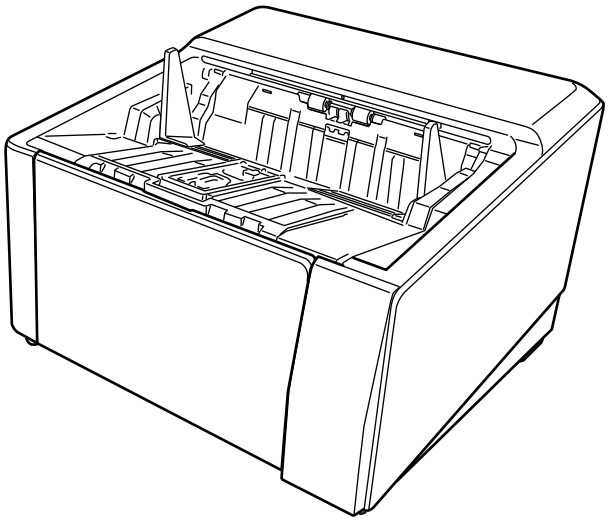
P3PC-7270-03ENZ0

RICOH

RICOH fi-890PRF/PRB Imprinter

Operator's Guide



Introduction

Thank you for purchasing this product.
This product is an option available to be installed on RICOH fi-8950/fi-8930/fi-8820. It can print text (e.g., alphanumeric characters) on a document after scanning.
This manual explains the basic operations and regular maintenance of the following two imprinters.
Use the product correctly according to this manual.

Product Name	Model	Device Name
RICOH fi-890PRF	FI-890PRF	Front-Side Imprinter
RICOH fi-890PRB	FI-890PRB	Back-Side Imprinter

For how to use RICOH fi-8950/fi-8930/fi-8820, refer to "RICOH fi-8950/fi-8930/fi-8820 Operator's Guide" contained in the setup DVD-ROM included in the package.
We hope that this manual helps you make the most of the product.

Trademarks

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Other company names and product names are the registered trademarks or trademarks of the respective companies.

Manufacturer

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Safety Information

The attached "Safety Precautions" manual contains important information about the safe and correct use of this product.
Make sure that you read and understand it before using the scanner.

Abbreviations Used in This Manual

The operating systems and products in this manual are indicated as follows.

Name	Indication
Windows® 10 Home (32-bit/64-bit) Windows® 10 Pro (32-bit/64-bit) Windows® 10 Enterprise (32-bit/64-bit) Windows® 10 Education (32-bit/64-bit)	Windows 10 (*1)
Windows Server® 2016 Standard (64-bit)	Windows Server 2016 (*1)
Windows Server® 2019 Standard (64-bit)	Windows Server 2019 (*1)
Windows Server® 2022 Standard (64-bit)	Windows Server 2022 (*1)
Windows® 11 Home (64-bit) Windows® 11 Pro (64-bit) Windows® 11 Enterprise (64-bit) Windows® 11 Education (64-bit)	Windows 11 (*1)
PaperStream IP (TWAIN) PaperStream IP (TWAIN x64) PaperStream IP (ISIS) fi-8000 Series	PaperStream IP driver
RICOH fi-890PRF/PRB Imprinter	imprinter
RICOH fi-8950/fi-8930/fi-8820	scanner
RICOH fi-8950/fi-8930/fi-8820 Operator's Guide	Operator's Guide

***1:**Where there is no distinction between the different versions of the above operating system, the general term "Windows" is used.

Arrow Symbols in This Manual

Right-arrow symbols (→) are used to separate icons or menu options which should be selected in succession.

Example: Click [Start] menu → [Control Panel].

Screen Examples in This Manual

Microsoft product screenshots are reprinted with permission from Microsoft Corporation.
The screen examples in this manual are subject to change without notice in the interest of product development.
If the actual displayed screen differs from the screen examples in this manual, operate by following the actual displayed screen while referring to the user's manual of the scanner application that you are using.
The screen examples used in this manual are of the PaperStream IP driver.
The screenshots used in this manual are of Windows 10. The actual windows and operations may differ depending on the operating system. Also note that the screens and operations may differ from this manual after the scanner application software is updated. In that case, refer to the manual provided upon updating the software.

Notice

- The contents of this manual are subject to change without notice.
- PFU Limited assumes no liability for incidental or consequential damages arising from the use of this product, and any claims by a third party.
- Copying of the contents of this manual, in whole or in part, as well as the scanner applications is prohibited under the copyright law.

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Preparations

Features

With the Imprinter installed in the scanner, you can print an alphanumerical string on a document scanned with the ADF.
This feature helps you to organize the scanned document with a name, date, or a serial number printed on it.
The Front-Side Imprinter prints a character string on the front of a document, and the Back-Side Imprinter on the back.

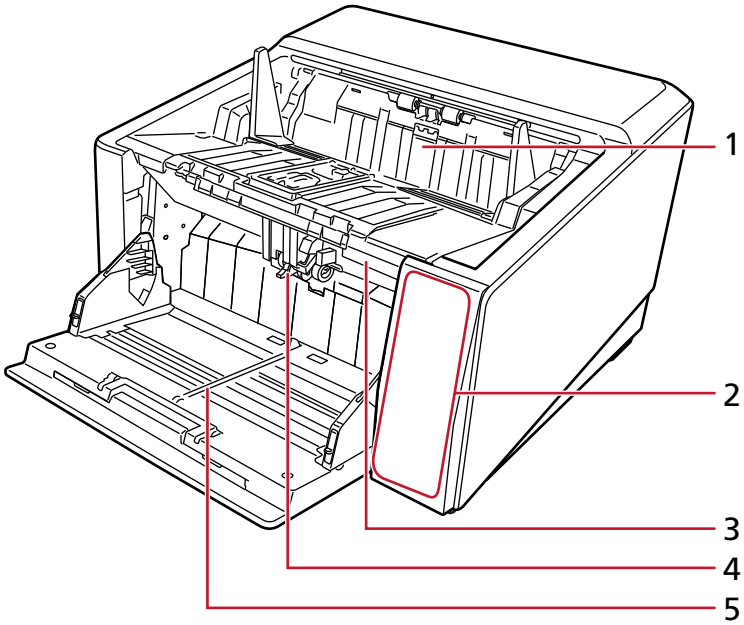
Parts and Functions

HINT

For the names and functions of scanner parts, refer to the Operator's Guide for your scanner.

External View

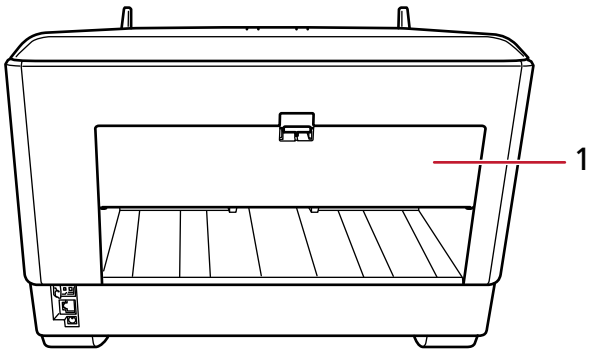
- **When the Front-Side Imprinter is installed**



No.	Name	Function
1	Front-Side Imprinter cover	Open the cover when you replace a print cartridge in the Front-Side Imprinter, or adjust the print start position.
2	Operator panel	It consists of a touch screen and buttons. On the operator panel, you can turn the scanner on or off, operate the scanner, and check the scanner status.

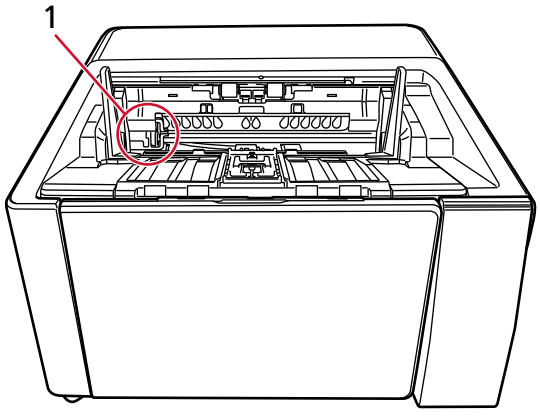
No.	Name	Function
3	ADF release tab	Push up the release tab to open the ADF.
4	ADF	It pulls and feeds the documents loaded on the hopper one at a time. Open the ADF when you replace consumables or clean inside the scanner.
5	Hopper	It is a table for loading documents to scan.

- **When the Back-Side Imprinter is installed**



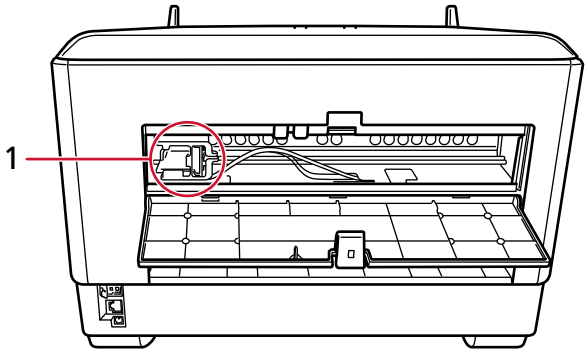
No.	Name	Function
1	Back-Side Imprinter cover	Open the cover when you replace a print cartridge in the Back-Side Imprinter, or adjust the print start position.

Under the Front-Side Imprinter Cover



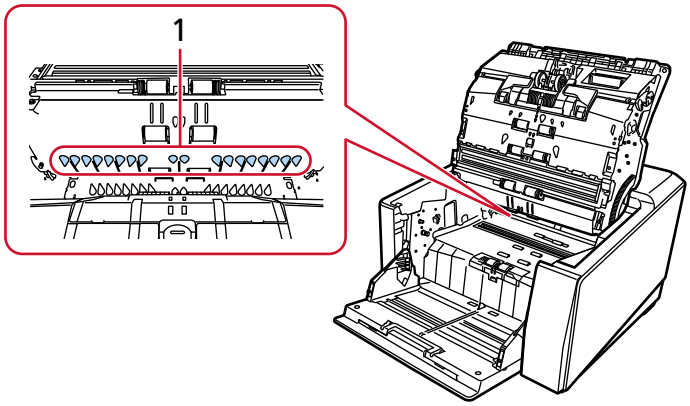
No.	Name	Function
1	Print cartridge holder	The print cartridge is set here for the Front-Side Imprinter.

Inside the Back-Side Imprinter Cover



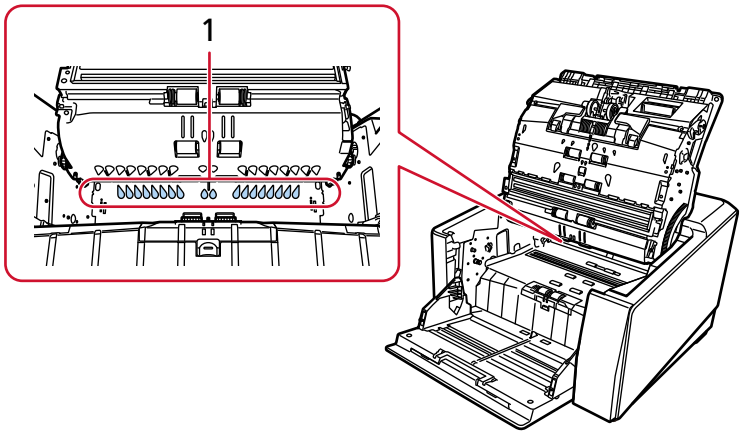
No.	Name	Function
1	Print cartridge holder	The print cartridge is set here for the Back-Side Imprinter.

Inside the ADF (Front Side)



No.	Name	Function
1	Print head	This is the print head of the Front-Side Imprinter.

Inside the ADF (Back Side)



No.	Name	Function
1	Print head	This is the print head of the Back-Side Imprinter.

Basic Operation

Installing the Print Cartridge

Install the print cartridge in the following procedure.

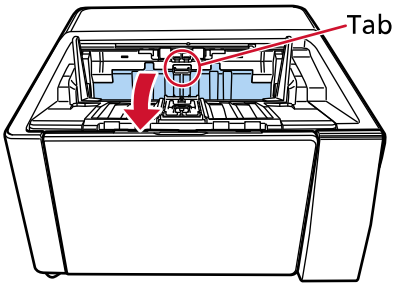
ATTENTION

When installing the print cartridge, make sure that you install it in the correct orientation.

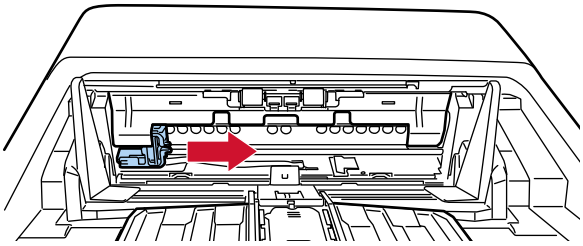
Front-Side Imprinter

1 **Turn off the scanner and disconnect the power cable.**

2 **Press down on the tab at the top center of the Front-Side Imprinter cover with your finger, then pull down the cover towards you.**



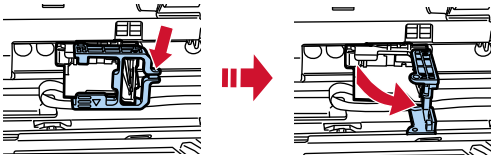
3 **Move the print cartridge holder to a location where a print cartridge can be installed easily.**



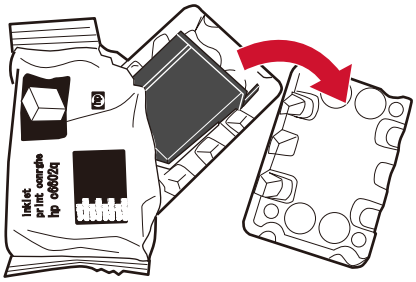
4 **Open the print cartridge holder cover.**

a **Press the release tab to release the lock.**

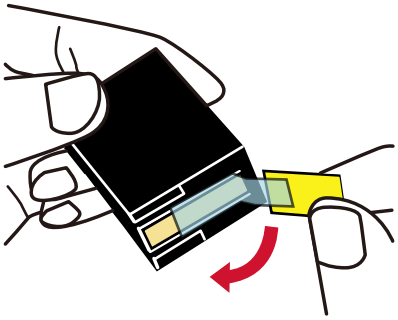
b **Open the cover to the right.**



5 Take out the print cartridge from the bag.

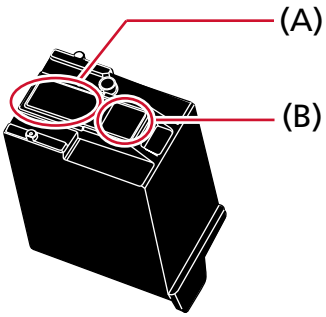


6 Remove the protection tape on the print cartridge.

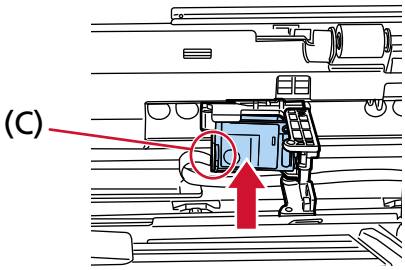


ATTENTION

- Do not put the tape back again.
- Be careful not to touch the print head of the print cartridge (the contact part (A) and the nozzle plate (B)) with your hands. Printing may be out of order.

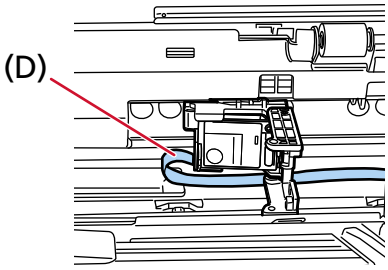


7 With the tab (C) on the print cartridge facing left, put the print cartridge into the holder.

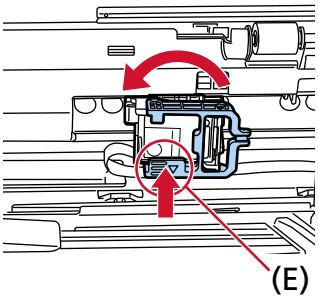


ATTENTION

Be careful not to let the print cartridge catch the print circuit film (D) to avoid damaging the film.



8 **Gently close the print cartridge holder cover on the left side until it locks into place, then press part (E) to fix the print cartridge in place.**



9 **Set the print cartridge holder at the position in which to print.**
(Refer to Front-Side Imprinter (page 16) in Setting the Position in Which to Print.)

10 **Close the Front-Side Imprinter cover.**

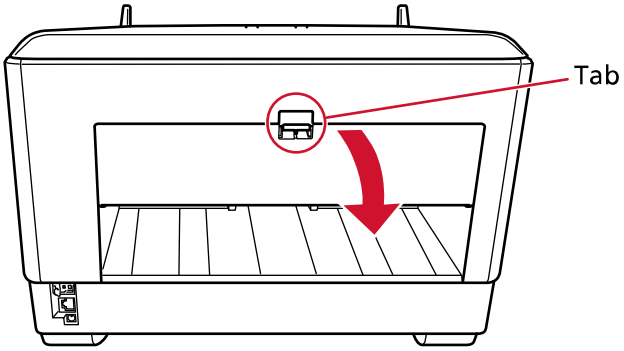
ATTENTION

When you do not use the imprinter for a long time, remove the print cartridge.
Ink will be consumed every time the scanner is powered-on even if printing is not done.

Back-Side Imprinter

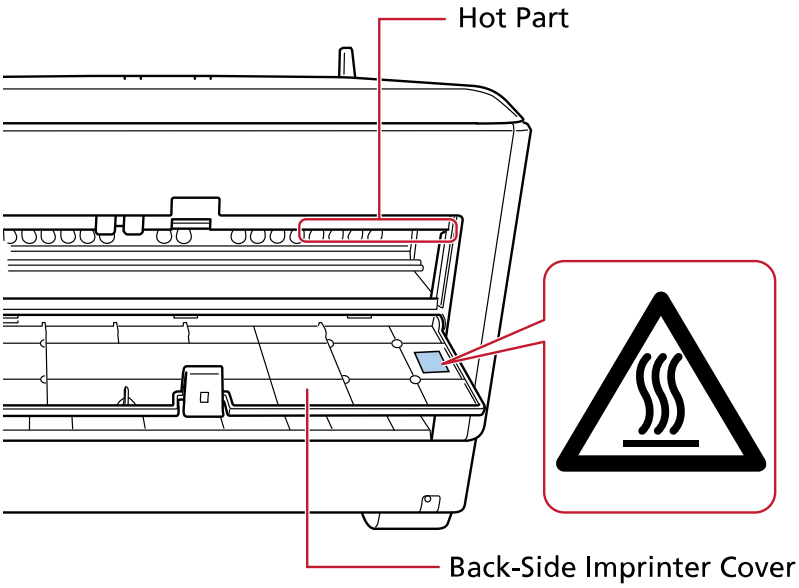
1 **Turn off the scanner and disconnect the power cable.**

2 **Press down on the tab at the top center of the Back-Side Imprinter cover with your finger, then pull down the cover towards you.**

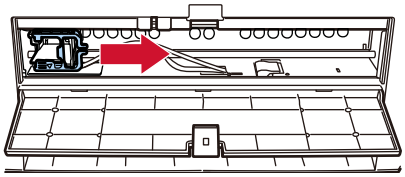


CAUTION

Be careful not to touch any hot internal parts when opening the Back-Side Imprinter cover, as this can lead to burns.



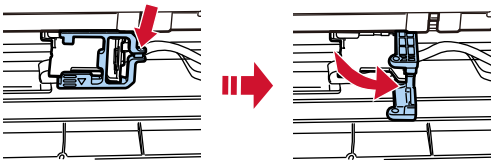
3 **Move the print cartridge holder to a location where a print cartridge can be installed easily.**



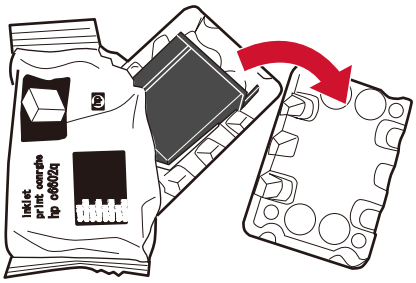
4 **Open the print cartridge holder cover.**

a **Press the release tab to release the lock.**

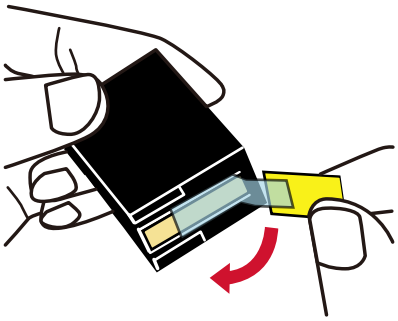
b Open the cover to the right.



5 Take out the print cartridge from the bag.

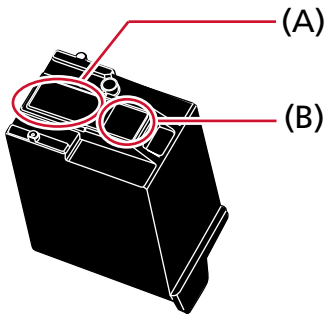


6 Remove the protection tape on the print cartridge.

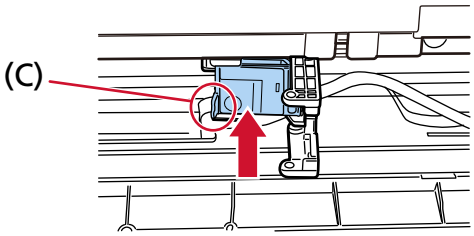


ATTENTION

- Do not put the tape back again.
- Be careful not to touch the print head of the print cartridge (the contact part (A) and the nozzle plate (B)) with your hands. Printing may be out of order.

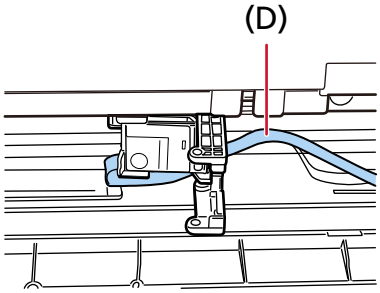


7 With the tab (C) on the print cartridge facing left, put the print cartridge into the holder.

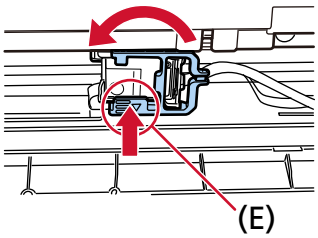


ATTENTION

Be careful not to let the print cartridge catch the print circuit film (D) to avoid damaging the film.



8 Gently close the print cartridge holder cover on the left side until it locks into place, then press part (E) to fix the print cartridge in place.



9 Set the print cartridge holder at the position in which to print.
(Refer to Back-Side Imprinter (page 17) in Setting the Position in Which to Print.)

10 Close the Back-Side Imprinter cover.

ATTENTION

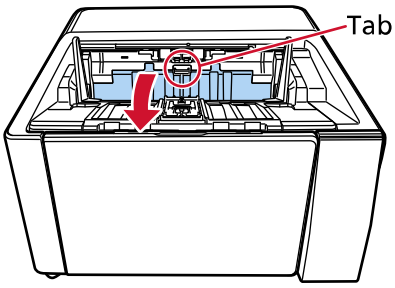
When you do not use the imprinter for a long time, remove the print cartridge.
Ink will be consumed every time the scanner is powered-on even if printing is not done.

Setting the Position in Which to Print

Set the position in which to print in the following procedure.

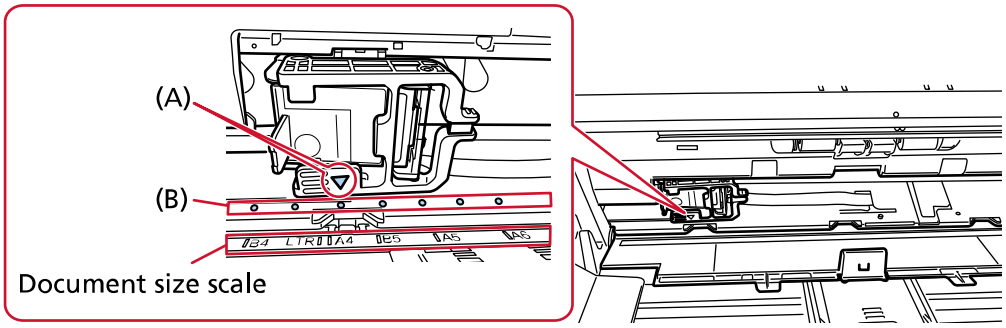
Front-Side Imprinter

1 Press down on the tab at the top center of the Front-Side Imprinter cover with your finger, then pull down the cover towards you.



2 Set the print cartridge holder at the position in which to print.

Align the ▼ part (A) of the print cartridge holder with the hole (B) corresponding to the scale of the document size that you want to print.



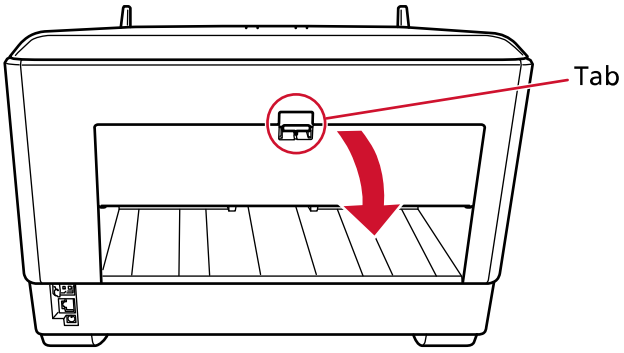
The print cartridge will click into place.

ATTENTION

- Make sure to align (A) with (B) when setting the print cartridge. Not doing so may cause printing errors or ink smudges.
- Place the document on the stacker, making sure that the print cartridge is positioned within the document width.

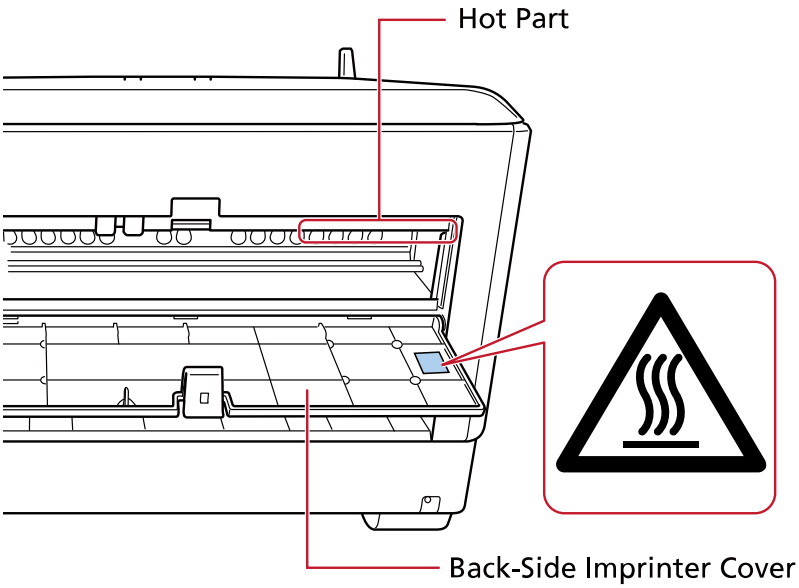
Back-Side Imprinter

1 Press down on the tab at the top center of the Back-Side Imprinter cover with your finger, then pull down the cover towards you.



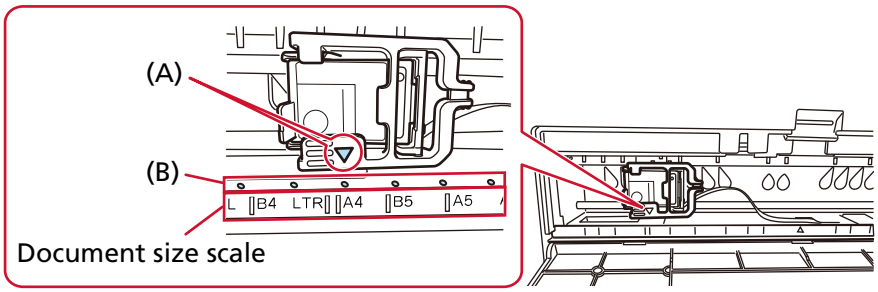
CAUTION

Be careful not to touch any hot internal parts when opening the Back-Side Imprinter cover, as this can lead to burns.



2 Set the print cartridge holder at the position in which to print.

Align the ▼ part (A) of the print cartridge holder with the hole (B) corresponding to the scale of the document size that you want to print.



The print cartridge will click into place.

ATTENTION

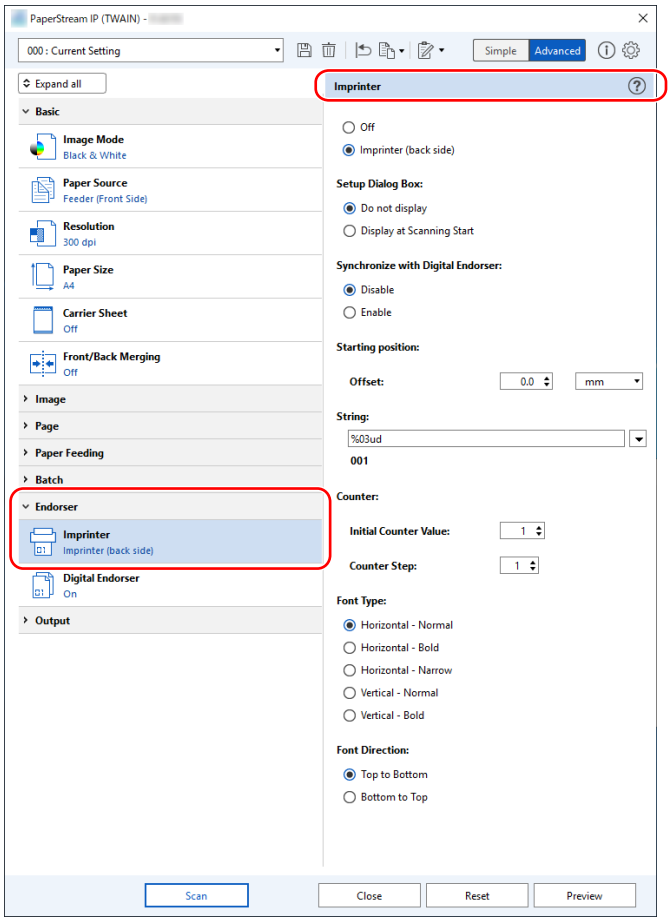
- Make sure to align (A) with (B) when setting the print cartridge. Not doing so may cause printing errors or ink smudges.
- Place the document on the stacker, making sure that the print cartridge is positioned within the document width.

Imprinter Settings

You can configure settings for the imprinter in the scanner driver.
For details about how to configure the settings, refer to the help for the scanner driver.
Also, actually scan a document to check the printed character string and its position.

- **PaperStream IP (TWAIN) (Example)**

  Display the Advanced dialog and configure the settings in [Imprinter] of [Endorser].

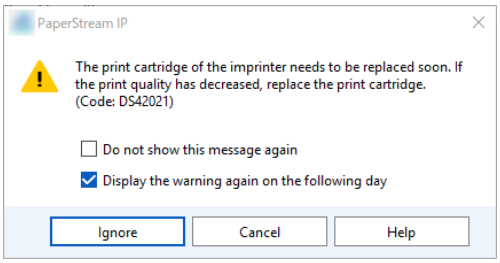


Replacing the Print Cartridge

The print cartridge is a consumable.
Replace the print cartridge in the following procedure.

ATTENTION

- When the following message appears, replace the print cartridge as soon as possible.
  If you continue to print without replacing the cartridge, your print output will be faded.



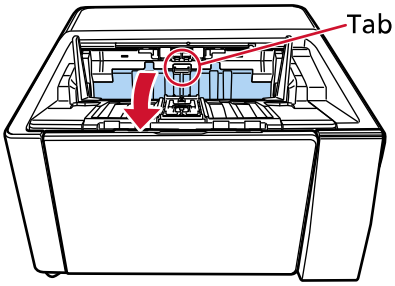
- When replacing the print cartridge, make sure that you install it in the correct orientation.

For information on purchasing the print cartridge, contact the distributor/dealer where you purchased this product. Refer to the contact information in the Contact List if supplied with this product, or refer to the contact information in the Contact for Inquiries section if provided in Safety Precautions supplied with this product, and then make an inquiry.

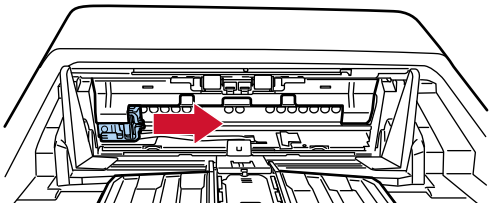
Front-Side Imprinter

1 Turn off the scanner and disconnect the power cable.

2 Press down on the tab at the top center of the Front-Side Imprinter cover with your finger, then pull down the cover towards you.



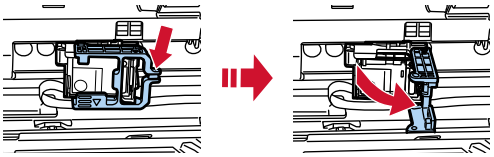
3 Move the print cartridge holder to a location where a print cartridge can be installed easily.



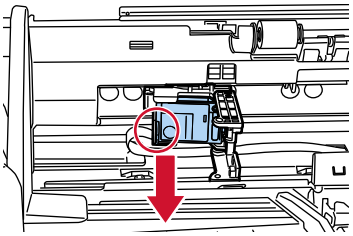
4 Open the print cartridge holder cover.

a **Press the release tab to release the lock.**

b **Open the cover to the right.**



5 **Pinch and remove the old print cartridge with your fingers.**



6 **Reinstall the new print cartridge.**
(Refer to steps 5 to 8 in Front-Side Imprinter in Installing the Print Cartridge.)

ATTENTION

When installing the print cartridge, make sure that you install it in the correct orientation.

7 **Close the Front-Side Imprinter cover.**

8 **Confirm that the scanner is connected to the computer, then turn on the scanner.**
For details about how to connect the scanner to the computer, refer to the Operator's Guide for your scanner.

9 **Reset the ink counter in the following procedure.**

ATTENTION

Be sure to reset the ink counter after replacing the print cartridge.

Use Software Operation Panel to reset the ink counter.
For details about Software Operation Panel, refer to the Operator's Guide for your scanner.

HINT

The ink counter can be reset from the operator panel. For details, refer to the Operator's Guide for your scanner.

a **Display the [Software Operation Panel] window.**

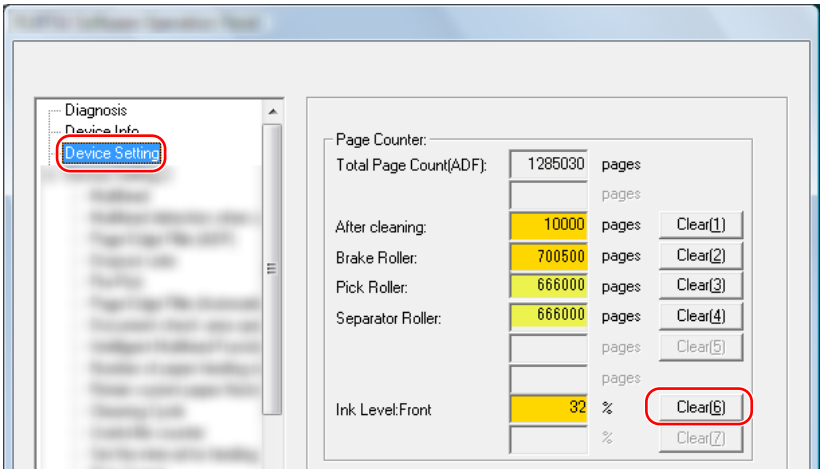
Windows 10/Windows Server 2016/Windows Server 2019/Windows Server 2022

Click [Start] menu → [fi Series] → [Software Operation Panel].

Windows 11

Click [Start] menu → [All apps] → [fi Series] → [Software Operation Panel].

b Click [Device Setting] from the list on the left, and then click the [Clear] button of [Remaining Ink].



The value of the counter is set to 100.

c Click the [OK] button on the [Software Operation Panel] window.

d A message appears asking you whether to apply the changes to Software Operation Panel. Click the [OK] button.

The [Software Operation Panel] window closes, and the ink counter is cleared.

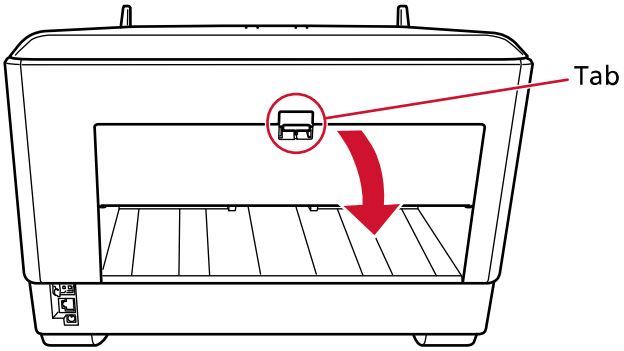
ATTENTION

When you do not use the imprinter for a long time, remove the print cartridge.
Ink will be consumed every time the scanner is powered-on even if printing is not done.

Back-Side Imprinter

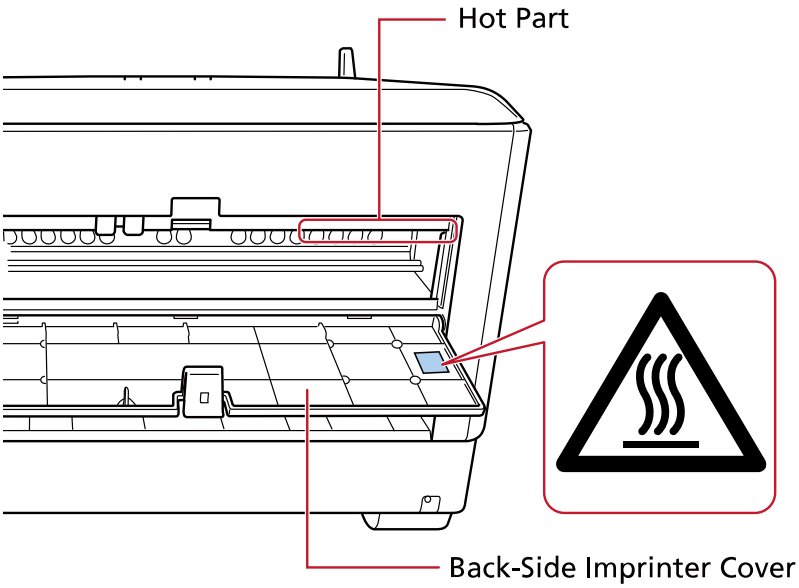
1 **Turn off the scanner and disconnect the power cable.**

2 **Press down on the tab at the top center of the Back-Side Imprinter cover with your finger, then pull down the cover towards you.**

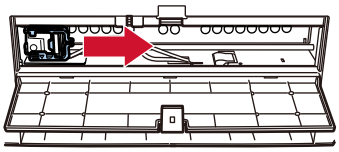


CAUTION

Be careful not to touch any hot internal parts when opening the Back-Side Imprinter cover, as this can lead to burns.



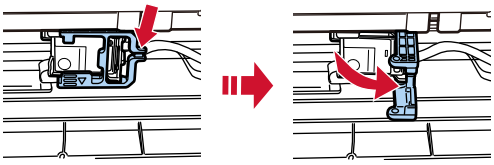
3 **Move the print cartridge holder to a location where a print cartridge can be installed easily.**



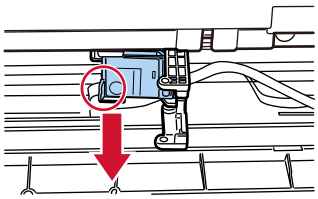
4 **Open the print cartridge holder cover.**

a **Press the release tab to release the lock.**

b Open the cover to the right.



5 Pinch and remove the old print cartridge with your fingers.



6 Reinstall the new print cartridge.
(Refer to steps 5 to 8 in Back-Side Imprinter in Installing the Print Cartridge.)

ATTENTION
When installing the print cartridge, make sure that you install it in the correct orientation.

7 Close the Back-Side Imprinter cover.

8 Confirm that the scanner is connected to the computer, then turn on the scanner.
For details about how to connect the scanner to the computer, refer to the Operator's Guide for your scanner.

9 Reset the ink counter in the following procedure.

ATTENTION
Be sure to reset the ink counter after replacing the print cartridge.

Use Software Operation Panel to reset the ink counter.
For details about Software Operation Panel, refer to the Operator's Guide for your scanner.

HINT
The ink counter can be reset from the operator panel. For details, refer to the Operator's Guide for your scanner.

a Display the [Software Operation Panel] window.

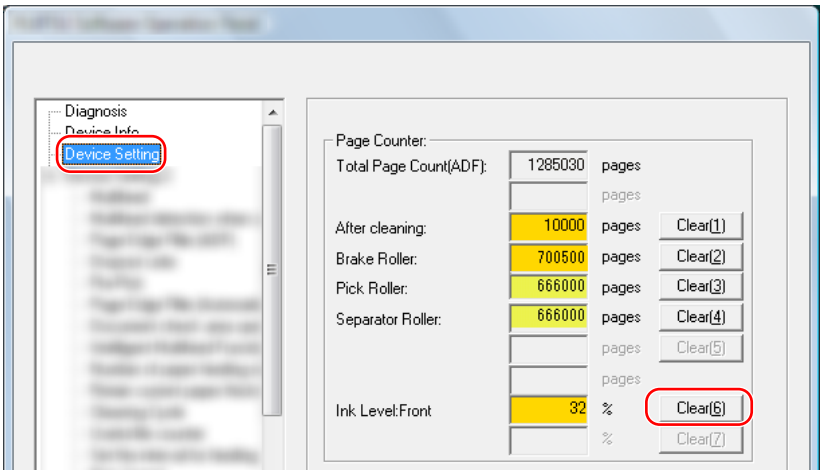
Windows 10/Windows Server 2016/Windows Server 2019/Windows Server 2022

Click [Start] menu → [fi Series] → [Software Operation Panel].

Windows 11

Click [Start] menu → [All apps] → [fi Series] → [Software Operation Panel].

b Click [Device Setting] from the list on the left, and then click the [Clear] button of [Remaining Ink].



The value of the counter is set to 100.

c Click the [OK] button on the [Software Operation Panel] window.

d A message appears asking you whether to apply the changes to Software Operation Panel. Click the [OK] button.

The [Software Operation Panel] window closes, and the ink counter is cleared.

ATTENTION

When you do not use the imprinter for a long time, remove the print cartridge.
Ink will be consumed every time the scanner is powered-on even if printing is not done.

Daily Care

WARNING

- The inside of the ADF becomes very hot when the scanner is being used. Before you start cleaning the inside of the ADF, make sure to turn off the power, unplug the power cable and wait for at least 15 minutes for the inside of the ADF to cool down.
- Do not use aerosol spray or spray that contains alcohol. Paper dust blown up by strong air from the spray may enter inside the scanner which may cause the scanner to fail or malfunction.
  Also note that sparks generated by static electricity may cause a fire.

Cleaning the Print Cartridge

Ink may get on the nozzle plate of the print cartridge.
If the imprinter has not been used for a long time, a clogged nozzle may cause low quality prints.
If your imprinter has these types of trouble, clean the nozzle plate of the print cartridge.

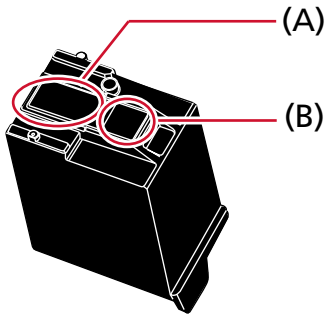
ATTENTION

For cleaning, use a dry lint-free cloth, and gently wipe off the excess ink from the nozzle plate. (Do not use a tissue.)

HINT

If the nozzle is still clogged after cleaning the print cartridge, replace it with a new cartridge.

1. **Turn off the scanner and disconnect the power cable.**
2. **Remove the print cartridge.**
   (Refer to Replacing the Print Cartridge (page 20).)
3. **Wipe off the excess ink on the nozzle plate (B) gently.**



ATTENTION

Be careful not to touch the print head of the print cartridge (the contact part (A) and the nozzle plate (B)) with your hands. Printing may be out of order.

4 Make sure that the excess ink is removed and then reinstall the print cartridge.
(Refer to Replacing the Print Cartridge (page 20).)

ATTENTION

When installing the print cartridge, make sure that you install it in the correct orientation.

Cleaning the Imprinter

Frequent use of the imprinter will cause ink to adhere to the area surrounding the print cartridge holder, which may transfer onto the paper.
Clean the area surrounding the print cartridge holder according to the procedure below as part of regular daily maintenance of the imprinter.

ATTENTION

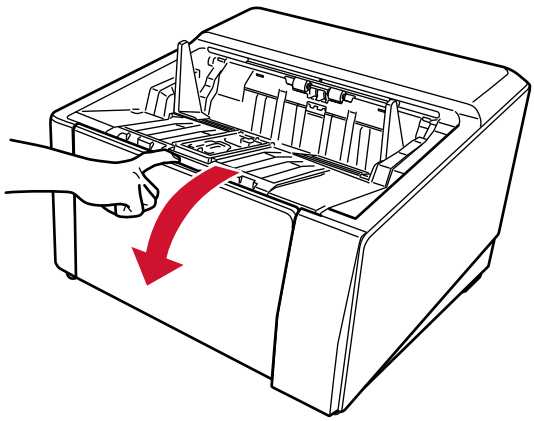
It may take a long time to dry if an excessive amount of Cleaner F1 is used.
Use only a small amount.
Wipe off the cleaner completely to leave no residue on the cleaned parts.

HINT

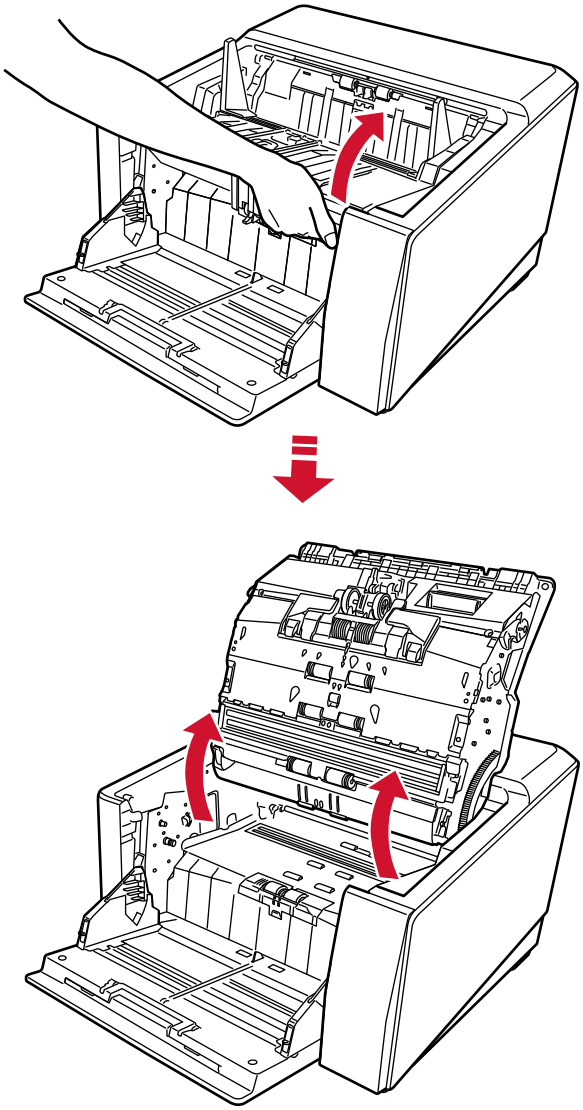
The recommended cleaning cycle is every 5,000 sheets.
The actual cleaning cycle may be shorter depending on how often the imprinter is used and the documents.

Front-Side Imprinter

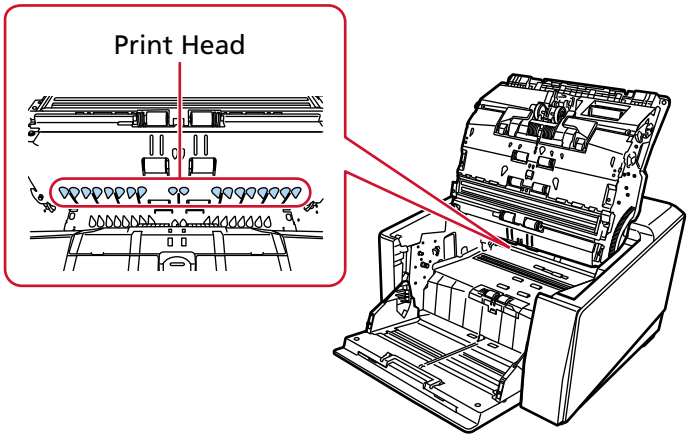
1. **Turn off the scanner and disconnect the power cable.**
2. **Remove the print cartridge.**
   (Refer to steps 2 to 5 in Front-Side Imprinter (page 20) in Replacing the Print Cartridge.)
3. **Open the hopper.**



4 **Grab the ADF release tab and lift it up to open the ADF.**



5 **Gently wipe the print head by using a cloth moistened with Cleaner F1.**



6 **Hold the ADF with both hands and push it down slowly.**
Push the ADF until it locks.

ATTENTION

- Make sure there is no foreign matter caught inside the ADF when closing the ADF.
- Be careful not to get your fingers caught.

7 **Put the hopper back up.**

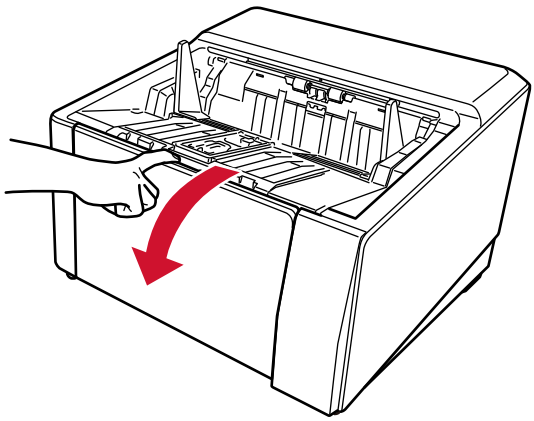
8 **Reinstall the print cartridge.**
(Refer to steps 5 to 8 in Front-Side Imprinter (page 10) in Installing the Print Cartridge.)

Back-Side Imprinter

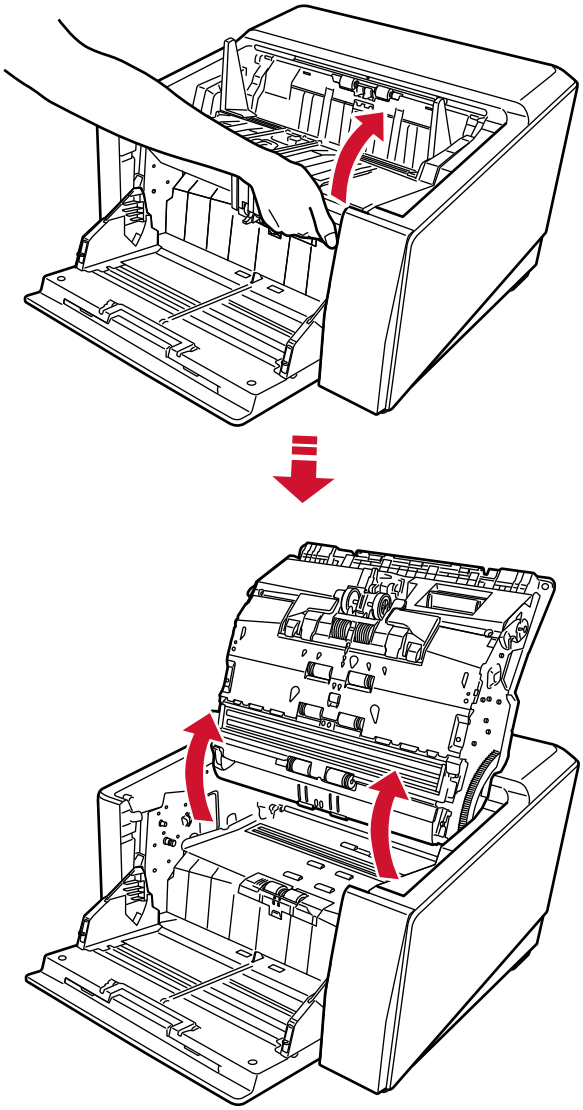
1 **Turn off the scanner and disconnect the power cable.**

2 **Remove the print cartridge.**
(Refer to steps 2 to 5 in Back-Side Imprinter (page 23) in Replacing the Print Cartridge.)

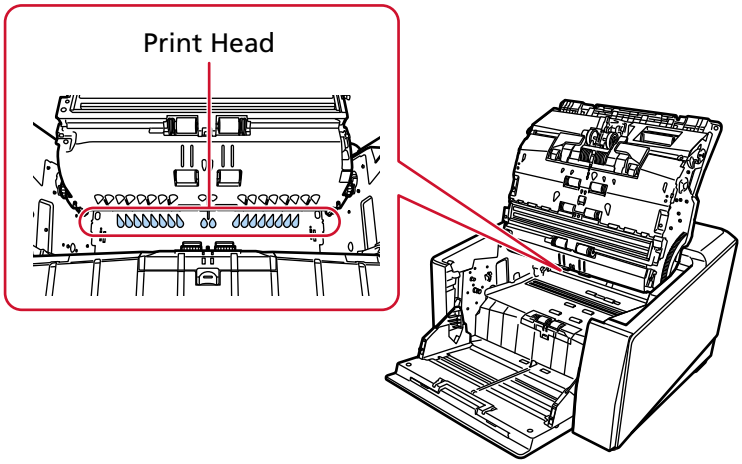
3 **Open the hopper.**



4 **Grab the ADF release tab and lift it up to open the ADF.**



5 **Gently wipe the print head by using a cloth moistened with Cleaner F1.**



6 **Hold the ADF with both hands and push it down slowly.**
Push the ADF until it locks.

ATTENTION

- Make sure there is no foreign matter caught inside the ADF when closing the ADF.
- Be careful not to get your fingers caught.

7 **Put the hopper back up.**

8 **Reinstall the print cartridge.**
(Refer to steps 5 to 8 in Back-Side Imprinter (page 13) in Installing the Print Cartridge.)

Cleaning Materials

Name	Part No.	Notes
Cleaner F1	PA03950-0352	Volume: 100 ml
Cleaning Wipe	PA03950-0419	24 packets (*1)

***1:**Pre-moistened with Cleaner F1.
It can be used instead of moistening a cloth with Cleaner F1.

ATTENTION

In order to use the cleaning materials safely and correctly, read the precautions on each product thoroughly.

For more information about the cleaning materials, contact the distributor/dealer where you purchased this product. Refer to the contact information in the Contact List if supplied with this product, or refer to the contact information in the Contact for Inquiries section if provided in Safety Precautions supplied with this product, and then make an inquiry.

Error Messages

This section explains the imprinter error messages.
Error messages are displayed on the operator panel of the scanner. Refer to the displayed error codes and error messages for troubleshooting.

ATTENTION

For details about the error messages other than the ones shown below, refer to the Operator's Guide for your scanner.

Error Code	Error Message	Action
U5:4A	Imprinter Cover Open	The Back-Side Imprinter cover was opened during scanning. Remove the document from the imprinter, and close the Back-Side Imprinter cover. Confirm that the Back-Side Imprinter cover is closed properly. To check whether or not it is closed completely, open the Back-Side Imprinter cover and then close it again.
U6:B4	The print cartridge is not seated properly. Check whether it has been installed correctly.	The print cartridge is not installed in the imprinter correctly. Check if the print cartridge is installed correctly. For details about the installation, refer to Installing the Print Cartridge (page 10). If the problem still persists, write down the error code and contact the distributor/dealer where you purchased this product. Refer to the contact information in the Contact List if supplied with this product, or refer to the contact information in the Contact for Inquiries section if provided in Safety Precautions supplied with this product, and then make an inquiry.
U7:B9	Attempting to print outside of printable area.	An error occurred with the print start position in the imprinter. Adjust the start position and character string for printing so that the print area is inside the document. For details about the adjustment, refer to Setting the Position in Which to Print (page 16).

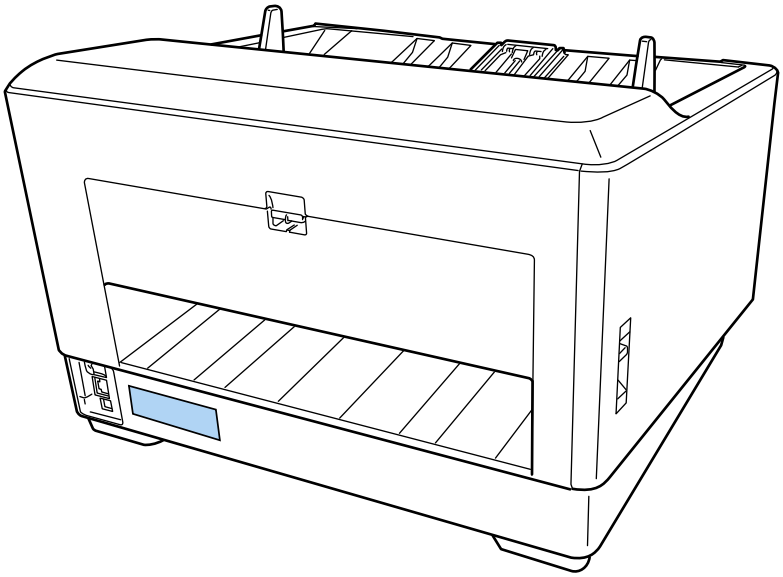
Error Code	Error Message	Action
L4:15	Sensor error If the problem persists after turning the power back on, inform your service provider of the error code. Code L4:15	An error has occurred with the sensor. Turn the scanner off then back on. If the problem still persists, write down the error code and contact the distributor/dealer where you purchased this product. Refer to the contact information in the Contact List if supplied with this product, or refer to the contact information in the Contact for Inquiries section if provided in Safety Precautions supplied with this product, and then make an inquiry.
A1:B3	Imprinter error (communication timeout) If the problem persists after turning the power back on, inform your service provider of the error code. Code A1:B3	An error occurred in the imprinter. Take the following measures. ● Check if the print cartridge is installed correctly. For details about the installation, refer to Installing the Print Cartridge (page 10). ● Turn the scanner off then back on. If the problem still persists, write down the error code and contact the distributor/dealer where you purchased this product. Refer to the contact information in the Contact List if supplied with this product, or refer to the contact information in the Contact for Inquiries section if provided in Safety Precautions supplied with this product, and then make an inquiry.
A2:B5	Imprinter error (print head) If the problem persists after turning the power back on, inform your service provider of the error code. Code A2:B5	
A3:B6	Imprinter error (EEPROM) If the problem persists after turning the power back on, inform your service provider of the error code. Code A3:B6	
A4:B8	Imprinter error (ROM) If the problem persists after turning the power back on, inform your service provider of the error code. Code A4:B8	
H6:B1	Imprinter system error If the problem persists after turning the power back on, inform your service provider of the error code. Code H6:B1	An imprinter circuit error occurred. Turn the scanner off then back on. If the problem still persists, write down the error code and contact the distributor/dealer where you purchased this product. Refer to the contact information in the Contact List if supplied with this product, or refer to the contact information in the Contact for Inquiries

Error Code	Error Message	Action
		section if provided in Safety Precautions supplied with this product, and then make an inquiry.

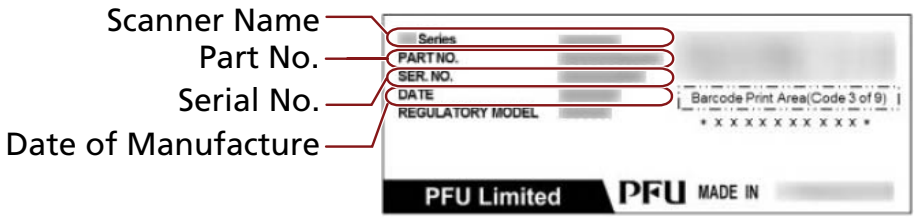
Checking the Product Label

This section explains about the product label on the scanner.

The label is located on the back of the scanner.



Label (example): Shows the imprinter information.



Specifications

Item	Specification	
	Front-Side Imprinter (RICOH fi-890PRF)	**Back-Side Imprinter (RICOH fi-890PRB)**
Printing method	Thermal inkjet printing	
Printing type	Post-imprinter (printing after image scanning)	
	Front-side printing	Back-side printing
Printing characters	**Alphabet:** A to Z, a to z **Numeric characters:** 0, 1 to 9 **Symbols:** ! " # $ % & ' ( ) * + , - . / : ; < = > ? @ [¥] ^ _ ` { | } ¯	
Maximum number of characters per line	Up to 43 characters	
Printing direction	**Regular, Bold:** 0°, 180° (horizontal), 90°, 270° (vertical) **Narrow:** 0°, 180° (horizontal)	
Character size	**Regular, Bold:** 2.91 (H) × 3.03 (W) mm (horizontal) 3.03 (H) × 2.91 (W) mm (vertical) **Narrow:** 2.91 (H) × 1.71 (W) mm (horizontal)	
Character pitch	**Regular, Bold:** 3.79 mm **Narrow:** 2.46 mm	
Font style	Regular, Bold	
Character width	Normal, Bold, Narrow	
Documents for printing	Documents that can be scanned with the scanner For details, refer to the Operator's Guide for your scanner. Note that the paper size and weight are as follows: ● Minimum size (width × length) 48 × 70 mm/1.9 × 2.8 in. ● Maximum size (width × length) 304.8 × 431.8 mm For long page documents, a maximum size of 6,096 mm (240 in.) can be scanned, but printing can be performed for only up to 863.6 mm (34 in.). ● Paper weight 52 to 157g/m^2 (14 to 42 lb)	

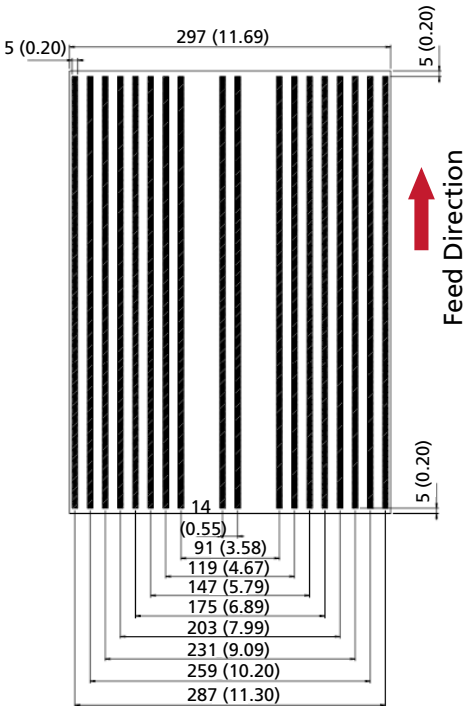
<table>
<tr><th rowspan="2">Item</th><th colspan="2">Specification</th></tr>
<tr><th>Front-Side Imprinter (RICOH fi-890PRF)</th><th>Back-Side Imprinter (RICOH fi-890PRB)</th></tr>
<tr><td></td><td colspan="2">

ATTENTION

- The following types of documents must not be scanned:
  An imprinting error occurs because ink does not easily dry on or pass through documents.
  In addition, ink makes the inside of the imprinter dirty, so the cleaning cycle will be shortened.
  - Documents with glossy surface such as thermal paper, thermal transfer paper, coated paper, and art paper
- The following types of documents must not be scanned because they cannot be fed:
  - The Carrier Sheet/Photo Carrier Sheet/Booklet Carrier Sheet or an OHP sheet
  - Thick plastic documents such as credit cards
  - Documents folded in half
  - Multi-layered documents such as transfer paper
  - Envelopes
  - Passports/passbooks

</td></tr>
</table>

<table>
<tr><th>Item</th><th colspan="2">Specification</th></tr>
<tr><th></th><th>Front-Side Imprinter (RICOH fi-890PRF)</th><th>Back-Side Imprinter (RICOH fi-890PRB)</th></tr>
<tr><td>Printing area</td><td>Shaded sections are printable. Other sections are not printable because of the Imprinter structure.

Unit: mm (in.)</td><td>Shaded sections are printable. Other sections are not printable because of the Imprinter structure.
 

Unit: mm (in.)</td></tr>
<tr><td>Accuracy of the position in which to print</td><td colspan="2">Feed direction:±4 mm (from the start position)</td></tr>
<tr><td>Dimension</td><td colspan="2">460 (W) × 430 (D) × 315 (H) mm/18.11 (W) × 16.93 (D) × 12.4 (H) in.
The depth indicates the size of the scanner without the hopper, the stacker, and the protrusions.</td></tr>
<tr><td>Weight</td><td colspan="2">23 kg (50.72 lb) or less</td></tr>
<tr><td>Ambient condition</td><td colspan="2">Temperature:15 to 35℃ (41 to 95°F)
Humidity: 20 to 80%</td></tr>
<tr><td>Consumables</td><td colspan="2">PRINT CARTRIDGE (Part No. CA00050-0262)
The number of printable characters:
4,000,000 characters (The printable number of characters differs depending on the characters to be printed.)</td></tr>
</table>

Item	Specification	
	Front-Side Imprinter (RICOH fi-890PRF)	**Back-Side Imprinter (RICOH fi-890PRB)**
	Suggested replacement cycle: 4,000,000 characters or half a year from the time the package is opened (A print cartridge has a specific expiration date, and the expiration period differs whether the package is opened or not. Start using the print cartridge before the expiration date that is written on the package.)	