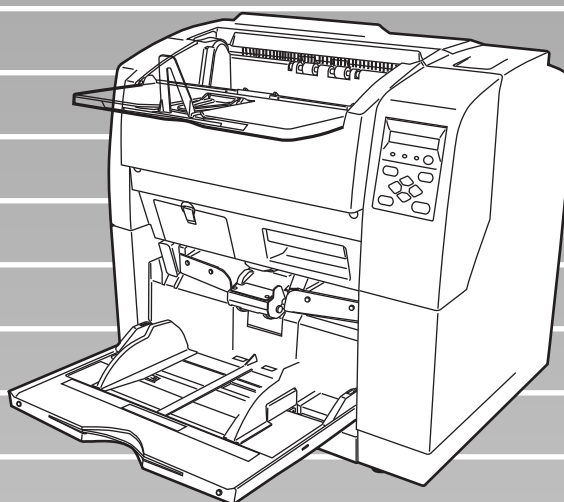




P3PC-E167-01EN

fi-4860C Image Scanner Operator's Guide



FUJITSU

INTRODUCTION

Thank you for purchasing the fi-4860C Duplex Color Scanner.

The fi-4860C is an image scanner designed to scan various documents in large quantities. FUJITSU fi series image scanners are known for its high reliability and this scanner is no exceptions. The fi-4860C is designed to give you the best results for your scanning need.

The fi-4860C has the following features.

- **High speed, high quality color scanning capabilities**

Scans documents of A4 size at the speed of 60ppm/120ipm (200dpi).

- **Highly reliable document handling**

Accepts various thicknesses, sizes and types of documents.

- **Production ready**

High capacity hopper (500sheets, 20lb(75g/m²) A4 size) and imprinter options. Duplex capability is provided as standard.

About this manual

The manual provides the following information.

- 1. BASIC OPERATIONS**

This chapter describes basic scanner operations and basic document scanning.

- 2. SCANNING DOCUMENTS**

This chapter describes how to scan various type of documents.

- 3. DAILY CARE**

This chapter describes how to clean the scanner.

- 4. REPLACING CONSUMABLES**

This chapter describes how to replace scanner consumables.

- 5. SOLVING COMMON PROBLEMS**

This chapter describes how to remedy document jams, other trouble, items to check before contacting the agent where you bought the scanner, and how to check device labels.

6. ADF DOCUMENT SPECIFICATIONST

This chapter describes about documents can be used with this scanner.

7. OPERATOR PANEL MENUS

This chapter describes about Setup-mode and Test-mode.

8. OPTIONS

This chapter describes about options.

9. SCANNER SPECIFICATIONS

This chapter lists the scanner specifications.

The “Installation Guide” is attached to this Scanner.
This guide icon contains necessary information for the scanner and the driver installation, please also read the Installation Guide.

1. SCANNER BASICS

This chapter describes how to prepare the scanner for use.

2. INSTALLATION AND CONNECTIONS

This chapter describes how to install and connect the scanner, and how to install the scanner application.

We hope that this manual is useful in taking full advantage of the fi-4860C Duplex Color Scanner's features.

August, 2002

■ Revisions

FCC declaration

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.



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



- The use of a non-shielded interface cable with the referenced device is prohibited. The length of the parallel interface cable must be 3 meters (10 feet) or less. The length of the serial interface cable must be 15 meters (50 feet) or less.
 - The length of the AC cable must be 3 meters (10 feet) or less.
-

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

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

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About the use of mercury

Scanner lamp includes mercury.

To avoid unexpected injury, read the followings carefully.

Doing following actions may result in serious personal injuries:

- Put the substance in the lamp into mouth as it contains mercury.
- Vaporize, crumb, condense the scanner.
- Aspirate the chemical liquid contained in scanner parts.

Dispose of the scanner should be conducted as required by local ordinances or regulations.

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Windows[®] Me: Refers to Microsoft[®] Windows[®] Millennium Edition operating system.

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Windows[®] XP: Refers to Microsoft[®] Windows[®] XP Professional operating system, and Microsoft[®] Windows[®] XP Home Edition operating system.

Windows NT[®]: Refers to Microsoft[®] Windows NT[®] operating system Version 4.0.

Where there is no distinction between the different versions of the above operating system, the general term "Windows[®] " is used.

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■ Preface

Safety Precautions

This manual describes important details for ensuring the safe and correct use of this product. Thoroughly read this manual before you start to use this product. In particular, be sure to read and fully understand the Safety Precautions described in this manual before you use this product.

Also, store this manual in a safe place so that it can be easily referred to during use of this product.

Warning Indications Used In This Manual

This manual uses the following indications to ensure safe and correct use of this product, and to prevent possible danger and injury to the operator and other persons.



This indication alerts operators to an operation that, if not strictly observed, may result in severe injury or death.



This indication alerts operators to an operation that, if not strictly observed, may result in safety hazards to personnel or damage to equipment.

Symbols Used In This Manual

This manual uses the following symbols in explanations in addition to warning indications.



This symbol alerts operators to particularly important information. Be sure to read this information.



This symbol alerts operators to helpful advice regarding operation.



A TRIANGLE symbol indicates that special care and attention is required.

The drawing inside the triangle shows the specific caution.



A CIRCLE with a diagonal line inside shows action which users are not allowed to do. The drawing inside or under the circle shows the specific action that is not allowed.



Outline characters on a colored background shows instructions users should follow. It may include the drawing which shows the specific instruction.

Screen Examples In This Manual

The screen examples in this manual are subject to change without notice in the interest of product improvement.

If the actual displayed screen differs from the screen examples in this manual, operate by following the actual displayed screen referring to the User's Manual of the scanner application you are using.

Furthermore, the screenshots in this manual are for the FUJITSU TWAIN32 scanner driver and the Image Capturing Software Utilities "ScandAll 21" for Microsoft® Windows®.

■ Safety Precautions



The following describes important warnings described in this manual.

Do not touch the AC cable with wet hands.



Do not insert or disconnect the power plug with wet hands. Doing so might cause electric shock.

Do not damage the AC cable.



A damaged AC cable might cause fire or electric shock.

Do not place heavy objects on AC cables, or pull, bend, twist, heat, damage or modify AC cables.

Also, do not use damaged AC cables or power plugs, and AC cables or power plugs when the power outlet fitting is loose.

Use only specified AC cables and connector cables



Use only specified AC cables and connector cables. Failure to use the included so might cause electric shock and equipment failure.

Use this scanner only at the indicated power voltage. Do not connect to multiple-power strips.



Use this scanner only at the indicated power voltage. Improper power voltage so might cause fire or electric shock.

Also, do not connect to multiple-power strips.

Wipe any dust from the power plug.



Wipe off any dust from metal parts on the power plug or metal fittings with a soft, dry cloth. Accumulated dust might cause fire or electric shock.

Do not install in locations subject to oil smoke, steam, humidity, and dust.



Do not install the scanner in locations subject to oil smoke, steam, humidity, and dust. Doing so might cause fire or electric shock.

Do not use the scanner if you smell strange odor.



If you sense heat coming from devices or detect other malfunctions such as smoke, strange smells or strange noises, immediately press down the power button to turn off the scanner and then disconnect its power plug.

Make sure that the smoke has disappeared, and then contact the agent where you bought the scanner.

Turn the scanner OFF if it is damaged.



If the scanner is damaged for any reason, press down the power button the scanner and unplug the power cable before contacting the authorized agent.

Do not allow liquids to get inside the scanner.



Do not insert or drop foreign metal objects in to the scanner.



Do not scan wet document or document with paper clips.



Do not splash or allow the scanner to get wet.



If foreign objects (water, small metal objects, liquids, etc.) get inside the scanner, immediately press down the power button to turn off the scanner and disconnect the power plug from the power outlet.



Then contact the agent where you bought the scanner or Maintenance Service Center.

Pay particular attention to this warning in households where there are small children.

Do not touch the inside of the scanner unless necessary.



Do not disassemble or modify the scanner. The inside of the scanner contains high-voltage components. Touching these components might cause fire or electric shock.



The following describes important cautions described in this manual.

Do not install the scanner on unstable surfaces.



Install the scanner on a desk so that none of its parts protrude outside of the desktop. Also, make sure that the scanner is installed on a flat, level surface.



Do not install the scanner on unstable surfaces. Install the scanner on a level surface that is free of vibration to prevent it from tilting.

Firmly insert the power plug.



Firmly insert the power plug into the power outlet as far it can go.

Do not block the ventilation ports.



Do not block the ventilation ports. Blocking the ventilation ports generates heat inside of scanner, resulting in fire or scanner failure.

Do not place heavy objects or climb on top of the scanner.



Do not place heavy objects on the scanner or use the scanner's top surface for performing other work. Improper installation might cause injuries.

Before moving the scanner, disconnect the power plug from the power outlet.



Do not move the scanner with the power and interface cables connected as this might damage the cables, causing fire, electric shock or injuries.

Before moving the scanner, be sure to disconnect the power plug from the power outlet, and disconnect connector cables. Also, make sure that the floor is free of obstructions.

Protect the scanner from static electricity.



Install the scanner away from strong magnetic fields and other sources of noise. Also, protect the scanner from static electricity as this might cause the scanner to malfunction.

Do not use aerosol sprays near the scanner.

Do not use aerosol sprays, for example, to clean the scanner. Air sprayed from aerosol sprays causes dirt and dust to enter the scanner, resulting scanner failure and malfunction.

Avoid any contact when scanner is in use.

Avoid any contact when scanner is operating as this may cause injuries.

Disconnect the power plug from the power outlet when the scanner is not used for a long period of time.

When the scanner is not used for a long period of time, be sure to disconnect the power plug from the power outlet for safety's sake.

Do not install the scanner in the direct sunlight.

Do not install the scanner in the direct sunlight or near heating apparatus. Doing so might cause heat to build up inside the scanner, causing fire or scanner trouble. Install the scanner in a well-ventilated location.

Do not carry out alone.



When you carry the scanner, never carry out alone.

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1 BASIC SCANNER OPERATIONS

This chapter describes basic scanner operations.

This chapter explains operations using the screens of Windows® XP. Depending on the OS, your PC's screen shots and the operation may be different from this manual. Please be aware that when FUJITSU TWAIN 32 scanner data source is updated, the screens and operations noted in this chapter may be changed slightly. In such case, please refer to the User's Guide provided with the update.

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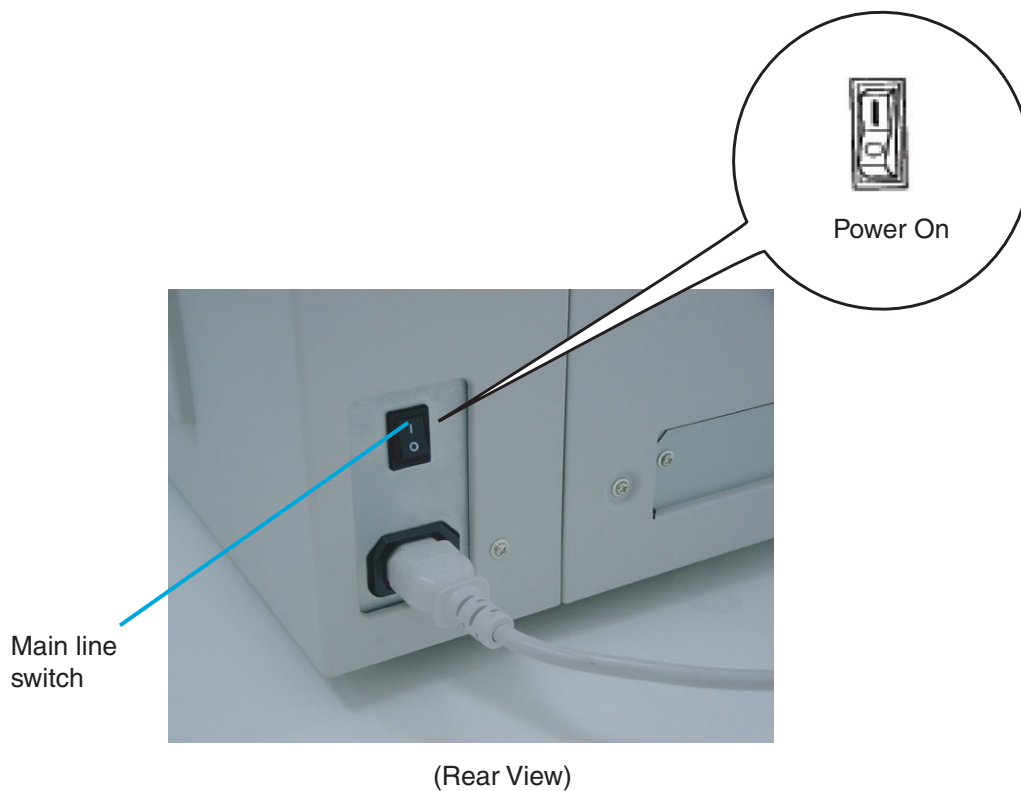
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1.1 Turning the Scanner ON

■ Turning the power on

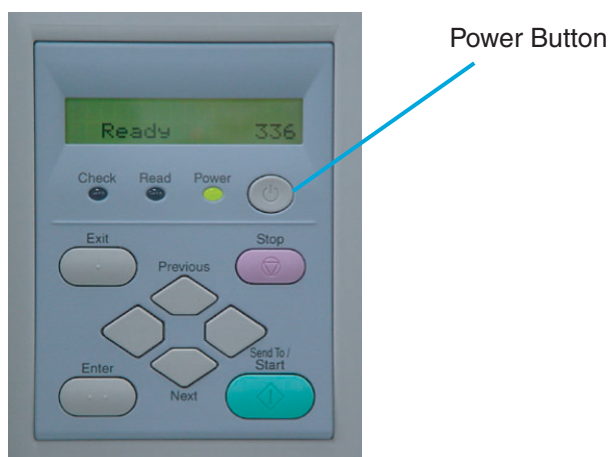
1. Press "I" side of the main line switch located on the back of the scanner.



2. Press the power button on the operator panel

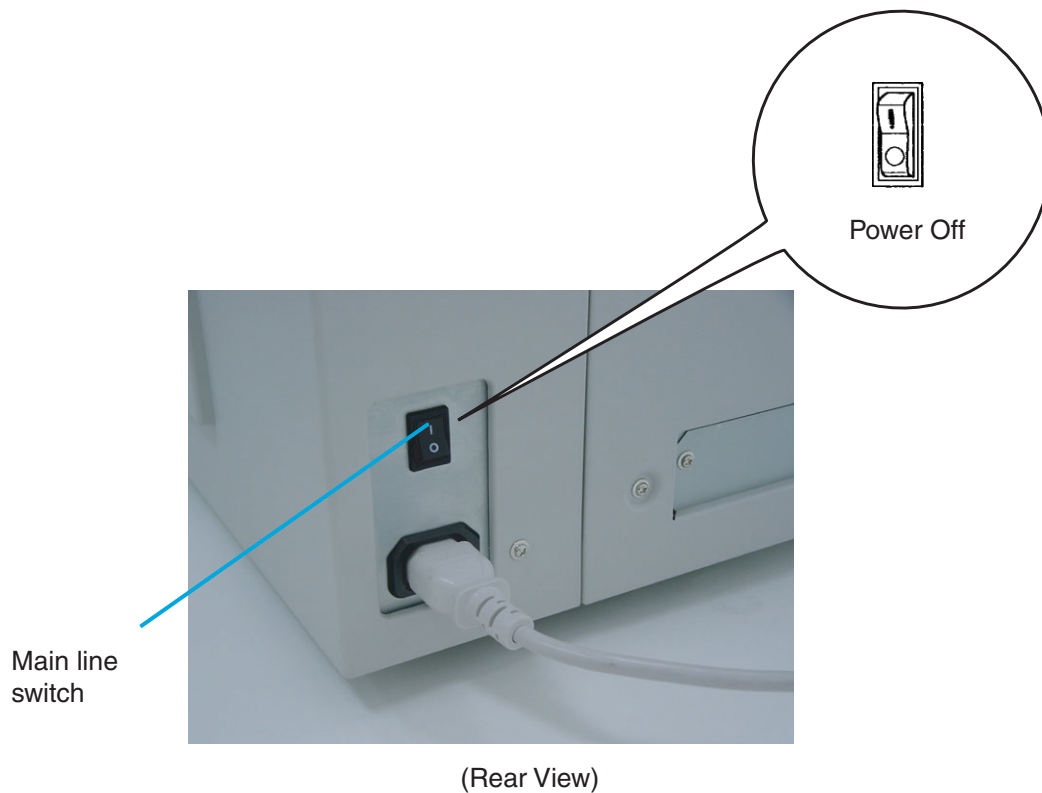
The power turns on and the green Power LED at the operator panel lights.

Operator panel LCD shows "Ready" to indicate the scanner is in the READY state.



■ Turning the Power off

1. Press and hold down the Power button for two seconds or longer.
2. Press "O" side of the main line switch located on the back of the scanner.



1.2 Waking up the Scanner from the Power Save Mode

The Power Save Mode keeps the scanner in a low powered state.

If no operation is performed on the scanner for a while (15 minutes to 60 minutes depending on the timer setup), the scanner automatically switches to the Power Save Mode.

In the Power Save Mode, the operator panel LCD display goes out. The green LED stays lit.

To wake up the scanner from the Power Save Mode, perform one of the following:

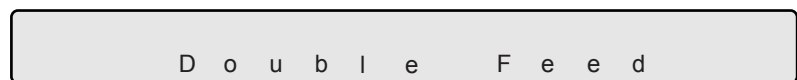
- Load documents on the hopper
- Press a button, except Power button, on the operator panel
- Send a command from the PC


1.3 Basic Operations of the Operator Panel

This basic operation include how to enter setup mode and test mode.

■ Clearing errors

When an user recoverable error occurs, Check LED blinks to alarm you and its error message is displayed on the LCD. Here is an example of an error message.



Press  button to clear the blinking after the cause of the error is removed.



You can not clear errors with Check LED lit. They are not user recoverable and Check LED stays lit.

■ Lifting or lowering the hopper

When the scanner has no error state (Check LED is not lit), pressing ◀ (Previous button) lifts the hopper and pressing ▶ (Next button) lowers the hopper.



During hopper height adjustment, do not touch the hopper table or do not put anything on the hopper table to prevent your fingers from getting caught.

If something is caught in the mechanism, the scanner may be damaged.

The function is valid when:

- Read LED is not lit
- The scanning operation is not in progress
- The scanner is not in test mode (excluding Single feed and Multi feed)
- The scanner is not in setup mode

The hopper stops at the pick position or at the 250-, or 500-sheet position, depending on the hopper height adjustment in setup mode. At the pick position, the top paper of stack (the hopper table when no paper is loaded on the hopper) is aligned to the Pick roller. At the 250-sheet position, for example, the hopper table can load about 250 sheets of paper. Each time you press ◀ (Previous button) or ▶ (Next button), the hopper lifts or lowers by one position. By pressing ◀ (Previous button) when loading documents, the hopper lifts up to the pick position.

■ Clearing the consumables replacement message

This scanner has the consumables counters to estimate life of the consumables. When one of the consumables counters, a counter for the Pad ASSY, the Pick roller unit, the Brake roller unit, the Front-side lamp or the Back-side lamp reaches the pre-set value, the LCD shows a message that the consumable may be expired. Here is an example of error messages.

A b r a s i o n a l a r m

Enter setup mode. (For the details on how to enter the setup mode, refer to "Chapter 7 OPERATOR PANEL MENUS"

Keep pressing ◀ (Next button) until the LCD shows the following message.

!	0	4		A	b	r	a	s	i	o	n		C	N	T
=	X	X	X	X	X	X		R	E	S	E	T	/	N	O

From this screen, you can select the consumable counter to reset. For the details on how to clear consumable counter, please refer to the section "7.3 Setup Mode Details," "9. Abrasion counter reset."

■ Using the setup and the test modes.


This scanner has the setup mode to customize the setup conditions, and test mode to test the scanner offline.

There are two types of setup mode: Online setup mode that can be entered during Ready status and Offline setup mode that can be entered only when the scanner is offline.


Available functions differ with the two modes. For the details, refer to "Chapter 7 OPERATOR PANEL MENUS"

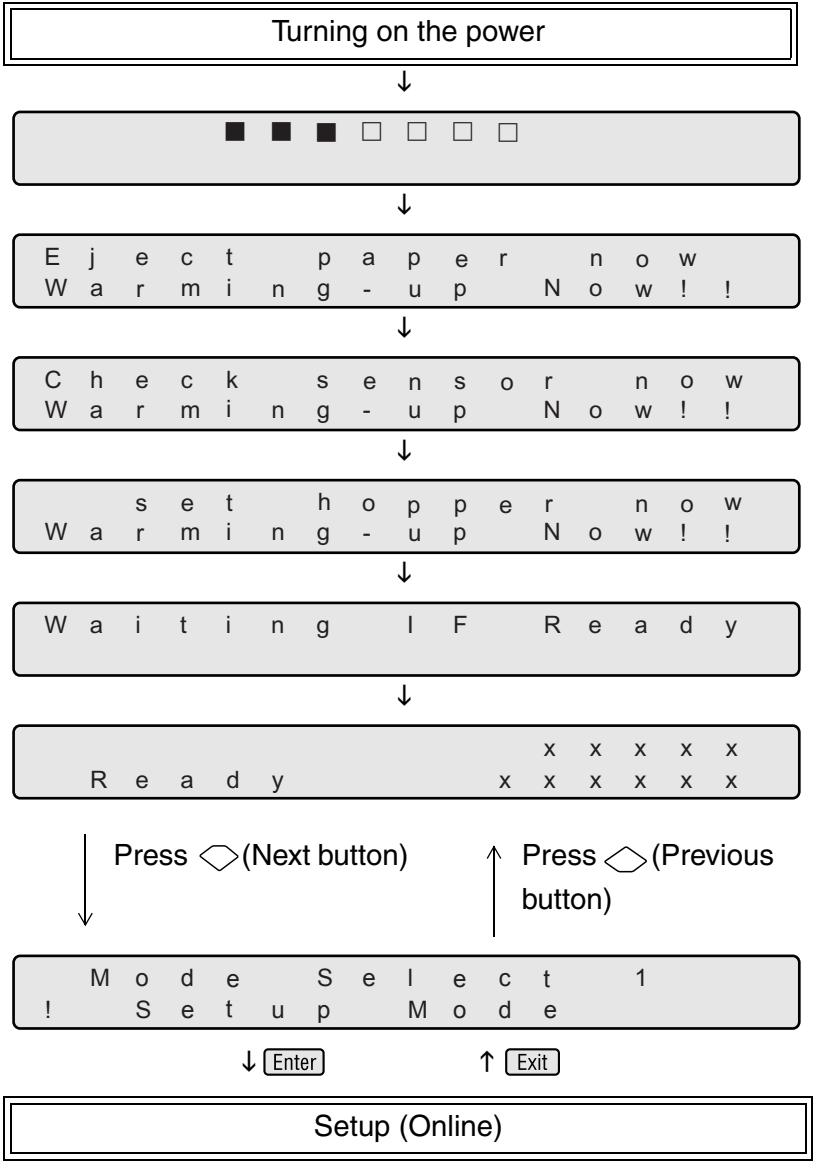
To enter these mode, follow the instructions below:

- Online setup mode

When LCD indicates Ready status, press  (Next button). The following message appears.

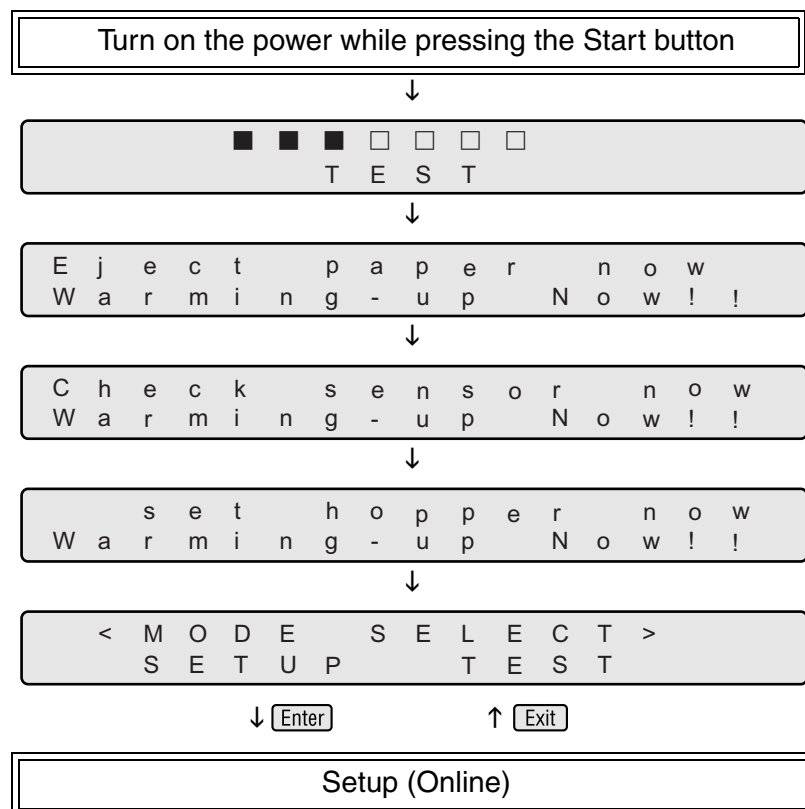
M	o	d	e	S	e	l	e	c	t	1
!	S	e	t	u	p	M	o	d	e	

Pressing  (Enter button), the scanner enters Offline setup mode.



- Offline setup mode and Online setup mode

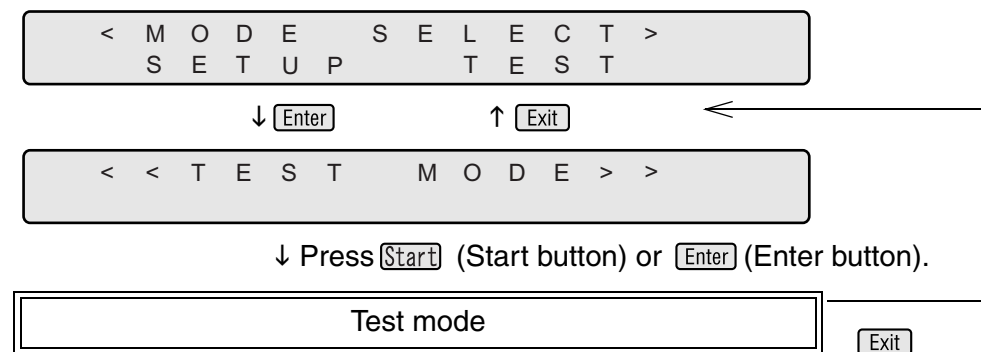
Start Keep pressing Start button and turn on the power.



- To enter setup mode, press ◀ (Left arrow button) or ▶ (Right arrow button) in [<Mode select>] screen to select [Setup] then press **Enter** (Enter button).

To exit this mode, turn off the power.

- To enter test mode, from the [<Mode select>] screen, press ◀ (Left arrow button) or ▶ (Right arrow button) , select [Test] and press **Enter** (Enter button). Please see the following for the operator panel transition chart.



To exit this mode, turn off the power.

1.4 Setting the Hopper

1.5 Setting the Stacker

1. Open the stacker.



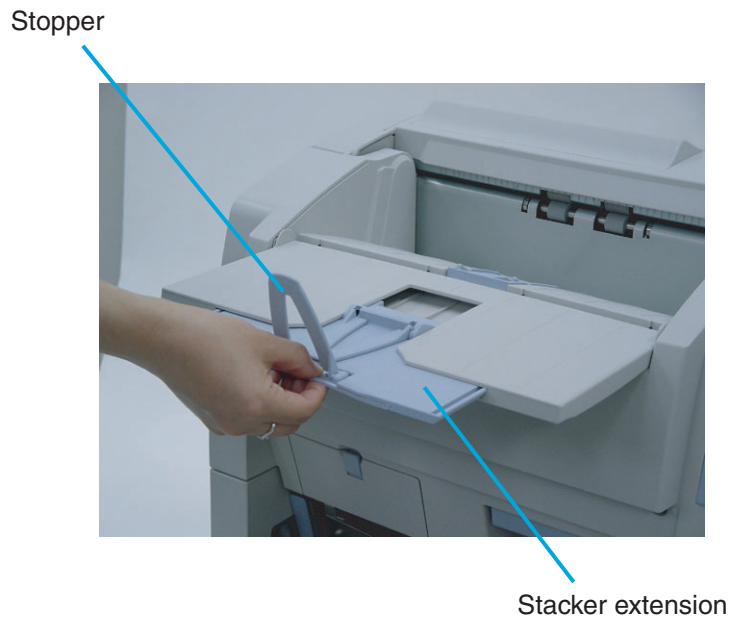
2. Push the opened stacker table lock into the scanner to fix it in place.



When retracting the stacker, pull out the foldable table a little then fold it.

1.6 Setting the Stacker Extension

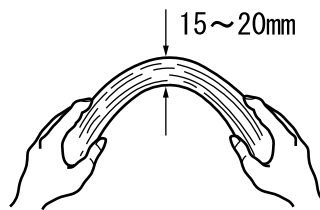
1. Grab the center of the blue part of the stacker extension to pull it out.



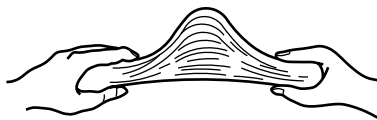
Never grab the stopper and pull out the stacker extension.
Stopper may be damaged if you pull it.

1.7 Loading Documents on the Hopper

1. Straighten the edges of the documents
 - 1) Straighten the both side edges of the documents.
2. Fan the documents
 - 1) Take the stack of documents with thickness of 15mm to 20mm.
 - 2) Hold both ends and bend the documents into an arch.



- 3) Firmly holding the document with both hands, bend back the document as follows so that the bent section rises up in the middle of the document as follows.
 - 4) Repeat steps 1) to 3) for a few times.
 - 5) Rotate the document 90 degrees, and fan again.



3. Load the documents on the hopper.
Place the documents face-up on the hopper table.

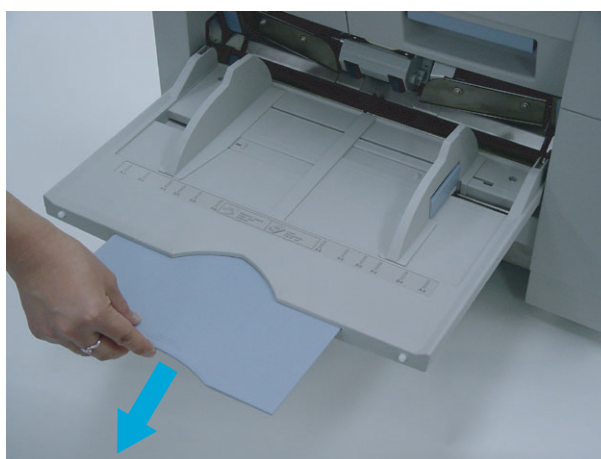


4. Adjust the Side guides to the document width.
Pressing the lock lever, slide the Side guides so that they touch the document sides.
If there is a clearance between the document edges and the guides, scanned image may get skewed.





- Make sure that the document stack is below the mark inside of the Side guides.
- For loading long documents, extend the hopper extension.



- Do not load documents consisting of different sizes.

5. Start up the scanner application and scan the documents.

For the details on how to scan using ScandAll 21, refer to the section "1.8 Scanning Documents."

1.8 Inserting Documents Manually

When the scanner is in Manual Mode, set the documents as follows.

1. **Lift the Pick roller until it is held by the magnet catch. The hopper table moves up to feed position.**



Be careful not to get your finger or things caught in the mechanism when the hopper table moves up.

2. Place documents face-up at the center of the hopper table.



For information on setting Manual feed timeout, refer to "Chapter 7 OPERATOR PANEL MENUS."

3. Set the Side guides to the width of the documents to scan. Load the documents so that the top edge of the documents contacts the hopper table guide plate.



1.9 Scanning Documents

The following shows the procedure for scanning documents using the "ScandAll 21" application (simply called "ScandAll 21" from here on.)

1. Load the documents on the hopper.

For details on how to load documents, refer to the section "1.6 Loading Documents on the Hopper."

2. Adjust the stacker table to the document size.



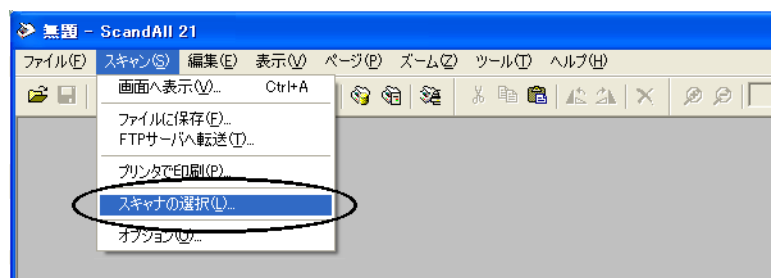
- When long documents are loaded on the hopper, extend the stacker extension.
- When short documents are loaded, adjust the stopper length.

3. Start up ScandAll 21

From [Start] menu, select [Program] - [Scanner Utility for Microsoft Windows] - [ScandAll 21]. This starts up ScandAll 21.

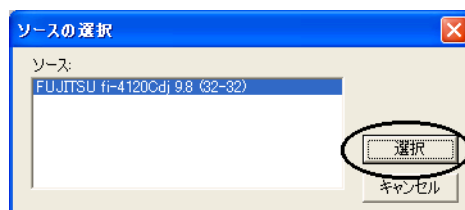
4. Select the scanner to use

Select [Select Source] from the [Scan] menu.

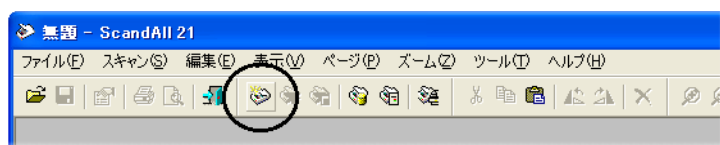


The [Select source] dialog box appears.

Select [FUJITSU fi-4860CEAdij] (WindowsNT®4.0, [FUJITSU TWAIN 32]).
Then click [Select].



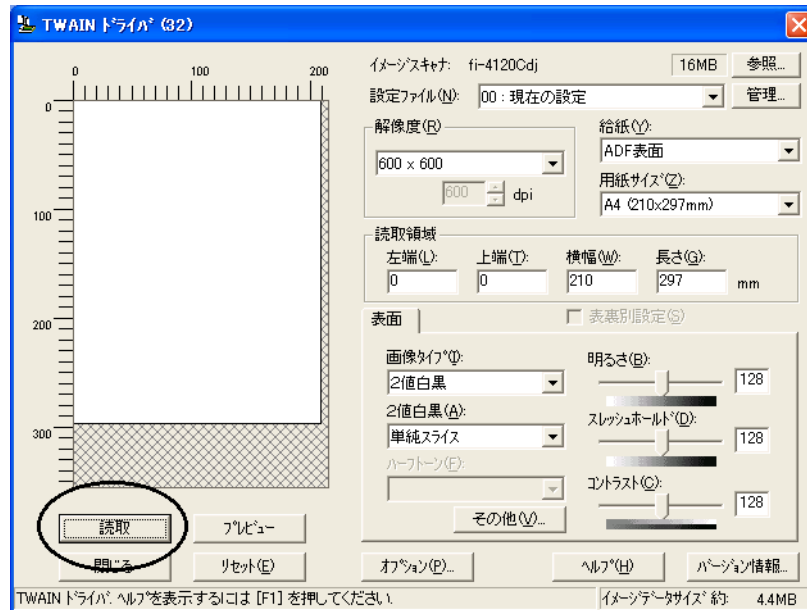
5. Click the [Display in scan preview screen] on the tool bar.



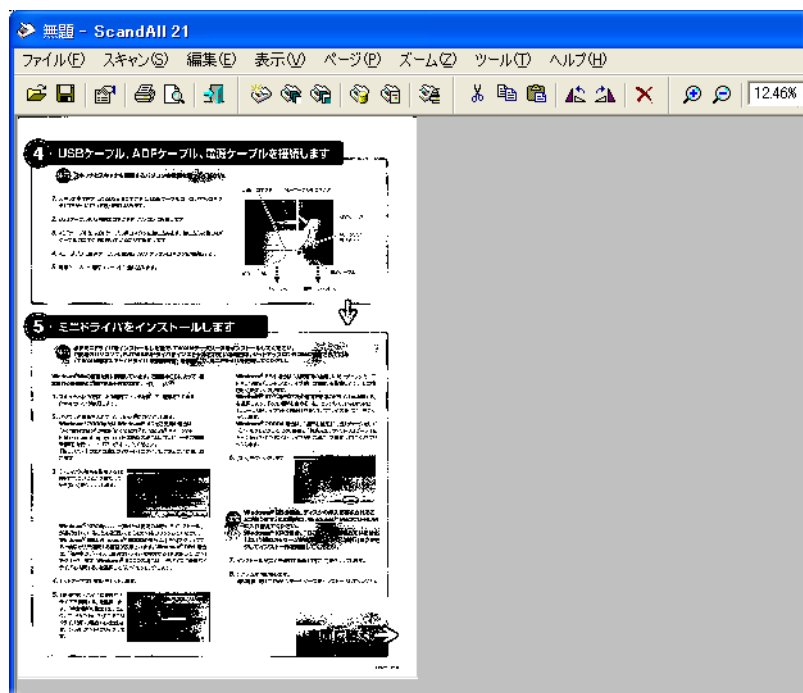
The [TWAINDriver] dialog box (screen for setting the scan conditions) appears.

6. Set the scan resolution, document size and other scan conditions, and click the [Scan] button.

For the details on settings in the [TWAIN Driver] dialog box, refer to the "Scanner Utility for Microsoft® Windows® User's Guide" on the scanner driver CD-ROM."



The document is scanned, and an image of the document appears on the ScandAll 21 screen.



For details on scanning various documents, see "Chapter 2 SCANNING VARIOUS TYPES OF DOCUMENTS".

For details on ScandAll 21 function and operations, refer to ScandAll 21 Help.

2 SCANNING VARIOUS TYPES OF DOCUMENTS

This chapter describes how to scan various types of documents.

This chapter explains operations using the screens of Windows® XP. Depending on the OS, your PC's screen shots and the operation may be different from this manual. Please be aware that when FUJITSU TWAIN 32 scanner data source is updated, the screens and operations noted in this chapter may be changed slightly. In such case, please refer to the User's Guide provided with the update.

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2.3 Removing a Color from Scanned Image (dropout color)	32
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2.1 Scanning Different-size Documents

When you scan a batch of documents with different sizes using ADF, you may get skewed image from small size documents.

Scanning the documents of the same width is recommended.

The following shows the procedure to scan the batch of mixed size documents.

- 1. Sort the batch into the stacks of the same width documents.**
- 2. Adjust the side guide to the width of the documents to scan.**
- 3. Separate the job by scanning the same width document stack each time.**

For the examples of how to scan the documents, please refer to the section "1.8 Scanning Documents."

2.2 Saving Scanned Images in PDF Format

If you would like to save scanned images in PDF format, please install AdobeQ® Acrobat® 5.0 or later on your PC.

Adobe Acrobat 5.0 can be installed from the Adobe Acrobat CD-ROM provided.

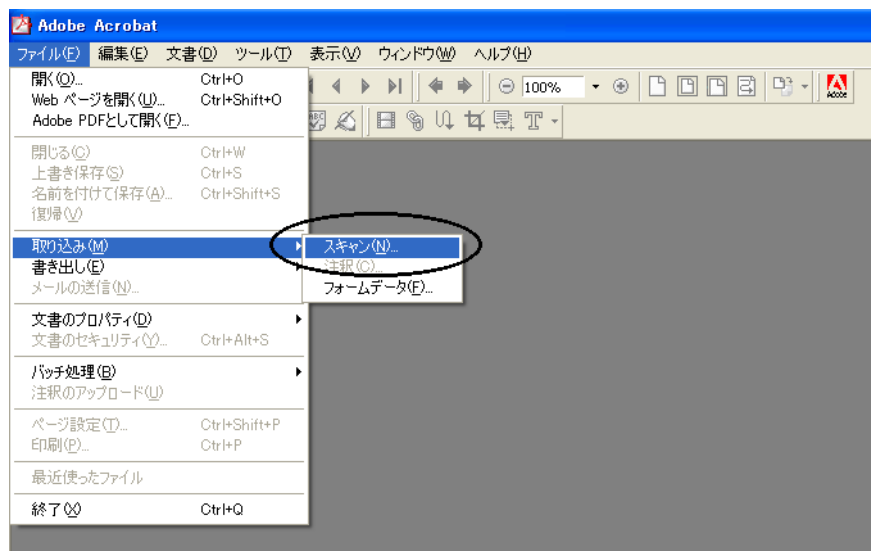
Following shows the procedure for saving scanned images in PDF format.

1. Load the documents on the hopper.

2. Start up Adobe Acrobat 5.0.

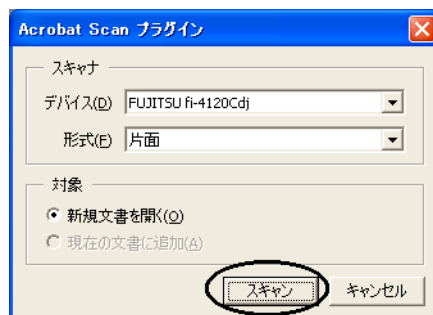
Select [Program] - [Adobe Acrobat] from the [Start] menu. This starts up Adobe Acrobat 5.0.

3. Select [Import] - [Scan] in that order from the [File] menu.



[Acrobat Scan Plugin] dialog box is displayed.

4. Select [FUJITSU fi-4860CEAdj] (WindowsNT®4.0, select [FUJITSU TWAIN 32]) at [Device] and click [Scan] button.

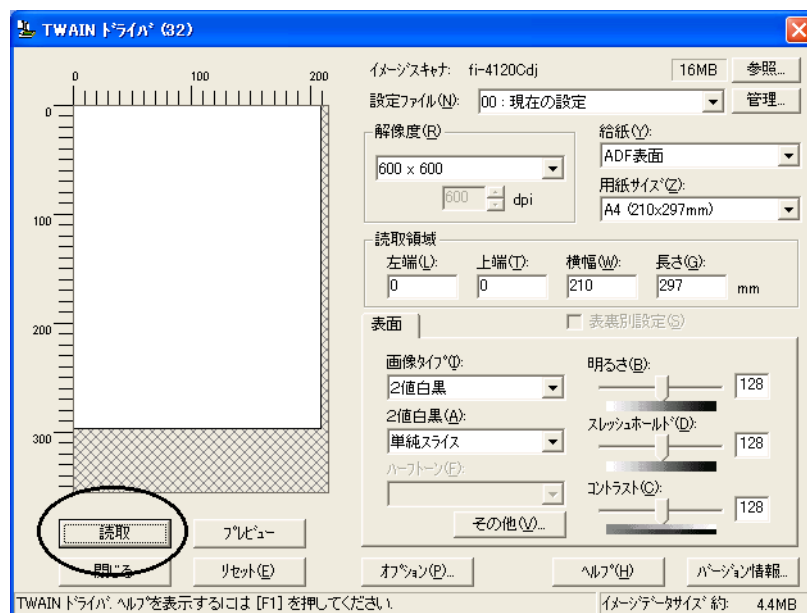


[TWAIN driver] dialog box is displayed.



- Select [Simplex] even if you intend to do duplex scanning.

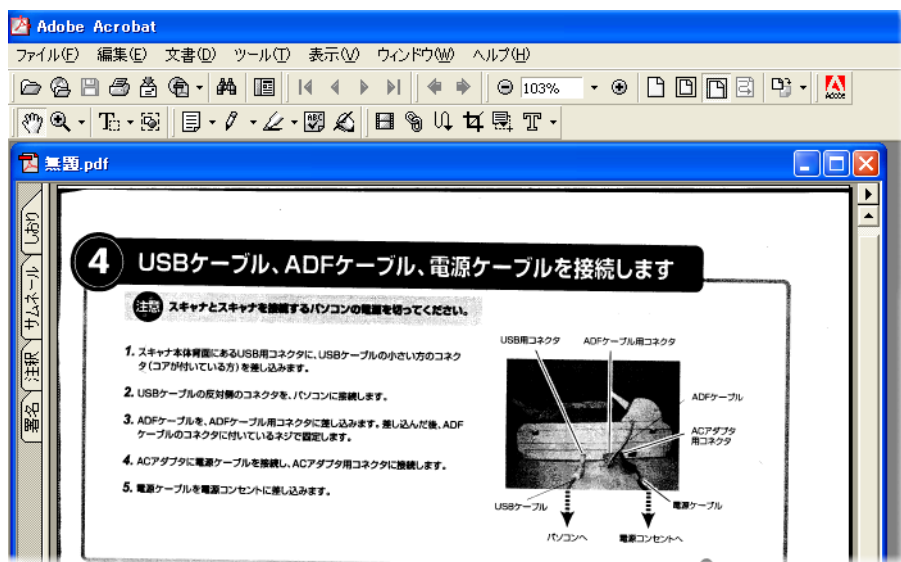
5. Set the scan resolution, document size and other scan conditions, and click the [Scan] button.



Scanning starts, and a message appears asking if you continue scanning.

6. To end scanning, click the [Demo] button.

The scanned image is displayed. Save the scanned image in Adobe Acrobat format (PDF).



For the details on Adobe Acrobat 5.0 operations, refer to the Adobe Acrobat 5.0 manual and help.

2.3 Removing a Color from Scanned Image (dropout color)

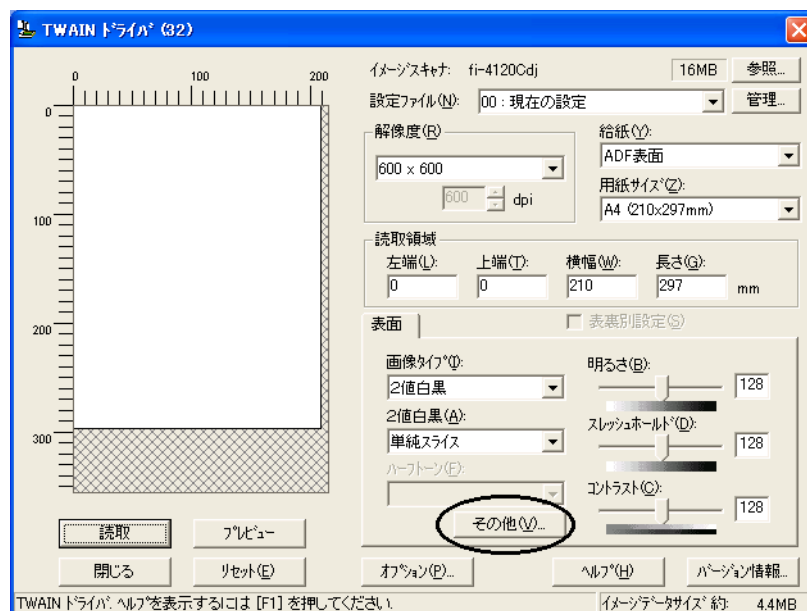
A selected color information (primary colors: red, green, blue) can be excluded (dropped out) from the scanned image data.

For example, if the document contains black texts in green frames, you can set the scanner to get only the texts and eliminate the green frames.

To drop out a color, change the setting in the [TWAIN Driver] dialog box and scan.

The following shows how to change the setting of [TWAIN Driver] dialog box.

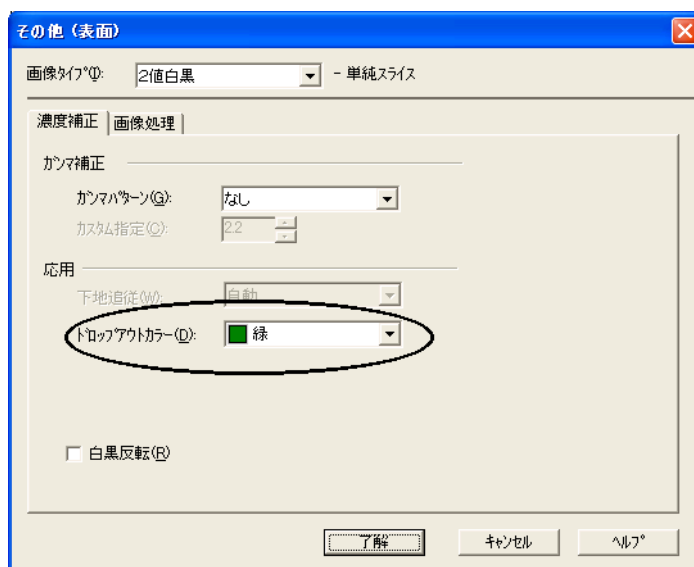
1. Click [[Advance] button in the [TWAIN Driver] dialog box.



The [Advance] dialog box appears.

2. Select the color to drop out from [Dropout Color] under [More].

For example, if the document contains black texts in green frames, you can set the scanner to get only the texts and eliminate the green frames.



3. Click [OK] button.

[TWAIN Driver] dialog box will be redisplayed.

3 DAIRY CARE

This chapter describes how to clean the scanner.

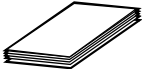


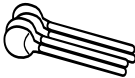


When you clean the scanner, turn off the power, and unplug power cable from the outlet.

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3.1 Cleaning Materials and Areas Requiring Cleaning

■ Cleaning materials

Cleaning materials	Part No.	Remarks
Cleaning sheet 	CA99501-0016 (* 1)	20 sheets/pack
Cleaner F2 	CA99501-0014 (* 1)	1 bottle, 100ml/bottle
Isopropyl alcohol or Cleaner F1 	CA99501-0013 (* 1)	1 bottle, 50ml/bottle Moisten cloth with this fluid and wipe the scanner to clean.
Cotton swab 	Commercially available one	
Dry cloth	Commercially available one(* 2)	

* 1) Contact the FUJITSU scanner dealer where you purchased the scanner.

*2) Any lint-free cloth can be used.

■ Cleaning Materials and Cleaning Frequency

The following shows the standard cleaning frequency for each area requiring cleaning.

Part to clean	Standard Cleaning Frequency
Pad	Clean every 100,000sheets
Pick roller	Clean every 100,000sheets
Brake roller	
Separation roller	
Feed roller	
Pinch roller	
Paper path	Clean every 200,000sheets
Discharge brush	Clean every 100,000sheets
Removable sheet guide	Clean every 200,000sheets
Glass sheet guide	
Document width detection sensor	Clean every 200,000sheets
SF1	
SF1.5	
SF2	
Front-side Lamp	Clean every 100,000sheets
Back-side lamp	



Please clean rollers using the cleaning sheet every 50,000 sheets.



You must clean the scanner more frequently when the following documents are scanned.

- Documents of coated paper
- Documents with printed text or graphics covering almost the entire surface
- Chemically treated documents such as carbonless paper



Do not use aerosol sprays to clean the scanner. The air from the spray may cause dirt and dust enter the scanner mechanism and result scanner failure and malfunctions.



You must clean the following area more frequently when you use fi-486PRFR or fi-486PRRF imprinters. The imprinter ink tend to stick to the document path.

- Removable sheet guide
 - Glass sheet guide
 - Feed rollers
 - Pinch rollers
-

3.2 Cleaning the Pad

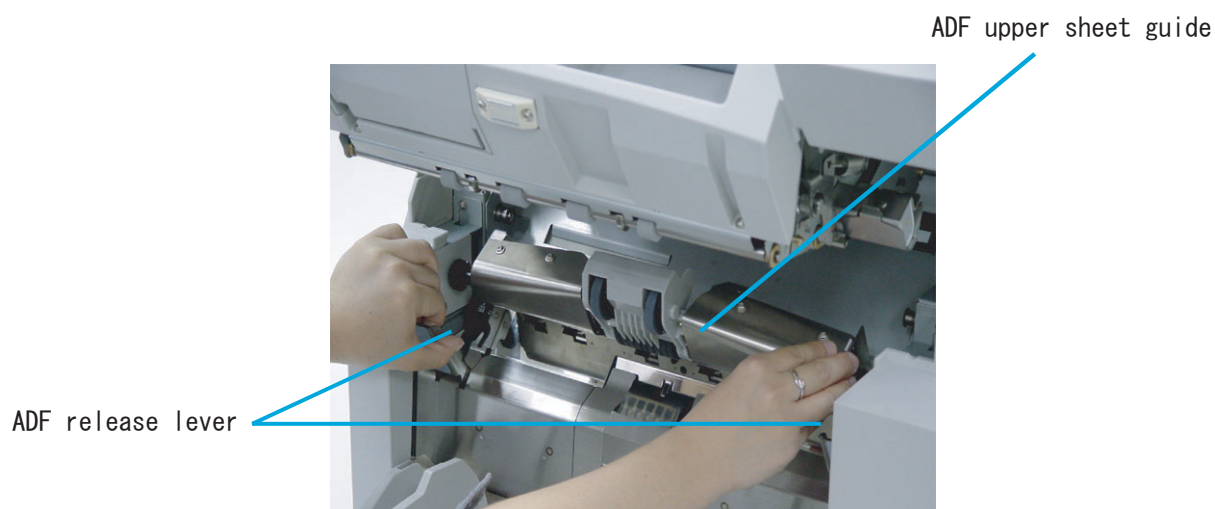
1. Pull up the lever on the right front of the Upper transport.



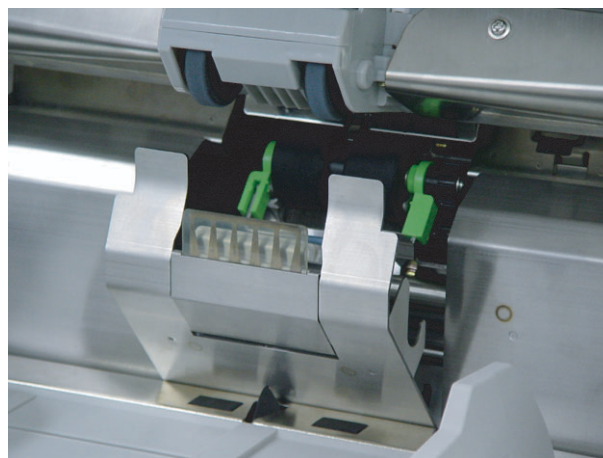
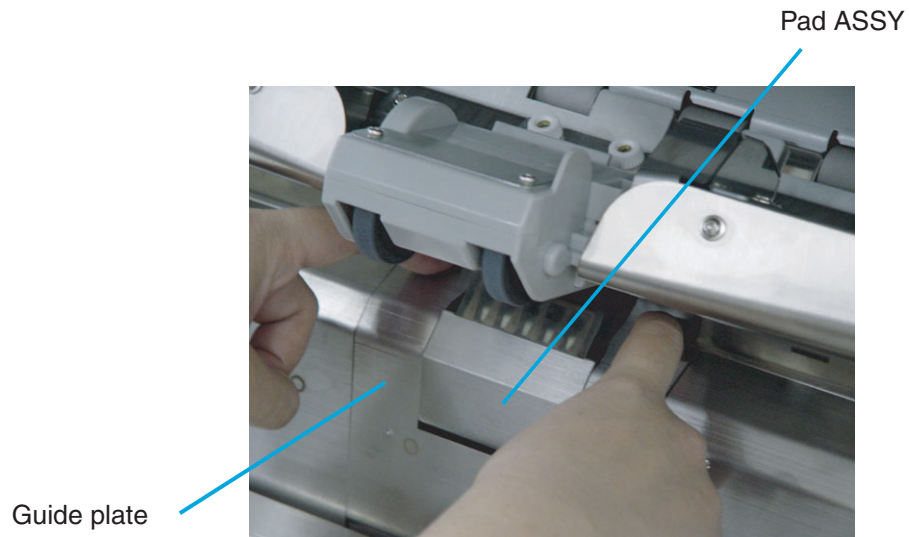
Make sure that the Upper transport is locked before you put your hands inside of the scanner .



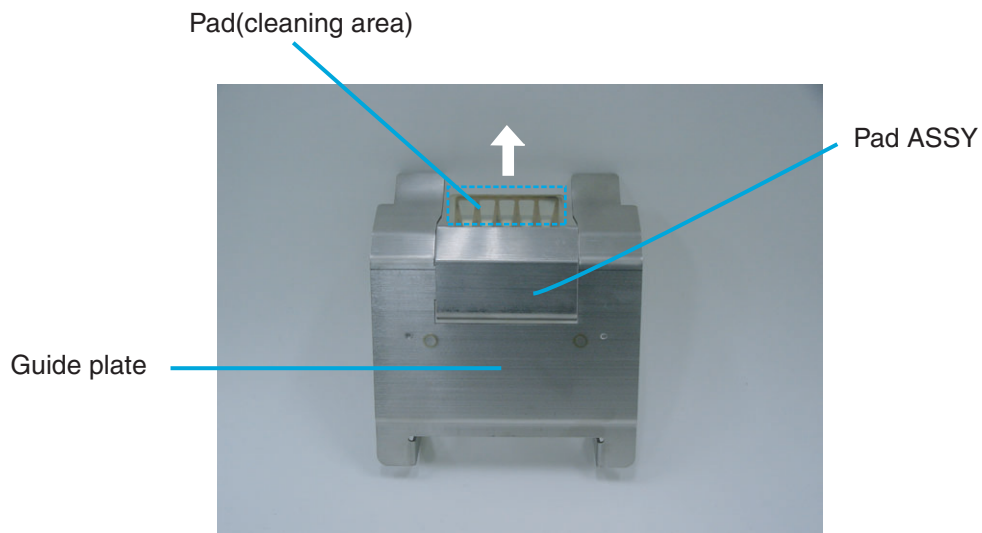
2. Pull the ADF release lever toward you and lift up the ADF sheet guide.



3. Pressing down the upper part of the Guide plate with your fingers at two positions and pull the plate toward you to remove it.




4. Wipe the translucent rubber part of the Pad ASSY using a cloth moistened with cleaner F1.



5. Install the guide plate in the reverse order of the removal. You should push it down then the installation can be done smoothly.
6. Lower the ADF upper sheet guide gently.
7. Lift the Upper transport unit a little to release the safety lock and then lower the transport unit slowly.

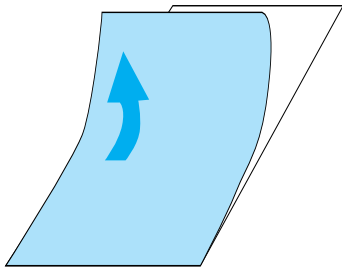
3.3 Cleaning the Rollers

■ Cleaning the rollers with the cleaning sheet

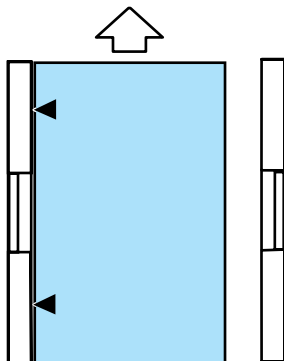
1. Set the Side guide for B4 size width.
2. Set the scanner in Test mode: For the details of the procedure, refer to the section "7.5 Test Mode Details."
3. Press  (Next button) to show the following screen.

T O 2 M u l t i f e e d

4. Remove the protective paper from the cleaning sheet.

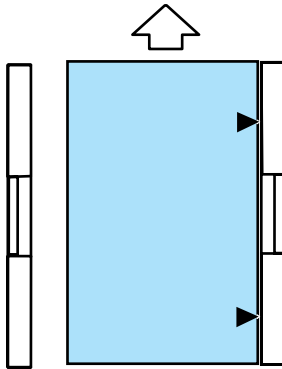


5. Place the cleaning sheet on the hopper table, aligning the left side with the hopper guide and with the adhesive side up. Press  (Start button), then the cleaning sheet is fed.



6. When [Hopper Empty] is displayed, press  (Cancel button).

7. Place the same cleaning sheet on the hopper table with adhesive side up by aligning the right side with the hopper guide. Press **Start** (Start button), then the cleaning sheet is fed.



8. When "Hopper Empty" is displayed, press **Stop** (Cancel) button.
9. Remove the protective paper from a new cleaning sheet and place it with the adhesive side face down.
- Repeat steps 5 through 8. When the cleaning is completed turn off the power.

■ Cleaning the Pick Rollers and the Separation Roller

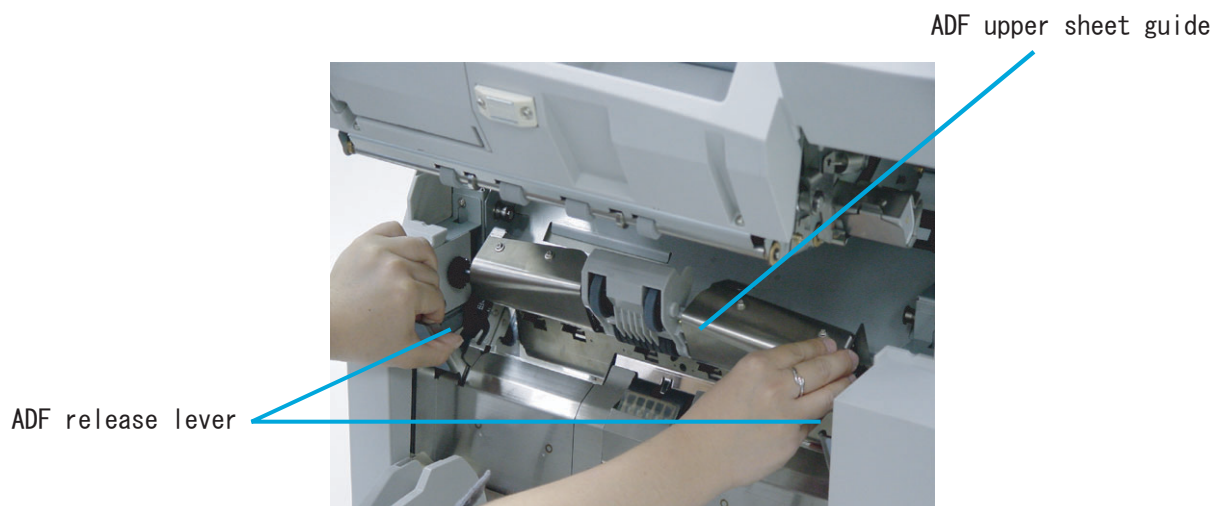
1. Pull up the lever on the right front of the Upper transport and open it.



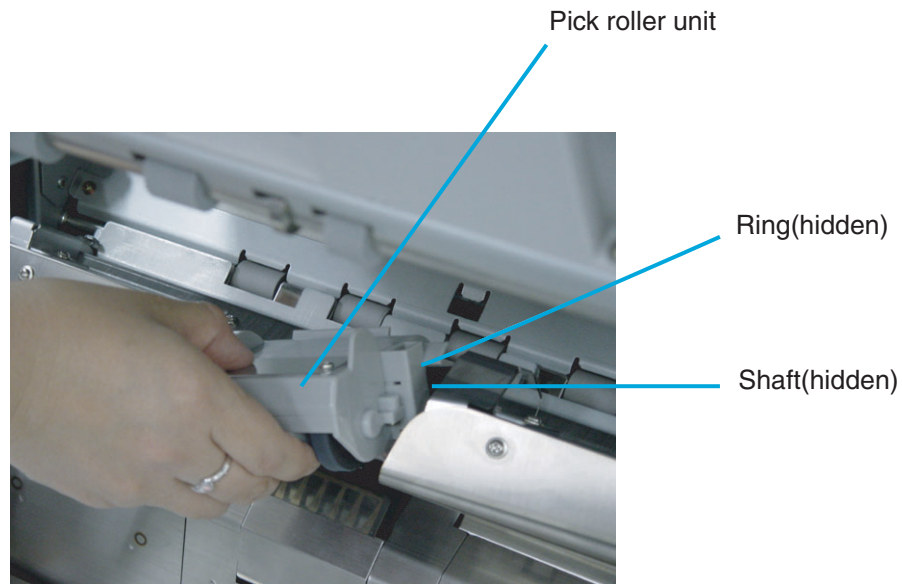
Make sure that the Upper transport is locked before you put your hands inside of the scanner .



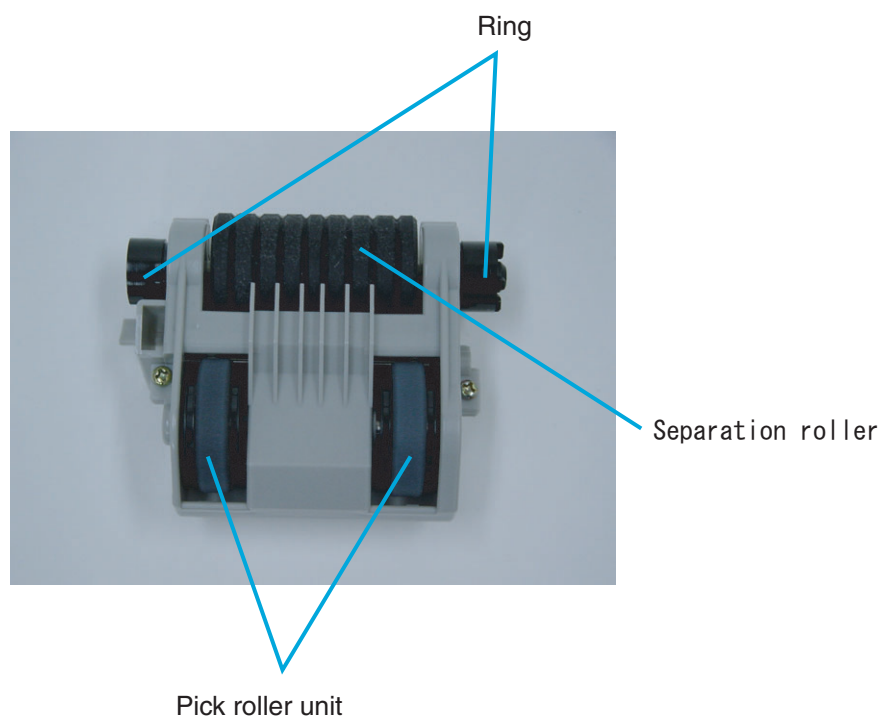
2. While pulling the ADF lever toward you, lift up the ADF upper sheet guide.



3. Slide the Pick roller unit leftward a little and disengage the right ring form the shaft.



4. Wipe the Pick rollers (2 positions) and the Separation roller using a cloth moistened with cleaner F1.



5. Install the Pick roller unit in the reverse order of its removal.



When attaching the Pick roller unit, its head sometimes hang down.
In such case, lift the unit up so that you can install it at the right position.

Incorrect installation



Correct installation



6. Lower the ADF upper sheet guide gently.

7. Lift the Upper transport unit a little to release the safety lock and then lower the transport unit slowly.

■ Cleaning the Brake roller unit

1. Pull up the lever on the right front of the Upper transport unit.

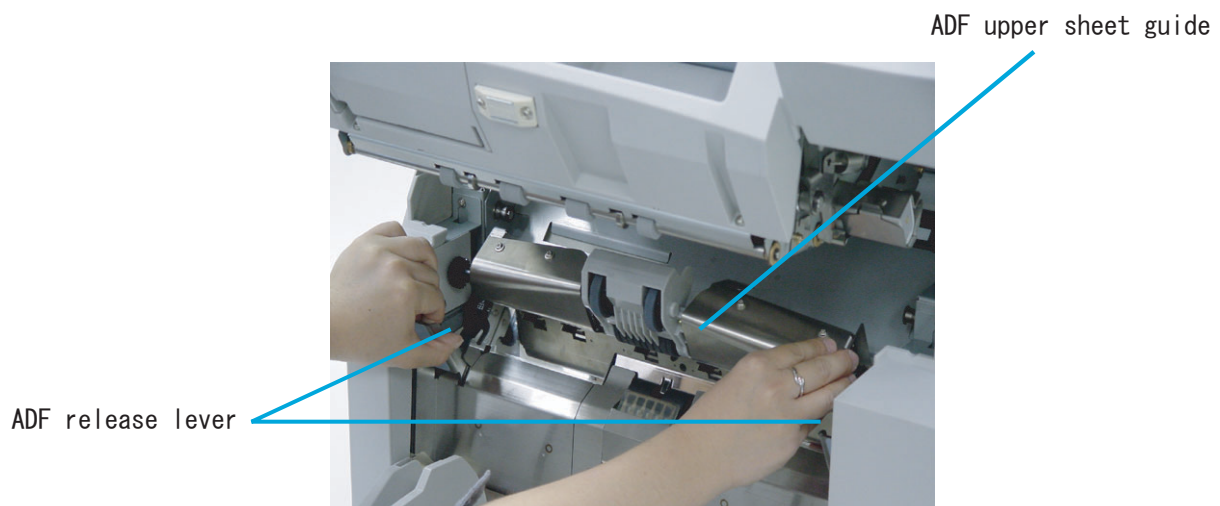


CAUTION

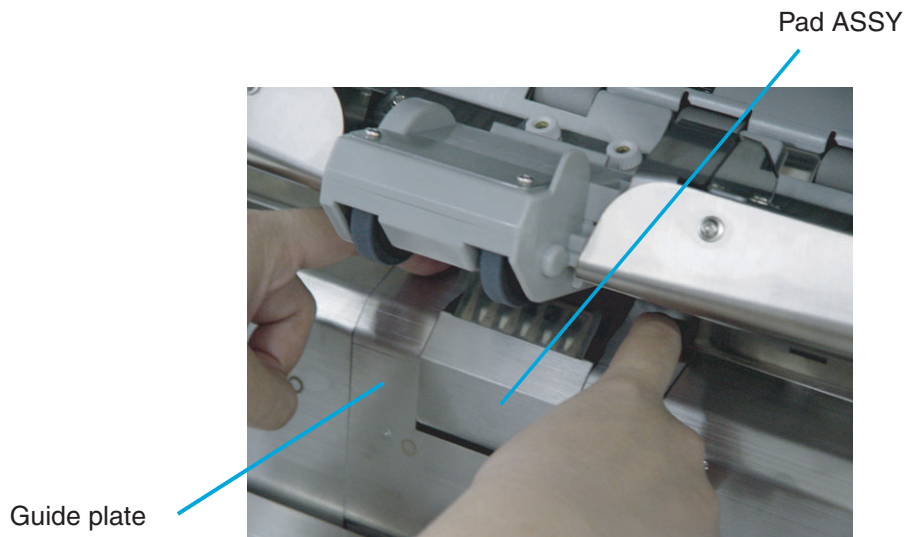
Make sure that the Upper transport is locked before you put your hands inside of the scanner .



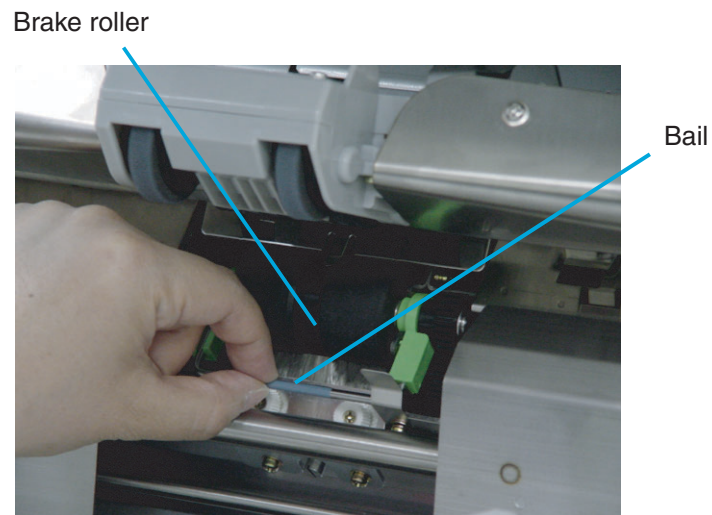
2. Pull the ADF release lever toward you and lift up the ADF sheet guide.



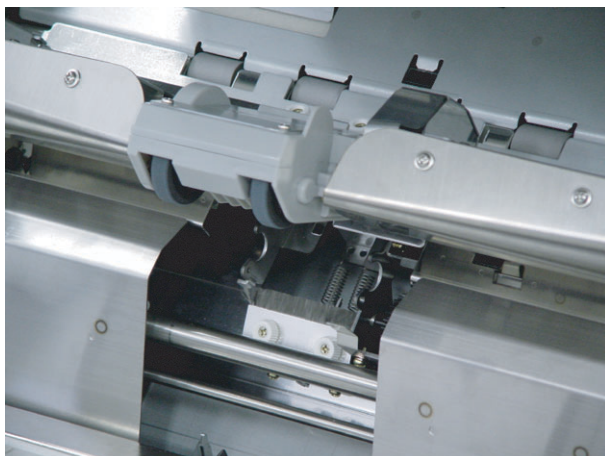
- 3. Pressing down the upper part of the Guide plate with your fingers at two positions and pull the plate toward you to remove it.**



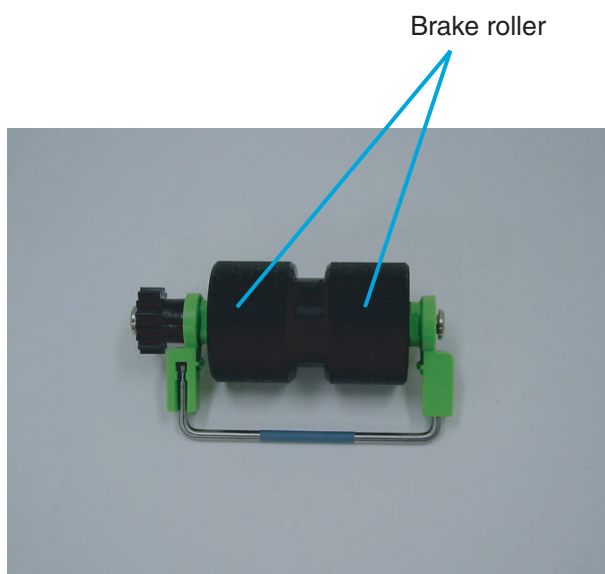
- 4. Turn the bail of the Brake roller upward and release the lock.**



5. Pull the Brake roller toward you to remove it.



6. Wipe the Brake roller unit using a cloth moistened with cleaner F1.



-
- 7. Attach a new Pick roller unit in the reverse order of its removal. Attach the roller unit until it locks in.**
 - 8. Install the guide plate in the reverse order of the removal. By pressing the guide plate down, you can install it smoothly.**
 - 9. Lower the ADF upper sheet guide slowly.**
 - 10. Lift the Upper transport unit a little to release the safety lock and then lower the transport unit slowly.**

■ Cleaning the Feed rollers

1. Pull up the lever on the right front of the Upper transport unit.

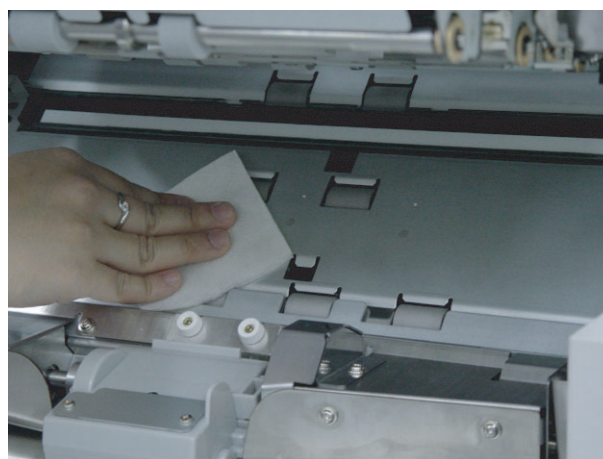
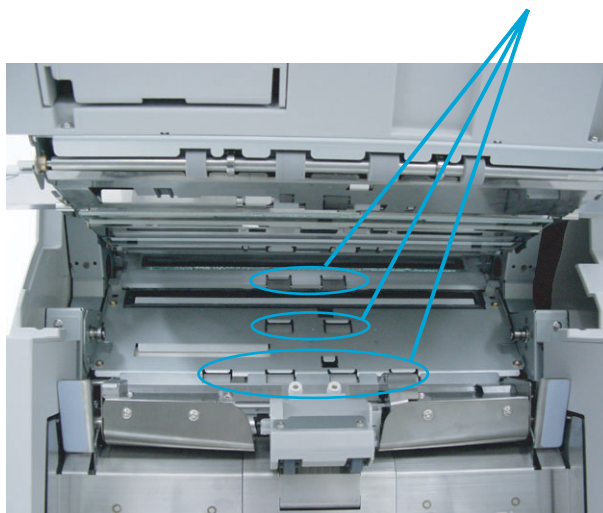


Make sure that the Upper transport unit is in the locked position before reaching inside the scanner.



- 2. Wipe the feed rollers using a cloth moistened with cleaner F2. Wipe the rollers thoroughly. If the rollers have black build-ups, the feed reliability is affected.**

Metal feed roller(in 12 locations)



Use cleaner F2 only for feed rollers (made of metal).

- 3. Lift the Upper transport unit a little to release the safety lock and then lower the transport unit slowly.**

■ Cleaning the Pinch rollers

1. Lift the lever located at the right to open the Upper transport unit.

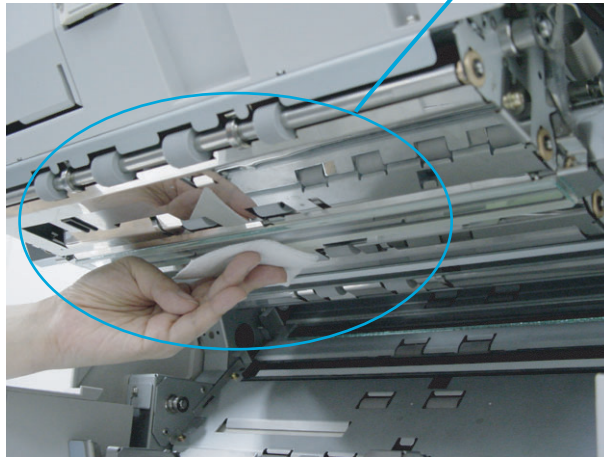


Make sure that the Upper transport is locked before you put your hands inside of the scanner .



2. Wipe the pinch rollers using a cloth moistened with cleaner F1.

Pinch roller (in 12 locations)



3. Lift the Upper transport unit a little to release the safety lock and then lower the transport unit slowly.

3.4 Cleaning the Transport Path

■ Cleaning the Transport path

1. Lift the lever located at the right to open the Upper transport unit.



CAUTION

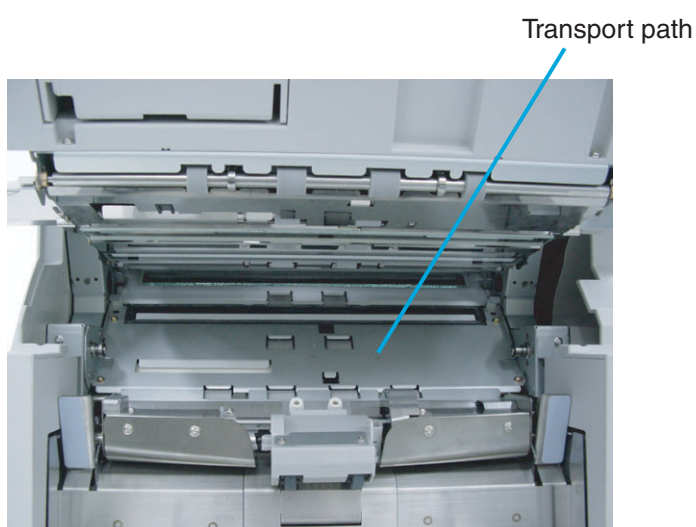
Make sure that the Upper transport unit is locked before you put your hands inside of the scanner.



2. Wipe and clean the whole transport path using a cloth moistened with cleaner F1.



Vacuum the transport path if there are paper dusts in the path.



3. Lift the Upper transport unit a little to release the safety lock and then lower the transport unit slowly.

3.5 Cleaning the Discharge Brush

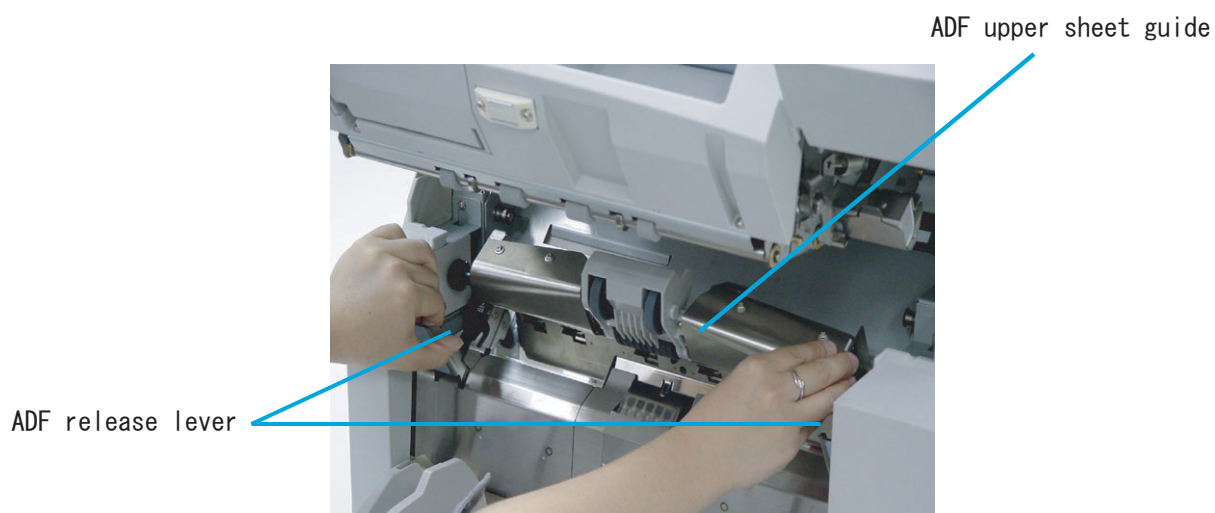
1. Lift the lever located at the right to open the Upper transport unit.



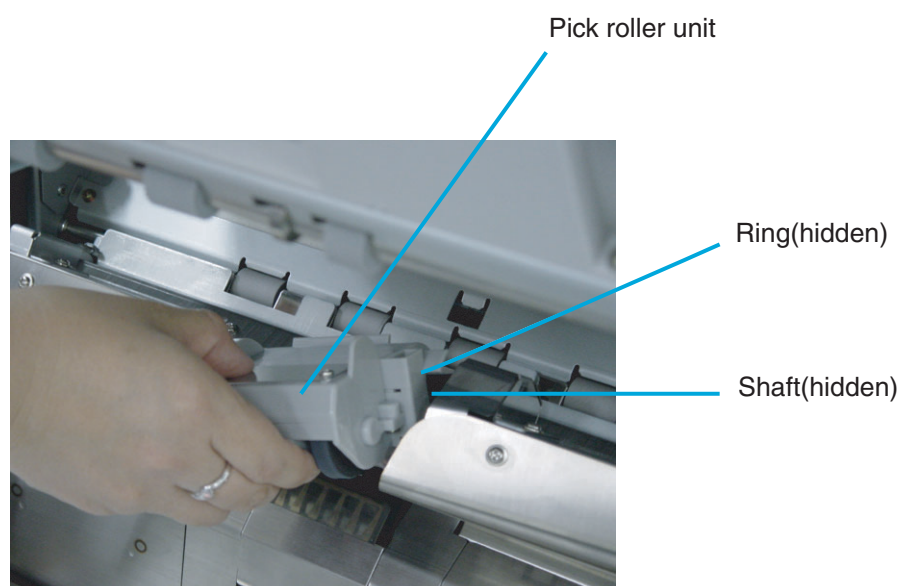
Make sure that the Upper transport unit is locked before you put your hands inside of the scanner.



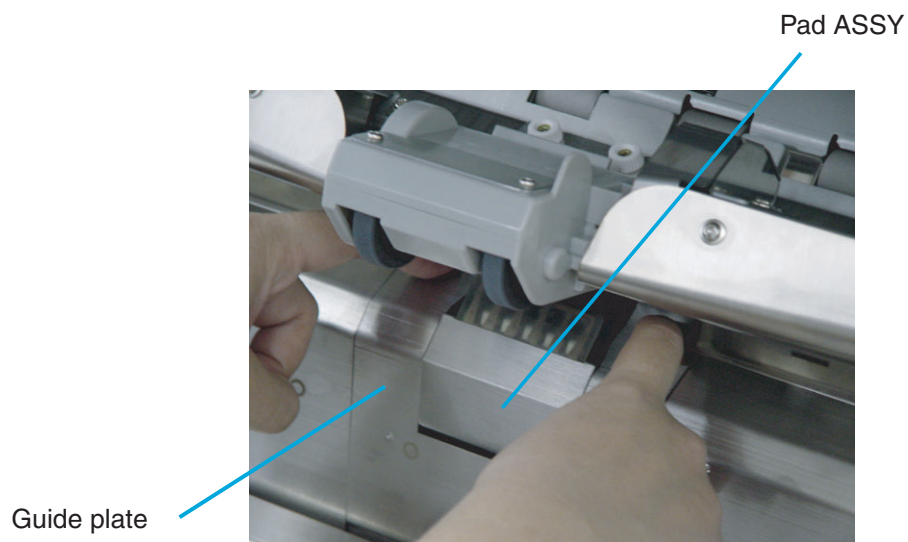
2. Pull the ADF release lever toward you and lift up the ADF sheet guide.



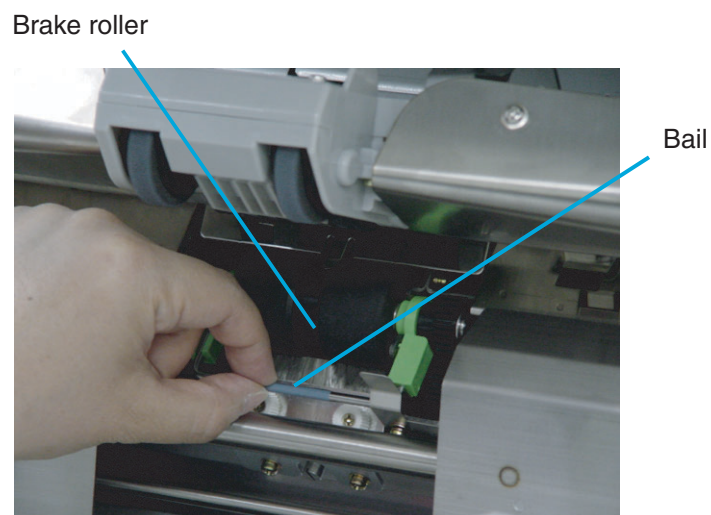
3. Slide the Pick roller unit leftward a little and disengage the right ring from the shaft.



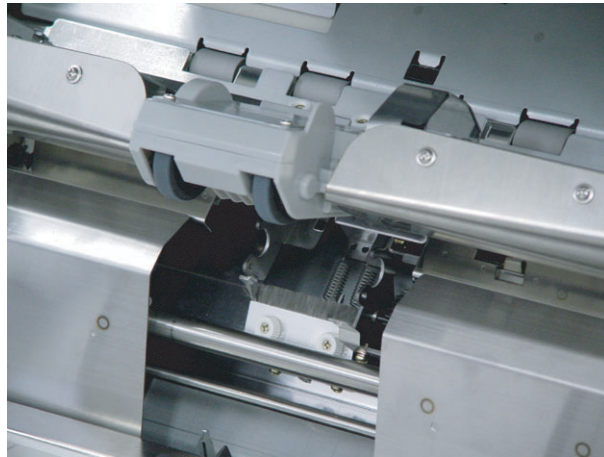
4. Pressing down the upper part of the guide plate with your fingers at two positions and pull the plate toward you to remove it.



6. Grab and turn the bail of the Pick roller unit upward and release the lock.

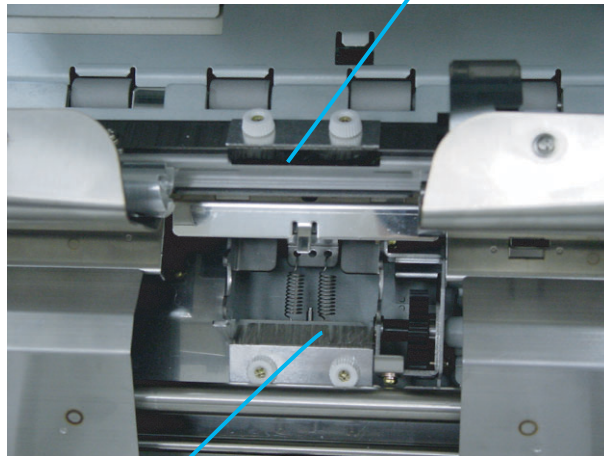


7. Pull the Brake roller unit toward you to remove it.



8. Wipe off the dust from the discharge brush. Make sure you clean the two discharge brushes: one at the Pick roller side, the other at the Pick roller side.

Diselectric brush(for Pick roller unit)



Diselectric brush(for brakeroller)

-
9. Attach a new Brake roller unit in the reverse order of its removal. Make sure that the Brake roller unit is firmly installed.
 10. Install the guide plate in the reverse order of the removal. You should push it down then the installation can be done smoothly.
 11. Lower the ADF upper sheet guide slowly.
 12. Lift the Upper transport unit a little to release the safety lock and then lower the transport unit slowly.

3.6 Cleaning the Glass Surface

■ Cleaning of the removable sheet guide



Wait 3 minutes after turning off the power before touching the Lamp.



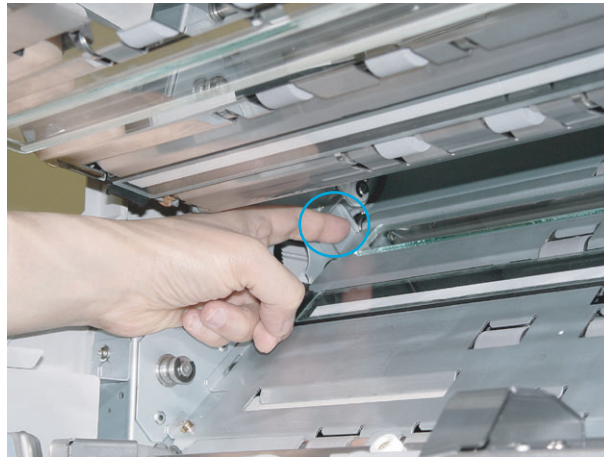
-
1. Lift the lever located at the right to open the Upper transport unit.



Make sure that the Upper transport unit is locked before you put your hands inside of the scanner.



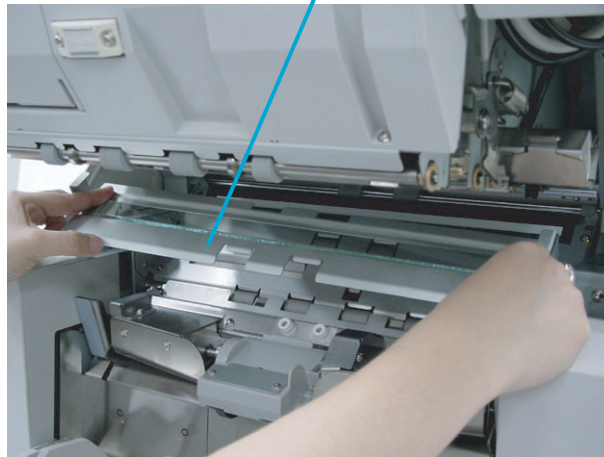
2. Use your index fingers to catch the both ends of the removable sheet guide.



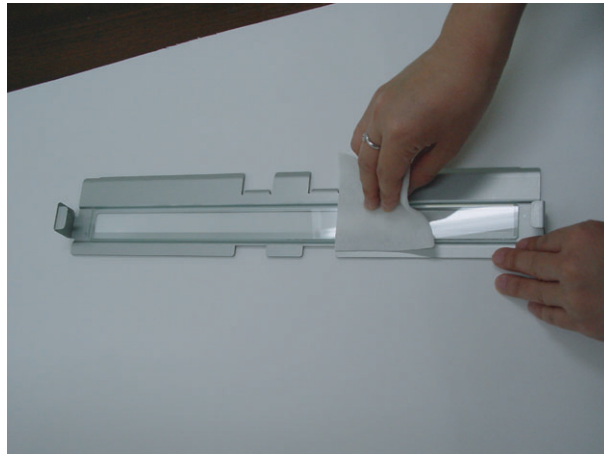
3. Lift the right side a little first.

4. Shift the sheet guide leftward while lifting it up to remove.

Removable sheet guide



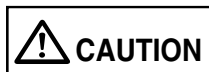
5. Wipe the both sides of the glass surface using a cloth moistened with cleaner F1.



6. Attach the removable sheet guide in the reverse order of its removal.

7. Lift the Upper transport unit a little to release the safety lock and then lower the transport unit slowly.

■ Cleaning the Glass Sheet Guide



Wait 3 minutes after turning off the power before touching the Lamp.



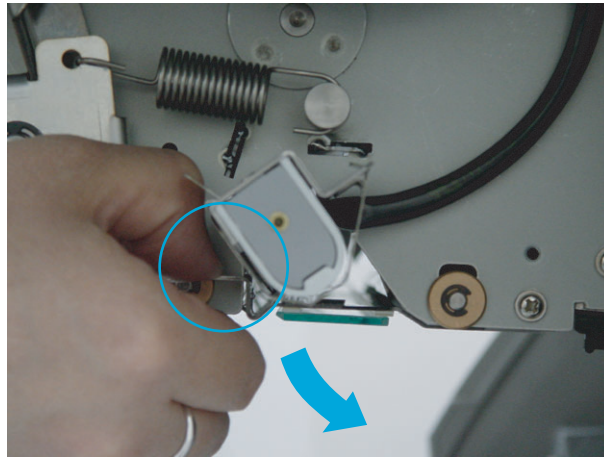
1. Lift the lever located at the right to open the Upper transport unit.



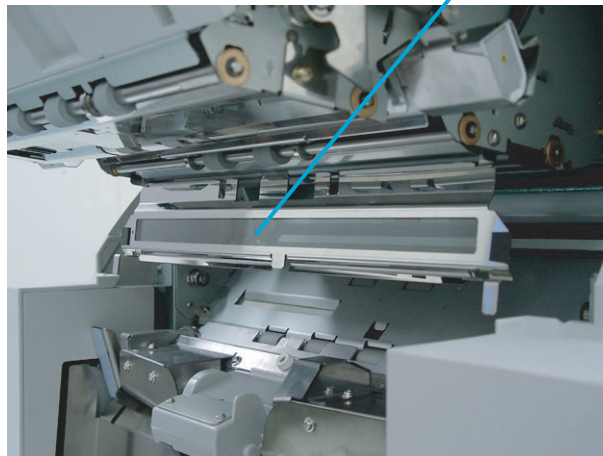
Make sure that the Upper transport unit is locked before you put your hands inside of the scanner.



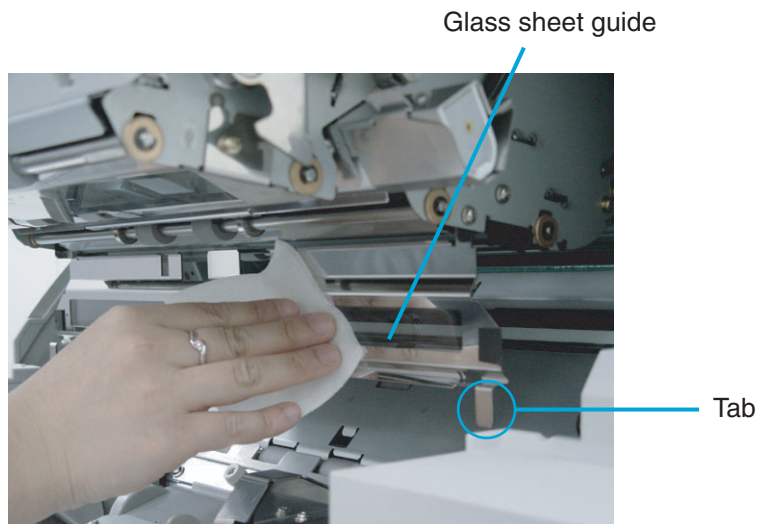
2. Push down the Glass sheet guide tab toward you.



Glass sheet guide



3. Wipe the Glass sheet guide using a cloth moistened with cleaner F1.



4. Lift the tab until the guide locks in. Close the Glass sheet guide. Make sure that the metal part is fixed firmly.
5. Lift the Upper transport unit a little to release the safety lock and then lower the transport unit slowly.

3.7 Cleaning the Sensors

■ Cleaning the document detection sensors (6 positions)

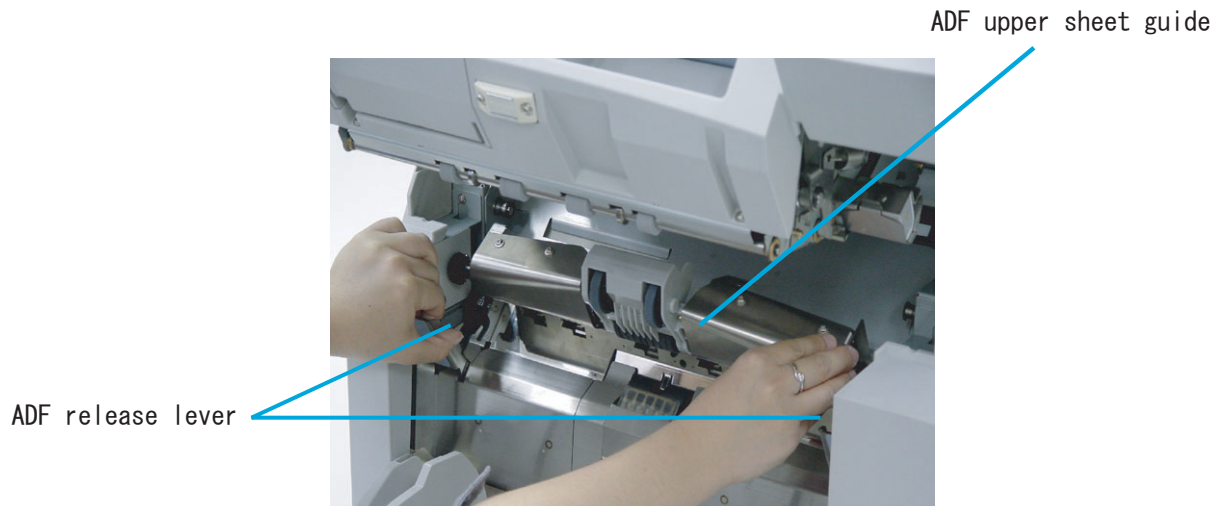
1. Lift the lever located at the right to open the Upper transport unit.



Make sure that the Upper transport unit is in the locked position before reaching inside the scanner.

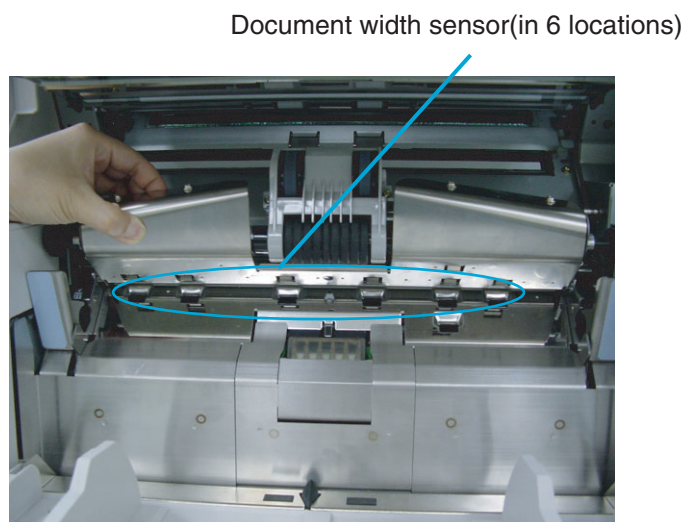


2. Pull the ADF release lever toward you and lift up the ADF sheet guide.



3. Hold the ADF sheet guide with your hand to keep it open.

4. Wipe the six sensor surfaces with a cloth moistened with cleaner F1.



5. Lower the ADF upper sheet guide gently.

6. Lift the Upper transport unit a little to release the safety lock and then lower the transport unit slowly.

■ Cleaning SF0 sensor and SF1 sensor.

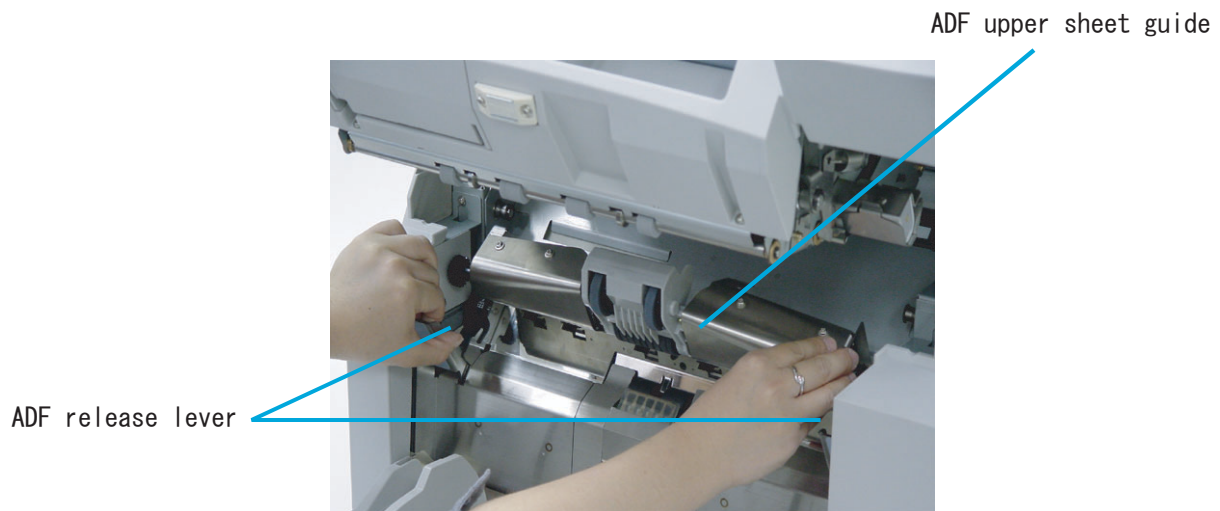
1. Lift the lever located at the right to open the Upper transport unit.



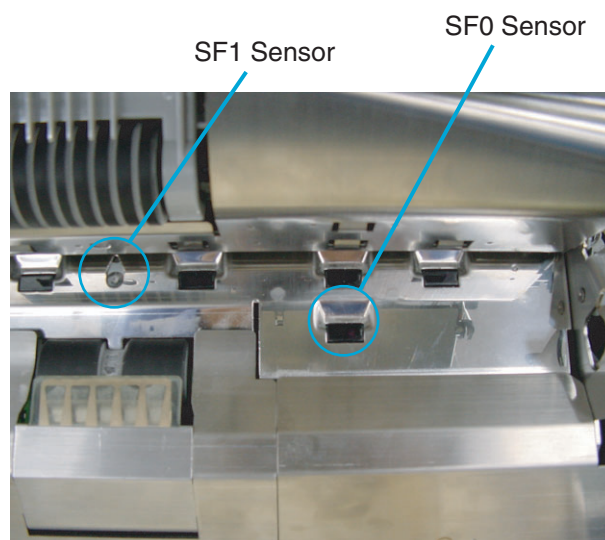
Make sure that the Upper transport unit is locked before you put your hands inside of the scanner.



2. Pull the ADF release lever toward you and lift up the ADF sheet guide.



3. Hold the ADF sheet guide with your hand to keep it open.
4. Wipe SF0 and SF1 sensor surfaces with a cloth moistened with cleaner F1.



5. Lower the ADF upper sheet guide gently.
6. Lift the Upper transport unit a little to release the safety lock and then lower the transport unit slowly.

■ Cleaning of SF1.5 sensor and SF2 sensor

1. Lift the lever located at the right to open the Upper transport unit.



Make sure that the Upper transport unit is locked before you put your hands inside of the scanner.



2. Wipe SF1.5 and SF2 sensor surfaces with a cloth moistened with cleaner F1.



3. Lift the Upper transport unit a little to release the safety lock and then lower the transport unit slowly.

3.8 Cleaning the Lamps



Never replace the Lamp without turning off the power.



Wait 5 minutes after turning off the power before touching the Lamp.

■ Front-side lamp

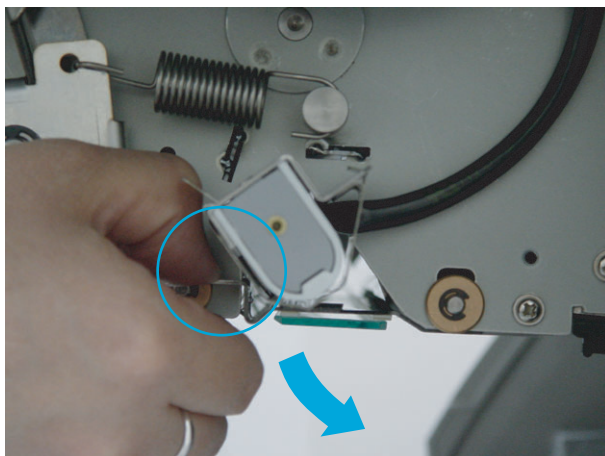
1. Lift the lever located at the right to open the Upper transport unit.



Make sure that the Upper transport unit is locked before you put your hands inside of the scanner.



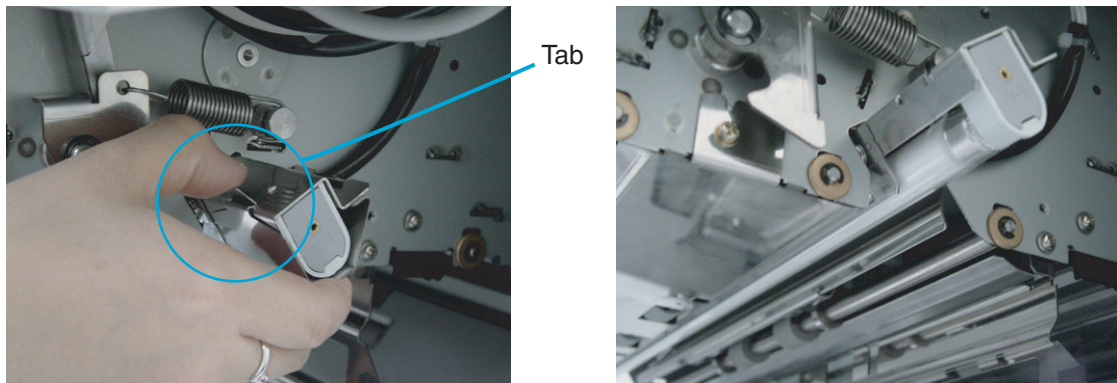
2. Pull down the Glass sheet guide tab and open the Glass sheet guide.



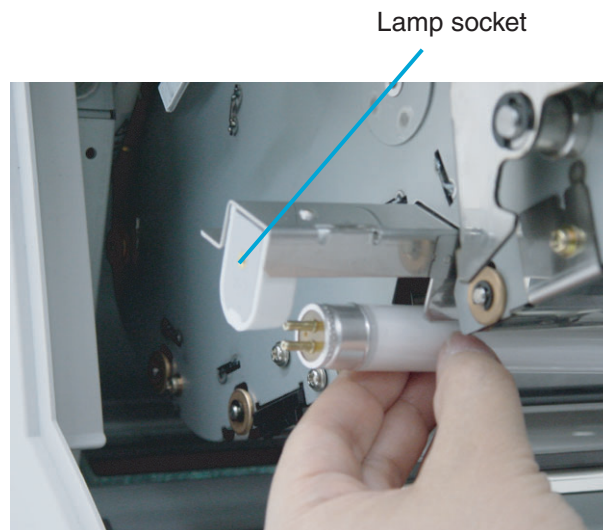
Glass sheet guide



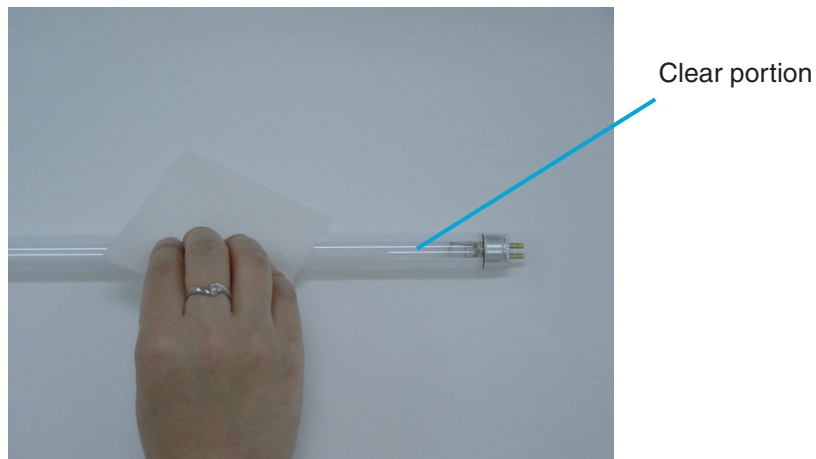
- 3. Pulling down the Lamp socket covers attached to the both end of the Lamp sockets and remove them.**



- 4. Rotate the Lamp a half turn so that the terminals on each end align with the slot on the Lamp socket and remove the Lamp from the unit.**



5. Clean the clear portion of the Lamp with a dry cloth.

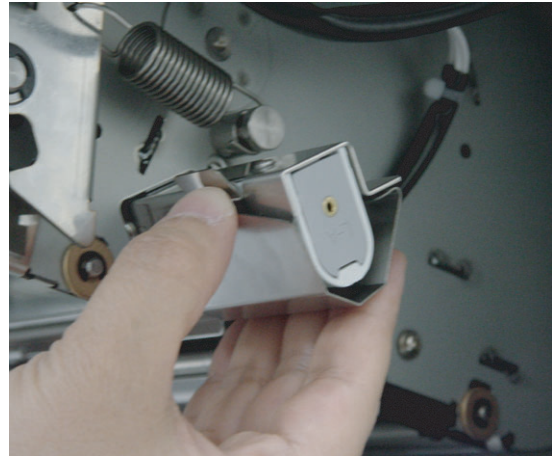
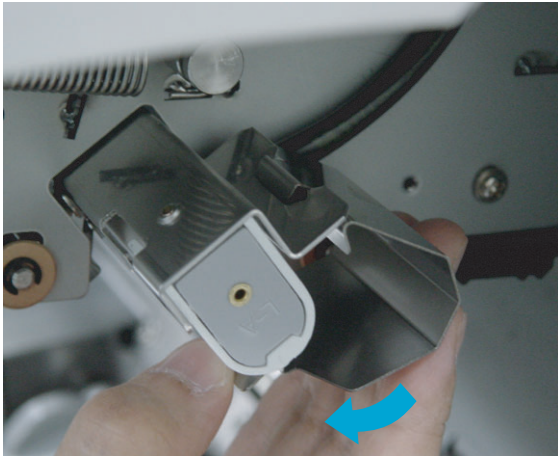


6. Attach the front-side Lamp in the reverse order of its removal. Make sure that the clear portion of the Lamp faces down.



If the Lamp is installed with the clear portion facing upward, an error due to insufficient light occurs.

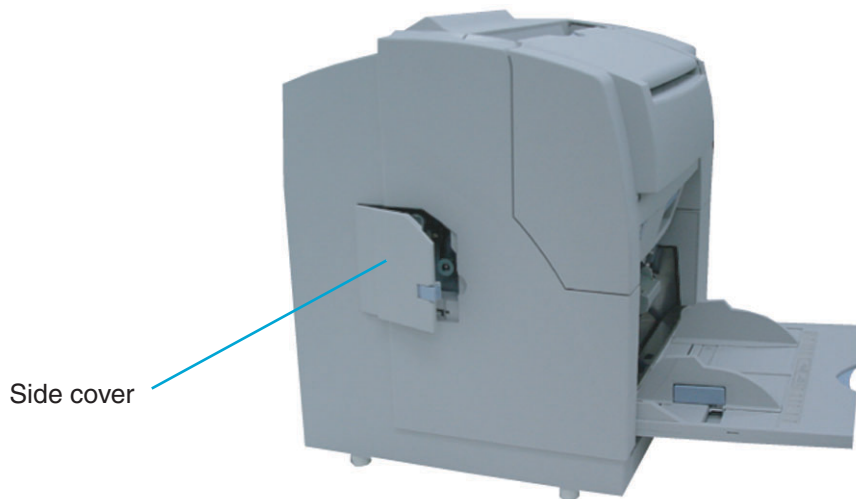
- 7. Attach the Lamp socket cover in the reverse order of its removal. Engage the socket cover hook to the Lamp frame as shown below, and attach the covers.**



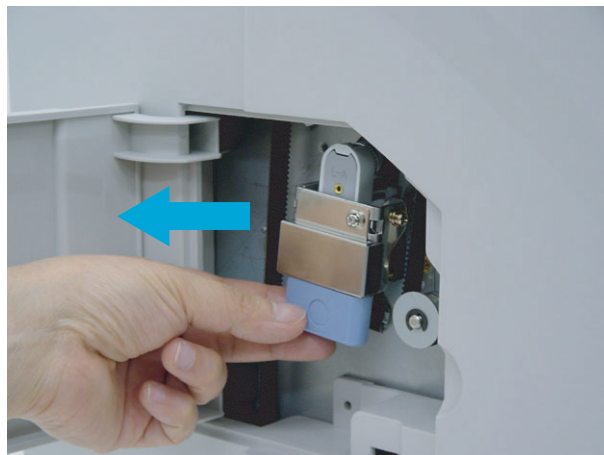
- 8. Close the Glass sheet guide. Make sure that the guide is fixed firmly.**
- 9. Lift the Upper transport unit a little to release the safety lock and then lower the transport unit slowly.**

■ Back-side lamp

1. Pull and open the side cover.

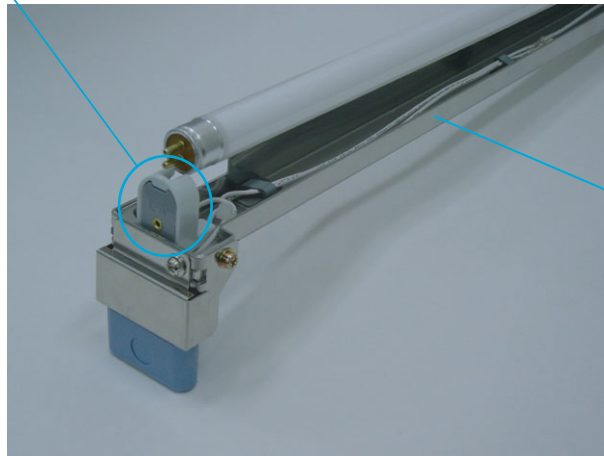


2. Grab the handle (blue part) and pull out the Back-side lamp unit.



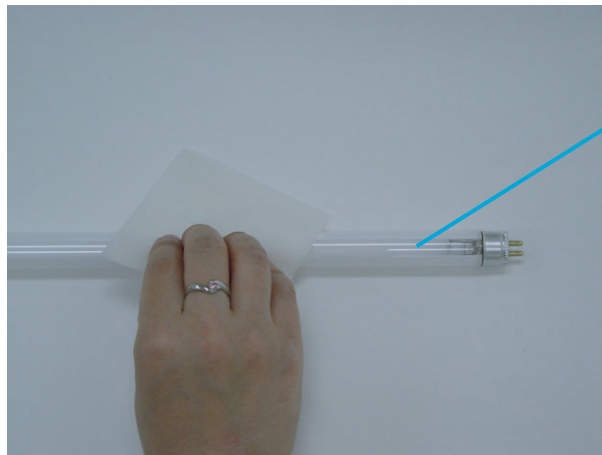
3. Rotate the Lamp a half turn so that the terminals on each end align with the slot on the Lamp socket and remove the Lamp from the unit.

Lamp socket



Backside lamp unit

4. Clean the clear portion of the Lamp with a dry cloth.



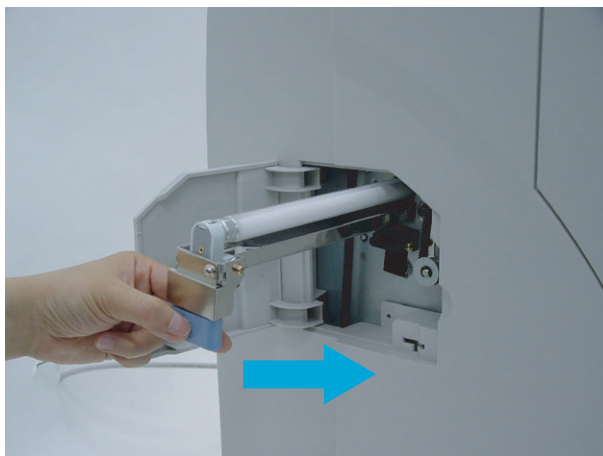
Clear portion

5. Install the Back-lamp unit in the reverse order of its removal. Make sure that the clear portion of the Lamp faces up.



If the Lamp is installed with the clear portion facing upward, an error due to insufficient light occurs.

6. Install the Back-lamp in the reverse order of its removal. Make sure the connectors meet properly.



7. Close the side cover. Confirm that the cover is closed securely.

4 REPLACEMENT OF CONSUMABLES

This chapter describes how to replace consumables.

4.1 Consumables and Replacement Cycle.....	86
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4.2 How to check the Abrasion Counter.....	87
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4.3 Replacing the Pad ASSY.....	88
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4.4 Replacing the Pick Roller Unit	93
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4.5 Replacing the Brake Roller Unit.....	95
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4.7 Replacing the Back-side Lamp	103
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4.1 Consumables and Replacement Cycle

The following table lists the Part No. and the standard replacement cycle of the consumables. It is recommended you stock extra consumables before the ones on the scanner reaches end of life. The consumables must be replaced periodically. You can check the number of scanned pages for the Pad ASSY, the Pick roller unit, the Brake roller unit, and Print cartridge, and you can check the cumulative lamp-on hours for the Lamps by referring to each counter on this scanner.

Descriptions	Part No.	Standard replacement cycle
Lamp	PA83950-0290	1,000 Hours
Pad ASSY	CA04315-G730	300,000 sheets or 1 year
Pick Roller Unit	PA03296-F711	300,000 sheets or 1 year
Brake Roller Unit	CA04315-F705	300,000 sheets or 1 year
Print Cartridge	CA00050-0262	Black ink cartridge 400,000sheets (10 characters/ sheet)

The replacement cycle is based on the printing on A4 woodfree paper or wood containing paper documents(64g/m²). If the conditions are different for document quality, duty of printing and cleaning frequency, the replacement cycle may differ.

Please contact the FUJITSU scanner dealer where you purchased your scanner.

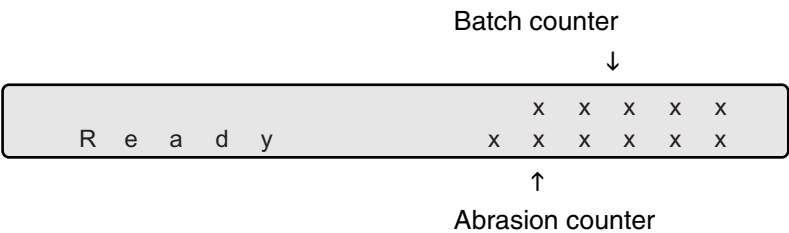


Use the Print cartridge we recommend to ensure proper operations.

4.2 How to check the Abrasion Counter

■ Checking the counter from the operator panel

The number displayed on the right bottom of LCD in scanner "Ready" status shows the consumables count. The counter, called as Abrasion counter, shown below indicates the highest cumulative number of sheets scanned from the last replacement of the PAD ASSY, the Pick roller unit or the Brake roller unit.



When the counter is zero, nothing is displayed.

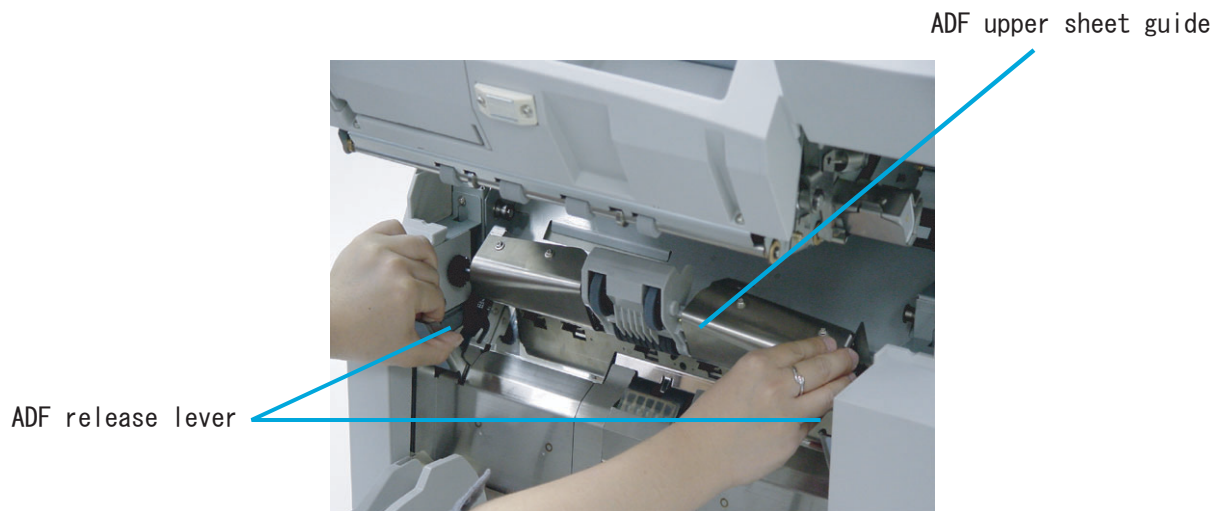
4.3 Replacing the Pad ASSY

1. Lift the lever located at the right to open the Upper transport unit.

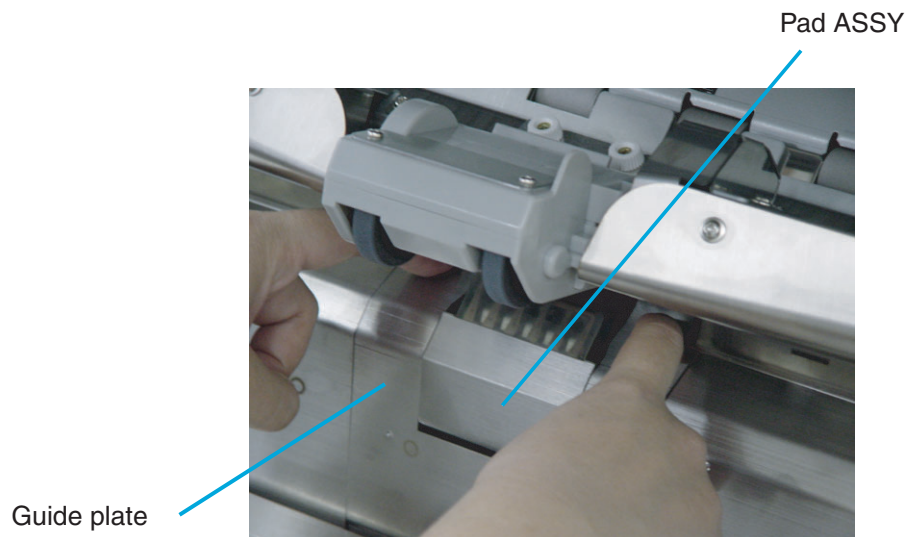


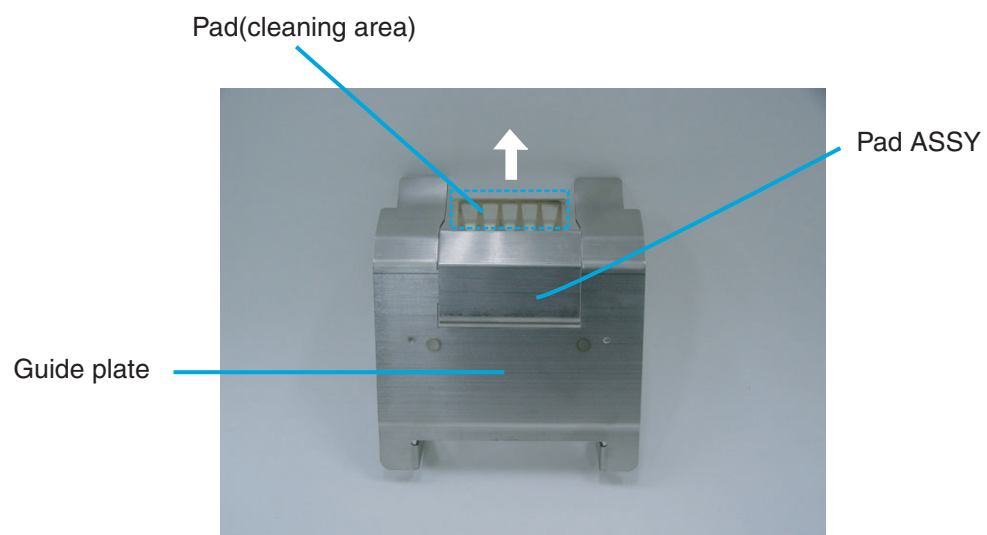
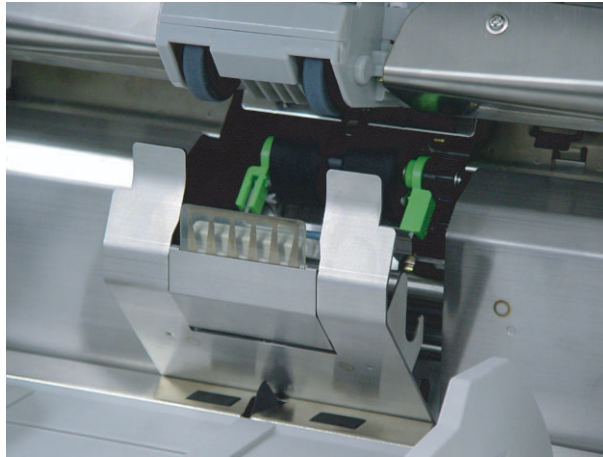
Make sure that the upper transport unit is locked before you put your hands inside of the scanner.

2. Pull the ADF release lever toward you and lift up the ADF sheet guide.

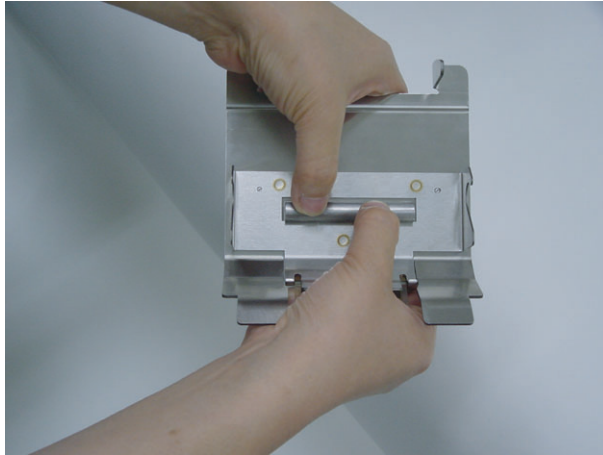


3. Pressing down the upper part of the Guide plate with your fingers at two positions and pull the plate toward you to remove it.

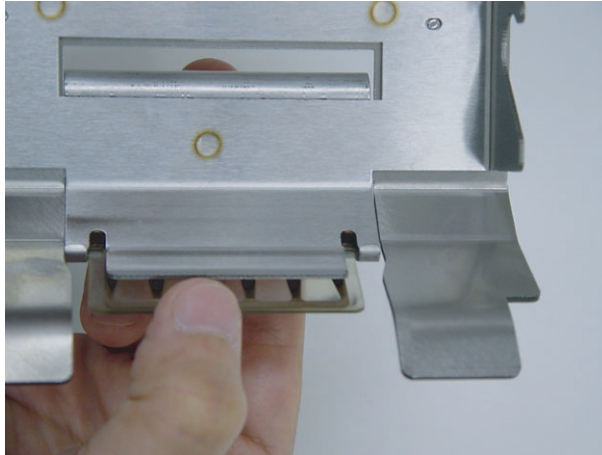




4. Remove the Pad ASSY from the Guide plate.



5. Attach a new Pad ASSY to the Guide plate.



Confirm that the pad is firmly attached to the guide.

If not attached firmly, paper feed errors such as document jams may happen.

6. Install the guide plate in the reverse order of the removal. You should push it down then the installation can be done smoothly.

7. Lower the ADF upper sheet guide gently.

8. Lift the Upper transport unit a little to release the safety lock and then lower the transport unit slowly.

9. Clear the Pad counter.

Please refer to the section “7.3 Setup Mode Details”, “9. Abrasion counter reset.”

4.4 Replacing the Pick Roller Unit

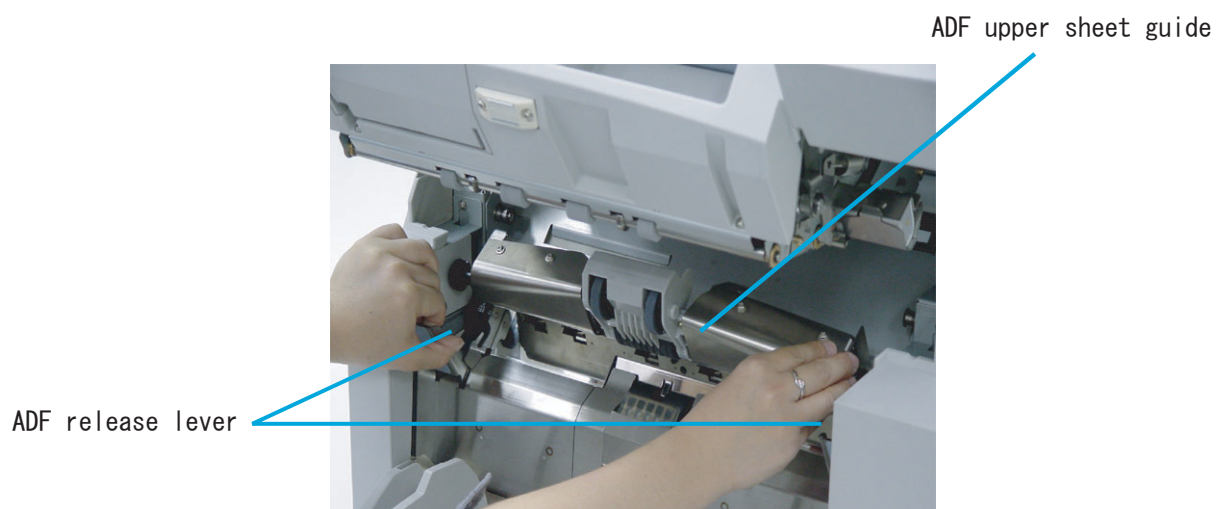
1. Pull up the lever on the right front of the upper transport unit.



Make sure that the Upper transport unit is locked before you put your hands inside of the scanner.



2. While pulling the ADF lever toward you, lift up the ADF upper sheet guide.



3. Lift up the Pick roller unit a little. Slide the Pick roller unit left and remove the right ring from its shaft.

4. Attach a new Pick roller unit in the reverse order of its removal.



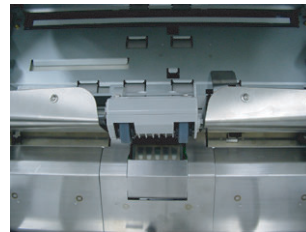
When attaching the Pick roller unit, its head sometimes hangs down.

In such case, lift the unit up so that you can install it at the right position.

Incorrect installation



Correct installation



5. Lower the ADF upper sheet guide gently.

6. Lift the Upper transport unit a little to release the safety lock and then lower the transport unit slowly.

7. Clear the Pick roller counter.

Please refer to the section “7.3 Setup Mode Details”, “9. Abrasion counter reset.”

4.5 Replacing the Brake Roller Unit

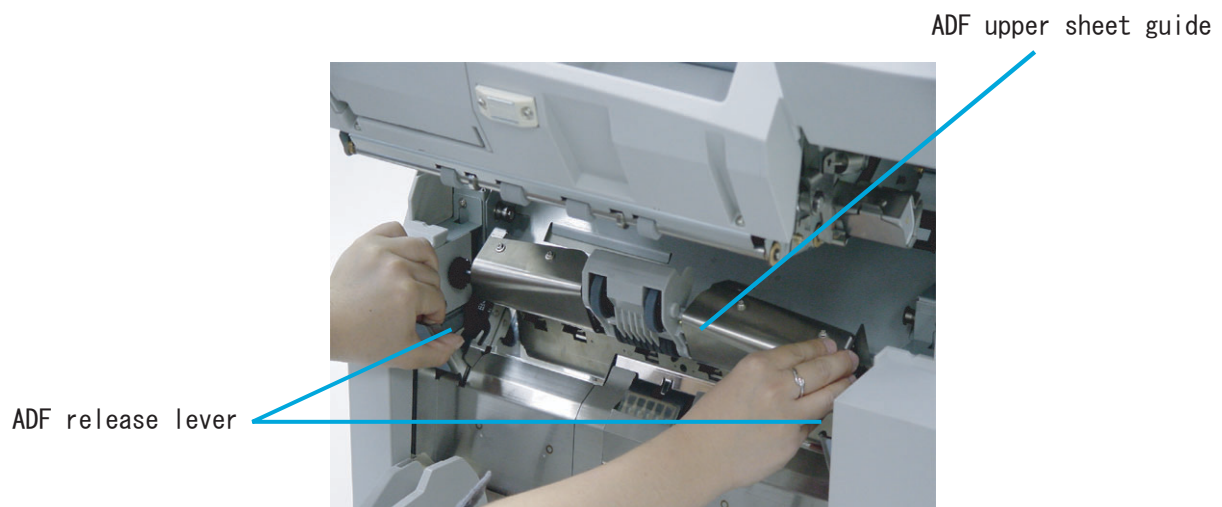
1. Pull up the lever on the right front of the Upper transport unit.



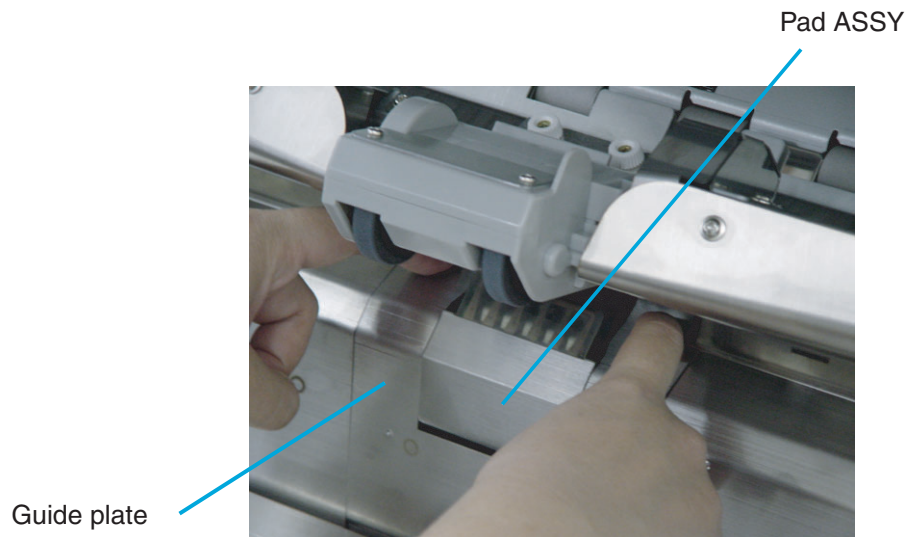
Make sure that the Upper transport unit is locked before you put your hands inside of the scanner.



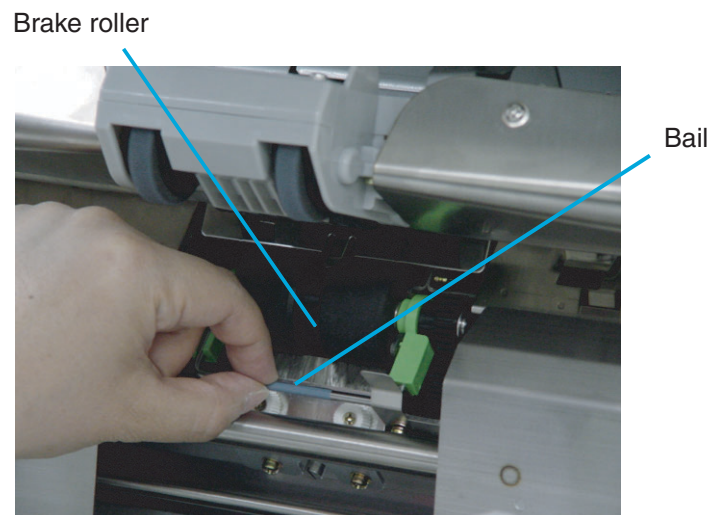
2. Pull the ADF release lever toward you and lift up the ADF sheet guide.



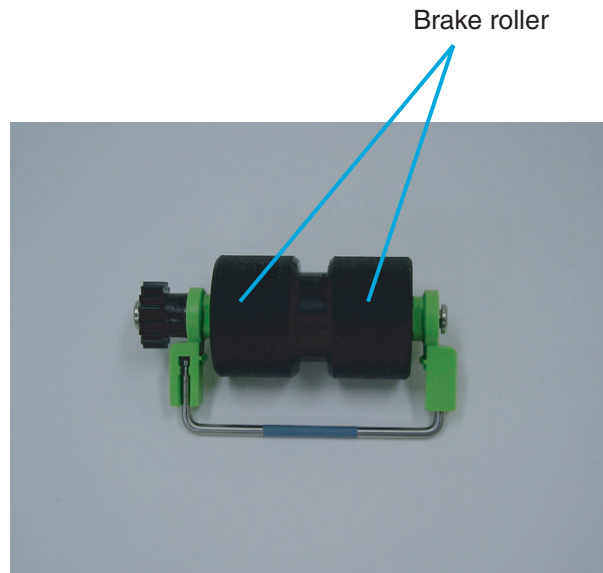
- 3. Pressing down the upper part of the Guide plate with your fingers at two positions and pull the plate toward you to remove it.**



- 4. Turn the bail of the Brake roller upward and release the lock.**

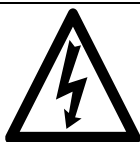


5. Pull the Brake roller toward you to remove it.



6. Attach a new Brake roller unit in the reverse order of its removal. Attach the roller unit until it locks in.
7. Install the Guide plate in the reverse order of the removal. You should push it down then the installation can be done smoothly.
8. Lower the ADF upper sheet guide slowly.
9. Lift the Upper transport unit a little to release the safety lock and then lower the transport unit slowly.
10. Clear the Brake roller counter.
Please refer to the section “7.3 Setup Mode Details”, “9. Abrasion counter reset.”

4.6 Replacing the Front-side Lamp



Never replace the Lamp without turning off the power.



Wait 5 minutes after turning off the power before touching the Lamp.

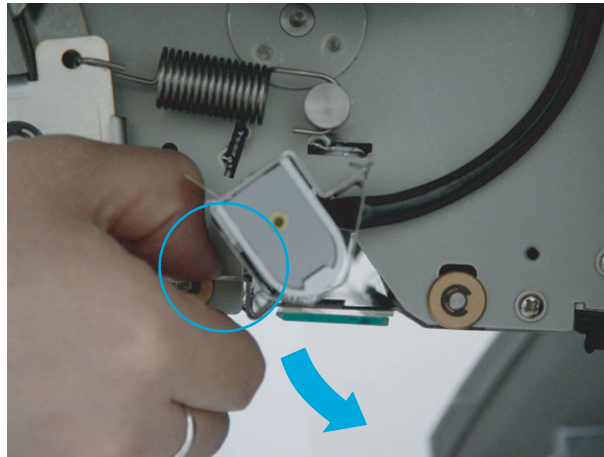
1. Lift the lever located at the right to open the Upper transport unit.



Make sure that the Upper transport unit is locked before you put your hands inside of the scanner.



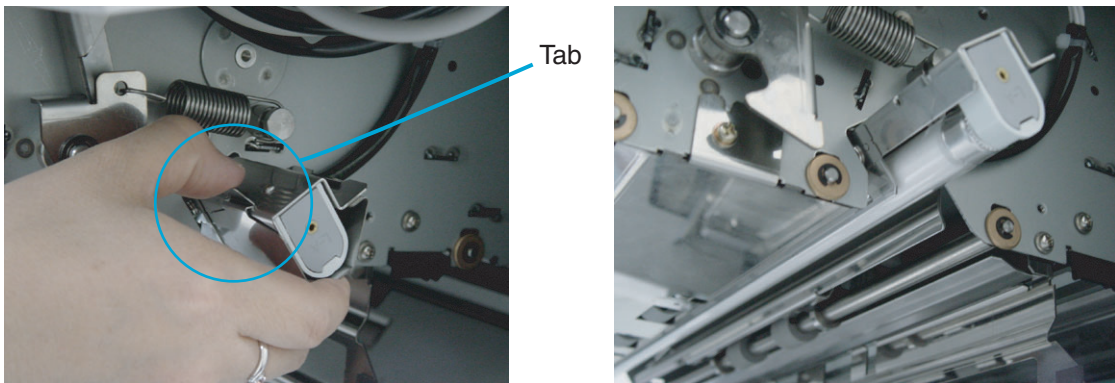
2. Pull down the Glass sheet guide tab and open the Glass sheet guide.



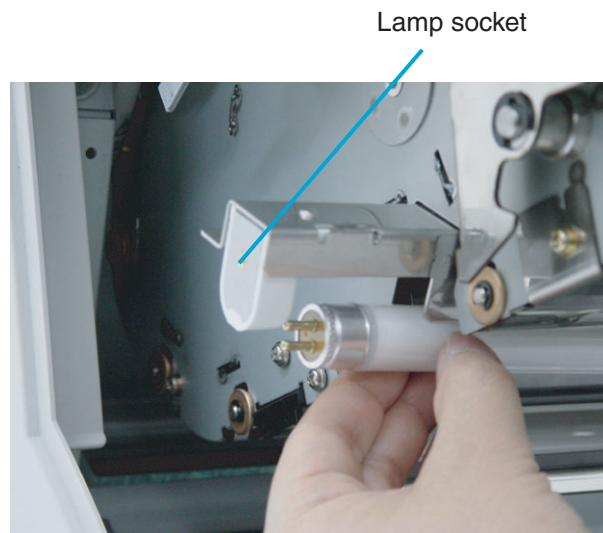
Glass sheet guide



- 3. Pulling down the Lamp socket covers attached to the both end of the Lamp sockets and remove them.**



- 4. Rotate the Lamp a half turn so that the terminals on each end align with the slot on the Lamp socket and remove the Lamp from the unit.**

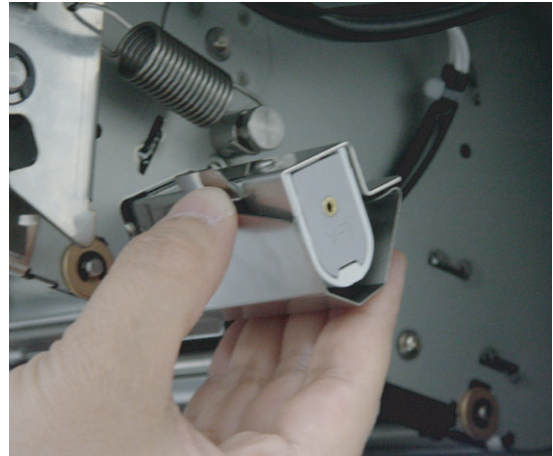
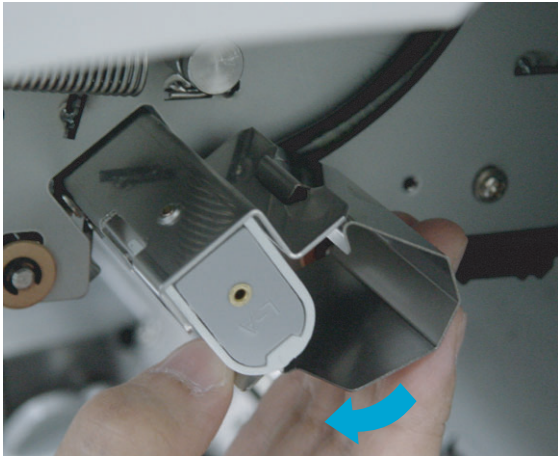


5. Install the Lamp in the reverse order of the removal. Make sure that the clear portion of the Lamp faces down.



If the Lamp is installed with the clear portion facing upward, an error due to insufficient light occurs.

- 6. Attach the Lamp socket cover in the reverse order of its removal. Make sure that the metal part is fixed firmly.**

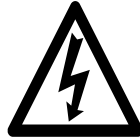


- 7. Close the glass sheet guide. Make sure that the guide is fixed firmly.**
- 8. Lift the Upper transport unit a little to release the safety lock and then lower the transport unit slowly.**
- 9. Clear the Front-side lamp counter.**
Please refer to the section “7.3 Setup Mode Details”, “9. Abrasion counter reset.”



You can check the cumulative lamp-on hours from the operator panel Test mode.
For the details, refer to the section "7.5 Test Mode Details," "3.Display the cumulative lamp-on hours."

4.7 Replacing the Back-side Lamp



Never replace the Lamp without turning off the power.

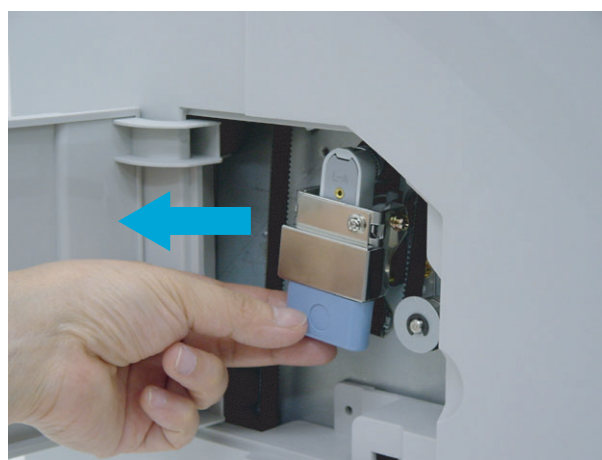
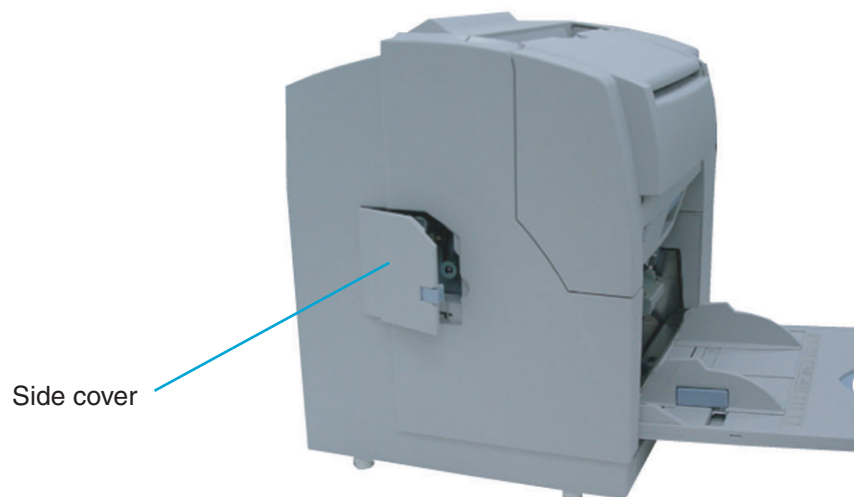


Wait 5 minutes after turning off the power before touching the Lamp.

4

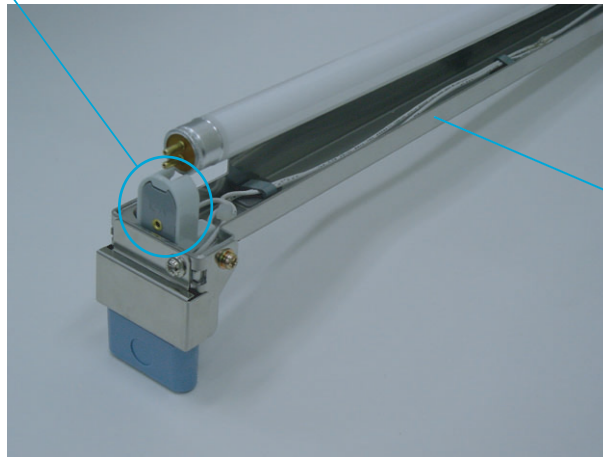
REPLACEMENT OF CONSUMABLES

1. Pull and open the side cover.



- 3. Rotate the Lamp a half turn so that the terminals on each end align with the slot on the Lamp socket and remove the Lamp from the unit.**

Lamp socket



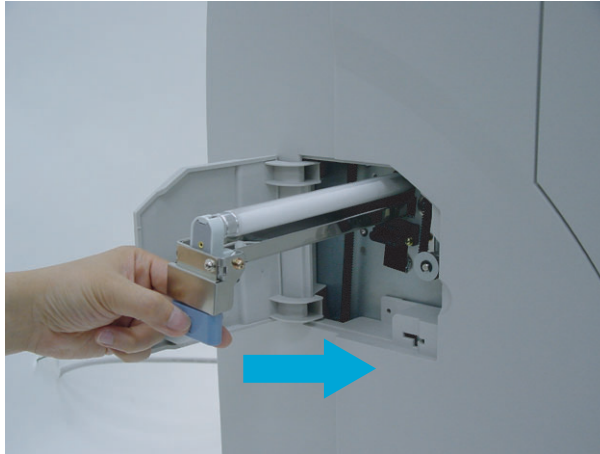
Backside lamp unit

- 4. Attach a new Lamp following the reverse order of old lamp removal. Make sure that the clear portion of the Lamp faces up.**



If the Lamp is installed with the clear portion facing upward, an error due to insufficient light occurs.

5. Install the Back-lamp unit in the reverse order of its removal. Make sure the connectors meet properly.



6. Close the side cover. Confirm that the cover is closed securely.

7. Clear the Rear-side lamp counter.

Please refer to the section "7.3 Setup Mode Details," "9. Abrasion counter reset."

3



You can check the cumulative lamp on hours from the operator panel Test mode.

For the details, refer to the section "7.5 Test Mode Details," "3.Display the cumulative lamp-on hours."

5 SOLVING COMMON PROBLEMS

This chapter describes how to clear document jams, how to remedy other problems, items to be checked before contacting an authorized service provider and how to check labels on the scanner.



For the problems not described in this manual and the details of errors, please refer to the “Scanner Utility for Microsoft®Windows® User's Guide” on the scanner driver CD-ROM.

5.1 Clearing Document Jams	108
5.2 Troubleshooting.....	115
5.3 Before Contacting a Service Provider	138
5.4 Labels on the Scanner	141

5.1 Clearing Document Jams

If a document jam occurs during feeding, follow the procedure below to remove the jammed documents.



- Be careful not to get injured during jam removal.
- When removing jammed documents, be careful not to get your neckties or necklaces entangled inside the scanners.
- The surface of the glass sometimes becomes hot during operation.

Take care not to get burned.

■ Removing jams from the hopper or the paper path

1. Remove the documents on the stacker.

2. Pull up the lever on the right front of the upper transport unit.

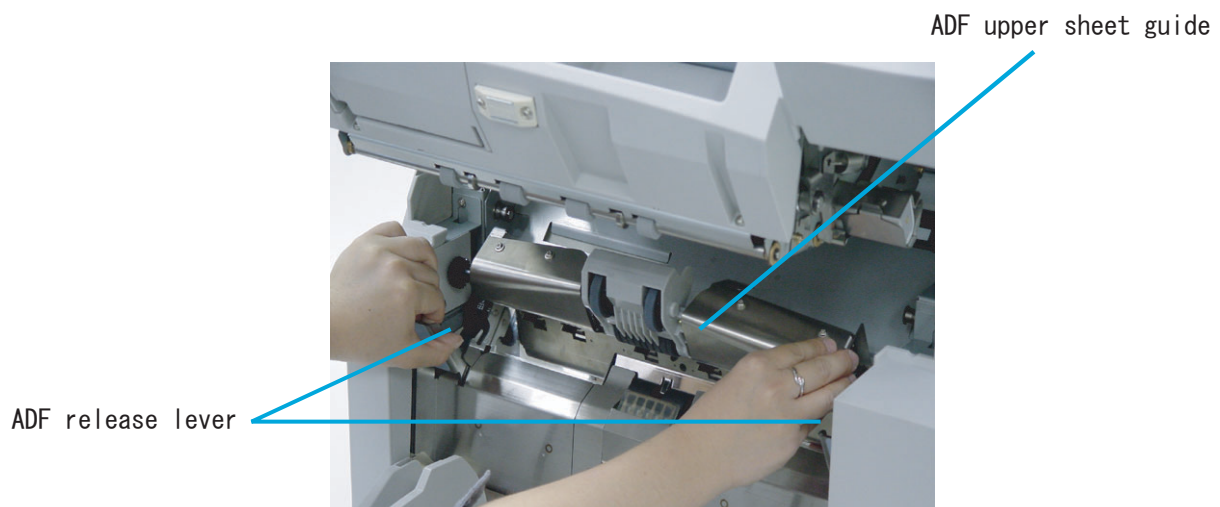


CAUTION

Make sure that the upper transport unit is locked before you put your hands inside of the scanner.



3. While pulling the ADF lever toward you, lift up the ADF upper sheet guide.



4. Remove the jammed document.



- Staples and paper clips etc. can cause document jams.

Make sure you check the document and the paper path fully and remove such things before you start scanning again.

Remove staples and paper clips from the documents before you start scanning.

5. Lower the ADF upper sheet guide gently.

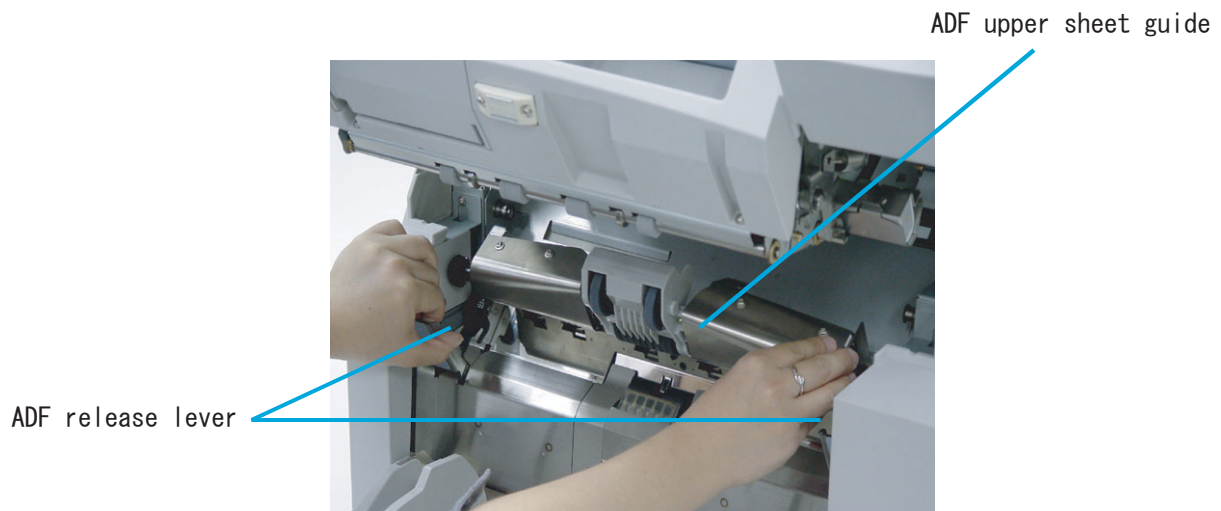
6. Lift the Upper transport unit a little to release the safety lock and then lower the transport unit slowly.

■ Removing jams from the eject mechanism.

1. Remove the documents on the stacker.



2. Pull up the lever on the right front of the Upper transport unit.



3. Pull out the jammed document to the stacker.
4. Lift the Upper transport unit a little to release the safety lock and then lower the transport unit slowly.

■ Document separation force adjustment

If the following error occurs frequently, adjust the brake force of the Brake roller using setup mode.

- Double-feed
- Mis-pick
- Paper jam1

1. Enter into the setup mode.

Please refer to the section "1.3 Basic Operations of Operator Panel", "Using the setup and Test mode."





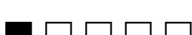
The following screen appears.



Choose an appropriate setting based on the thickness of the document you are scanning and the error.

By pressing  (Right arrow button), the LCD display changes items from (5) to (1).

By pressing  (Left arrow button), the LCD display changes items from (1) to (5).

- | | | |
|-----|---|------------------------------------|
| (1) |  | - Document thickness: Thick |
| (2) |  | - Document thickness: Medium thick |
| (3) |  | - Document thickness: Mid |
| (4) |  | - Document thickness: Medium thin |
| (5) |  | - Document thickness: Thin |

When the desired option appears, press  (Enter button) to select it.

Document separation force setup items are as follows.

Setting	Document thick-ness	Document separa-tion force	"Double-feed" occurs fre-quently	"Mis-pick" or "Document jam" occurs fre-quently
Thick	Thick	Strong	Increase docu-ment separation force	Decrease docu-ment separation force
Medium Thick	Medium Thick	Less strong		
Mid	Mid	Medium (Factory default set-ting)		
Medium Thin	Medium Thin	Less weak		
Thin	Thin	Weak		

If Mis-pick occurs frequently, adjust the Pick roller rotation speed.

Press ◀ (Next button) to show the following screen.




Press ◀ (Left arrow button) or ▶ (Right arrow button) and select an item.

HINT

The blinking item is the one selected.

Press **Enter** (Enter button) to make the setting valid.

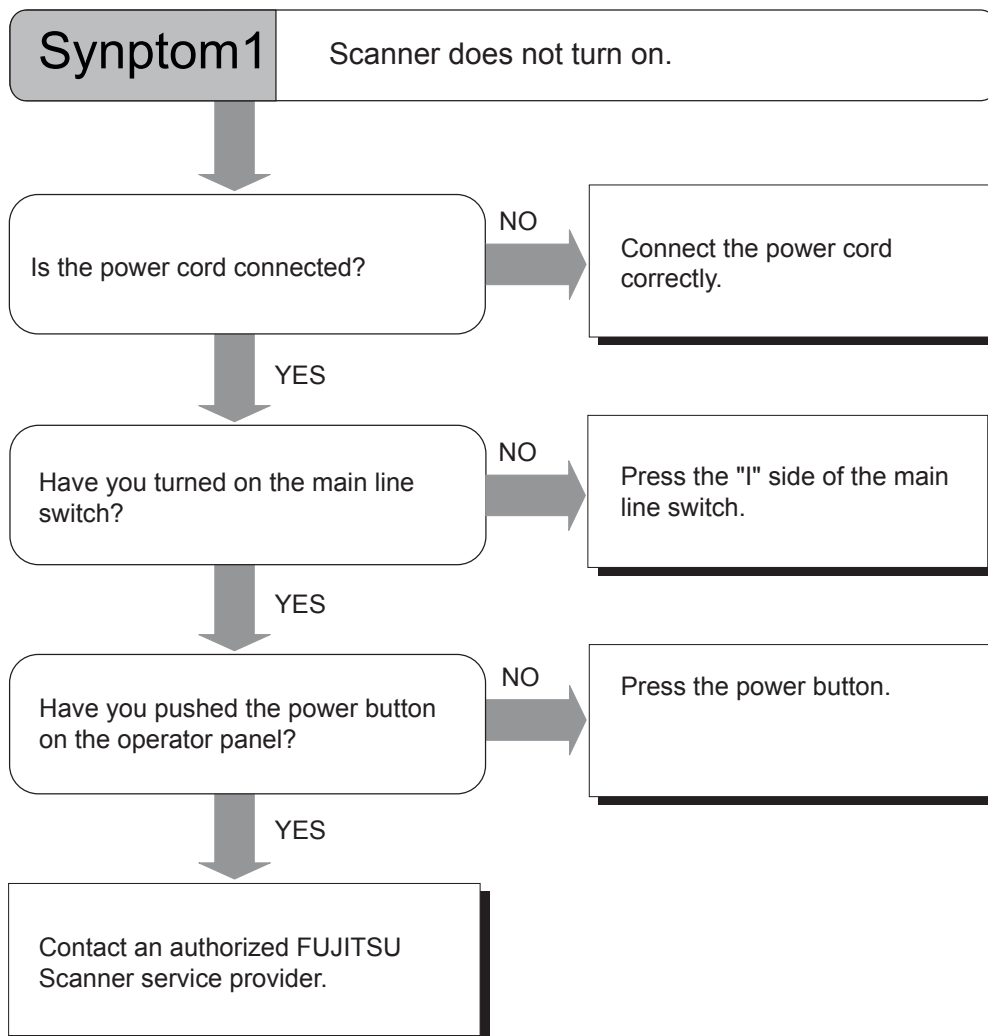
Pick speed	Mis-pick occurs frequently.
Fast (Factory default)	Decrease pick speed 
Mid	
Slow	

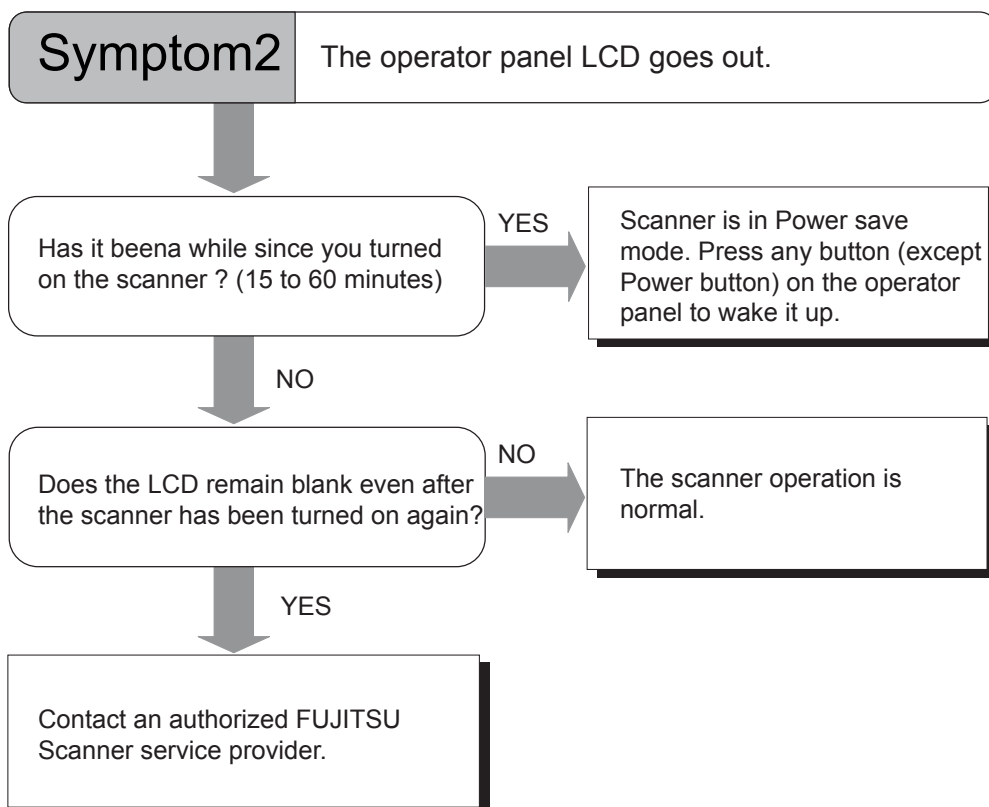


When you set pick speed at "Mid" or "Slow", scanning speed gets slower.

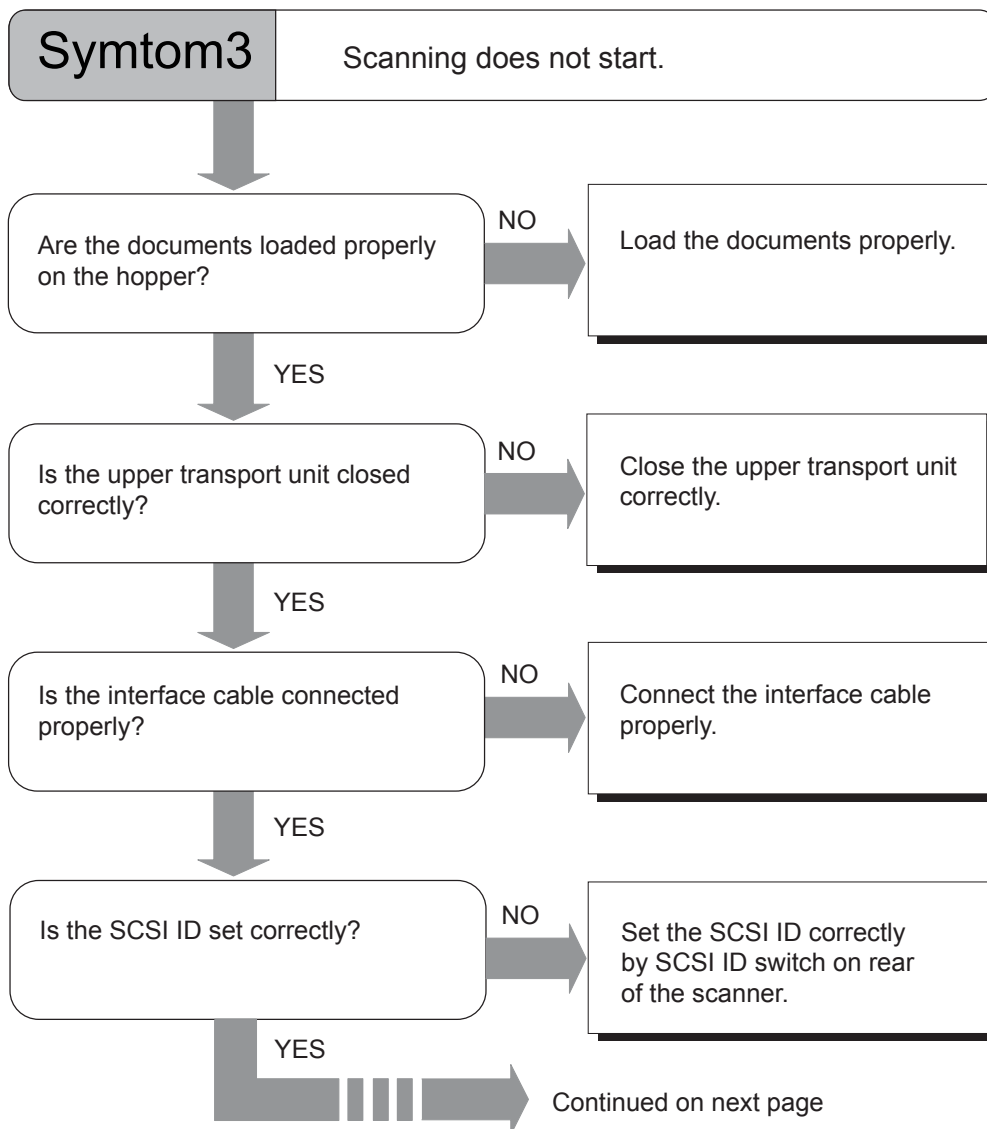
5.2 Troubleshooting

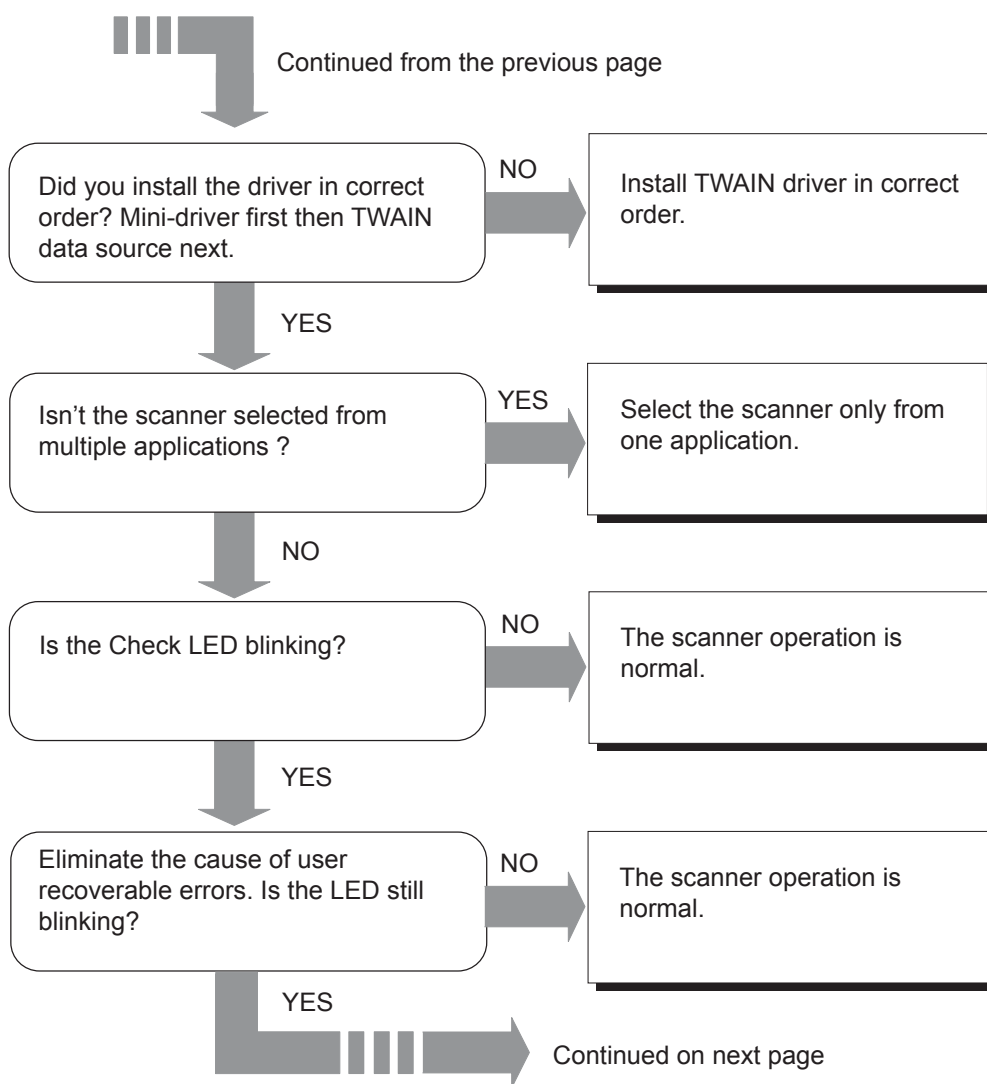
This section describes common troubles during usage and how to remedy the troubles.
If the remedies in these flowcharts do not solve your problem, check the items in section "5.3 Before Contacting a Service Provider."

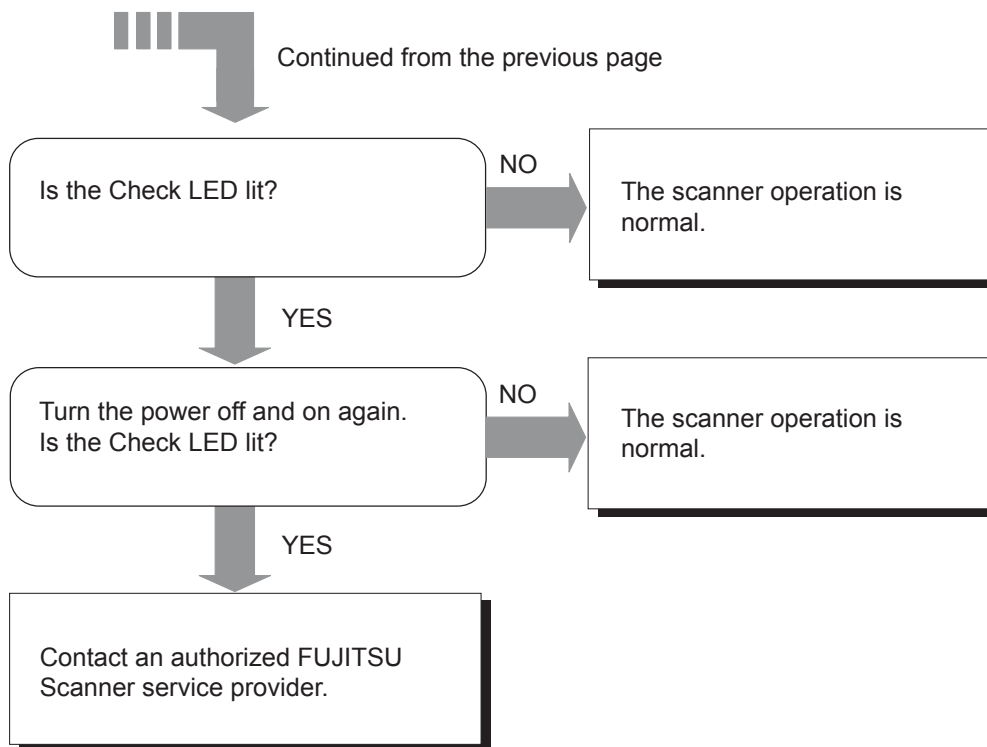


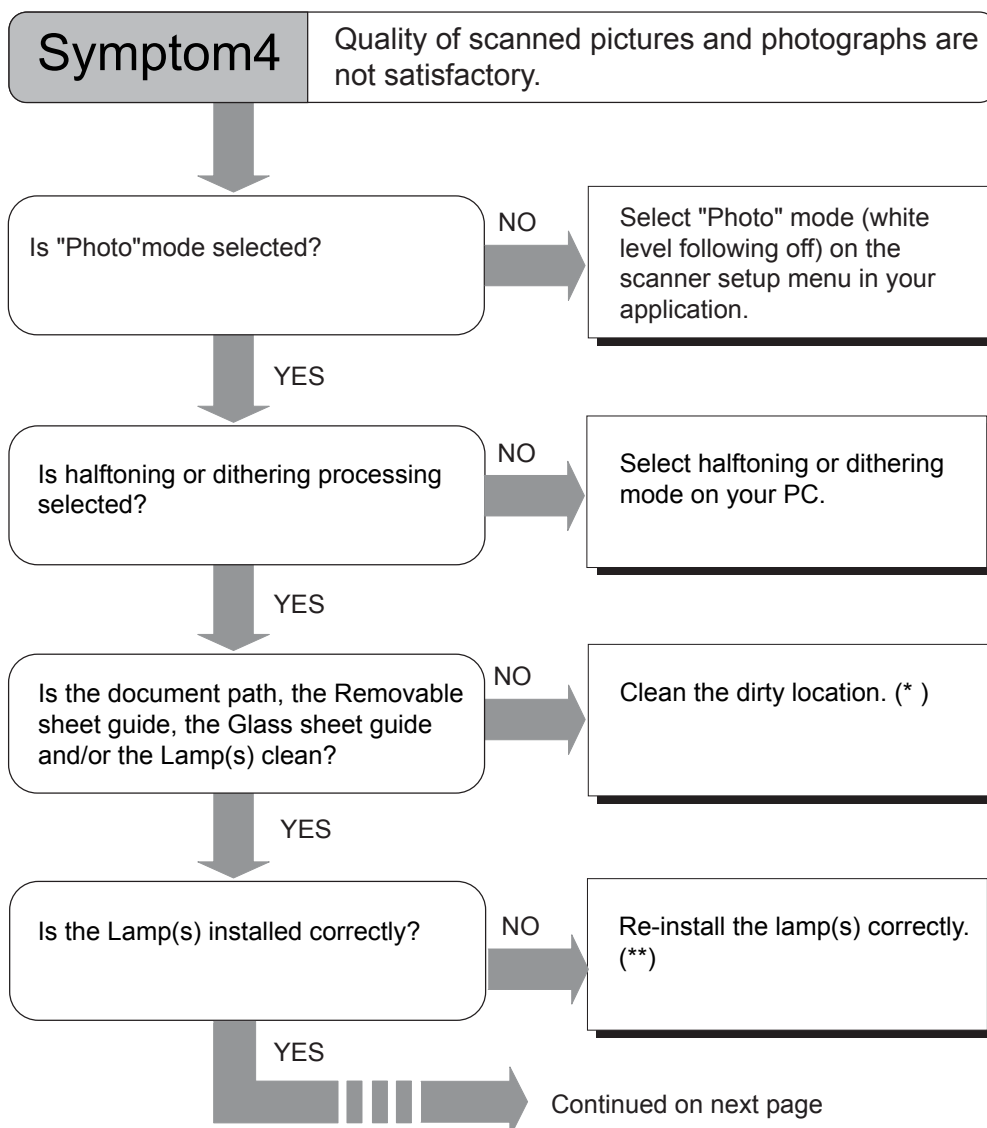


(*) Press any button except Power button. The Power button will not work to wake up the scanner. Pressing the power button more than 2 seconds will turn off the power.









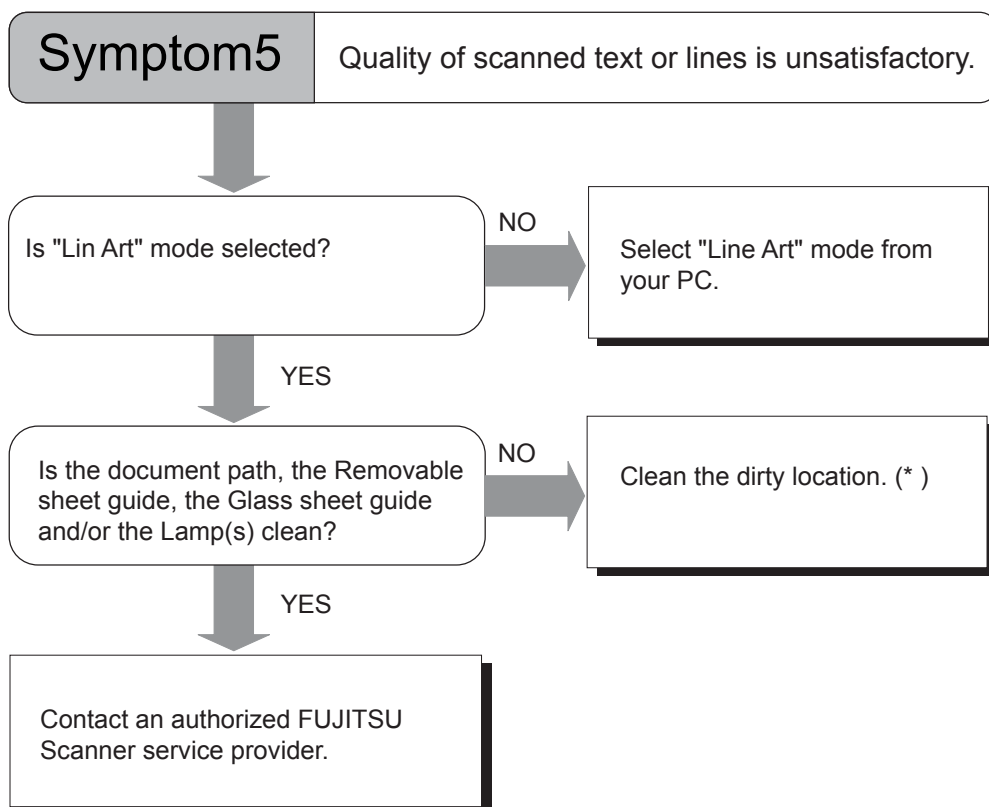


Continued from the previous page

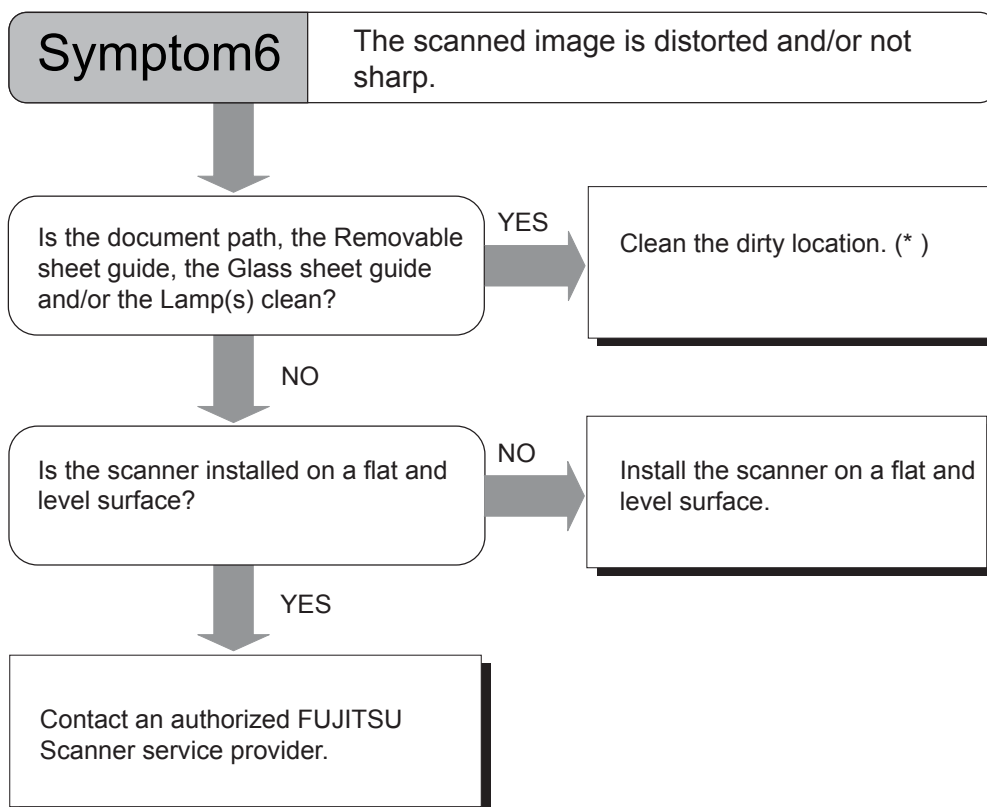
Contact an authorized FUJITSU
Scanner service provider.

(*) For the details of cleaning, refer to "Chapter 3 DAILY CARE."

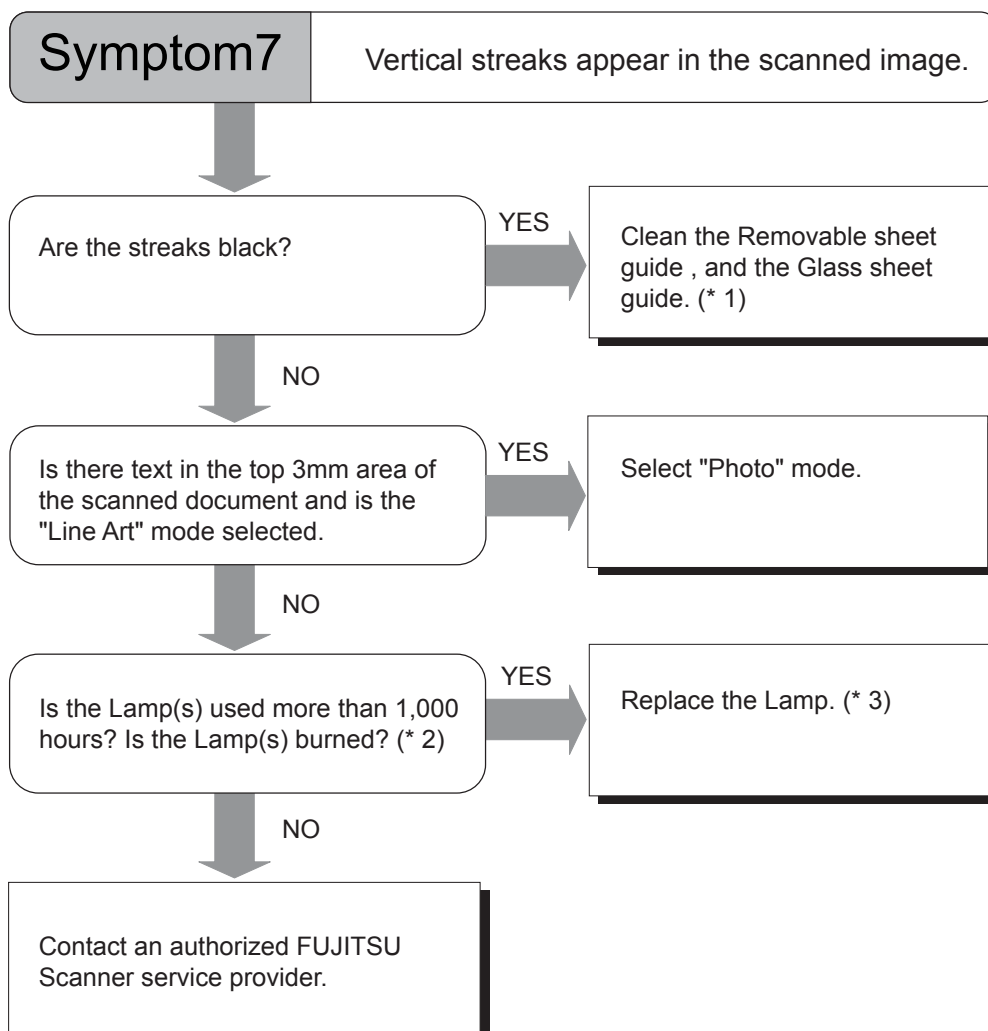
(**) For the details on how to replace Lamps, refer to "Chapter 4 REPLACING
CONSUMABLES."



(*) For the details of cleaning, refer to "Chapter 3 DAILY CARE."



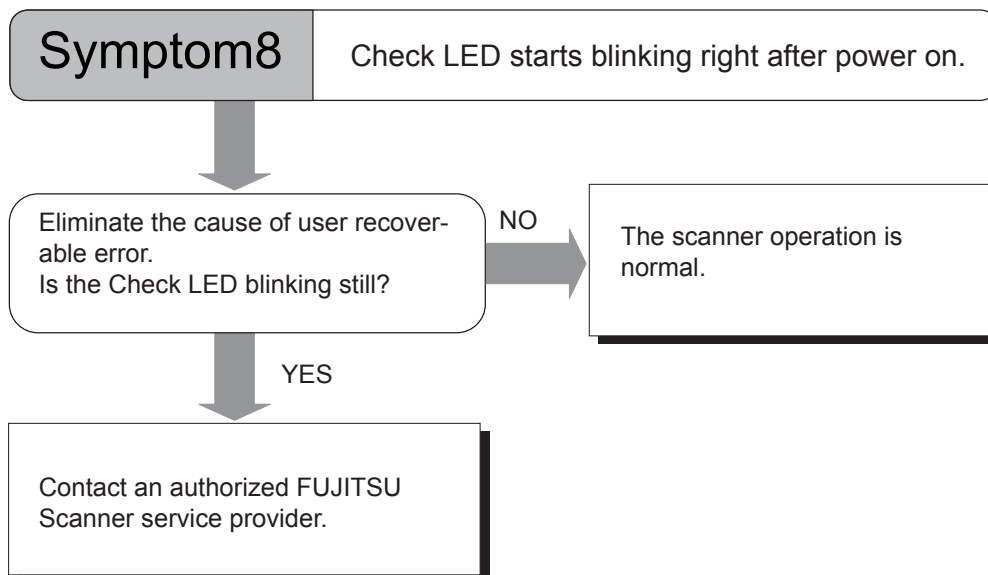
(*) For the details of cleaning, refer to "Chapter 3 DAILY CARE."

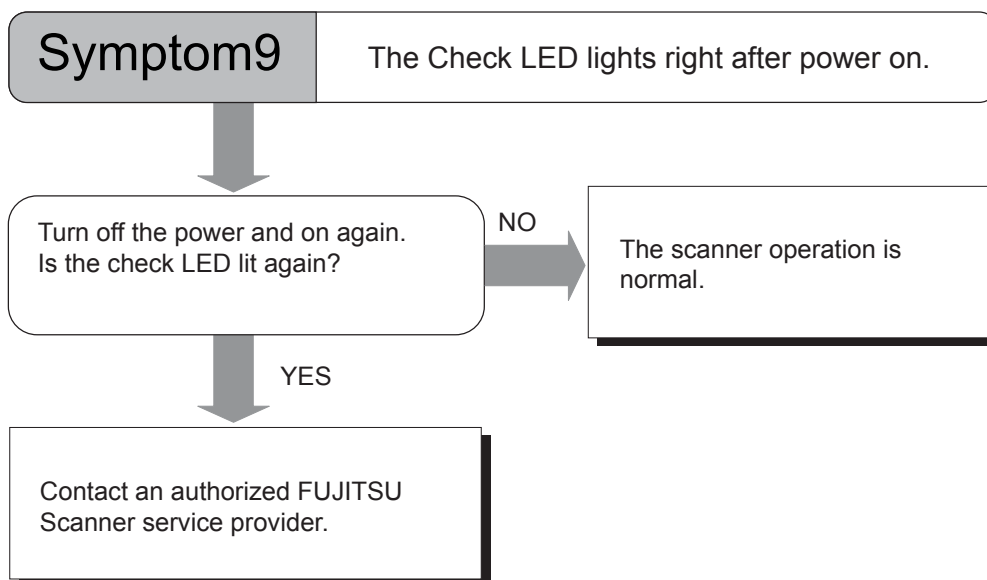


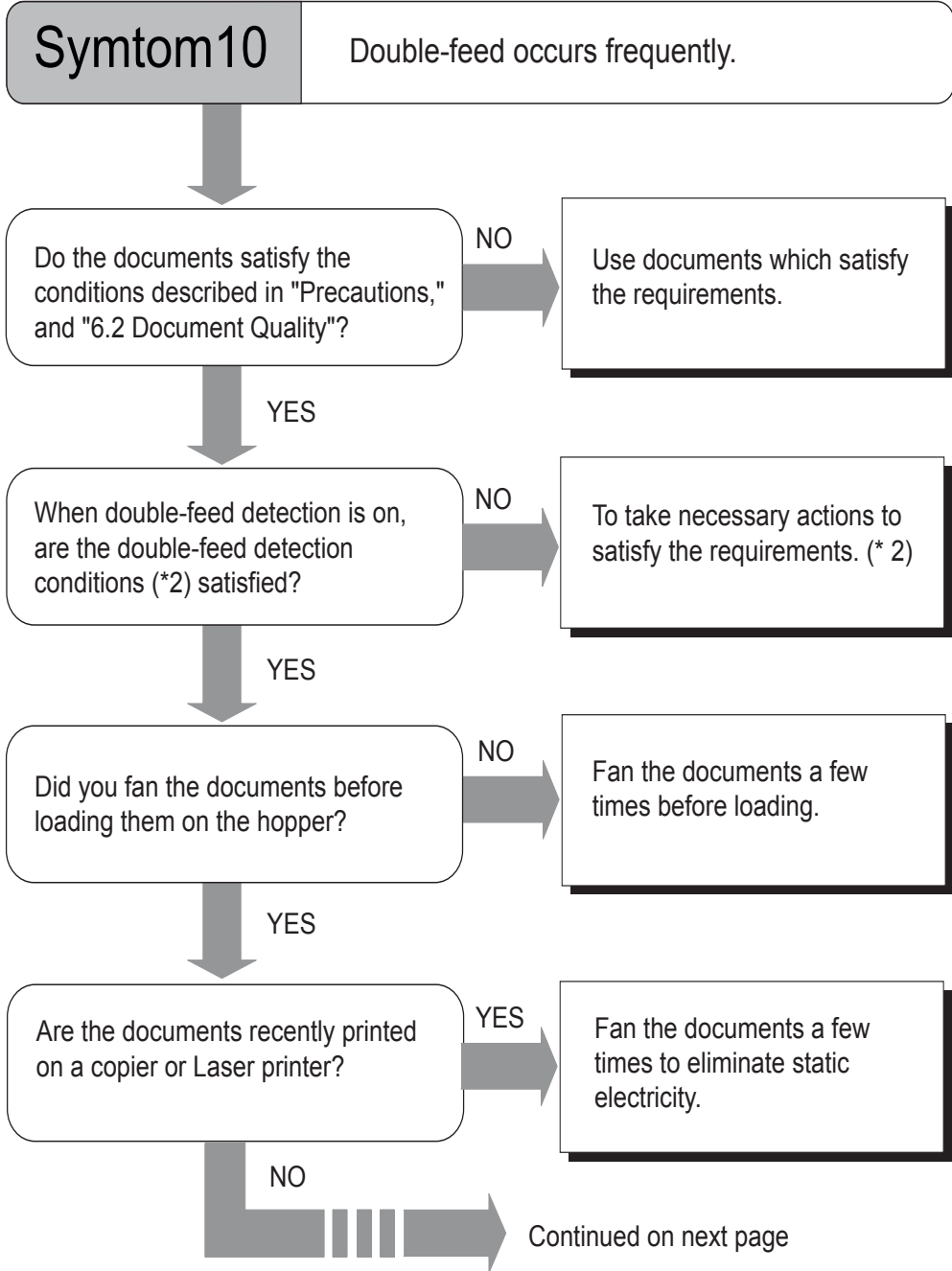
(* 1) For the cleaning of the removable sheet guide, and the glass sheet guide, please refer to "Chapter 3 DAILY CARE."

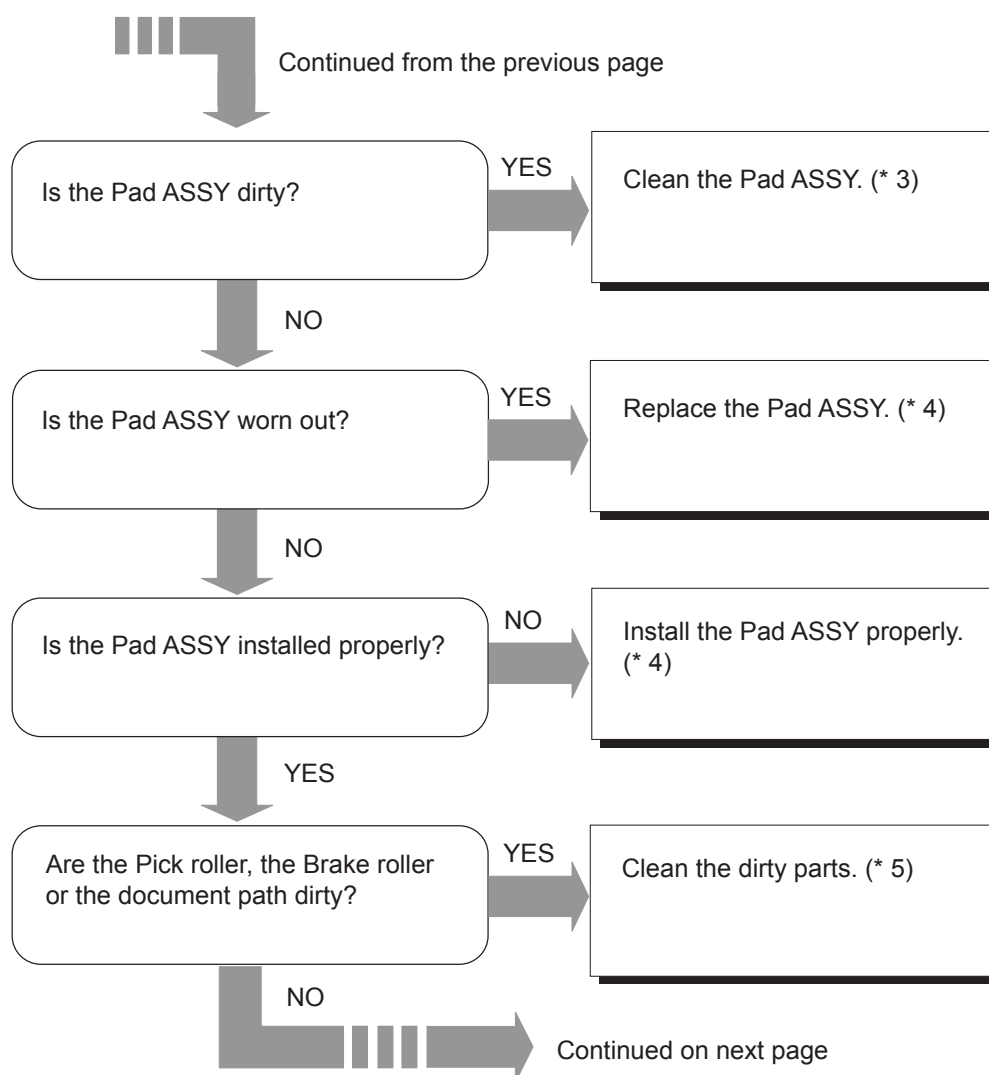
(* 2) For the details on how to check the lamp-on hours, please refer to the section "7.5 Test Mode Details," "3. Display the cumulative lamp-on hours."

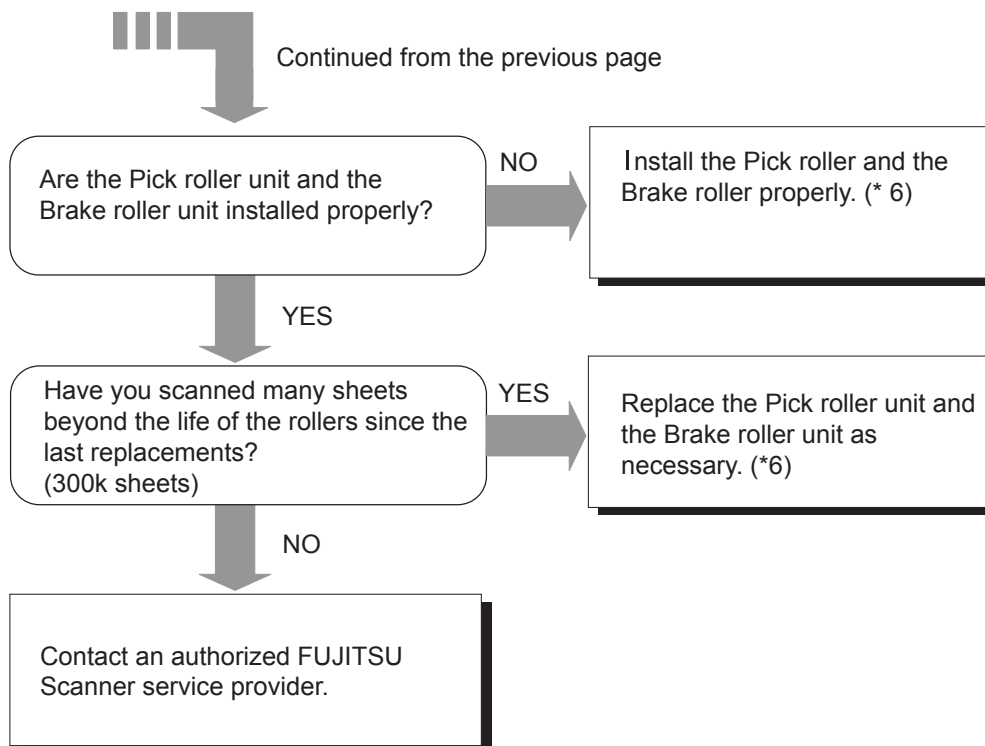
(* 3) For the details on how to replace Lamps, refer to "Chapter 4 REPLACING CONSUMABLES."











(* 1) For the details on required conditions, refer to the section "6.2 Document Quality."

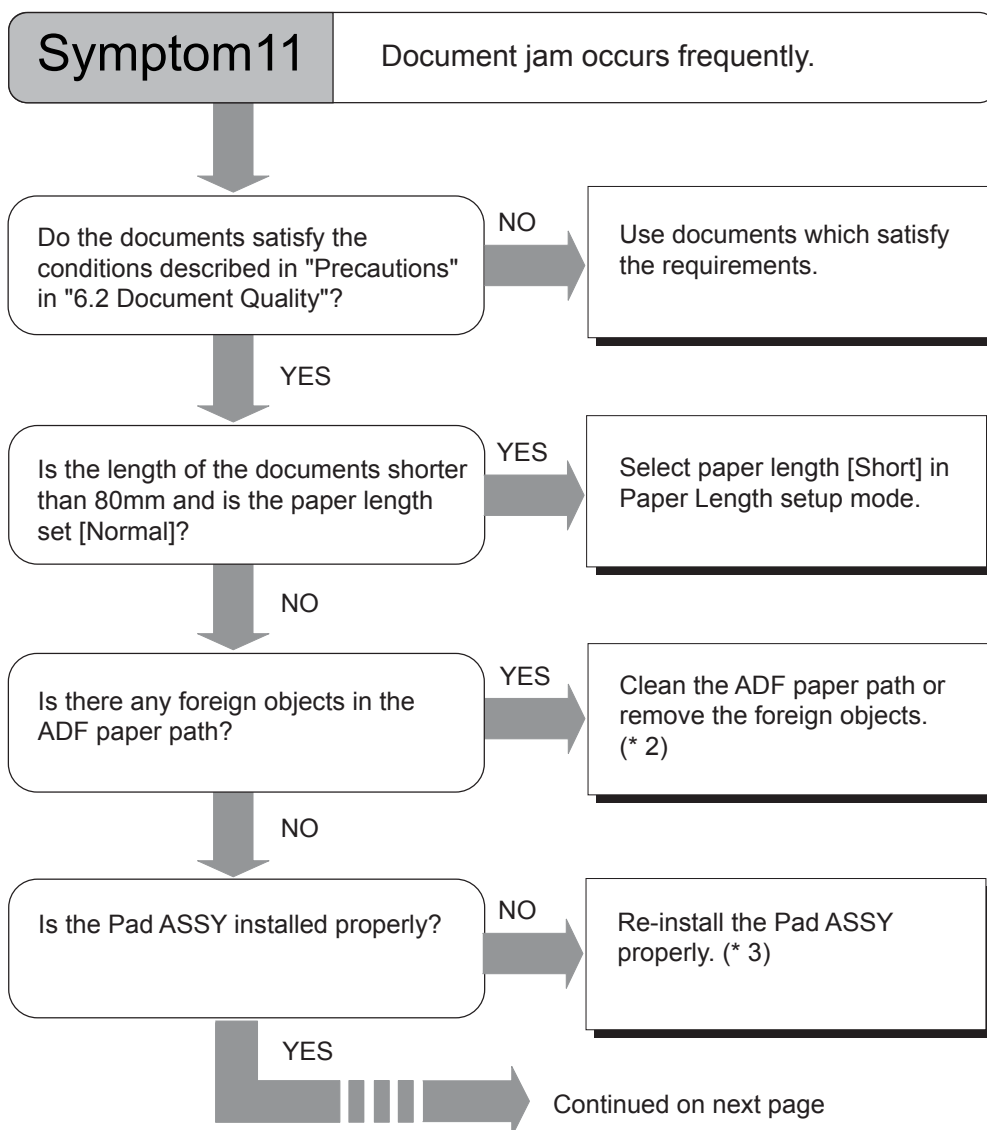
(* 2) For the details on the double-feed detecting conditions, refer to "Appendix 2 Double-feed Detection Conditions."

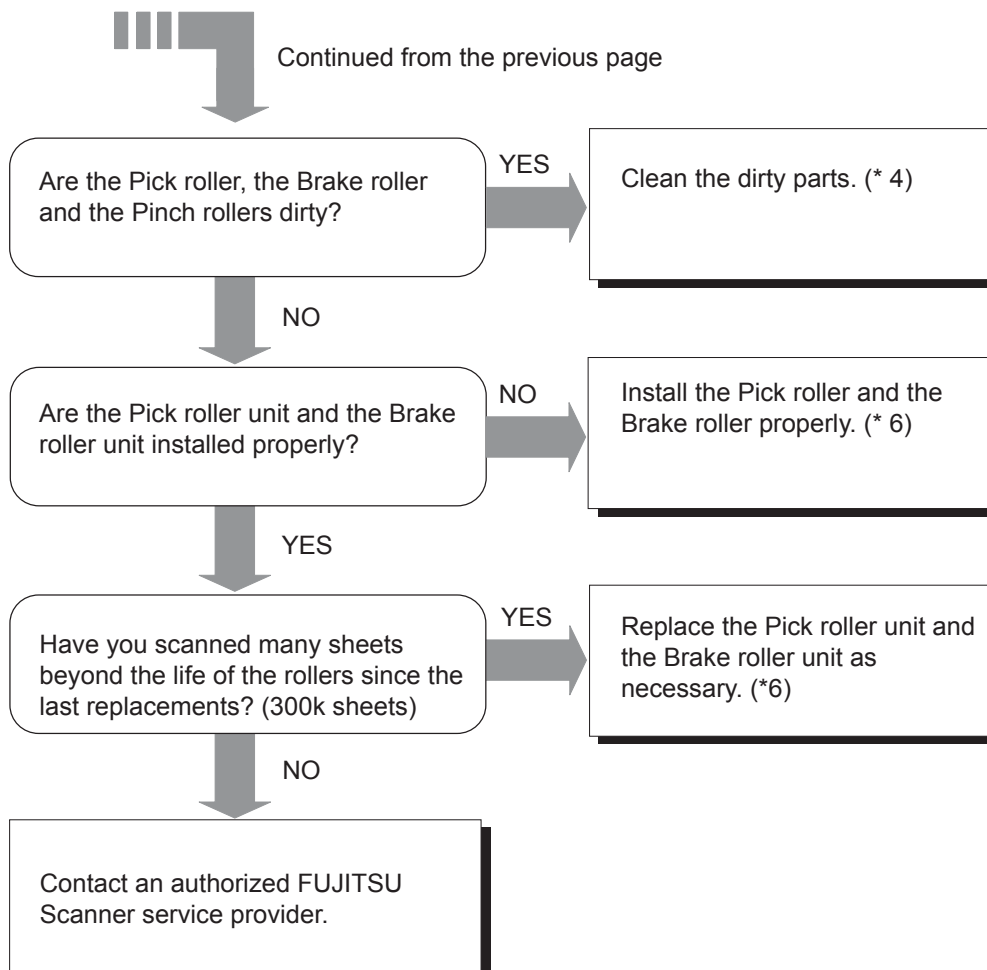
(* 3) For the details on how to clean Pad ASSY, refer to "Chapter 3, DAILY CARE."

(* 4) For the details on how to replace Pas ASSY, refer to "Chapter3, DAILY CARE."

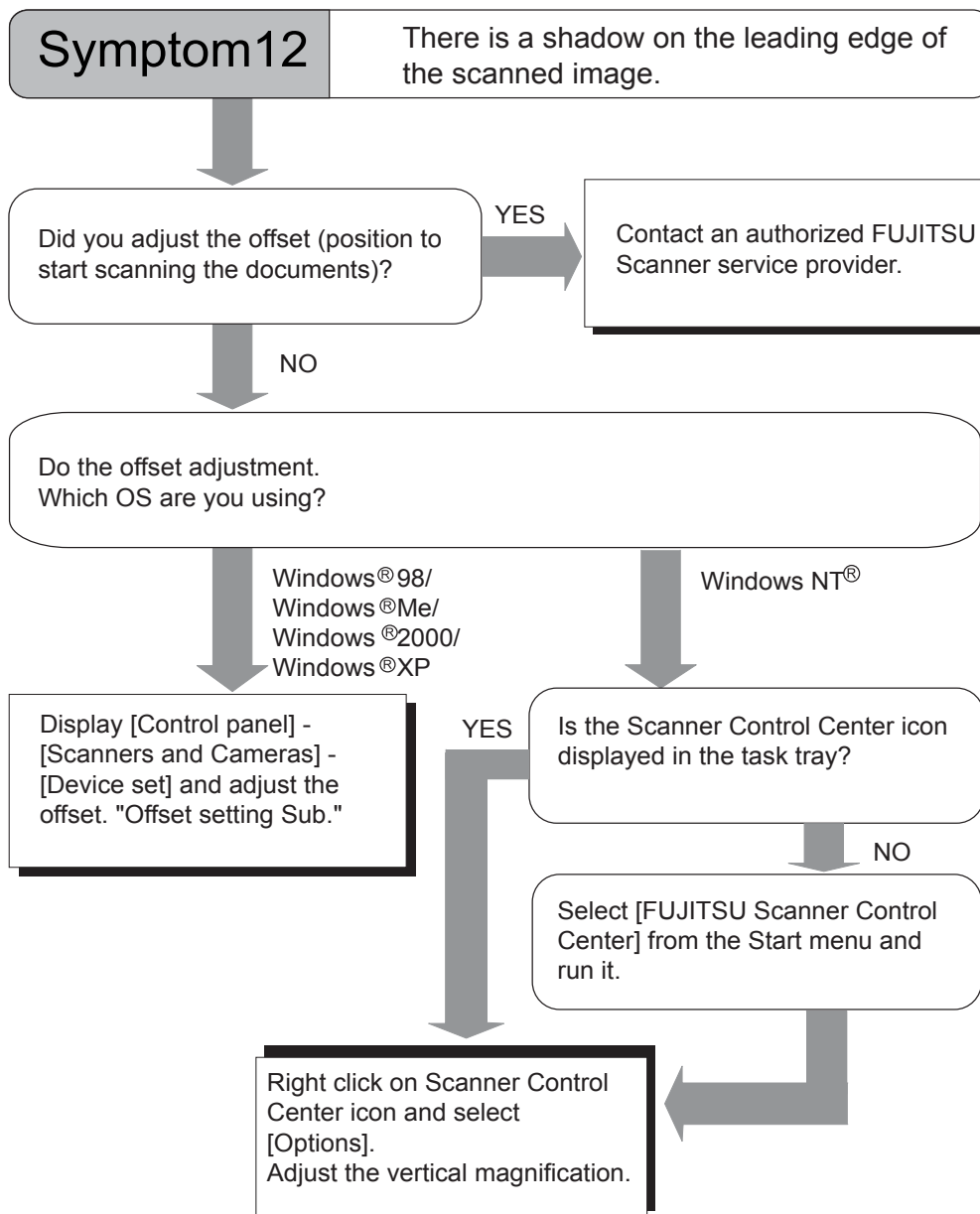
(* 5) For the details on scanner cleaning, refer to "Chapter 3 DAILY CARE."

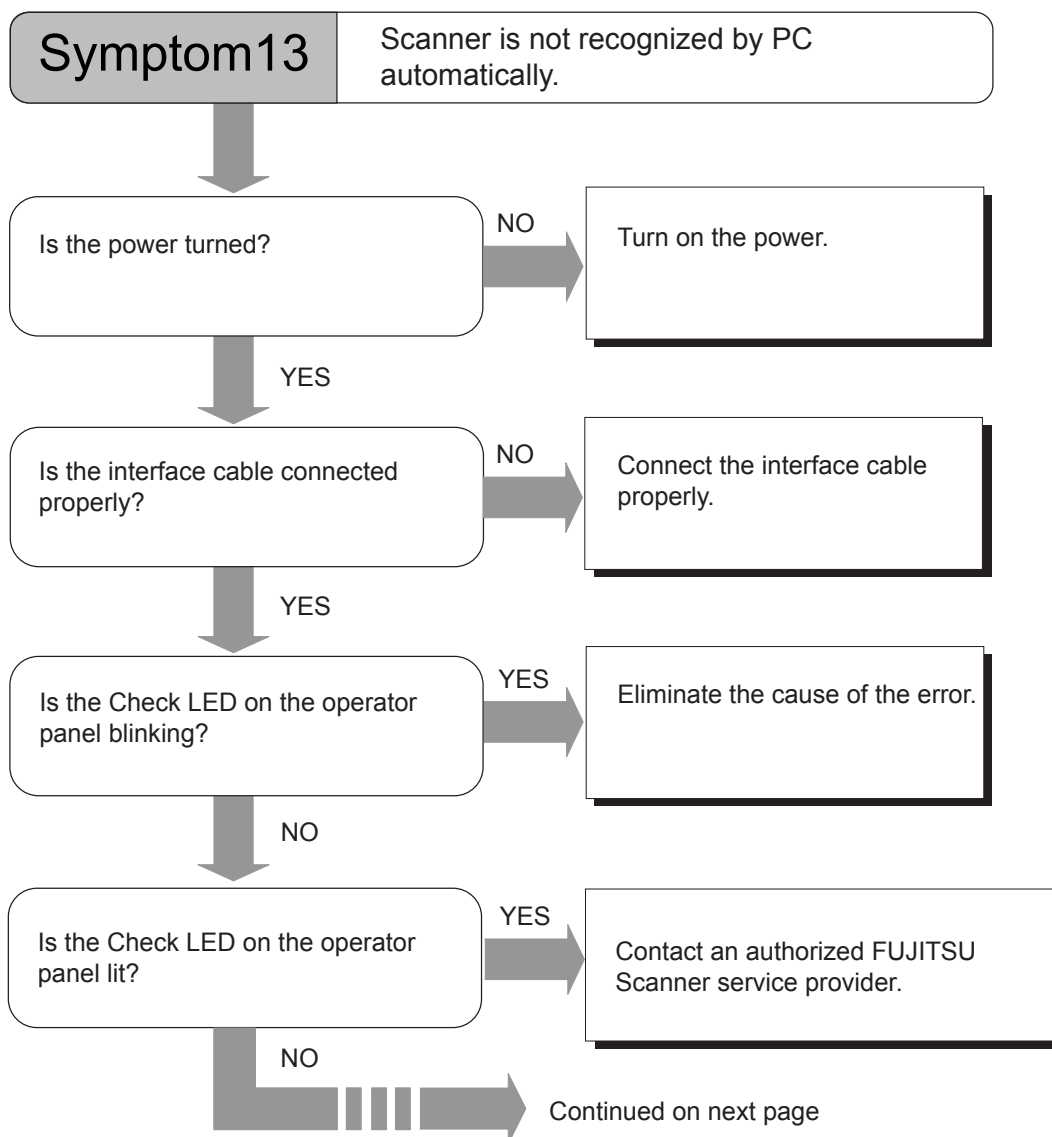
(* 6) For the details on how to replace and install Pick roller unit and Brake roller unit, refer to "Chapter 4 REPLACING CONSUMABLES."

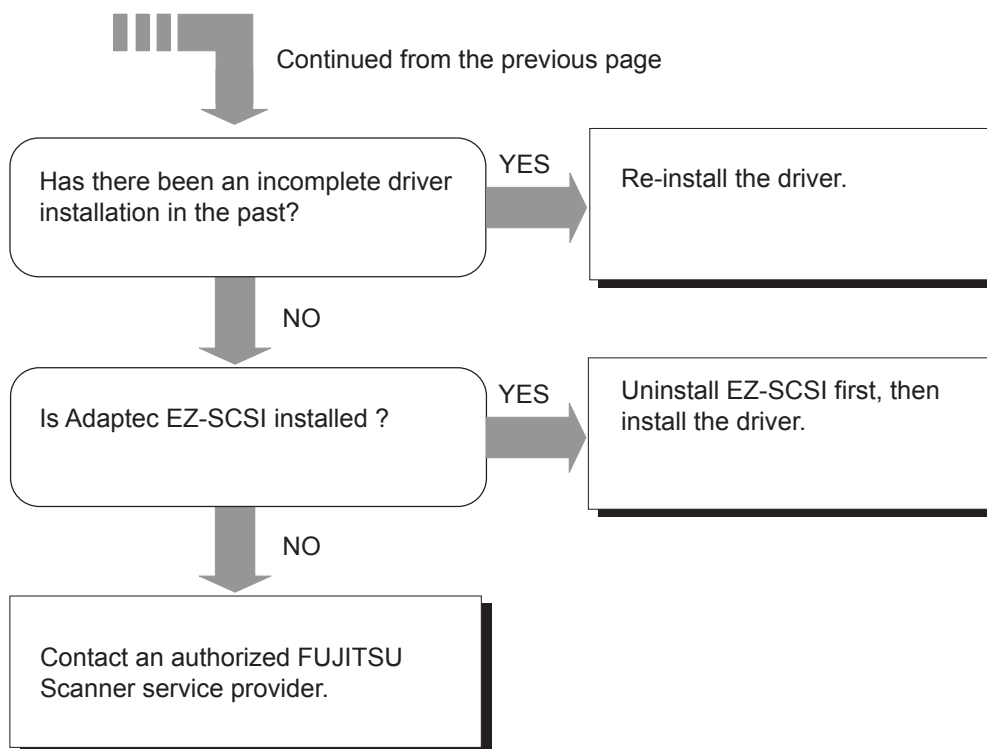


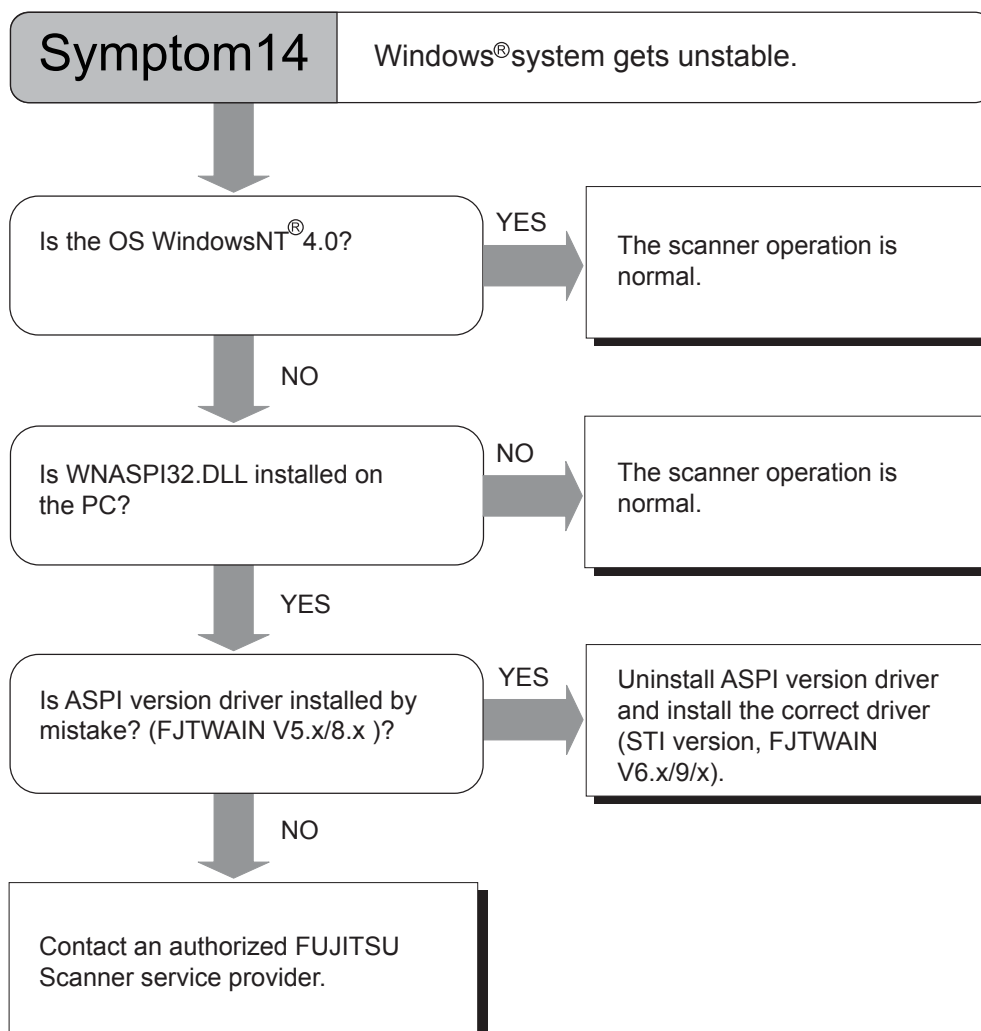


- (* 1) For the details on required conditions, refer to the section "6.2 Document Quality."
- (* 2) For the details on how to set up the Paper Length, refer to "7.3 Setup Mode Details", "10. Setting Short document scan mode (Paper Length setup)."
- (* 3) For the details on how to clean ADF, refer to "Chapter 3 DAILY CARE."
- (* 4) For the details on how to replace Pas ASSY, refer to "Chapter3, DAILY CARE."
- (* 5) For the details on scanner cleaning, refer to "Chapter 3 DAILY CARE."
- (* 6) For the replacement and re-installation of Pick roller unit and Brake roller unit, please refer to "Chapter 4 REPLACING CONSUMABLES."









5.3 Before Contacting a Service Provider

Please check the following items before contacting an authorized FUJITSU Scanner service provider.

■ Outline

Items to check	Findings
Model	(Example) fi-4860C For the model name confirmation, refer to "5.4 Labels on the Scanner."
Serial Number	(example) 000001 For checking the serial number, refer to "5.4 Labels on the Scanner."
Manufacturing date	(example) 2002-08 (August 2002) For the confirmation of manufacturing date, refer to the section "5.4 Labels on the Scanner."
Date of purchase	
Symptom	
Frequency of trouble	

■ Error Descriptions

■ Problem at the time of PC connection.

Items to check	Findings
OS (Windows) type	
Displayed error message	
Interface	(example) SCSI interface
Interface controller	(example) Adaptec SCSI Card 2940AU

■ Document feed trouble

Items to check	Findings
Document type	
Main purpose of use	
Last cleaning date	
Last consumable replacement date	
Operator panel status at trouble	

■ Imaging quality trouble

Items to check	Findings
Type and version of scanner driver	
Interface controller	(example) Adaptec SCSI Card 2940AU
OS (Windows) type	
Application software	(example) ScandAll 21 (example) Acrobat

■ Others

Items to check	Findings
Can you send both the original document (or scanned grayscale image file) and printed scanned data (or the file) via Fax (or by e-mail)?	

5.4 Labels on the Scanner

This section describes how to check the labels on the scanner.







■ The positions of the labels

The following shows where the two labels are located on the scanner.

Manufacturing Label (example): Indicates scanner manufacturing information.

MODEL	fi-4860C IMAGE SCANNER										SER NO.	XXXXXX										
PART NO.	PA03296-B001										Rev. Label	MODEL NAME										
	AC100-240V50/60Hz											0	1	2	3	4	5	6	7	8	9	
	1 ϕ 2.9-1.5A											0	1	2	3	4	5	6	7	8	9	
DATE	200X-XX										45	Kg	0	1	2	3	4	5	6	7	8	9
PFU Limited												MADE IN JAPAN										

Regulatory label (example): Shows the conforming standards of the scanner.

この装置は、クラスA情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。 VCCI-A	
This device complies with Part 15 of the FCC Rules Operation is subject to the following two conditions. (1) This device may not cause harmful interference and (2) this device must accept any interference received including interference that may cause undesired operation.	
 175525	    
電源を接続する前に必ず設置説明書をご覧ください。 See installation instructions before connecting to the supply. voir la notice d'installation avant de raccorder au réseau. Bitte lesen sie die Bedienungsanleitung bevor sie das Gerät in Betrieb setzen.	

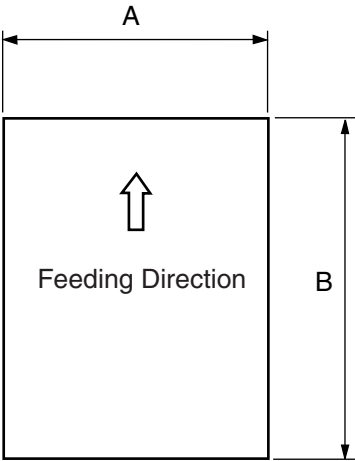
6 ADF DOCUMENT SPECIFICATIONS

This chapter describes the sizes and qualities of documents required for the good performance of the ADF.

6.1 Document Size.....	144
6.2 Document Quality.....	145
6.3 Hole-punching Prohibited Areas.....	148
6.4 Print Prohibited Area.....	149
6.5 Grounding Color Areas.....	150
6.6 Job Separation Sheet.....	151

6.1 Document Size

The following shows the supported document sizes.



Maximum		Minimum	
A	B	A	B
297	432	74	105

6.2 Document Quality

This section describes the types and thickness of documents this scanner supports.

■ Document type

The recommended document types are as follows.

- Woodfree paper
- Wood containing paper

When using any other types of paper, test feed a few sheets to ensure the satisfactory scan performance.

■ Document thickness

Paper thickness is expressed by "paper weight."

- $52\text{g/m}^2 \sim 127\text{g/m}^2$

■ Precautions

The following documents sometimes may have difficulty to feed with this scanner. To prevent unexpected troubles, preliminary feed test using the same quality paper as the target documents may be necessary.

- Document with clips or staples
- Document written on with ink and still wet
- Document without a constant thickness
- Document with rumples or curls (refer to the HINT on page 120)
- Document with folds or tears
- Tracing paper
- Coated paper
- Carbon paper
- Carbonless paper
- Document smaller than A7 or larger than A3
- Materials other than paper: fabric, metal foil, or transparencies.
- Photosensitive paper
- Perforated or punched documents
- Non-rectangular documents
- Very thin paper



- When scanning a translucent document, set the scanner density to light to avoid bleed through.
 - To prevent the rollers from getting dirty, avoid scanning documents containing large areas written or filled in with pencil. If scanning of such documents is necessary, clean the rollers frequently.
 - When document jams or double feed happens frequently, please refer to "5.1 Document Jam", "Document separation force adjustment".
-



- Carbonless paper contains chemical substances that may damage the Pad ASSY or rollers. Pay attention to the following.

Cleaning: If mis-pick occur frequently, clean the Pad ASSY and pick rollers.

For the details on cleaning, please refer to "Chapter 3 Daily Care."

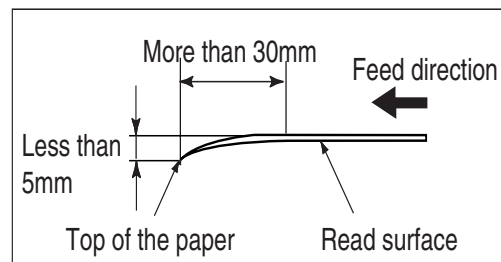
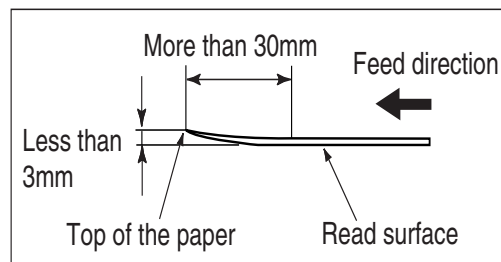
Replacement of parts: The life of the Pad ASSY and Pick roller may be shorter if carbonless papers are scanned rather than wood containing papers.

- When wood containing paper documents are scanned, the life of the Pad ASSY and Pick rollers may become shorter than scanning wood free paper documents.



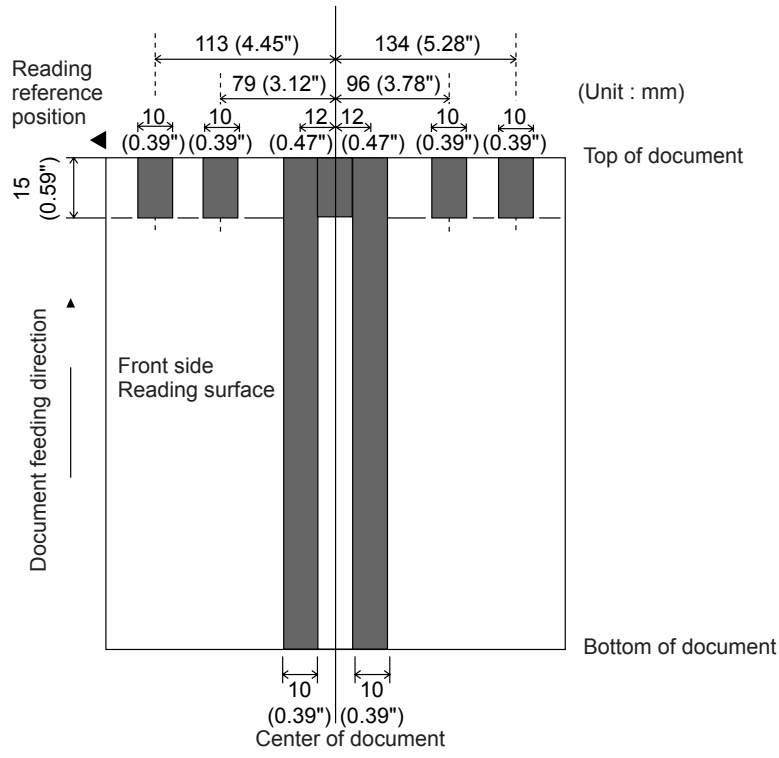
The leading edge of all documents fed should be straightened.

Make sure that the curls at the leading edge should meet the following tolerances.



6.3 Hole-punching Prohibited Areas

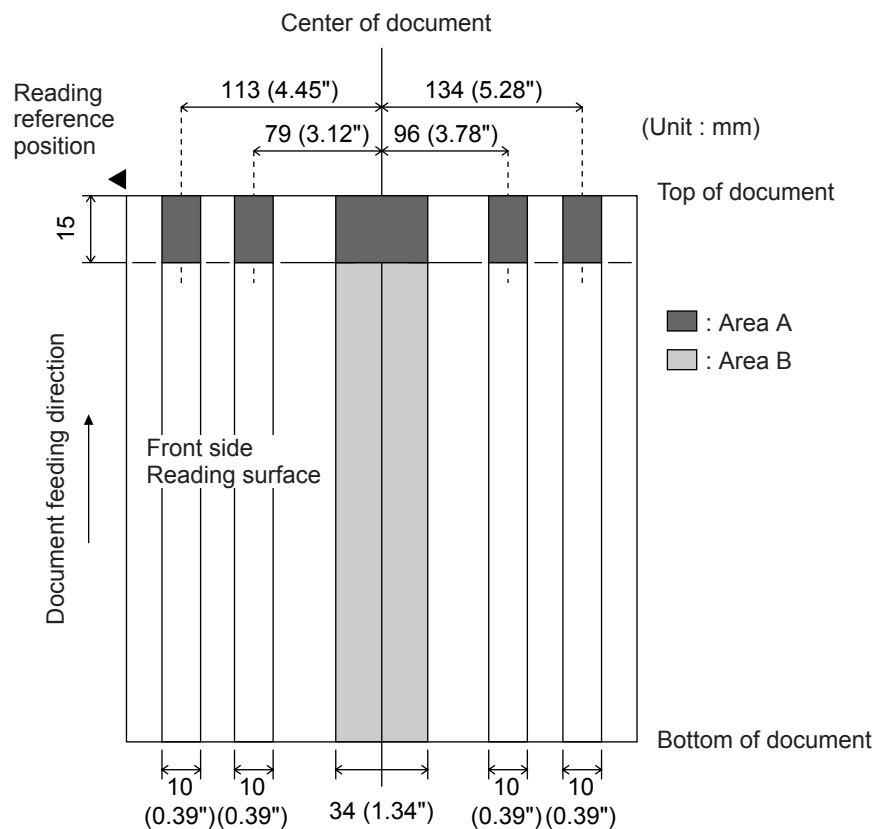
Punched holes in the shaded areas may cause errors.
For job separation sheet requirements, please refer to the section "6.6 Job Separation Sheet."



6.4 Print Prohibited Area

If there are prints in the area A, document size may be mis-detected. Prints in the area B of a document may cause double-feed errors. Following figure shows print prohibited area on a document. If double-feed detection is to be enabled, it is recommended to avoid printing in these areas in the original documents and the forms design.

For the details of double-feed detection, please refer to "Appendix-2 Double Feed Detection Conditions."

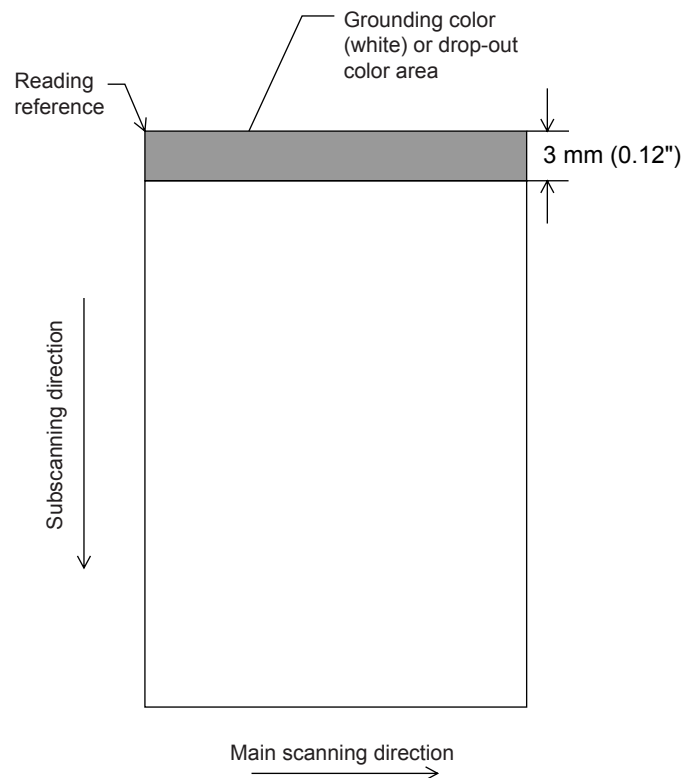


6.5 Grounding Color Areas

The shaded area in the Figure below, top 3mm on both sides of a document, should have paper grounding color (white).

The area can be dropout color. If this cannot be followed, turn the white level follower off when reading.

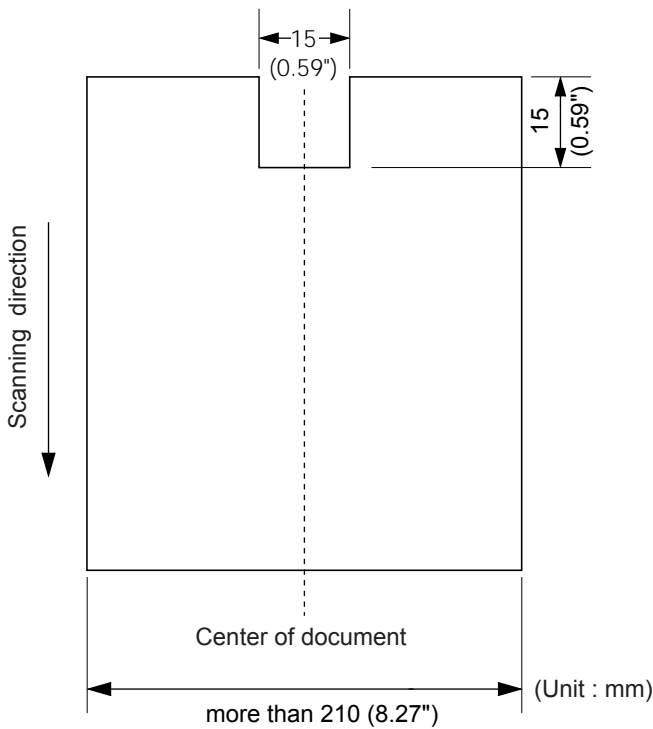
For the details on dropout color, please refer to "Appendix-1 Dropout Color."



6.6 Job Separation Sheet

1. Shape

The following shows the typical format of the job separation sheet.



2. Document Specifications

Document width must be A4 width (210mm) or wider.

7 SETUP MODE

This chapter explains the setup mode and the test mode of the scanner.

7.1 Setup Mode	154
7.2 Setup mode functions.....	162
7.3 Setup Mode Details	169
7.4 Test Mode Overview	213
7.5 Test Mode Details	219

7.1 Setup Mode

■ Outline

There are two types of setup mode: Online setup mode that can be entered during scanner "Ready" status, and Offline setup mode that can be entered only when the scanner is offline. Available functions differ with the two modes.


To enter these mode, follow the instructions below:

- Online setup mode


When LCD indicates Ready status, press  (Next button).

The following message appears.

M	o	d	e	S	e	l	e	c	t	1
!	S	e	t	u	p	M	o	d	e	



By pressing  (Enter button), the scanner enters Offline setup mode.


- Offline setup mode and Online setup mode

Keep pressing  (Start button) and turn on the power.

Then the operator panel LCD displays the following message.

<	M	O	D	E	S	E	L	E	C	T	>
	S	E	T	U	P		T	E	S	T	

Press  (Left arrow button) or  (Right arrow button) and select [Setup].

Press  (Enter button) to enter Offline setup mode.

To quit setup, press  (EXIT button).



The blinking item is the one selected.

■ Online setup mode restrictions

In Online setup mode, the scanner setup can be changed without turning off the power.

However, the following items cannot be changed from the mode.

- Consumables counter reset
- SCSI ID change
- Product ID change
- SCSI bus width change
- Interface change
- TPS interface baud rate change

Some of the other setup items can be specified as “unavailable items in Online setup mode” using Offline setup mode functions.

■Function of buttons in setup mode

Button name	Function
◇ [Next]	Displays the next menu without saving the change. Referred to as Next button in this manual.
◇ [Previous]	Displays the previous menu without saving the change. Referred to as Previous button in this manual.
◇	Moves to the right item on the menu Referred to as Right arrow button in this manual.
◇	Moves to the left item on the menu Referred to as Left arrow button in this manual.
Enter	- Saves the change and then displays the next menu - Moves to the lower level menu Referred to as Enter button in this manual.
Exit	Moves to the upper level menu without saving the change Referred to as EXIT button in this manual.

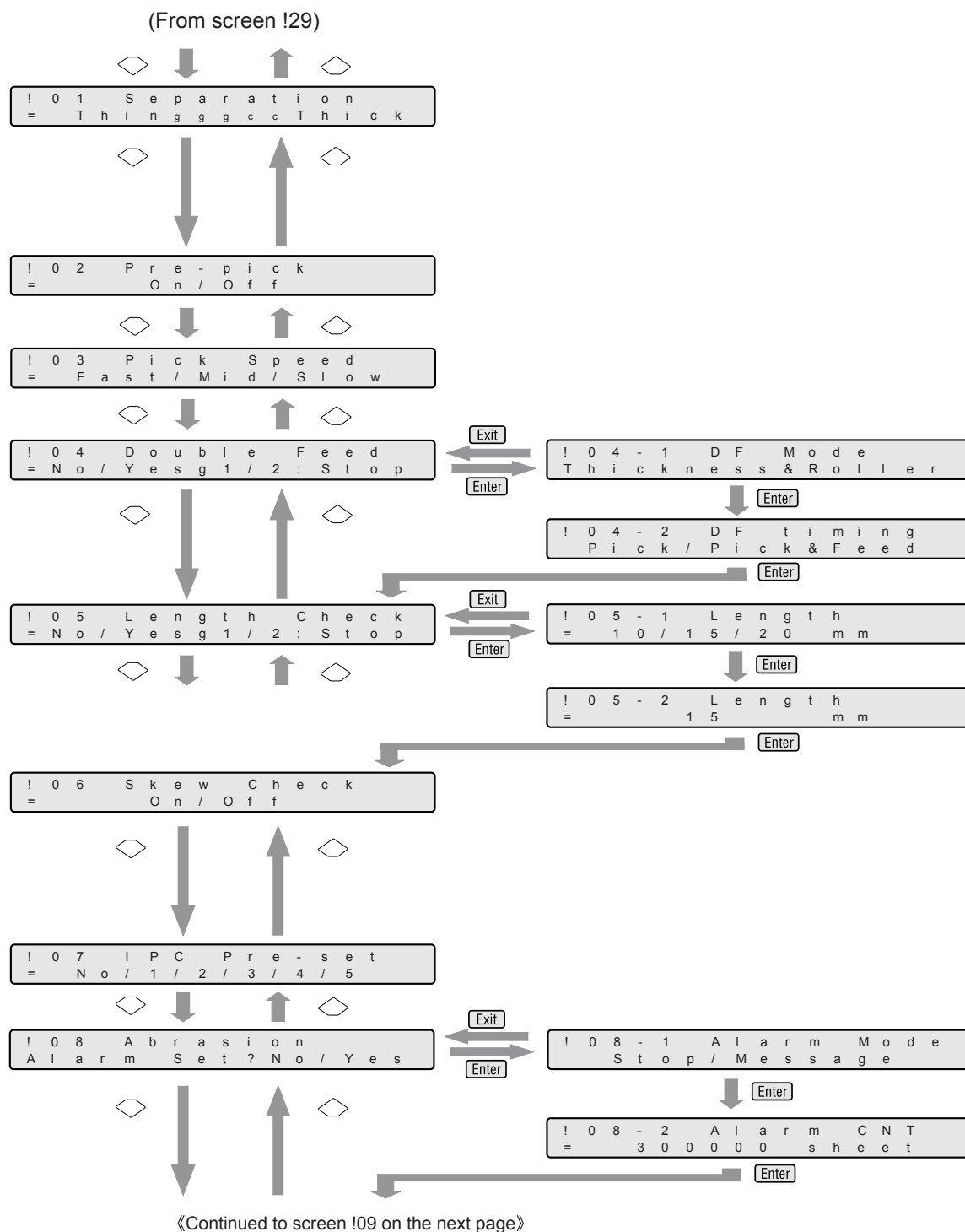
■ Transitions of screens in setup mode

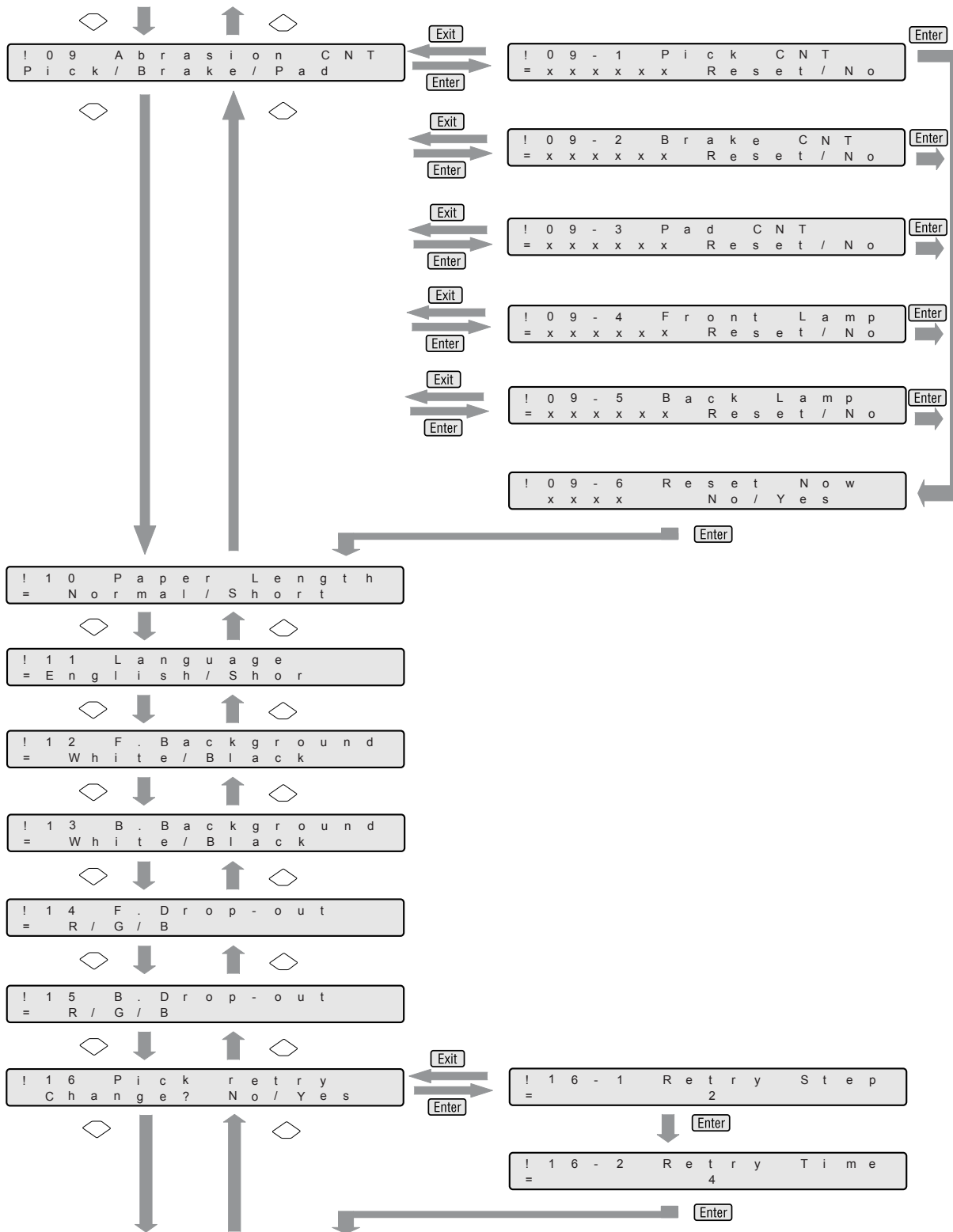
Refer to the next page LCD screen transitions chart for setup mode.

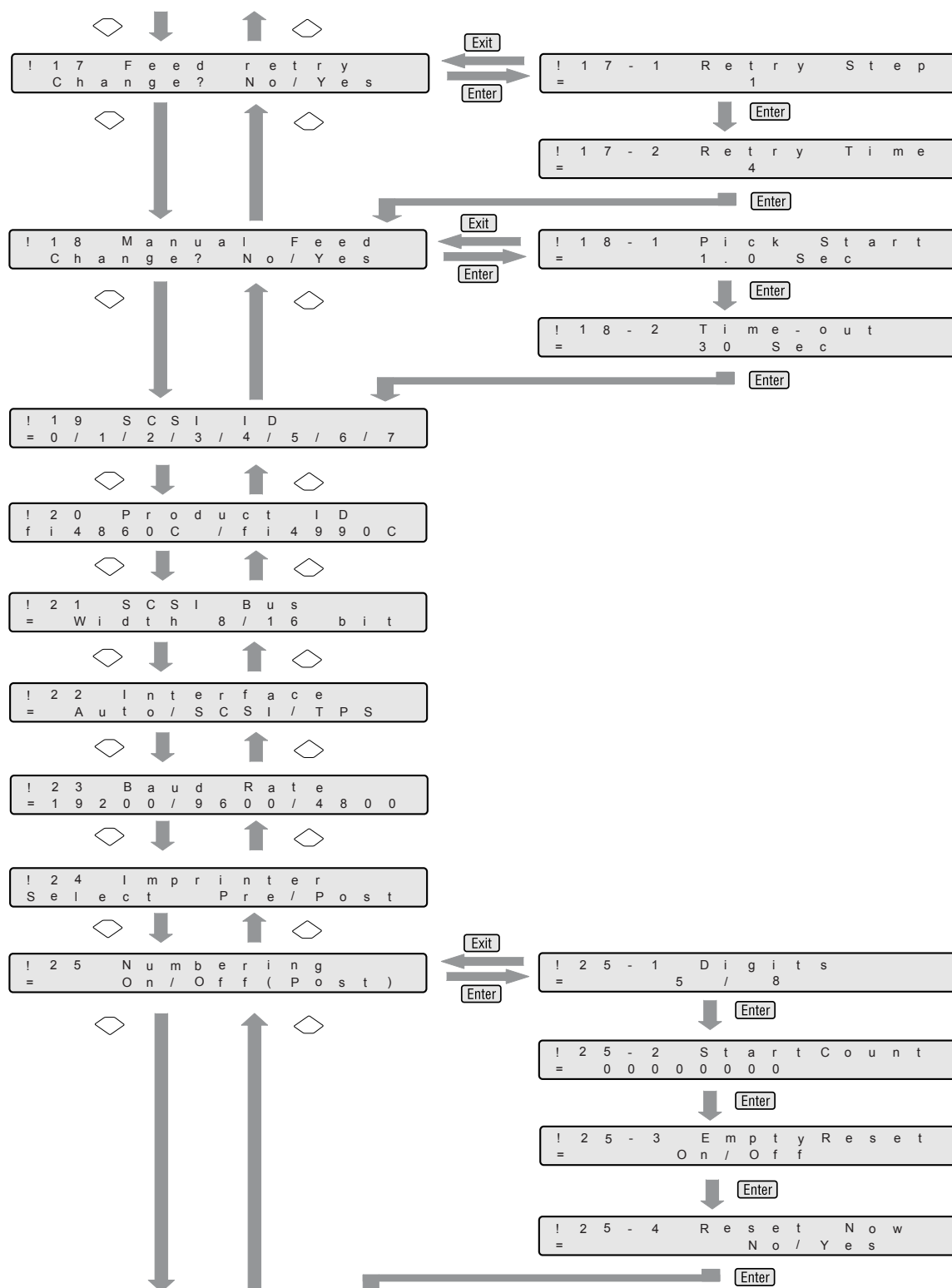
The LCD screen transition chart in the following pages show the concept.

Some of the details are not expressed in the chart.

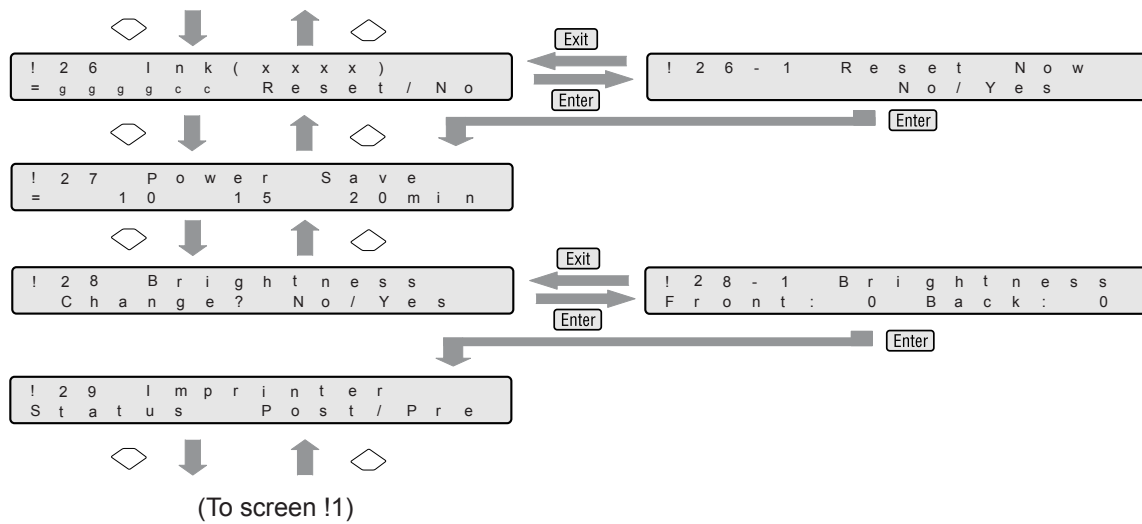
For the details, please refer to the descriptions in “■Setup mode functions.”







«Continue to screen !26 on the next page»





The menu screens with dotted line frame appear only in Offline setup mode



Screen 22 and screen 23 appear only when TPS interface board is installed.

Screen 24 appears only when both the fi-486PRFR (Front side imprinter) and the fi-486PRRE (Rear side imprinter) are installed.
Screen 25, Screen 26 and Screen 29 appear when either or both of the fi-486PRFR and the fi-486PRRE are installed.

7.2 Setup mode functions

There are 29 items in setup mode as shown in the following.

LCD display	Descriptions	Selectable parameters	Default	Mode		Remarks
				On-line	Off-line	
Double Feed	Specify the double-feed detection based on document thickness. There are two ways to detect double-feed. 1: Document thickness 2: Document thickness + Brake roller rotation amount	No/Yes 1: Thickness 2: Thickness + Brake roller	No	Available	Available	Setup done via the PC has the priority.
Length Check	Specify the double-feed detection based on the document length deviation. There are 3 selections for the acceptable length deviation tolerance as shown right.	No/Yes Yes: 10/15/20mm (Tolerance)	No	Available	Available	Setup done via the PC has the priority.
IPC Pre-Set	The scan parameters are set with recommended values automatically. There are 5 choices as shown right.	No 1: 2: 3: 4: 5:	No	Available	Available	

LCD display	Descriptions	Selectable parameters	Default	Mode		Remarks
				On-line	Off-line	
Abrasion Alarm	Specifies the scanner operation at consumables replacement message: stop scanning or message display only. Also specifies the consumable replacement message timing.	Stop/Message 10,000 to 2,560,000 sheets	Stop 300,000	Not Available	Available	The replacement timing increment/decrement by 10,000 sheets.
Abrasion Counter	Clear the consumable counters (Abrasion counter)	-	-	Not Available	Available	-
Manual Feed	Specifies the pick start time from the time document is manually set.	0.2 to 29.8 sec	1.0 sec	Available	Available	-
	Specifies the waiting time from the read command to document manual insert.	1, 5, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 180, 240, 255 sec	30 sec			

LCD display	Descriptions	Selectable parameters	Default	Mode		Remarks
				On-line	Off-line	
Skew Check	Specify if skew detection is enabled.	On/Off	Off	Available	Available	Setup done via the PC has the priority.
Separation	Specify the Brake roller force appropriate for the document thickness	Thick <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Medium Thick <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> Mid <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Medium Thin <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Thin <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Mid	Available	Available	-
Paper Length	Specifies when scanning the document equal or shorter than length 80mm.	Normal / Short	Normal	Available	Available	-
B.Back-ground (Front)	Specifies the background color (Black or White) for scanning.	White/ Black	White	Available	Available	Setup done via the PC has the priority.
B.Back-ground (Back)	Specifies the background color (Black or White) for scanning.	White/ Black	White	Available	Available	Setup done via the PC has the priority.

LCD display	Descriptions	Selectable parameters	Default	Mode		Remarks
				On-line	Off-line	
Pre-pick	Enable or disable the pre-pick operation, a picking of a next sheet of documents prior to actual feeding, to increase scan throughput	On/Off	On	Available	Available	Setup done via the PC has the priority.
Picking speed	Specify the Pick roller rotation speed	Fast/ Mid / Slow	Fast	Available	Available	-
Pick retry	Specify the Pick motor rotation time (Retry Step) and number of retries(Retry Time).	Retry Step :1 - 7 Retry Time :1 - 7	Retry Step : 2 Retry Time : 4	Available	Available	-
Feed retry	Specify the Feed motor rotation time *Retry Step) and number of retries(Retry Time).	Retry Step :1 - 7 Retry Time :1 - 7	Retry Step : 1 Retry Time : 4	Available	Available	-
F.Drop-out	Specifies the front page dropout color for mono color scan.	R G B	G	Available	Available	Setup done via the PC has the priority.

LCD display	Descriptions	Selectable parameters	Default	Mode		Remarks
				On-line	Off-line	
B.Drop-out	Specifies the back page dropout color for mono color scan.	R/ G/ B	G	Available	Available	Setup done via the PC has the priority.
Brightness	Adjust the Front/ Back Brightness to compensate the grayscale level differences.	-6 to +6	0	Available	Available	
SCSI ID	Specifies SCSI ID of the scanner.	0 to 7	5	Not Available	Available	New SCSI ID valid after turning on the power again.
Product ID	Specifies the scanner product ID.	fi4860C/ fi4990C/ 4099DC/ M3099G	fi4860C	Not Available	Available	New setting valid after turning on the power again.
SCSI Bus	Specifies SCSI data bus width, 8bit or 16 bit.	16bit/ 8bit	16bit	Not Available	Available	New setting valid after turning on the power again.
Interface	Specifies the interface to use when a optional or third party interface board is installed in the TPS (Third Party Slot).	Auto/ SCSI/ TPS	Auto	Not Available	Available	

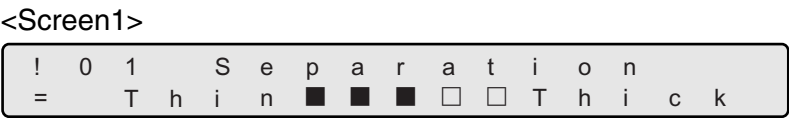
LCD display	Descriptions	Selectable parameters	Default	Mode		Remarks
				On-line	Off-line	
Baud Rate	Specifies the control data transfer rate for TPS interface.	19200/ 9600/ 4800/ 2400	9600	Not Available	Available	New setting valid after turning on the power again.
Imprinter	When both fi-486PRFR(Front side/Pre-print) and fi-486PRRE(Rear side/Post-print) are installed, specifies which one to setup.	Pre/Post	-	Available	Available	-
Numbering	When either fi-486PRFR(Front side/Pre-print) or fi-486PRRE(Rear side/Post-print) is installed, set the numbering parameters.	Numbering : On/Off Digits : 5/8 Initial No.: 5digit: 0-99999 8digit:0-16777215 Reset at hopper empty: On/Off	Numbering : Off Digits : 5 Initial No.: 00000 Reset at hopper empty: On	Available	Available	Setup done via the PC has the priority.
Ink	Shows the remaining ink amount. Reset remaining amount ink counter when the Print cartridge is replaced.	-	-	Available	Available	-

LCD display	Descriptions	Selectable parameters	Default	Mode		Remarks
				On-line	Off-line	
Power Save	Specifies the time to enter Power save mode.	5 to 60minutes	15 minutes	Available	Available	
Language	Specifies the language to use for Operator panel display.	Japanese (Katakana)/ English	-	Available	Available	
Imprinter Status	Shows the installed imprinter type.	-	-	Available	Available	

7.3 Setup Mode Details

1. Setting the document separation force

1) Press ◀ (Next button) or ▶ (Previous button) and let the scanner show <Screen1>.



2) At <Screen1>, press ◀ (Left arrow button) or ▶ (Right arrow button) and select the appropriate document thickness.



The blinking item is the one selected.

▶ (Right arrow button) moves the blinking from (5) to (1).

◀ (Left arrow button) moves the blinking from (1) to (5).

- (1) ■ ■ ■ ■ ■ - Document thickness: Thick
- (2) ■ ■ ■ ■ □ - Document thickness: Medium thick
- (3) ■ ■ ■ □ □ - Document thickness: Mid
- (4) ■ ■ □ □ □ - Document thickness: Medium thin
- (5) ■ □ □ □ □ - Document thickness: Thin

(3) Press **Enter** (Enter button) and make the setting valid.

Press **Exit** (EXIT button) at the end and the LCD redisplay [Ready] screen.





If the following error occurs frequently, change the setting by referring to the explanation on the table.

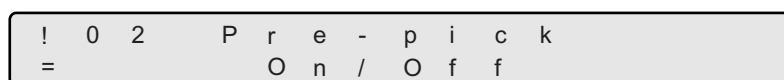
- Double-feed
- Mis-pick
- Paper Jam1

Setting	Document separation force	Double-feed occurs frequently.	Mis-pick or Paper jam1 occurs frequently.
Thick	Strong	Make the document separation force stronger.	Make the document separation force weaker.
Medium Thick	Less strong		
Mid	Mid (Factory default)		
Medium Thin	Less weak		
Thin	Weak		

2. Setting Pre-pick


- 1) Press  (Next button) or  (Previous button) and let the scanner show <Screen2>.

<Screen2>



- 2) At <Screen2>, to enable Pre-pick, press  (Left arrow button) and select [On].

To disable Pre-pick, press  (Right arrow button) and select [Off].

- 3) Press  (Enter button) and make the setting valid.

Press  (EXIT button) at the end and the LCD display goes back to [Ready] screen.

3. Setting Pick Speed

- 1) Press ◀ (Next button) or ▶ (Previous button) and let the scanner show <Screen3>.

<Screen3>

!	0	3	P	i	c	k	S	p	e	e	d			
=		F	a	s	t	/	M	i	d	/	S	l	o	w

- 2) At <Screen3>, press ◀ (Left arrow button) or ▶ (Right arrow button) and select Pick roller rotation speed.



The blinking item is the one selected.

- 3) Press **Enter** (Enter button) and make the setting valid.

Press **Exit** (EXIT button) at the end and the LCD display goes back to [Ready] screen.



Pick roller rotation speed should be set Slow for scanning thin or soft documents, the documents which tend to cause Mis-pick.

Picking speed	When Mis-pick occurs frequently
Fast (Factory default)	Decreases the Pick speed ↓
Mid	
Slow	

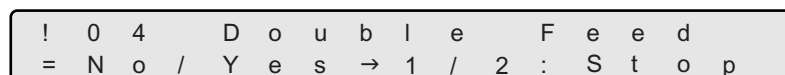


When the Pick speed is set at "Mid" or "Slow", scan throughput get low.

4. Setting Double-feed detection (document thickness)

- 1) Press ◀ (Next button) or ▶ (Previous button) and let the scanner show <Screen4>.

<Screen4>



- 2) At <Screen4>, by pressing ◀ (Left arrow button) or ▶ (Right arrow button), Double-feed detection by document thickness (checked by through light) can be enabled or disabled. Document thickness is detected by the difference of decreased through light amount when 2 sheets are fed. In this screen, you specify if Double-feed detection is enabled, set the detection mode and select error processing.

By pressing ▶ (Right arrow button), selection moves from (1) to (3).

By pressing ◀ (Left arrow button), selection moves from (3) to (1).


- | | |
|---------------------------------------|--|
| (1) [No] is blinking: | Document thickness is not checked. |
| (2) [Yes] and [1] are blinking: | Document thickness is checked.
However, scanning continues even if Double-feed is detected and the error message is displayed on the LCD. |
| (3) [Yes] and [2: Stop] are blinking: | Document thickness is checked.
When double-feed is detected, scanning stops. Then the error is reported to the PC. |

If you would like to disable the Double-feed detection, select [No] and press

 (Enter button).







The blinking item is the one selected.

- 3) When the LCD is showing (2) or (3), pressing  (Enter button) changes LCD display to <Screen 4-1>.

<Screen4-1>

!	0	4	-	1	D	F	M	o	d	e			
=					T	h	i	c	k	n	e	s	s

- 4) At <Screen4-1>, by pressing  (Left arrow button) or  (Right arrow button), you can select the detection mode.

Each time  (Left arrow button) or  (Right arrow button) is pressed, LCD displays <Screen 4-1> and <Screen4-2> alternately.

<Screen4-2>

!	0	4	-	1	D	F	M	o	d	e					
T	h	i	c	k	n	e	s	s	&	R	o	l	l	e	r

(1) [Thickness] is blinking:

Double-feed is detected by through light amount.

(2) [Thickness & Roller] is blinking:

Double-feed is detected based on the through light amount and Brake roller rotation amount.

By pressing  (Enter button), LCD display changes to <Screen4-3>.

<Screen4-3>

!	0	4	-	2	D	F	t	i	m	i	n	g	
P	i	c	k	/	P	i	c	k	&	F	e	e	d

5) At <Screen4-3>, by pressing ◀ (Left arrow button) or ▶ (Right arrow button), the detection timing can be selected.

- | | |
|--------------------------------|--|
| (1) [Pick] is blinking: | Double-feed is checked at the document pick timing. |
| (2) [Pick & Feed] is blinking: | Double-feed is checked at the document pick timing and during feeding. |

6) Press **Enter** (Enter button) and make the setting valid.

Press **Exit** (EXIT button) at <Screen4-1>, <Screen4-2> or <Screen4-3>, then the LCD display changes to <Screen4>. Press **Exit** (EXIT button) again and the LCD display goes back to [Ready] screen.



- Double-feed detection accuracy increases when both thickness and length of documents are checked.



- When double-feed is detected and scanning operation is stopped, documents in the hopper or the one ahead of it might have been double fed.



- Depending on the document type, there are cases when double-feed can not be detected.

5. Setting Double-feed detection (by document length)

- 1) Press ◀ (Next button) or ▶ (Previous button) and let the scanner show <Screen5>.

<Screen5>

!	0	5		L	e	n	g	t	h		C	h	e	c	k
=	N	o	/	Y	e	s	→	1	/	2	:	S	t	o	p

- 2) At <Screen5>, by pressing ◀ (Left arrow button) or ▶ (Right arrow button), Double-feed detection by document length can be enabled or disabled.

By checking the document length deviation when partially over wrapped two sheets are fed. In this screen, you can specify if the length check is done, set the detection conditions, and select the error processing.

By pressing ▶ (Right arrow button), selection moves from (1) to (3).

By pressing ◀ (Left arrow button), selection moves from (3) to (1).

(1) [No] is blinking:

Document length is not checked.

(2) [Yes] and [1] are blinking:

Document length is checked.

However, scanning continues even if Double-feed is detected and the error message is displayed on the LCD.

(3) [Yes] and [2: Stop] are blinking:

Document length is checked.

When double-feed is detected, scanning stops. Then the error is reported to the PC.

If you would like to disable the Double-feed detection, select [No] and press

Enter (Enter button).






The blinking item is the one selected.


- 3) In case of (2) or (3), by pressing **Enter** (Enter button), LCD display changes to <Screen5-1>.

<Screen5-1>

!	0	5	-	1	L	e	n	g	t	h
=	1	0	/	1	5	/	2	0	m	m

- 4) At <Screen5-1>, by pressing  (Left arrow button) or  (Right arrow button), the document length can be specified.

By pressing , selection moves from (1) to (3).

By pressing , selection moves from (3) to (1).

- | | |
|-----------------------|--|
| (1) [10] is blinking: | The document length difference below 10mm is not detected as an error. |
| (2) [15] is blinking: | The document length difference below 15mm is not detected as an error. |
| (3) [20] is blinking: | The document length difference below 20mm is not detected as an error. |

- 5) Press **Enter** (Enter button) and the setting becomes valid.

Press **Exit** (EXIT button) at <Screen5-1>, then the LCD display changes to <Screen5>.

Press **Exit** (EXIT button) again and the LCD display goes back to [Ready] screen.

6. Setting Skew Check

- 1) Pressing ◀ (Next button) or ▶ (Previous button) and let the LCD show <Screen6>.

<Screen6>



- 2) If you want to enable Skew check at <Screen6>, press ◀ (Left arrow button), and select [On].

To disable Skew-check, press ▶ (Right arrow button) and select [Off] then press

Enter (Enter button).

- 3) Press **Enter** (Enter button) and make the setting valid.

Press **Exit** (EXIT button) at the end and the LCD display goes back to [Ready] screen.

7. Setting IPC pre-set

- 1) Pressing ◀ (Next button) or ▶ (Previous button) and let the LCD show <Screen7>.

<Screen7>

!	0	7		I	P	C		P	r	e	-	s	e	t
=		N	o	/	1	/	2	/	3	/	4	/	5	

- 2) At <Screen7>, the preset items can be selected by pressing ◀ (Left arrow button) or ▶ (Right arrow button).



The blinking item is the one selected.

- 3) Press **Enter** (Enter button) and make the setting valid.

Press **Exit** (EXIT button) at the end and the LCD display goes back to [Ready] screen.



When scanning in Binary mode (Line art), documents type and suitable pre-set pattern relationship is shown as follows:

- The horizontal axis shows the darkness/color of the background against the text/lines on the documents.
- The vertical axis shows the darkness of the txt and lines on the documents.

● Document type and IPC preset pattern

	Background darkness		Background color		
	Normal ←	→Dark	Red	Green	Blue
Text Dark- ness	Normal↑	1: Normal Background and normal darkness text 3: Dark back-ground and normal darkness text			
	↓ Light	2: Mid darkness back-ground and light text	4: Red back-ground and light text	5: Green back-ground and light text	

*1 to 5 indicates IPC pre-set pattern number.



This setting is invalid in grayscale mode or in color mode.

Pre-set is valid only in binary scan mode.

Validity of each scan parameter when using IPC pre-set in Offline mode, is shown in the following table.

● Validity of scan parameter

	Scan mode	Resolution	Line art/ Photos	Half-tone	DTC	Document sizes	Portrait/ Landscape	Crop-ping
Valid	X	X	-	-	-	X	X	X
invalid	-	-	X	X	X	-	-	-

	Document selection	Pattern	Contrast	Auto separation	Reverse image	Image emphasis	Outline Extraction	Simplified DTC
Valid	X	-	-	-	X	-	-	-
Invalid	-	X	X	X	-	X	X	X

8. Setting Consumables Replacement Message

- 1) Pressing ◀ (Next button) or ▶ (Previous button) and let the LCD show <Screen8>.

<Screen8>

!	0	8		A	b	r	a	s	i	o	n			
A	I	a	r	m	S	e	t	?	N	o	/	Y	e	s

- 2) At <Screen8> , to change Consumables replacement message setup (Abrasion Alarm), press ▶ (Right arrow button) and select [Yes].



The blinking item is the one selected.

Press **Enter** (Enter button) to confirm the selection. <Screen8-1> appears on LCD.
If Consumables replacement message setup change is not required, select [No] and press **Enter** (Enter button).

<Screen8-1>

!	0	8	-	1		A	I	a	r	m		M	o	d	e		
						S	t	o	p	/	M	e	s	s	a	g	e

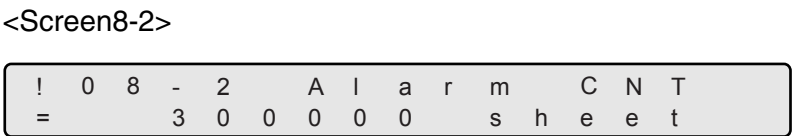
3) At <Screen8-1>, press ◀ (Left arrow button) or ▶ (Right arrow button) and select consumable error process.

- (1) [Stop] is blinking:

When the consumables replacement condition is reached, the Consumables replacement message (Abrasion alarm) is shown on the LCD and scanning stops.
- (2) [Message] is blinking:

When the consumables replacement condition is reached, the Consumables replacement message (Abrasion alarm) is shown on the LCD but the scanning continues.

By pressing **Enter** (Enter button), <Screen8-2> appears on the LCD.



- 4) At <Screen8-2>, specify the number of scans to get Consumables replacement message.
- Each time ◀ (Left arrow button) is pressed, the counter value decrements by 10,000.
- Each time ▶ (Right arrow button) is pressed, the counter value increments by 10,000.
- 5) Press **Enter** (Enter button) and the setting becomes valid.
- Press **Exit** (EXIT button) at <Screen8-1> or <Screen8-2>, the LCD display changes to <Screen8>.
- Press **Exit** (EXIT button) at <Screen8> and the LCD display goes back to [Ready] screen.

9. Abrasion counter (Abrasion CNT) reset

1) Pressing ◀ (Next button) or ▶ (Previous button) and let the LCD show <Screen9>.

<Screen9>

!	0	9		A	b	r	a	s	i	o	n		C	N	T
P	i	c	k	/	B	r	a	k	e	/	P	a	d		

2) At <Screen9>, select the Abrasion counter to reset.



The blinking item is the one selected.

You can select a counter(s) from the following.

- | | |
|---------------------------|--|
| (1) [Pick] is blinking: | Pick roller counter (Pick CNT) can be reset. |
| (2) [Brake] is blinking: | Brake roller counter (Brake CNT) can be reset. |
| (3) [Pad] is blinking: | Pad counter (Pad CNT) can be reset. |
| (4) [F.Lamp] is blinking: | Front-side lamp counter (Front Lamp) can be reset. |
| (5) [B.Lamp] is blinking: | Back-side lamp counter (Back Lamp) can be reset. |

By pressing ▶ (Right arrow button), selection moves from (1) to (5).

By pressing ◀ (Left arrow button), selection moves from (5) to (1).

3) By pressing Enter (Enter button), LCD display changes to <Screen9-1>, <Screen9-2>, <Screen9-3>, <Screen9-4>, or <Screen9-5> depending on the selection at <Screen9>.

When [Pick] is selected:

<Screen9-1>

!	0	9	-	1	P	i	c	k	C	N	T			
=	x	x	x	x	x		R	e	s	e	t	/	N	o

When [Brake] is selected:

<Screen9-2>

!	0	9	-	2	B	r	a	k	e	C	N	T		
=	x	x	x	x	x		R	e	s	e	t	/	N	o

When [Pad] is selected:

<Screen9-3>

!	0	9	-	3	P	a	d	C	N	T				
=	x	x	x	x	x		R	e	s	e	t	/	N	o

When [F Lamp] is selected:

<Screen9-4>

!	0	9	-	4	F	r	o	n	t	L	a	m	p		
=	x	x	x	x	x	x		R	e	s	e	t	/	N	o

When [B Lamp] is selected:

<Screen9-5>

!	0	9	-	5	B	a	c	k	L	a	m	p			
=	x	x	x	x	x			R	e	s	e	t	/	N	o



[XXXXXX] indicates each Abrasion counter value.

4) In <Screen9-1> to <Screen9-5>, to reset the corresponding counter, press ◀ (Left arrow button) and select [Reset].

Press **Enter** (Enter button) to confirm the selection, then <Screen9-6> is displayed.

If you do not want to reset the counter, select [No] and press **Enter** (Enter button).

<Screen9-6>

!	0	9	-	6	R	e	s	e	t	N	o	w
x	x	x	x	x	N	o	/	Y	e	s		



[XXXXXX] is the counter value of the selected consumable.

- Pick roller counter
- Brake roller counter
- Pad counter
- Front-side lamp counter (lamp-on time)
- Back-side lamp counter (lamp-on time)

5) If reset is really OK, select [YES] and press **Enter** (Enter button).

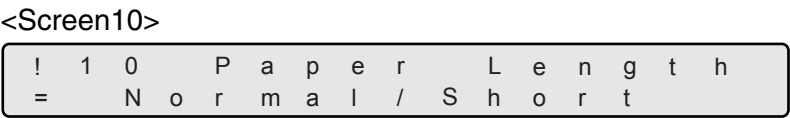
To cancel Reset, select [No] and press **Enter** (Enter button).

Press **Exit** (EXIT button) at <Screen9-1>, <Screen9-2>, <Screen9-3>, <Screen9-4> or <Screen9-5>, the LCD display changes to <Screen9>.

Press **Exit** (EXIT button) at <Screen9> and the LCD display goes back to [Ready] screen.


10. Setting Short document scan mode(Paper Length setup)

1) Press ◀(Next button) or ▶ (Previous button) and let LCD display <Screen10> .



2) At <Screen10>, press ◀(Left arrow button) or ▶(Right arrow button) and select the proper setting for the document to scan.

HINT



The blinking item is the one selected.

- (1) [Normal] is blinking:

This mode is for scanning documents longer than 80mm.
- (2) [Short] is blinking:

This mode is for scanning documents which length is 80mm or less.

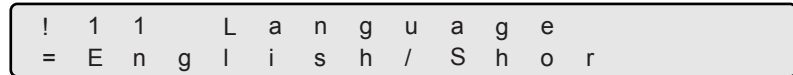
(3) Press **Enter** (Enter button) and make the setting valid.

Press **Exit** (EXIT button) at the end and the LCD display goes back to [Ready] screen.

11. Setting Language

- 1) Press ◀ (Next button) or ▶ (Previous button) and let LCD display <Screen11> .

<Screen11>





- 2) Press ◀ (Left arrow button) or ▶ (Right arrow button) and select the language for LCD display.

- 3) Press **Enter** (Enter button) and make the setting valid.


Press **Exit** (EXIT button) at the end and the LCD display goes back to [Ready] screen.


12. Setting Front-side background color


- 1) Press  (Next button) or  (Previous button) and let LCD display <Screen12> .


<Screen12>

!	1	2	F	.	B	a	c	k	g	r	o	u	n	d
=		W	h	i	t	e	/	B	l	a	c	k		

- 2) At <Screen12>, to set the background color to white, press  (Left arrow button) and select [White].

To set the background color to black, press  (Right arrow button) and select [Black].

- 3) Press  (Enter button) and make the setting valid.

Press  (EXIT button) at the end and the LCD display goes back to [Ready] screen.

13. Setting Back-side background color

- 1) Press ◀ (Next button) or ▶ (Previous button) and let LCD display <Screen13> .

<Screen13>

!	1	3		B	.	B	a	c	k	g	r	o	u	n	d
=			W	h	i	t	e	/	B	l	a	c	k		

- 2) At <Screen12>, to set the background color to white, press ◀ (Left arrow button) and select [White].

To set the background color to black, press ▶ (Right arrow button) and select [Black].

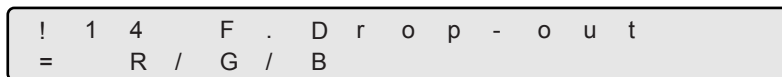
- (3) Press **Enter** (Enter button) and make the setting valid.

Press **Exit** (EXIT button) at the end and the LCD display goes back to [Ready] screen.

14. Setting Front-side dropout color

- 1) Press ◀ (Next button) or ▶ (Previous button) and let LCD display <Screen14> .

<Screen14>



- 2) At <Screen14>, press ◀ (Left arrow button) or ▶ (Right arrow button) and select the color to drop out.



The blinking item is the one selected.

- (3) Press **Enter** (Enter button) and make the setting valid.

Press **Exit** (EXIT button) at the end and the LCD display goes back to [Ready] screen.

15. Setting Back-side dropout color

- 1) Press ◀ (Next button) or ▶ (Previous button) and let LCD display <Screen15> .

<Screen15>

!	1	5		B	.	D	r	o	p	-	o	u	t
=			R	/	G	/	B						

- 2) At <Screen15>, press ◀ (Left arrow button) or ▶ (Right arrow button) and select the color to drop out.



The blinking item is the one selected.

- 3) Press **Enter** (Enter button) and make the setting valid.

Press **Exit** (EXIT button) at the end and the LCD display goes back to [Ready] screen.

16. Setting Pick retry

- 1) Press ◀ (Next button) or ▶ (Previous button) and let LCD display <Screen16>.

<Screen16>

!	1	6	P	i	c	k	r	e	t	r	y
	C	h	a	n	g	e	?	N	o	/	Y
											s

- 2) At <Screen16>, to change Pick motor pick operation time and the number of retries, press ▶ (Right arrow button) and select [Yes]. Press (Enter button) to confirm the selection. <Screen16-1> is displayed.

If the change is not required, select [No] and press (Enter button).

<Screen16-1>

!	1	6	-	1	R	e	t	r	y	S	t	e	p
=							2						



The blinking item is the one selected.

- 3) At <Screen16-1>, pick motor's pick operation time can be specified. Longer pick operation time makes the pick feed amount bigger.

Pressing ◀ (Left arrow button) makes the pick operation time shorter.

Pressing ▶ (Right arrow button) makes the pick operation time longer.

Press ◀ (Left arrow button) or ▶ (Right arrow button), and select the setting.

The range of the pick motor retry steps is 1 to 7.

Press (Enter button) to confirm the selection. <Screen16-2> is displayed.

<Screen16-2>

!	1	6	-	2	R	e	t	r	y	T	i	m	e
=							4						

4) At <Screen16-2>, specify the number of pick retries. By pressing ◀ (Left arrow button), the number of retries decreases. By pressing ▶ (Right arrow button), the number of retries increases.

Press ◀ (Left arrow button) or ▶ (Right arrow button), and select the setting.

The number of the pick retries can be set between 1 to 7 times.

5) Press **Enter** (Enter button) and make the setting valid.

Press **Exit** (EXIT button) at <Screen16-1> or <Screen16-2>, then the LCD display changes to <Screen16>.

Press **Exit** (EXIT button) again and the LCD display goes back to [Ready] screen.

17. Setting Feed retry

- 1) Press ◀ (Next button) or ▶ (Previous button) and let LCD display <Screen17>.

<Screen17>

!	1	7		F	e	e	d		r	e	t	r	y	
	C	h	a	n	g	e	?		N	o	/	Y	e	s

- 2) At <Screen17>, to change Feed motor operation time and the number of retries, press ▶ (Right arrow button) and select [Yes].

Press **Enter** (Enter button) to confirm the selection. <Screen17-1> is displayed.

If the change is not required, select [No] and press **Enter** (Enter button).

<Screen17-1>

!	1	7	-	1		R	e	t	r	y		S	t	e	p
=									1						



The blinking item is the one selected.

- 3) At <Screen17-1>, feed motor rotation time can be specified. Longer feed operation time makes the feed amount bigger.

Pressing ◀ (Left arrow button) makes the feed motor operation time shorter.

Pressing ▶ (Right arrow button) makes the feed motor operation time longer.

Press ◀ (Left arrow button) or ▶ (Right arrow button), and select the setting.

The feed motor rotation step range is 1 to 7 steps.

Press **Enter** (Enter button) to confirm the selection. <Screen17-2> is displayed.

<Screen17-2>

!	1	7	-	2		R	e	t	r	y		T	i	m	e
=										4					

- 4) In <Screen17-2>, specify the number of retries. By pressing ◀ (Left arrow button), the number of retry decreases. By pressing ▶ (Right arrow button), the number of retries increases. The number of the feed retries can be set between 1 to 7 times. Press ◀ (Left arrow button) or ▶ (Right arrow button), and select the setting.
- 5) Press **Enter** (Enter button) and the setting becomes valid.
- Press **Exit** (EXIT button) at <Screen17-1> or <Screen17-2>, the LCD display changes to <Screen17>.
- Press **Exit** (EXIT button) at <Screen17> and the LCD display goes back to [Ready] screen.


18. Setting Manual Feed mode

1) Press ◀(Next button) or ▶(Previous button) and let LCD display <Screen18>.

<Screen18>

!	1	8		M	a	n	u	a	l		F	e	e	d
	C	h	a	n	g	e	?		N	o	/	Y	e	s

2) At <Screen18>, if the setting change is required, press ▶(Right arrow button) and select [Yes].



The blinking item is the one selected.

Press **Enter** (Enter button) to confirm the selection then the LCD display changes to <Screen18-1>.

If the change is not necessary, select [No] and press **Enter** (Enter button).

<Screen18-1>


!	1	8	-	1		P	i	c	k		S	t	a	r	t
=						1	.	0			S	e	c		

3) At <Screen18-1>, specify the time to start pick from the manual setting of the document (Start time).

By pressing ◀(Left arrow button), the pick start time decreases.

By pressing ▶(Right arrow button), the pick start time increases.

The pick start time can be specified to be 0.2 to 29.8 seconds.




Pick start time can be specified by the unit of 0.2 second.


Press  (Enter button) then <Screen18-2> is displayed.

<Screen18-2>


!	1	8	-	2	T	i	m	e	-	o	u	t
=					3	0	S	e	c			


- 4) At <Screen18-2>, specify the wait time (i.e. the time from the PC issues scan command to time out) for manual setting of document.


By pressing , the wait time becomes shorter.

By pressing , the wait time becomes longer. .

The wait time can be 1, 5, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 180, 240, 255 sec

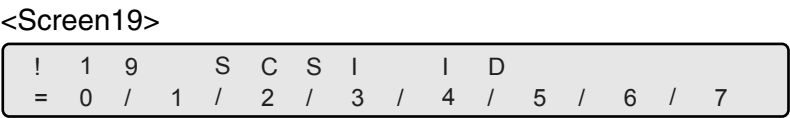
- 5) Press  (Enter button) and the setting becomes valid.

Press  (EXIT button) at <Screen18-1> or <Screen18-2>, then the LCD display changes to <Screen18>.

Press  (EXIT button) at <Screen18> and the LCD display goes back to [Ready] screen.


19. Setting of SCSI ID

1) Press ◀(Next button) or ▶ (Previous button) and let LCD display <Screen19>.



2) At <Screen19>, press ◀(Left arrow button) or press ▶(Right arrow button) to select SCSI ID number.

HINT




The blinking item is the one selected.

3) Press **Enter** (Enter button) and make the setting valid.

Press **Exit** (EXIT button) at the end and the LCD display goes back to [Ready] screen.

HINT



Changed SCSI ID becomes valid after the next power on.

20. Setting of Product ID(Scanner model number)

- 1) Press ◀ (Next button) or ▶ (Previous button) and let LCD display <Screen20>.

<Screen20>

!	2	0		P	r	o	d	u	c	t		I	D	
f	i	4	8	6	0	C	/	f	i	4	9	9	0	C

- 2) At <Screen20>, press ◀ (Left arrow button) or ▶ (right arrow button) and select Product ID.



The blinking item is the one selected.

The following are the selectable Product IDs.

- (1) fi4860C
- (2) fi4990C
- (3) M4099DC
- (4) M3099G

By pressing ◀ (Left arrow button), selection moves from (4) to (1).

By pressing ▶ (Right arrow button), selection moves from (1) to (5).



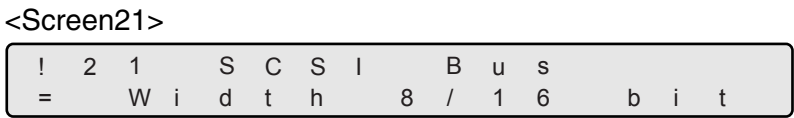
Usually, Product ID does not need to be changed.

- (3) Press **Enter** (Enter button) and make the setting valid.


Press **Exit** (EXIT button) at the end and the LCD display goes back to [Ready] screen.

21. Setting SCSI bus width

1) Press ◀(Next button) or ▶ (Previous button) and let LCD display <Screen21>.




2) At <Screen21>. If Wide SCSI (68pin) interface is used, press ▶ (Right arrow button) and select [16].
If SCSI-2 (50pin) interface is used, press ◀ (Left arrow button) and select [8].



The blinking item is the one selected.

(3) Press **Enter** (Enter button) and make the setting valid.
Press **Exit** (EXIT button) at the end and the LCD display goes back to [Ready] screen.

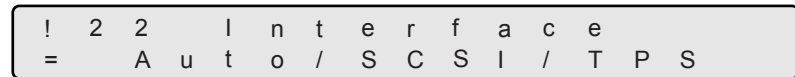


- If 16 bit bus width data transfer is prohibited, specify [8] bit.

22. Setting Interface

- 1) Press ◀ (Next button) or ▶ (Previous button) and let LCD display <Screen22>.

<Screen22>



- 2) At <Screen22>, press ◀ (Left arrow button) or ▶ (Right arrow button), and select the type of interface.



The blinking item is the one selected.

Available interface settings are as follows:

- | | |
|-------------------------|--|
| (1) [Auto] is blinking: | If an interface board, either from third party or optional, is installed in TPS, this interface is used. If not, SCSI interface is used. |
| (2) [SCSI] is blinking: | SCSI interface is used. The interface on TPS is disregarded. |
| (3) [TPS] is blinking: | TPS interface is used. The SCSI interface is disregarded. |



By pressing ◀ (Left arrow button), selection moves from (3) to (1).

By pressing ▶ (Right arrow button), selection moves from (1) to (3).

- (3) Press **Enter** (Enter button) and make the setting valid.



Press **Exit** (EXIT button) at the end and the LCD display goes back to [Ready] screen.

24. Selection of Imprinter

- 1) Press  (Next button) or  (Previous button) and let LCD display <Screen24>.


<Screen24>

! 2 4 l m p r i n t e r
S e l e c t P r e / P o s t

- 2) At <Screen24>, press  (Left arrow button) or  (Right arrow button) and select the imprinter to setup.



The blinking item is the one selected.

- (3) Press  (Enter button) and make the setting valid.

Press **Exit** (EXIT button) at the end and the LCD display goes back to [Ready] screen.



This screen is displayed when both of fi-486PRFR and fi-486PRRE are installed.

25. Setting Imprinter numbering


- 1) Press  (Next button) or  (Previous button) and let LCD display <Screen25>.


<Screen25>


!	2	5		N	u	m	b	e	r	i	n	g			
=				O	n	/	O	f	f	(P	o	s	t)



In [XXXX], [Pre] or [Post] is displayed.

- 2) At <Screen25>, to enable numbering printing with the imprinter, press  (Left arrow button) and select [On].

Press  (Enter button) to confirm the selection. Then <Screen25-1> is displayed.

If numbering printing is not required, press  (Right arrow button) and select [Off].

Then press  (Enter button) to confirm.

<Screen25-1>

!	2	5	-	1		D	i	g	i	t	s
=					5	/		8			



The blinking item is the one selected.

- 3) At <Screen25-1>, press ◀ (Left arrow button) or ▶ (Right arrow button) and let your choice of number of digits blink.
 Selectable number of digits is listed as below.

(1) [5] is blinking: 5 digit

(2) [8] is blinking: 8 digit

Press  (Enter button), then <Screen25-2> is displayed.


<Screen25-2>

!	2	5	-	2	S	t	a	r	t	C	o	u	n	t
=		0	0	0	0	0	0	0	0					

- 4) At <Screen25-2>, specify the initial value of numbering.

By pressing ◀ (Left arrow button) or ▶ (Right arrow button), a digit position (blinking on LCD) can be specified.

By pressing ▶ (Next button) or ▲ (Upper arrow button), the number at the digit can be changed.

Press  (Enter button). <Screen25-3> is displayed.

<Screen25-3>

!	2	5	-	3	E	m	p	t	y	R	e	s	e	t
=					O	n	/	O	f					



Initial number can be increased up to the maximum number (5digit: 99,999/ 8digit: 16,777,215).

- 5) At <Screen25-3>, you can specify if the numbering should be reset at hopper empty.

To specify to reset the numbering at hopper empty, press ◀ (Left arrow button) and select [On].

Press **Enter** (Enter button) to confirm the selection. Then, <Screen25-4> is displayed.

To specify not to reset the numbering at hopper empty, select [Off], press **Enter** (Enter button) and then <Screen 25-4> is displayed.

<Screen25-4>

!	2	5	-	4	R	e	s	e	t	N	o	w
=					N	o	/	Y	e	s		

- 6) At <Screen25-4>, specify if the numbering should be initialized immediately.

To specify to reset immediately, press ▶ (Right arrow button) and select [Yes].

To specify not to reset immediately, select [No] and press **Enter** (Enter button).

- 7) Press **Enter** (Enter button) and make the setting valid.

Press **Exit** (EXIT button) at <Screen25-1>, <Screen25-2>, <Screen25-3>, <Screen25-4>, then the LCD display changes to <Screen25>.

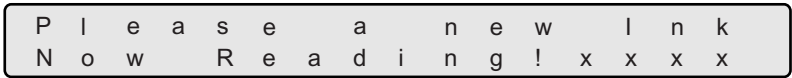
Press **Exit** (EXIT button) at <Screen25>, and the LCD display goes back to [Ready] screen.



Command from the PC overrides the setting from the operator panel.

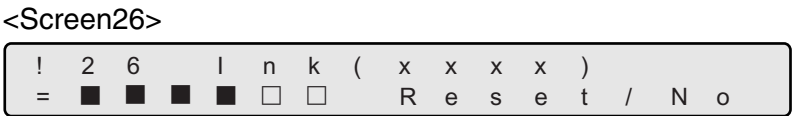
26. Reset the remaining ink counter of imprinter.

If the following message comes up, prepare the new Print cartridge. If no further printing is impossible, replace the Print cartridge and reset the ink counter. If the Print cartridge is replaced before Print cartridge error occurs, be sure to reset the remaining ink counter.

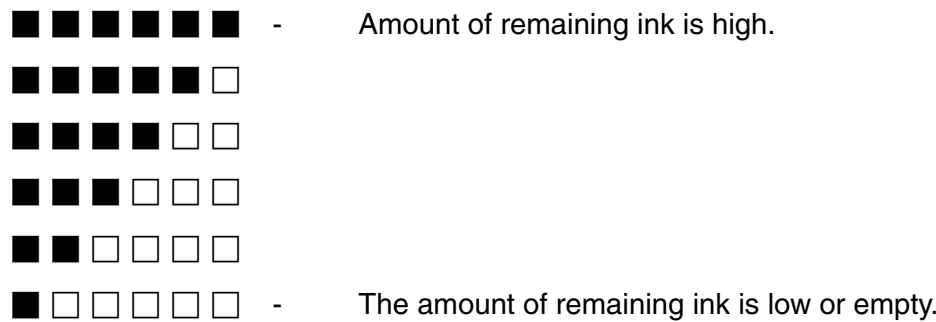


[XXXX] is the scanned sheet counter value.

1) Press ◀ (Next button) or ▶ (Previous button) and let LCD display <Screen26>.



Approximate remaining ink amount is shown as below:

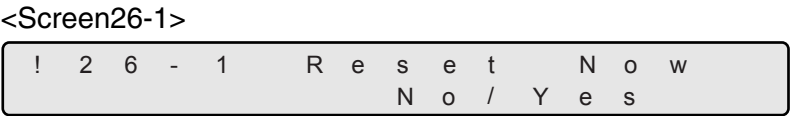


In [XXXX], [Pre] or [Post] is displayed.

2) At <Screen26>, to choose to reset the ink counter, press ◀ (Left arrow button) and select [Reset].

Press **Enter** (Enter button). <Screen26-1> is displayed.

Not to reset, select [No] and press **Enter** (Enter button).

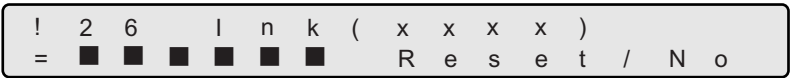


3) At <Screen26-1>, to actually reset the counter, press ▶ (Right arrow button) and select [yes].

To cancel the reset, select [No] and press **Enter** (Enter button).

4) Press **Enter** (Enter button) and reset the counter.

The remaining ink amount indication on LCD goes back to full (■■■■■■■■).



5) Press **Exit** (EXIT button) at <Screen26-1> then the LCD display changes to <Screen26>.

Press **Exit** (EXIT button) at <Screen1> and the LCD display goes back to [Ready] screen.

27. Setting Power save mode

1) Press ◀ (Next button) or ▶ (Previous button) and let LCD display <Screen27>.

<Screen27>

!	2	7	P	o	w	e	r	S	a	v	e	
=			1	0		1	5	2	0	m	i	n

2) At <Screen27>, by pressing ◀ (Left arrow button) or ▶ (Right arrow button), select the scanner wait idle time before entering power save mode.



The blinking item is the one selected.

A minimum of 5 minutes to the maximum of 60 minutes can be selected with 5 minutes increment.



The default time recommended by the ENERGY STAR® program is 15 minutes.

28. Setting Brightness

- 1) Press ◀ (Next button) or ▶ (Previous button) and let LCD display <Screen28>.

<Screen28>

!	2	8		B	r	i	g	h	t	n	e	s	s
C	h	a	n	g	e	?		N	o	/	Y	e	s

- 2) At <Screen28>, to adjust the Brightness, press ▶ (Right arrow button) and select [Yes].

Press **Enter** (Enter button) to confirm the selection. <Screen28-1> is displayed.

If Brightness adjustment is not required, select [No] and press **Enter** (Enter button).

<Screen28-1>

!	2	8	-	1		B	r	i	g	h	t	n	e	s	s
F	r	o	n	t	:		0		B	a	c	k	:		0



The blinking item is the one selected.

- 3) At <Screen28-1>, to adjust the front-side brightness, press ◀ (Left arrow button) and select [Front].

If back side needs brightness adjustment, press ▶ (Right arrow button) and select [Back].

If the brightness needs to be increased, press ◀ (Next button). Each time the button is pressed the brightness value increases by 1.



If the brightness needs to be decreased, press ▶ (Previous button). Each time the button is pressed, the brightness decreased by 1.

- 4) Press **Enter** (Enter button) and make the setting valid.

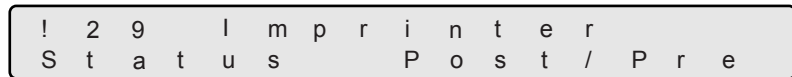
Press **Exit** (EXIT button) at <Screen28-1> then the LCD display changes to <Screen28>.

Press **Exit** (EXIT button) at <Screen28> and the LCD display goes back to [Ready] screen.

29. Confirming Imprinter installation


- 1) Press  (Next button) or  (Previous button) and let LCD display <Screen29>.

<Screen29>



[XXXX/XXXX], imprinter installation status is displayed.

- | | |
|---|------------|
| (1) Only fi-486PRFR is installed: | [Pre] |
| (2) Only fi-486PRRE is installed: | [Post] |
| (3) Both fi-486PRFR and fi-486PRRE are installed: | [Post/Pre] |

- 2) By pressing  (EXIT button), LCD display goes back to "Ready".

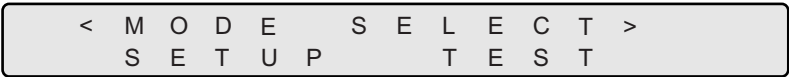
7.4 Test Mode Overview

■ Outline

Scanner operation can be checked in offline test mode.
To enter the test mode, follow the procedures below.

- Test mode

Keep pressing **Start** (Start button) and turn on the power.
Then the operator panel LCD displays the following message.



Press ◀ (Left arrow button) or ▶ (Right arrow button) and select [Reset].
By pressing **Enter** (Enter button), the scanner enters test mode.

To end the test mode, turn off the power.



The blinking item is the one selected.

■ Button functions in test mode

Button name	Function
◇ [Next]	Displays the next menu without saving the change. Referred to as Next button in this manual.
◇ [Previous]	Displays the previous menu without saving the change. Referred to as Previous button in this manual.
◇	Moves to the right item on the menu Referred to as Right arrow button in this manual.
◇	Moves to the left item on the menu Referred to as Left arrow button in this manual.
Enter	- Saves the change and then displays the next menu - Moves to the lower level menu Referred to as Enter button in this manual.
Exit	Moves to the upper level menu without saving the change Referred to as EXIT button in this manual.

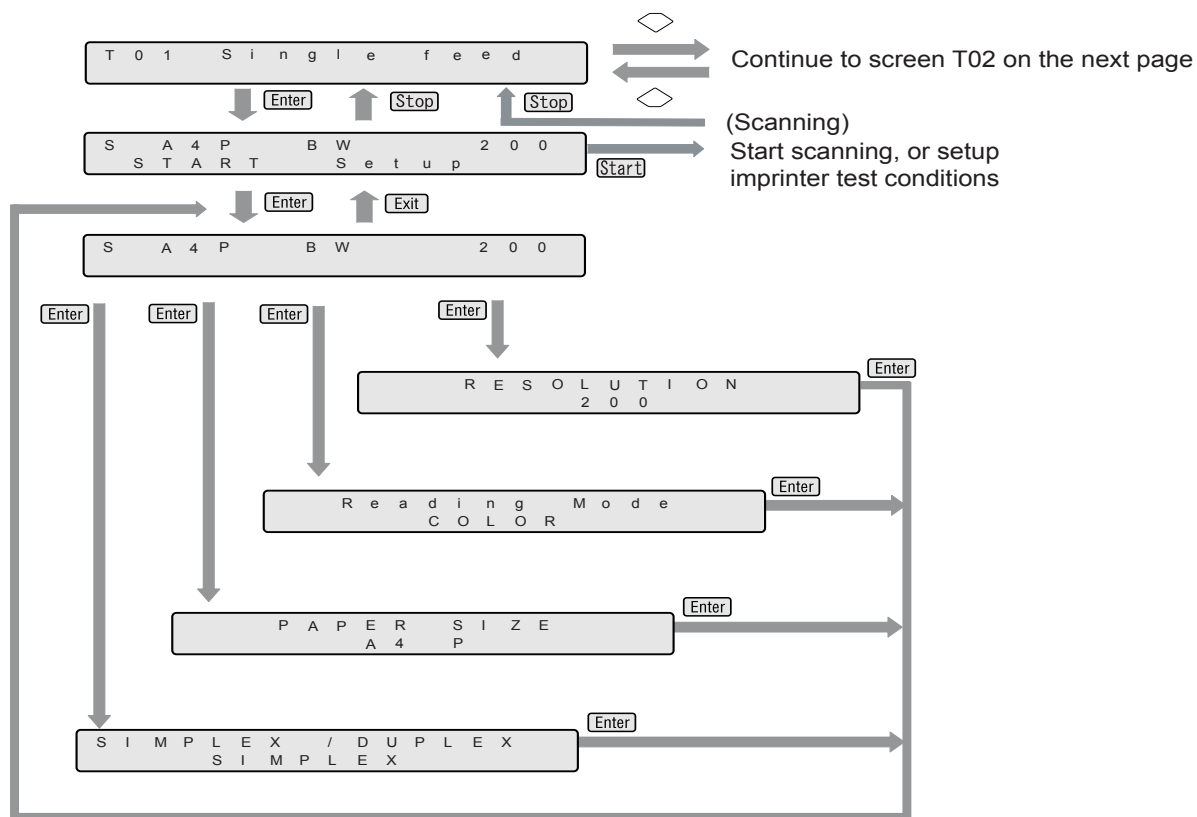
■ Transition of screens in test mode

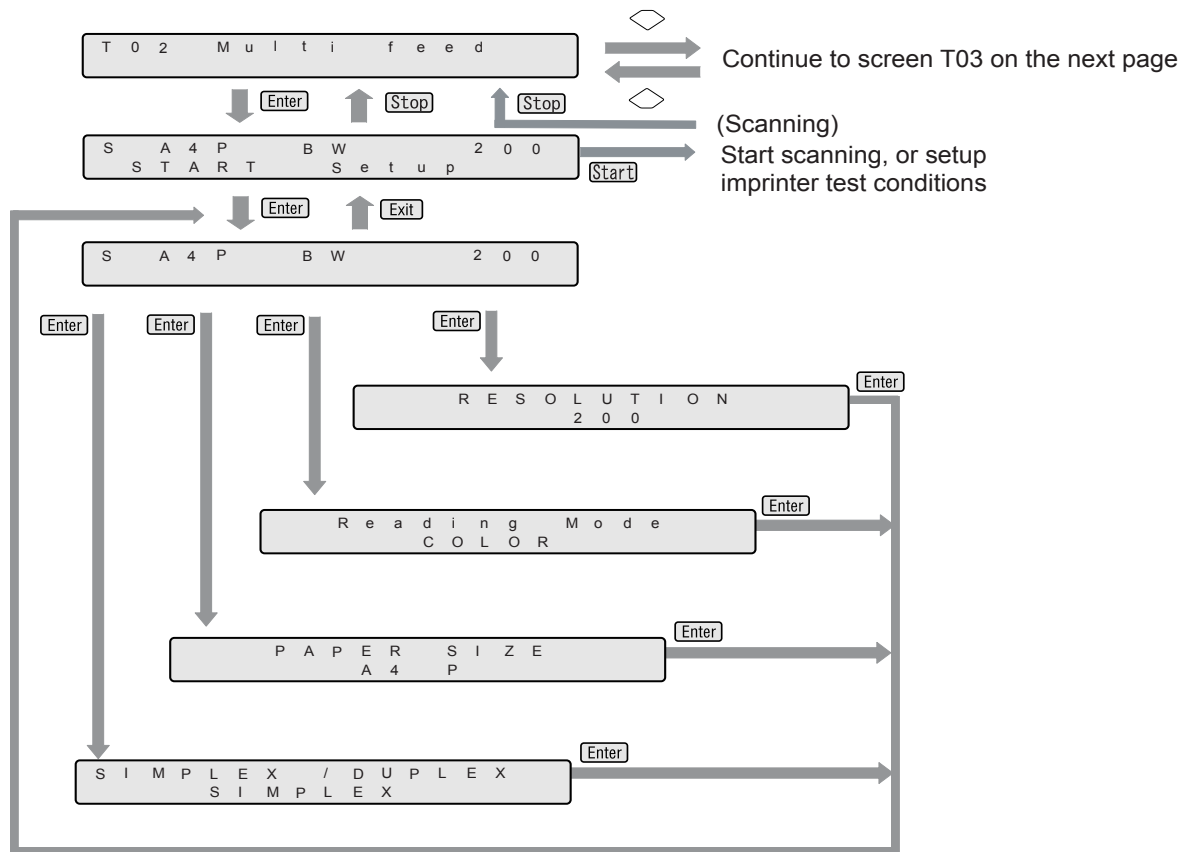
Refer to the next page.

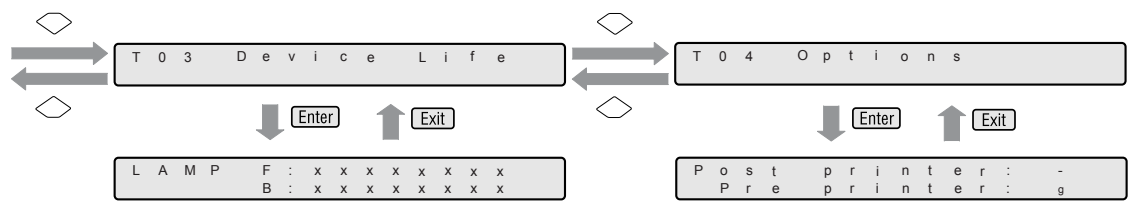
The LCD screen transition chart in the following pages show the concept.

Some of the details are not expressed in the chart.

For the details, please refer to the descriptions in “■ Contents of test mode setting”







■ Contents of test mode setting

LCD display	Descriptions
Single feed	Scans a sheet of document without connecting to PC.
Multi feed	Scans documents continuously without connecting to PC.
Device Life	Shows the cumulative lamp-on hours.
Options	Shows the options installation status.

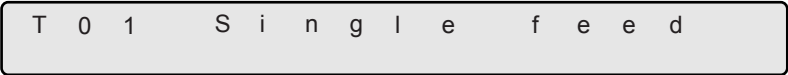
7.5 Test Mode Details

1. Single feed

Without connecting PC, the scanner's whole mechanism operation can be checked.
Only one sheet of document is fed with this test.
Scan parameters can be changed and used for scanning.
Imprinter test print can be performed at the same time.

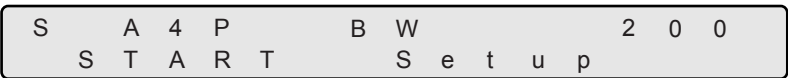
- 1) Place the documents to scan on the hopper.
- 2) Press ◀ (Next button) or ▶ (Previous button) and let the LCD show <Screen50>.

<Screen50>



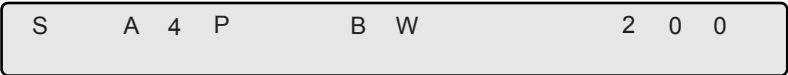
- 3) At <Screen50>, press [Enter] (Enter button) or [Start] (Start button). Then <Screen50-1> is displayed.

<Screen50-1>




- 4) At <Screen 50-1>, press ▶ (Right arrow button) and select [Setup].
Press [Enter] (Enter button) or [Start] (Start button). Then <Screen50-2> is displayed.

<Screen50-2>






4) Specify the scanning conditions.

- (1) At <Screen50-2>, select the left most item, [S] in the sample screen, and press  (Enter button). Then the LCD display shows <Screen50-2.1>.


<Screen50-2.1>

S	I	M	P	L	E	X	/	D	U	P	L	E	X
				S	I	M	P	L	E	X			

At this screen, press  (Left arrow button) or  (Right arrow button) and select simplex or duplex.



Press  (Enter button) and confirm the setting.

Then the display goes back to <Screen50-2>.

- (2) At <Screen50-2>, select the second item from left, [A4P] in the sample screen, and press  (Enter button). Then the LCD display shows <Screen50-2.2>.

<Screen50-2.2>

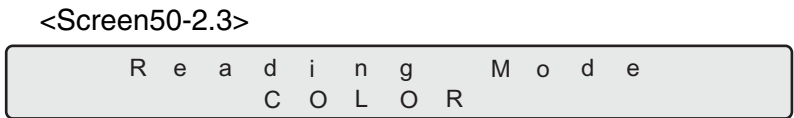
P	A	P	E	R	S	I	Z	E
	A	4			P			

At this screen, press  (Left arrow button) or  (Right arrow button) and select the document size and the orientation. Following parameters can be specified.

A4 portrait	A4P
B4 portrait	B4P
Legal portrait	LGP
11 x 17 inch portrait	DLP
A3 portrait	A3P
A5 landscape	A5L
B5 landscape	B5L
Letter landscape	LTL
A4 landscape	A4L
A5 portrait	A5P
B5 portrait	B5P
Letter portrait	LTP

Press **Enter** (Enter button) and confirm the setting. Then the display goes back to <Screen50-2>.

- (3) At <Screen50-2>, select the third item from left, [BW] in the sample screen, and press **Enter** (Enter button). Then the LCD display shows <Screen50-2.3>.



In this screen, press ◀ (Left arrow button) or ▶ (Right arrow button) and select the scan mode: binary (BW) or color(COLOR).

Press **Enter** (Enter button) and confirm the setting. Then the display goes back to <Screen50-2>.

- (4) At <Screen50-2>, select the right most item, [200] in the sample screen, and press **Enter** (Enter button). Then the LCD display shows <Screen50-2.4>.



At this screen, press ◀ (Left arrow button) or ▶ (Right arrow button) and select scan resolution. Following parameters can be specified.

200:	Scan at 200 dpi
240:	Scan at 240 dpi
300:	Scan at 300 dpi
400:	Scan at 400 dpi

Press **Enter** (Enter button) and confirm the setting. Then the display goes back to <Screen50-2>.

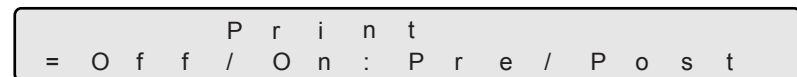
- (5) Press **Exit** (Enter button). Then the display goes back to <Screen50-1>.

At <Screen50-1>, select [START], and press **Start** (Start button).

If fi-486PRFR and/or fi-486PRRE is installed, <Screen50-3> is displayed for you to setup imprinter test conditions.

If an imprinter(s) is not installed, the scanner starts scanning operations.

<Screen50-3>



5) At <Screen50-3>, press ◀ (Left arrow button) or ▶ (Right arrow button) and:

Select [On] to do imprinter test while scanning.

Then select the imprinter to use.

If the printer to use is fi-486PRFR, select [Pre].

If fi-486PRRE, select [Post].

If imprinter test is not required, select [Off].

6) Press **Start** (Start button). Scanning operation starts with or without imprinter test .



If you want to quit, press **Stop** (Stop button).
LCD display goes back to <Screen50>.

2. Multi feed



Without connecting PC, the scanner's whole mechanism operation can be checked.

In this test documents are scanned continuously.

Scan parameters can be changed and used for scanning.



Imprinter test print can be performed at the same time.

1) Place the documents to scan on the hopper.

2) Press  (Next button) or  (Previous button) and let the LCD show <Screen51>.

<Screen51>



T	0	2	M	u	l	t	i	f	e	e	d
---	---	---	---	---	---	---	---	---	---	---	---

3) At <Screen51>, press  (Enter button) or  (Start button), then <Screen51-1> is displayed.

<Screen51-1>

S	A	4	P	B	W	2	0	0	
S	T	A	R	T	S	e	t	u	p


4) At <Screen 50-1>, press  (Right arrow button) and select [Setup].

Press  (Enter button) or  (Start button). Then <Screen51-2> is displayed.

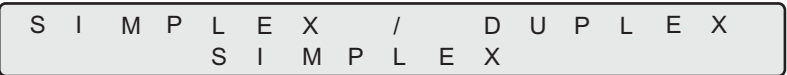
<Screen51-2>



S	A	4	P	B	W	2	0	0
---	---	---	---	---	---	---	---	---


5) Specify the scanning conditions.


(1) At <Screen51-2>, select the left most item, [S] in the sample screen, and press  (Enter button). Then the LCD display shows <Screen51-2.1>.

<Screen51-2.1>

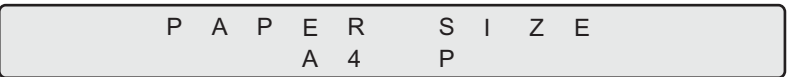




At this screen, press  (Left arrow button) or  (Right arrow button) and select simplex or duplex.

Press  (Enter button) and confirm the setting.
Then the display goes back to <Screen51-2>.


(2) At <Screen51-2>, select the second item from left, [A4P] in the sample screen, and press  (Enter button). Then the LCD display shows <Screen51-2.2>.

<Screen51-2.2>



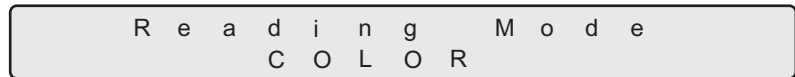
At this screen, press  (Left arrow button) or  (Right arrow button) and select the document size and the orientation. Following parameters can be specified.

A4 portrait	A4P
B4 portrait	B4P
Legal portrait	LGP
11 x 17 inch portrait	DLP
A3 portrait	A3P
A5 landscape	A5L
B5 landscape	B5L
Letter landscape	LTL
A4 landscape	A4L
A5 portrait	A5P
B5 portrait	B5P
Letter portrait	LTP

Press  (Enter button) and confirm the setting. Then <Screen51-2> is redisplayed.

- (3) At <Screen51-2>, select the third item from left, [BW] in the sample screen, and press (Enter button). Then the LCD display shows <Screen51-2.3>.

<Screen51-2.3>



In this screen, press ◀ (Left arrow button) or ▶ (Right arrow button) and select the scan mode: binary (BW) or color(COLOR).

Press (Enter button) and confirm the setting. Then the display goes back to <Screen51-2>.

- (4) At <Screen51-2>, select the right most item, [200] in the sample screen, and press **Enter** (Enter button). Then the LCD display shows <Screen51-2.4>.

<Screen51-2.4>

R	E	S	O	L	U	T	I	O	N
				2	0	0			

At this screen, press ◀ (Left arrow button) or ▶ (Right arrow button) and select scan resolution. Following parameters can be specified.

200:	Scan at 200 dpi
240:	Scan at 240 dpi
300:	Scan at 300 dpi
400 sheets:	Scan at 400 dpi

Press **Enter** (Enter button) and confirm the setting. Then <Screen51-2> is redisplayed.

- (5) Press **Exit** (Enter button). Then <Screen51-1> is redisplayed.

At <Screen51-1>, select [START] and press **Start** (Start button).

If fi-486PRFR and/or fi-486PRRE is installed, <Screen51-3> is displayed for you to setup imprinter test conditions.

If an imprinter(s) is not installed, the scanner starts scanning operations.

<Screen51-3>

			P	r	i	n	t		
=	O	f	f	/	O	n	:	P	r
								e	/
								P	o
								s	t

5) At <Screen50-3>, press ◀ (Left arrow button) or ▶ (Right arrow button) and:

Select [On] to do imprinter test while scanning.

Then, select the imprinter to use.

If the printer to use is fi-486PRFR, select [Pre].

If fi-486PRRE, select [Post].

If imprinter test is not required, select [Off] .



6) Press **Start** (Start button). Scanning operation starts with or without imprinter test.



If you want to quit, press **Stop** (Stop button).
The LCD goes back to <Screen51>.



3. Display the cumulative lamp-on hours

You can check the cumulative number of lamp-on hours.

- 1) Press  (Next button) or  (Previous button) and let LCD display <Screen53>.

<Screen53>

T	O	3	D	e	v	i	c	e	L	i	f	e
---	---	---	---	---	---	---	---	---	---	---	---	---

- 2) At <Screen53>, press  (Start button) or  (Enter button). Then <Screen53-1> is displayed.

<Screen53-1>



L	A	M	P	F	:	x	x	x	x	x	x	x	x
				B	:	x	x	x	x	x	x	x	x

[F: XXXXXXXX] indicates the cumulative lamp-on hours for the Front-side lamp.
[B: XXXXXXXX] indicates the cumulative lamp-on hours for the Back-side lamp.

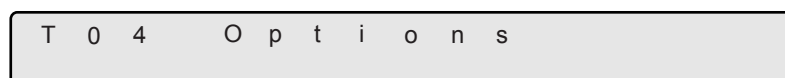
- 3) Press  (Stop button) or  (EXIT button). Then <Screen53> is redisplayed.



4. Option installation status display

You can check the options installation status.

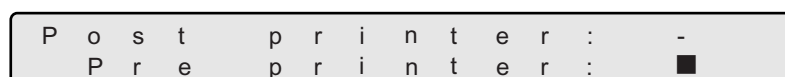
- 1) Press  (Next button) or  (Previous button) and let LCD display <Screen54>.

<Screen54>





- 2) At <Screen54>, press  (Enter button) or  (Start button). <Screen54-1> is displayed.

<Screen54-1>



If fi-486PRFR is installed, LCD display shows [Pre Printer : ■]. [■] indicates that the printer is installed. If not installed, it shows [Pre Printer:-] .

If fi-486PRRE is installed, LCD display shows [Post Printer : ■]. [■] indicates that the printer is installed. If not installed, it shows [Post Printer:-] .

- 3) Press  (EXIT button) or  (Stop button). Then <Screen54> is redisplayed.

8 OPTIONS

This chapter describes options for fi-4860C.

8.1 Options	232
8.2 fi-486PRFR (Front side imprinter)	233
8.3 fi-486PRRE (Rear side imprinter)	234

8.1 Options

The following lists options available for the scanner.

Descriptions	Part No.	Remarks
fi-486PRFR	PA03296-D206	Prints information on the front of a document prior to scan
fi-486PRRE	PA03296-D200	Prints information such as serial number on the back of a document after scan

For the details please contact FUJITSU scanner dealer where you purchased the scanner or FUJISTU group company responsible for your country.



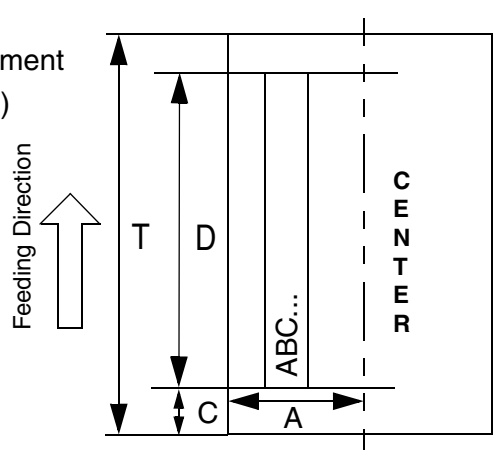
- fi-486PRFR is installed at the front side of document path, inside of the scanner. It prints prior to scanning.
- fi-486PRRE is installed at the rear side of the document path, inside of the scanner. It prints after the scanning.



The both imprinters can be installed on the scanner at the same time.
However, only one of them can be specified for printing.
Depending on the application, appropriate imprinter should be specified.

8.2 fi-486PRFR (Front side imprinter)

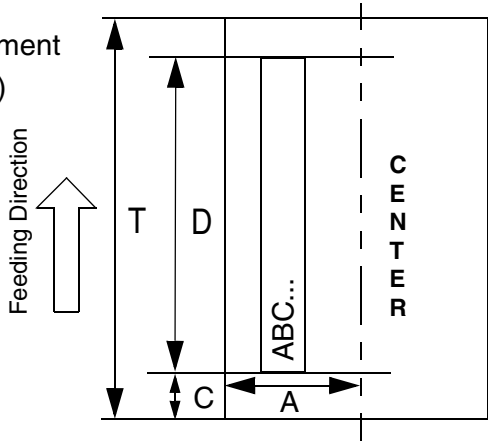
fi-486PRFR (Front side imprinter) Specifications are described below.

Item	Descriptions
Printing Method	Thermal Ink Jet
Printable characters	Alpha bet letters : A to Z, a to z Numeric characters: 0,1 to 9 Symbols : ! " # \$ % & ' () * + , - . / : ; < = > ? @ [\] ^ _ { } -
Maximum printable characters per line	40
Character size	Height 2.91mm x Width 2.82mm
Character pitch	Approximately 3.53mm
Printing area	<p>Printable area is shown as below.</p> <p>T: Length of a document A: A half of the width of a document D: 140.5mm or less (40column) C: 70.0mm or more</p> <p>$T-(C+D)$: 7mm or more</p> 
Consumables	Print Cartridge

As for the operations and functions of fi-486PRFR (Front side imprinter), refer to the fi-486PRFR Operator's Guide included in the package.

8.3 fi-486PRRE (Rear side imprinter)

fi-486PRFR (Rear side imprinter) Specifications are described below.

Item	Descriptions
Printing Method	Thermal Ink Jet
Printable characters	Alpha bet letters : A to Z, a to z Numeric characters: 0,1 to 9 Symbols : ! " # \$ % & ' () * + , - . / : ; < = > ? @ [\] ^ _ { } -
Maximum printable characters per line	40
Character size	Height 2.91mm x Width 2.82mm
Character pitch	Approximately 3.53mm
Printing area	<p>Printable area is shown as below.</p> <p>T: Length of a document A: A half of the width of a document D: 140.5mm or less (40column) C: 70.0mm or more</p> <p>$T-(C+D)$: 7mm or more</p> 
Consumables	Print Cartridge

As for the operations and functions of fi-486PRRE (Rear side imprinter), refer to the fi-486PRRE Operator's Guide included in the package.

9 SCANNER SPECIFICATIONS

This chapter describes the Scanner Specifications.

9.1 Basic Product Specifications	236
9.2 Installation Specifications	237
9.3 Dimensions	239

9.1 Basic Product Specifications

1	Scanner Type		ADF(Automatic Document Feeder) and Manual feed	-
2	Image sensor		Color CCD x 2	Front/Back
3	Light source		White cold cathode discharge lamp x 2	Front/Back
4	Scanning area	Minimum	74mmx74mm	-
		Maximum	A3 or 11x17 in.	-
5	Document thickness		52g/m ² to 127g/m ²	(* 1)
6	Scanning speed (A4 Portrait) * 2	Binary (Black and White)	Simplex 60 ppm Duplex 120 ipm	200dpi
		Color	Simplex 60 ppm Duplex 120 ipm	150 dpi (* 3) 200 dpi
7	ADF capacity		500 sheets	80g/m ²
8	Optical resolution		400 dpi	-
9	Output resolution	Binary (Black and White)	100, 150, 200, 240, 300, 400 dpi	-
		Grayscale	100, 150, 200, 240, 300, 400 dpi	-
		Color	100, 150, 200, 300, 400 dpi	-
10	Grayscale level		8 bits per color	internal 10 bits
11	Output mode of halftone patterns		Dither/Error diffusion	-
12	Interface		Ultra Wide SCSI	Shielded, 68 pin half density (Mini DB68)
13	Other functions		JPEG compression	-

(* 1) For details, see “Chapter 8 ADF and Document Specifications”

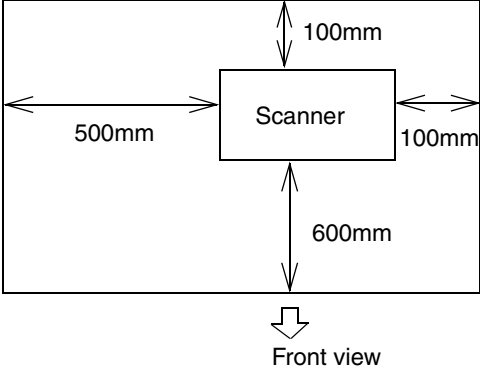
(* 2) The scanning speed is the maximum speed of the scanner hardware. The actual speed may be slower due to the system overhead such as data transfer time.

(* 3) With JPEG enabled

(* 4) The maximum capacity varies depending on the document thickness. Refer to “Chapter 6 ADF DOCUMENT SPECIFICATIONS.”

(* 5) Avoid connecting other SCSI devices to the same bus.
It can reduce the scanner throughput.

9.2 Installation Specifications

Item		Specification		
Dimensions?mm (With hopper and stacker retracted)		Depth	Width	Height
		431	520	523
Space requirements		<div>  <p>Front view</p> </div>		
Weight (kg)		45 kg		
Input power	Voltage	AC100 - 240V±10 %		
	Phase	Single-phase		
	Frequency	50/60Hz + 2%/ -4%		
Power consumption		200W or less		

Item		Specification	
Ambient condition	Device status	Operating	Not operating
	Temperature	15 - 35degree Celsius	- 20 - 60 degree Celsius
	Humidity	20 - 80%	8 - 95%
Heat capacity		172kcal or less	
Shipping Weight (kg)		50kg	
Product life		5years or 7,200,000 sheets whichever comes first.	



The product life of this scanner is 5 years or 7,200,000 sheet scans whichever comes first from the date of purchase.

As for the the cumulative number of scanned pages, please refer to the section "1.3 Basic Operation of the Operator Panel, Operator panel Counter display "

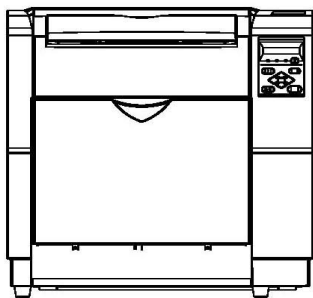
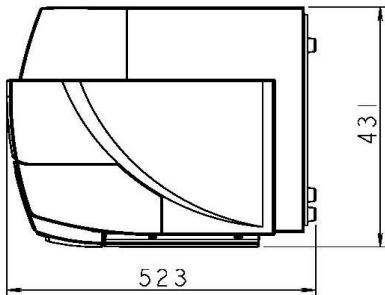
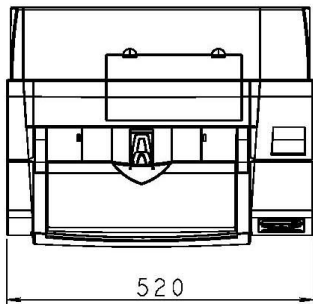


The actual product life may become shorter than the 7,200,000 sheets depending on the conditions for cleaning, consumables replacement frequency, and the documents quality.



If the scanner is used beyond the product life, failures and/or scan performance degradation may occur.

9.3 Dimensions



APPENDIX 1 DROP-OUT COLOR

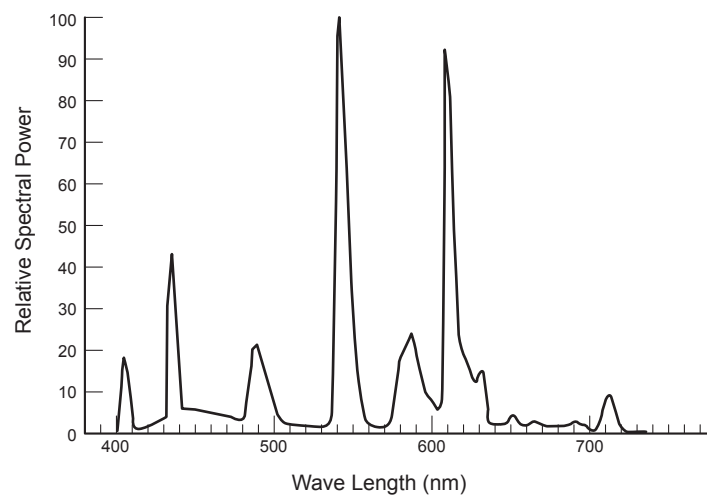
A drop-out color is a color visible by a human eye but not visible to the scanner.

To check the grounding color of document for a drop-out color, use the method and follow the standards given below.

■ Print density measurement

The measurement must be made in one of the following ways:

- A light source using fluorescent.
- Macbeth PCS meter PCM II is used, which requires a filter.



■ Drop-out color standard

In the spectrum of fluorescent lamp the PCS value must satisfy the following standards:

- Maximum: 0.14 or less
- Average: 0.1 or less

APPENDIX 2 DOUBLE-FEED DETECTION CONDITIONS

There are three double-feed detection modes: document thickness, document length, and both document thickness and length. The following conditions must be satisfied in each of these detection modes.

■ Detection by Document Thickness

Sheets of the same thickness shall be set in the ADF at a time.

- Document thickness: 0.065 to 0.15mm
- Printed area: 12% or less
- No black printed areas are allowed at the center area (26 x 10mm) at the leading edge of the document.
- Punched holes are not allowed within 35mm of the vertical center line of the document.
- The deviation in the amount of the light transmitted through background areas must not be less than 10%.

■ Detection by Document Length

Sheets of the same length shall be set in the ADF at a time.

- Document length deviation: 1% or less
- Printed area: 12% or less
- No black printed areas are allowed at the center area (26 x 10mm) at the leading edge of the document.
- Punched holes are not allowed within 35mm of the vertical center line of the document.
- The deviation in the amount of the light transmitted through background areas must not be less than 10%.

■ Detection by Document Thickness and Length

Sheets of the same thickness and length shall be set in the ADF at a time.

- Document length: 0.065 to 0.15mm
- Document length deviation: 1% or less
- Printed area: 12% or less
- No black printed areas are allowed at the center area (26 x 10mm) at the leading edge of the document.
- Punched holes are not allowed within 35mm of the vertical center line of the document.
- The deviation in the amount of the light transmitted through background areas must not be less than 10%.



The type and the conditions of document and the conditions sometimes cause the double-feed detection rate to drop.

APPENDIX 3 MESSAGES OF OPERATOR PANEL

■ Messages of Operator panel

<Not Ready status>
(Initializing) ■ changes to n with progress of time, and when all become n, it move to the following check states.



<Not Ready status>
(Ejecting document)

E	j	e	c	t		p	a	p	e	r		n	o	w
W	a	r	m	i	n	g	-	u	p		N	o	w	!!

<Not Ready status>
(Checking sensor)

C	h	e	c	k		s	e	n	s	o	r		n	o	w
W	a	r	m	i	n	g	-	u	p		N	o	w	!!	

<Not Ready status>
(Reseting the hopper)

	s	e	t		h	o	p	p	e	r		n	o	w
W	a	r	m	i	n	g	-	u	p		N	o	w	!!

<Not Ready status>
(Waiting to initialize option board)

W	a	i	t	i	n	g		I	F		R	e	a	d	y
---	---	---	---	---	---	---	--	---	---	--	---	---	---	---	---

<preparing the print
cartridge>
(At power on)

P l e a s e p r e p a r e
a n e w l i n k (p r e)

P l e a s e p r e p a r e
a n e w l i n k (p o s t)

P l e a s e p r e p a r e
a n e w l i n k (B o t h)

<Scanning>

P l e a s e a n e w l i n k
N o w R e a d i n g ! x x x x



"xxxx" shows the number of Batch counter value.

<Scanning>

N o w R e a d i n g ! x x x x



"xxxx" shows the number of Batch counter value.

<AtLow power
mode>

When the messages of LCD on the Operation panel disappears
and the Power LED lamp lights, the scanner is in Low power
mode.



The scanner wake up from Low power mode by one
of the following operations.

- Press any button on the Operator Panel.
- Set the documents on the Hopper.
- Send the command from PC.

<Cleaning request>
(Scanning)

When the Pickroller needs to be cleaned, the following message is displayed on the Operator panel.

C	l	e	a	n		P	i	c	k	r	o	l	l	e	r		
N	o	w				R	e	a	d	i	n	g	!	x	x	x	x



"xxxx" shows the number of Batch counter value.

(Scanning)

When the Removable sheet guide and the Glass sheet guide require cleaning the following message is displayed on the Operator panel.

C	l	e	a	n		A	D	F		G	l	a	s	s			
N	o	w				R	e	a	d	i	n	g	!	x	x	x	x



"xxxx" shows the number of Batch counter value.

(Scanning)

When both the Pickroller and the sheet guides need to be cleaned, the following message is displayed on the Operator panel.

C	l	e	a	n		P	i	c	k	r	o	l	l	e	r
C	l	e	a	n		A	D	F		G	l	a	s	s	

<Cleaning request>
(Waiting)

When the Pickroller needs to be cleaned, the following message is displayed on the Operator panel.

C	l	e	a	n		P	i	c	k	r	o	l	l	e	r
R	e	a	d	y		x	x	x	x	x	x	x	x	x	x



"xxxxxxxx" shows the number of Batch counter value.

(Waiting)

When the Removable sheet guide and the Glass sheet guide need to be cleaned, the following message is displayed on the Operator panel.

C	l	e	a	n		A	D	F		G	l	a	s	s	
R	e	a	d	y		x	x	x	x	x	x	x	x	x	x



"xxxxxxxx" shows the number of Batch counter value.

(Waiting)

When both the Pickroller and the sheet guides need to be cleaned, the following message is displayed on the Operator panel.

C	l	e	a	n		P	i	c	k	r	o	l	l	e	r
C	l	e	a	n		A	D	F		G	l	a	s	s	



During waiting status, "Ready" and "cleaning directions" are displayed by turns every 2 seconds.

<Double feed error> (Scanning) The following message is displayed while the scanner is scanning continuously in the state where double feed has detected (by thickness check).
If a double feed detection state is canceled on "Ready" screen after scanning, the upper row of this message disappear.

D	o	u	b	l	e	F	e	e	d						
N	o	w		R	e	a	d	i	n	g	!	x	x	x	x



"xxxx" shows the number of Batch counter value.

(Waiting) The following message is displayed while the scanner is waiting in the state where double feed (check in thickness) has detected.
Press the [Stop] button, and the double feed detection state is canceled.
The upper row of this message blinks with cycle per second

D	o	u	b	l	e	F	e	e	d	x	x	x	x	x
						R	e	a	d	y	x	x	x	x



"xxxx"(upper) shows the number of Abration counter value.
"xxxxxxx"(lower) shows the number of Life counter value.

■ Error message (Temporary error)

<Hopper empty>

The following messages are displayed if no documents are on the hopper during the scanning operation. Please place documents on the hopper. Scanning is continued, when placing documents on the hopper for re-scanning.
To clear this message, press the [Stop] button.

P a p e r E m p t y x x x x x

(at Double feed)

D o u b l e F e e d x x x x x
P a p e r E m p t y



"xxxx" shows the number of Batch counter value.

<Paper Jam>

The following message displayed if a document is jammed in the ADF.
Refer to "Operator guide" included in "User manual CD-ROM" for removing the document remained in the scanner.

P a p e r J a m x



One of "1" - "8" is displayed instead of "x", depending on paper jam status.

<ADF cover open>

The following message is displayed if the ADF cover is not closed completely.
Close the ADF cover completely, to enable scanning.

A D F - C o v e r O p e n

<Double feed error> The following message is displayed, when the double feed is detected by thickness check.

D o u b l e F e e d

(by length check) The following message is displayed, when the double feed is detected by length check.

L e n g t h e r r o r

<Miss pick> The following message is displayed, when a document is not sent from the hopper to the ADF.

M i s - p i c k

<Pick over run> The following message is displayed, when a document is sent from the hopper to the ADF and it goes into too much than the normal position.

P i c k o v e r r u n

<Skew error> The following message is displayed, When skewed document is fed from the hopper to the ADF.

I r r e g u l a r p a p e r

<Hopper is full or
Pick unit not set>

The following message is displayed, when the Pick roller unit is not set correctly or when there are too many documents.
(When the documents are on the hopper.)

H o p p e r o v e r l o a d

<Pick unit not set>

The following message is displayed, when the Pick roller unit is not set correctly.
(When the documents are not exist on the hopper.)

P i c k r o l l e r u n i t
n o t s e t

<Pick unit not set>

The following message is displayed, when the Pick roller unit is not set correctly during scanning.

P i c k r o l l e r u n i t

<Break roller not
set>

The following message is displayed, when scanning while the Break roller unit is not set correctly.

B r e a k r o l l e r
n o t s e t

<Separation roller >

The following message is displayed, when rotating the Separation roller and the Brake roller does not rotate at all.

S e p a r a t i o n
r o l l e r w o r n

<Checking Consumables>

The following message is displayed, when the Abrasion counter value exceeds the setting value to display an consumables replacement message.

A b r a t i o n a l a r m

<Print cartridge not set>

The following message is displayed, when the Print cartridge is not set to fi-486PRFR (Imprinter of front-side) or to fi-486PRE (Imprinter of rear-side).

P r e
N o l i n k C a r t r i d g e

P o s t
N o l i n k C a r t r i d g e

■ Alarm message (Hardware error)

The following messages are displayed, when an error occurs inside the scanner. In this case, please switch on the power supply once again after disconnecting the power supply.

If the same message is displayed again, please contact to a distributor or an nearest imaging service and support center for help.

<Optical alarm >
(Front side)

The following message is displayed, when an error occurs to the front side optical unit.

F r o n t S i d e
O p t i c a l A l a r m

<Optical alarm >
(Back side)

The following message is displayed, when an error occur to the back side optical unit.

B a c k S i d e
O p t i c a l A l a r m

<Motor fuse alarm>
(Toransport motor)

The following messages are displayed, when the fuse of various motors (Toransport motor, Separation motor, Pick motor, Hopper motor) goes out.

F	u	s	e		a	l	a	r	m
F	e	e	d		m	o	t	o	r

(Separation motor)

		F	u	s	e		a	l	a	r	m				
S	e	p	a	r	a	t	i	o	n		m	o	t	o	r

(Pick motor)

		F	u	s	e		a	l	a	r	m
P	i	c	k		m	o	t	o	r		

(Hopper motor)

		F	u	s	e		a	l	a	r	m
H	o	p	p	e	r		m	o	t	o	r

<Lamp fuse alarm>
(Front side)

The following message is displayed, when the fuse for the lamp for front side belows out.

		F	u	s	e		a	l	a	r	m			
F	r	o	n	t		s	i	d	e		l	a	m	p

<Lamp fuse alarm>
(Back side)

The following message is displayed, when the fuse for the lamp for back side belows out.

		F	u	s	e		a	l	a	r	m		
B	a	c	k		s	i	d	e		l	a	m	p

<Background fuse alarm>
(Front side)

The following message is displayed, when the fuse for changing the Background of front side belows out.

		F	u	s	e		a	l	a	r	m					
B	a	c	k		g	r	o	u	n	d	:	F	r	o	n	t

<Background fuse alarm>
(Back side)

The following message is displayed, when the fuse for changing the Background of back side belows out.

		F	u	s	e		a	l	a	r	m				
B	a	c	k		g	r	o	u	n	d	:	B	a	c	k

<Background fuse
error>
(Front side)

The following message is displayed, when the Background of
front side is unable to change.

F	r	o	n	t	s	i	d	e						
B	a	c	k	g	r	o	u	n	d	A	l	a	r	m

<Background fuse
error>
(Back side)

The following message is displayed, when the Background of
back side is unable to change.

B	a	c	k	s	i	d	e							
B	a	c	k	g	r	o	u	n	d	A	l	a	r	m

<Hopper over run>

The following message is displayed, when the hopper moves over the normal position.

H o p p e r o v e r r u n

<Sensor control error>

The following message is displayed, when an error occurs in the sensor control part.

S e n s o r C o n t r o l
A l a r m

<Sensor dirty error>

The following message is displayed, when an error occurs owing to a dirt on the sensor.

x x x x S e n s o r d i r t y



"xxxx." shows the sensor name (SF0, SA4, and SSK2 etc.)

<Sensor error>

The following message is displayed, when a sensor error occurs

x x x x S e n s o r e r r o r



"xxxx." shows the sensor name (SF0, SA4, and SSK2 etc.)

<Temprature error> The following message is displayed, when the temperature inside the scanner becomes higher than standard temperature.

T e m p e r a t u r e
a l a r m

<Power supply error> The following message is displayed, when an error occurs in the Power supply.

P o w e r s u p p l y
e r r o r

<Fan alarm> The following message is displayed, when an error occurs on the Fan.

F A N A l a r m

<Memory alarm> The following message is displayed, when an error occurs in the Memory.

M e m o r y A l a r m

<EEPROM Alarm> The following message is displayed, when an error occurs in EEPROM.

A D D R E S S 0 0 H
E E P R O M A l a r m



The adress where the error occurs is displayed into "xxxx."

<VDCC Read/Write error>

The following message is displayed, when an error occurs during accessing to the area of VDCC.

V D C C 2 R / W E r r o r

<Dither/Gamma Read/Write error>

The following message is displayed, when an error occurs during accessing to the Dither/Gamma RAM.

D i t h e r / G a m m a
R / W E r r o r

<Temporary memory Read/Write error>

The following message is displayed, when an error occurs during accessing to the temporary memory.

T e m p M e m R / W e r r o r

<MDC download error>

The following message is displayed, when an error occurs during downloading the firmware to MDC.

M D C d o w n l o a d
E r r o r

<Image transration alarm>

The following message is displayed, when an error occurs during sending image data.

I m g T r a n s A l a r m

<Imprinter alarm>

The following message is displayed, when an error occurs in fi-486PRFR (Imprinter of front-side) or fi-486PRRE (Imprinter of rear-side).

P r e
I m p r i n t e r A l a r m

P o s t
I m p r i n t e r A l a r m

<Command alarm> The following message is displayed, when an error occurs in the command sequence from PC.

(MDC command timeout 1)

C o m m a n d E r r o r 1

(MDC command timeout 2)

C o m m a n d E r r o r 2

ÄiSDC command Sequence errorÄj

C o m m a n d E r r o r 3

(MDC response error)

C o m m a n d E r r o r 4

(SCSI response timeout)

C o m m a n d E r r o r 5

(MDC timeout)

M D S T i m e o u t

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fi-4860C Image Scanner Operator's Guide

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