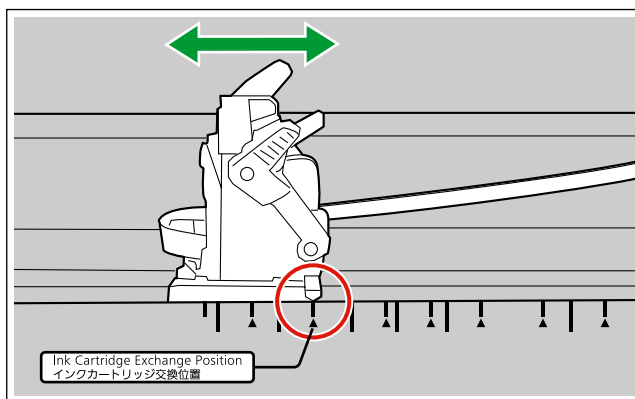


## 7.1 Installing the Imprinter Unit and Ink Cartridge

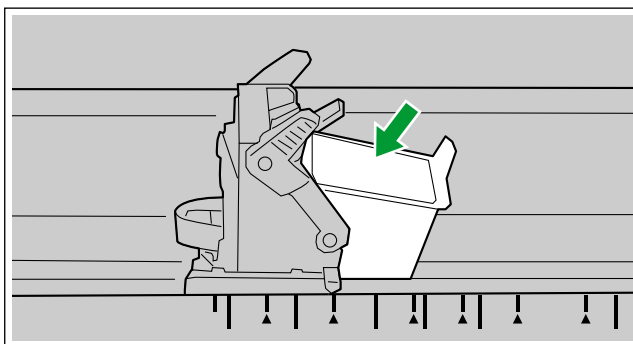
8. Remove the protective sheet.



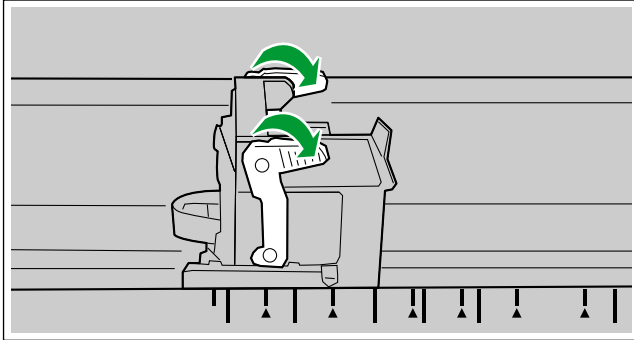
9. Move the carriage to the cartridge exchange position.



10. Insert the ink cartridge into the carriage.



- 11.** Lock the cartridge adjusting lever.

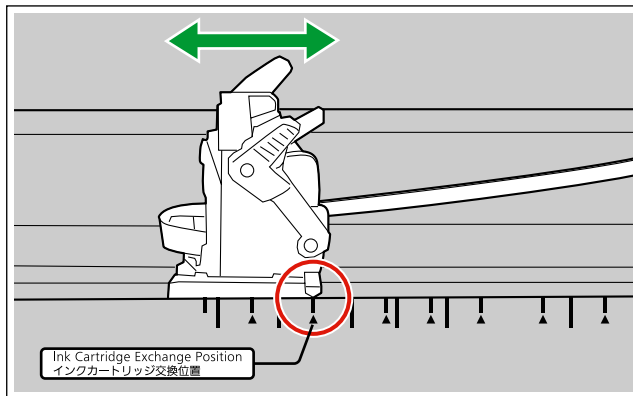


- 12.** Close the imprinter door.

## 7.2 How to Remove the Ink Cartridge

Remove the old ink cartridge before installing a new ink cartridge.

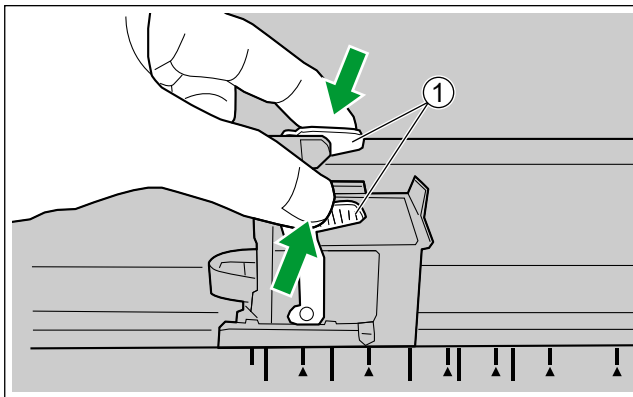
1. Press and hold the power button for one second or more to turn off the unit's power.
2. Open the imprinter door.
3. Move the carriage to the ink cartridge exchange position.



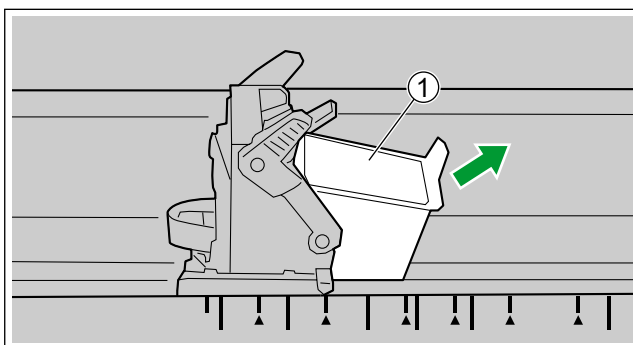
### Notice

- Adjust the position following the label on the imprinter unit.

4. Pinch the ink cartridge adjustment lever (①) and lift it.



5. Remove the ink cartridge (①).

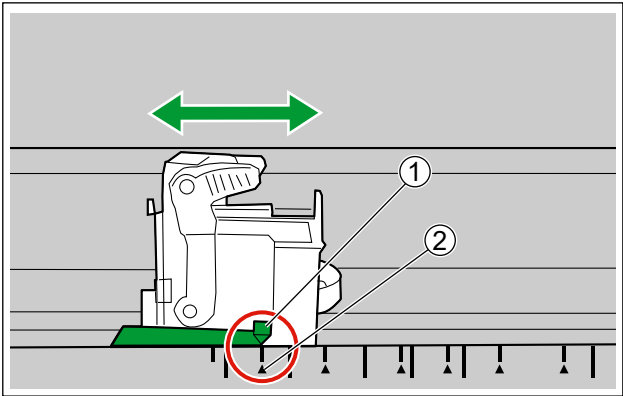


- For details about installing a new ink cartridge, refer to step 8 and after in "7.1 Installing the Imprinter Unit and Ink Cartridge" (page 57).

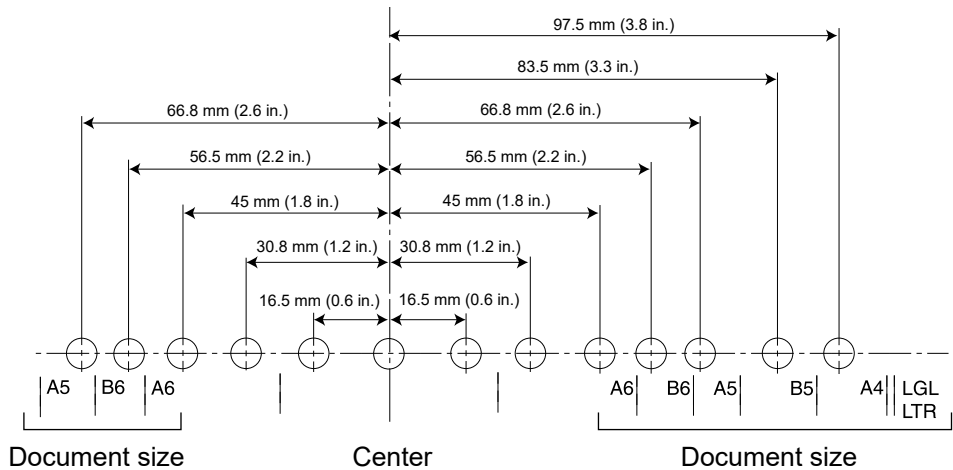
# 7.3 Printing

## Adjusting the imprinter printing position

1. Move the carriage to the desired printing position, and align the indicator (①) with the "▲" mark (②).
- The "▲" mark indicates the printing position. Printing is not available in any other position.



## Printing Position



## Printing

Printing can be set from the Image Capture Plus software and the TWAIN and ISIS drivers. For details, refer to the Image Capture Plus, TWAIN, or ISIS help.

# 7.4 Cleaning the ink cartridge

If printing becomes faded, perform the followings.

### Cleaning by using the User Utility

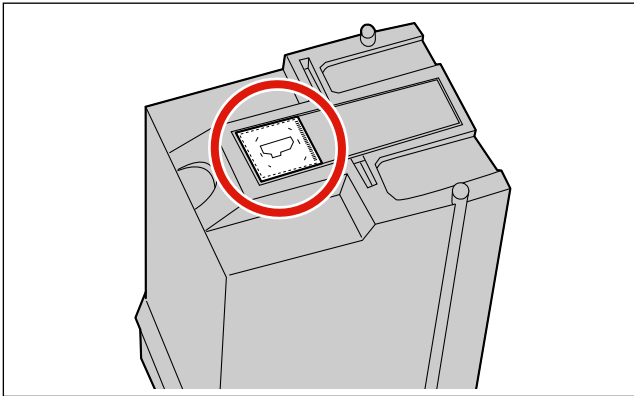
Click the [Clean Imprinter] button on the User Utility program.

This will help remove clogging by ejecting ink from the print head.

### Cleaning the dirt on the print head

Wipe and clean the print head with moistened tissue paper.

Do not use any material that includes alcohol. (Ex.: Roller cleaning paper)



### Notice

- Depending upon the type of paper you use, ink may stain the inside of the scanner (Ex.: Rollers). In this case, clean it by using the Roller cleaning paper (KV-SS03).

## 8 Appendix

### 8.1 Troubleshooting

If a problem occurs while the scanner is being used, check the following items and check the scanner status in User Utility. If the unit still malfunctions, turn it OFF, unplug the power cord and call for service.

Symptom	Possible Cause	Remedy
The LED (Green) does not light when the unit's power is turned ON.	The power cord is not plugged in.	Insert the power plug firmly.
The computer does not recognize the scanner. The scanner is not functioning correctly.	The scanner is not connected to the computer correctly.	Connect the USB cable correctly.
	The software is not installed correctly.	Uninstall the software from the computer (page 69), and then install the software again (page 17).
	The scanner is connected via USB hub.	Do not connect via USB hub.
	There is a problem with the USB cable.	Make sure to use the included USB cable.
	The unit's power was turned OFF because no operation was performed for a certain period of time.	Press the power button to turn ON the unit's power.
Scan speed is slow.	The scanner is connected over a USB 1.1 connection.	Connect over USB 2.0 / USB 3.0.
The document has been loaded on the feed tray, but the scanner does not start scanning.	The document is not loaded properly.	Load the document correctly. (page 28)
	The sensor cannot detect the document as the edge of the document is curled.	Flatten the document (page 23) and load it again (page 28).

## 8.1 Troubleshooting

Symptom	Possible Cause	Remedy
Double feeding occurs frequently.	The paper feed roller, separation roller, or double feed prevention roller is dirty.	Clean the paper feed roller, separation roller, or double feed prevention roller. (page 48)
	The double feed detectors are dirty.	Clean the double feed detectors. (page 47)
	The paper feed roller, separation roller, or double feed prevention roller has become worn down.	Replace the paper feed roller module, and double feed prevention roller. (page 51)
	Right and left sides of the document to be scanned are not the same in height, because of curling or folding.	Flatten the document (page 23) and load it again after reducing the number of sheets.
	The document is printed on an unsupported type of paper or thick paper.	Make a copy of the document on paper of a compatible type and thickness (page 23), and then scan the copy.
	The length of the paper is too short.	Make a copy of the document on paper of a compatible size (page 23), and then scan the copy.
	The document is not aligned correctly.	Realign the document. (page 28)
	Too many sheets are set on the feed tray.	Remove sheets until the sheets on the feed tray are under the limit mark on the document guide.
Documents are not being fed separately.	Manual feeding is selected.	Select automatic feeding. (page 31)
Paper jams occur frequently.	The document is wrinkled.	Smooth out the document.
	The rollers are dirty.	Clean the rollers. (page 48)
	The document is not aligned correctly.	Realign the document. (page 28)
	Too many sheets are set on the feed tray.	Remove sheets until the sheets on the feed tray are under the limit mark on the document guide.
Scanned image is skewed.	The document guides are not adjusted to the size of the document to be scanned, or the document to be scanned is set slanted on the feed tray.	Adjust the document guides properly to the size of the document to be scanned. (page 28)
	Right and left sides of the document to be scanned are not the same in height, because of curling or folding.	Flatten the document (page 23) and load it again after reducing the number of sheets.
The image for a scanned document is blank.	The document to be scanned was loaded upside down.	Load the documents with the surface to be scanned facing up.
Vertical streaks appear on the scanned document.	The scanning glasses are dirty.	Clean the conveyor and scanning glasses. (page 46)

Symptom	Possible Cause	Remedy
The scanning density is uneven.	The scanning glasses are dirty.	Clean the conveyor and scanning glasses. (page 46)
The color of the scanned document is extremely different from the original document.	The settings of the computer monitor are wrong.	Adjust the computer monitor settings.
	Depending on the documents scanned, the color of documents may not be scanned properly. For example, the color of a highlighter pen may be scanned lighter than it appears.	Setting the value for [Chroma] higher in the scanning conditions may solve this problem.
Dark spots or noise appear on the scanned documents.	The scanning glasses are dirty.	Clean the conveyor and scanning glasses. (page 46)
There is noise or wave patterns (moire pattern) on the scanned image.	The scanning resolution settings, combined with patterns within the scanned image, may cause this problem.	Change the scanning resolution or turn the Moire Reduction function ON, and perform scanning again. About Moire Reduction function, refer to the Image Capture Plus, TWAIN, or ISIS help.
There is a noise louder than normal when a short document exits the unit.	The motor speed control may cause a louder noise when a short document exits the unit. This operation is normal.	—

If you still experience problems after following these suggestions, please contact our Technical Support Department at 1-800-726-2797 for further assistance. (U.S.A. only)

## 8.2 Error Messages

Error codes corresponding to the scanner status are displayed on the LCD. Also, when the scanner is connected to a computer, simple messages are displayed on the LCD. For details about the error codes and messages, check in User Utility.

Error Code	Cause	Remedy
U11	The paper has jammed in the feed tray area.	Open the ADF door, and remove the paper.
	The sensors are dirty.	Clean the sensors.
U12 U13 U14 U16	A paper jam has occurred in the unit.	Open the ADF door, and remove the paper.
	The sensors are dirty.	Clean the sensors.
U18	Paper has been left in the scanner.	Open the ADF door, and remove all the paper left inside.
	The sensors are dirty.	Clean the sensors.
U23	A double-feed error has occurred.	Open the ADF door, and remove the jammed paper.
U30	The ADF door is open.	Close the ADF door.
U32	The Imprinter door is open.	Close the Imprinter door.
Fxx	A system error has occurred.	Contact your dealer.

## 8.3 Uninstalling the Software

If you want to remove the software that is installed on your computer, follow the procedure below to uninstall them.

1. In [Control Panel], open [Uninstall a program].
  - In Windows XP, select [Add or Remove Programs].
2. Uninstall the following software programs.

Program Name	Publisher
Image Capture Plus	Panasonic Corporation
Scan Button Setting Tool	Panasonic Corporation
IDREngine	Panasonic Corporation
Panasonic Scanner Manuals	Panasonic Corporation
Panasonic Document Scanner Device Driver	Panasonic Corporation
MCD	Panasonic Corporation
KV-S2087 ISIS Driver	Panasonic Corporation
Panasonic Document Scanner TWAIN Driver	Panasonic Corporation
Panasonic Scanner User Utility	Panasonic Corporation
OCREngine	Panasonic Corporation

3. Follow the instructions on the screen.

# 8.4 Repacking Instructions

It is highly recommended that you keep the original carton and ALL packing materials. If you need to transport or ship the scanner, please follow these instructions.

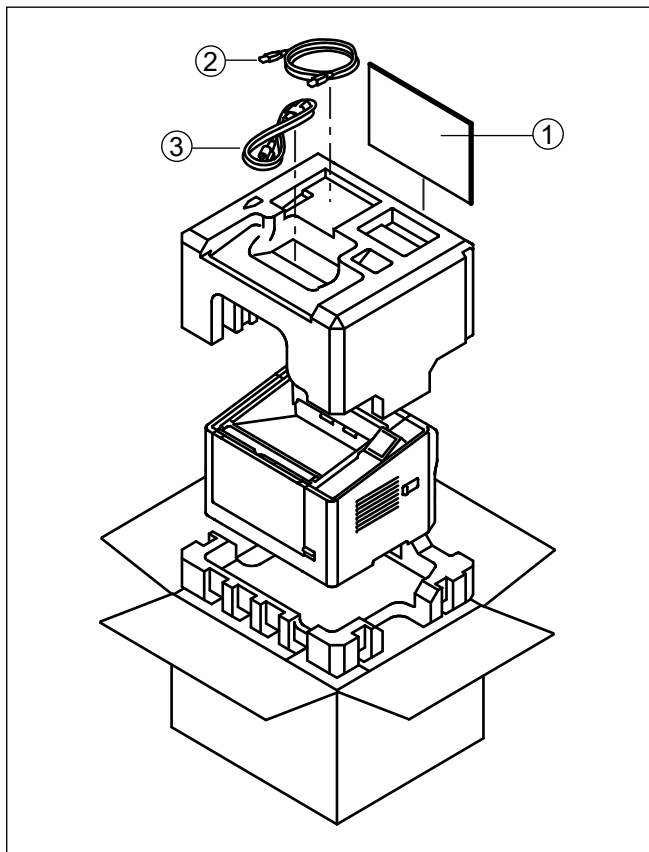
### Note

- Improper repacking of the scanner may result in a service charge to repair the scanner.
- Please use the original carton and all of the original packing materials.
- The scanner should be handled in the correct (horizontal) position.

### Required Materials

- Original scanner carton and packing materials
- Shipping tape and scissors

1. Unplug the power cord and disconnect the USB cable.
2. Pack the scanner.



- ① Quick Installation Guide and Software / Manual CD-ROM
- ② USB cable
- ③ Power cord

## 8.5 Specifications

### Scanning

item		KV-S2087
Scanning face		Duplex
Scanning method		Color CIS (600 dpi)
Scanning speed* <sup>1</sup> • A4 / Letter • Binary / color • 200 dpi, 300 dpi	Simplex	85 pages/min.
	Duplex	170 images/min.
Scanning resolution		100 – 600 dpi (1 dpi step) 1,200 dpi (Interpolated) Optical: 300 dpi / 600 dpi (Automatic switch)
Paper* <sup>2</sup>	Width	48 mm – 216 mm (1.9 in. – 8.5 in.)
	Length* <sup>3</sup>	Automatic feeding: 70 mm – 356 mm (2.75 in. – 14 in.) Manual feeding: 70 mm – unlimited (2.75 in. – unlimited)
	Thickness	0.04 mm – 0.66 mm (1.6 mils – 25.98 mils) <b>Note</b> 1 mil = 0.001 in.
	Weight	U-turn path (front exit): 20 g/m <sup>2</sup> – 157 g/m <sup>2</sup> (5.2 lb. – 42 lb.) Straight path (rear exit): • Automatic feeding: 20 g/m <sup>2</sup> – 157 g/m <sup>2</sup> (5.2 lb. – 42 lb.) • Manual feeding: 20 g/m <sup>2</sup> – 546 g/m <sup>2</sup> (5.2 lb. – 145 lb.)
	Feed capacity	200 sheets (80 g/m <sup>2</sup> [21 lb.] High-quality woodfree paper) 220 sheets (64 g/m <sup>2</sup> [17 lb.] High-quality woodfree paper)
Card* <sup>4</sup>	Format	ISO format
	Size	85.6 mm × 54 mm (3.4 in. × 2.1 in.)
	Thickness	0.76 mm (0.03 in.)
Roller replacement* <sup>5</sup>		350,000 sheets

\*<sup>1</sup> The scanning speed differs depending on the host computer, the operating system, the application, the measuring method, the quantity of data in the image, and the paper type. The scanning speed depends on a measuring method of Panasonic.

\*<sup>2</sup> For details, see "4.1.1 Compatible Paper".

## 8.5 Specifications

- <sup>\*3</sup> Using "Long Paper", you can scan a long document to a series of split scanned images. For details about "Long Paper", refer to the Image Capture Plus, TWAIN, or ISIS help.
- <sup>\*4</sup> Portrait orientation only
- <sup>\*5</sup> For details, see "6.3 Replacing the Rollers".

- dpi: dots per inch
- "Weight in pounds" of paper represents the weight of 500 (432 mm × 559 mm [17 in. × 22 in.]) sheets.

### General

Item		KV-S2087
External dimensions (Width × Depth × Height)		350 × 319 × 242 mm (13.78 × 12.56 × 9.53 in.) (Not including protruding parts)
Weight		9 kg (19.84 lb.)
Power requirement		AC100 – 127 V, 50/60 Hz, 1.2 A AC100 – 240 V, 50/60 Hz, 1.2 – 0.7 A AC220 – 240 V, 50/60 Hz, 0.7 A
Power consumption	Scanning	65 W or less
	Ready	20 W or less
	Sleep	3.0 W or less
	Power OFF	0.5 W or less
Environment <sup>*1</sup>	Operating environment	Temperature: 5 °C – 35 °C (41 °F – 95 °F) Humidity: 20 % – 80 % RH
	Non-operating environment	Temperature: -20 °C – 60 °C (-4 °F – 140 °F) Humidity: 8 % – 95 % RH
	Storage environment	Temperature: -10 °C – 50 °C (14 °F – 122 °F) Humidity: 8 % – 75 % RH
Interface		USB 3.0

<sup>\*1</sup> About the environmental conditions of Imprinter Unit (KV-SS020), refer to the Installation Manual of Imprinter Unit. When printing in conditions outside of the imprinter unit's operating environment, the printing result may be faded or printing may not occur.

