Service Manual

iR C3380/2880 Series

Canon

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Application

This manual has been issued by Canon Inc. for qualified persons to learn technical theory, installation, maintenance, and repair of products. This manual covers all localities where the products are sold. For this reason, there may be information in this manual that does not apply to your locality.

Corrections

This manual may contain technical inaccuracies or typographical errors due to improvements or changes in products. When changes occur in applicable products or in the contents of this manual, Canon will release technical information as the need arises. In the event of major changes in the contents of this manual over a long or short period, Canon will issue a new edition of this manual.

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Caution

Use of this manual should be strictly supervised to avoid disclosure of confidential information.

Symbols Used

This documentation uses the following symbols to indicate special information:

Symbol	Description
	Indicates an item of a non-specific nature, possibly classified as Note, Caution, or Warning.
	Indicates an item requiring care to avoid electric shocks.
	Indicates an item requiring care to avoid combustion (fire).
	Indicates an item prohibiting disassembly to avoid electric shocks or problems.
	Indicates an item requiring disconnection of the power plug from the electric outlet.
 Memo	Indicates an item intended to provide notes assisting the understanding of the topic in question.
 REF.	Indicates an item of reference assisting the understanding of the topic in question.
	Provides a description of a service mode.
	Provides a description of the nature of an error indication.

The following rules apply throughout this Service Manual:

1. Each chapter contains sections explaining the purpose of specific functions and the relationship between electrical and mechanical systems with reference to the timing of operation.
   In the diagrams, ▭▮▮▮▭ represents the path of mechanical drive; where a signal name accompanies the symbol , the arrow ⟶ indicates the direction of the electric signal.
   The expression "turn on the power" means flipping on the power switch, closing the front door, and closing the delivery unit door, which results in supplying the machine with power.
2. In the digital circuits, '1'is used to indicate that the voltage level of a given signal is "High", while '0' is used to indicate "Low".(The voltage value, however, differs from circuit to circuit.) In addition, the asterisk (*) as in "DRMD*" indicates that the DRMD signal goes on when '0'.
   In practically all cases, the internal mechanisms of a microprocessor cannot be checked in the field. Therefore, the operations of the microprocessors used in the machines are not discussed: they are explained in terms of from sensors to the input of the DC controller PCB and from the output of the DC controller PCB to the loads.

The descriptions in this Service Manual are subject to change without notice for product improvement or other purposes, and major changes will be communicated in the form of Service Information bulletins.
All service persons are expected to have a good understanding of the contents of this Service Manual and all relevant Service Information bulletins and be able to identify and isolate faults in the machine."

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Chapter 1 Introduction

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1.1 System Construction

1.1.1 System Configuration Overview (Delivery Accessories)

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

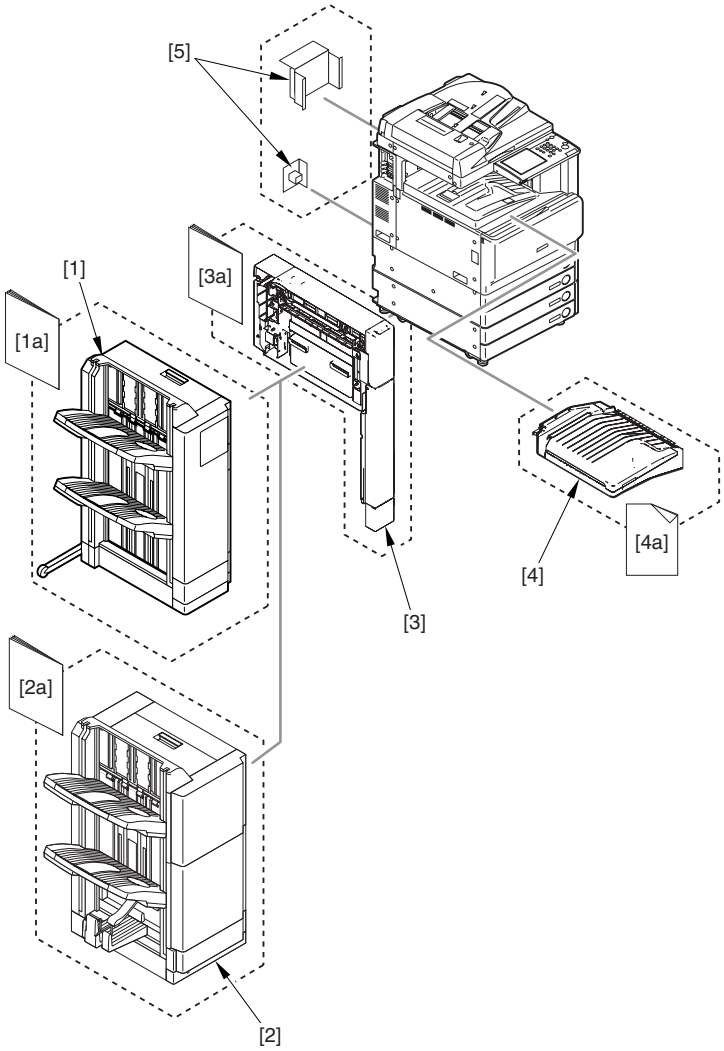
The delivery accessories for the machine can be divided into three patterns in accordance with the available functions.
- In case a large amount of delivery processing or a several types of delivery processing (e.g., staple, punch) are necessary: system configuration 1 for the delivery accessories.
- In case some delivery processing (e.g., staple) is necessary: system configuration 2 for the delivery accessories.
- In case some delivery processing (e.g., three-system sorting) is necessary: system configuration 3 for the delivery accessories.

The configuration is shown in the next section.

1.1.2 System Configuration 1 (Delivery Accessories)

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The system configuration is shown below.



F-1-1

[1]	Finisher-Y1	[1a]	Installation Procedure - Mounting the Finisher-Y1. - Mounting the Buffer Path Unit [4].
[2]	Saddle Finisher-Y2	[2a]	Installation Procedure - Mounting the Finisher-Y2. - Mounting the Buffer Path Unit [4].
[3]	Puncher Unit-L1/M1/N1/P1	[3a]	Installation Procedure - Mounting the Puncher Unit-L1/M1/N1/P1
[4]	Buffer Path Unit-E2	[4a]	Instruction's sheet of corresponding Installation Procedure For instructions on installation, see the Installation Procedure if the respective machine.
[5]	Optional Power Supply-R1 [120V/230V as standard equipments] (It is needed when mounting [1] to [3].)		

The available functions and the accessories needed are shown below.

T-1-1

Function	Accessory needed
- Three-system delivery function - Staple function	Finisher Y1 or Saddle Finisher-Y2 Optional Power Supply-R1 (100V) Buffer Path Unit-E2

T-1-2

Function	Accessory needed
- Saddle function	Saddle Finisher-Y2 Optional Power Supply-R1 (100V) Buffer Path Unit-E2

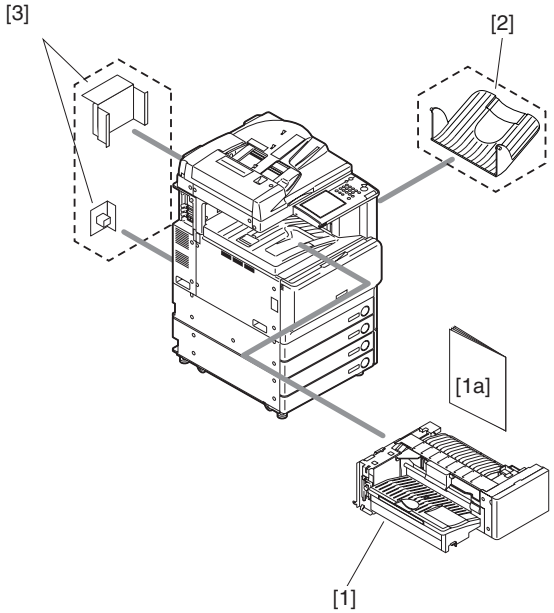
T-1-3

Function	Accessory needed
- Punch function	Finisher Y1 or Saddle Finisher-Y2 Optional Power Supply-R1 (100V) Buffer Path Unit-E2 Puncher Unit-L1/M1/N1/P1

1.1.3 System Configuration 2 (Delivery Accessories)

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The system configuration is shown below.



F-1-2

[1] Finisher-Z1

[2] Copy Tray-J1

[3] Optional Power Supply-R1 [120V/230V as standard equipments]

[1a] Installation Procedure
- Mounting the Finisher-Z1.

Installation Procedure
- Refer to this service manual.

The available functions and the accessories needed are shown below.

T-1-4

Function	Accessory needed
- Two-system delivery function	Copy Tray-J1

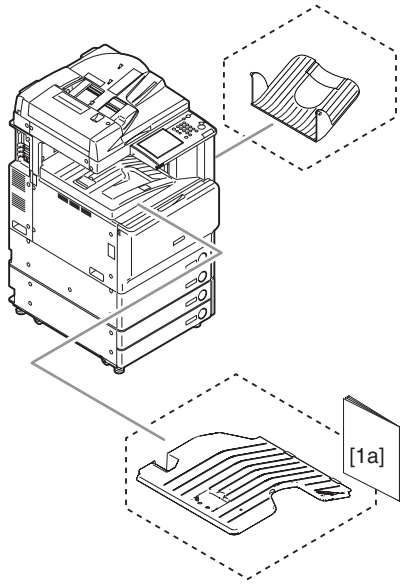
T-1-5

Function	Accessory needed
- Two-system delivery function - Staple function	Finisher-Z1 Optional Power Supply-R1 (100V) Copy Tray-J1

1.1.4 System Configuration 3 (Delivery Accessories)

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The system configuration is shown below.



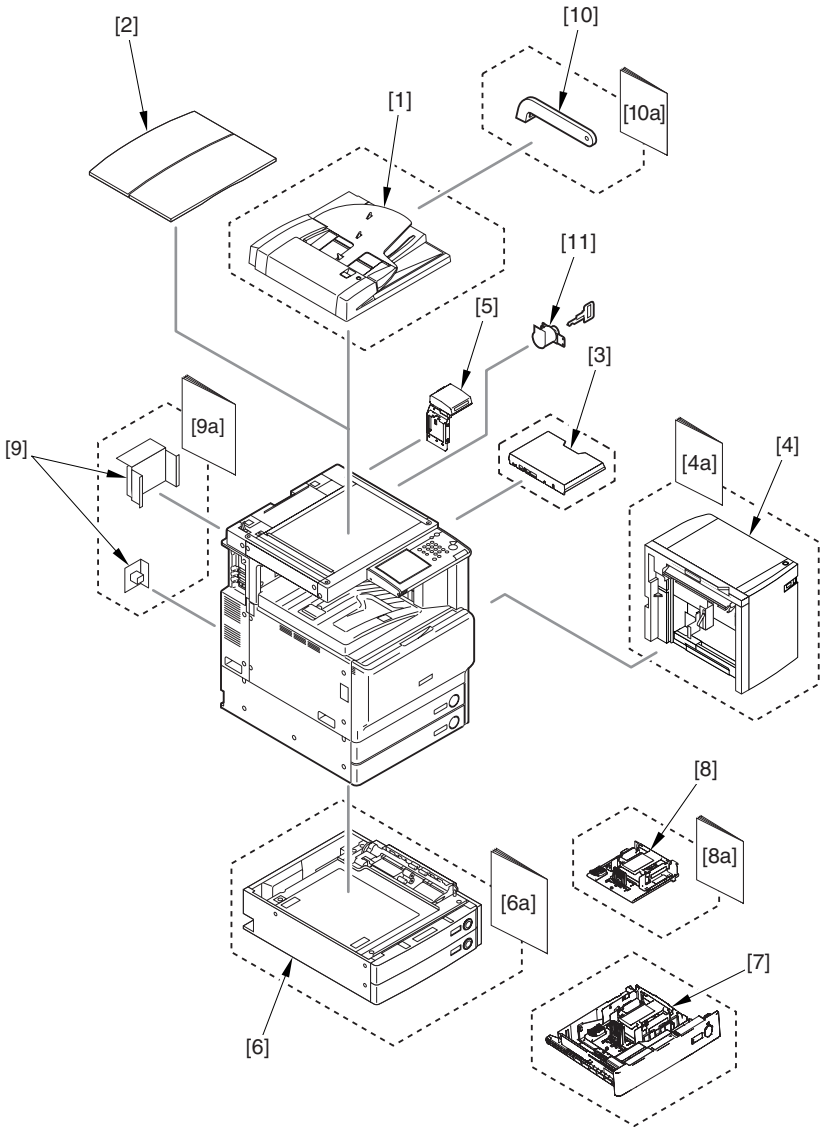
F-1-3

[1]	Inner 2-way Tray-D1	[1a]	Installation Procedure - Mounting the Inner 2-way Tray-D1.
[2]	Copy Tray-J1		Installation Procedure - Refer to this service manual.

1.1.5 System Configuration (Pickup/Original Processing Accessories)

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The system configuration is shown below.



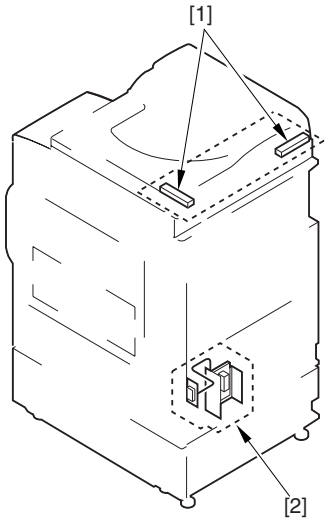
F-1-4

[1]	DADF-N1		Installation Procedure - Refer to this service manual.
[2]	Platen Cover Type-H		
[3]	Original Tray-J1		Installation Procedure - Refer to this service manual.
[4]	Side Paper Deck-Z1	[4a]	Installation Procedure - Mounting the Side Paper Deck-Z1.
[5]	Card Reader-C1, Card Reader Mounting Kit-B1		Installation Procedure - Refer to this service manual.
[6]	2-Cassette Pedestal-Y3	[6a]	Installation Procedure - Mounting the 2-Cassette Pedestral-Y3.
[7]	Envelope Cassette-C2 (100V)		
[8]	Envelope Cassette Attachment-C2 (115V/200V)	[8a]	Installation Procedure - Mounting the Envelop Cassette Attachment-C2.
[9]	Optional Power Supply-P2 [120V/230V as standard equipments] (It is needed when mounting the Side Paper Deck-Z1 [4].)		Installation Procedure - Refer to this service manual.
[10]	ADF Access Handle-A1	[10a]	Installation Procedure - Mounting the ADF Access Handle-A1.
[11]	Control Key Unit-A2 (Key Switch Unit-A2)		Installation Procedure - Refer to this service manual.

1.1.6 Reader Heater System Configuration

iR C3380i / iR C3380 / iR C2880i / iR C2880

The system configuration is shown below.



F-1-5

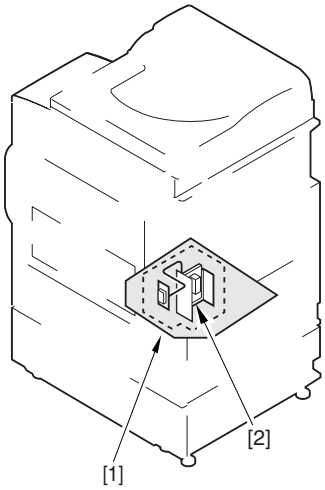
T-1-6

[1]	Reader Heater Unit-B1	Installation Procedure - Refer to this service manual.
[2]	Cassette Heater PCB-G1	

1.1.7 Cassette Heater System Configuration 1

iR C3380i / iR C3380 / iR C2880i / iR C2880

The following shows a typical system configuration:



F-1-6

T-1-7

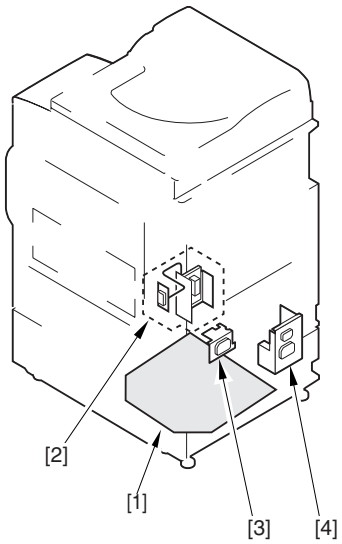
[1]Cassette Heater Unit (Service parts)
(installation to the printer unit)
(A Heater PCB-C1 is needed for operation.)

[2]Heater PCB (Service parts)

1.1.8 Cassette Heater System Configuration 2

/ iR C3380i / iR C2880i / iR C2880

The following shows a typical system configuration:



F-1-7
T-1-8

[1] Cassette Heater Unit-29
(attached to the Cassette Feeding Unit)

[2] Heater Switch PCB-C1

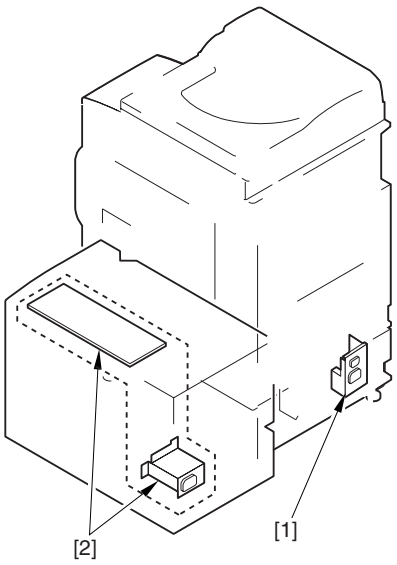
[3] Outlet Unit

[4] Cassette Heater Attachment-D2

1.1.9 Side Deck Heater System Configuration

iR C3380i / iR C3380 / iR C2880i / iR C2880

The system configuration is shown below.



F-1-8
T-1-9

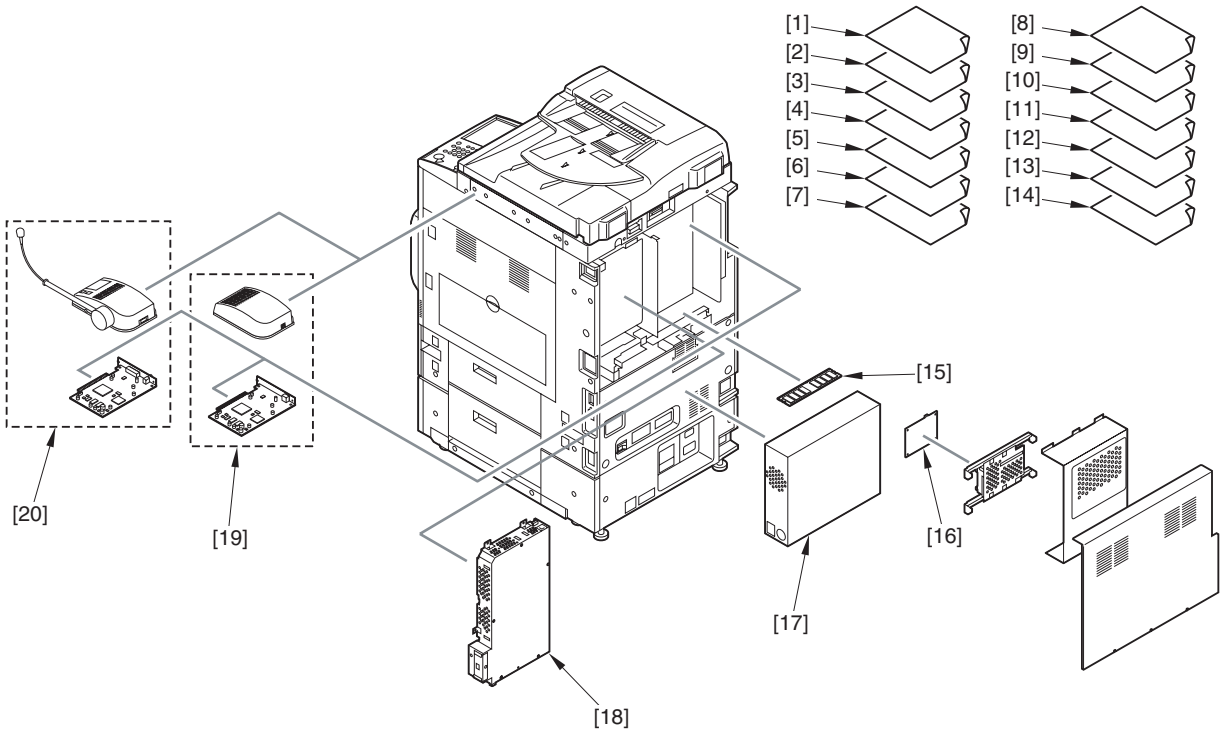
[1] Cassette Heater Attachment-D2

Installation Procedure
- Refer to this service manual.

[2] Cassette Heater Unit-23
(Its operation requires the installation of the Cassette Heater Attachment-D2.)

1.1.10 System Configuration (Printing/Transmission Accessories) (EUR)

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880



F-1-9

[1] Color UFRII Printer Kit-Q1(License)
[2] Color UFRII/PCL Printer Kit-Q1(License)
[3] Color PS Printer Kit-Q1(License)
[4] Direct Printing Kit-F1(License)
[5] Color Universal Send Kit-H1(License)
[6] Universal Send PDF Security Feature Set-A1(License)
[7] Universal Send PDF Advanced Feature Set-A1 (EUR)(License)
[8] Secure Watermark-A1(License)
[9] HDD Date Erase Kit-A1(License)
[10] Remote Operator's Software Kit-A2(License)
[11] Web Access Software-E1(License)
[12] Barcode Printing Kit-A1(License)
[13] Encrypted Secure Print Software-C1(License)
[14] Access Management System Kit-A1(License)
[15] iR512MB Expansion RAM-C1
[16] HDD Data Encryption Kit-B1
[17] Coior Network Printer Unit-J1
[18] Super G3 FAX Board-W1
[19] Voice Guidance Kit-B1
[20] Voice Operation Kit-A1

1.1.11 Functions of Printing/Transmission Accessories (EUR)

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1. Functions of Printing/Transmission Accessories

T-1-10

Function	Accessory needed	Overview
UFRII Printing	Color UFRII Printer Kit-Q1	
PCL Printing	Color UFRII/PCL Printer Kit-Q1	
LIPS/PS Printing	Color UFRII/PCL Printer Kit-Q1 + Color PS Printer Kit-Q1	
PDF/TIFF/JPEG direct printing	Direct Printing Kit-F1	
PS Printing	Coior Network Printer Unit-J1	
Transmission	Color Universal Send Kit-H1	SEND PDF Compact Trace & Smooth
Encryption PDF Transmission	Universal Send PDF Security Feature Set-A1	Encrypted PDF Device Signature PDF
Searchable PDF Transmission	Universal Send PDF Advanced Feature Set-A1 (EUR)	
High-Compression PDF Outline PDF	Universal Send PDF Advanced Feature Set-A1 (EUR)	
Electronic Signature PDF	Universal Send PDF Security Feature Set-A1	
Background Marking Printing	Secure Watermark-A1	

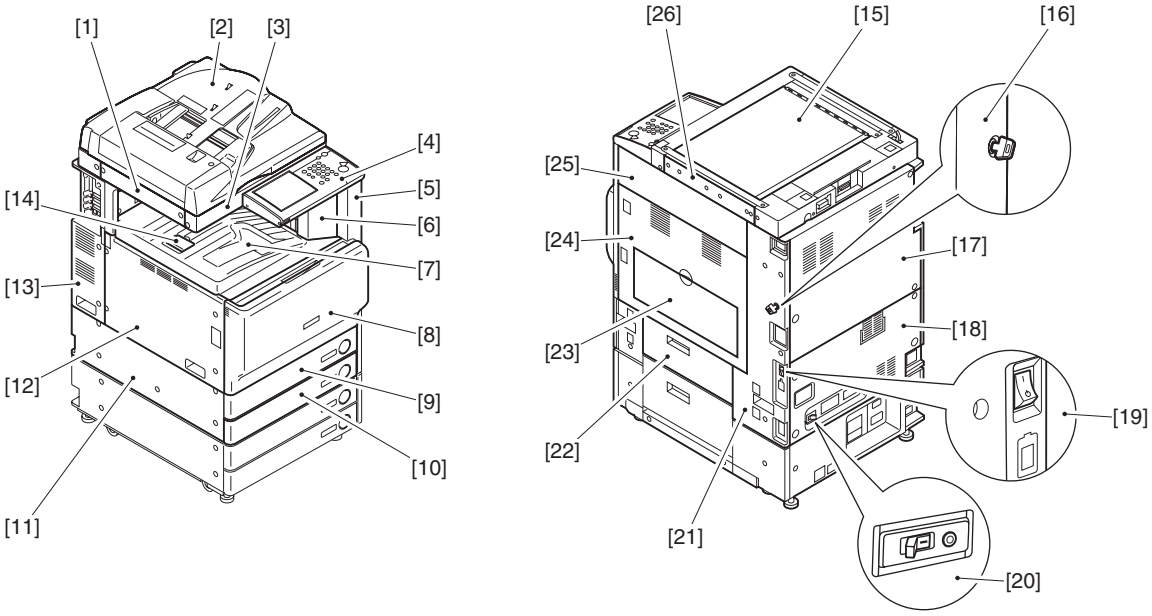
Function	Accessory needed	Overview
Faxing (1-line)	Super G3 FAX Board-W1	
HDD Erase	HDD Date Erase Kit-A1	
Encryption	HDD Data Encryption Kit-B1	
Voice Guidance	Voice Guidance Kit-B1	
Voice Recognition/Voice Guidance Function	Voice Operation Kit-A1	
Remote Operation	Remote Operator's Software Kit-A2	
Web browsing	Web Access Software-E1	
Barcode Function	Barcode Printing Kit-A1 + PCL Printer Kit-Q1	
Secured Print Function	Encrypted Printing Software-C1	
iWAMS Function	Access Management System Kit-A1	

1.2 Product Specifications

1.2.1 Names of Parts

1.2.1.1 External View

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

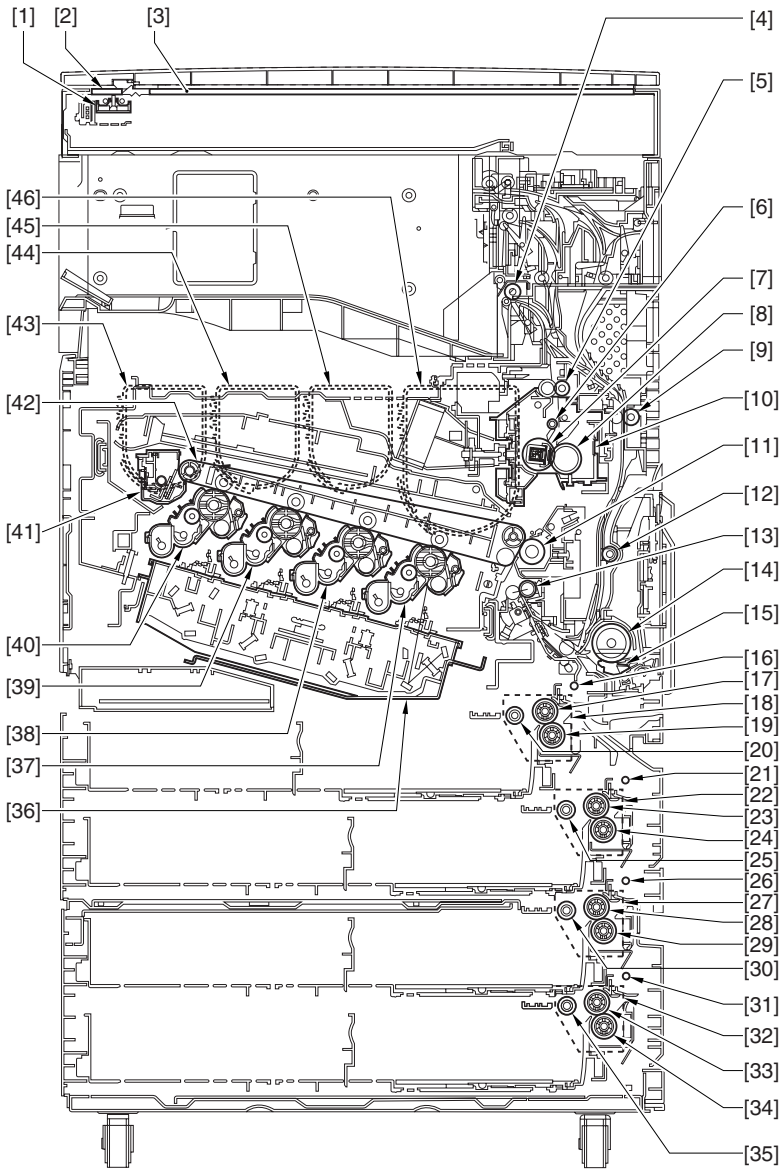


F-1-10

[1]	ADF Reading Glass Retainer	[2]	DADF
[3]	Reader Cover (front)	[4]	Control Panel
[5]	Front Right Cover	[6]	Right Inside Cover
[7]	Delivery Tray	[8]	Front Cover
[9]	Cassette 1	[10]	Cassette 2
[11]	Left Cover (lower)	[12]	Left Cover
[13]	Controller Cover	[14]	Delivery Tray Guide
[15]	Copyboard Glass	[16]	Security Key
[17]	Rear Cover (upper)	[18]	Rear Cover (lower)
[19]	Main Power Switch	[20]	Breaker
[21]	Right Cover (rear)	[22]	Cassette Upper Right Cover
[23]	Manual Feeder Tray	[24]	Right Cover
[25]	Right Cover (upper)	[26]	Reader Cover (right)

1.2.1.2 Cross Section

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880



F-1-11

[1]	CIS Unit	[2]	ADF Reading Glass
[3]	Copyboard Glass	[4]	Delivery Roller
[5]	Fixing Outlet Roller	[6]	Photosensitive Drum
[7]	Fixing Film Unit	[8]	Pressure Roller
[9]	Duplexing Feed Roller 1	[10]	Fixing Unit
[11]	Secondary Transfer Roller	[12]	Duplexing Feed Roller 2
[13]	Registration Roller	[14]	Manual Feeder Pickup Roller
[15]	Manual Feed Separation Pad	[16]	Vertical Path Roller 1
[17]	Feeding Roller (Cassette 1)	[18]	Cassette 1 Pickup Assembly
[19]	Separation Roller (Cassette 1)	[20]	Pickup Roller (Cassette 1)
[21]	Vertical Path Roller 2	[22]	Cassette 2 Pickup Assembly
[23]	Feed Roller (Cassette 2)	[24]	Separation Roller (Cassette 2)
[25]	Pickup Roller (Cassette 2)	[26]	Vertical Path Roller 3
[27]	Cassette 3 Pickup Assembly	[28]	Feed Roller (Cassette 3)
[29]	Separation Roller (Cassette 3)	[30]	Pickup Roller (Cassette 3)
[31]	Vertical Path Roller 4	[32]	Cassette 4 Pickup Assembly
[33]	Feed Roller (Cassette 4)	[34]	Separation Roller (Cassette 4)
[35]	Pickup Roller (Cassette 4)	[36]	Laser Scanner Assembly
[37]	Bk Process Unit	[38]	C Process Unit
[39]	M Process Unit	[40]	Y Process Unit
[41]	ITB Cleaning Unit	[42]	ITB Unit

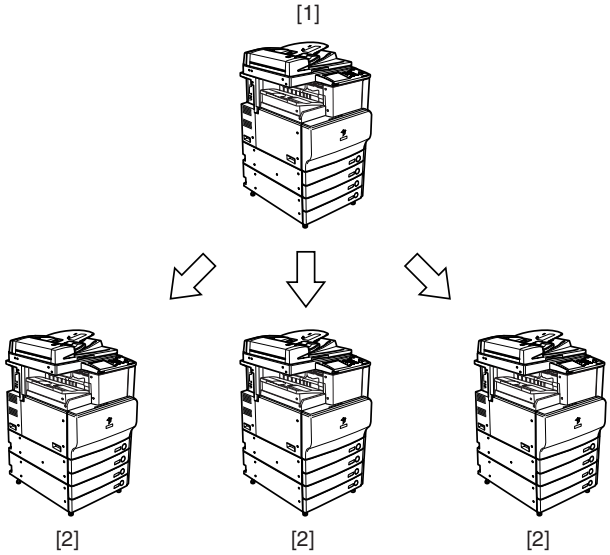
[43] Y Toner Container [44] M Toner Container
[45] C Toner Container [46] Bk Toner Container

1.2.2 User Mode Items

1.2.2.1 Common Settings

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

* Indicates the default setting.
*1 Indicates items that appear only when the appropriate optional equipment is attached.
*2 Indicates information that is delivered only if the number of output trays in the host machine and client machines is the same.
*3 Indicates items that appear only when the appropriate optional equipment is attached to the Color imageRUNNER C3380/C2880. For the Color imageRUNNER C3880i/C2880i, these items are displayed by default.
*4 Specifying device information delivery settings.
Among multiple machines on the network, registration of device information (administration data) in 1 parent machine [1] can transmit the same data to child machines [2]. The child machines to which the device information was transmitted receives and updates the information.



F-1-12

T-1-11

Item	Description	Device Information Delivery Item *4
Function Display Settings		
Initial Functions and Function Order Settings	Copy*, Express Copy, Send, Mail Box, Print Job, Scan, MEAP	No
Copy Screen Display Settings	Regular Copy Only*, Regular and Express Copy, Express Copy Only	
	Regular Copy Screen Priority: On*, Off	
Set System Monitor as the Default Screen	On, Off*	
Set the Default Screen for System Monitor	Copy, Send, Fax, Print, Receive, Device*	
Auto Clear Setting	Initial Function*, Selected Function	Yes
Audible Tones	Entry Tone: On*, Off	
	Invalid Entry Tone: On, Off*	
	Restock Supplies Tone: On, Off*	
	Error Tone: On*, Off	
	Job Done Tone: On*, Off	
Display Remaining Paper Message	On*, Off	No
Text/photo priority when ACS is set to Black	Text Priority*, Photo Priority	Yes
Display the Black Mode Shortcut Key	On, Off*	No
Inch Entry	On, Off*	Yes
Drawer Eligibility For APS/ADS	Copy, Printer, Mail Box, Receive, Fax, Other:	Yes
	(Stack Bypass: On, Off*, All Other Paper Sources: On*, Off)	
	Copy: Consider Paper Type: Yes, No*	
Envelope Cassette	Env. 1: COM10, ISO-B5, Monarch, ISO-C5, DL, Yougata 4*	Yes
	Env. 2: COM10*, ISO-B5, Monarch, ISO-C5, DL, Yougata 4	
Register Paper Type	Plain*, Recycled, Color, Pre-punched, Bond, Heavy 1, Transparency	No
Energy Consumption in Sleep Mode	Low*, High	Yes
LTRR/STMT Original Selection	Distinguish Manually, Use LTRR Format*, Use STMT Format	Yes

Item	Description	Device Information Delivery Item *4
Tray Designation	If the Optional Copy Tray-J1 Is Attached:	Yes*2
	Tray A: Copy*, Mail Box*, Printer, Receive, Fax, Other	
	Tray B: Copy, Mail Box, Printer*, Receive, Fax*, Other*	
	If the Optional Inner 2way Tray-D1 Is Attached:	
	Tray A: Copy*, Mail Box*, Printer, Receive, Fax, Other	
	Tray B: Copy, Mail Box, Printer*, Receive, Fax*, Other*	
	If the Optional Inner 2way Tray-D1 and Copy Tray-J1 Are Attached:	
	Tray A: Copy*, Mail Box*, Printer, Receive, Fax, Other	
	Tray B: Copy, Mail Box, Printer*, Receive, Fax, Other	
	Tray C: Copy, Mail Box, Printer, Receive, Fax*, Other*	
	If the Optional Finisher-Z1 and Copy Tray-J1 Are Attached:	
	Tray A: Copy*, Mail Box*, Printer*, Receive, Fax, Other	
	Tray B: Copy, Mail Box, Printer, Receive, Fax*, Other*	
	If the Optional Finisher-Y1 or Saddle Finisher-Y2, and Buffer Pass Unit-E1 Are Attached:	
	Tray A: Copy*, Mail Box*, Printer, Receive, Fax, Other	
	Tray B: Copy, Mail Box, Printer*, Receive, Fax*, Other*	
	Tray C: Copy, Mail Box, Printer, Receive, Fax*, Other*	
	Tray Home Position: Tray A*, Tray B, Off	
Printing Priority	Copy: 1*, 2, 3	Yes
	Printer: 1, 2*, 3	
	Mail Box, Receive/Fax, Other: 1, 2, 3*	
Register Form for Composition	Register, Erase, Check Print, Details	No
Image Priority for Form Composition	Auto*, Original Priority, Form Priority	Yes
Register Characters for Page No./Watermark	Register, Edit, Erase	Yes
Stack Bypass Standard Settings	On, Off*	No
Registering Irregular Size for Stack Bypass	Register/Edit, Erase, Register Name	Yes
Paper Feed Method Switch	Speed Priority*, Print Side Priority	Yes
Standard Local Print Settings		No
Paper Select	All Paper Sources, Auto*	
Copies	1* to 9,999 sets	
Finishing	If No Finisher Is Attached or Only the Optional Inner 2way Tray-D1 is Attached:	
	Do Not Collate, Collate*, Rotate Collate, Group, Rotate Group	
	If the Optional Finisher-Z1 Is Attached:	
	Do Not Collate, Collate, Offset Collate*, Group, Offset Group, Staple (Corner: Top Left, Bottom Left, Top Right, Bottom Right), (Double: Left, Right)	
	If the Optional Finisher-Y1 or Saddle Finisher-Y2, and Buffer Pass Unit-E1 Are Attached:	
	Do Not Collate, Collate, Offset Collate*, Group, Offset Group, Staple (Corner: Top Left, Bottom Left, Top Right, Bottom Right), (Double: Left, Right)	
	If the Optional Finisher-Y1 or Saddle Finisher-Y2, and Buffer Pass Unit-E1 and Puncher Unit-M1 Are Attached:	
	Do Not Collate, Collate, Offset Collate*, Group, Offset Group, Staple (Corner: Top Left, Bottom Left, Top Right, Bottom Right), (Double: Left, Right), Hole Punch	
2-Sided Print	On, Off*	
Erase Document After Printing	On, Off*	
Merge Documents	On, Off*	
Language Switch	On*, Off	No
Reversed Display (Color)	On, Off*	No
Offset Jobs*1	On*, Off	Yes
Job Separator between Jobs	On, Off*	Yes
Job Separator between Copies	On, Off*	Yes
Job Duration Display	Copy: On, Off*	No
	Mail Box: On, Off*	
	Other: On, Off*	
Number of Copies/Job Duration Status Display	On*, Off	No
Cleaning Display for the Original Scanning Area*3	On*, Off	No
Data Compression Ratio for Remote Scans	High Ratio, Normal*, Low Ratio	Yes
Gamma Value for Remote Scans	Gamma 1.0, Gamma 1.4, Gamma 1.8*, Gamma 2.2	Yes
Limited Functions Mode*1	On, Off*	Yes
Erase Remaining Toner Error Message	Erase	No
Shutdown Mode	Press [Start]	No
Initialize Common Settings	Initialize	No

1.2.2.2 Timer Settings

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

* Indicates the default setting.

T-1-12

Item	Description	Device Information Delivery Item
Time Fine Adjustment	00:00 to 23:59, in one minute increments	No
Auto Sleep Time	10, 15, 20*, 30, 40, 50 min., 1 hour, 90 min., 2, 3, 4 hours	Yes
Auto Clear Time	0 (Off) to 9 minutes, in one minute increments; 2 min.*	Yes
Daily Timer Settings	Sunday to Saturday, 00:00 to 23:59, in one minute increments	Yes
Low-power Mode Time	5*, 10, 15, 20, 30, 40, 50 min., 1 hour, 90 min., 2, 3, 4 hours	Yes

1.2.2.3 Adjustment/Cleaning

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

* Indicates the default setting.
*1 Indicates items that appear only when the appropriate optional equipment is attached.
*2 Indicates items that appear only when the appropriate optional equipment is attached to the Color imageRUNNER C3380/C2880. For the Color imageRUNNER C3880i/C2880i, these items are displayed by default.

T-1-13

Item	Description	Device Information Delivery Item
Zoom Fine Adjustment	X: -1.0% to +1.0%, in 0.1% increments; 0.0%*	No
	Y: -1.0% to +1.0%, in 0.1% increments; 0.0%*	
Saddle Stitcher Staple Repositioning*1	Press [Start]	No
Saddle Stitch Position Adjustment*1	All paper sizes: -2.0 mm to +2.0 mm, in 0.25 mm increments; 0.00 mm*	Yes
Creep (Displacement) Correction Adjustment	Correction (for each paper type) 0.000" to 0.078" (0.00 mm to 2.00 mm), in 0.002" (0.05 mm)	No
	increments; 0.010" (0.25 mm)*	
Auto Gradation Adjustment	Plain*, Heavy 1/Heavy 2	No
	Full Adjust: Automatic after the machine prints and scans three sets of test prints	
	Quick Adjust: Press [Start]	
Exposure Recalibration	Copy/Inbox, Send (B&W), Send (Color): Light, Dark: 1 to 9 levels; 5*	No
Character/Background Contrast Adjustment*1	Black, Cyan, Magenta	No
	Relative Contrast Value: -7 to +7; -1*	
	Standard Value Settings: 0 to 64; 24*, Sample Print, Sample Print Settings:	
	Latent String Density: 0 to 36; 8*	
Cleaning inside Main Unit	Press [Start]	No
Feeder Cleaning*2	Press [Start]	No
Toner Replacement White Printing is Possible	Black, Cyan, Magenta, Yellow	No

1.2.2.4 Report Settings

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

* Indicates the default setting.
*1 Indicates items that appear only when the appropriate optional equipment is attached.

T-1-14

Item	Description	Device Information Delivery Item
Settings: Send		
TX Report	For Error Only*, On, Off	Yes
	Report with TX Image: On*, Off	
	Report with Color TX Image: On, Off*	
Activity Report		
Auto Print	On*, Off	Yes
Daily Activity Report Time	On, Off*	
	Timer Setting: 00:00 to 23:59	
Send/Receive Separate	On, Off*	
Settings: Fax*1		
Fax TX Report	For Error Only*, On, Off	Yes
	Report with TX Image: On*, Off	
Fax Activity Report		Yes
Auto Print	On*, Off	
Daily Activity Report Time	On, Off*	
	Timer Setting: 00:00 to 23:59	
Send/Receive Separate	On, Off*	
Fax RX Report	For Error Only, On, Off*	Yes
Confidential Fax Inbox RX Report	On*, Off	Yes

Item	Description	Device Information Delivery Item
Print List: Send		
Address Book List	Address Book 1 to 10; One-touch Buttons, Print List	No
User Data List	Print List	No
Print List: Fax*1		
User Data List	Print List	No

1.2.2.5 System Settings

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

* Indicates the default setting.
*1 Indicates items that appear only when the appropriate optional equipment is attached.
*2 Indicates items that are not delivered as device information.

T-1-15

Item	Description	Device Information Delivery Item
System Manager Settings		
System Manager ID	Seven digit number maximum	Yes
System Password	Seven digit number maximum	
System Manager	32 characters maximum	
E-mail Address	64 characters maximum	
Contact Information	32 characters maximum	
Comment	32 characters maximum	
Dept. ID Management		
Dept. ID Management	On, Off*	Yes
Register Dept. ID/Password	Register, Edit, Erase, Limit Functions	Yes
Page Totals	Clear, Print List, Clear All Totals	No
Allow Printer Jobs with Unknown IDs	On*, Off	Yes
Allow Remote Scan Jobs with Unknown IDs	On*, Off	Yes
Allow Black Copy/Inbox Print Jobs	On, Off*	Yes
Allow Black Printer Jobs	On, Off*	Yes
Communications Settings		
E-mail/I-Fax Settings		Yes
Maximum Data Size for Sending	0 (Off), 1 to 99 MB; 3 MB*	
Full Mode TX Timeout	1 to 99 hours; 24 hours*	
Divided Data RX Timeout	0 to 99 hours; 24 hours*	
Default Subject	40 characters maximum; Attached Image*	
Print MDN/DSN on Receipt	On, Off*	
Always send notice for RX errors	On*, Off	
Use Send Via Server	On, Off*	
Allow MDN Not Via Server	On, Off*	
Fax Settings*2		
Send Start Speed	33600 bps*, 14400 bps, 9600 bps, 7200 bps, 4800 bps, 2400 bps	Yes
Receive Start Speed	33600 bps*, 14400 bps, 9600 bps, 7200 bps, 4800 bps, 2400 bps	Yes
Receive Password	20 digits maximum	No
PIN Code Access	On, Off*	Yes
Memory RX Inbox Settings		
Memory RX Inbox Password	Seven digit number	No
Use Fax Memory Lock*1	On, Off*	Yes
Use I-Fax Memory Lock	On, Off*	Yes
Memory Lock Start Time	Everyday, Select Days, Off*	Yes
Memory Lock End Time	Everyday, Select Days, Off*	Yes
Remote UI	On*, Off Use SSL*2: On, Off*	Yes
Restrict the Send Function		
Address Book Password	Seven digit number	Yes
Access Number Management	On*, Off	Yes
Restrict New Addresses	Fax: On, Off* E-mail: On, Off* I-fax: On, Off* File: On, Off*	Yes
Allow Fax Driver TX*1	On*, Off	Yes
Confirm Entered Fax Numbers*1	On, Off*	Yes
E-mail/I-Fax Domain Sending Restriction	Restrict Sending to Domains; On, Off* Register, Edit, Erase	Yes

Item	Description	Device Information Delivery Item
Allow PDF Send with Expired Certificates*1	On, Off*	Yes
Always Add Device Signature to Send PDF*1	On, Off*	Yes
Device Information Settings		
Device Name	32 characters maximum	No
Location	32 characters maximum	No
Forwarding Settings	Receive Type, E-mail Priority, Edit, Erase, Print List	Yes
	Validate/Invalidate, Register (Registered Forwarding Settings), Forward w/o Conditions	
Clear Message Board	Clear	No
Auto Online/Offline		
Auto Online	On, Off*	Yes
Auto Offline	On, Off*	Yes
Date & Time Settings	Date and Time Setting (12 digit number)	No
	Time Zone: GMT -12:00 to GMT +12:00; GMT -05:00*	
	Daylight Saving Time: On*, Off	
Limit Functions with the Security Key OFF*1	Partial Functions*, All Functions	Yes
License Registration	24 characters maximum	No
System Monitor Screen Restriction		
Display Status Before Authentication	On, Off*	No
Allow Secured Print from Print Status Screen	On, Off*	No
Job Log Display	On*, Off	
Register LDAP Server	Register, Edit, Erase, Register/Edit LDAP Search, Print List	No
MEAP Settings		
Use HTTP	On*, Off	Yes
	Use SSL*2: On, Off*	
Print System Information	Print	No
Copy Set Numbering Option Settings	Copy Set Num. Op: On, Off*	Yes
	ID/User Name: On, Off	
	Date: On, Off	
	Characters: On, Off	
Display Remaining Toner Error Message	On, Off*	No
Display ID/User Name	On*, Off	No
USB Settings		
Use USB Device	On*, Off	Yes
Use USB Host	On*, Off	Yes
Device Information Delivery Settings		
Register Destinations	Auto Search/Register, Register, Details, Erase, Print List	
Auto Delivery Settings	Everyday, Select Days, Off*	
Manual Delivery	Add. Functions Settings Value: On, Off*	
	Network Settings: Include, Exclude*	
	Dept. ID: On, Off*	
	Address Book: On, Off*	
	Printer Settings: On, Off*	
Restrictions for Receiving Device Info.	On*, Off	
Restore Data	Add. Functns Set. Value, Dept. ID, Address Book, Printer Settings	
Receive Restriction for Each Function	Add. Functions Settings Value: On*, Off	
	Dept. ID: On*, Off	
	Address Book: On*, Off	
	Printer Settings: On, Off*	
Communication Log	Details, Print List, Report Settings	
	Auto Print: On*, Off	
	Daily Activity Report Time: On, Off*	
	Report Time: 00:00 to 23:59	
	Separate Report Type: On, Off*	
Initialize All Data/Settings	Initialize	No
Use Asterisks to Enter Access No./Passwords	On*, Off	Yes
Forced Secure Watermark Mode*1	Copy: Do Not Set*, Set	Yes
	Mail Box: Do Not Set*, Set	
	Printer: Do Not Set*, Set	
Encrypted Print Settings*1		
Only Allow Encrypted Print Jobs	On, Off*	Yes

1.2.2.6 Copy Settings

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

* Indicates the default setting.
*1 Indicates items that appear only when the appropriate optional equipment is attached to the Color imageRUNNER C3380/C2880. For the Color imageRUNNER C3380i/C2880i, these items are displayed by default.

T-1-16

Item	Description	Device Information Delivery Item
Paper Select Key Size for Express Copy Screen	Large*: Four paper sources maximum (Stack Bypass, Stack Bypass Settings, 1: Paper Drawer 1, 2: Paper Drawer 2, 3: Paper Drawer 3, 4: Paper Drawer 4, 5: Paper Deck-Z1), Small	No
Standard Key 1, 2 Settings for Regular Screen	Various modes; No Settings*	No
Standard Key Settings for Express Copy Screen	Displayed Standard Keys: Up to 5 Set Keys*, Up to 10 Set Keys, Settings:	No
	Various modes; No Settings*	No
Auto Collate*1	On*, Off	Yes
Auto Orientation	On*, Off	Yes
Standard Settings	Store, Initialize	No
Initialize Copy Settings	Initialize	No

1.2.2.7 Communications Settings

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

* Indicates the default setting.
*1 Indicates items that appear only when the appropriate optional equipment is attached.
Initialize TX Settings

T-1-17

Item	Description	Device Information Delivery Item
Common Settings: TX Settings		
Sender's Names (TTI)*1	01 to 99, Register/Edit, Erase	No
Unit Name	24 characters maximum	No
Enabling non-ASCII code characters for FTP transmission*1	On, Off*	Yes
Erase Failed TX	On*, Off	Yes
Data Compression Ratio	High Ratio, Normal*, Low Ratio	Yes
Handle Documents with Forwarding Errors	Always Print, Store/Print, Off*	Yes
Retry Times*1	0 to 5 times; 3 times*	Yes
Edit Standard Send Settings	Scanning Mode: Clr/B&W 200x200 dpi	No
	File Format: TIFF/PDF Auto Select	
	Stamp: Off	
Register Favorites Button	Register/Edit, Erase (M1 to M18), Display Comment: On, Off*	Yes
Display Confirmation for Favorites Button	On*, Off	No
Image Level for PDF (Compct)*1	Image Level in Text/Photo or Photo Mode: Data Size Priority, Normal*, Image Priority	Yes
	Image Level in Text Mode: Data Size Priority, Normal*, Image Priority	
PDF(OCR) Settings*1	Smart Scan: On*, Off	Yes
	Num. of Char. for Doc. Name Setting: 1 to 24 characters; 24 characters*	
Check Device Signature Certificate*1	Certificate Details: Certificate Verification	No
Check User Signature Certificate*1	Certificate Details: Certificate Verification	No
Default Screen for Send	Favorites Buttons, One-touch Buttons, New Address*	No
	Enlarged Display: On, Off*	
TX Terminal ID	On*, Off	Yes
	Printing Position: Inside, Outside*	
	Display Destination Name: On*, Off	
	Telephone # Mark: FAX*, TEL	
Use Chunked Encoding with WebDAV Sending	On*, Off	Yes
Gamma Value for YCbCr Send Jobs	Gamma 1.0, Gamma 1.4, Gamma 1.8*, Gamma 2.2	Yes
Initialize TX Settings	Initialize	No
Common Settings: RX Settings		
2-Sided Print	On, Off*	Yes
Select Drawer	Switch A: On*, Off	Yes
	Switch B: On*, Off	
	Switch C: On*, Off	
	Switch D: On*, Off	
Receive Reduction	On*, Off	Yes
	RX Reduction: Auto*, Fixed Reduction	
	Reduce %: 75 to 97% (in 1% increments); 90%*	
	Reduce Direction: Vertical & Horizontal, Vertical Only*	

Item	Description	Device Information Delivery Item
Received Page Footer	On, Off*	Yes
2 On 1 Log	On, Off*	Yes
Gamma Value for YCbCr Received Jobs	Gamma 1.0, Gamma 1.4, Gamma 1.8*, Gamma 2.2	Yes
Fax Settings: User Settings*1		
Unit Telephone #	20 digits maximum	No
Tel Line Type	Pulse, Tone*	No
Volume Control	Alarm Volume: 0 to 8 levels; 4*	Yes
	Monitor Volume: 0 to 8 levels; 4*	
Fax Settings: TX Settings*1		
ECM TX	On*, Off	Yes
Pause Time	1 to 15 seconds; 2 seconds*	Yes
Auto Redial	On*, Off	Yes
	Redial Times: 1 to 10 times; 2 times*	
	Redial Interval: 2 to 99 minutes; 2 minutes*	
	TX Error Resend: Error and 1st Page*, All pages, Off	
Check Dial Tone Before Sending	On*, Off	Yes
Fax Settings: RX Settings*1		
ECM RX	On, Off*	Yes
Fax Settings: Dual Line Options*1		
Unit Telephone #	20 digits maximum	No
Unit Name	24 characters maximum	No
Tel Line Type	Pulse, Tone*	No
TX Line Selection	Line 1: Priority TX*, Prohibit TX	No
	Line 2: Priority TX, Prohibit TX	

1.2.2.8 Mail Box Settings

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

* Indicates the default setting.
*1 Indicates items that are not delivered as device information.
*2 Information is not delivered if a password is set for the inbox.

T-1-18

Item	Description	Device Information Delivery Item
User Inboxes Settings	Inbox No.: 00 to 99	Yes*2
	Register Inbox Name: 24 characters maximum	
	Password: Seven digits maximum	
	Time until Document Auto Erase: 0 (Off), 1, 2, 3, 6, 12 hours, 1, 2, 3*, 7, 30 days	
	URL Send Settings	
	Print upon storing from the printer driver: On, Off*	
	Initialize*1	
Standard Scan Settings	Store, Initialize	No
Confidential Fax Inboxes Settings*2	Inbox No.: 00 to 49	Yes*2
	Register Inbox Name: 24 characters maximum	
	Password: Seven digits maximum	
	URL Send Settings	
	Initialize*1	

1.2.2.9 Address Book Settings

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

T-1-19

Item	Description	Device Information Delivery Item
Register Address	Register New Address, Edit, Erase	Yes
Register Address Book Name	Register Name	Yes
One-touch Buttons	Register/Edit (from 001 to 200), Erase	Yes

- When authentication is enabled for an SDL or SSO login service, the system administrator setup mode cannot be used if the user type is a general user.
- When authentication is enabled for an SDL or SSO login service, the system administrator setup mode may be used if the user type is an administrator. (If a dialog box appears, asking you to type in the appropriate administrative group ID and system administration ID No., do so.)

1.2.3 User Maintenance

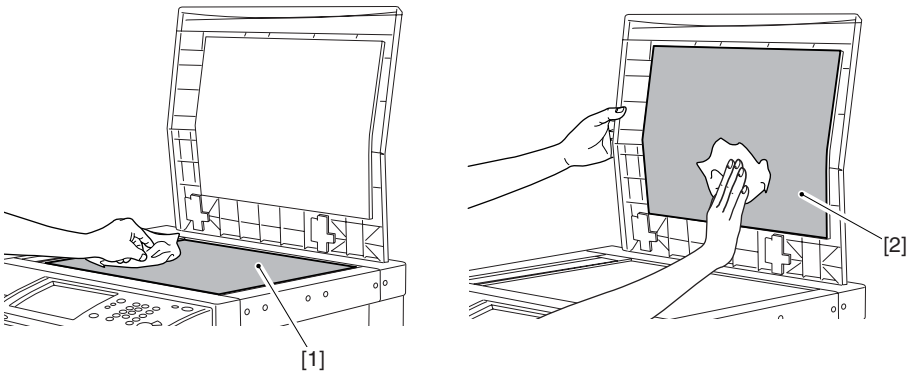
1.2.3.1 Cleaning

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The machine has some components that must be cleaned by the user on a periodical basis (about once a month); advise the user on how to clean such components:

1. Platen Glass/Underside of the Platen Cover

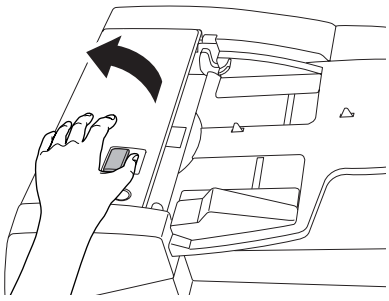
1) Clean the platen glass [1] and the underside of the platen cover [2] with a cloth moistened with water or solution of mild detergent (well-wrung); then, dry wipe them with a soft, dry cloth.



F-1-13

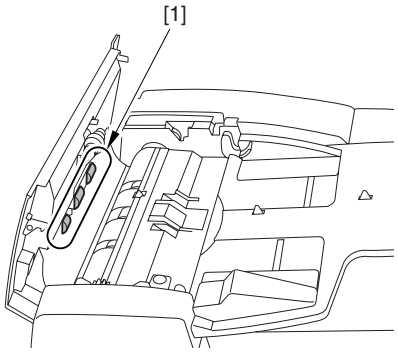
2. Feeder

1) Open the feeder cover.



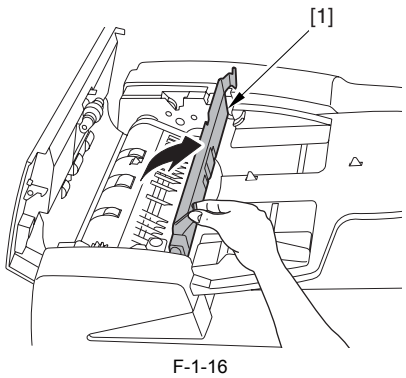
F-1-14

2) Clean the 3 rollers [1] on the underside of the feeder cover with a cloth moistened with water (well-wrung); then, dry wipe them with a soft, dry cloth.



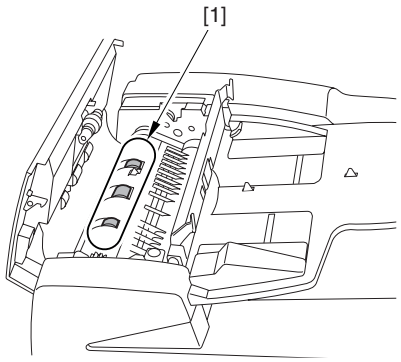
F-1-15

3) Hold the knob at the front side, and open the middle cover [1].



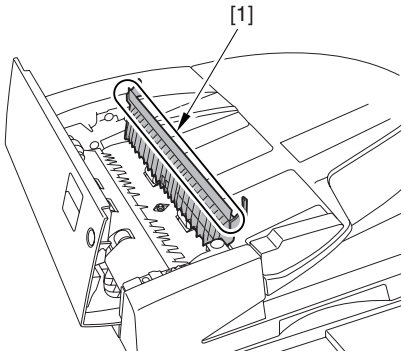
F-1-16

4) Clean the 3 rollers [1] with a cloth moistened with water (well-wrung); then, dry wipe them with a soft, dry cloth.



F-1-17

5) Clean the clear plastic part [1] on the upper side of the middle cover with a cloth moistened with water (well-wrung); then, dry wipe them with a soft, dry cloth.

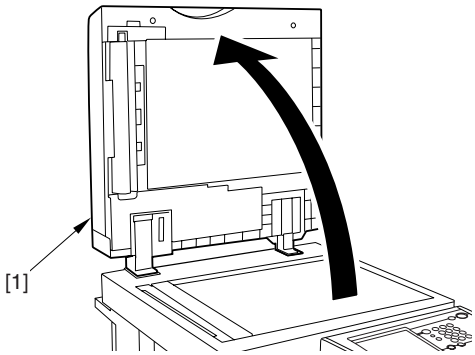


F-1-18

6) Close the middle cover and the feeder cover.

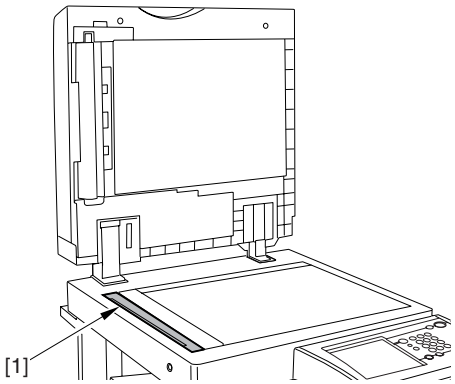
3. Original Reading Block

1) Open the feeder.



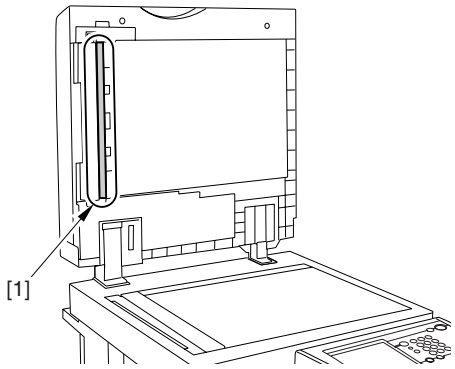
F-1-19

2) Clean the original reading block [1] with a cloth moistened with water (well-wrung); then, dry wipe them with a soft, dry cloth.



F-1-20

3) Clean the side part of the rubber roller [1] with a cloth moistened with water (well-wrung); then, dry wipe them with a soft, dry cloth.

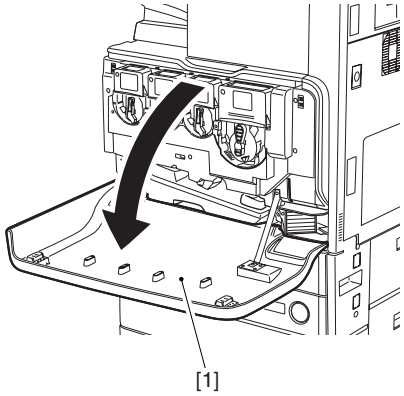


F-1-21

4) Close the feeder.

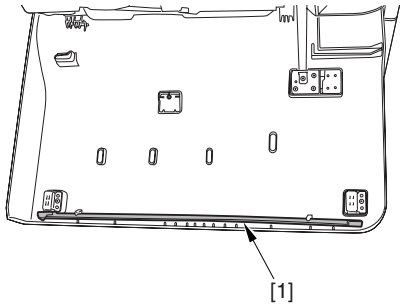
4. Dustproof Glass

1) Open the front cover [1] of the host machine.



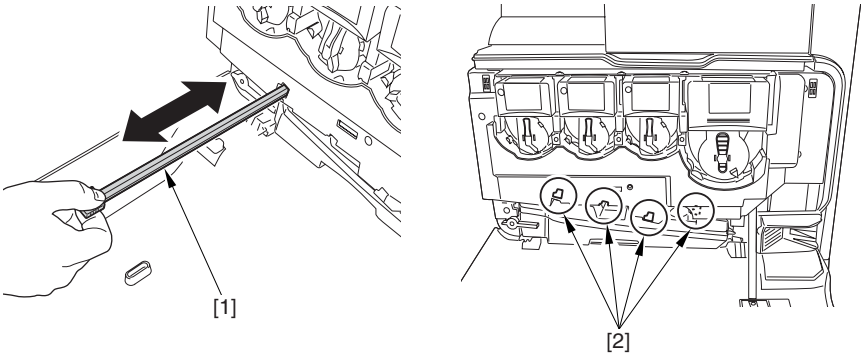
F-1-22

2) Take out the cleaning tool [1] from the backside of the front cover.



F-1-23

3) Hold the knob of the cleaning tool [1], and slowly move it back and forth to clean the 4 internal points [2] of the host machine with the pad at the tip of the cleaning tool.



F-1-24

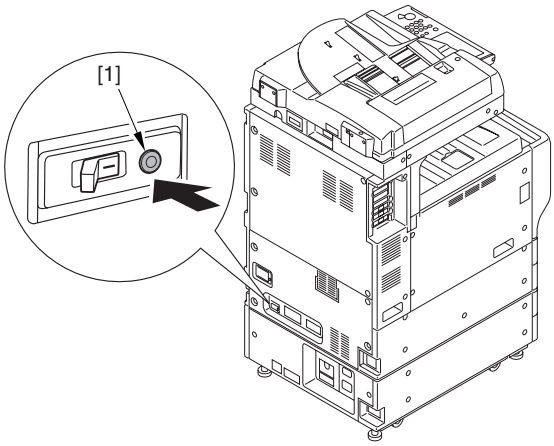
4) Return the cleaning tool to the underside of the front cover, and close the front cover.

1.2.3.2 Inspection

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

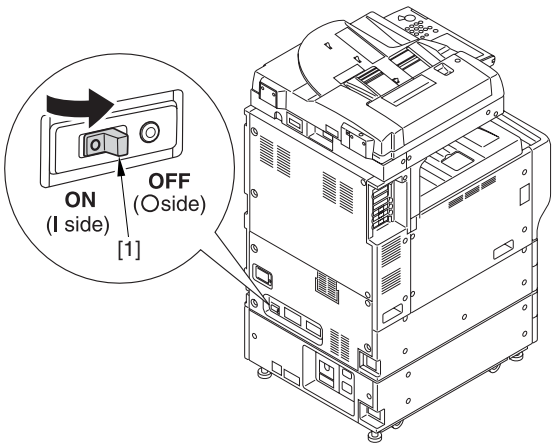
The machine is equipped with a breaker for detection of over-current and leakage current for enhanced safety, and it is important to check and see that the breaker operates properly.
Advise the user to check the breaker on a periodical basis (about once a month), and keep a record of inspection.
Go through the following:

1) Turn off the main power switch.
2) Push the test button [1] of the breaker with the tip of a ball-point pen or the like.



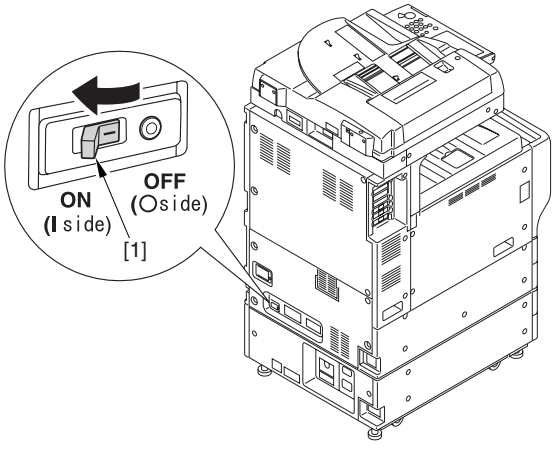
F-1-25

3) Check to see that the breaker switch [1] shifts to the OFF side.



F-1-26

4) Shift the breaker switch [1] back to the ON side.



F-1-27

⚠
Check to be sure that the breaker switch is on the ON side. If it has stopped between the ON and OFF sides, push it back to the OFF side and then to the ON side.

5) Turn on the main power switch.

1.2.4 Safety

1.2.4.1 Laser safety

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

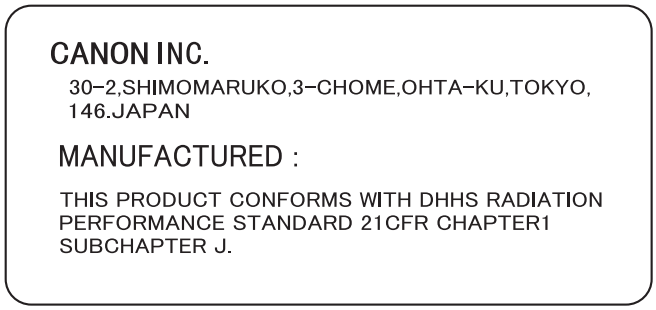
Laser beam radiation may pose a danger to the human body. A laser scanner mounted on the machine is sealed with the protection housing and external cover to prevent the laser beam from leaking to the outside. The laser beam never leaks out of the scanner as far as users operate the machine normally

The following warnings are given to comply with Safety Principles (EN60950).
Laserstrahlen können für den menschlichen Körper gefährlich sein. Aus diesem Grund ist das optische Lasersystem mit einem Schutzgehäuse und einer Außenabdeckung dicht verschlossen und hat eine Struktur, die keine Laserstrahlen nach außen dringen lässt. Unter der Voraussetzung, dass der Benutzer dieses Gerät normal bedient, ist ein Austritt von Laserstrahlen daher ausgeschlossen.

1.2.4.2 CDRH Act

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The Center for Devices and Radiological Health of the US Food and Drum Administration put into force regulations concerning laser products on August 2, 1976. These regulations apply to laser products manufactured on and after August 1, 1976, and the sale of laser products not certified under the regulations is banned within the Untied States. The label shown here indicates compliance with the CDRH regulations, and its attachment is required on all laser products that are soled in the United States.



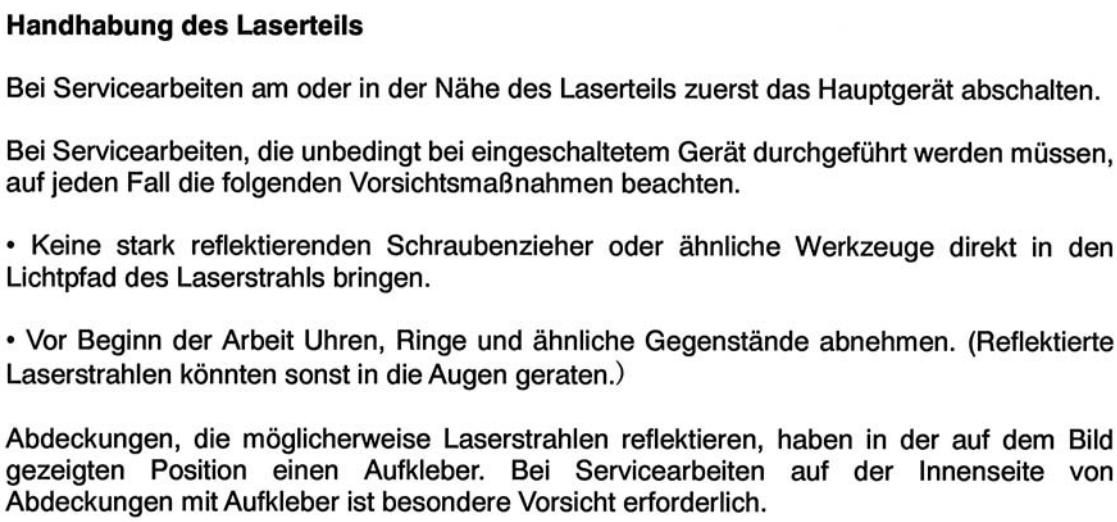
F-1-28

A different description may be used for a different product.

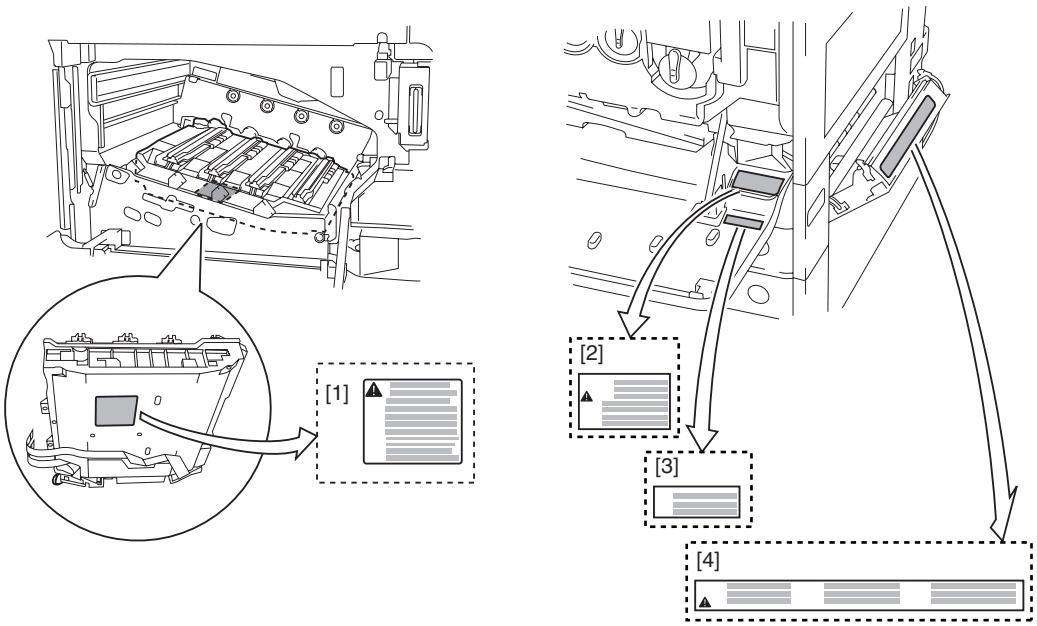
1.2.4.3 Handling of laser system

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

When servicing the area around the laser assembly, be sure to turn off the main power.
If you must servicr while the power is turned on, be sure to keep the followings:
- Do not use a screwdriver or tools that have a high level of reflectance in the laser path.
- Remove watches and rings before starting the work. (They can reflect the laser beam, possibly hitting the eye.)
The machine's covers that can reflect laser light are identified by means of a warning label (Figure). If you must detach a cover showing the label, be sure to take extra caution during the work.
The following warnings are given to comply with Safety Principles (EN60950).



F-1-29



F-1-30

1.2.4.4 Safety of Toner

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1. About Toner
The machine's toner is a non-toxic material made of plastic, iron, and small amounts of dye.

⚠
Do not throw toner into fire. It may cause explosion.

2. Toner on Clothing or Skin
- If your clothing or skin has come into contact with toner, wipe it off with tissue; then, wash it off with water.
- Do not use warm water, which will cause the toner to jell and fuse permanently with the fibers of the cloth.
- Do not bring toner into contact with plastic material. It tends to react easily.

1.2.4.5 Notes when handling a lithium battery

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

⚠
RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.
DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

The following warnings are given to comply with Safety Principles (EN60950).

⚠
Wenn mit dem falschen Typ ausgewechselt, besteht Explosionsgefahr.
Gebrauchte Batterien gemäß der Anleitung beseitigen.

1.2.5 Product Specifications

1.2.5.1 Type and function

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Body	Console
Photosensitive medium	OPC drum (30-mm dia) X 4
Exposure method	Laser exposure
Charging method	Roller charge
Development method (mono)	Dry two components
Development method (color)	Dry two components
Cassette pickup method	Separation retard (guide center)
Multifeeder pickup method	Separation duplo (guide center)
Transfer method	belt transfer
Transfer method (primary transfer)	Transfer roller
Transfer method (secondary transfer)	belt + transfer roller

Separation method	Curvature separation + discharger
Drum cleaning method	Cleaning blade
Trasnsfer cleaning method	Cleaning blade
Fixing method	On-demand fixing
Delivery method	Face down
Warm-up time	After Powering ON: iR C3380/C2880: 30 seconds iR C3380i/C2880i: 38 seconds Returning from the Sleep mode: 15 to 30 seconds Retuning from the Low-Power mode: Approximately 15 seconds
Toner type	monochrome/color: nonmagnetism negative toner
Print area	maximum printing available area: 301 X 450.5mm maximum printing assurance area: 305 X 450.5mm
Printing resolution	600dpi X 600dpi 1200dpi X 1200dpi (Half speed)
Duplex method	Tray-less both sides
Toner level detection function	w/detection system Alarm: rotation of toner supply motor (body counter) Stop: piezosensor
Cassette capacity	680 sheets (64g/m2 paper) 550 sheets (80g/m2 paper)
Multifeeder tray capacity	55 sheets (64g/m2 paper) 50 sheets (80g/m2 paper)
Non-image width (leading edge)	4.0+1.5/-1.0mm (one side/both sides)
Non-image width (left/right)	2.5±1.5mm (one side/both sides)
Image margin (leading edge)	4.0+1.5/-1.0mm
Image margin (left/right)	2.5±1.5mm (double-sided: 2.5±2.0mm)
Image margin (trailing edge)	2.5mm
Energy save mode	-
Low-power mode	w/low power mode Fixing assembly is not OFF. Transfer to sleep mode after certain time passing.
Sleep mode	w/sleep mode
Option	See system configuration list

1.2.5.2 Others

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Operating environment (temperature range)	15 to 30 deg C
Operating environment (humidity range)	5%RH to 80%RH
Operating environment (atmospheric pressure)	0.6 - 1.0 atm
Noise	Standby 53dB or less Printing 70.55dB or less (4C) Printing 68.8dB or less (BK)
Power consumption	Maximum 1500 W Standby 110 W Consecutive printing 706.92 W(BK) Consecutive printing 900 W(4C)
Ozone	< / = 0.02 mg/m3 initial: Average 0.01ppm or less overtime: Average 0.036ppm or less
Dimensions	Width (W) 565mm Depth (D) 760mm Height (H) 791mm
Weight	Body machine 116kg (excluding cartridge)

1.2.6 Function List

1.2.6.1 Print speed

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

iR C3380 Series

Type of paper		First/second delivery			third delivery		
		Cassette	Manual feeding	Both sides	Cassette	Manual feeding	Both sides
Standard paper	A4, LTR	33/30	25	33/30	30*	25	30*
	A4R, LTRR	17	17	17	17	17	17
	B4, LGL	17	17	17	17	17	17
	A3	15	15	15	15	15	10
	LDR	14	14	14	14	14	10
	A5R, STMTR	13	13	13	13	13	13
	12"X18"	12	12	12	-	-	-
	SRA3	-	7	7	-	-	-
Heavy paper 1 (105 to 163g/m2)	A4, LTR	16.5/15	12.5	-	-	-	-
	A4R, LTRR	8.5	8.5	-	-	-	-
	B4, LGL	8.5	8.5	-	-	-	-
	A3	7.5	7.5	-	-	-	-
	LDR	7.0	7.0	-	-	-	-
	SRA3	-	7.0	-	-	-	-
	12"X18"	7.0	6.5	-	-	-	-
	A5R, STMTR	6.5	12.0	-	-	-	-
	Card	-	-	-	-	-	-
Heavy paper 2 (up to 164g/m2)	A4, LTR, B5	-	12.5	-	-	-	-
	A4R, LTRR	-	8.5	-	-	-	-
	B4, LGL	-	8.5	-	-	-	-
	A3	-	7.5	-	-	-	-
	LDR	-	7.0	-	-	-	-
	SRA3	-	7.0	-	-	-	-
	12"X18"	-	7.0	-	-	-	-
	A5R, B5R, STMTR	-	6 to 2	-	-	-	-
	A5, LTR	-	12.5	-	-	-	-
OHP	Color	5	5	-	-	-	-
	BK	20	20	-	-	-	-
1200dpi	A4, LTR	16.5/15	12.5	16.5/15	16.5/15	12.5	16.5/15
	A4R, LTRR	8.5	8.5	8.5	8.5	8.5	8.5
	B4, LGL	8.5	8.5	8.5	8.5	8.5	8.5
	A3	7.5	7.5	7.5	7.5	7.5	5.0**
	LDR	7.0	7.0	7.0	7.0	7.0	5.0**
	SRA3	-	7.0	-	-	-	-
	12"X18"	7.0	7.0	7.0	-	-	-
	A5R, STMTR	6.5	6.5	6.5	6.5	6.5	6.5
	Card	-	12.0	-	-	-	-

iR C 2880 Series

T-1-21

Type of paper		First/second delivery			third delivery		
		Cassette	Manual feeding	Both sides	Cassette	Manual feeding	Both sides
Standard paper	A4, LTR	28/26	25	28/26	28/26	25	28/26

* Due to minimum distance between papers at the time of reversing output
** Due to third delivery both-side large size one-sheet type
Example: 33/30 (mono color/color)

1.2.6.2 Type of paper

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

T-1-22

Type	paper size	position of feeding		
		cassette	deck	Manual
Standard paper Eco paper Recycled paper (64g/m2 to 105g/m2)	A3,B4,A4,A4R,B5,B5R,LDR,LGL,LTR,LTRR,SRA3,12"X18"	Yes	No	Yes
	A4,LTR	Yes	Yes	Yes
	B5,EXE	Yes	No	Yes
	A5R,STMTR	Yes	No	Yes
	B5R	Yes	No	Yes
	A5,STMT,SRA3	No	No	Yes
	12"X18"	Yes	No	Yes
Heavy paper 1 (up to 163g/m2)	A3,B4,A4,A4R,B5,B5R,LDR, LGL,LTR,LTRR,SRA3,12"X18"	Yes	No	Yes

Heavy paper 2 (164g/m2 to 220g/m2)	A3, B4, LDR, LGL, A4R, LTRR	No	No	Yes
	A4, LTR	No	No	Yes
	B5, Exe, A5R, STMTR, B5, 12"X18"	No	No	Yes
	A5, STMT, SAR3	No	No	Yes
OHP	A4,LTR	Yes	No	Yes
Card	Postal card A6R non-fixed size, Return postal card A5/A5R non-fixed size	No	No	Yes
Four-panel postcard	A4/A4R non-fixed size	No	No	Yes
Label	A4,A4R,LTR,LTRR	No	No	Yes
Paper with three holes	Same as standard paper	Yes	Yes	Yes
Secondary master drawing	A3,B4,A4	Yes	No	Yes
Envelope	Com10,Monarch,DL,ISO-C5ISO-B5,yogata NO.4	Yes	No	Yes

Chapter 2 Installation

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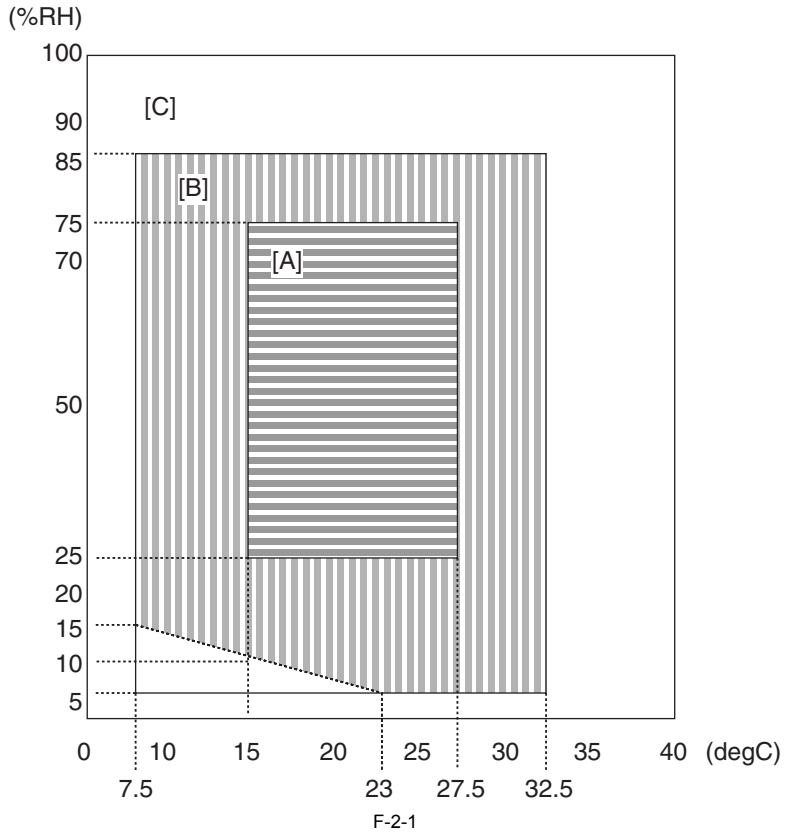
2.1 Making Pre-Checks

2.1.1 Selecting the Site of Installation

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

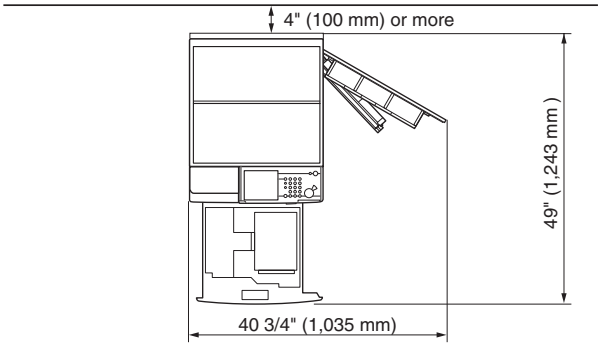
Select the site of installation against the following requirements; if possible, visit the user's before delivery of the machine:

1) There must be a power outlet properly grounded and rated as indicated (+, -10%) for exclusive use by the machine.
2) The environment of the room must be as indicated in the following diagram, and the machine must not be installed near a water faucet, water boiler, humidifier, or refrigerator:



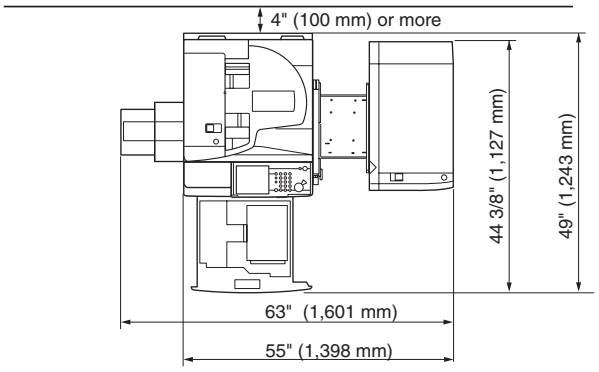
F-2-1

<Assured environmental zone>
[A]: A zone. All quality standard items are satisfied.
[B]: B zone. Some quality standard items are inferior to those in A zone or not satisfied.
[C]: C zone. Copying operation is performed normally without any safety issues, malfunction, and errors in display.
3) The machine must not be installed near a source of fire or in an area subject to dust or ammonium gas.
If the area is exposed to direct rays of the sun, provide curtains to the window.
4) The room must be well ventilated. (The level of ozone generated by the machine in use will not affect the individuals around it. However, some may find its odor to be unpleasant, as when working in a poorly ventilated room.)
5) The floor of the machine must be level so that the feet of the machine will remain in contact and the machine will remain level.
6) The machine must be at least 100 mm away from any wall, permitting unobstructed use.
Without accessory



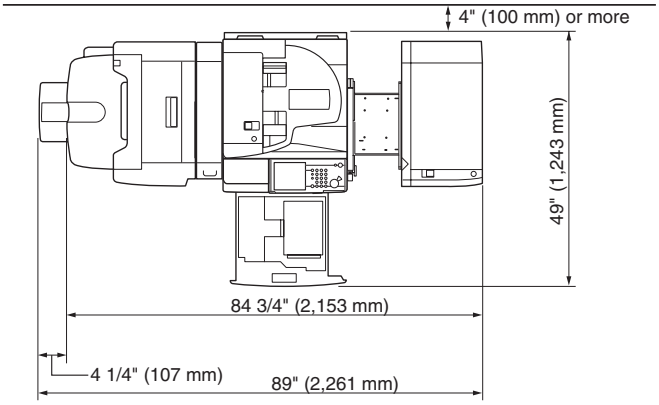
F-2-2

DADF-L1 + Finisher-Z1 + Side Paper Deck-Z1



F-2-3

DADF-L1 + Saddle Finisher-Y2 + Puncher Unit-L1 + Buffer Pass Unit-E1 + Side Paper deck-Z1



F-2-4

7) The machine must be placed in a well ventilated area. It is important to make sure, however, that the machine is not near the air vent (for suction) of the room.

2.1.2 Check to Make Before Installation

/ / iR C3380 / iR C2880

Be sure to go through the following before starting the work:
1) If you are installing the machine after moving it from a cold to warm location, be sure to leave the machine unpacked for at least 2 hours so that the machine is fully used to the site temperature, thus avoiding image faults caused by condensation.
(The term "condensation" refers to the formation of droplets of water on the surface of a metal object brought in from a cold to warm place, i.e., as the result of the rapid cooling of the moisture (vapor) around the object.)
2) The machine weighs a maximum of about 125 kg (including a DADF). Be sure to work in a group of 4 persons when lifting it.
Also, lift the main body while keeping it level.

2.1.3 Combination Table of Accessories

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

⚠
The following table shows the combination of accessories that are set at the right side of the host machine.
When setting the accessories indicated in the table, refer to the table below and check the combination before the setup.

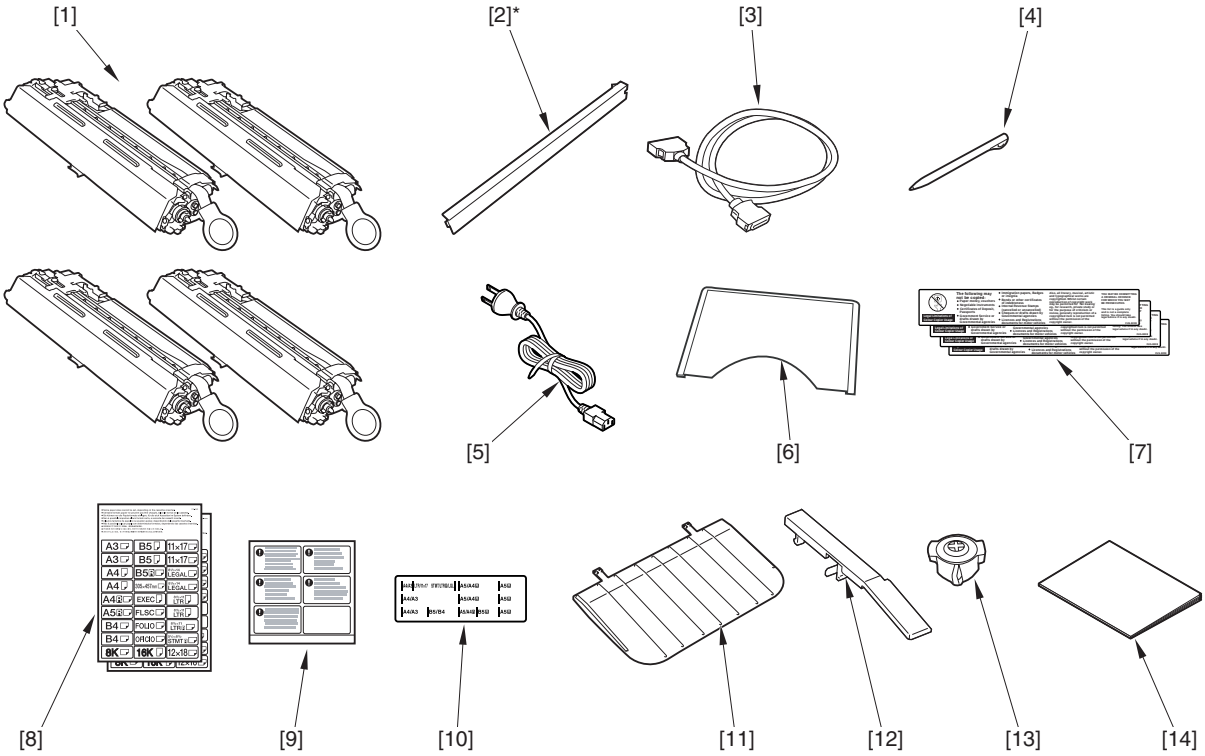
T-2-1

	Document Tray-J1	Voice Guidance Kit-B1	Voice Operation Kit-A1	Card Reader-C1
Document Tray-J1	-	no	no	yes
Voice Guidance Kit-B1	no	-	no	yes
Voice Operation Kit-A1	no	no	-	yes
Card Reader-C1	yes	yes	yes	-
yes: Available no: Unavailable				

2.1.4 Checking the Contents

iR C3380i / iR C3380 / iR C2880i / iR C2880

MEMO:
Remove all bundled parts in the cassette.



F-2-5

[1]	Developing assembly (Bk/Y/M/C)	1 pc. each	[8]	Cassette size label	2 pc.
[2]*	Lower right cover (Lower)	1 pc.	[9]	Shut-Down label	1 pc.
[3]	Reader communication cable	1 pc.	[10]	Document Size Label (models with DADF only)	1 pc.
[4]	Touch pen	1 pc.	[11]	Reversing end plate guide	1 pc.
[5]	Power cable	1 pc.	[12]	MP Side Guide Plate Stopper	1 pc.
[6]	Service book container	1 pc.	[13]	Stamp (models with DADF only, for attaching the ADF)	1 pc.
[7]	Copy Inhibit Label	4 pc.	[14]	Toner protect sheet (Keep it in Service book container)	1 pc.

* Use only in the case that the cassette pedestal is not installed.

Check the documentation and CD against the following table:

	iR C2280i/C3380i	iR C2280/C3380
Manual CD ROM	yes	yes
User's Guide	yes	yes
Sending and Facsimile Guide	yes	-
Tutorial CD (UKE)	yes	yes
Tutorial CD (FRE)	yes	yes
Tutorial CD (ITA)	yes	yes
Tutorial CD (GER)	yes	yes
Universal Send Trial Kit-B1	yes	yes
MEAP Administration Software CD	yes	yes
UFR II/PCL/PS Driver/Utility CD	yes	-
iW MC CD	yes	-
Release Note	yes	yes
Network Quick Start Guide	yes	-
PS/PCL/UFR II Printer Guide	yes	-
EULA	yes	yes

2.2 Unpacking and Installation

2.2.1 Points to Note When Turning Off the Main Power

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

How to Turn Off the Main Power
When turning off the main power, be sure to go through the following steps to protect the hard disk:
1) Hold down the control panel power switch for 3 sec or more.
2) Follow the instructions on the shutdown sequence screen to let the main power switch be ready to turn off.
3) Turn off the power switch.
4) Disconnect the power cables (for the power outlet).

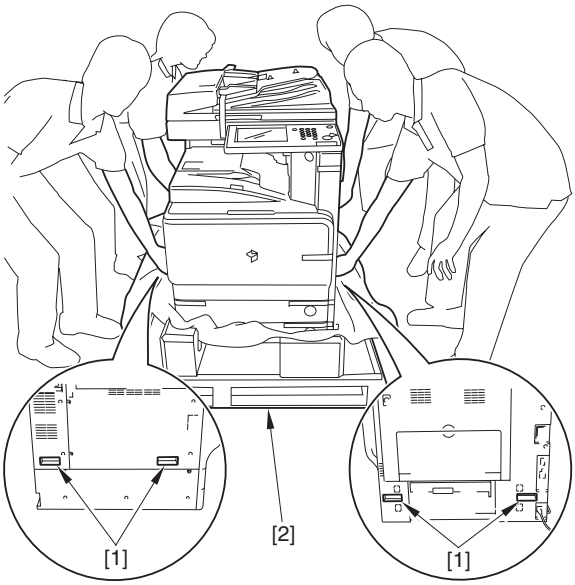
2.2.2 Unpacking

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

MEMO:
When installing the Plain pedestal/Cassette pedestal, be sure to place the main body on the Plain pedestal/Cassette pedestal. (For installation of the Plain pedestal/Cassette pedestal, see the Installation Procedure.)

1) Unpack the main body.
2) Hold the 4 grips [1] (left, right), and lift the machine off the skid [2].

The machine weighs a maximum of about 125 kg (including a DADF). Be sure to work in a group of 4 persons when lifting it.
Also, lift the main body while keeping it level.



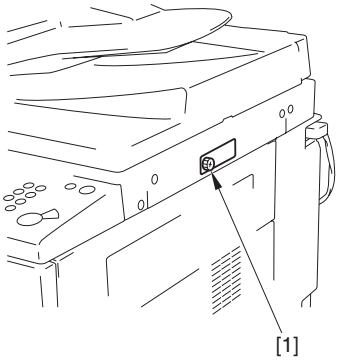
F-2-6

3) Remove all the tapes from the main body.

2.2.3 Installation of the Scanner

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Open the copyboard or the DADF to remove the copyboard glass protection pad.
2) Remove the scanning system fixing screw [1] found at the external side of the reader right cover (Take care to keep the scanning system fixing screw in preparation for shifting the machine).

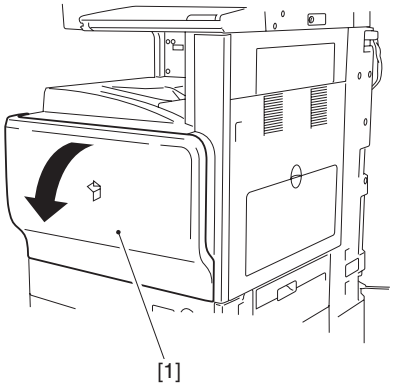


F-2-7

2.2.4 Installation of the Drum Cartridge

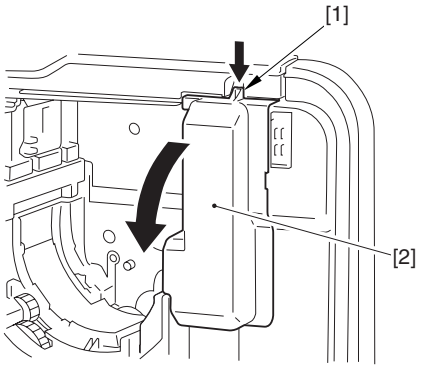
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Open the front cover [1].



F-2-8

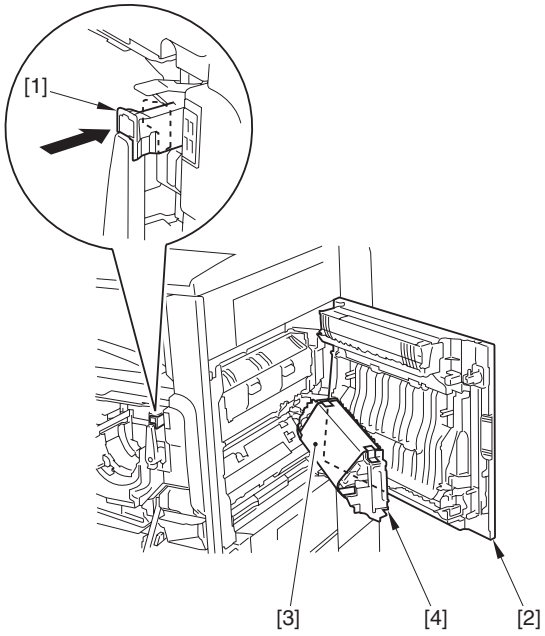
2) Press the claw down [1], and detach the handle cover [2].



F-2-9

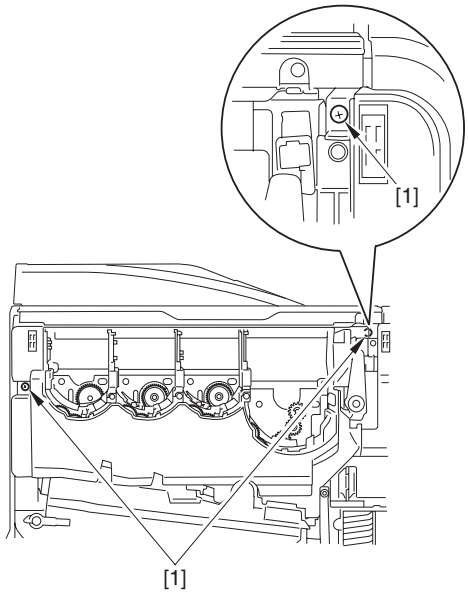
3) Press the release lever [1] to open the lower right cover [2] of the host machine.
4) Remove 4 tapes and the protection sheet [3] attached to the duplexing unit.

For taking in/out of the process unit, make sure to do with the duplexing unit [4] open.



F-2-10

5) Remove the 2 screws [1].

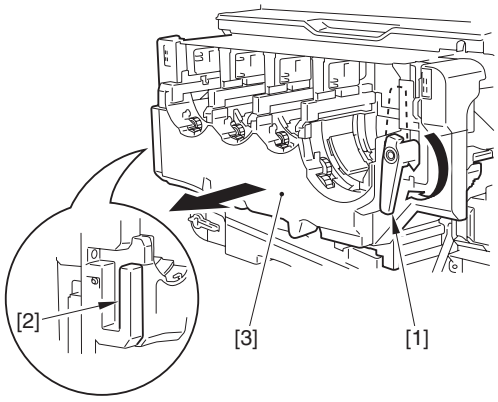


F-2-11

6) Turn the handle [1] by 180 degrees, and hold the handle [1] and the grip [2] to slide the process unit [3] until it stops.

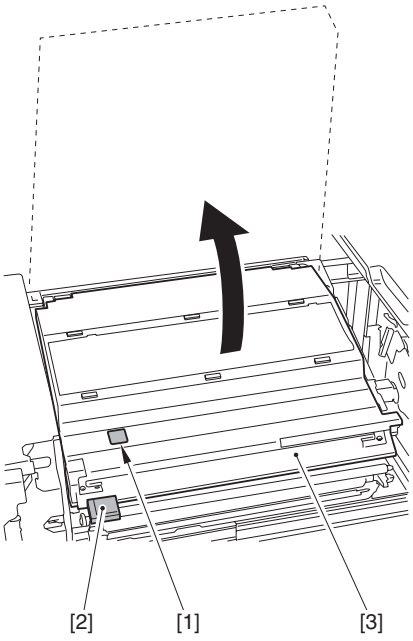
⚠

Make sure to pull out the process unit until it stops. If closing the lower right cover while the process unit is pulled out in a halfway, the high voltage point of the secondary transfer roller contacts to the ITB belt, so it may scratch the ITB belt.



F-2-12

7) Press the push-button [1], and hold the grip [2] to open the ITB unit [3] upward.

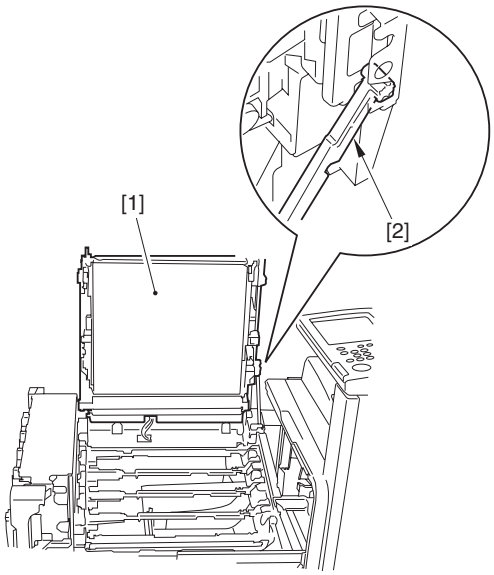


F-2-13

8) Secure the ITB unit [1] in place with the tip-resistant arm [2] (Secure in the lower slot of the 2)

⚠

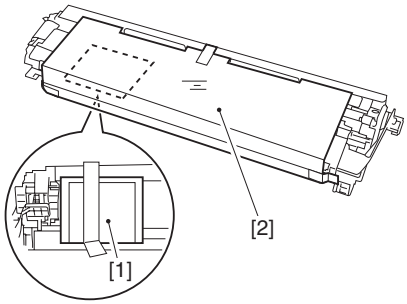
Do not touch the ITB. If the ITB is scratched, it may cause the pickup fault or degradation of the print quality.
In case the print quality is degraded due to touching the ITB, clean the ITB with soft and dry cloth.
If the print quality is not improved, execute the following:
[Additional Functions] > [Adjustment/Cleaning] > [Cleaning inside Main Unit] > [Start]



F-2-14

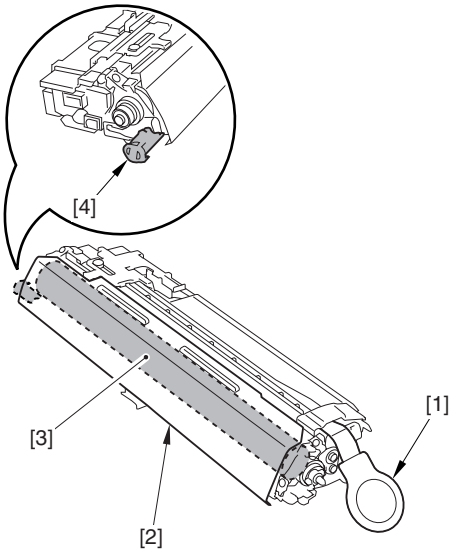
9) Take care of the following items to unpack the entire drum cartridge package.

Make sure to remove the drying agent [1] and the antifriction sheet [2] first.



F-2-15

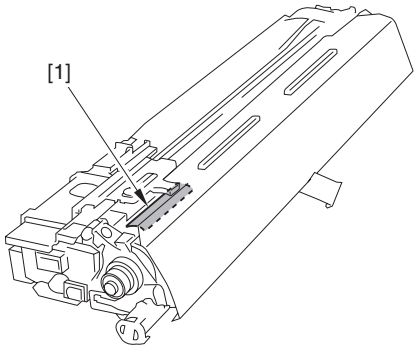
- Do not remove the sealing tape [1] and the drum protection cover [2].
- Do not press the drum area [3] over the drum protection cover [2]. It may cause the damage of the drum area.
- Do not touch the waste toner shutter [4]. It may loosen the stopper [4].



F-2-16

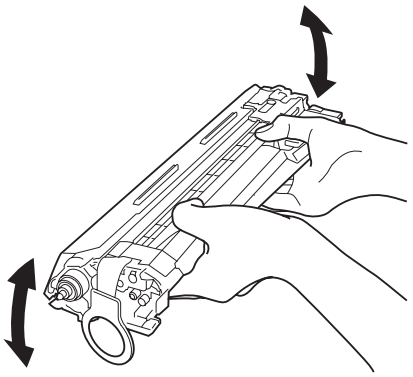
- Make sure to execute in the order of Y/M/C/Bk for step 10) through 12).

- Check the color of the drum cartridge by the label [1].



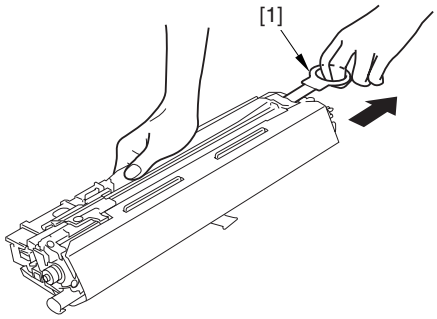
F-2-17

10) Hold the drum cartridge with both hands as shown in the figure, and shake it up and down 5 times to ensure the developer inside spread evenly.



F-2-18

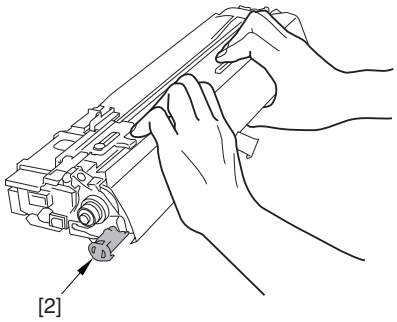
11) Hold down the drum cartridge as shown in the figure, and draw the sealing tape [1] in the direction shown by the arrow.



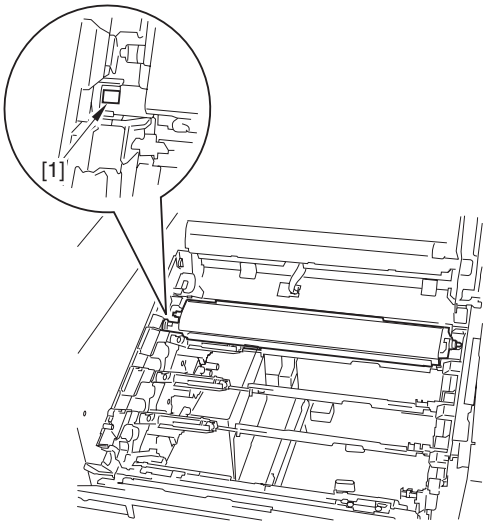
F-2-19

12) Hold the drum cartridge as shown in the figure below to set to the specified position of the ITB unit.

- Do not press the drum area over the drum protection cover. It may cause the damage of the drum area.
- Check to see if the waste toner shutter label [1] is visible when setting. If the drum cartridge is set with the waste toner shutter [2] loosen, the waste toner shutter label [1] cannot be seen and the parts may be broken at rotating the handle in the step 17).
- Check to see if the drum cartridge is inserted to the specified position.



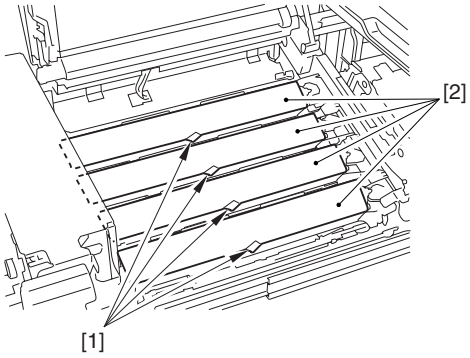
F-2-20



F-2-21

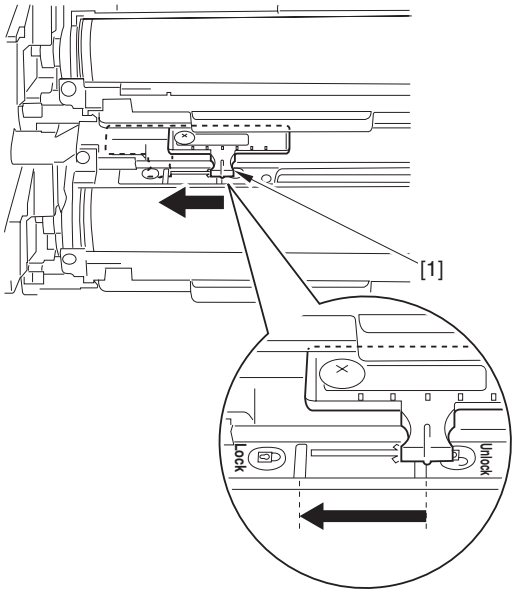
13) After completing the setting of all drum cartridges, pull the 4 tapes [1] to remove the 4 drum protection covers [2].

- Do not close the ITB cover with the drum protection cover fixed.
- Make sure not to put light to the drum for 5 min or more after detaching the drum protection cover.



F-2-22

14) Lock the shutter levers [1] of each drum cartridge in the direction of the arrow.



F-2-23

Points to Note When Removing Drum Cartridge

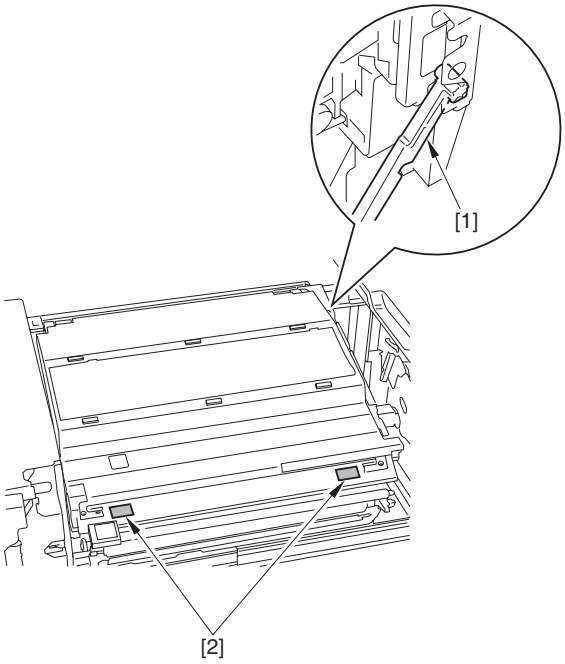
When removing the drum cartridge, make sure that the shutter lever is at the 'Unlock' position.

If removing the drum cartridge from the machine while the shutter lever is not at the 'Unlock' position, and then mounting the cartridge again after shifting the lever to the 'Unlock' position, the shutter of the drum cartridge is not opened properly. Therefore, toner does not get into the drum cartridge from the hopper assembly, and the spilled toner strays within the machine.

If removing the drum cartridge while the shutter lever is not at the 'Unlock' position, put the cartridge back and shift the shutter lever to the 'Unlock' position, and then, remove the cartridge.

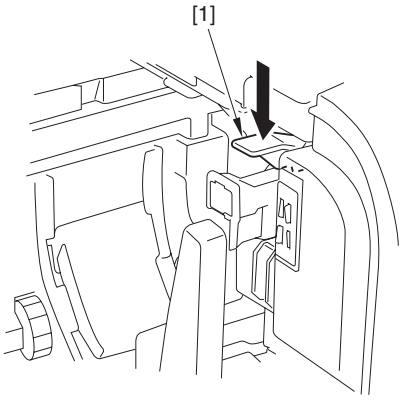
15) Release the tip-resistant arm [1], and press the 2 sealing areas [2] on the ITB cover to close the ITB unit.

- Make sure to release the tip-resistant arm [1] first, and then, close the ITB unit. If you try to close the ITB unit while the tip-resistant arm is fixed, it may cause damage of the tip-resistant arm.
- If you press the areas other than the sealing areas to close the ITB unit, the ITB cover may make contact with the ITB.



F-2-24

16) Press down the process unit onto the main body.
17) Turn the handle of the process unit by 180 degrees counterclockwise.
18) Press the lever [1] and set back the release lever.



F-2-25

19) Fix the process unit in place with 2 screws that were removed in the step 5) to attach the handle cover.

⚠

Close the lower right cover of the main body after fixing surely the process unit. The position of the process unit may be displaced in closing the lower right cover of the main body first.

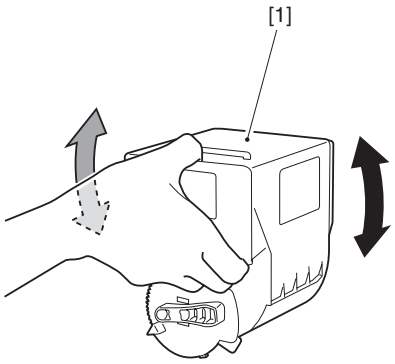
---

20) Close the lower right cover of the host machine.

2.2.5 Installation of the Toner Retainer

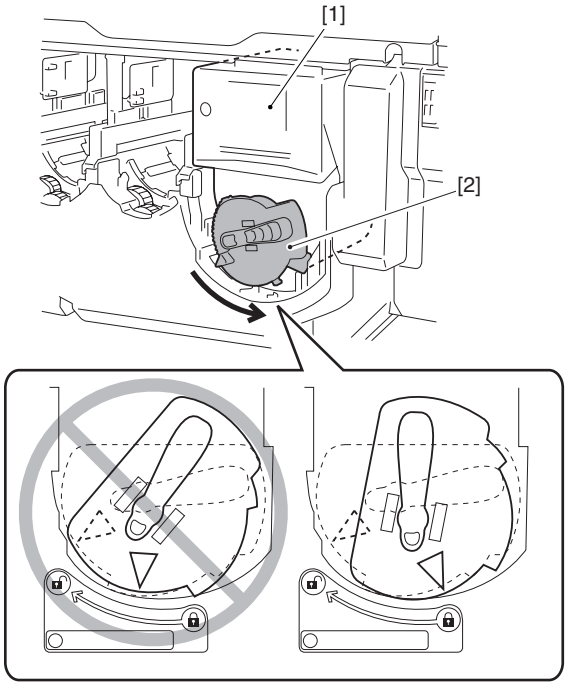
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Take out the toner retainer Bk [1] from the protection package and shake it 5 times from side to side.



F-2-26

2) Set the toner retainer Bk [1] to the host machine, and turn the lever [2] in the direction of the arrow to lock.



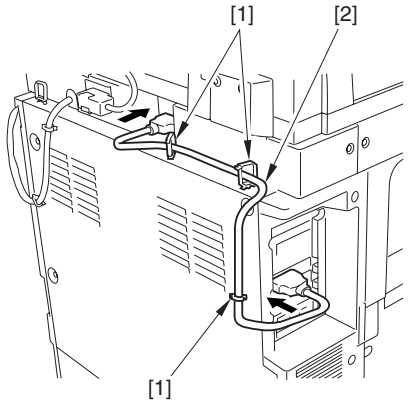
F-2-27

3) Set the rest of the toner retainers in the same way.
4) Close the front door.

2.2.6 Connection of the Cable

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Fix the reader communication cable [2] in place with the 3 wire saddles [1] to connect the connector of the both sides to the main body.



F-2-28

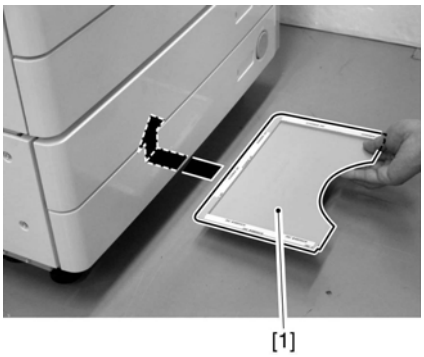
2) Connect the power cable (for outlet) of the main body.
3) Turn on the main power switch.

2.2.7 Attaching Other Parts

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

<Service book container>

1) Remove the release paper of the double-sided tape on the rib area of the service book container [1], and attach the service book container on the bottom plate of the pedestal.

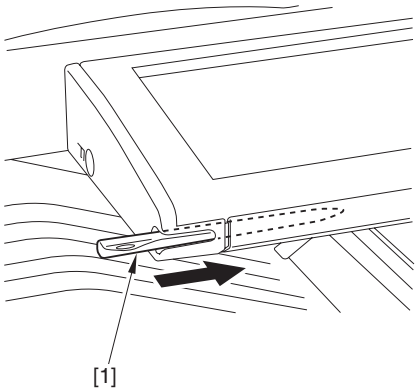


F-2-29

⚠ Do not attach the service container:
- Inside the machine
- in the position onto which attachment of the service book container may block off the louver area
- in the position onto which attachment of the service book container may block off the grip area

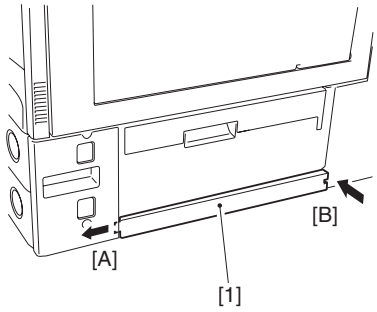
MEMO:
In case there is no pedestal, attach the service book container on the left cover of the main body.

<Touch Pen>
1) Place the touch pen [1] in the control panel.



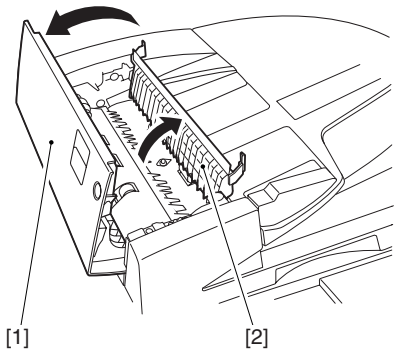
F-2-30

<Lower Right Cover (Lower)>
1) Hook the claws in the order of [A] and [B], and attach the Lower right cover (Lower) [1].
(Go through this procedure when double-deck pedestal is not installed.)



F-2-31

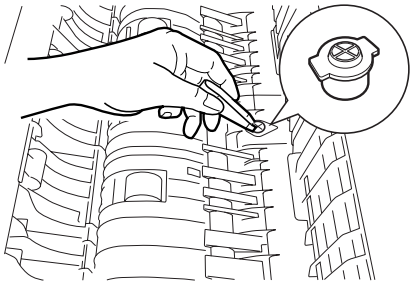
<Stamp (Model with DADF only)>
1) Open the DADF feeder cover [1] and separation guide [2].



F-2-32

2) Using tweezers, fix the stamp in place, making sure that the print face of the stamp faces upward.

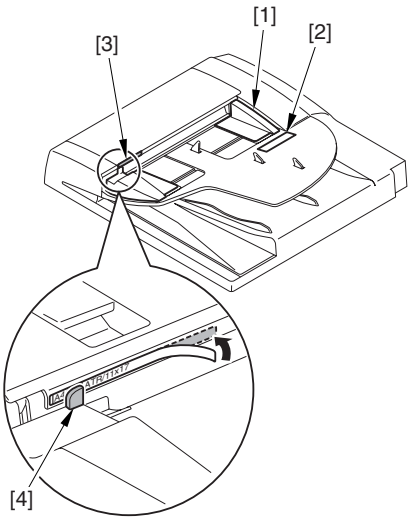
⚠
Be sure to push in the stamp until a click is felt. The presence of a gap can cause paper to jam.



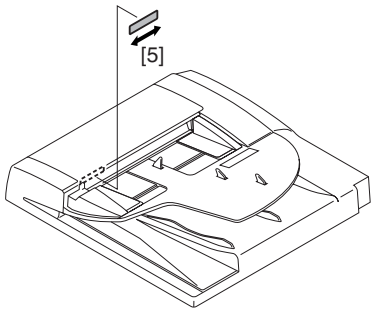
F-2-33

<Size Label (only if w/ DADF)>
1) Match the side guide (rear) [1] against the index A4/A3 or LTR/11X17 indicated by a marking [2].
2) Attach the size label [3] of the correct paper configuration to the feeder cover.

MEMO:
This label is designed to help individuals needing different angles of view. Move the label back and forth (in the direction of the arrow [5]) so that the index [4] of the side guide (front) will match the appropriate index of the size label.



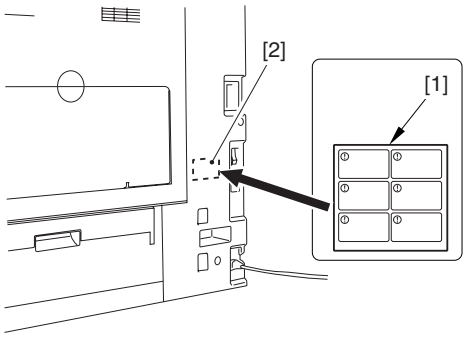
F-2-34



F-2-35

<Shut-Down Label>

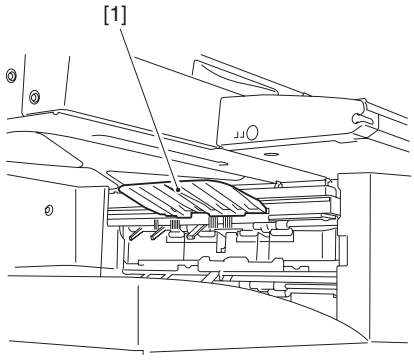
1) Attach the Shut-Down warning label [1] of the appropriate language to the right rear cover of the machine (i.e.,. on the left inside [2] of the main power supply.).



F-2-36

<Reversing End Plate Guide>

1) Attach the reversing trailing edge guide [1] to the delivery assembly.



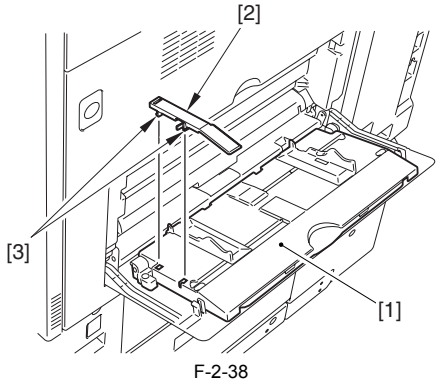
F-2-37

<MP Side Guide Plate Stopper>

MEMO:
MP side guide plate stopper is the part to attach in the case of not using the paper in the size of A4 width or more when making prints from the manual feeder tray.
Ask user whether to attach this part, and do the attaching work if there is a request from the user.

---

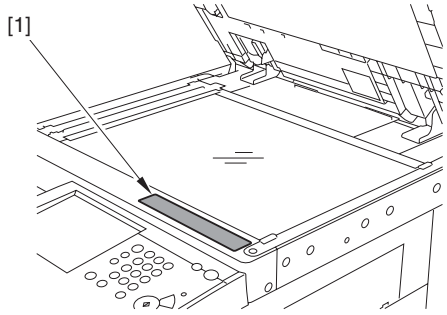
1) Open the manual feeder tray [1] to attach the MP side guide plate stopper [2].
   - 2 claws [3]



F-2-38

<Copy Inhibit Label >

1) Open copyboard or DADF, and attach the copy inhibit label [1] in the language matching to the location over the label attached at shipment. (A label in English is attached at shipment)



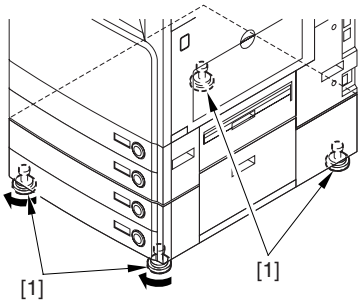
F-2-39

2.2.8 Fixing the Machine in Place

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

<If a Cassette Pedestal Is Used>

1) Move the machine to its permanent position, and fix it in place using the 4 adjusters of the cassette pedestal.



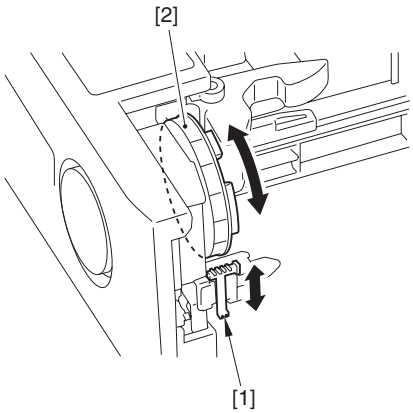
F-2-40

MEMO:
No need for adjustment in the case of no cassette pedestal.

2.2.9 Setting Up the Cassette

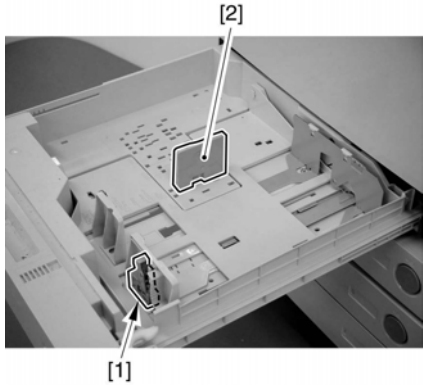
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Press the cassette release button, and slide out the cassette to the front.
2) Check the type of paper that the user uses, check to see that the size configuration switch [1] of the cassette is set to the paper size. As necessary, change the switch position.
3) Set the paper size dial [2] to suit the size of the paper in question.



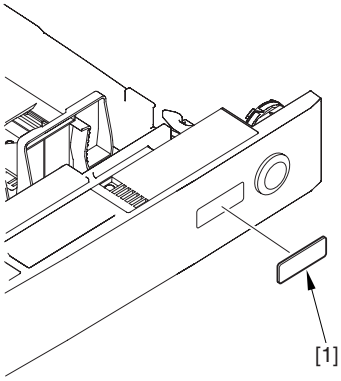
F-2-41

4) Pick the lever [1] of the side guide plate, and move the side guide plate to the desired position.
5) Shift down the rear guide plate [2] to the right to detach. Adjust the rear guide plate to suit the appropriate size indicated on the base of the cassette.



F-2-42

6) Attach the cassette size label [1] that matches the selected size of paper to the front of the cassette.



F-2-43

7) Deposit paper in the cassette; then, slide in the cassette.
8) Perform the same for the other cassette.
9) If a cassette pedestal is used, set it by referring to its Installation Procedure.

2.2.10 Automatic Gradation Correction

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

For models except ones with DADF, mount the accessory platen cover or the DADF. When mounting the DADF, be sure to see the installation procedure for the DADF.

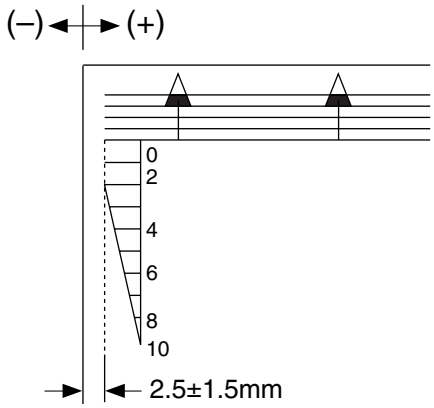
1) Clean the machine's copyboard glass.
2) Place A3, A4, 11X17, or LTR paper in the cassette. (See the instructions on how to set up the cassette.)
3) Press the [Additional Function].
4) Make the following selections: [adjust/clean] > [auto gradation correction] > [full correction] > [test print]
   - The test print 1 will be printed out.
5) Place the printout of the test print 1 on the copyboard glass as instructed on the control panel screen.
6) Close the copyboard cover/ DADF.
7) Press [start to read].
   - The machine reads the printout of the test print 1.
   - When a message appears prompting you to remove the test print, remove the printout of the test print 1 from the copyboard glass.
8) Press [test print 2].
   - The machine prints out the test print 2.
9) Place the printout of the test print 2 on the copyboard glass as instructed on the control panel scan.
10) Close the copyboard cover/ DADF.
11) Press [start to read].
   - The machine reads the print out of the test print 2.
   - When a message appears promoting you to remove the test print, remove the printout of the test print 2 from the copyboard glass.
12) Press [test print 3].
   - The machine prints the test print 3.
13) Place the printout of the test print 3 on the copyboard glass as instructed on the control panel screen.
14) Close the copyboard cover/ DADF.
15) Press [start to read].
   - The machine reads the printout of the test print 3.
   - The machine issues a message to indicate that it has completed full correction. In response, remove the printout of the test print 3 form the copyboard glass.
16) Press the Reset key once to end user mode.

2.2.11 Adjusting the Image Position

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1. Adjusting the Margin (1st side; mechanical adjustment)

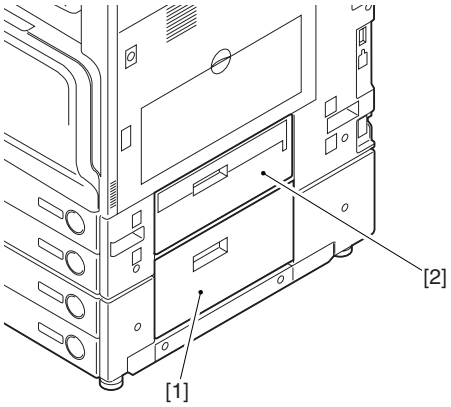
1) Make a copy using the cassettes 1 and 2 as the source of paper; then, check to see that the margin on the front side is 2.5±1.5 mm.



F-2-44

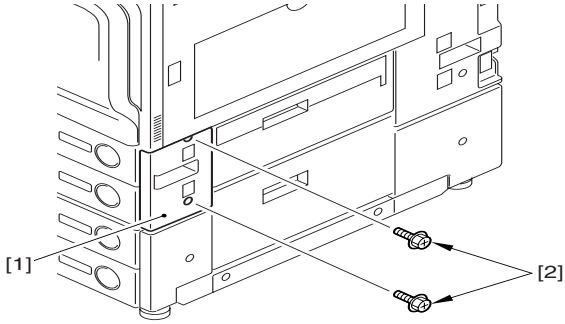
<In the case that the cassette 1, or the cassette 2 is out of specification>

1) In the case of the device with the 2-cassette pedestal, detach the cassette lower right cover [1].
2) Open the cassette upper right cover [2].



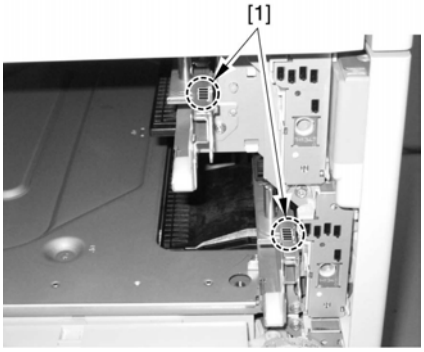
F-2-45

3) Detach the front right cover [1].
   - 2 screws [2]



F-2-46

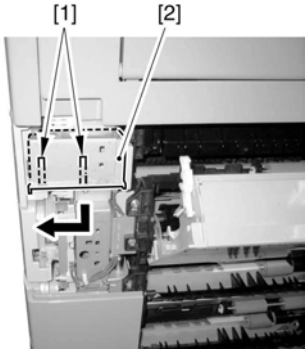
4) Slide out the cassettes 1 and 2.
5) Check the index position [1] on the adjusting plate.



F-2-47

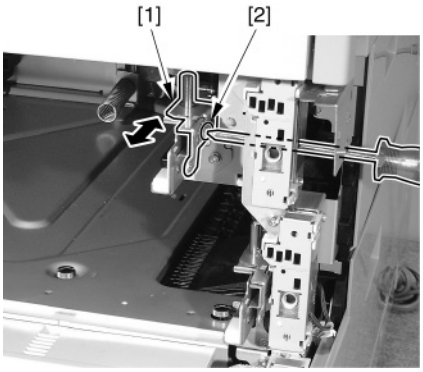
A. Making Adjustments for the Cassette 1

A-1) Free the 2 claws [1], and pull the grip (right front) [2] in the direction of the arrow to detach.



F-2-48

A-2) Loosen the fixing screw [2] of the adjusting plate [1].
A-3) By referring to the index you took note of in step 5), move the adjusting plate back and forth. Moving it toward the rear of the machine will increase the margin on the image front.

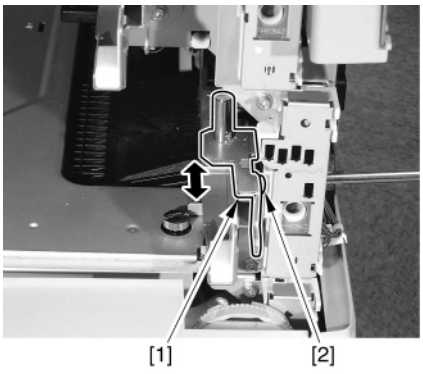


F-2-49

A-4) Tighten the fixing screw.
A-5) Slide in the cassette 1.
A-6) Make a copy using the cassette 1 as the source of paper; then, check to see that the margin in the image front direction is 2.5 +/-1.5 mm.
A-7) Mount back the grip (front right).

B. Making Adjustments to the Cassette 2

B-1) Loosen the fixing screw [2] of the adjusting plate [1].
B-2) By referring to the index you took note of in step 5), move the adjusting plate back and forth. Moving it toward the rear of the machine will increase the margin on the image front side.



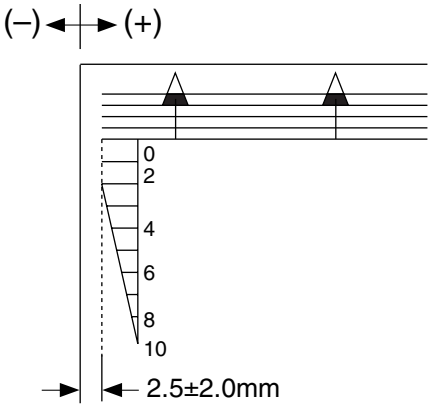
F-2-50

B-3) Tighten the fixing screw.
B-4) Slide back the cassette 2.
B-5) Make a copy using the cassette 2 as the source of paper; then, check to see that the margin in the image front direction is 2.5 +/-1.5 mm.

3) Mount back the machine's cassette front right cover.
4) Close the cassette lower right cover and the cassette upper right cover.

2. Adjusting the Margin (2nd side)

1) Make a copy using the cassette 1 as the source of paper; then, check to make sure that the margin on the front side is 2.5 +/-2.0 mm.

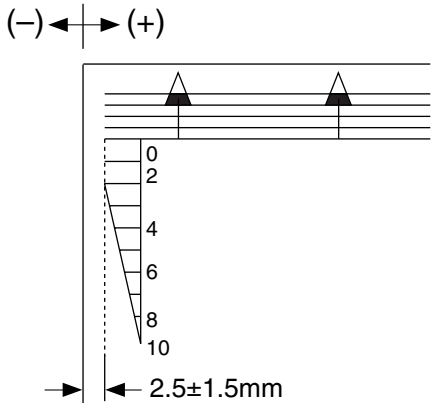


F-2-51

2) If the margin is as indicated, change the adjustment value of the horizontal registration for the 2nd side for the cassette 1.
- COPIER > ADJUST > FEED-ADJ > ADJ-C1RE
An increase by '1' will decrease the margin on the front side by 0.1 mm.
3) Enter the adjustment value for the horizontal registration of the 2nd side for the cassette 1 as the adjustment value for the horizontal registration of the 2nd side of the cassette 2.
- COPIER > ADJUST > FEED-ADJ > ADJ-C2RE
4) Make a copy using the cassette 2 as the source of paper; then, check to make sure that the margin on the front side is 2.5 +/-2.0 mm.
5) If the value is not as indicated, change the adjustment value of the 2nd side for the cassette 2.
- COPIER > ADJUST > FEED-ADJ > ADJ-C2RE
An increase by '1' (for DJ-C2RE) will decrease the horizontal registration on the front side by 0.1 mm.
6) Record the new values on the service label.
- ADJ-C1RE
- ADJ-C2RE
7) Press the Reset key twice to end service mode.

3. Adjusting the Margin for the Manual Feed Tray (1st side; mechanical adjustment)

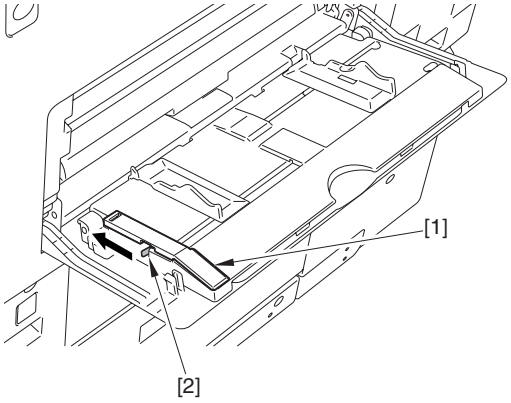
1) Place paper in the manual feed tray. For instructions, see the label attached to the manual feed tray.
2) Make a copy using the manual feed tray as the source of paper; then, check to make sure that the margin on the front side is 2.5 +/-1.5 mm.



F-2-52

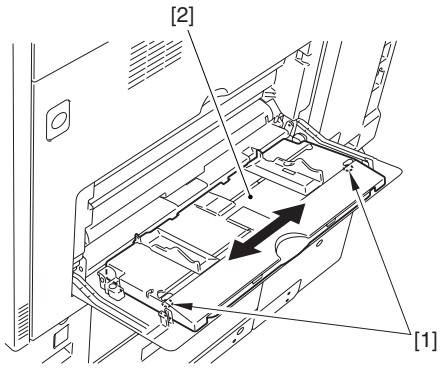
- If the value is not as indicated, make the following adjustments:

3) Remove the paper from the manual feed tray.
4) In case the MP side guide plate stopper [1] is attached, slide the knob [2] in the direction of the arrow and unlock the stopper.



F-2-53

5) Loosen the 2 fixing screws [1] on the manual feed tray upper cover.
6) With reference to the value you took note of in step 2), move the manual feed upper cover [2] back and forth. Moving it toward the rear of the machine will increase the margin on the front side.

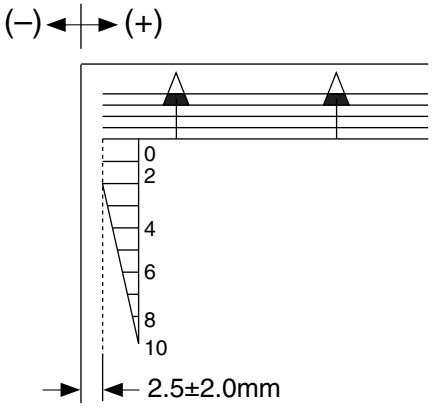


F-2-54

7) Tighten the fixing screw of the manual feed tray upper cover.
8) Place paper in the manual feed tray.
9) Make a copy; then, check to make sure that the margin on the image front side is 2.5 +/-1.5 mm.

4. Adjusting the Margin (manual feed tray; 2nd side)

1) Make a double-sided copy using the manual feed tray as the source of paper; then, check to make sure that the margin on the front side for the 2nd side is 2.5 +/-2.0 mm.



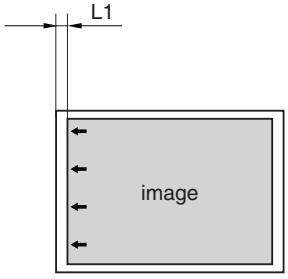
F-2-55

2) If the value is not as indicated, change the horizontal registration adjustment value for the 2nd side for the manual feed tray.
   - COPIER > ADJUST > FEED-ADJ > ADJ-MFRE
   An increase by '1'(ADJ-MFRE) will decrease the margin on the front side by 0.1 mm.
3) Record the new adjustment value on the service label.
   - ADJ-MFRE
4) Press the Reset key twice to end service mode.

5. Adjusting the Margin Along the Leading Edge (1st side)

Make a copy using the cassette 1 as the source of paper; then, check to make sure that the margin along the image leading edge (L1) is 4.0 +1.5/-1.0 mm. If not, make adjustments as follows:

1) Make the following selections in service mode: COPIER > ADJUST > FEED-ADJ > REGIST.
2) Change the setting to make adjustments. (A change of '1' will cause a shift of 0.1 mm, with a higher value moving the image toward the leading edge.)



F-2-56

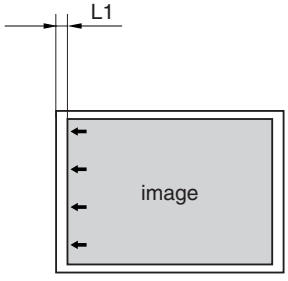
An increase in REGIST will shift the image toward the leading edge of the paper.

3) Record the new adjustment value on the service label.
   - REGIST

6. Adjusting the Margin Along the Leading Edge (2nd side)

Make a double-sided copy using the cassette 1 as the source of paper; then, check to see if the margin along the image leading edge for the 2nd side (L) is 4.0 +1.5/-1.0 mm. If not, make adjustments as follows:

1) Make the following selections in service mode: COPIER > ADJUST > FEED-ADJ > RG-REFE.
2) Change the setting, and make adjustments. (A change of '1' will cause a shift of 0.1 mm, with a higher setting moving the image toward the leading edge.)



F-2-57

An increase in RG-REFE will shift the image toward the leading edge of paper (toward the trailing edge of feed).

3) Record the new adjustment value on the service label.
   - RG-REFE

2.3 Checking the Connection to the Network

2.3.1 Checking the Connection to the Network

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

⚠

Perform the following work only if the machine is equipped with printer functions:

1) Hold down the control panel power switch for 3 sec or more.
2) Operate on the touch panel according to the shut-down sequence indicated so that the main power switch may be turned off.
3) Turn off the main power switch.
4) Connect the network cable to the machine, and turn on its main power switch.
5) Inform the system administrator of the site that the installation work is complete, and ask him/her to make network settings.

⚠

You must select 'On' for the following mode item before making network settings:
[Additional Fanction] > [System Settings] > [Network Settings] > [Change Settings/Display Connection Confirm].

6) When network settings have appropriately been made, turn off and then back on the main power as described in steps 1) through 3) above so that the new settings are valid.

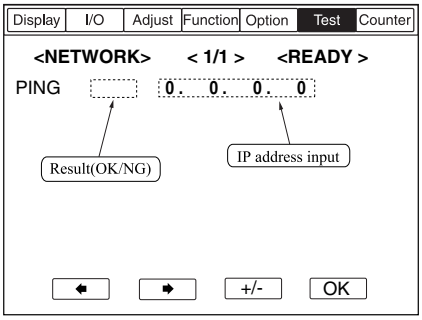
2.3.2 Using PING

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

⚠

Go through the following steps only if the machine is connected to a network:
If the user's network environment is based on TCP/IP, use the PING function to see that the main controller PCB (sub LANBAR-C) has been correctly mounted and the network settings have been correctly made. If the user's network environment is based on IPX/SPX or AppleTalk, on the other hand, you need not make a PING-based check.

1) Make the following selections in service mode: COPIER > TEST > NETWORK > PING.
2) Enter the IP address using the keypad on the control panel, and press the OK key.
3) Press the Start key.
   - If the PING check is successful, the machine will indicate 'OK'; otherwise, it will indicate 'NG'.



F-2-58

2.3.3 Making Checks Using a Remote Host Address

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

You can execute PING using a remote host address, thereby checking the connection to the network.

The term "remote address" refers to the IP address of a PC terminal connected to and operating in a TCP/IP network environment to which the machine belongs.

1) Inform the system administrator that you will be checking the connection to the network using PING.
2) Check with the system administrator to find out the remote host address.
3) Enter the remote host address you obtained in PING.
4) If the indication is 'OK', the machine is correctly connected to the network.
5) If the indication is 'NG', the machine is not correctly connected to the network. Go through the following troubleshooting steps:

2.4 Troubleshooting the Network

2.4.1 Troubleshooting the Network

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

⚠

Go through the following steps only if the machine is connected to the network:

If the connection to the network is not correct, you may suspect the following:
a. poor connection between the network and the main controller PCB (sub LANBAR-C)
b. wrong TCP/IP setting on the machine
c. faulty main controller PCB (sub LANBAR-C) or poorly mounted PCB

d. faulty user network

2.4.2 Making Checks Using a Loopback Address

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

A loopback address returns before it reaches the main controller PCB (sub LANBAR-C); therefore, executing PING using a loopback address will enable you to find out whether the TCP/IP settings of the machine are correct.
1) Enter the loopback address (127.0.0.1) to PING.
   - if the machine indicates 'NG', check the TCP/IP settings of the machine once again, and then execute PING once again.
   - if the machine indicates 'OK', check the local host address.

2.4.3 Making a Check Using a Local Host Address

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

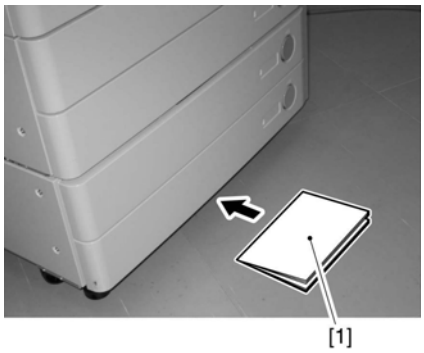
The local host address is the IP address of the machine; therefore, executing PING using the local host address, which returns after it has reached the main controller PCB (sub LANBAR-C), enables you to find out if the main controller PCB (sub LANBAR-C) is good or not.
1) Enter the IP address of the machine to PING.
   - if the machine indicates 'NG', make the following checks/corrections, and execute PING once again.
     a. faulty IP address of the machine: check with the system administrator to find out if the IP address (and its settings) assigned to the machine is correct.
     b. poor connection of the main controller PCB (sub LANBAR-C): check the connectors associated with the main controller PCB (sub LANBAR-C).
     c. faulty main controller PCB (sub LANBAR-C): replace the main controller PCB (sub LANBAR-C).
   - if the machine indicates 'OK', suspect a fault in the user's network environment. Report to the system administrator, ask for corrective action.

2.5 Checking the Images/Operations

2.5.1 Checking the Images

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Place the test chart on the copyboard glass, and make copies using the individual cassettes as the source of paper. then, check the images.
   - check to see that the machine does not produce any abnormal noise.
   - check to see that the images are produced correctly at different magnifications.
   - check to see that the machine produces as many copies as specified normally.
2) Make settings (Additional Function ; e.g., date, time) to suit the needs of the user.
3) Start service mode.
4) Make the user-related settings to suit the needs of the user (COPIER > OPTION > USER).
5) Print out test prints in service mode (COPIER > FUNCTION > MISC-P > P-PRINT).
6) Put away the printed test print [1] in the service book case.



F-2-59

7) Press the Reset key twice to end service mode.
8) Clean up the area around the machine, and fill out the service book.

2.6 Relocating the Machine

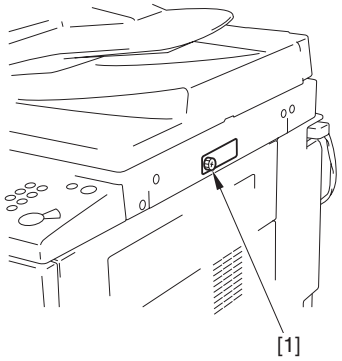
2.6.1 Relocating the Machine

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

If you need to relocate the machine after installation by truck or other means of transportation, be sure to perform the following work in advance:

⚠
If you want to move the machine intact with its cassette pedestal, be sure not to use the machine's grips; otherwise, the machine will come off the cassette pedestal as when it is moved over a step. Be sure to lift the cassette pedestal.

1) Fix the scanner in place using the scanner fixing screw [1] that has been set aside from the time of installation.



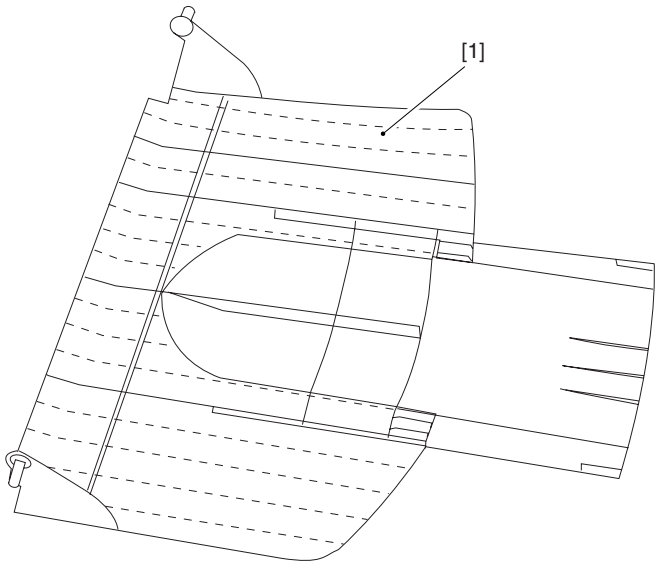
F-2-60

2) Put paper on the copyboard glass.
3) Remove all toner cartridges and developing assembly so that the developing rotary will not rotate in response to vibration occurring in transit.

2.7 Installing the Copy Tray

2.7.1 Checking the Components

/ / iR C3380i / iR C3380 / iR C2880i / iR C2880



F-2-61

[1] Delivery tray 1 pc.

2.7.2 Turning Off the Machine

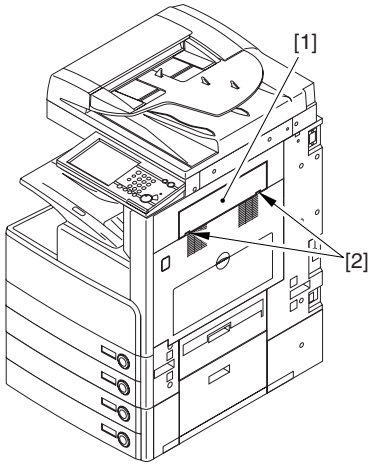
/ / iR C3380i / iR C3380 / iR C2880i / iR C2880

⚠ **How to Turn Off the Host Machine**
When turning off the main power, be sure to go through the following in strict sequence to protect the machine's hard disk:
1) Hold down on the power switch on the control panel for 3 sec or more.
2) Operate on the touch panel according to the shut-down sequence indicated so that the main power switch may be turned off.
3) Turn off the main power switch.
4) Disconnect the power cable (for the power outlet).

2.7.3 Installation Procedure

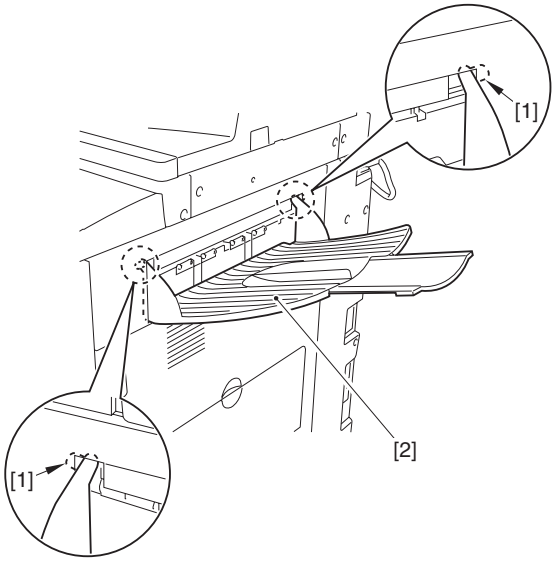
/ / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Using a flat-blade screwdriver, free the 2 claws [2] of the delivery cover [1] to remove.



F-2-62

2) Fitting the 2 protrusions [1] at the both edges of the tray to the holes, attach the tray [2].



F-2-63

3) Connect the power cable to the outlet.
4) Turn on the main power switch.
5) Login to the service mode.
6) Select the followings to register '1': COPIER > OPTION > ACC >OUT-TRAY
7) Check to see the following menu items are added: [Initial Setting/Register] > [Common Specification Setting] > [Delivery Tray Setting]
8) Select the copy at the tray B, and execute test print.
9) Check to see that the copy is delivered to the copy tray.
10) According to user's request, reset the tray.

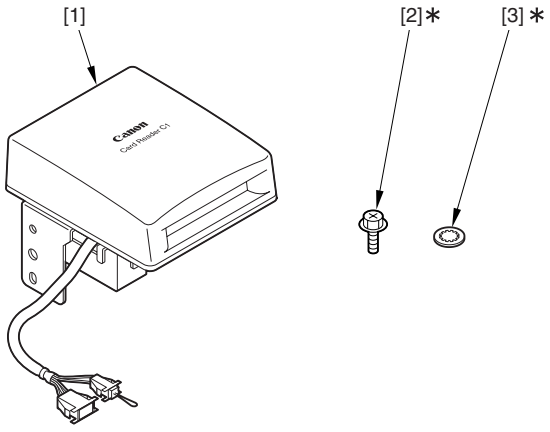
2.8 Installing the Card Reader

2.8.1 Checking the Contents

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

⚠
To install the card reader-C1, the card reader mounting kit-B1 is necessary.

<Card Reader-C1>

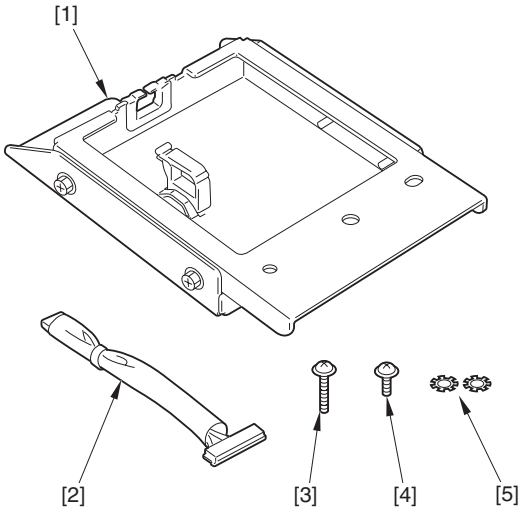


F-2-64

[1]	Card reader	1pc.
[2]*	Screw (RS tightening; M4X10)	1pc.
[3]*	Toothed washer	1pc.

* not used in this machine

<Card Reader Mounting Kit-B1>



F-2-65

[1]	Card reader base plate	1pc.
[2]	Relay harness	1pc.
[3]	Screw (TP; M4X25)	1pc.
[4]	Screw (TP; M4X8)	1pc.
[5]	Toothed washer	2pc.

2.8.2 Turning Off the Host Machine

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

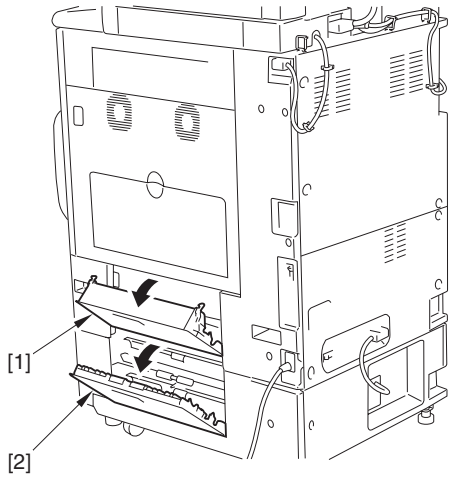
How to Turn Off the Main Power
When turning off the main power, be sure to go through the following steps to protect the hard disk:
1) Hold down the control panel power switch for 3 sec or more.
2) Follow the instructions on the shutdown sequence screen to let the main power switch be ready to turn off.
3) Turn off the power switch.
4) Disconnect the power cables (for the power outlet).

2.8.3 Installation Procedure

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

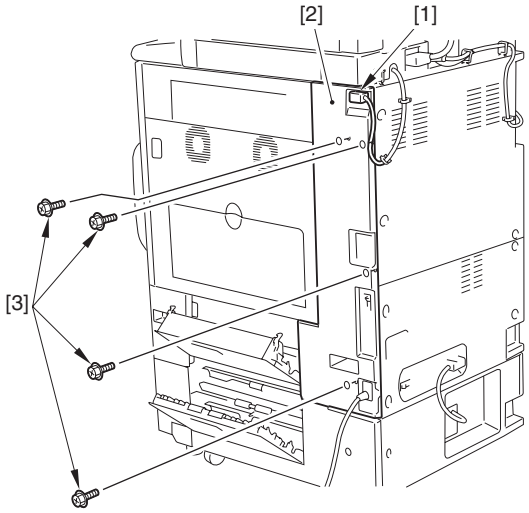
- After installing the card reader-C1, enter the card number to use in the service mode of this machine by selecting the following: COPIER > FUNCTION > INSTALL > CARD. Unless entering the card number, the card fails to be recognized when inserting the card.
- When installing the machine, see the Combination Table for Accessory Installation.

1) Open the cassette right upper cover [1]. If the cassette pedestal was installed, open also the cassette right lower cover [2].



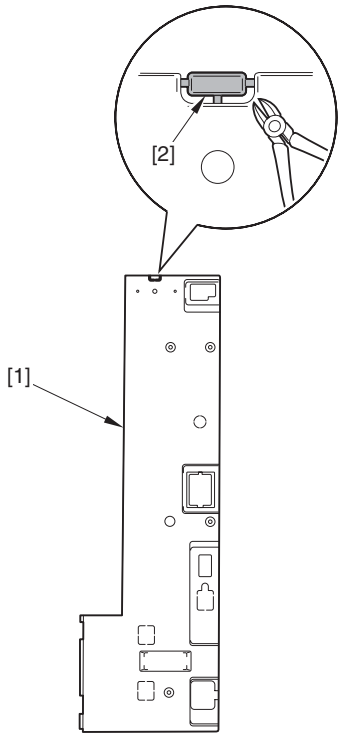
F-2-66

2) Pull out the reader power supply cable [1].
3) Detach the right rear cover [2].
- 4 screws [3]



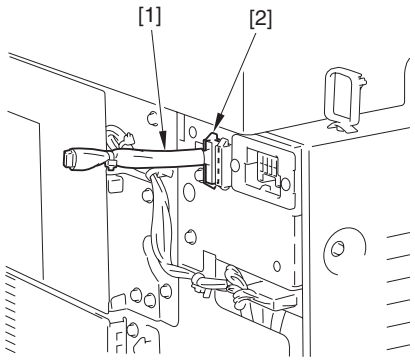
F-2-67

4) Using nippers cut off the face plate [2] of the rear right cover [1].



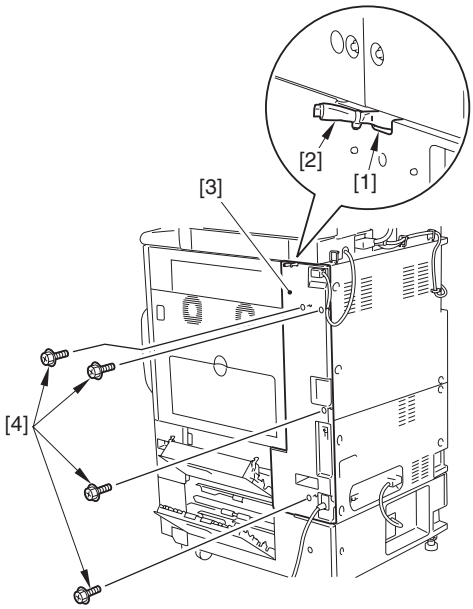
F-2-68

5) Connect the relay cable [1] to the connector area [2] of the host machine.



F-2-69

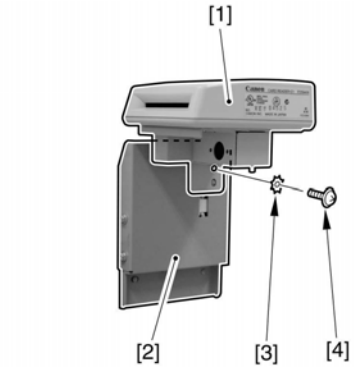
6) Pass the relay cable [2] from the cut off [1], and attach the rear right cover [3].
- 4 screws [4] (removed in the step 3))



F-2-70

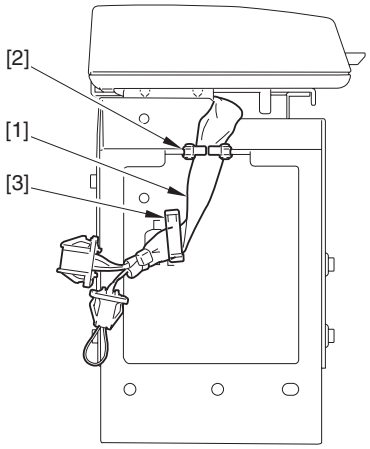
7) Close the cassette upper right cover and the cassette lower right cover.

8) Attach the card reader [1] and the card reader base plate [2].
- 1 toothed washer [3]
- 1 screw (TP; M4X8) [4]



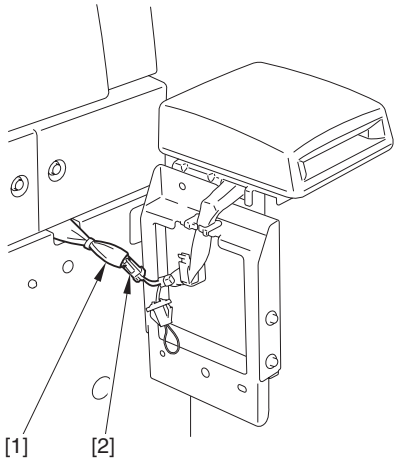
F-2-71

9) 9) Fix the relay cable [1] of the card reader in place.
- 1 edge saddle [2]
- 1 wire saddle [3]



F-2-72

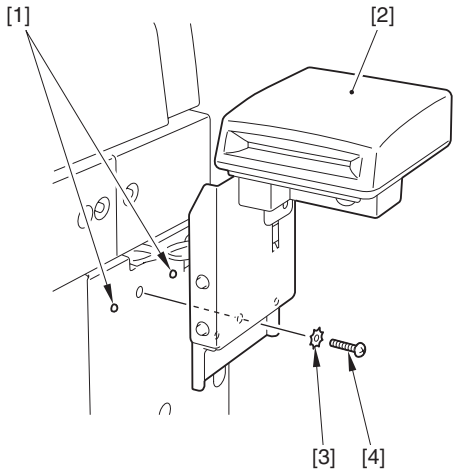
10) Connect the relay cable [1] that is connected in the step 5) with the relay cable [2] of the card reader.



F-2-73

11) Fit the 2 bosses [1] to attach the card reader [2].
- 1 toothed washer [3]
- 1 screw (TP; M4X25) [4]

⚠
Take care not to nip the harness.



F-2-74

12) Plug the power cable (for outlet) into the outlet.
13) Turn ON the switch of the main power.
14) Enter the card number (1 through 2001) to use by selecting the following in service mode of host machine:
COPIER > FUNCTION > INSTALL > CARD
- Enter the smallest number among the cards used by user
- 1000 cards from the input number are usable
15) Turn OFF the power supply following the shutdown sequence.
16) Insert the usable card (that is registered to use) to check that it is standby state.

2.8.4 Installation Procedure in the imageWARE Accounting Manager (hereinafter referred to iWAM) Environment

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Check to see that 'ID00000001 to ID00001000' have been created in '[Initial Settings / Registration] > [System Administration Settings] > [Department ID management] > [Count Management]' (In the case of entering '1' as the first number in 'Service Mode > COPIER > FUNCTION > INSTALL > CARD')
2) Press [Reset] to exit from [Initial Settings / Registration].
3) Select: [Initial Settings / Registration] > [System Administration Settings] > [Network Settings] > [TCP/IP Settings] > [IP Address], and make settings of [IP Address], [Gateway Address], and [Subnet Mask] suitable for the user's environment.
4) Press [Reset] to exit from [Initial Settings / Registration].
5)

⚠
Be sure that without selecting: [Initial Settings / Registration] > [System Administration Settings] > [System Administrator Information Settings] and then registering [System Administration Department ID] and [System Administration Password], 'Card Registration to the Device' cannot be executed in the iWAM settings.

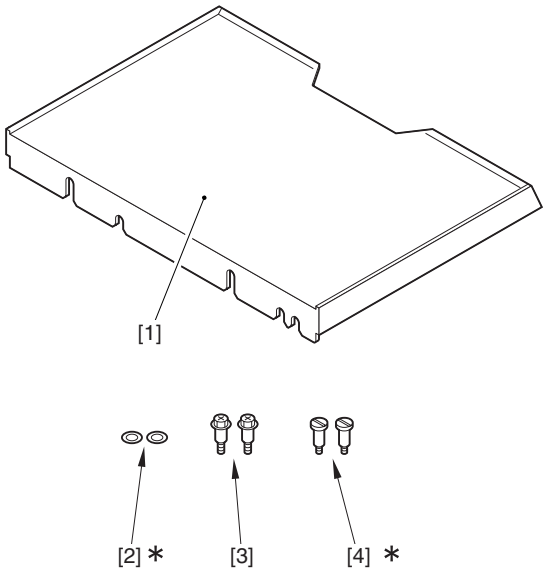
Select: [Initial Settings / Registration] > [System Administration Settings] > [System Administrator Information Settings], and then enter given numbers for [System Administration Department ID] and [System Administration Password].
6) Press [Reset] to exit from [Initial Settings / Registration].
7) Turn OFF the power supply following the shutdown sequence.

2.9 Installing the Original Tray

2.9.1 Checking the Content

/ / iR C3380i / iR C3380 / iR C2880i / iR C2880

<Document Tray-J1>



F-2-75

[1]	Document Tray	1pc
[2]*	washer	2pc
[3]	stepped screw (RS tightening)	2pc
[4]*	stepped screw (M4)	2pc

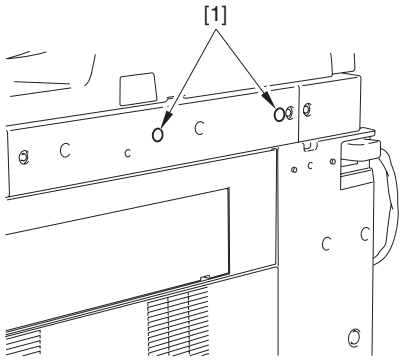
* do not use with the host machine.

2.9.2 Installation Procedure

/ / iR C3380i / iR C3380 / iR C2880i / iR C2880

When installing the machine, see the Combination Table for Accessory Installation.

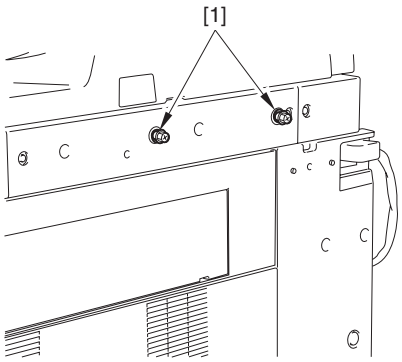
1) Remove the 2 face seals [1].



F-2-76

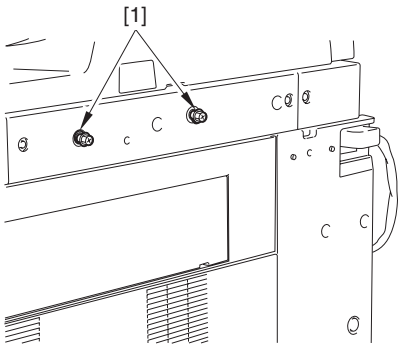
2) Tighten 2 stepped screws (RS tightening) [1] to the upper right cover of the host machine.

A: In the case that the card reader is not attached to the host machine



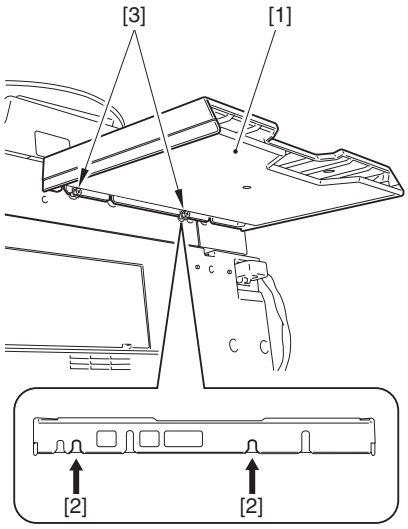
F-2-77

B: In the case that the card reader is attached to the host machine



F-2-78

3) Set the cut-offs [2] of the support plate on the Document Tray [1] with the stepped screws [3].



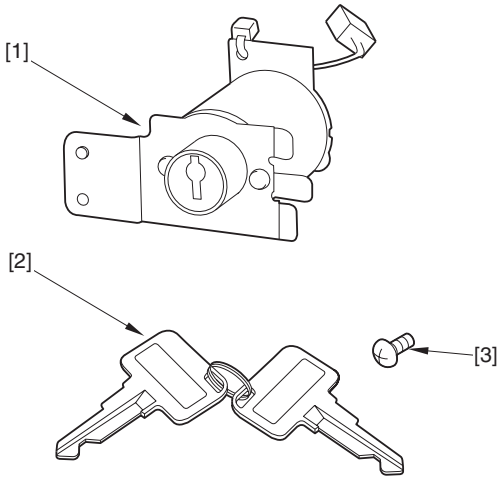
F-2-79

2.10 Installing the Key Switch Unit

2.10.1 Checking the Contents

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

<Control Key Unit-A2>



F-2-80

[1]	Key switch unit	1pc.
[2]	Control key	1pc.
[3]	Screw (binding; M4X6)	1pc.

2.10.2 Turning Off the Host Machine

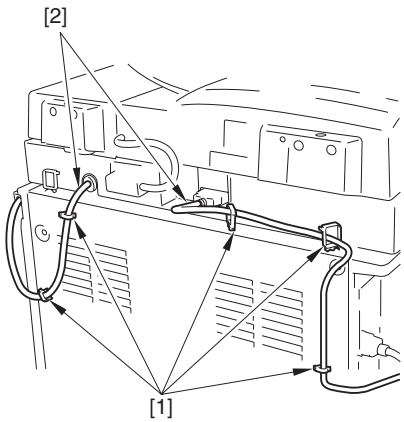
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

How to Turn Off the Main Power
When turning off the main power, be sure to go through the following steps to protect the hard disk:
1) Hold down the control panel power switch for 3 sec or more.
2) Follow the instructions on the shutdown sequence screen to let the main power switch be ready to turn off.
3) Turn off the power switch.
4) Disconnect the power cables (for the power outlet).

2.10.3 Installation Procedure

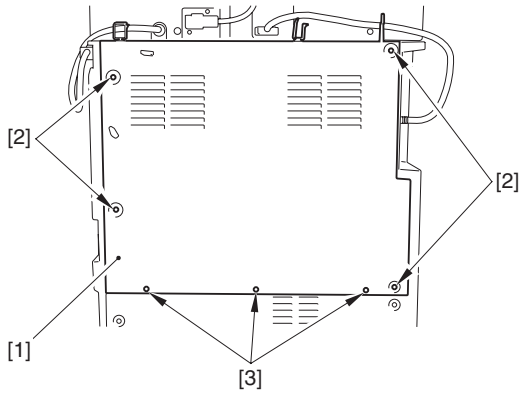
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Release five wire saddles [1] on the rear upper cover to free two cables [2] upward.



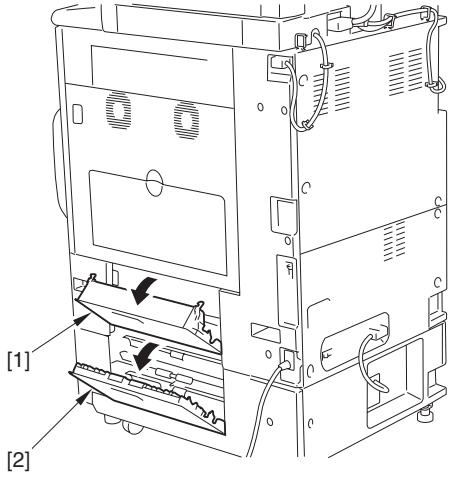
F-2-81

2) Detach the rear upper cover [1].
- 4 screws [2] (Remove)
- 3 screws [3] (Loosen)



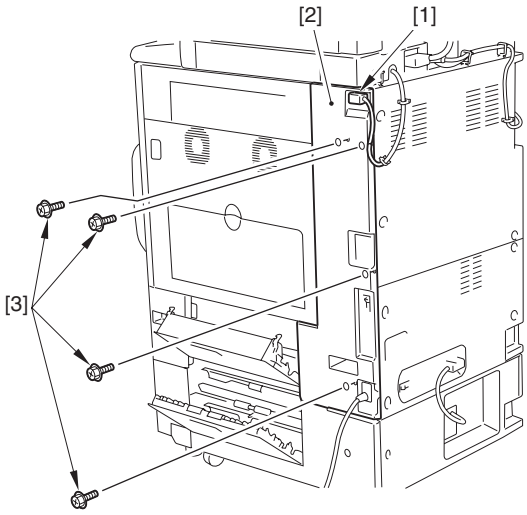
F-2-82

3) Open the cassette right upper cover [1]. If the cassette pedestal was installed, open also the cassette right lower cover [2].



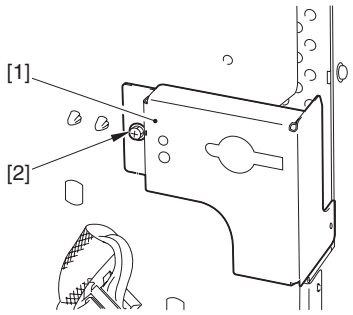
F-2-83

4) Pull out the reader power supply cable [1].
5) Detach the right rear cover [2].
- 4 screws [3]



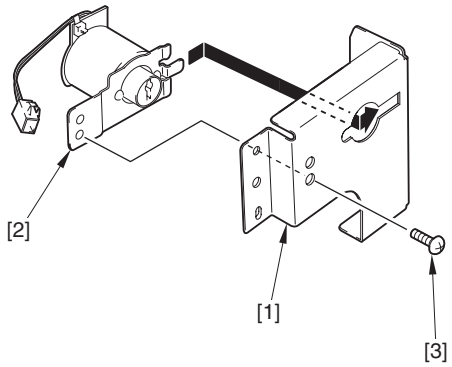
F-2-84

6) Remove the key switch bracket [1].
- 1 screw [2]



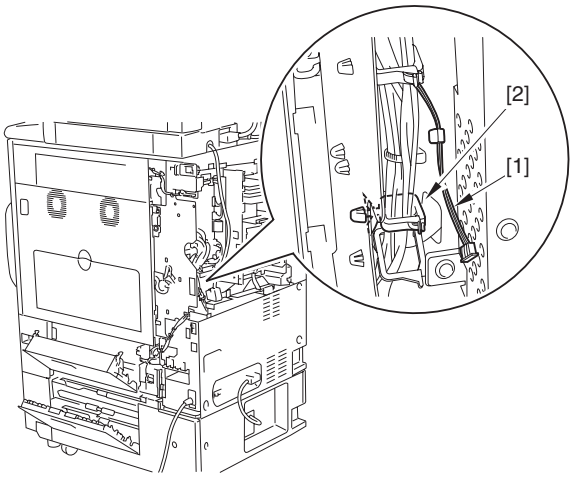
F-2-85

7) Fix the key switch unit [2] to the key switch bracket [1].
- 1 screw (binding; M4X6) [3]



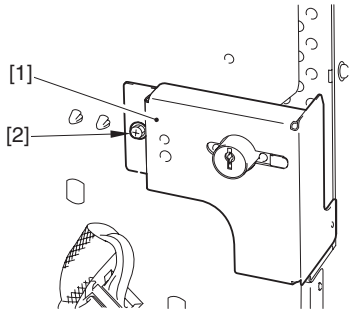
F-2-86

8) Disconnect the connector [1] on the main body from the wire saddle [2] to get it out to the rear side of the main body.
9) Close the wire saddle.



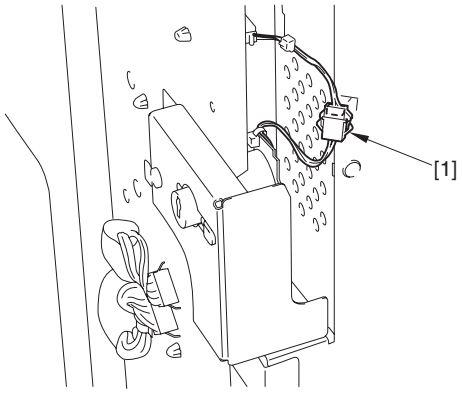
F-2-87

10) Fix the key switch bracket [1].
- 1 screw [2] (Screw removed in the step 6))



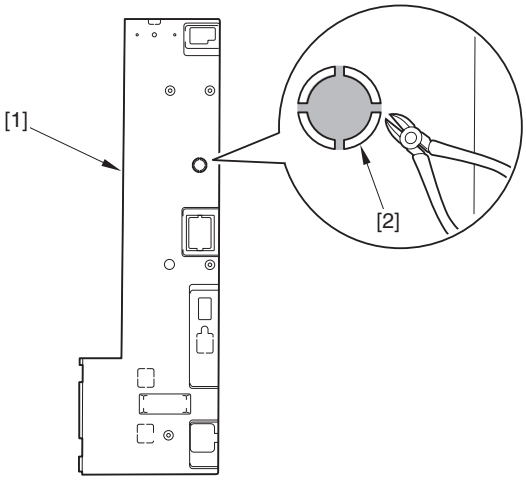
F-2-88

11) Connect the connector of the key switch unit to the connector [1] of the main unit.



F-2-89

12) Remove the blanking area [2] of the right rear cover [1] with nipper, etc.



F-2-90

13) Attach the right rear cover.
14) Close the cassette right upper cover and the cassette right lower cover.
15) Connect the reader power supply cable.
16) Attach the rear upper cover.
17) Fix the cable removed in the step 1) to the wire saddle.
18) Connect the power supply cable to the power plug.
19) Turn ON the main power switch.

2.10.4 Checking After Installation

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Enter the service mode.
2) Select COPIER > FUNCTION > INSTALL > KEY, register '1'.
3) Turn OFF/ON the main power switch according to the shutdown sequence.
4) Check the display 'Please set the control key'.
5) Insert the key into the key switch unit and rotate it, check if the display in the step 4) disappears.

2.11 Installing the Cassette Heater

2.11.1 Points to Note at Installation

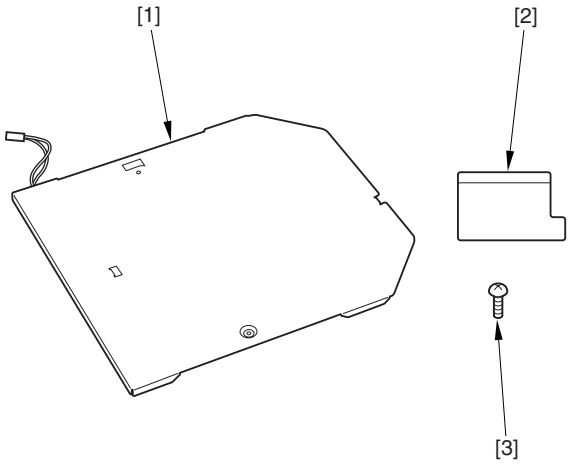
iR C3380

- In the case of mounting the cassette heater unit to the cassette of the host machine, the heater PCB needs to be mounted.
- In the case of mounting the cassette heater unit to the cassette pedestal, the heater PCB and the cassette heater attachment need to be mounted.

2.11.2 Checking the Parts

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Prepare the following parts because each part of the heater PCB is assigned as service part.



F-2-91

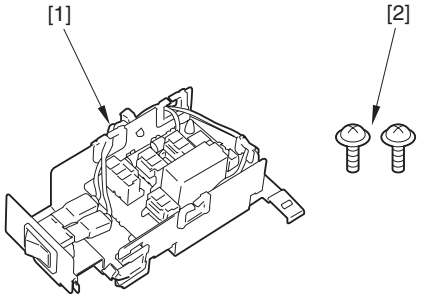
T-2-2

No.	Name	Part No.	Qty.
[1]	Heater Unit	FK2-0376-000	1pc
[2]	Plastic film	FC5-6899-000	1pc
[3]	Screw (binding; M4X6)	XB1-2400-607	1pc

2.11.3 Checking the Parts

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Prepare the following parts because each part of the heater PCB is assigned as service part.



F-2-92

T-2-3

No.	Name	Part No.	Qty.
[1]	Heater PCB	FM2-9979-000	1 pc
[2]	Screw (TP; M3X6)	XB6-7300-607	2 pc

2.11.4 Turning Off the Host Machine

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

How to Turn Off the Main Power

When turning off the main power, be sure to go through the following steps to protect the hard disk:
1) Hold down the control panel power switch for 3 sec or more.
2) Follow the instructions on the shutdown sequence screen to let the main power switch be ready to turn off.
3) Turn off the power switch.
4) Disconnect the power cables (for the power outlet).

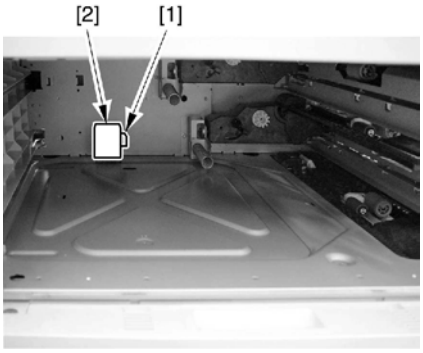
2.11.5 Mounting the Cassette Heater Unit

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1. Mounting to the cassette of the host machine

To operate the Cassette Heater Unit, the Heater PCB needs to be mounted.

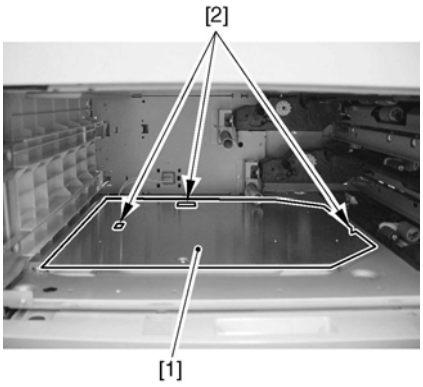
1) Pull out the cassette 1 and 2.
2) While removing the hook by inserting the part indicated as [1] from the front side of the host machine with a flat blade screwdriver, detach the connector cover [2].



F-2-93

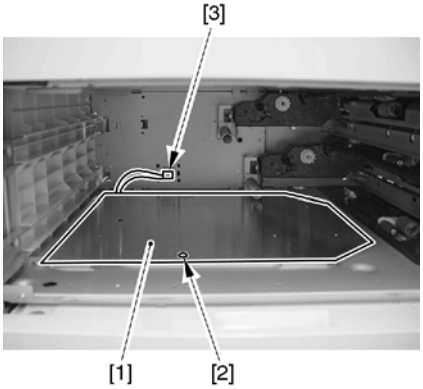
3) Fit the 3 hooks [2] of the heater unit [1] to the slit of the base plate to match the hole positions.

In the case of mounting the heater unit, make sure to check that the 3 hooks [2] are tightly fitted and there is no jiggle.



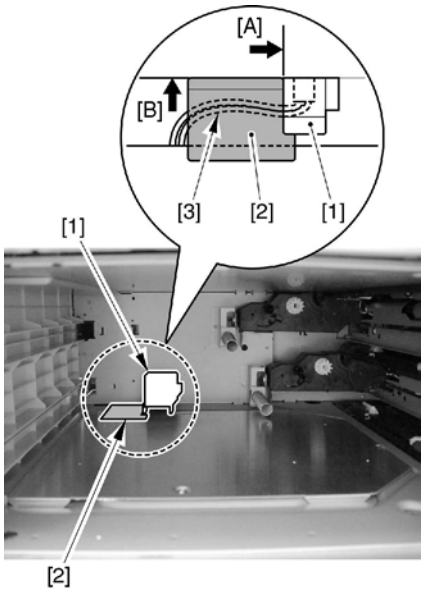
F-2-94

4) Mount the heater unit [1] with the screw (binding; M4X6) [2], and connect the connector [3].



F-2-95

5) Attach the connector cover [1].
6) Attach the plastic film [2] (for protecting the AC cable) over the cable [3] to fit the end of the connector cover [A] and the end of the rear side of the host machine [B].



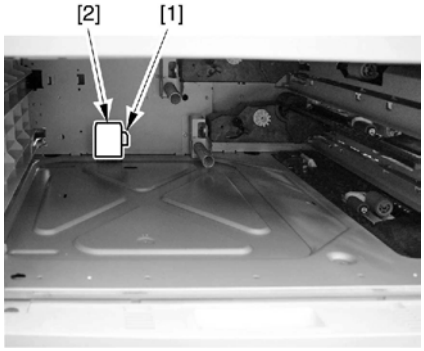
F-2-96

7) Put back the cassette 1 and 2.

2. Mounting to the cassette pedestal side

To operate the Cassette Heater Unit, the Heater PCB and Cassette Heater Attachment needs to be mounted.

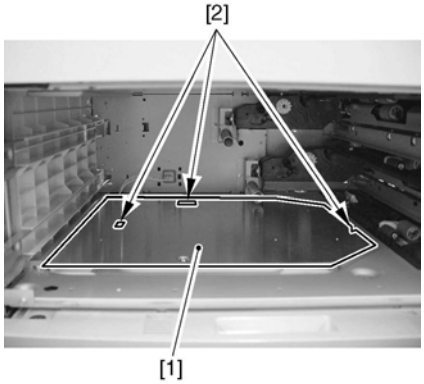
1) Pull out the cassette 3 and 4.
2) While removing the hook by inserting the part indicated as [1] from the front side of the host machine with a flat blade screwdriver, detach the connector cover [2].



F-2-97

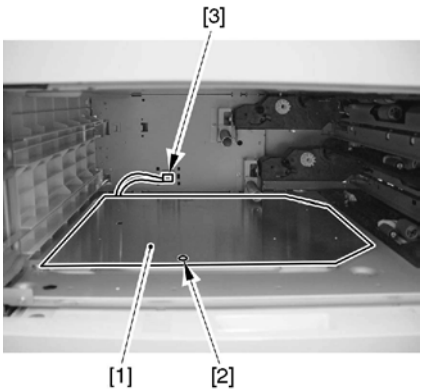
3) Fit the 3 hooks [2] of the heater unit [1] to the slit of the base plate to match the hole positions.

In the case of mounting the heater unit, make sure to check that the 3 hooks [2] are tightly fitted and there is no jiggle.



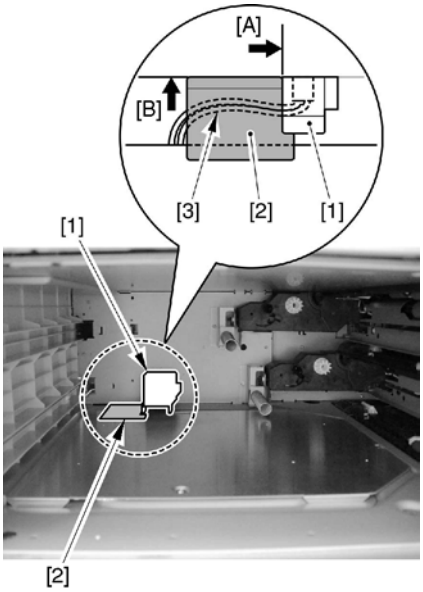
F-2-98

4) Mount the heater unit [1] with the screw (binding; M4X6) [2], and connect the connector [3].



F-2-99

5) Attach the connector cover [1].
6) Attach the plastic film [2] (for protecting the AC cable) over the cable [3] to fit the end of the connector cover [A] and the end of the rear side of the host machine [B].



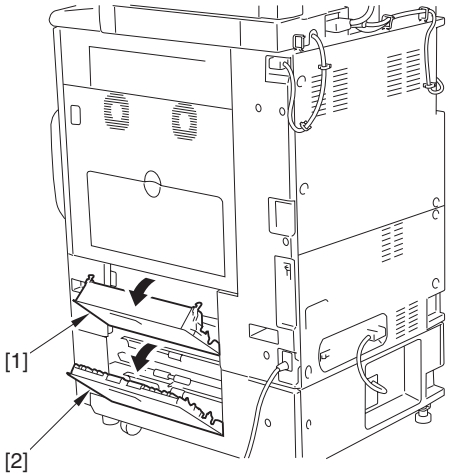
F-2-100

7) Put back the cassette 3 and 4.

2.11.6 Mounting the Heater PCB

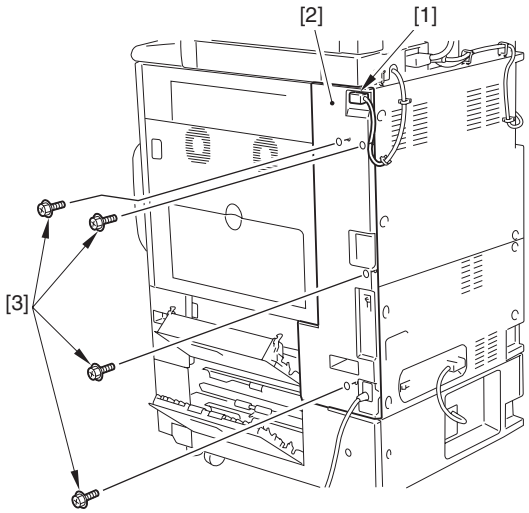
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Open the cassette upper right cover [1]. In the case that the cassette pedestal is mounted, also open the cassette lower right cover [2].



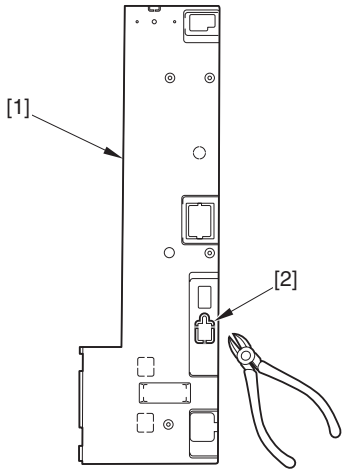
F-2-101

2) Disconnect the reader power cable [1].
3) Detach the rear right cover [2].
- 4 screws [3]



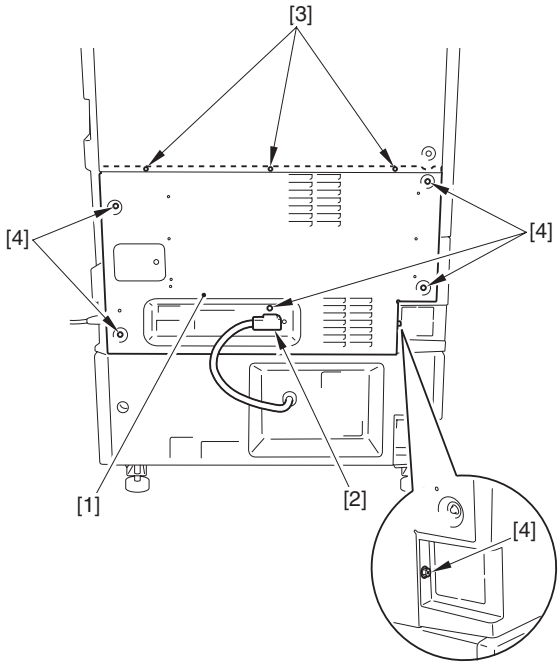
F-2-102

4) Using nippers, cut off the face plate [2] of the detached rear right cover.



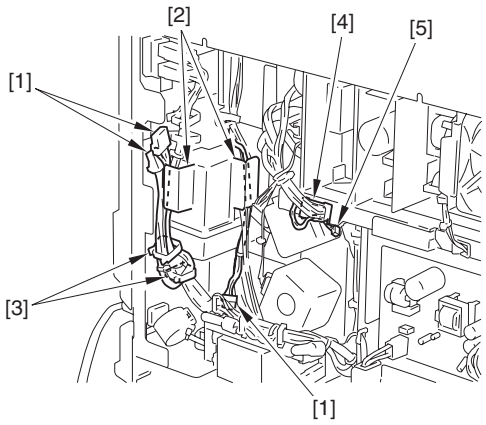
F-2-103

5) Detach the lower rear cover [1].
- lattice connector [2] (in the case that the cassette pedestal is mounted)
- 3 screws [3] (to loosen)
- 6 screws [4] (to remove)



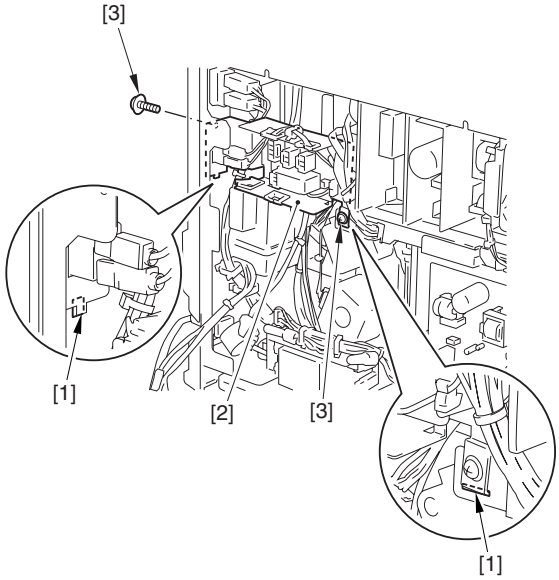
F-2-104

6) Pull out the 3 harnesses of the AC connector [1] from the cable guides [2] to remove them from the 2 wire saddles [3].
7) Remove the harness of the DC connector [5] from the edge saddle [4].



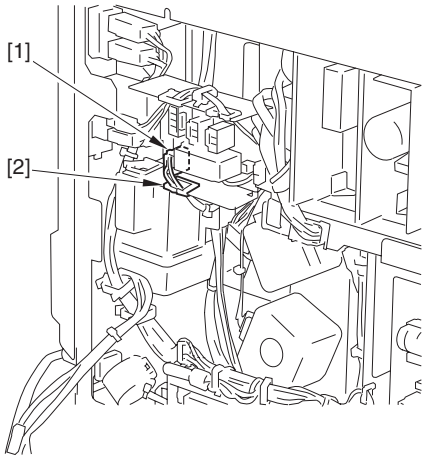
F-2-105

8) Fit the 2 claws [1] to mount the heater PCB [2].
- 2 screws (TP; M3X6) [3]



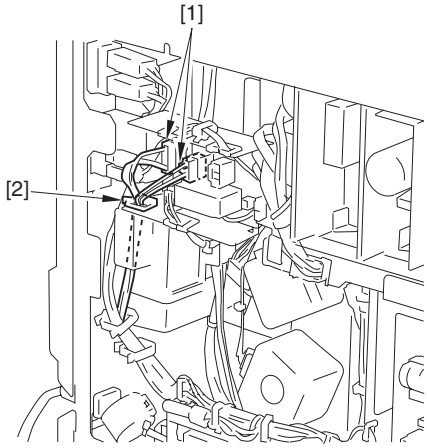
F-2-106

9) Connect the AC connector [1] to the heater PCB, and pass it through the edge saddle [2].



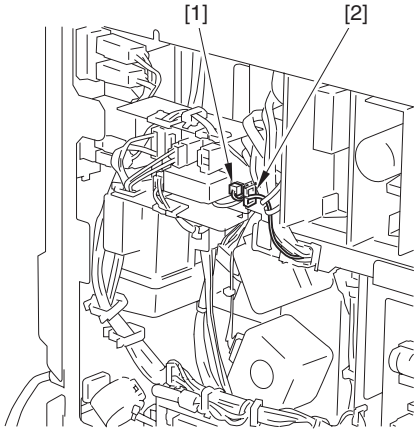
F-2-107

10) Connect the 2 AC connectors [1] to the heater PCB, and pass them through the edge saddle [2].



F-2-108

11) Connect the DC connector [1] to the heater PCB, and pass it through the edge saddle [2].



F-2-109

12) By reversing the steps used to remove covers, attach the followings:
- lower rear cover
- lattice connector (in the case that the cassette pedestal is mounted)
- rear right cover
- reader power cable

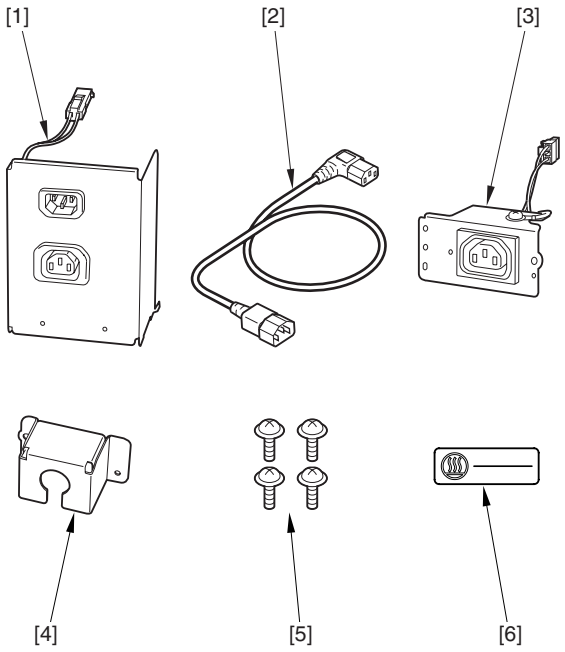
13) In the case that the cassette pedestal is mounted, close the cassette lower right cover. Close the upper right cover.
14) Turn ON the heater switch.

2.12 Installing the Cassette Heater for the Cassette Pedestal

2.12.1 Checking the Parts

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Prepare the following parts because each part of the Cassette Heater Attachment is assigned as service part.



F-2-110

T-2-4

No.	Name	Part No.	Qty.
[1]	Power Code Unit	FM3-0278-000	1 pc
[2]	Power Code	FK2-4628-000	1 pc
[3]	Environment Heater Outlet	FM3-0279-000	1 pc
[4]	Retainer	FC7-7138-000	1 pc
[5]	Screw (TP; M3X6)	XB6-7300-607	4 pc
[6]	Outlet Label	FU5-8018-000	1 pc

2.12.2 Turning Off the Host Machine

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

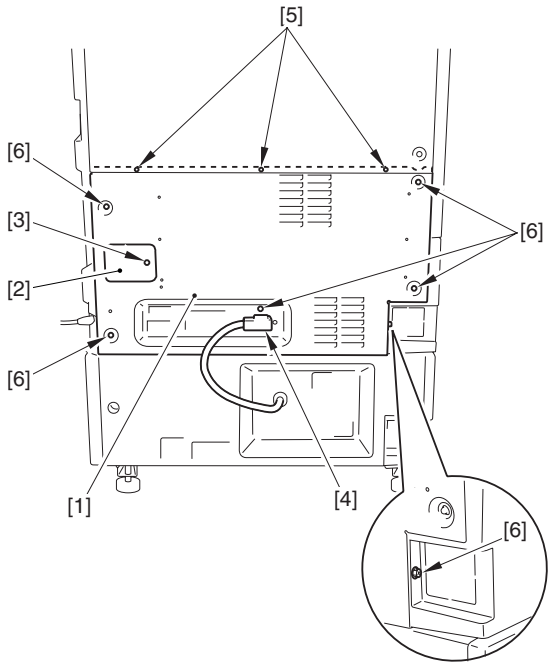
How to Turn Off the Main Power

When turning off the main power, be sure to go through the following steps to protect the hard disk:
1) Hold down the control panel power switch for 3 sec or more.
2) Follow the instructions on the shutdown sequence screen to let the main power switch be ready to turn off.
3) Turn off the power switch.
4) Disconnect the power cables (for the power outlet).

2.12.3 Mounting the Cassette Heater Attachment

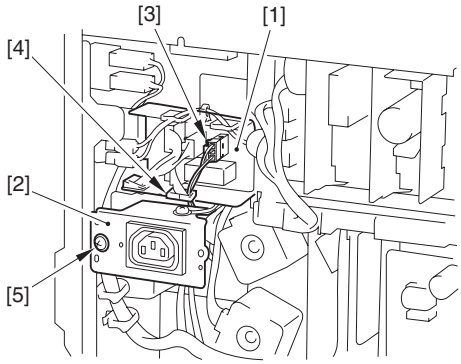
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the small cover [2] of the lower rear cover [1] (the detached small cover is not used).
   - 1 screw [3]
2) Detach the lower rear cover [1].
   - lattice connector [4]
   - 3 screws [5] (to loosen)
   - 6 screws [6] (to remove)



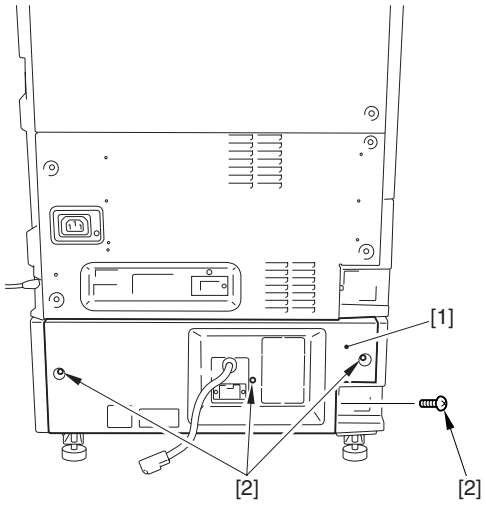
F-2-111

3) Connect the connector [3] of the environment heater outlet [2] to the heater PCB [1], and fix it in place with the edge saddle [4].
4) Attach the heater outlet [2] with the screw (TP; M3X6) [5].



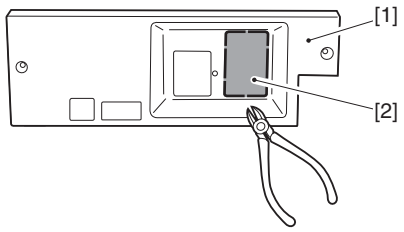
F-2-112

5) Attach the lower rear cover.
6) Detach the rear cover [1] of the cassette pedestal.
- 4 screws [2]



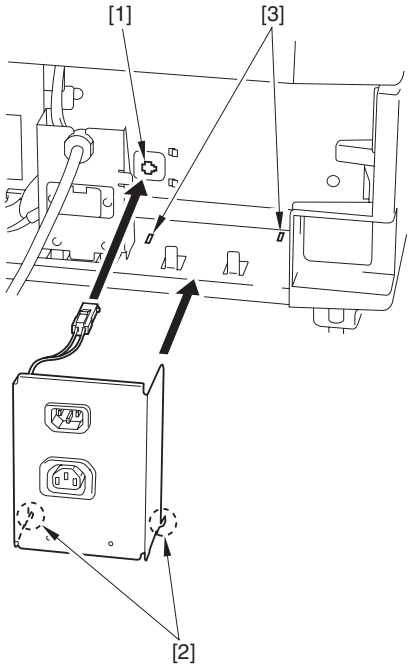
F-2-113

7) Using nippers, cut off the face plate [2] of the rear cover [1] of the cassette pedestal.

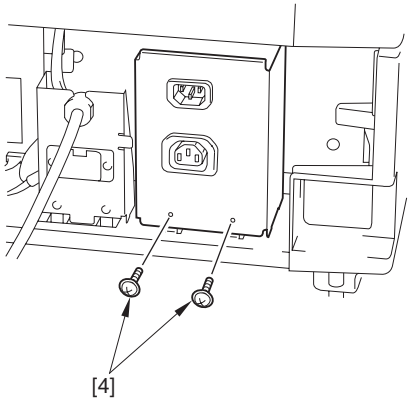


F-2-114

8) Connect the connector [1] of the power code unit, and while fitting the hooks [2] to the holes [3] found at the bottom of the cassette pedestal, attach it with 2 screws (TP; M3X6) [4].

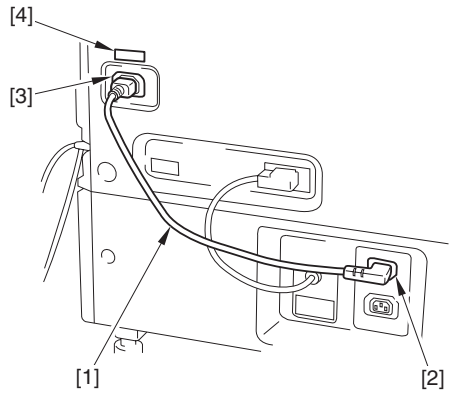


F-2-115



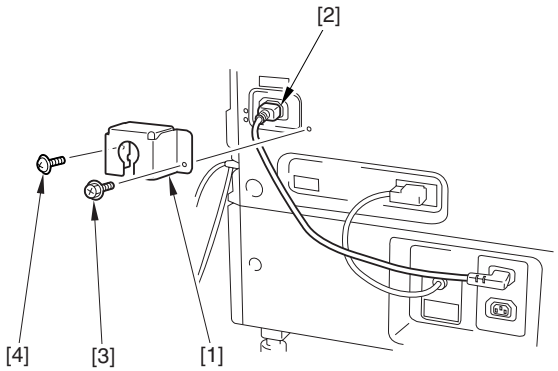
F-2-116

9) Attach the rear cover of the cassette pedestal.
10) Connect the lattice connector to the host machine.
11) Connect the power code [1] to the power code unit [2] and the environment heater outlet [3] of the host machine.
12) Attach the outlet label [4].



F-2-117

13) Attach the plug cover [1] on the power code [2].
- 1 screw [3] (use the screw that was removed in the step 1)
- 1 screw (TP; M3X6) [4]



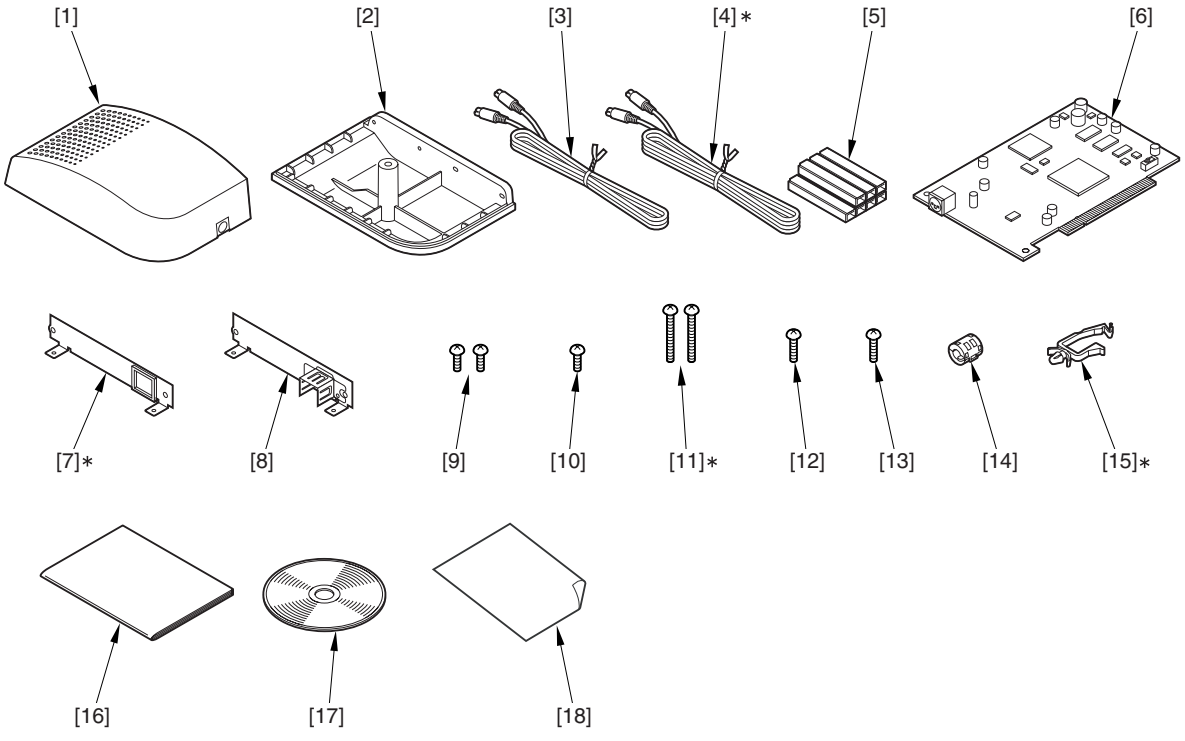
F-2-118

2.13 Installing the Voice Guidance Kit

2.13.1 Checking the Contents

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

<Voice Guidance Kit-B1>



F-2-119

[1]	Speaker Unit (Upper)	1pc.	[10]	Screw (binding; M4X6)	1pc.
[2]	Speaker Unit (Lower)	1pc.	[11]*	Screw (binding; M4X40)	2pc.
[3]	Cable (1300 mm)	1pc.	[12]	Screw (binding; M3X16)	1pc.
[4]*	Cable (1850 mm)	1pc.	[13]	Screw (binding; M4X16)	1pc.
[5]	Cord Guide	7pc.	[14]	Ferrite Core	1pc.
	(Use 2pc in this machine)		[15]*	Wire Saddle	1pc.
[6]	Voice Board	1pc.	[16]	Voice Guidance Kit Users Guide	1pc.
[7]*	Voice Board Face Plate	1pc.	[17]	Voice Guidance Kit Users Guide CD	1pc.
[8]	Voice Board Face Plate	1pc.	[18]	FCC/IC Sheet (Except Japan)	1pc.
[9]	Screw (binding; M3X6)	2pc.			

* Do not use for this machine.

2.13.2 Turning Off the Host Machine

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

⚠ How to Turn Off the Main Power
When turning off the main power, be sure to go through the following steps to protect the hard disk:
1) Hold down the control panel power switch for 3 sec or more.
2) Follow the instructions on the shutdown sequence screen to let the main power switch be ready to turn off.
3) Turn off the power switch.
4) Disconnect the power cables (for the power outlet).

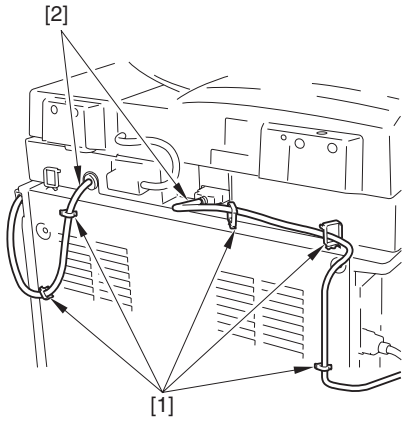
2.13.3 Installation Procedure

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

When installing the machine, see the Combination Table for Accessory Installation.

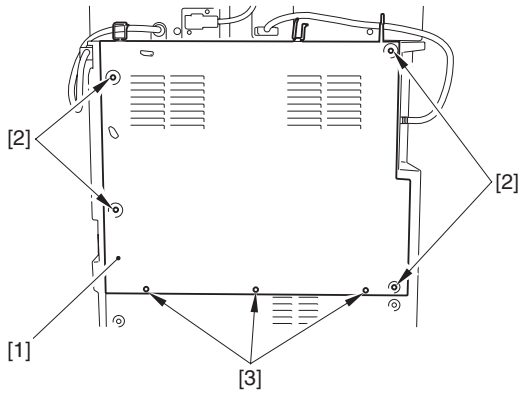
1. Installation Procedure

1) Release five wire saddles [1] on the rear upper cover, make two cables [2] coming off upward.



F-2-120

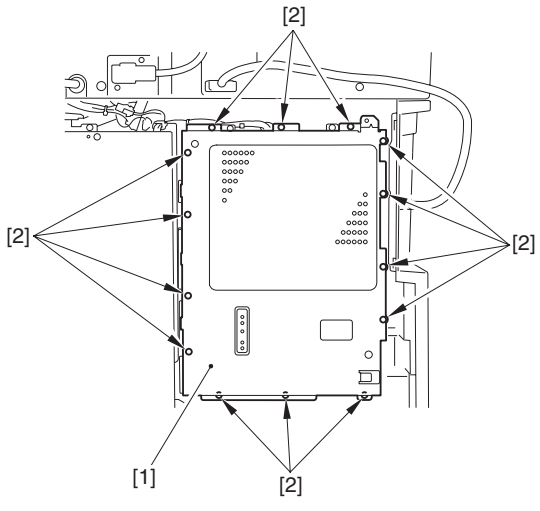
2) Detach the rear upper cover [1].
- 3 screws [2] (to remove)
- 6 screws [3] (to loosen)



F-2-121

3) Detach the controller box cover [1].
- 14 screws [2]

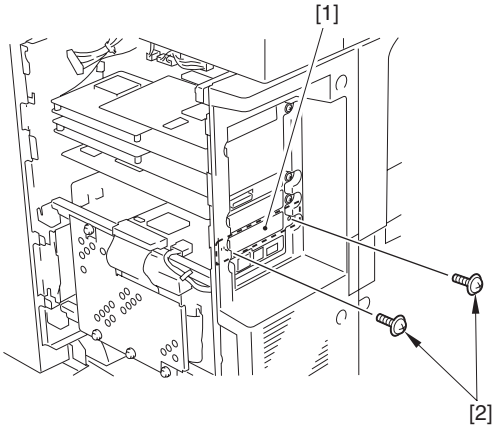
Do not make the screws fall off.



F-2-122

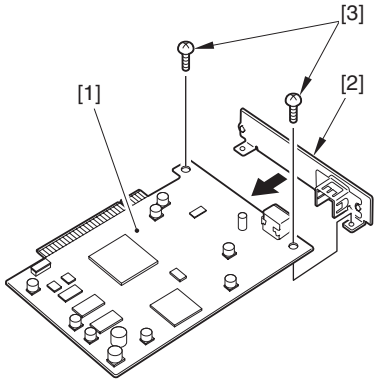
4) Detach the blanking plate [1] (Do not use the detached blanking plate).

- 2 screws [2]



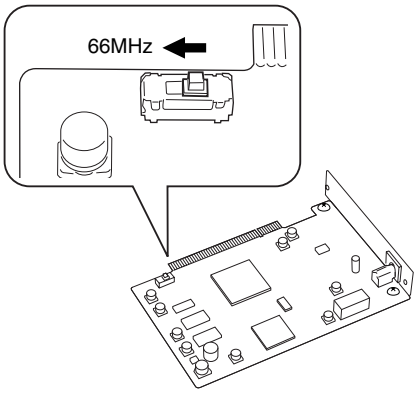
F-2-123

5) Attach the voice board face plate [2] to the voice board [1].
- 2 screws (binding; M3X6) [3]



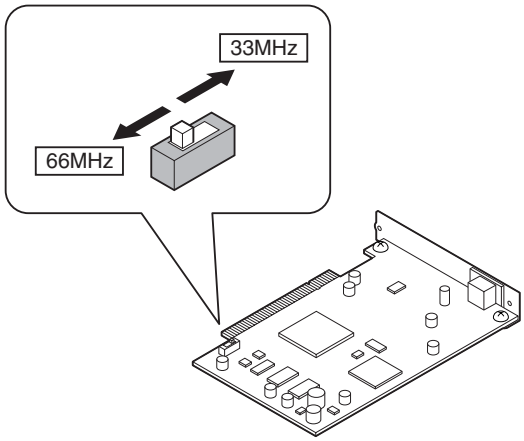
F-2-124

6) Slide the slide switch SW1 on the voice board to 66MHz from 33MHz of the factory setting.



F-2-125

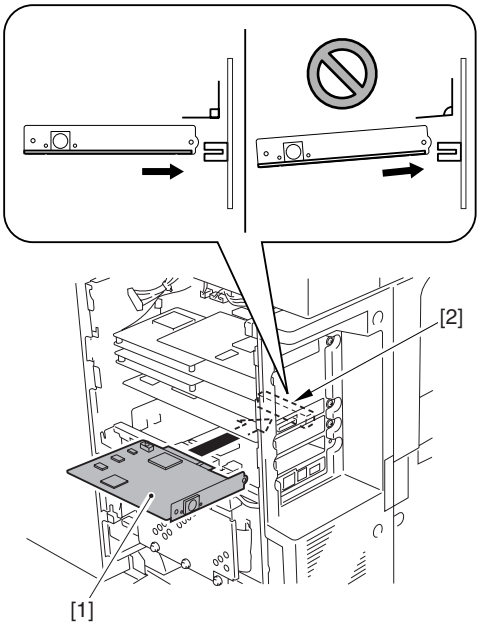
The slide switch SW1 on the voice operation board is mounted to switch between in accordance with the transfer speed of PCI bus.
If the position of the switch does not match the transfer speed, the voice is not correctly played such as the interruption.
If you move the switch by mistake, be sure to return it to the correct position. In this machine, the switch should be positioned at 66MHz.



F-2-126

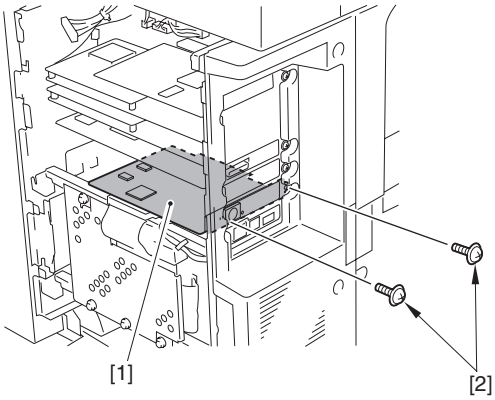
7) Connect the voice board [1] into the connector [2] of the main controller PCB.

When inserting the voice board into the connector, be sure that the voice board is vertical against the connector.



F-2-127

8) Fix the voice board [1] in place with two screws [2] removed in the step 4).

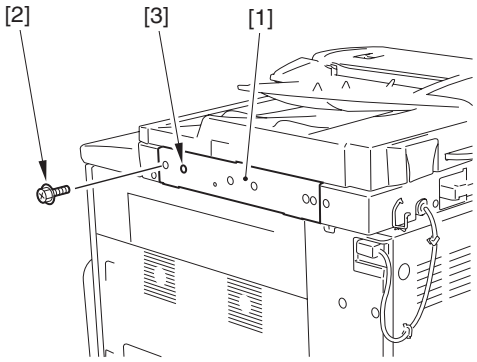


F-2-128

9) Attach the cover in the opposite step from the one for detaching.
- controller box cover
- rear upper cover

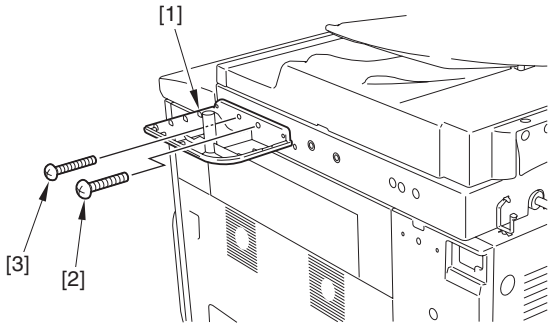
10) Fix two cables removed in the step 1) in place with wire saddle.

11) Remove the screw [1] and the blanking seal [2] fixed to the right upper cover (Do not use the removed screw and blanking seal).



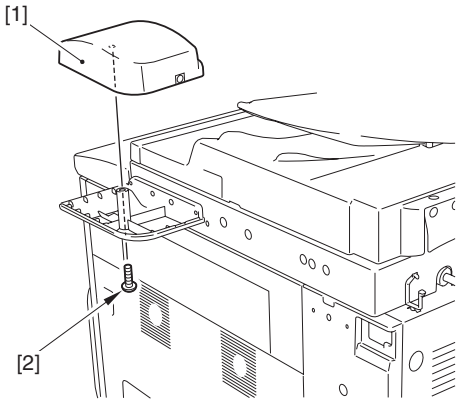
F-2-129

12) Mount the speaker unit (lower) [1].
- 1 screw (binding; M4X16) [2]
- 1 screw (binding; M3X16) [3]



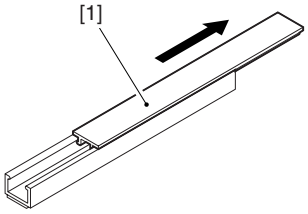
F-2-130

13) Mount the speaker unit (upper) [1] on the speaker unit (lower), fix them with a screw (binding; M4X6) [2] from beneath.



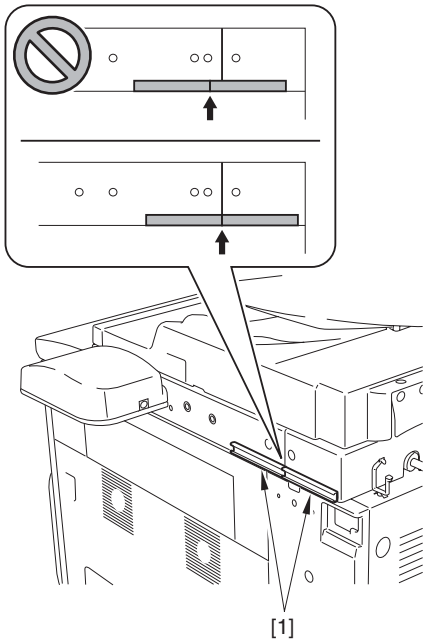
F-2-131

14) Detach the cover [1] on the cord guide.



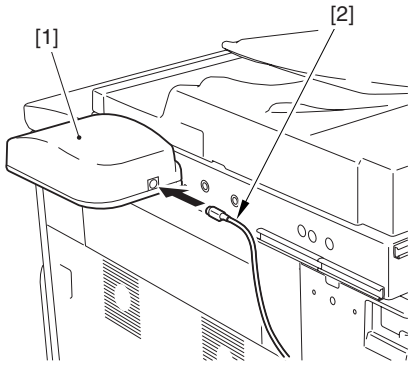
F-2-132

15) Peel off two released papers on the cord guide [1], affix them to the position on the right side as in the chart.



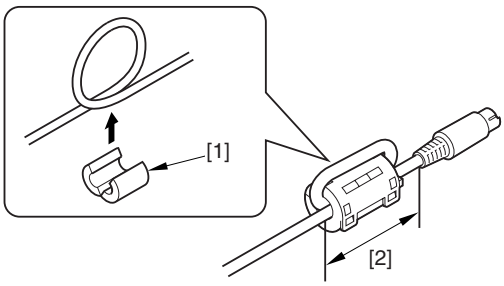
F-2-133

16) Connect the cable [2] into the speaker unit [1].



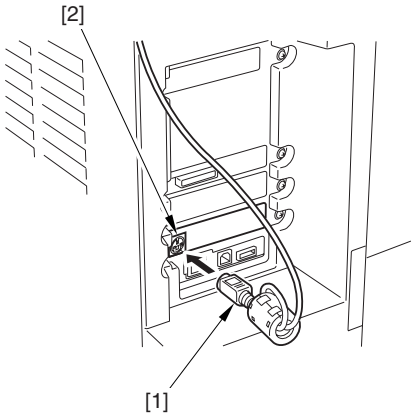
F-2-134

17) Attach the ferrite core [1] to the cable. Be sure that the length [2] is 50 mm or shorter.



F-2-135

18) Connect the cable [1] to the terminal [2] of the voice board.

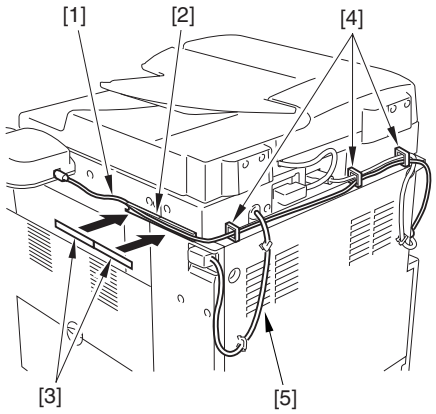


F-2-136

19) Route the cable [1] through the cord guide [2], attach two cord guide covers [3] and fix them with three wire saddles [4].

⚠

- Route them beneath the reader power cable [5].
- There should no excessive bending of the cable.



F-2-137

20) Connect the power cable to the power plug.
21) Turn ON the main power switch.
22) Check if the voice board is recognized.
Service mode
Select COPIER > DISPLAY > ACC-STS > PCI.
If "Voice Board" is displayed, that means that the voice board is correctly recognized.

2. Setting After Installation

To use 'voice guidance' after power-on, it is necessary to set the followings.
1) Select [Additional Function] > [System Settings] > [Voice Navigation Management Settings] > [Use Voice Guide].
2) Select ON key (Default: OFF)
3) Press OK key.

3. Operation Check

<When Using the Voice Guidance>
1) Press the reset key for 3 sec or longer.
2) When the display of the number of copy is enclosed with red lines on the screen, "Voice Guidance" becomes enabled.

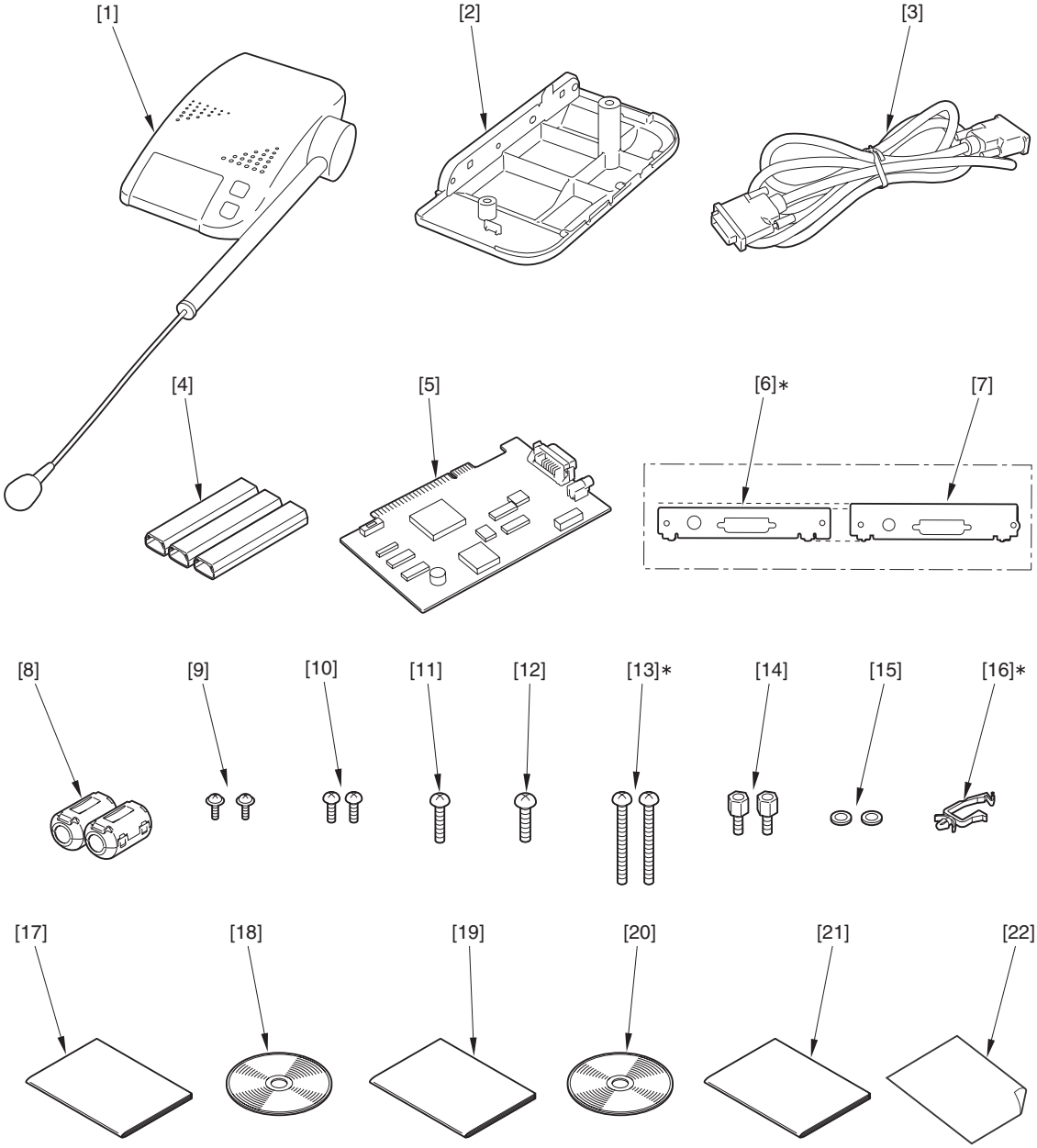
<When Stopping the Usage>
1) Press the reset key for 3 sec or longer.

2.14 Installing the Voice Operation Kit

2.14.1 Checking the Contents

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

<Voice Operation Kit-A1>



F-2-138

[1]	Speaker Unit (Upper)	1pc.	[12]	Screw (binding; M4X20)	1pc.
[2]	Speaker Unit (Lower)	1pc.	[13]*	Screw (binding; M4X40)	1pc.
[3]	Cable	1pc.	[14]	Hex Screw	2pc.
[4]	Cable Guide	3pc.	[15]	Washer	2pc.
	(Use 1pc in this machine)		[16]*	Wire Saddle	1pc.
[5]	Voice Operation Board	1pc.	[17]	Voice Guidance Kit Users Guide	1pc.
[6]*	Board Support Plate	1pc.	[18]	Voice Guidance Kit Users Guide CD	1pc.
[7]	Board Support Plate	1pc.	[19]	Voice Operation Kit Users Guide	1pc.
[8]	Ferrite Core	2pc.	[20]	Voice Operation Kit Users Guide CD	1pc.
[9]	Screw (TP; M3X6)	2pc.	[21]	Voice Operation Quick Guide	1pc.
[10]	Screw (binding; M4X6)	2pc.	[22]	FCC/IC Sheet	1pc.
[11]	Screw (binding; M3X20)	1pc.			

* Do not use for this machine.

2.14.2 Turning Off the Host Machine

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

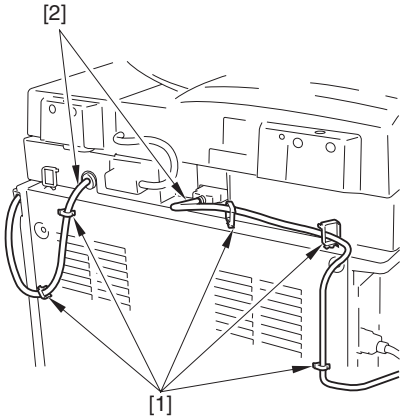
How to Turn Off the Main Power
When turning off the main power, be sure to go through the following steps to protect the hard disk:
1) Hold down the control panel power switch for 3 sec or more.
2) Follow the instructions on the shutdown sequence screen to let the main power switch be ready to turn off.
3) Turn off the power switch.
4) Disconnect the power cables (for the power outlet).

2.14.3 Installation Procedure

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

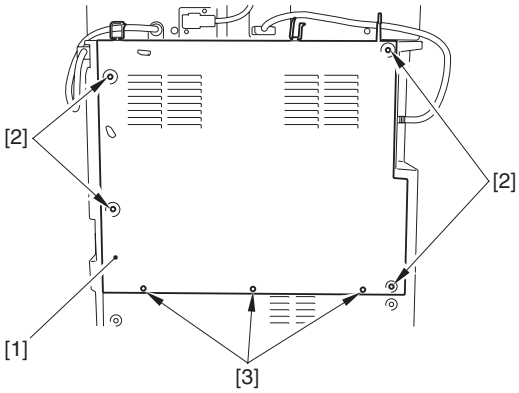
When installing the machine, see the Combination Table for Accessory Installation.

1. Installation Procedure
1) Release five wire saddles [1] on the rear upper cover, make two cables [2] coming off upward.



F-2-139

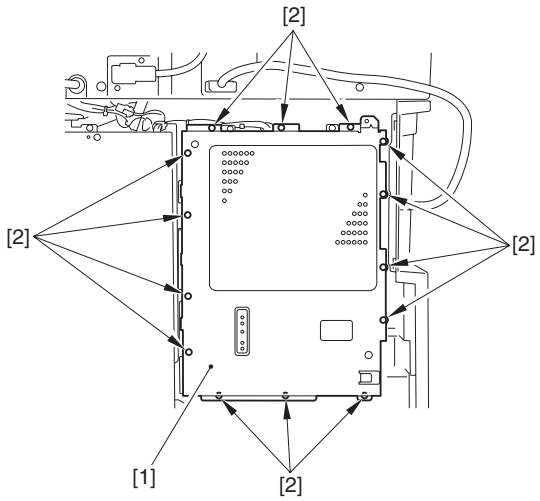
2) Detach the rear upper cover [1].
- 3 screws [2] (to remove)
- 6 screws [3] (to loosen)



F-2-140

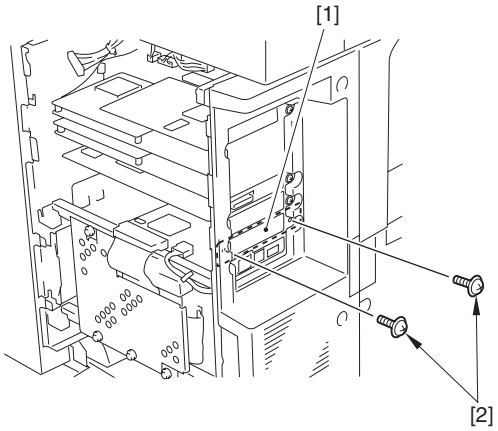
3) Detach the controller box cover [1].
- 14 screws [2]

Do not make the screws fall off.



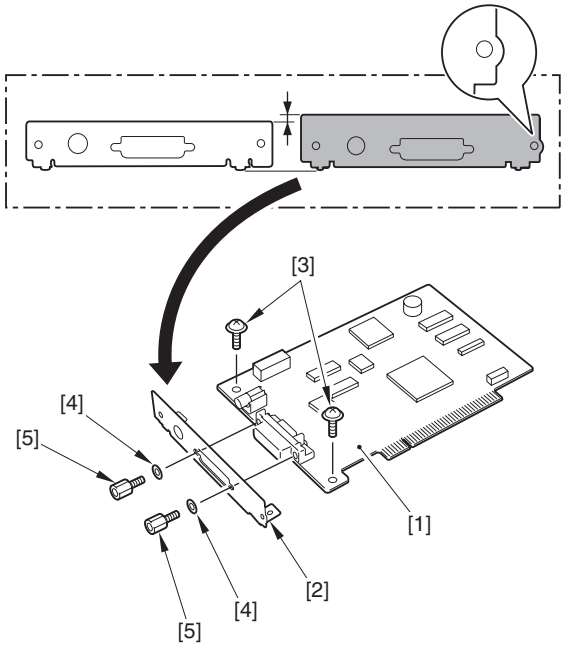
F-2-141

4) Detach the blanking plate [1] (Do not use the detached blanking plate).
- 2 screws [2]



F-2-142

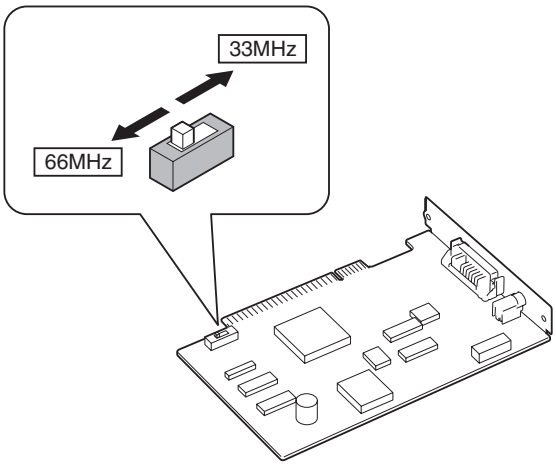
5) Attach the board support plate [2] to the voice operation board [1].
- 2 screws (TP; M3X6) [3]
- 2 washers [4]
- 2 hex screws [5]



F-2-143

Check the Slide Switch SW1 on the Voice Operation Board
The slide switch SW1 on the voice operation board is mounted to switch between in accordance with the transfer speed of PCI bus.

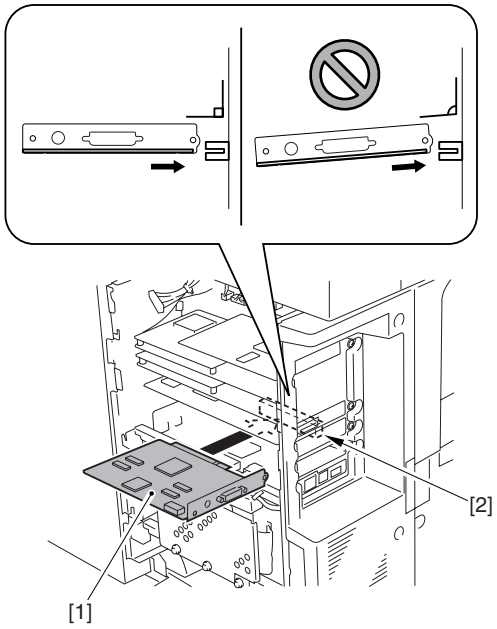
If the position of the switch does not match the transfer speed, the voice is not correctly played such as the interruption.
If you move the switch by mistake, be sure to return it to the correct position. In this machine, the switch should be positioned at 66MHz.



F-2-144

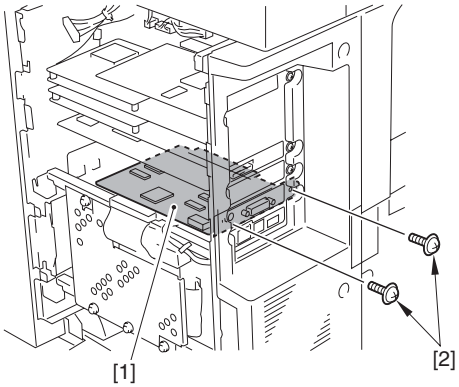
6) Connect the voice operation board [1] to the connector of the main controller PCB.

⚠
When inserting the board into the connector, be sure that the board is vertical against the connector.



F-2-145

7) Fix the voice operation board [1] with two screws [2] removed in the step 4).

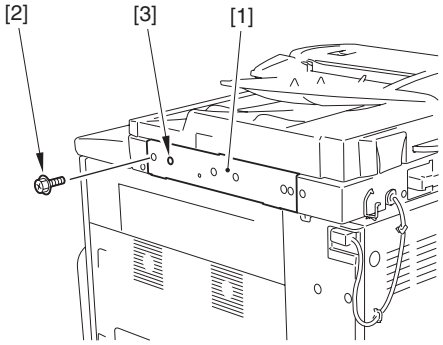


F-2-146

8) Attach the cover in the opposite step from the one for detaching.
- controller box cover
- rear upper cover

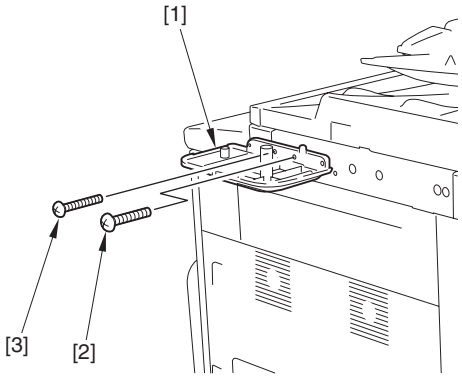
9) Fix two cables removed in the step 1) with wire saddle.

10) Remove the screw [2] and the blanking seal [3] fixed to the right upper cover [1] (Do not use the removed screw and blanking seal).



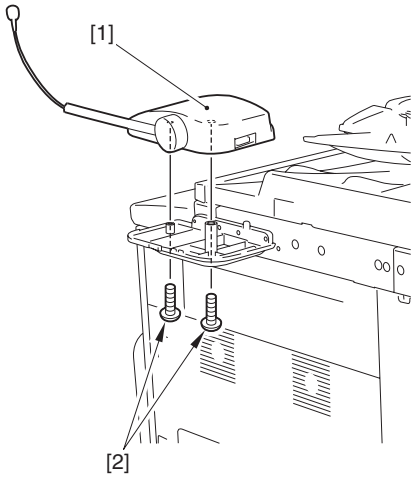
F-2-147

11) Mount the speaker unit (lower) [1].
- 1 screw (binding; M4X20) [2]
- 1 screw (binding; M3X20) [3]



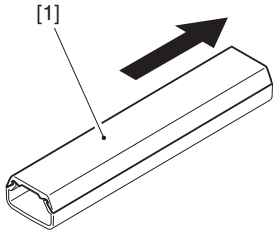
F-2-148

12) Mount the speaker unit (upper) [1] on the speaker unit (lower), fix them with two screws (binding; M4X6) [2] from beneath.



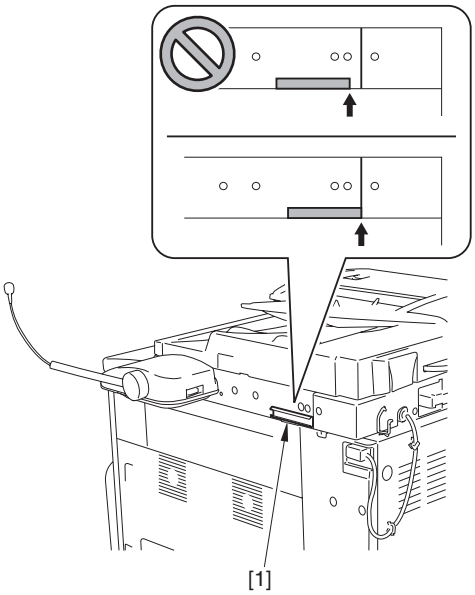
F-2-149

13) Detach the cover [1] of the cable guide.



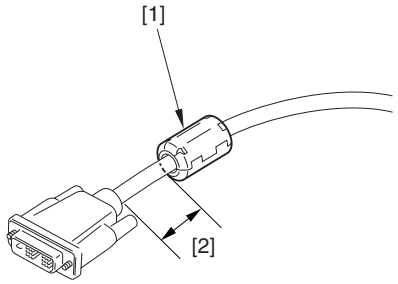
F-2-150

14) Peel off the released paper of the cable guide [1], affix it to the position on the right side as in the chart.



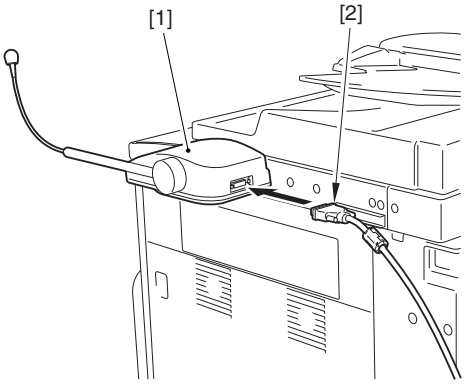
F-2-151

15) Attach the ferrite core [1] to the cable. Be sure that the length [2] is 50 mm. Fix it on the opposite side in the same procedure.



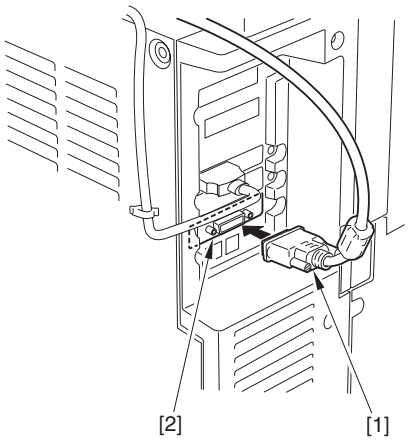
F-2-152

16) Connect the cable [2] to the speaker unit [1].



F-2-153

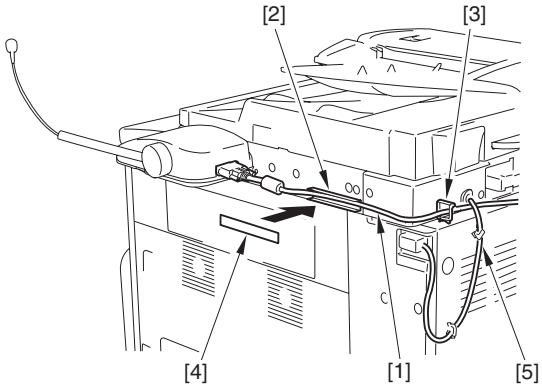
17) Connect another cable [1] to the terminal [2] of the voice operation board.



F-2-154

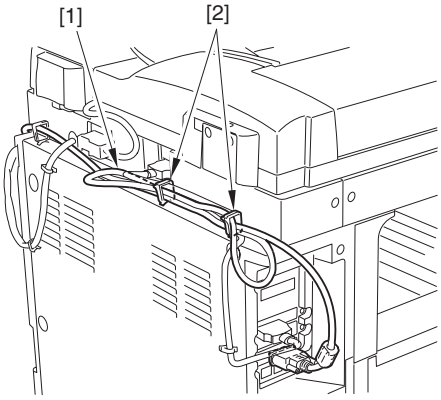
18) Route the cable [1] through the cable guide [2] and the wire saddle [3], attach the cable guide cover [4].

Route them beneath the reader power cable [5].



F-2-155

19) Fix it with two clamps [2] so that there is no bending of the cable [1].



F-2-156

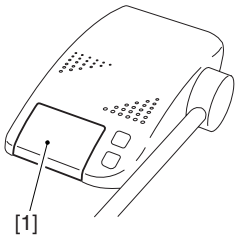
20) Connect the power cable to the power plug.
21) Turn ON the main power switch.
22) Check if the voice operation board is recognized.
Service mode.
Select COPIER > DISPLAY > ACC-STS > PCI.
If "Voice Operation" is displayed, that means that the voice operation board is correctly recognized.

2. Setting After Installation

To use 'voice operation kit' after power-on, it is necessary to set the followings.
1) Select [Additional Function] > [System Settings] > [Voice Navigation Management Settings] > [Use Voice Navigation].
2) Select ON key (Default: OFF)
3) Press OK key.

3. Operation Check

<When Using the Voice Operation Kit>
1) Press the reset key or the voice recognition button [1] three seconds or longer.



F-2-157

2) When the display on the control panel is enclosed with red lines, "Voice Operation Kit" becomes enabled.

If 'Voice Operation Kit' does not work, check the following points.
- Is the slide switch on the voice operation board switched to 66MHz?
- TTS-JA/TTS-EN and ASR-JA/ASR-EN should be installed properly in the Service mode: COPIER > Display > VERSION.

<When Stopping the Usage>
1) Press the reset key or the voice recognition button three seconds or longer.

2.15 Installing the Power Supply

2.15.1 Turning Off the Machine

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

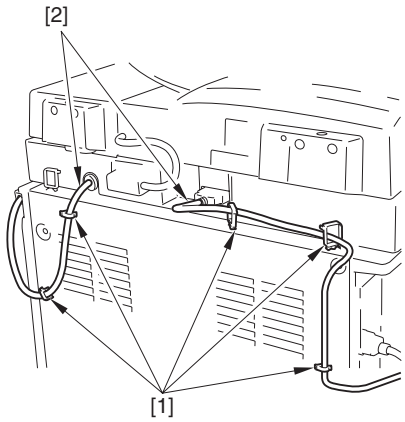
How to Turn Off the Host Machine
When turning off the main power, be sure to go through the following in strict sequence to protect the machine's hard disk:
1) Hold down on the power switch on the control panel for 3 sec or more.
2) Operate on the touch panel according to the shut-down sequence indicated so that the main power switch may be turned off.
3) Turn off the main power switch.
4) Disconnect the power cable (for the power outlet).

2.15.2 Installation Procedure

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

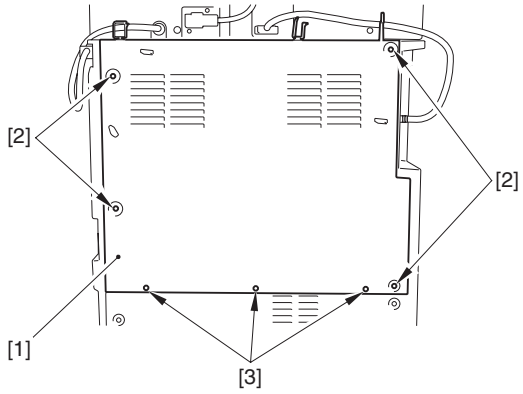
1. Mounting Optional Power Supply PCB

1) Open the 4 wire saddles [1] on the upper rear cover, and move the cable [2] upward.



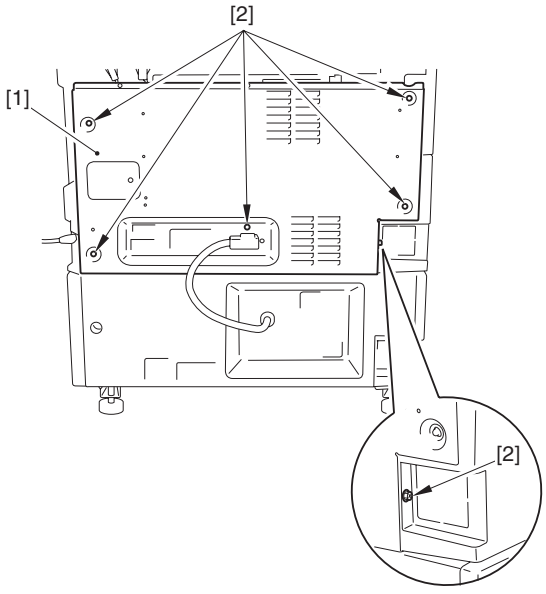
F-2-158

2) Detach the upper rear cover [1].
- 4 screws [2] (remove)
- 3 screws [3] (loosen)



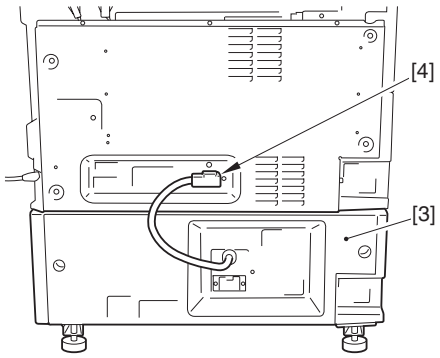
F-2-159

3) Detach the lower rear cover [1].
- 6 screws [2]



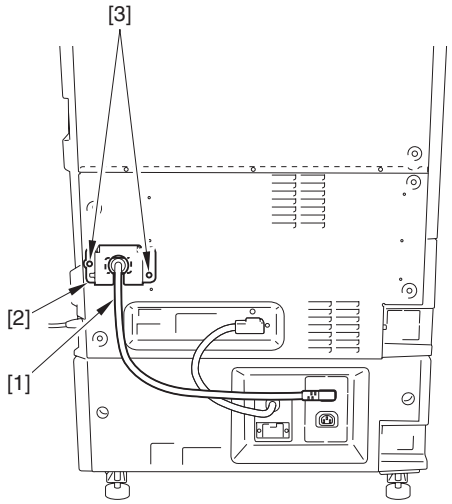
F-2-160

If a Cassette pedestal [3] exists, disconnect the lattice connector [4].



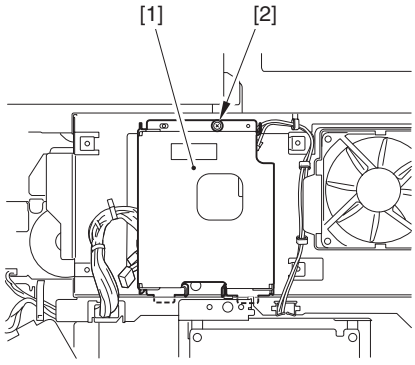
F-2-161

4) In case the power code of the heater for the cassette pedestal [1] is connected, remove the stopper [2]; then, unplug the power code [1].
- 2 screws [3]



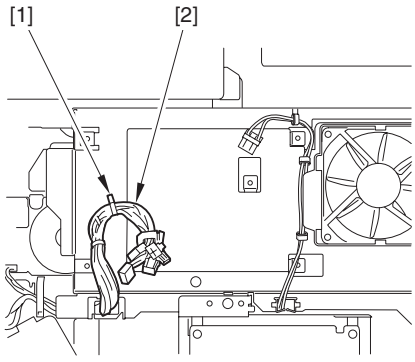
F-2-162

5) Detach the protection cover [1].
- 1 screw [2]



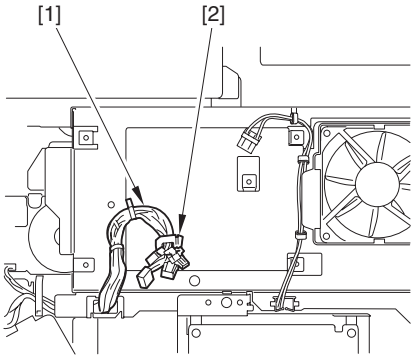
F-2-163

6) Free the harness [2] by picking the reuse band [1].



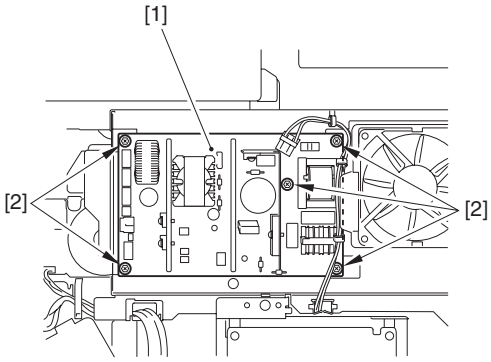
F-2-164

7) Remove the wire saddle [2] that holds the harness [1].



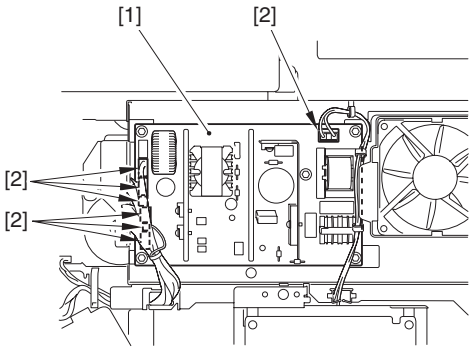
F-2-165

8) Mount the optional power supply [1].
- 5 screws (TP; M3X6) [2]



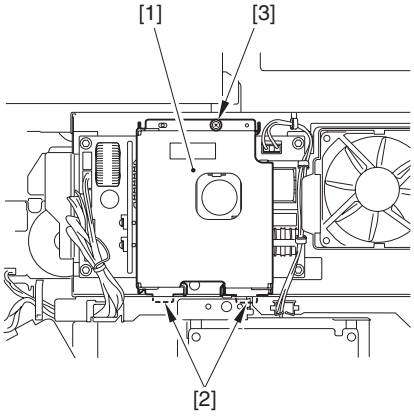
F-2-166

9) Connect 7 connectors [2] to the optional power supply [1].



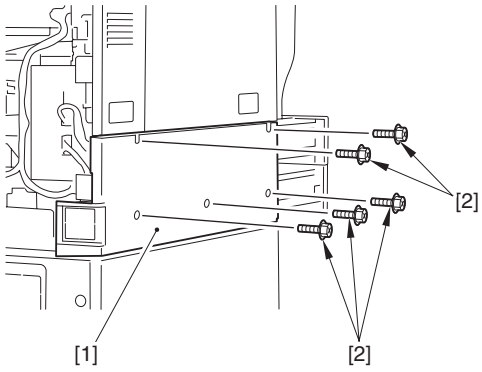
F-2-167

10) Attach the protection cover [1].
- Hook 2 claws [2]
- 1 screws (the screw removed in step 5)) [3]



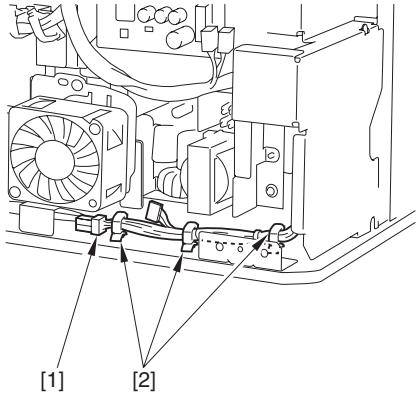
F-2-168

2. Mounting Finisher Connector Mount
1) Pull out the cassettes.
2) Detach the lower left cover [1].
- 5 screws [2]



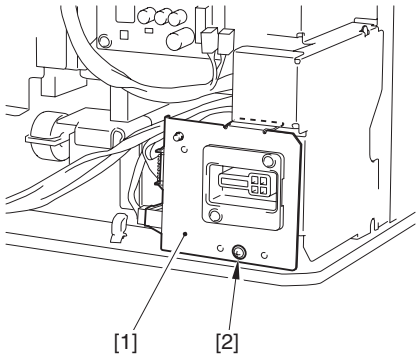
F-2-169

3) Free the harness [1] from the 3 wire saddles [2].



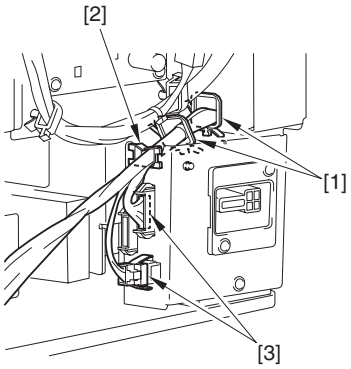
F-2-170

4) Mount the finisher connector mount [1].
- 1 screw (RS tightening; M3X8) [2]



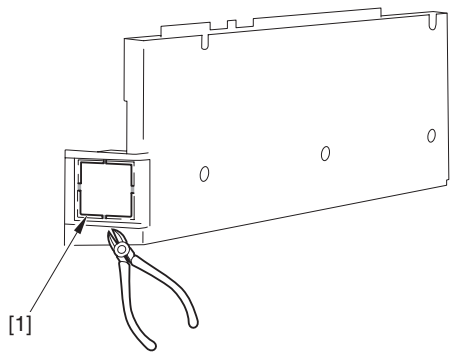
F-2-171

5) Fix the finisher harness in place with the 2 wire saddle [1] and the edge saddle [2], and connect 2 connectors [3].



F-2-172

6) Cut out the blanking plate [1] of the lower left cover with the nippers.



F-2-173

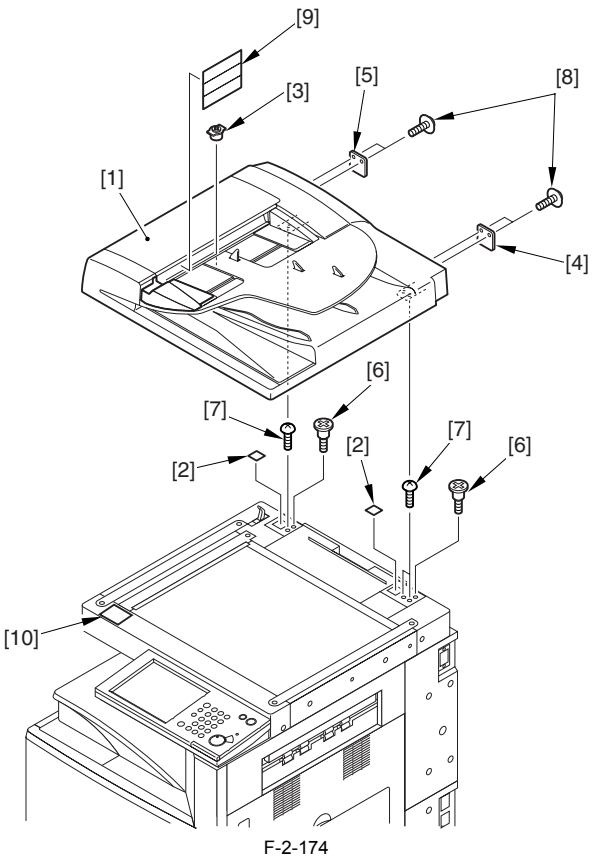
7) Attach the covers using the steps to detach them but in reverse.
   - Lower left cover
   - Lower rear cover
8) Put back the cassettes.
9) Fix the cable in place with the wire saddle.
10) Plug the power cable (for outlet) into the outlet.
11) Turn ON the switch of the main power.

2.16 Installing the DADF

2.16.1 Checking the Contents

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

<DADF-L1>



F-2-174

[1]	DADF Main Unit	1pc.
[2]	Blanking Seal	2pc.
[3]	Stamp	1pc.
[4]	Hinge Cover (Right)	1pc.
[5]	Hinge Cover (Left)	1pc.
[6]	Stepped Screw (M5X6)	2pc.
[7]	Stepped Screw (M4X10)	3pc.
[8]	Self-Tapping Screw (M3X8)	4pc.
[9]	Document Size Label	1pc.
[10]	Glass Cleaning Position Label	1pc.

2.16.2 Turning Off the Machine

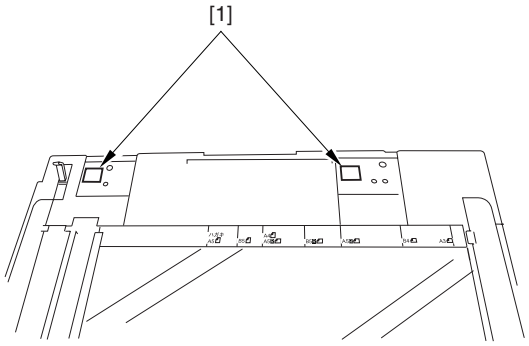
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

How to Turn Off the Host Machine
When turning off the main power, be sure to go through the following in strict sequence to protect the machine's hard disk:
1) Hold down on the power switch on the control panel for 3 sec or more.
2) Operate on the touch panel according to the shut-down sequence indicated so that the main power switch may be turned off.
3) Turn off the main power switch.
4) Disconnect the power cable (for the power outlet).

2.16.3 Installation Procedure

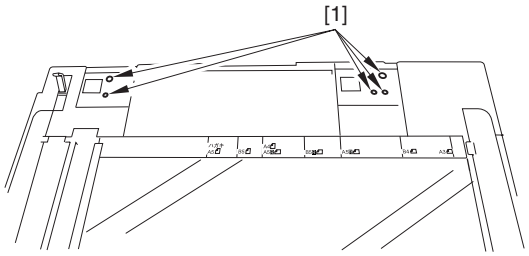
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the pressing plate of the main unit, attach the blanking seal [1] to the hinge hole.



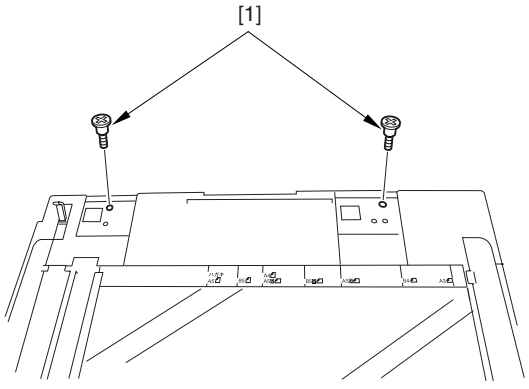
F-2-175

2) Remove five screws [1] on the upper side of the unit (Do not use these screws).



F-2-176

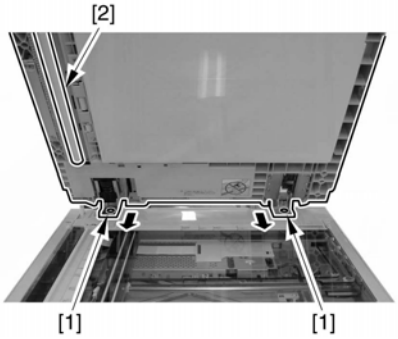
3) Tighten two stepped screws (M5X6) [1] to the upper rear side of the unit.



F-2-177

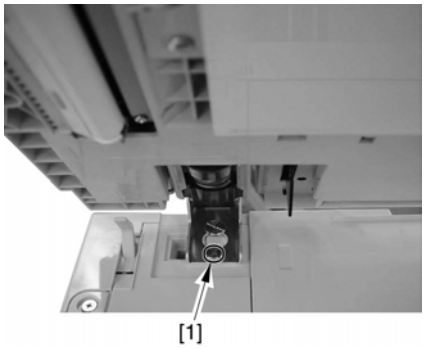
4) Set the stepped screws [1] to DADF hinge from the back of the unit, slide it forward.

Do not touch the platen roller [2] when holding DADF.

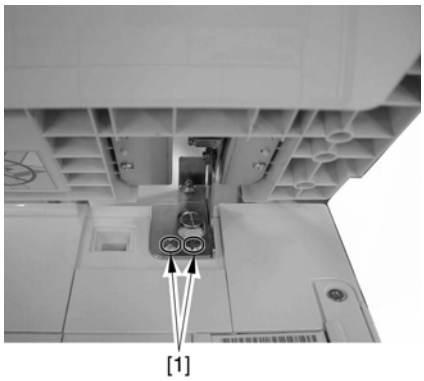


F-2-178

5) Fix the hinges to DADF with stepped screws (M4X10) [1]. Use one screw for the left side and two for the right side. Tighten them so that DADF is aligned against the left side of the unit when closing DADF.

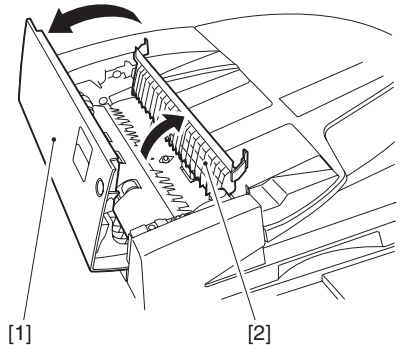


F-2-179



F-2-180

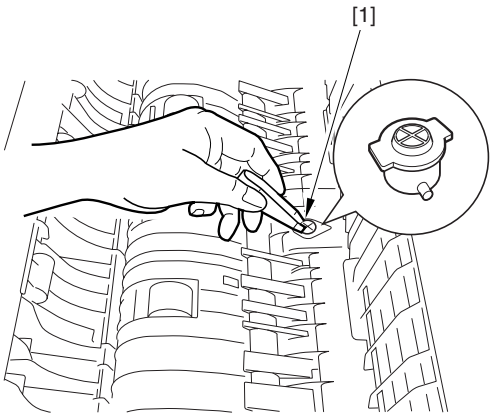
6) Open the DADF feeder cover [1] and separation guide [2].



F-2-181

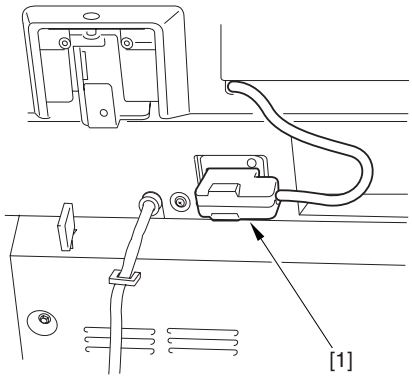
7) Attach the stamp [1] using tools such as tweezers. Attach the stamp with the stamped surface upside.

Incomplete fixation of the stamp results in jam. Press the stamp until it clicks.



F-2-182

8) Close the separation guide and the DADF feeder cover.
9) Connect DADF cable [1].

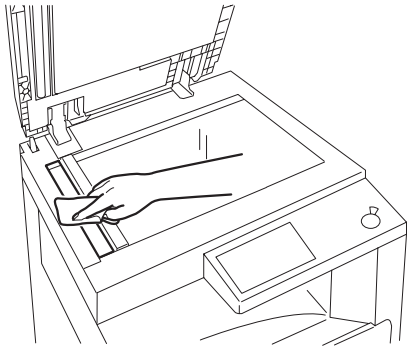


F-2-183

2.16.4 Cleaning the Copyboard Glass

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Wipe DADF reading glass with a cloth moistened with water (well-wrung).



F-2-184

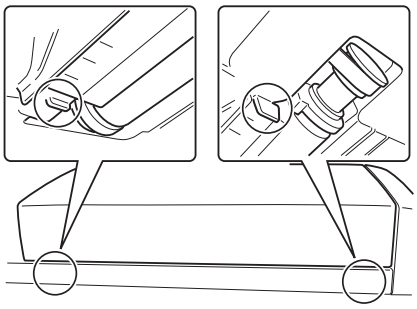
2.16.5 Adjustment

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1. Height Adjustment

1-1. Making Pre-Checks

Check if the copyboard reference points of the pick-up side are attached to the copyboard glass both on the front and rear sides when closing DADF.



F-2-185

1-2. Adjustment Sequence

* When fixed incompletely on the front or rear side
  1) Left hinge adjustment (See 3)
  2) Right hinge adjustment (See 4)
  3) Left hinge adjustment (See3) or left hinge check

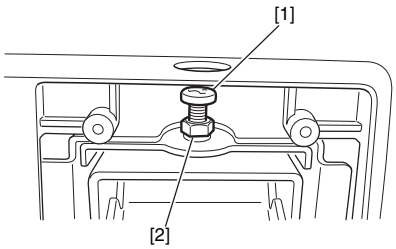
* When fixed incompletely on both sides
  1) Left hinge adjustment (See 3)
  2) Right hinge adjustment (See 4)
  3) Left hinge adjustment (See 3)
  4) Right hinge adjustment (See 4) or right hinge check

1-3. Left Hinge Height Adjustment

1) Adjust the left hinge with the height adjustment screw [1].

Loosen the fixing nut [2] before adjustment. Tighten it after adjustment.

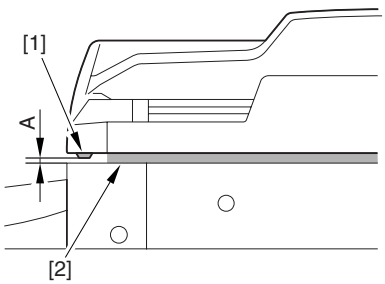
* When the front side is fixed incompletely -> Rotate the adjustment screw clockwise, set the front side to the glass.
* When the rear side or both sides are fixed incompletely -> Rotate the adjustment screw counterclockwise, set the rear side to the glass.



F-2-186

1-4. Right Hinge Height Adjustment

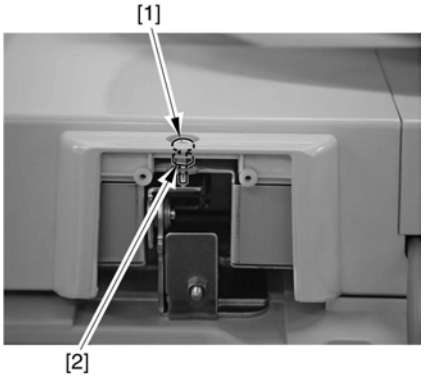
1) When closing DADF, check the following two matters.
- The rubber foot [1] is not attached to the cover of the reader unit (There is gap A).
- The document retaining sheet [2] is attached to the copyboard glass.



F-2-187

2) If the height is not correct, adjust it with right hinge height adjustment screw [1].

Loosen the fixing nut [2] before adjustment. Tighten it after adjustment.



F-2-188

* Rotate the adjustment screw clockwise -> Gap A becomes wider
* Rotate the adjustment screw counterclockwise -> Gap A becomes narrower
3) Perform the step 1) 'Left Hinge Height Adjustment'. If there is any displacement, perform adjustment again.

2. Main Unit Power ON

1) Connect the power supply cable to the power plug.
2) Turn ON the main power switch.

3. Tray Width Adjustment

The result of this adjustment is stored in the reader controller PCB. When installing DADF in the field, this adjustment should be performed to input the adjustment result in the reader unit. For DADF, this adjustment is not performed in installing in the field. If this adjustment is not performed, the following problem occurs.
- Wrong detection of the document size

For the tray width adjustment, perform 'AB system adjustment' or 'INCH system adjustment'.

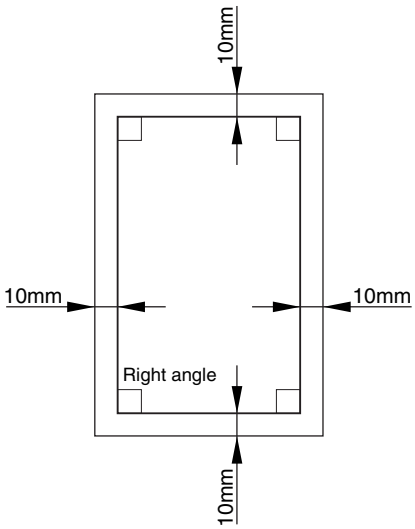
<AB System Adjustment>
1) Enter the service mode
2) Select the screen in the following order to display the adjustment screen.
   1. FEEDER
   2. FUNCTION
   3. TRY-A4 (highlighted)

3) Align the tray side guide against the 'A4/A3' indication.
4) Press OK key, register the width of 'A4'.
5) Press TRY-A5R (highlighted).
6) Align the tray side guide against the 'A5R' indication.
7) Press OK key, register the width of 'A5R'.
8) Press the reset key twice to release the service mode.

<INCH System Adjustment>
1) Enter the service mode.
2) Select the screen in the following order to display the adjustment screen.
   1. FEEDER
   2. FUNCTION
   3. TRY-LTR (highlighted)

3) Align the tray side guide against the 'LTR/11X17' indication.
4) Press OK key, register the width of LTR.
5) Press TRY-LTRR key (highlighted).
6) Align the tray side guide against the 'STMT/LTRR/LGL' indication.
7) Press OK key, register the width of LTRR.
8) Press the reset key twice to release the service mode.

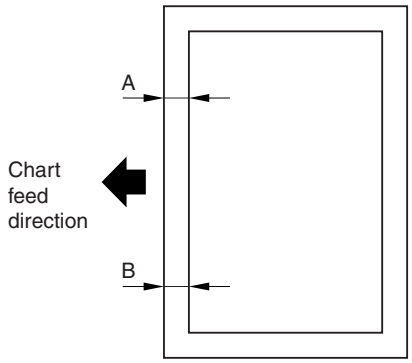
4. Right-Angle Adjustment
Here, the original feed direction of the machine is adjusted in relation to the optical system of the iR machine.
1) Prepare a test chart as shown using A4 or LTR copy paper.



F-2-189

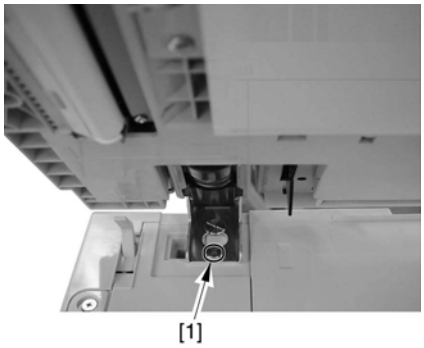
2) It can be used by copying or cutting.

3) Check the right angle of the image at the edge of the copied paper. Check the right angle by reading the difference between A and B dimensions at the edge of the copy. If there is a difference between A and B, perform adjustment from the step 3).

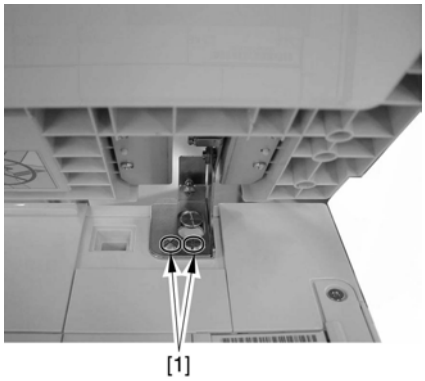


F-2-190

4) Loosen three screws [1] for hinge fixation.



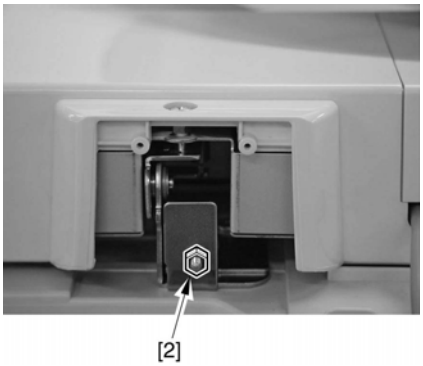
F-2-191



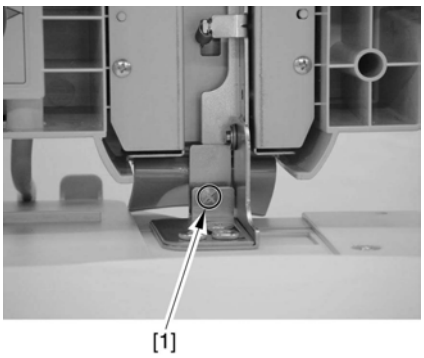
F-2-192

5) Adjust the DADF angle by right-side hinge adjustment screw [1].

⚠
Loosen the fixing nut [2] before adjustment. Tighten it after adjustment.



F-2-193



F-2-194

* For A>B -> Rotate clockwise.
* For A<B -> Rotate counterclockwise.
6) Tighten all of the hinge fixing screw loosened in the step 3).

5. Reading Position Adjustment
1) Enter the service mode.
2) Select the screen from the service mode screen in the following order, to display the adjustment screen.
1. COPIER
2. FUNCTION
3. INSTALL

3) 3) Press STRD-POS to highlight.
4) 4) Press OK key.
The scanner starts scanning by pressing OK. Auto adjustment of scanning position is completed in a few seconds, OK is displayed.

⚠
If auto adjustment is failed and NG is displayed, perform the following steps.
1) Clean the white roller of DADF and the copyboard glass of the main unit, and perform auto adjustment again.
2) If it fails again, perform manual adjustment in the following step by the service mode.
COPYER > ADJUST > ADJ-XY > STRD-POS
The default is 30.
Modify the value and check the actual copy image, and determine the optimum value.

6. Reproduction Ratio Adjustment

MEMO:
DADF reproduction ratio adjustment is performed by comparing the stream reading copy image and pressing plate reading copy image (because the DADF is for color machine). Comparison between stream reading copy image and original is performed at DADF for the previous monochrome machine, so perform adjustment taking this difference into account. When reproduction ratio adjustment by comparing stream reading copy image and original is performed as in the case of monochrome DADF, the following problems may occur.
- ACS erroneous decision
- Black text enhancement erroneous decision

1) Set test chart to DADF, copy one set. This is to be copy B.
2) Set the test chart used in the step 1) to the copyboard glass of the main unit, copy one sheet. This is to be copy A.
3) Compare the image length in the feeding direction between copy A and copy B. Perform adjustment at the service mode if necessary.
Copy B image is short -> Decrease the value (Make the document stream reading speed lower)
Copy B image is long -> Increase the value (Make the document stream reading speed higher)
Adjustment unit 1=0.1%

4) Select the screen from the service mode screen in the following order.

1. FEEDER
2. ADJUST
3. LA-SPEED (highlighted)

7. Horizontal Registration Adjustment

1) Set the test chart to DADF, copy one set.
2) Compare the test chart and the copy paper horizontal registration. Perform adjustment if necessary.
   Image is displaced to the front side -> Decrease the value
   Image is displaced to the rear side -> Increase the value
   Adjustment value unit 1=0.1mm
3) Select the screen from the service mode screen in the following order to display the adjustment screen, and perform adjustment.
   1. COPIER
   2. ADJUST
   3. ADJ-XY
   4. ADJ-Y-DF

8. Rear End Registration Adjustment

1) Set the test chart to DADF, copy one set.
2) Compare the test chart and the copy paper rear end registration. Perform adjustment if necessary.
   Image is displaced to the front side -> Decrease the value
   Image is displaced to the rear side -> Increase the value
   Adjustment value unit 1=0.1mm
3) Select the screen from the service mode screen in the following order to display the adjustment screen, and perform adjustment.
   1. FEEDER
   2. ADJUST
   3. DOCST

9. White Level Adjustment

MEMO:
This is the new adjustment to adjust the white level of the stream reading image to the white level of the pressing plate reading image (because DADF is for color). If this adjustment is not performed, the following problems may occur.
- Incorrect under-color density of the stream reading image
- Wrong detection of solid in the stream reading mode

---

1) Set paper (for user normal use) on the copyboard glass, close DADF.
2) Select the screen from the service mode screen in the following order, to display the adjustment screen.
   1. COPIER
   2. FUNCTION
   3. CCD
3) Press DF-WLVL1 key to highlight.
4) Press OK key.
   Auto adjustment is performed. When it is correctly completed, 'OK!' is displayed on the screen.
5) Take the paper out of the copyboard glass, set it on DADF document tray.
6) Press DF-WLVL2 key on the touch panel to highlight .
7) Press OK key.
   Auto adjustment (both-side stream reading) is performed.
   If completed normally, 'OK!' is displayed on the screen.
8) Press the reset key twice to get out from the service mode.
9) Turn OFF the main power switch according to the shutdown sequence.

2.16.6 Affixing Labels

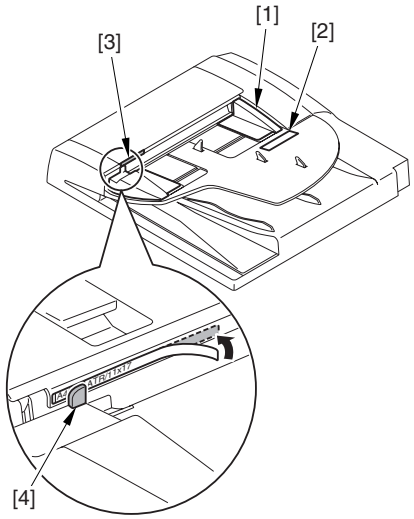
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1. Affixing Size Label

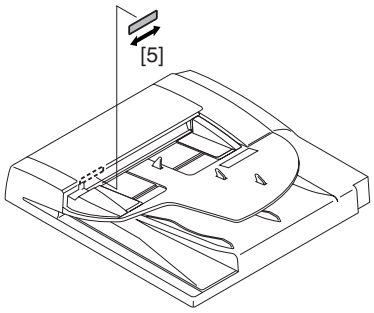
⚠
This label aims to make the size easier to adjust for user's viewability.

---

1) Set the side guide (rear) [1] to the indication of 'A4/A3' or 'LTR/11X17' [2].
2) Affix the size label [3] in appropriate language to the feeder cover.
   Determine the label position in the cross direction (arrow [5] direction) and affix the label so that the indication [4] on the side guide (the front) matches the indication of the size label considering user's viewability.

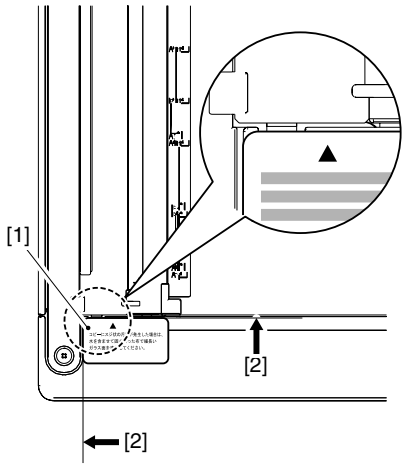


F-2-195



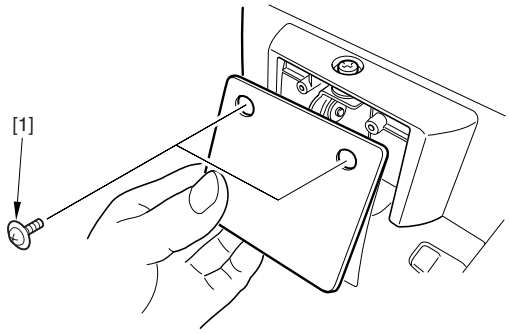
F-2-196

2. Affixing the Copyboard Glass Cleaning Label
1) Push and affix the copyboard glass cleaning label [1] to the reader unit front cover [2].



F-2-197

3. Fixing the Hinge Cover
1) Fix the hinge covers to the left and right hinge assemblies with two each self-tapping screws (M3X8) [1]. Fit the sheet inside, the rubber plate outside, and fix it.



F-2-198

2.16.7 Operation Check

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

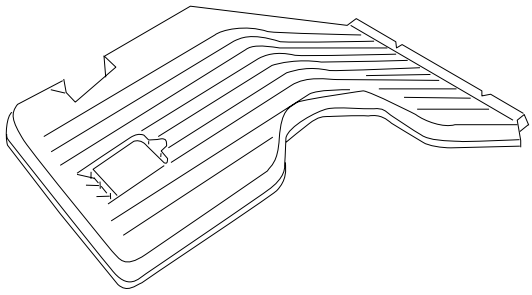
1) Check the following operations.
1. Set the original to DADF, check LED ON/OFF.
2. Check the single-sided, two-sided copy operations.
3. When using FAX mode, check the stamp operation for FAX sending.

2.17 Installing the Inner 2 Way Tray

2.17.1 Checking the Components

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

<Inner 2 Way Tray-D1>



F-2-199
T-2-5

[1] Inside paper tray 1pc.

2.17.2 Turning Off the Machine

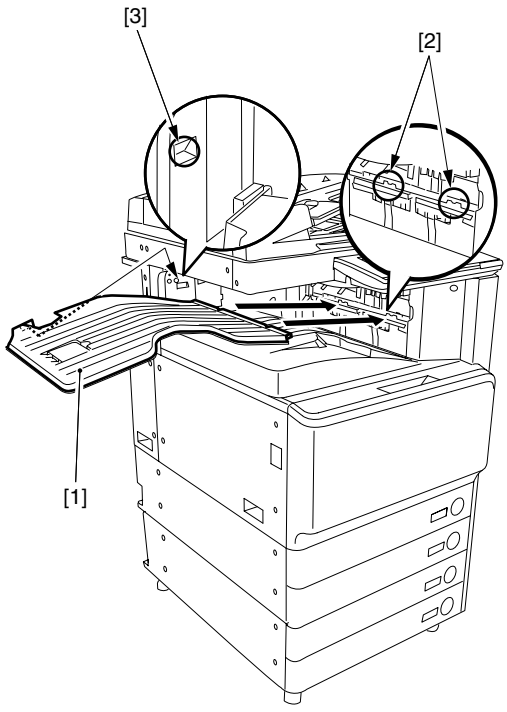
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

How to Turn Off the Host Machine
When turning off the main power, be sure to go through the following in strict sequence to protect the machine's hard disk:
1) Hold down on the power switch on the control panel for 3 sec or more.
2) Operate on the touch panel according to the shut-down sequence indicated so that the main power switch may be turned off.
3) Turn off the main power switch.
4) Disconnect the power cable (for the power outlet).

2.17.3 Installation Procedure

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Fit the inside delivery tray [1] into the delivery assembly slot [2]; then, hook it on the rear cover slot [3] to secure it in position.



F-2-200

2) Plug the power cable (for outlet) into the outlet.
3) Turn ON the switch of the main power.
4) Enter the Service mode.
5) Set the menu flag below at 1.
COPIER > OPTION > ACC > IN-TRAY.

When '1' is set to this mode item, tray B will be enabled under 'delivery tray setup' in user mode.

6) Turning off the Host Machine.
7) After 3 or more sec. has passed, turn ON the main power switch.
8) Press the additonal functions key. Then check the follow menu added.
[Common settings] > [delivery tray setup]
9) Select the tray B to copy, and perform test copy.
10) Set a tray in compliance with the needs of the user.

Chapter 3 Basic Operation

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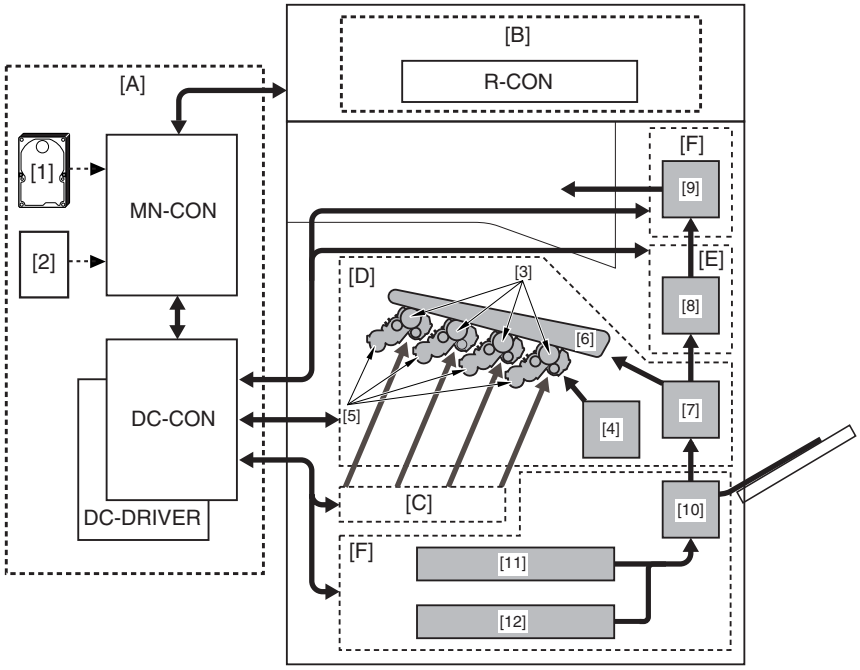
3.1 Construction

3.1.1 Functional Construction

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The machine may broadly be divided into the following functional system blocks: general control system block, original exposure system block, reader control system block, printer control system block, laser exposure system block, image formation system block, fixing system block. and pickup/feed system block, For detailed discussions of individual functions, see the chapters that follow.



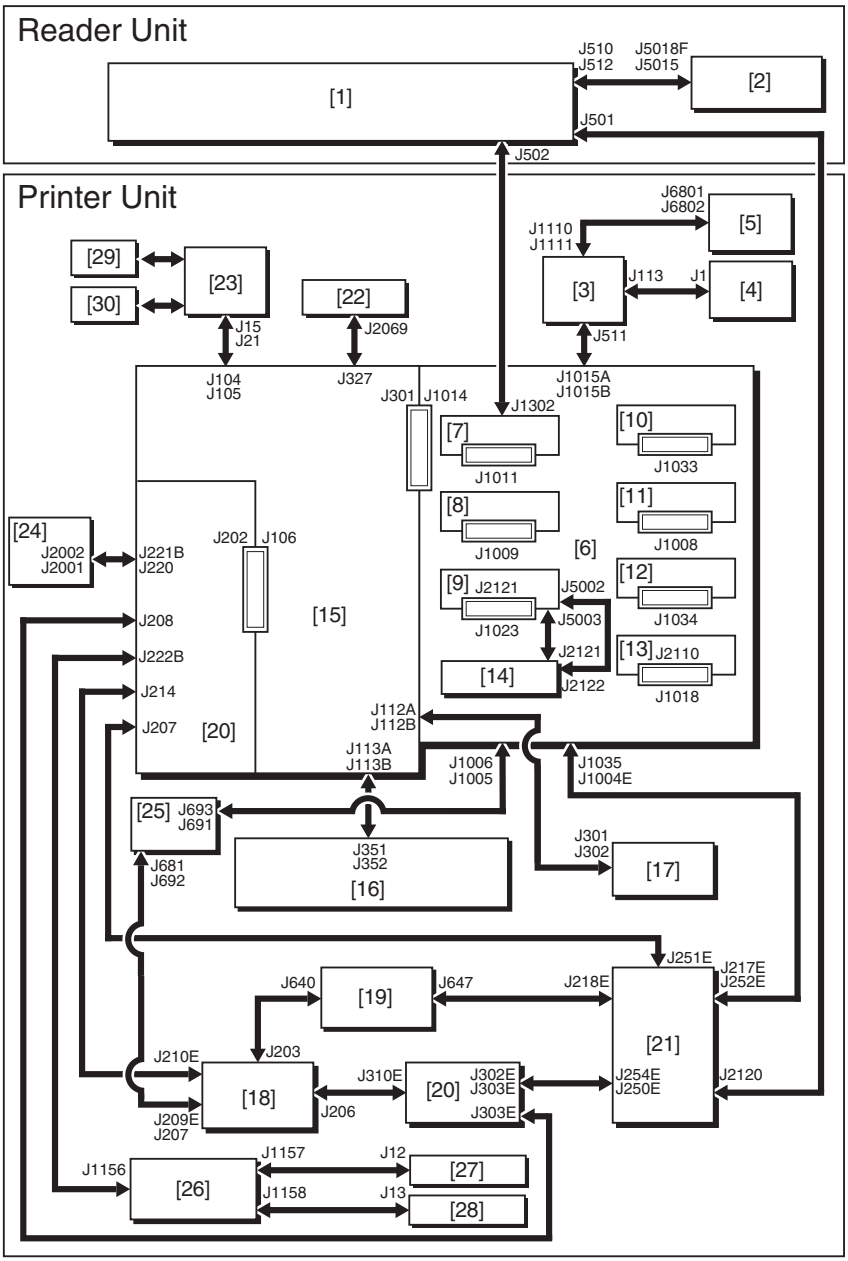
F-3-1

[A]	General Control System main controller PCB DC controller PCB DC driver PCB	[B]	Original Exposure System reader controller PCB	[C]	Laser Exposure System
[D]	Image Formation System	[E]	Fixing System	[F]	Pickup/Feed System
[1]	HDD	[2]	Accessories PCB	[3]	Photosensitive drum
[4]	Charging	[5]	Development	[6]	Primary transfer
[7]	Secondary transfer/Separation	[8]	Fixing	[9]	Delivery/Reversal/Duplexing
[10]	Pickup	[11]	Cassette 1	[12]	Cassette 2

3.1.2 Connections Among Major PCBs

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The following is a diagram showing connections among individual PCBs:



F-3-2

[1]	Reader controller PCB	[2]	CIS inverter PCB
[3]	Control panel CPU PCB	[4]	Control panel inverter PCB
[5]	Keypad PCB	[6]	Main controller PCB (main)
[7]	Main controller PCB (sub SJ-A)	[8]	Main controller PCB (sub R-A)
[9]	Main controller PCB (sub LANBAR-C)	[10]	SRAM PCB
[11]	Main controller PCB (sub PE-A)	[12]	RAM
[13]	FRAM	[14]	HDD
[15]	DC controller PCB	[16]	Transfer high-voltage PCB
[17]	Image formation high-voltage PCB	[18]	AC driver PCB
[19]	Accessories power supply PCB	[20]	Printer power supply PCB
[21]	Controller power supply PCB	[22]	DC driver PCB
[23]	Laser relay PCB	[24]	Relay PCB
[25]	All-night power supply PCB	[26]	Cassette size relay PCB
[27]	Upper cassette size PCB	[28]	Lower cassette size PCB
[29]	Laser driver PCB YM	[30]	Laser driver PCB CK

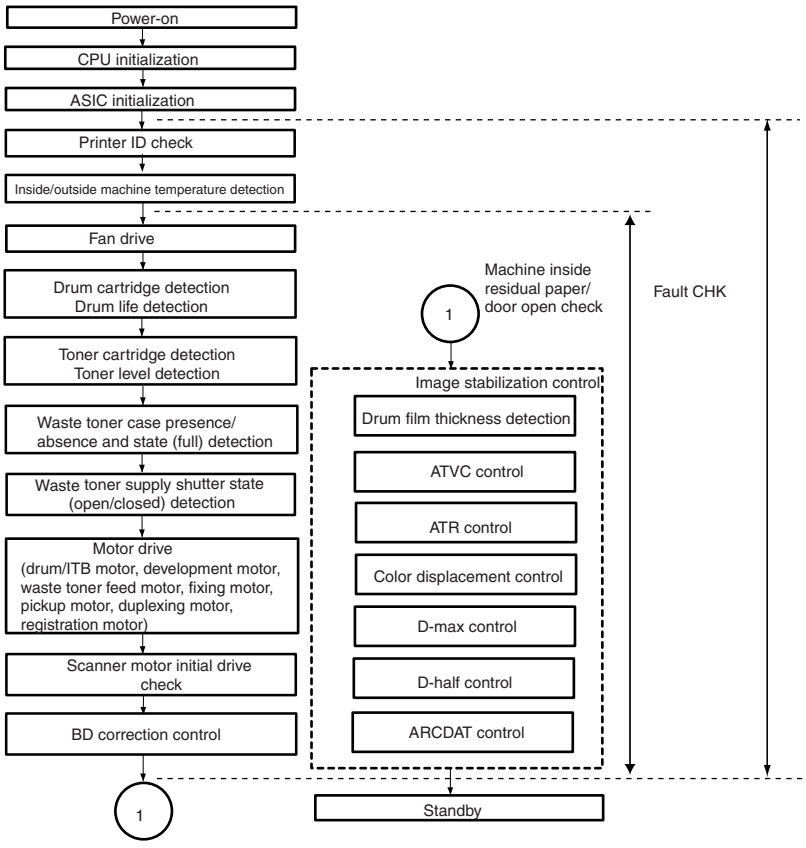
MEMO:
The arrows in the diagram indicate PCB connections, not the direction of signals.

3.2 Basic Sequence

3.2.1 Basic Sequence of Operations at Power-On

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The following shows the machine's power-on sequence in the form of a flow chart, during which the various machine loads are initialized according to the instructions programmed in the machine firmware (from when the power switch is turned on to when the machine enters a standby state):



F-3-3

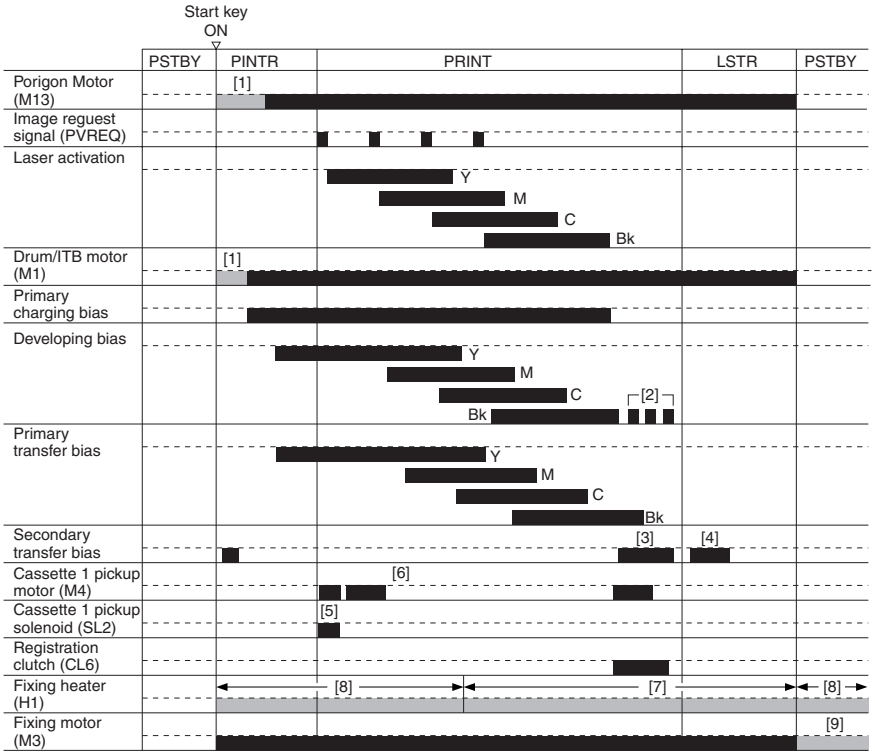
3.2.2 Basic Sequence of Operations for a Print Job (full color)

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Full color, A4, 1 copy, Cassette 1

T-3-1

Period	Description
PSTBY (print standby)	when the machine is ready to accept a copy/print request signal.
PINTR (initial rotation)	from when a print request signal is received to when an image signal is generated.
PRINT	from when all toner has been transferred to paper and the paper is delivered.
LSTR (last rotation)	from when the paper has been delivered to when all drive has been stopped.



F-3-4

[1] stabilizes the rotation.
[2] holds toner/carrier on the developing cylinder.
[3] transfers to paper.
[4] cleans the secondary transfer outside roller.
[5] picks up paper from the cassette.
[6] executes registration.
[7] controls 165 to 240 degrees Celcius.
[8] controls 140 to 195 degrees Celcius.
[9] executes half-speed rotation (to increase temperature of the pressure roller).

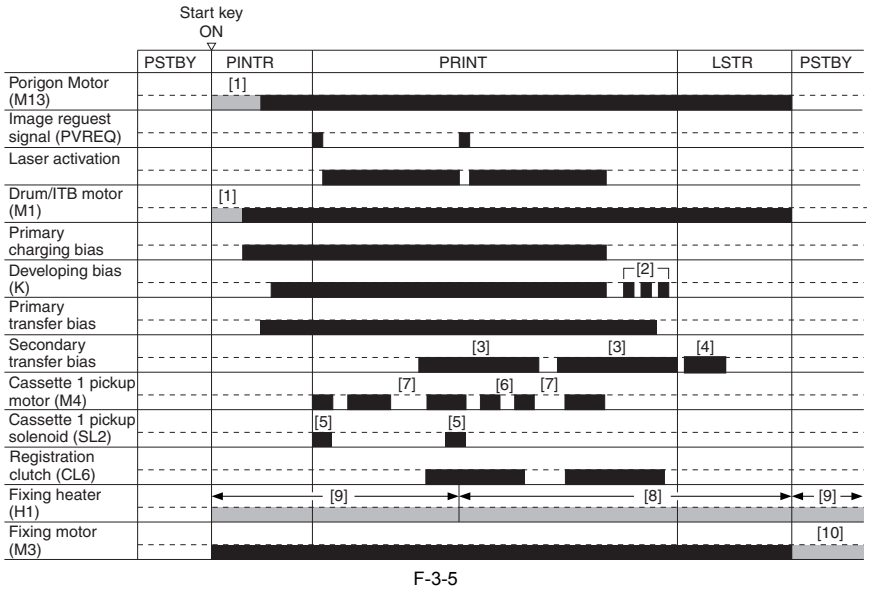
3.2.3 Basic Sequence of Operations for a Print Job (mono color)

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Mono, A4, 2 copies, Cassette 1

T-3-2

Period	Description
PSTBY (print standby)	whine the machine is ready to accept a copy/print request signal.
PINTR (initial rotation)	from when a print request signal has been received to when an image signal is generated.
PRINT	from when all toner has been transferred to paper to when the paper is delivered.
LSTR (last rotation)	from when the paper has been delivered to when all drive is stopped.



F-3-5

[1] stabilizes the rotation.
[2] retains toner/carrier on the developing cylinder.
[3] transfers to paper.
[4] executes secondary transfer outside roller cleaning.
[5] picks up paper from the cassette.
[6] executes pre-registration.
[7] executes registration.
[8] controls 165 to 240 degrees Celcius.
[9] controls 140 to 195 degrees Celcius.
[10] performs half-speed rotation (to increase the temperature of the pressure roller).

Chapter 4 Main Controller

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4.1 Construction

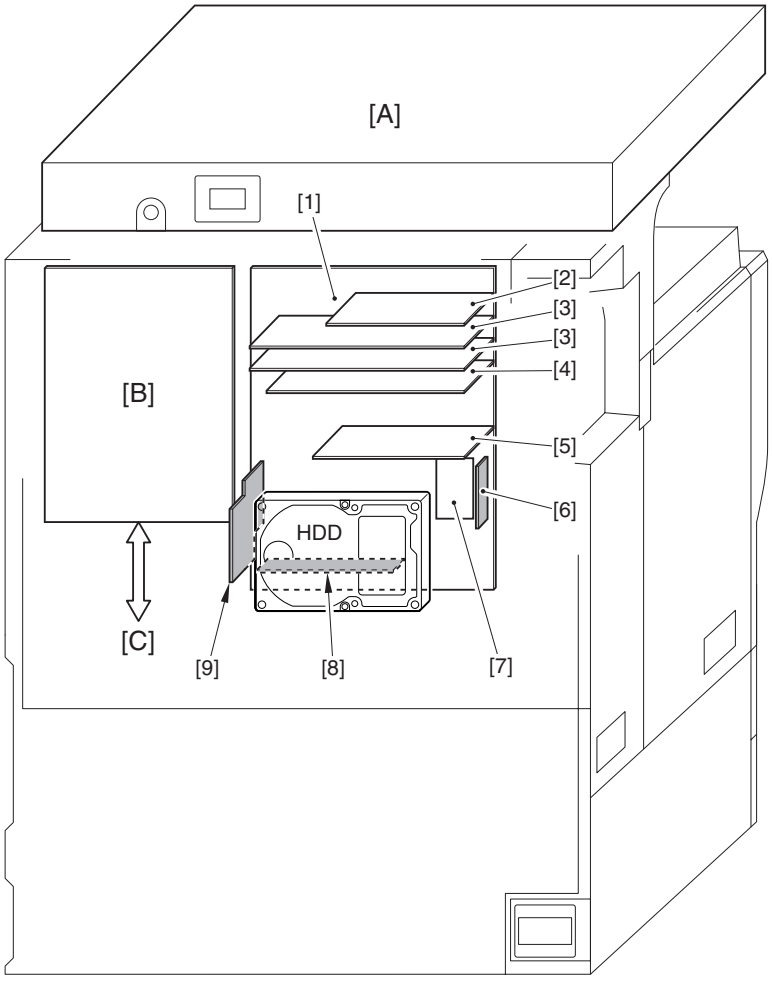
4.1.1 Construction and Functions

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The machine's main controller block consists of the following components and provides the functions indicated:

T-4-1

	Item	Description
[1]	Main controller PCB (main)	controls the system, controls the memory, controls image processing for output to the printer
[2]	Main controller PCB (sub R-A)	color space conversion, rotation for electronic sorting, binary processing, resolution conversion
[3]	Main controller PCB (sub PDRM-EF-A)	image processing for printer output (color space compression, background removal, LOG conversion, direct mapping, color balance, zoom fine adjustment, gradation conversion, screen processing, framing, add-on)
[4]	Main controller PCB (sub SJ-A)	scanner interface, scanner image processing (resolution conversion, image rotation, compression/ expansion)
[5]	Main controller PCB (sub LAN-bar-A)	LAN connection, HDD controller, HDD power supply
[6]	Boot ROM	stores programs used for booting
[7]	SRAM PCB	retains service mode settings and HDD control information
[8]	DDR-SDRAM	retains program data and image data temporarily
[9]	Main controller PCB (sub RB-A)	(to be translating)
HDD	HDD	stores system software, retains image data for Box/fax functions
[A]	Reader unit	
[B]	DC controller PCB	
[C]	Printer unit	



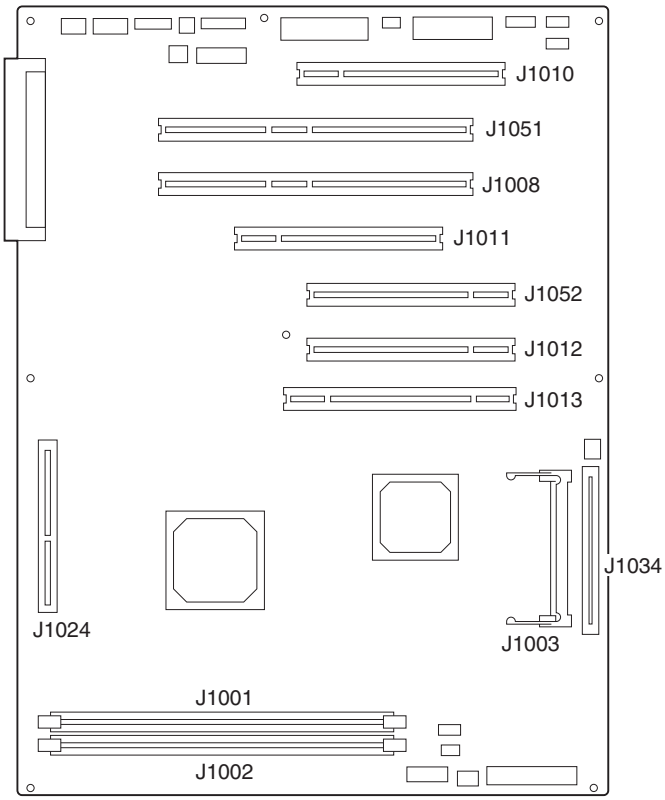
F-4-1

4.2 Construction of the Electrical Circuitry

4.2.1 Main Controller PCB (main)

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The following shows the major control functions of the main controller PCB (main) grouped according to jack/IC:



F-4-2

T-4-2

Jack No	Discription
J1001	image memory (DDR-SDRAM, 1 GB; standard)
J1002	image memory (DDR-SDRAM, 512 MB) *1
J1003	SRAM PCB connection slot
J1008	main controller PCB (sub PDRM-EF-A) connection slot
J1010	main controller PCB (sub R-A) connection slot
J1011	main controller PCB (sub SJ-A) connection slot
J1012	optional board connection slot (security expansion board)
J1013	main controller PCB (sub LAN-BAR-A) connection slot
J1024	main controller PCB (sub RB-A) connection slot *1
J1034	boot ROM connection slot
J1051	main controller PCB (sub PDRM-EF-A) connection slot
J1052	optional board connection slot (voice guidance board)

*1 optional for some models.

4.2.2 SRAM PCB

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The following is a discussion of the major control functions of the SRAM indicated with reference to ICs:

T-4-3

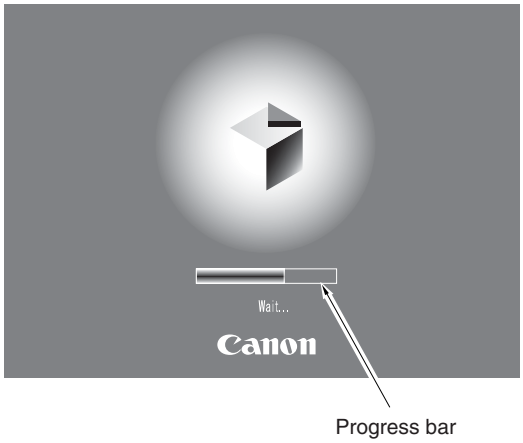
IC No.	Description
IC1,2(SRAM)	retains control information on the image data stored on the HDD; retains service mode settings data and Additional Function settings data

4.3 Start-Up Sequence

4.3.1 Overview

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The system software used to control the operation of the machine is stored on the HDD.
When the machine is started up, the CPU on the main controller PCB reads the system software from the HDD into the image memory (DDR-SDRAM) of the main controller PCB for use as instructed by the boot program of the boot ROM.
The following screen remains on the control panel white the CPU is reading the system memory from the HDD into the image memory (DDR-SDRAM), with the bar indicating the progress of the startup sequence.



F-4-3

Never turn off the main power while the progress bar is indicated. The CPU is accessing the HDD, and turning off the power can cause a fault (E602) on the HDD.

4.3.2 Start-Up Sequence

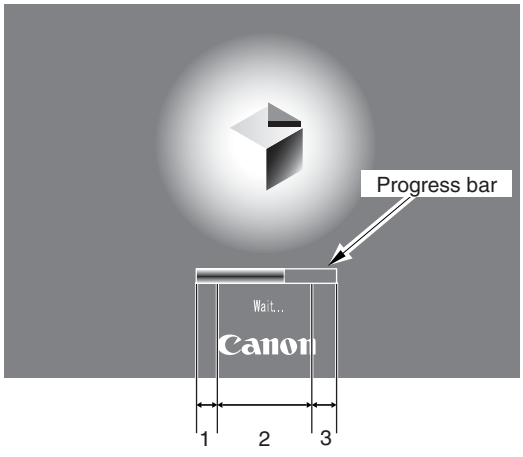
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1. Boot Program (interval 1)
The boot program is executed by the CPU on the main controller PCB when the main power switch is turned on, making checks on the image memory (DDR-SDRAM) and the HDD condition.
An error code will be indicated if a fault is detected. If the check ends normally, the control program is read from the HDD to the memory.

2. Control Program 1 (interval 2)
1) The individual devices (i.e., hardware components on the controller PCB) are checked and initialized.
2) If the engine was not previously turned off appropriately (i.e., by performing its shut-down sequence), the system files are repaired as necessary. (The engine may need an extra time when starting up.)
3) The individual program modules are initialized.

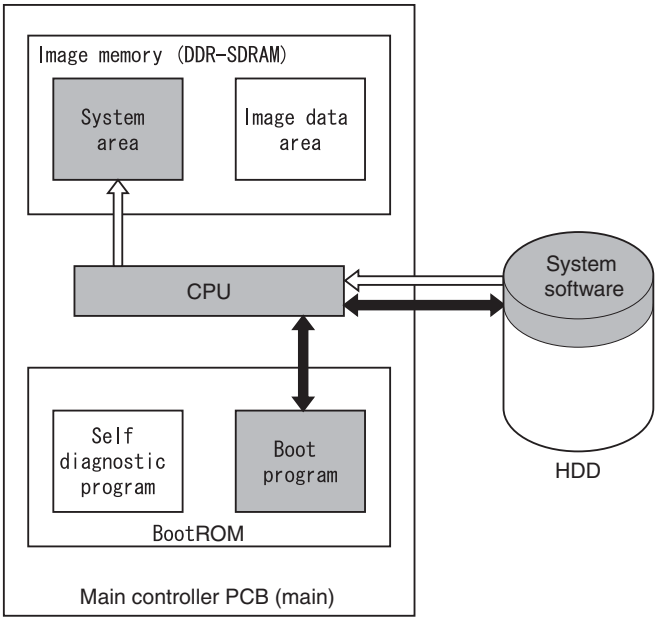
3. Control Program 2 (interval 3)
1) The individual software modules are initialized, and the printer and screen configurations are established.
2) The start-up sequence ends when the printer and scanner are correctly recognized. Otherwise, an error code (E732/E733) will be indicated at the end of a connection time-out.

The engine becomes ready to accept a job when the start-up sequence ends normally. (Its control panel displays the control screen, and the Start key LED changes from red to green.)



F-4-4

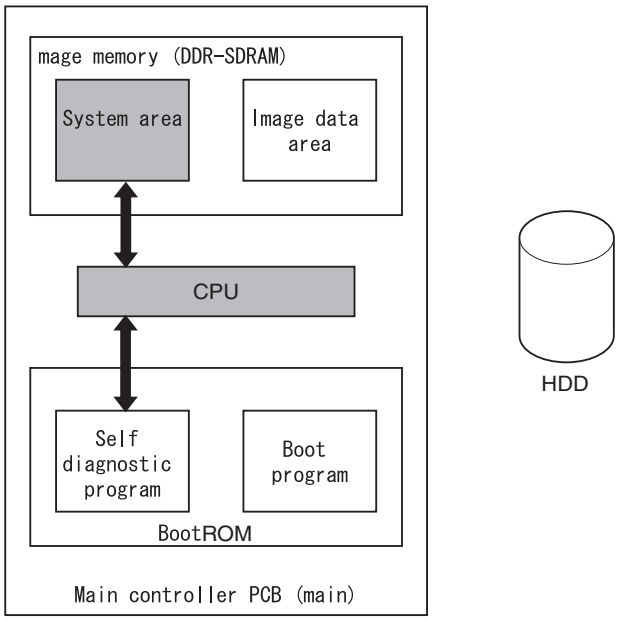
-When Executing the Boot Program



: access to the program at time of execution.
: flow of system program operations.

F-4-5

-When Executing the Control Program



: access to the program at time of execution.

F-4-6

4.4 Actions when HDD Error

4.4.1 E602 in Detail

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

E602-XXYY

- if XX='00'

T-4-4

XX	YY	Description	Remedial action
00	01	The HDD is not recognized. The boot partition (BOOTDEV) is not found at time of start-up.	1. Turn off the main switch, and check the HDD cable. Thereafter, turn on the main switch. 2. Check to see if the HDD rotates at power-up. Check to see if 5V/12V power is being supplied. 3. If the foregoing fails to correct the fault, replace the HDD and reinstall the system software. If the fault still persists, replace the main board.
	02	There is no system software for the main CPU.	1. Start up in safe mode; then, execute full formatting using the SST, reinstall the system software (System, Lang, RUI), and turn off and then on the main switch. 2. If the foregoing fails, suspect a fault on the HDD. Replace the HDD, and reinstall the system software.
	03	WriteAbort has been detected in BootDevice.	1. Locate the sector that shows WriteAbort, and repair it. <in the case of black-and-white E code> 1-1 Go through the following, as service mode cannot be started: 1-2 Turn off the power; then, while holding down the 1 and 9 keys, turn on the power so that the WriteAbort sector repair routine will start automatically, causing the screen to go solid black. 1-3 Allow for some time (40 to 50 min). A progress indictor will appear. When the screen turns solid white, the repair is over. <in the case of spanner icon indication> 1-1 Set CHK-TYPE=0, and execute HD-CHECK (40 to 50 min); then, turn off the main switch. 2. If the foregoing fails, start up in safe mode, and execute full formatting using the SST and reinstall the system software (System, Lang, RUI); then, turn off and then on the main switch. 3. If the fault still persists, suspect a fault on the HDD, and replace the HDD and reinstall the system software.
	06	The system software of the sub CPU is missing.	1. Start up in safe mode, and execute full formatting using the SST and reinstall the system software (System, Lang, RUI); then, turn off and then on the main switch. 2. If the foregoing fails, suspect a fault on the HDD, and replace the HDD and reinstall the system software.
	07	ICCProfile is missing.	1. Start up in safe mode, and execute full formatting using the SST and reinstall the system software (System, Lang, RUI); then, turn off and then on the main switch. 2. If the foregoing fails, suspect a fault on the HDD, and replace the HDD and reinstall the system software.

XX				YY					
				YY=03	YY=05	YY=00,01,02,04	YY=11,21	YY=13,25	YY=10,12,14,22,23,24
				At time of start-up			During normal operation		
XX	CHK-TYPE	Partition in question	Description	Remedy	Remedy	Remedy	Remedy	Remedy	Remedy
01	1	FSTDEV	image data storage area (e.g., Box)	*1	*5	*9	*10	*11	*12
02		IMG_MNG	image management data	*1	*5	*9	*10	*11	*12
03		FSTCDEV	image data storage area (for Chasing)	*1	*5	*9	*10	*11	*12
04	2	APL_GEN	general-purpose data storage area	*1	*5	*9	*10	*11	*12
05		TMP_GEN	general-purpose data storage area (temporary file)	*1	*5	*9	*10	*11	*12
06		TMP_FAX	fax (temporary file)	*1	*5	*9	*10	*11	*12
07		TMP_PSS	PSS (temporary file)	*1	*5	*9	*10	*11	*12
08	3	PDLDEV	PDL-related file storage area (font, registration form, ICCProfile PDL function color correction information file)	*1	*5	*9	*10	*11	*12
09	4	BOOTDEV	Firmware storage area (Booktable, MEAP, Key, certificate, PDF dictionary, RUI content, voice dictionary (ICC profile, PS test data))	*3	*8	*9	*10	*11	*12
10	5	APL_MEAP	MEAP	*1	*5	*9	*10	*11	*12
11	6	APL_SEND	address book, filter	*2	*5	*9	*10	*11	*12
FF	0	Not identified	HDD full fault check and recovery	*4	*7	*9	*10	*11	*12

- if XX='01 to FF'

XX				YY						HDD formatting			
				YY=03	YY=05	YY=00, 01,02,04	YY=11, 21	YY=13, 25	YY=10, 12,14,22 ,23,24				
				At time of start-up			During normal operation						
XX	CHK-TYPE	Partition in question	Description	Remedy	Remedy	Remedy	Remedy	Remedy	Remedy	Items deleted (typical)	HDD formatting by HD-CLEAR	HDD formatting by normal mode + SST	HDD formatting by safe mode + SST
01	1	FSTDEV	image data storage area (e.g., Box)	*1	*5	*9	*10	*11	*12	all stored data (e.g., Box)	possible (3 partitions simultaneous)	FSTDEV selected (3 partitions simultaneous)	
02		IMG_MNG	image management data	*1	*5	*9	*10	*11	*12				
03		FSTCDEV	image data storage area (for Chasing)	*1	*5	*9	*10	*11	*12				
04	2	APL_GEN	general-purpose data storage area	*1	*5	*9	*10	*11	*12	General	possible (4 partitions simultaneous)	APL_GEN selected (4 partitions simultaneous)	
05		TMP_GEN	general-purpose data storage area (temporary file)	*1	*5	*9	*10	*11	*12	General			
06		TMP_FAX	fax (temporary file)	*1	*5	*9	*10	*11	*12	FAX			
07		TMP_PSS	PSS (temporary file)	*1	*5	*9	*10	*11	*12	PSS			
08	3	PDLDEV	PDL-related file storage area (font, registration form, ICCProfile, PDL function color correction information file)	*1	*5	*9	*10	*11	*12	UserFont Icc Profile	possible	PDLDEV selected	
09	4	BOOTDEV	Firmware storage area (Booktable, MEAP, Key, certificate, PDF dictionary, RUI content, voice dictionary (ICC profile, PS test data))	*3	*8	*9	*10	*11	*12	System	Not possible	Not possible	
10	5	APL_MEAP	MEAP	*1	*5	*9	*10	*11	*12	MEAP	possible	possible	
11	6	APL_SEND	address book, filter	*2	*5	*9	*10	*11	*12	SEND	Not possible	Not possible	
FF	0	Not identified	HDD full sector fault check and repair	*4	*7	*9	*10	*11	*12	-	-	-	-

	YY	Description	Remedial action
*1	03	WriteAbort(start-up)	1. Indicate the partition in question for CHK-TYPE; then, execute HDD-CHECK (several min to several 10s of min); then, turn off and then on the power. 2. If the foregoing fails, indicate the partition for CHK-TYPE, and execute HDD-CLEAR; then, turn off and then on the main power switch.
*2	03	WriteAbort(start-up)	1. If possible, ask the user to make a backup of the data (address book) using the remote UI. 2. Indicate the partition in question for CHK-TYPE, and execute HDD_CHECK (several min to several 10s of min); then, turn off and then on the main power switch. 3. If the foregoing fails, start download mode, and execute full formatting and reinstall the system software (System, Lang, RUI); then, turn off and then on the main power switch.
*3	03	WriteAbort(start-up)	Recovery on the boot partition always calls for the use of SST in safe mode: 1. Set CHK-TYPE=0, and execute HDD-CHECK (several 10s of min); then, turn off and then on the power. 2. If the foregoing fails, start download mode, and execute full formatting and reinstall the system software (System, Lang, RUI); then, turn off and then on the main power switch.
*4	03	WriteAbort(start-up)	1. Set CHK-TYPE=0, and execute HDD-CHECK (several 10s of min); then, turn off and then on the power. 2. If the foregoing fails, use CHK-TYPE-1, 2, 3, 5 to execute HDD-CLEAR; then, turn off and then on the power.
*5	05	file system error	1. Indicate the partition for CHK-TYPE, and execute HDD-CLEAR; then, turn off and then on the main switch. 2. If the foregoing fails, suspect a fault on the HDD, and replace the HDD and reinstall the system software.
*6	05	file system error	HDD-CLEAR cannot be executed in service mode so as to prevent inadvertent deletion of data for address book, filter, and the like. 1. If possible, ask the user to make a backup of the data for address book using the remote UI. 2. Start in service mode, and start download mode. Execute full formatting using the SST, and reinstall the system software (System, Lang, RUI); then, turn off and then on the main power switch.
*7	05	file system error	This error seldom occurs. 1. Using CHK-TYPE=1, 2, 3, 5, execute HDD-CLEAR; then, turn off and then on the power. 2. If the foregoing fails, suspect a fault on the HDD, and replace the HDD and reinstall the system software.
*8	05	file system error	Repair of the boot partition always calls for the use of the SST in safe mode. 1. Start up in safe mode, and execute full formatting using the SST and reinstall the system software (System, Lang, RUI); then, turn off and then on the main power switch. 2. If the foregoing fails, suspect a fault on the HDD, and replace the HDD and reinstall the system software.
*9	00,01, 02,04	HDD contact fault, or v x Works system error	1. Check the cable and power supply connectors. 2. If the foregoing fails, start up in safe mode, and execute full formatting using the SST and reinstall the system software; then, turn off and then on the main power switch. 3. If the foregoing fails, suspect a fault on the HDD, and replace the HDD and reinstall the system software.

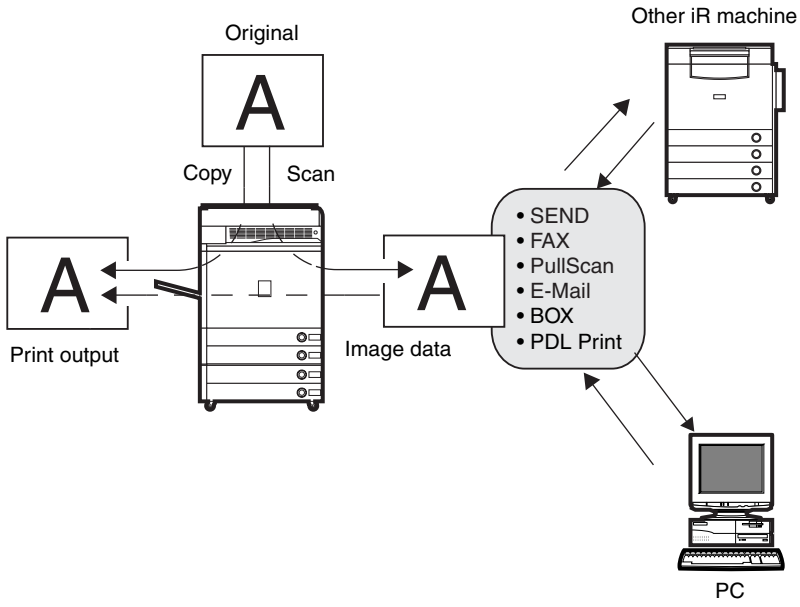
	YY	Description	Remedial action
*10	11,21	HDD contact fault	This error seldom occurs in the course of normal read/write operations. 1. Check the cable and power connectors. 2. If the foregoing fails, suspect a fault on the HDD, and replace the HDD and reinstall the system software.
*11	13,25	WriteAbort	The text file on the HDD (e.g., Box) may be damaged. 1. Indicate the partition for CHK-TYPE, and execute HDD-CHECK (several min to several 10s of min); then, turn off and then on the power. 2. If the forgoing fails, indicate the partition for CHK-TYPE, and execute HDD-CLEAR; then, turn off and then on the main switch. (In the case of BOOTDEV, BOOTDEV2, or APL_SEND, execute formatting using the SST and reinstall the system software.) 3. If the foregoing fails, suspect a fault on the HDD, and replace the HDD and reinstall the system software.
*12	10,12, 14 22,23, 24	system error, or packet data error	This error occurs in response to corruption of data or a bug in software. 1. Start up in safe mode, and execute full formatting using the SST and reinstall the system software (System, Lang, RUI); then, turn off and then on the main power switch. 2. If the foregoing fails, suspect a fault on the HDD; replace the HDD, and reinstall the system software.

4.5 Image Processing

4.5.1 Overview of the Flow of Image Data

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The image data processing flow useing this machine as follows;

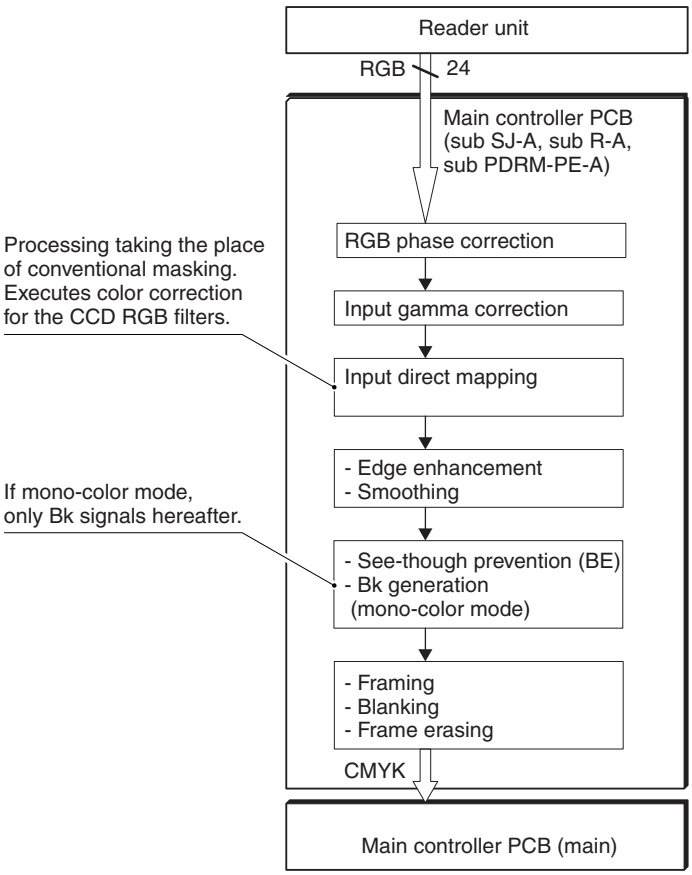


F-4-7

4.5.2 Reader Input Image Processing

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The image data (RGB data) collected by the CCD is processed by the main controller PCB (sub SJ-A, sub R-A, sub PDRM-PE-A).

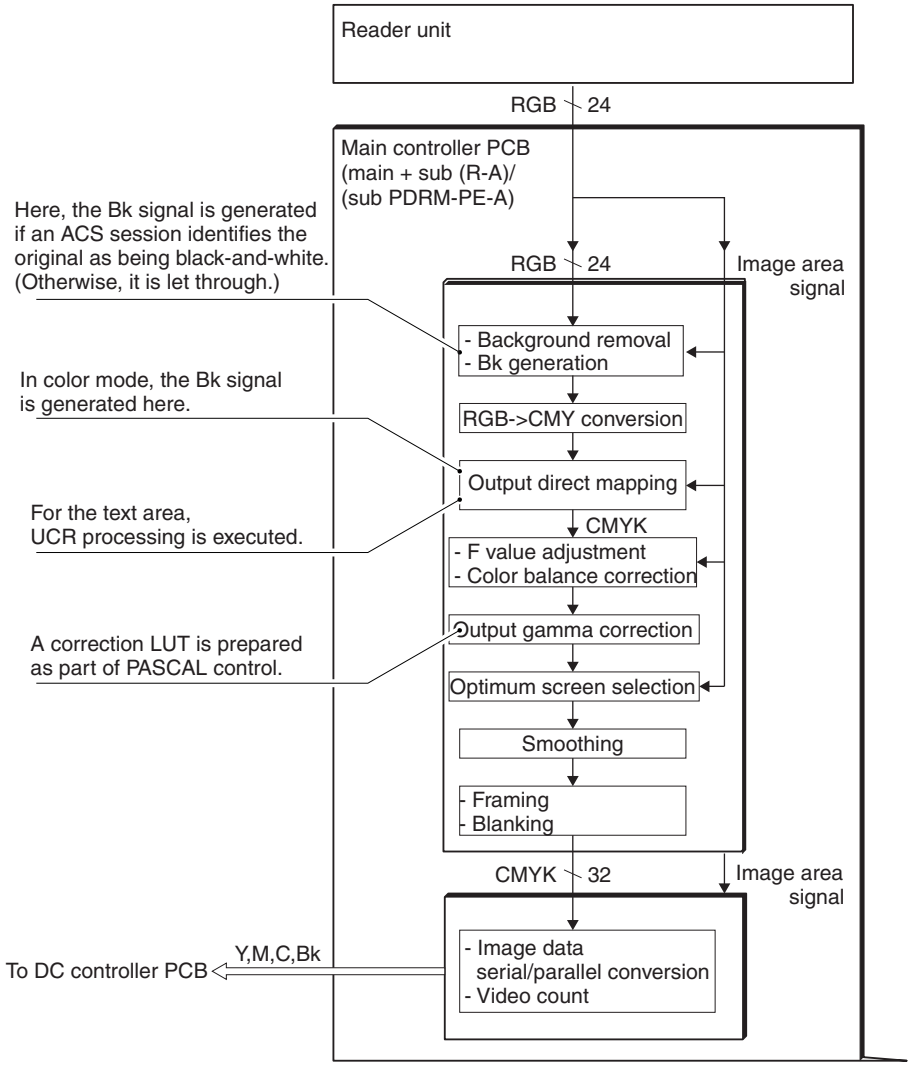

Reader unit
RGB
24
Main controller PCB
(sub SJ-A, sub R-A,
sub PDRM-PE-A)
RGB phase correction
Input gamma correction
Input direct mapping
- Edge enhancement
- Smoothing
- See-though prevention (BE)
- Bk generation
(mono-color mode)
- Framing
- Blanking
- Frame erasing
CMYK
Main controller PCB (main)
Processing taking the place
of conventional masking.
Executes color correction
for the CCD RGB filters.
If mono-color mode,
only Bk signals hereafter.

F-4-8

4.5.3 Printer Output Image Processing

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The main controller processes the image data arriving from the reader unit for output to the printer unit.

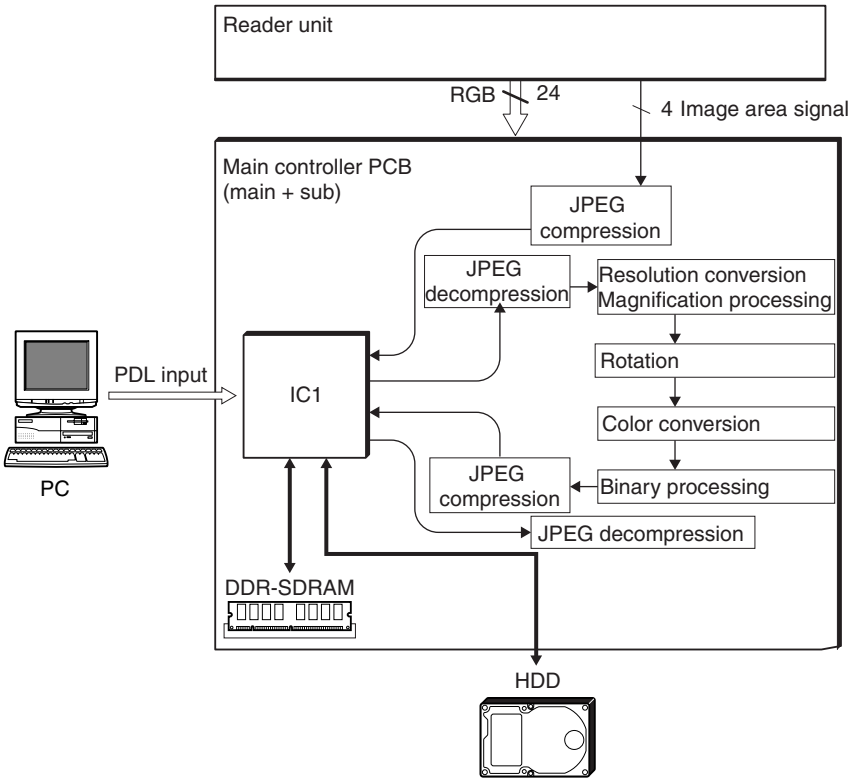


F-4-9

4.5.4 Compression, Decompression, and Edit Processing Blocks

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The main controller PCB processes data for compression, decompression, and editing.



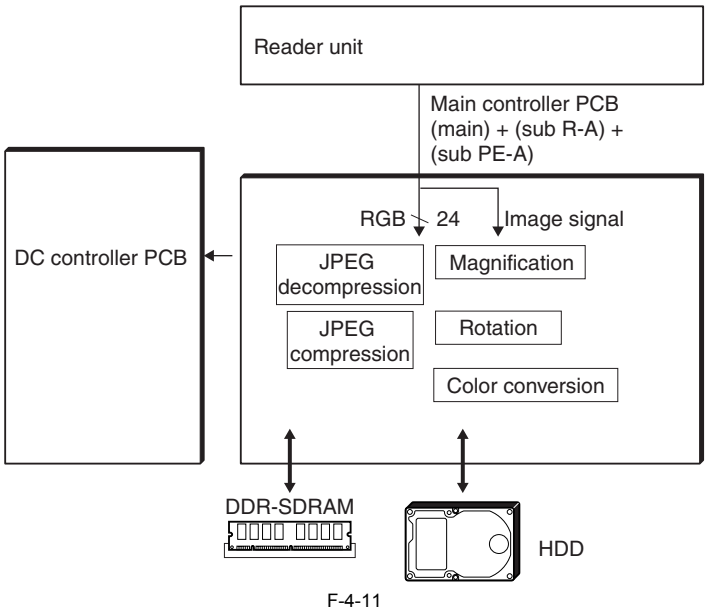
F-4-10

4.6 Flow of Image Data

4.6.1 Flow of Image Data for Copier Functions

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The following shows the flow of image data when a copier function is being used:

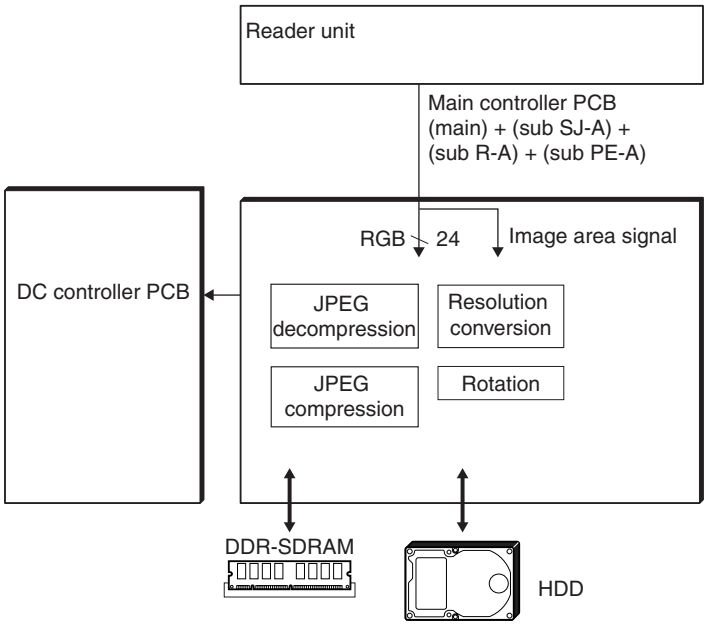


F-4-11

4.6.2 Flow of Image Data for Box Functions

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The following shows the flow of image data when a Box function is being used:

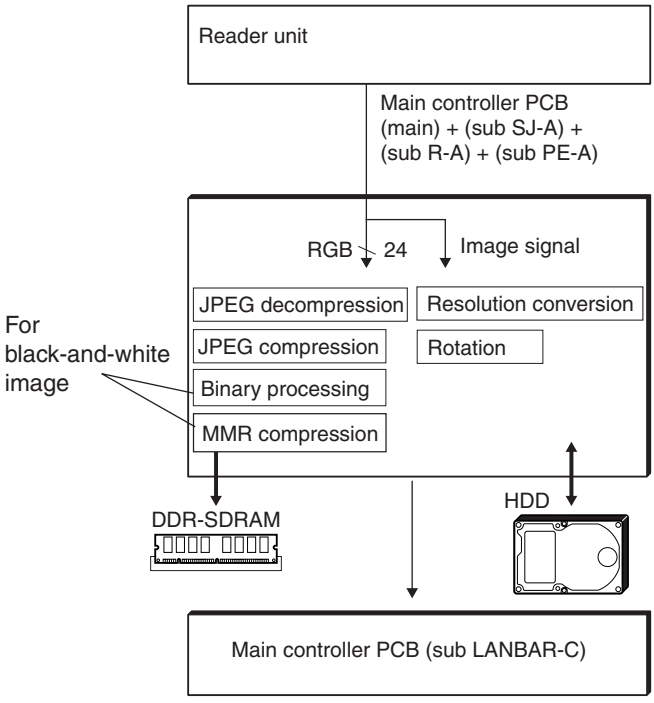


F-4-12

4.6.3 Flow of Image Data for SEND Functions

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The following shows the flow of image data when a SEND function is used:

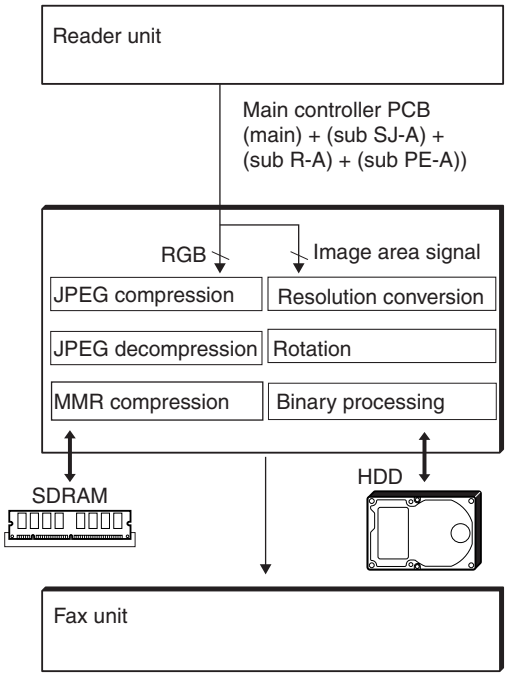


F-4-13

4.6.4 Flow of Image Data for Fax Transmission Functions

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The following shows the flow of image data when a fax transmission function is being used:

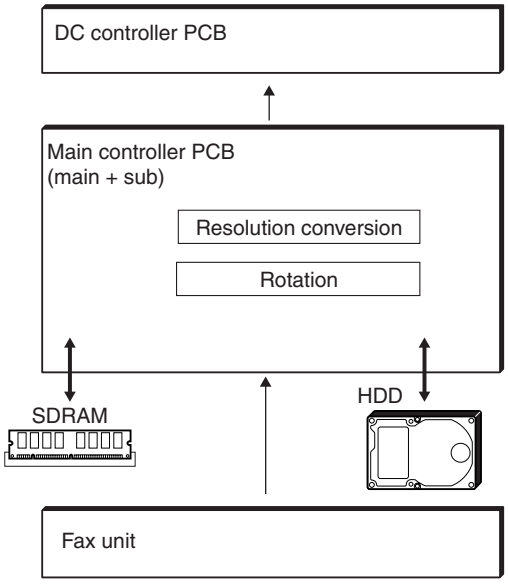


F-4-14

4.6.5 Flow of Image Data for Fax Reception Functions

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The following shows the flow of image data when a fax reception function is being used:

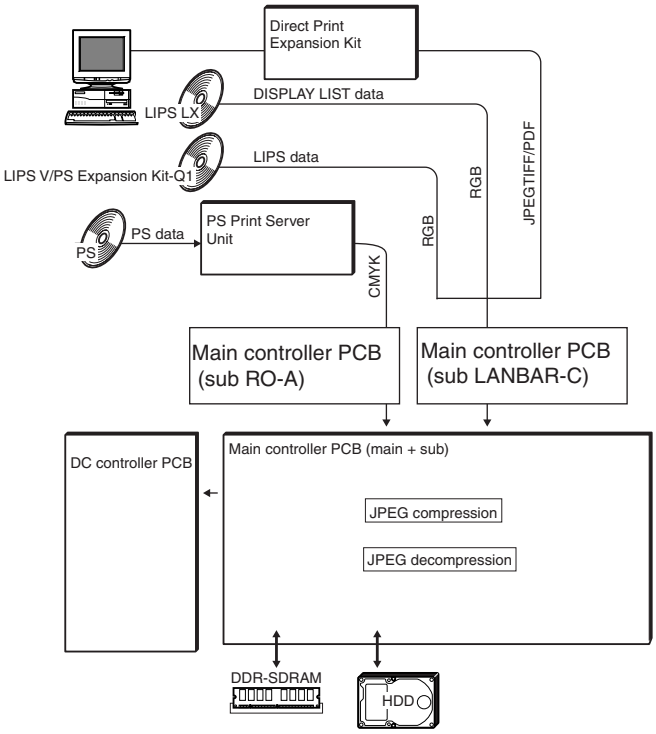


F-4-15

4.6.6 Flow of Image Data for PDL Functions

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The following shows the flow of image data when a PDL function is being used:



F-4-16

4.7 Parts Replacement Procedure

4.7.1 Controller Box

4.7.1.1 Before Removing the Main Controller Box

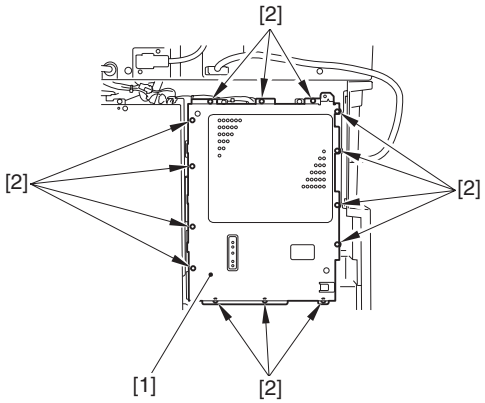
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the rear upper cover. (page 10-14) [Detaching the Rear Upper Cover]
2) Detach the left cover. (page 10-14) [Detaching the Left Cover]
3) Detach the left rear cover. (page 10-14) [Detaching the Left Rear Cover]
4) Remove the DC driver PCB. (page 10-25) [Removing the DC Driver PCB]
5) Remove the DC controller PCB. (page 10-22) [Detaching the DC Controller PCB]

4.7.1.2 Removing the Controller Box

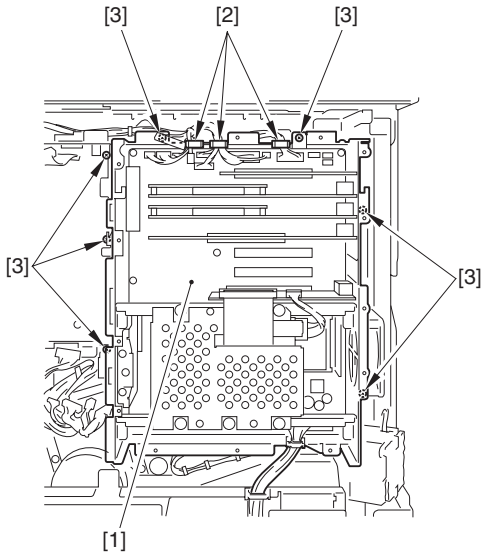
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the main controller cover [1].
   - 14 screws [2]



F-4-17

2) Remove the controller box [1].
   - 11 connectors [2]
   - 4 edge saddles [3]
   - 7 screws [2]



F-4-18

4.7.2 Main Controller PCB (main)

4.7.2.1 Before Removing the Main Controller PCB

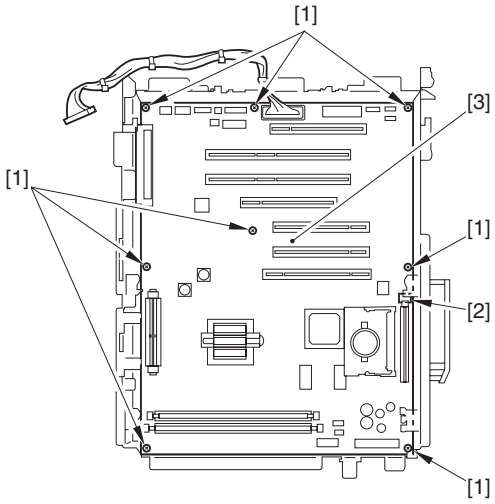
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the rear upper cover. (page 10-14) [Detaching the Rear Upper Cover]
2) Detach the left rear cover. (page 10-14) [Detaching the Left Rear Cover]
3) Remove the DC driver PCB. (page 10-25) [Removing the DC Driver PCB]
4) Remove the DC controller PCB. (page 10-22) [Detaching the DC Controller PCB]
5) Remove the main controller box. (page 4-14) [Removing the Controller Box]
6) Remove the main controller sub-board (sub-R-A board). (page 4-15) [Removing the Main Controller PCB (sub-R-A)]
7) Remove the main controller sub-board (sub-PDRM-EF-A board). (page 4-15) [Removing the Main Controller PCB (sub-PDRAM-A)]
8) Remove the main controller sub-board (sub-SJ-A board). (page 4-15) [Removing the Main Controller PCB (sub SJ-A)]
9) Remove the main controller sub-board (LANBAR-C board). (page 4-16) [Removing the Main Controller PCB (sub LANBAR-C)]
10) Remove the main controller sub-board(RB-A2 board). (page 4-16) [Removing the Main Controller PCB (sub RB-A2)]
11) Remove the SDRAM. (page 4-18) [Removing the Image Memory (SDRAM) PCB]
12) Remove the HDD. (page 4-18) [Removing the HDD]
13) Remove the BOOT ROM. (page 4-17) [Removing the Boot ROM PCB]

4.7.2.2 Removing the Main Controller PCB

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the main controller PCB [1].
   - 1 connector [2]
   - 8 screws [3]

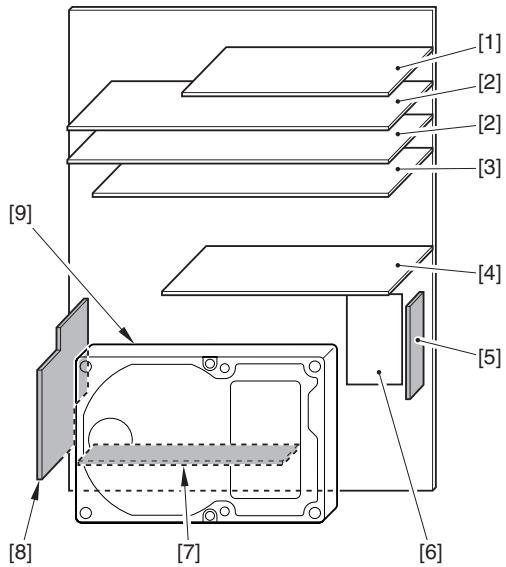


F-4-19

4.7.2.3 Replacing Main Controller PCB

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

After mounting the main controller PCB (main), mount each PCB that is removed before the replacement.
[1] Main Controller PCB (Sub R-A)
[2] Main Controller PCB (Sub PDEM-EF-A)
[3] Main Controller PCB (Sub SJ-A)
[4] Main Controller PCB (Sub LANBAR-C)
[5] Storage of program for BOOT ROM BOOT
[6] SRAM PCB
[7] DDR-SDRAM
[8] Main Controller PCB (Sub RB-A)
[9] HDD



F-4-20

4.7.3 Main Controller PCB (sub R-A)

4.7.3.1 Before Removing the Main Controller PCB (sub-R-A)

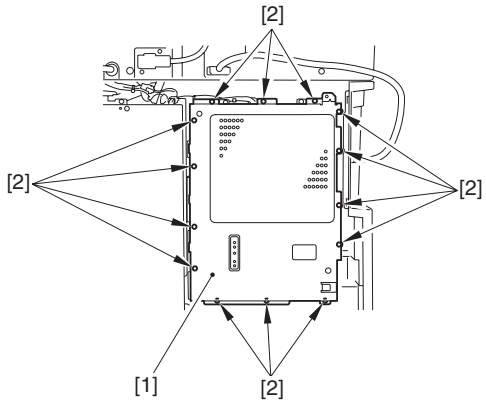
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the rear upper cover. (page 10-14)[Detaching the Rear Upper Cover]
2) Detach the left rear cover. (page 10-14)[Detaching the Left Rear Cover]

4.7.3.2 Removing the Main Controller PCB (sub-R-A)

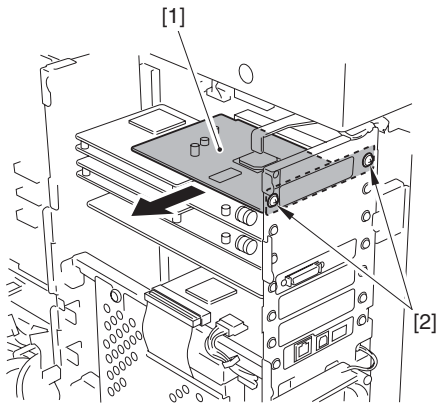
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the main controller cover [1]
- 14 screws [2]



F-4-21

2) Remove the main controller PCB (sub-R-A)
- 2 screw [2]



F-4-22

4.7.4 Main Controller PCB (sub PDRM-A)

4.7.4.1 Before Removing the Main Controller PCB (sub-PDRAM-A)

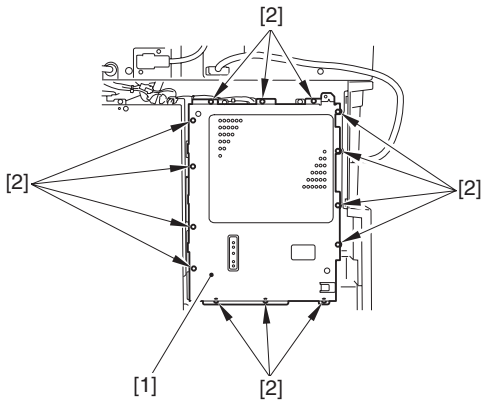
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the rear upper cover. (page 10-14)[Detaching the Rear Upper Cover]
2) Detach the left rear cover. (page 10-14)[Detaching the Left Rear Cover]

4.7.4.2 Removing the Main Controller PCB (sub-PDRAM-A)

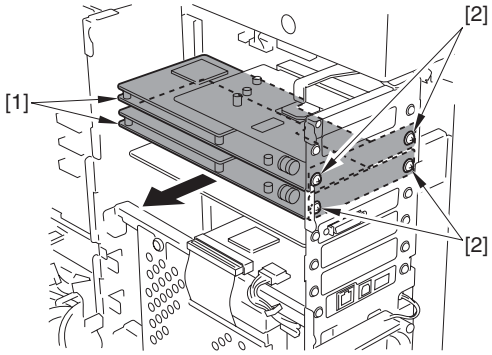
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the main controller cover [1].
- 14 screws [2]



F-4-23

2) Remove the main controller PCB (sub-PDRAM-A)
- 2 screws [2]



F-4-24

MEMO:
There are 2 main controller PCBs (sub-PDRM-A).
The procedure to remove them are the same.

4.7.5 Main Controller PCB (sub SJ-A)

4.7.5.1 Before Removing the Main Controller PCB (sub SJ-A)

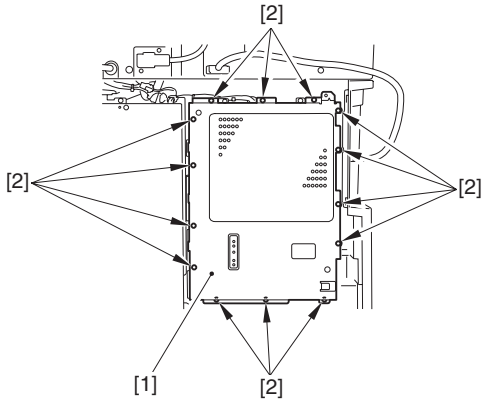
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the rear upper cover. (page 10-14)[Detaching the Rear Upper Cover]
2) Detach the left rear cover. (page 10-14)[Detaching the Left Rear Cover]

4.7.5.2 Removing the Main Controller PCB (sub SJ-A)

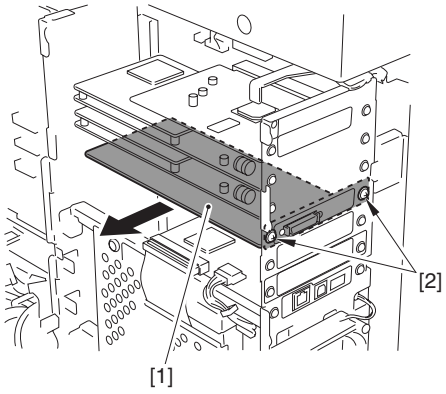
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the main controller cover [1].
- 14 screws [2]



F-4-25

2) Remove the main controller PCB (sub SJ-A)
- 2 screws [2]



F-4-26

4.7.6 Main Controller PCB (sub LAN-A)

4.7.6.1 Before Removing the Main Controller PCB (sub LANBAR-C)

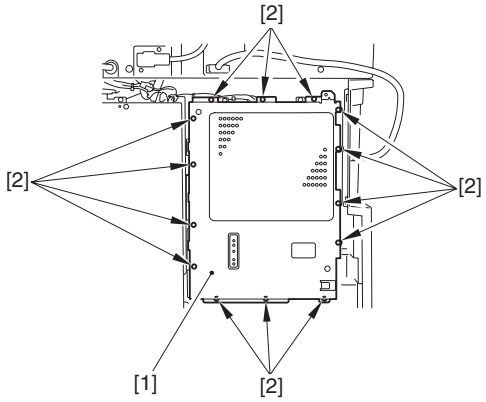
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the rear upper cover. (page 10-14) [Detaching the Rear Upper Cover]
2) Detach the left rear cover. (page 10-14) [Detaching the Left Rear Cover]

4.7.6.2 Removing the Main Controller PCB (sub LANBAR-C)

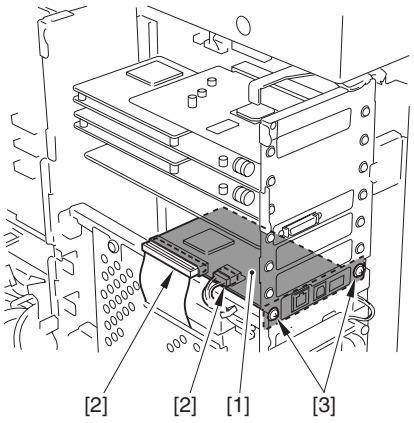
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the main controller cover [1].
- 14 screws [2]



F-4-27

2) Remove the main controller PCB (sub LANBAR-C)
- 2 connectors [2]
- 2 screws [3]



F-4-28

4.7.7 Main Controller PCB (sub RB-A)

4.7.7.1 Before Removing the Main Controller PCB (sub RB-A2)

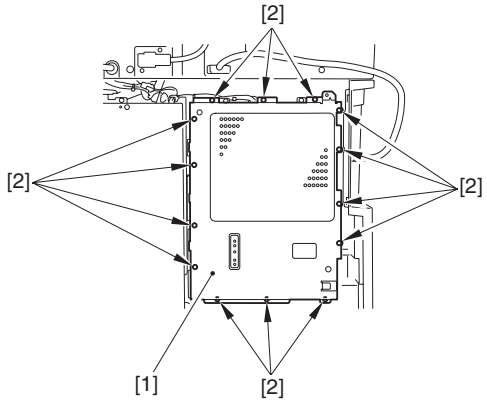
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the rear upper cover. (page 10-14) [Detaching the Rear Upper Cover]
2) Detach the left rear cover. (page 10-14) [Detaching the Left Rear Cover]

4.7.7.2 Removing the Main Controller PCB (sub RB-A2)

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the 2 HDD mount [2].
- 2 screws [1] each



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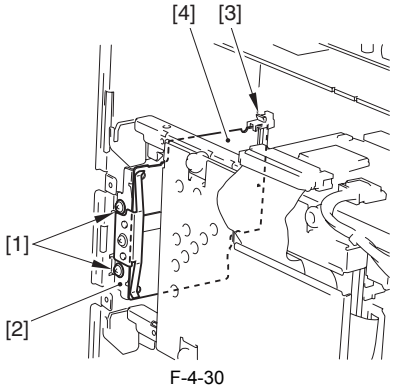
1) Remove the main controller PCB (sub RB-A2) [4].

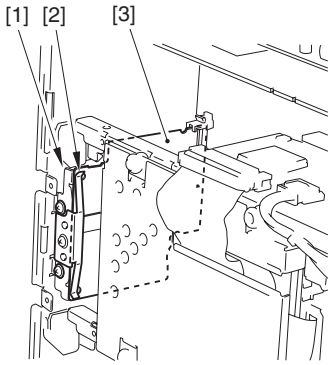
In the case the main controller PCB (sub RB-A2) is not attached, this procedure is not required.

- 2 screws [1]
- 1 mount [2]
- 1 connector [3]



F-4-30

⚠ Points to Note when Attaching the Main Controller PCB (sub RB-A2)
Put the PCB [3] between the mount [1] and the plate spring [2].



F-4-31

4.7.8 SRAM PCB

4.7.8.1 Before Removing the SRAM

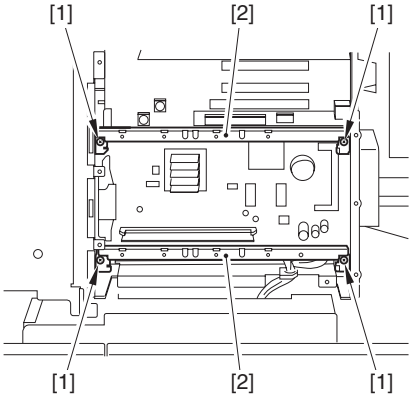
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the rear upper cover. (page 10-14) [Detaching the Rear Upper Cover]
2) Detach the left rear cover. (page 10-14) [Detaching the Left Rear Cover]
3) Remove the HDD. (page 4-18) [Removing the HDD]

4.7.8.2 Removing the SRAM

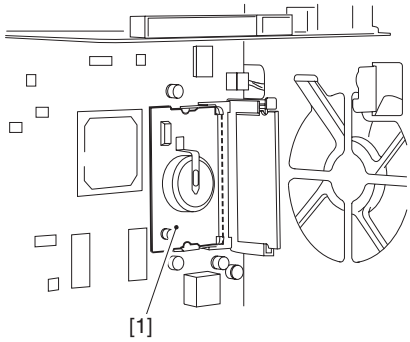
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the 2 HDD mounts [2].
- 2 screws [1]



F-4-32

2) Remove the SRAM PCB [1].



F-4-33

4.7.8.3 When Replacing the SRAM PCB

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

⚠
When the SRAM PCB is replaced, all data in its memory will be lost (file-related, user mode-related, service mode-related, history-related files). There will be no error operation, and initialization will take place automatically.
If you pull out the SRAM PCB from machine B and mount it to machine A, the PCB will be initialized and be rendered useless for machine A or B. Take full care.

1) When you turn on the power after replacing the SRAM PCB, the machine will perform automatic initialization and will indicate a message on its panel to the effect that you are to turn off and then on the power switch found on its right side. Follow the message and turn off and then on the machine.
2) Using service mode, initialize the RAM.
COPIER>FUNCTION>CLEAR>MN-CON

⚠
Before starting the work, be sure to inform the user that all image data stored in the Box will be lost and obtain his/her consent.

4.7.9 Boot ROM PCB

4.7.9.1 Before Removing the Boot ROM PCB

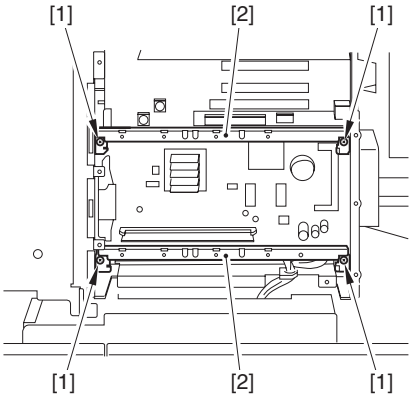
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the rear upper cover. (page 10-14) [Detaching the Rear Upper Cover]
2) Detach the left rear cover. (page 10-14) [Detaching the Left Rear Cover]
3) Remove the HDD. (page 4-18) [Removing the HDD]

4.7.9.2 Removing the Boot ROM PCB

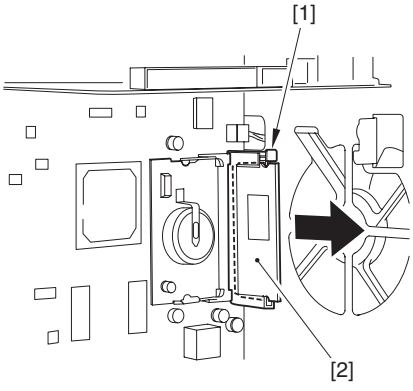
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the 2 HDD mounts [2]
- 2 screws [1] each



F-4-34

2) Press the PCB release button [1] to remove the Boot ROM PCB [2].



F-4-35

4.7.10 Image Memory (SDRAM)

4.7.10.1 Before Removing the Image Memory (SDRAM) PCB

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

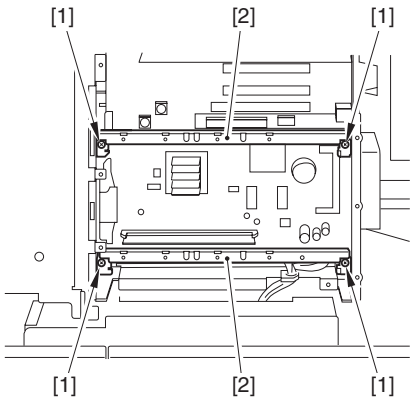
1) Detach the rear upper cover. (page 10-14) [Detaching the Rear Upper Cover]
2) Detach the left rear cover. (page 10-14) [Detaching the Left Rear Cover]

3) Remove the HDD. (page 4-18) [Removing the HDD]

4.7.10.2 Removing the Image Memory (SDRAM) PCB

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

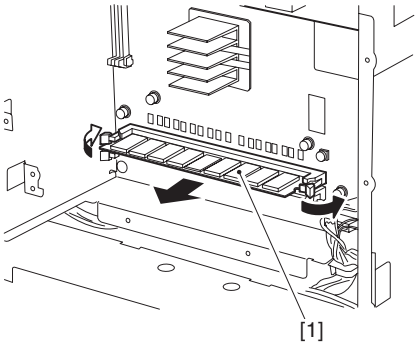
1) Remove the 2 HDD mounts [2].
- 2 screws [1] each



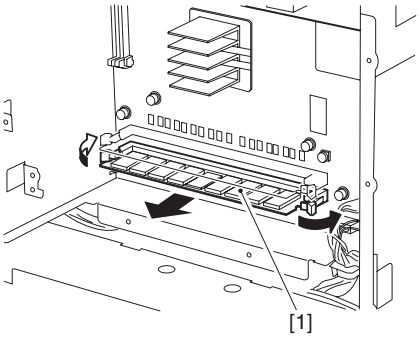
F-4-36

2) Open the fixing member in the direction shown by the arrow, and then remove the image memory (SDRAM) PCB [1].

In case the 2 image memories (SDRAM) are attached, remove both of them.



F-4-37



F-4-38

4.7.11 HDD

4.7.11.1 Before Removing the HDD

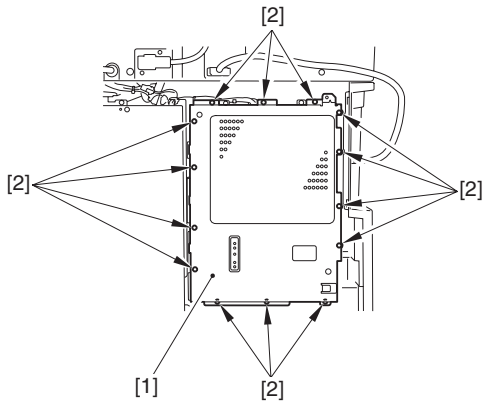
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the rear upper cover. (page 10-14) [Detaching the Rear Upper Cover]
2) Detach the left rear cover. (page 10-14) [Detaching the Left Rear Cover]

4.7.11.2 Removing the HDD

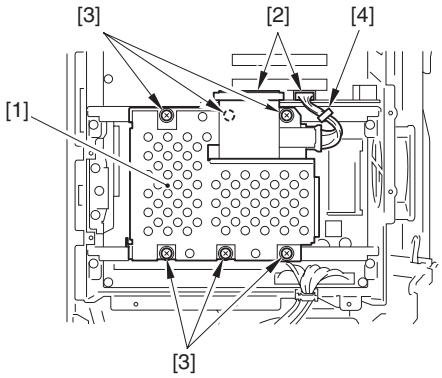
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the main controller cover [1].
- 14 screws [2]



F-4-39

2) Remove the HDD unit [1].
-2 connectors [2]
-6 screws [3]
- 1 cable clamp [4]



F-4-40

Points to Note when Removing the HDD
When removing the HDD, be sure not to damage it by electrostatic discharge.
Do not give a shock to the HDD.

4.7.11.3 When Replacing the HDD

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1. If NetSpot Accountant (NSA) Is Not Used
1) Formatting the HDD
While holding down the 2 and 8 keys on the control panel, turn on the power to start up. Using the HD formatting function of the SST, format all partitions.
2) Downloading the Software
Using the SST, download the various software (system, language, RUI). The machine will take about 10 min to start up after downloading.

2. If NetSpot Accountant (NSA) Is Used Together with a Card Reader
The card ID used by the NSA resides on the HDD. If you have replaced the HDD, therefore, you will have to newly download the card data from NSA to enable the statistical operations of NSA. After going through steps 1) and 2) above, perform the following:
1) Set the following in service mode:
Select the following : COPIER >FUNCTION >INSTALL >CARD; then, enter the number of the first card, and press [OK].
(For instance, if cards No. 1 through No. 1000 are used for group control, enter '1')
2) Turn off and then on the machine; when the machine has started up, perform the following in user mode:
Select the following : user mode >system control settings >group ID control >count control; then, check that IDs from 00000001 through 00001000 have been prepared.
Select the following : user mode >system control settings >network settings >TCP/IP settings >IP address; then, set up 'IP address' 'gateway address' and 'subnet mask'
Select the following : user mode >system administrator setup; then, fill in 'system control group ID' and 'system control ID No.' thereafter, turn off and then on the machine.
If you leave out 'system control group ID' and 'system control ID No.' the service engineer will not be able to 'register card to device' as part of setup work for NSA.
3) With the machine in standby state, download the card ID to be used from NSA.

4) When the card data has been downloaded from NSA, check that the ID data has correctly been downloaded on the screen brought up by making the following selections:
user mode>system control settings>group ID control
(Only the downloaded ID data must be indicated.)
5) Make copies using a user card registered with NSA, and check that statistical operations are made for the device in question.

4.7.12 Controller Fan

4.7.12.1 Before Removing the Controller Fan

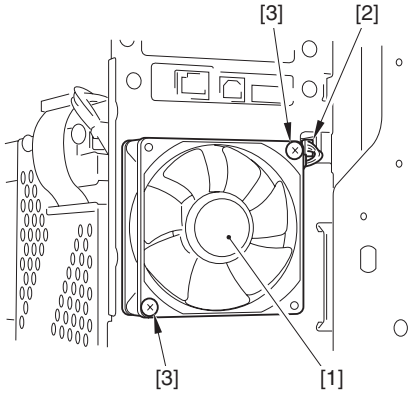
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the rear upper cover. (page 10-14)[Detaching the Rear Upper Cover]
2) Detach the left rear cover. (page 10-14)[Detaching the Left Rear Cover]

4.7.12.2 Removing the Controller Fan

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the controller fan [1].
-1 connector [2]
-2 screws [3]



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Chapter 5 Original Exposure System

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5.1 Construction

5.1.1 Specifications, Control Mechanisms, and Functions

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The following are the major specifications, control mechanisms, and functions associated with the original exposure system:

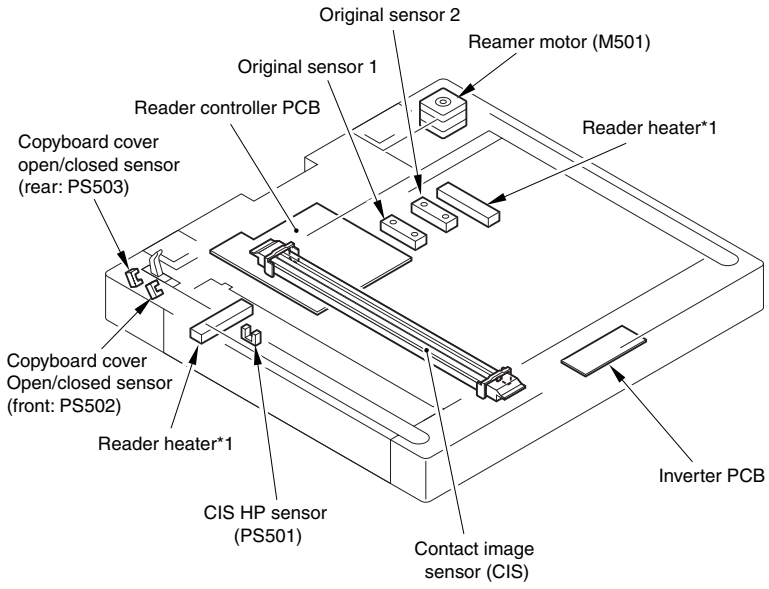
T-5-1

Item	Description	
Source of light	Xenon lamp (white)	
Scan	in book mode: scan by a moving contact image sensor (CIS)	
	in ADF mode: scan by a stationary contact image sensor (CIS; stream reading)	
Reading resolution	600 dpi (main scanning direction) x 600 dpi (sub scanning direction)	
Number of gradations	256	
Productivity (w/ ADF in use)	28 ipm (single-sided, A4/LTR)	
Carriage position detection	by contact image sensor (CIS) HP sensor (PS501)	
Magnification	25% to 400%	
	in main scanning direction: image processing by the main control PCB (main)	
	in sub scanning direction: image processing by the main controller PCB (main)	
Lens	rod lens array	
CCD	number of lines: 3 (RGB)	
	Number of pixels: 7488	
	maximum reading width: 310 mm	
CIS drive control	by reader motor (M501)	
Scanning lamp activation control	[1] by inverter circuit	
	[2] error detection	
Original size identification	[1] Book Mode	
	main scanning direction:	by contact image sensor (CIS)
	sub scanning mode:	by reflection sensor (AB/Inch)
	[2] ADF mode	
	main scanning direction:	by slide guide in ADF
	sub scanning direction:	by photo sensor in ADF

5.1.2 Major Components

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The original exposure system consists of the following major components:



*1: accessories settings (100/230V model only)

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T-5-2

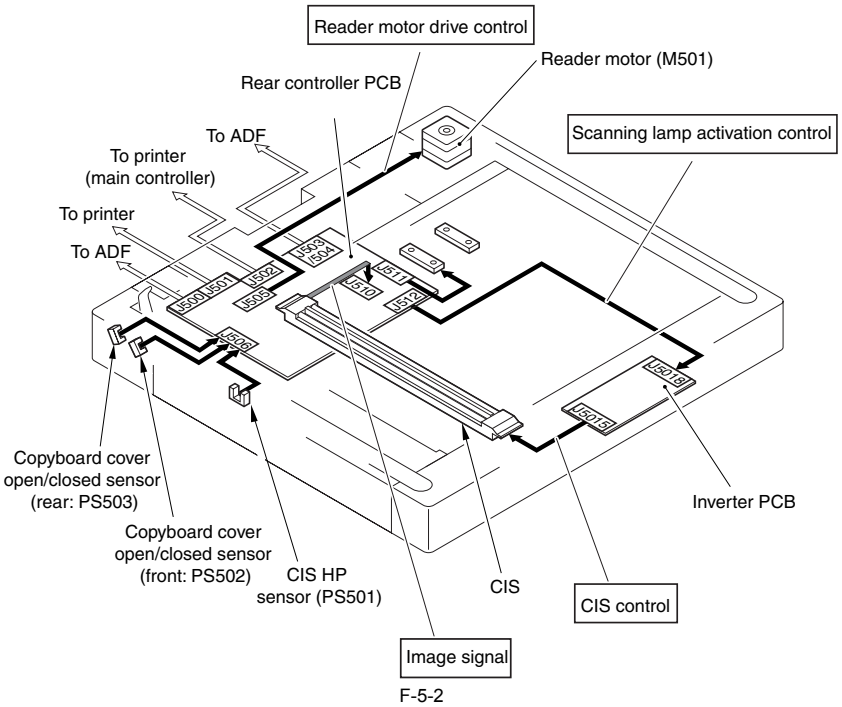
Item	Notation	Description
Contact image sensor (CIS)		xenon lamp (2 pc. of 2400 lx)
Reader motor	M501	pulse motor (carriage drive control)
CIS HP sensor	PS501	photointerrupter (CIS home position detection)
Copyboard cover open/closed sensor	PS502/PS503	photointerrupter (copyboard cover state (open/closed) detection)
	(PS502)	sub scanning direction by angle of copyboard cover (lamp ON)

Item	Notation	Description
		copyboard cove/ADF: 25 deg (approx.)
	(PS503)	main scanning direction by angle of copyboard cover (about 17 deg)
Original sensor 1	---	original size detection (AB)
Original sensor 2	---	original size detection (Inch)

5.1.3 Construction of the Control System

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The control system of the original is constructed as follows:



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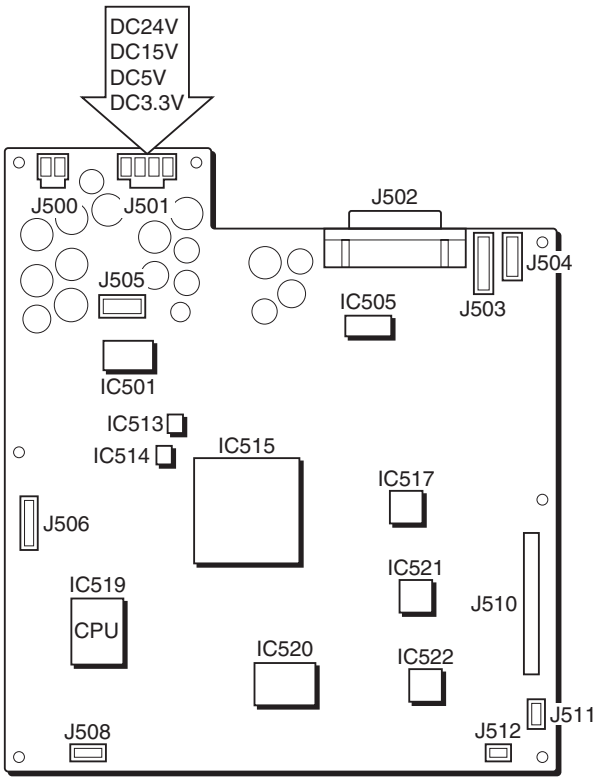
5.1.4 Reader Controller PCB

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The following shows the functional construction of the reader controller PCB:



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Jack	Description
J500	used to supply power to the ADF.
J501	used for power from the machine (printer unit).
J502	used for communication with the machine (printer unit).
J503	used for communication with the ADF.
J504	used for communication with the ADF.
J505	used for connection to the main motor.
J506	used for connection with the original cover open/closed sensor, CIS HP sensor.
J510	used for connection with the contact image sensor (CIS).
J511	used for connection with the original size sensor (AB/Inch).
J512	used for connection with the inverter PCB.

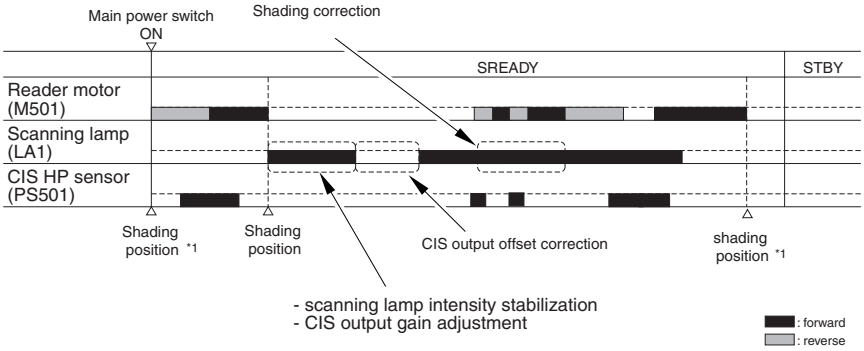
T-5-4

IC	Description
IC501	reader motor driver
IC505	image data parallel/serial conversion
IC513	EEPROM (backup of service mode settings)
IC514	EEPROM (backup of service mode settings)
IC515	image processing (shading correction)
IC517	A/D converter
IC519	CPU (boot program storage)
IC520	system software storage (flash ROM)
IC521	A/D converter
IC522	A/D converter

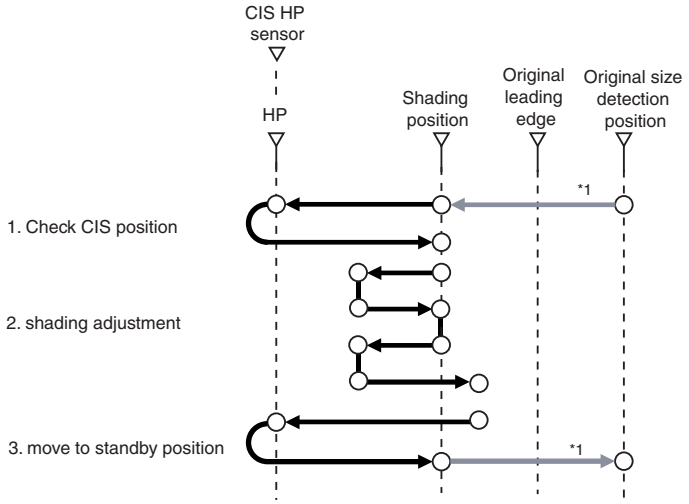
5.2 Basic Sequence

5.2.1 Basic Sequence of Operations at Power-On

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880



F-5-4

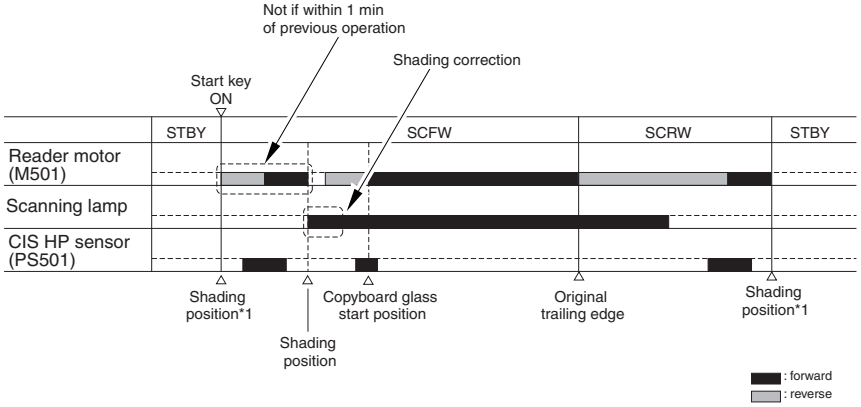


*1:only if the copyboard cover/ADF is 'open'

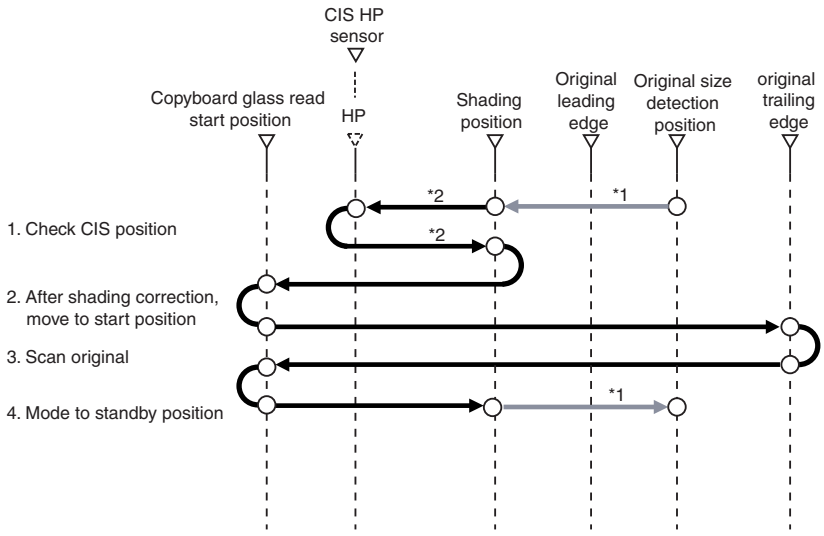
F-5-5

5.2.2 Basic Sequence of Operations in Response to a Press on the Start Key (book mode, 1 original)

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880



F-5-6

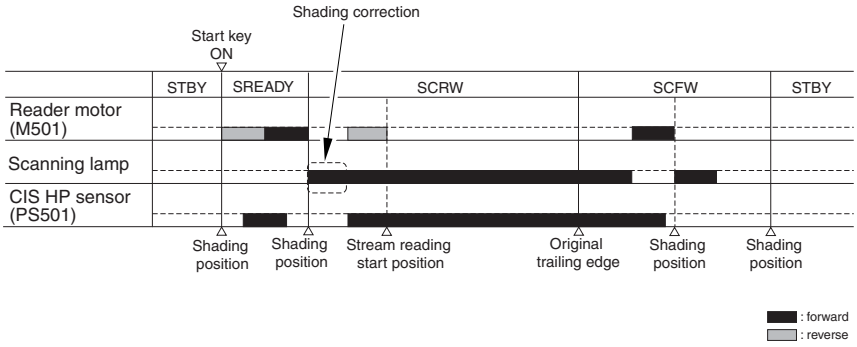


*1: shifts only if the copyboard cover (ADF) is 'open'
*2: only if 1 min or more passed from previous operation.

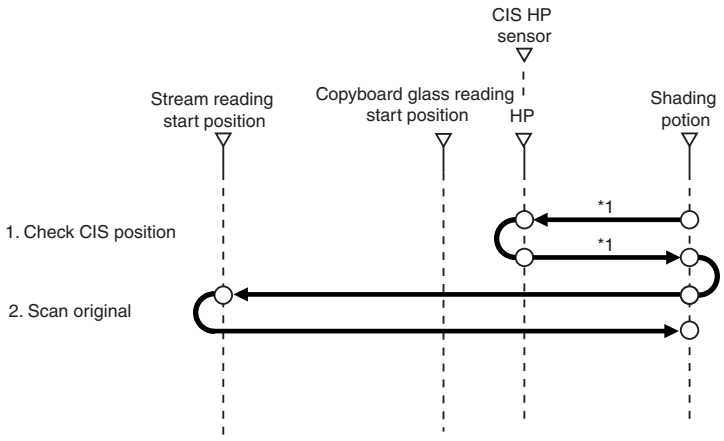
F-5-7

5.2.3 Basic Sequence of Operations in Response to a Press on the Start Key (ADF mode, 1 original)

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880



F-5-8



*1:only if 1 min or more passed since previous operation

F-5-9

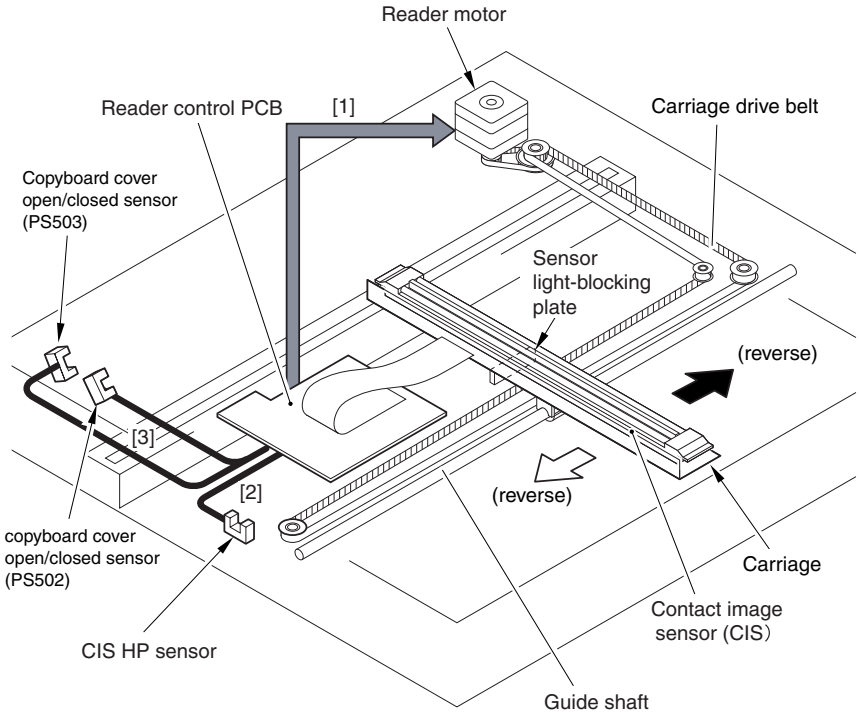
5.3 Various Control Mechanisms

5.3.1 Controlling the Scanner Drive System

5.3.1.1 Overview

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The following components are associated with the scanner drive system:



F-5-10

[1] Reader Motor (M501) Drive Signal
used to turn on/off the motor and change its direction/speed of rotation.

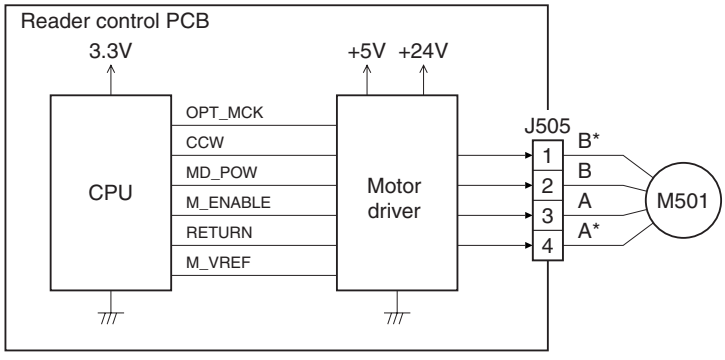
[2] Contact Image Sensor (CIS) Home Position sennsaor (PS501) Detection Signal
used to indicate that the contact image sensor (CIS) is in home position,

[3] Copyboard Cover Sensor (front, PS502; rear, PS503) Detection Sugnal
used to indicate the state (open/closed) of the copyboard cover.

5.3.1.2 Reader Motor Control

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The reader motor driver turns on/off the reader motor and controls its direction/speed of rotation.



F-5-11

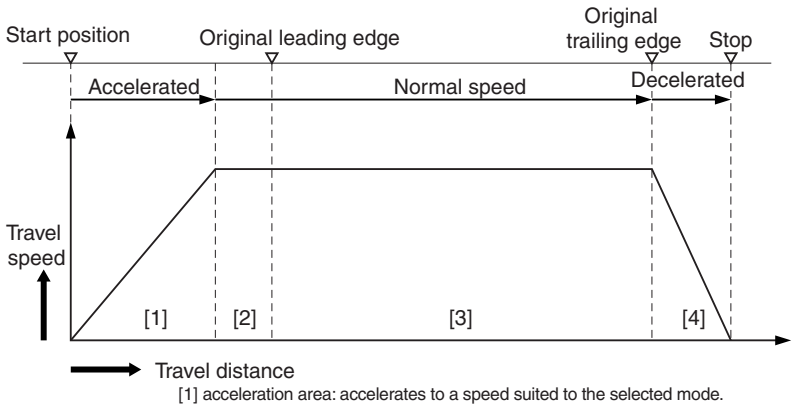
MEMO:
The machine uses any of the following scan speeds according to selected mode:

T-5-5

Function	Mode	Scan speed
Copy	full color mode	118 mm/sec
	black-and-white mode	118 mm/sec
SEND	full-color mode (originals other than of 300 dpi or lower; 320x450m 12"x18")	236 mm/sec

Function	Mode	Scan speed
	full-color mode (originals of 300 dpi or lower; 320x450, 12"x18")	118 mm/sec
	black-and-white mode	236 mm/sec

1. Moving Forward to Scan an Image
when scanning the image, the machine controls the contact image sensor (CIS) by controlling the motor as follows:



[1] acceleration area: accelerates to a speed suited to the selected mode.
[2] margin area: drives to ensure a specific speed.
[3] image read area: scans an image at a specific speed.
[4] deceleration area: after the trailing edge of the image, decelerates and stops.

F-5-12

2. Moving in Reverse After an Image Scan
The machine maintains a specific speed (147 mm/sec) to move the contact image sensor (CIS) to shading position after making an image scan.

5.3.2 Contact Image Sensor (CIS)

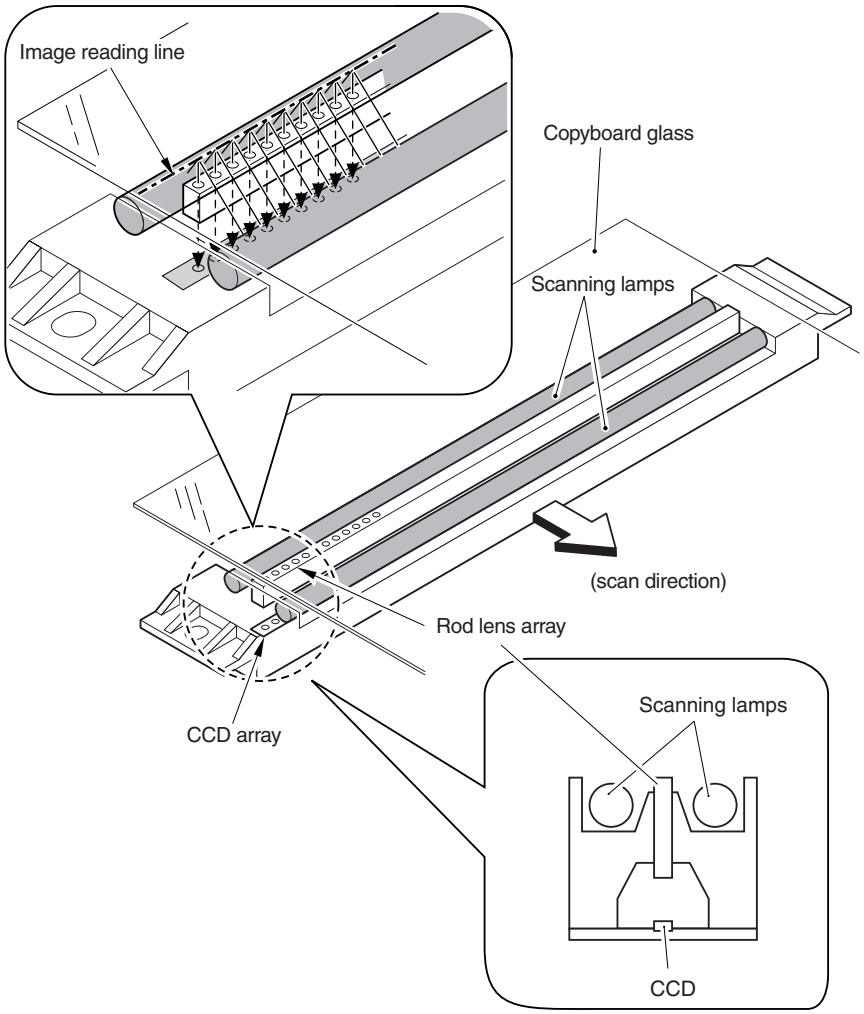
5.3.2.1 Overview

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The machine uses a contact image sensor (CIS) to read images, line-by line.

T-5-6

Item	Description
Scanning lamp	used to illuminate originals.
Rod lens array	used to collect light reflected by originals.
CCD array	used to collect reflected light coming through a rod lens array.



F-5-13

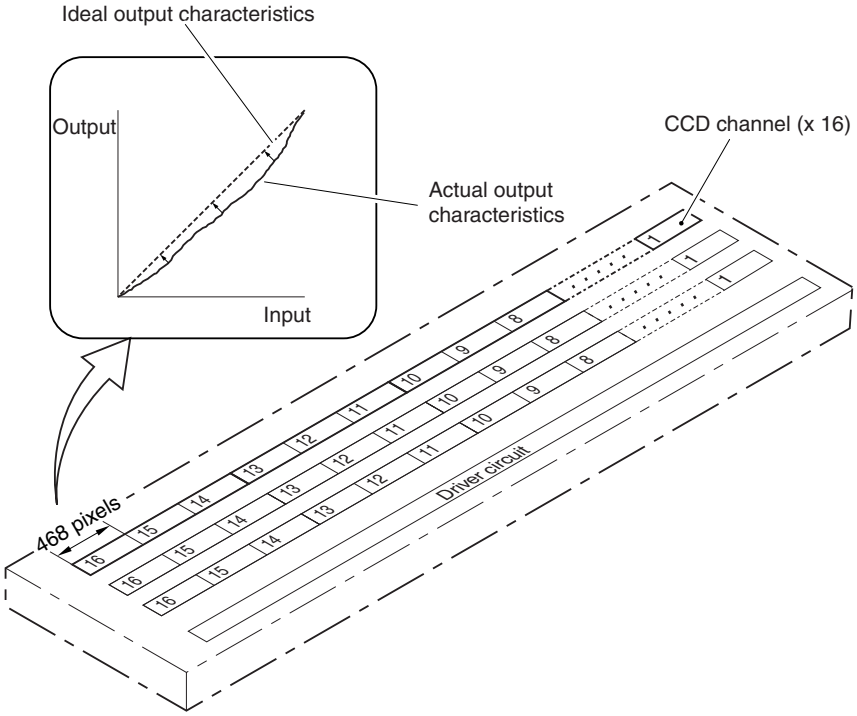
5.3.2.2 Analog Control Inside the Contact Image Sensor (CIS)

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The contact image sensor (CIS) read images in keeping with the following flow of analog image processing:

uses a rod lens array to collect light reflected by the original.
-> receives light using a CCD array.
-> uses the CCD array to turn the light into an electrical signal (photo conversion), thus preparing output.

The machine's CCD array consists of 16 channels (units) in total. Each of these channels is equipped with an output correction table, and generates image signals after gain correction on input intensity signals.



F-5-14

If any of the following occurs, be sure to execute the following service mode item to correct the output among the channels:
- there is a difference in the output of the image density among channels after replacement of the contact image sensor (CIS).
- the CCD-LUT setting is not 0 after replacement of the reader controller PCB.

Service Mode:
- setting CIS unit gain correction data
  COPIER>OPTION>BODY>CCD-LUT
- CCD Gain Fine Correction
  COPIER>FUNCTION>CCD>LUT-ADJ2
  (making adjustments using a D-10 chart)

5.3.3 Enlargement/Reduction

5.3.3.1 Changing the Magnification in Main Scanning Direction

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Book mode, ADF in use
The machine reads the original in main scanning direction at 100%; any change needed in magnification is made by processing data on the main controller PCB (main).

5.3.3.2 Changing the Magnification in Sub Scanning Direction

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

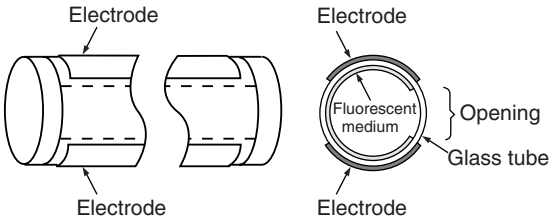
Book mode, ADF in use
The machine reads the original in sub scanning direction at 100%; any change needed in magnification is made by processing data on the main controller PCB (main).

5.3.4 Controlling the Scanning Lamp

5.3.4.1 Scanning Lamp

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The machine's scanning lamp is a xenon lamp, in which xenon gas is sealed inside a tube. Along the glass tube are 2 electrodes, while the inside the glass tube is coated with phosphorous material. When a high-frequency voltage is applied to the electrodes, electrons occur within the gas, thus causing the phosphorous material to emit light.

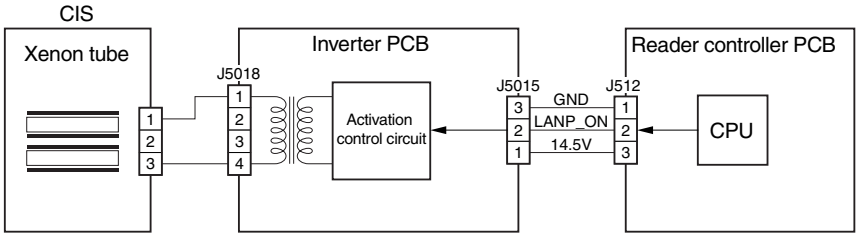


F-5-15

5.3.4.2 Overview

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The scanning lamp is controlled for the following, and is composed of the items indicated:
- activation/de-activation
- error detection



F-5-16

5.3.4.3 Activation Control

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The scanning lamp is turned on/off using the drive signal (LAMP_ON) generated by the CPU of the reader controller PCB. In response to the signal, the inverter PCB uses the drive voltage (+16 V) from the reader controller PCB to generate high-frequency voltage in the activation control circuit to turn on the xenon lamp.

5.3.4.4 Error Detection

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

An error in the intensity of the lamp is checked against the presence/absence of a fault when the lamp is initially tuned on (e.g., at time of shading correction).

E225 (CIS intensity error)
- fault in the inverter PCB
- fault in the reader controller PCB
- fault in the contact image sensor (CIS)
- fault in the flexible cable (poor contact)

5.3.5 Detecting the Size of Originals

5.3.5.1 Overview

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The machine identifies the size of an original based on the measurements it takes of the light reflected by the original at specific points of the CCD (inside the CIS) and the output of the reflection sensor.

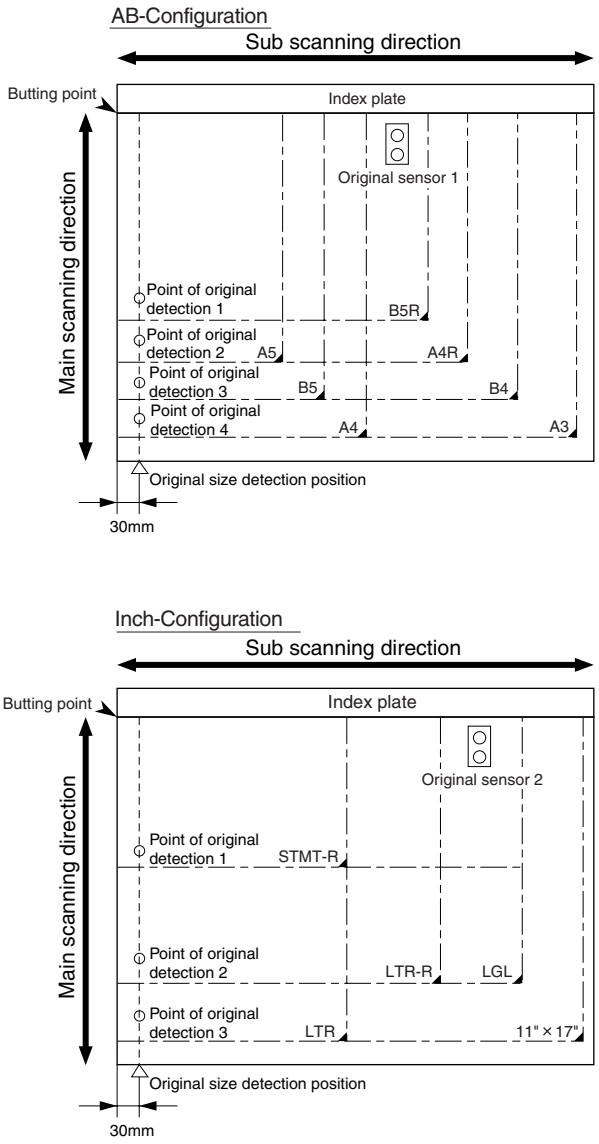
- main scanning direction: CCD (4 points for AB; 3 points for Inch)
- sub scanning direction: reflection photosensor (1 point for AB; 1 point for Inch)

1) External Light Search (main scanning direction only)
While keeping the scanning lamp on, the machine measures the level of light at specific points of the CCD for main scanning direction.
2) Detecting the Sensor Output Level
The machine turns on the scanning lamp, and measures the CCD levels at individual points of detection in main scanning direction.
The machine also turns on the reflection photosensor and measures its output for sub scanning direction.
The machine identifies the size of the original based on the resulting combination of the measurement and the output.

5.3.5.2 Points of Original Size Detection

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The length in main scanning direction is measured by checking the intensify of light at specific points while moving the contact image sensor (CIS) to a point 30 mm from the leading edge of the original. The length in sub scanning direction, on the other hand, is measured by means of the sensors mounted to the following locations:

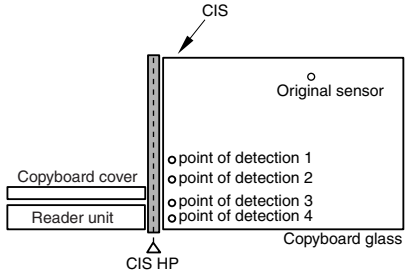


F-5-17

5.3.5.3 Overview of Detection Operation

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

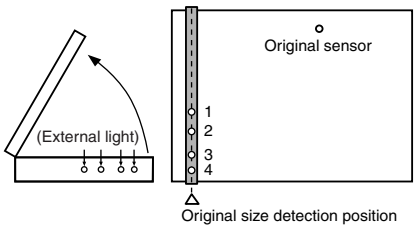
Book Mode
1 original (A4R), copyboard cover (or ADF) closed
1) Standby
CIS: in home position
xenon lamp: off
original sensor: off



F-5-18

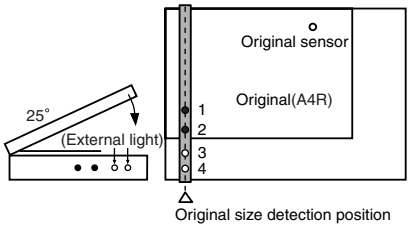
2) Copyboard Cover Opened

CIS: moves to point of original detection
xenon lamp: off
original sensor: off



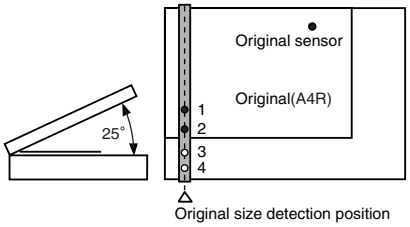
F-5-19

3) Copyboard Cover Closed (15 deg C or more, less than 25 deg C)
a. External Light Detection
The machine executes an external light search.



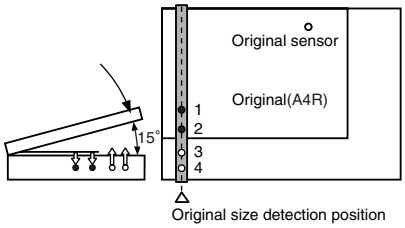
F-5-20

b. Size Detection in Sub Scanning Direction
The copyboard cover sensor identifies a "closed" state.
CIS: at point of original detection
xenon lamp: off
original sensor: on



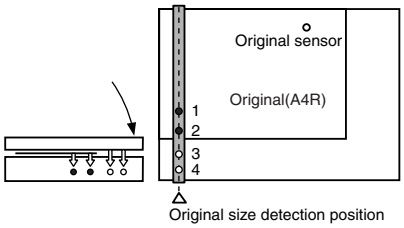
F-5-21

4) Copyboard Cover Closed (less than 15 deg C)
c. Size Detection in Main Scanning Direction
The machine turns on the xenon lamp inside the CIS, and uses the CCD inside the CIS to check the reflected light.
CIS: at point of original detection
xenon lamp: on
original sensor: on



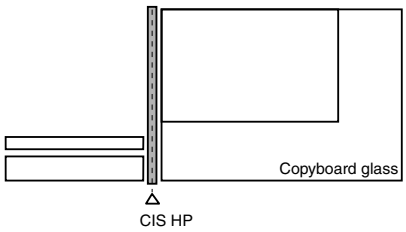
F-5-22

5) Copyboard Cover Fully Closed
After the copyboard cover sensor has identified a "closed" state, the machine checks for a change in the output level of the original sensor (CCD point of detection) for 3 sec. If there is no change in the level of output, the machine identifies the condition to indicate the presence of an original.
The machine uses combinations of changes in the levels of 6 locations to identify the size of the original:



F-5-23

6) Standby (in wait for a press on the Start key)
CIS: moves to home position
xenon lamp: off
original sensor: off



F-5-24

AB-Configuration

Original size	1	2	3	4	Original sensor1
A3	○	○	○	○	○
A4	○	○	○	○	●
B4	○	○	○	●	○
B5	○	○	○	●	●
A4R	○	○	●	●	○
A5	○	○	●	●	●
B5R	○	●	●	●	○
No original	●	●	●	●	●

Inch-Configuration

Original size	1	2	3	Original sensor2
11"X17"	○	○	○	○
LTR	○	○	○	●
LGL	○	○	●	○
LTR-R	○	○	●	●
STMT-R	○	●	●	●
No original	●	●	●	●

○: Change absent
●: Change present

F-5-25

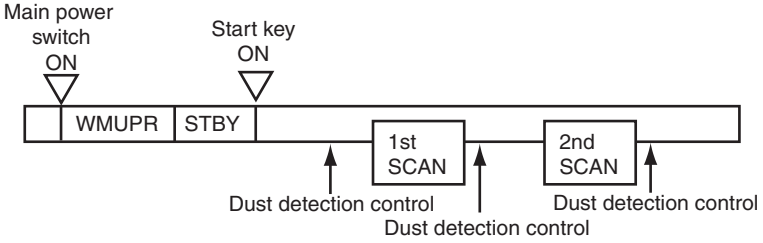
5.3.6 Dirt Sensor Control

5.3.6.1 Overview

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

When reading an original, the machine changes the point of reading or corrects image data in reference to the presence/absence of dust on the stream reading glass/ ADF platen roller, thereby avoiding the effects of dust on images. The machine executes this control only when the ADF is used and, in addition, when it is closed.

1. Timing of Control
(1) at the end of a job
(2) between sheets (each time a sheet is read)
(3) at the start of a job (only if any of the following is met)
(a) first job after power-on
(b) presence of dust at all points of detection at the end of the previous job
(c) failure of dust detection at the end of the previous job (e.g., the ADF is opened)



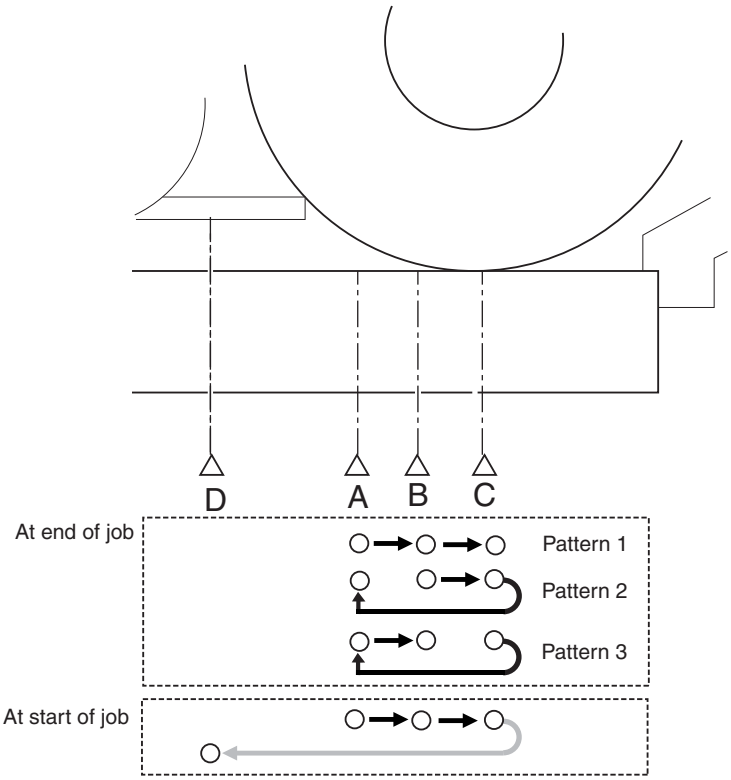
F-5-26

2. Particulars of Control
(1) At the End of a Job (dust detection)
The contact image sensor (CIS) checks the light reflected by the platen roller of the ADF at a point of reading to find out the presence/absence of dust. If the presence of dust is detected, the contact image sensor moves to the next candidate point (2 times max.; A -> B -> C; B -> C -> A; or C -> A -> B).
The point identified will be used as the point of reading for the next job.

⚠
- For the control at the end of a job, the sensor will never move to point D.
- For the control at the end of a job, a message prompting cleaning of the glass surface will be indicated if an original is placed in the ADF while the presence of dust has been detected at all points (A, B, C). The Start key is disabled until the message is cleared.

---

(2) At the Start of a Job (dust avoidance)
The same detection mechanism as used at the end of a job is executed; if the presence of dust is detected at all points (A, B, C), the sensor is moved to point D for reading operation.
If the control is at the end of a job that takes place at point D, it will be after moving the sensor to point D.

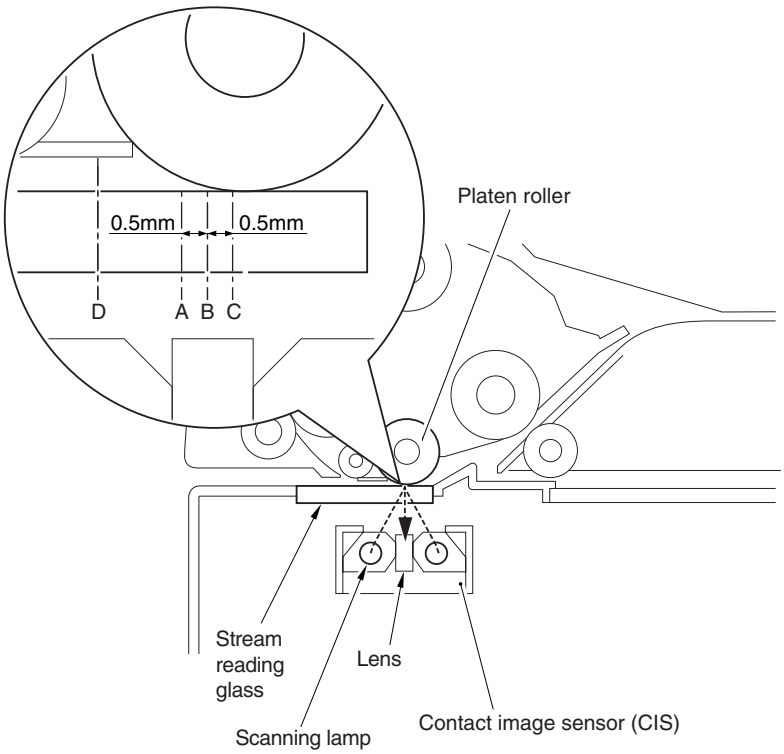


F-5-27

(3) Between Sheets
The contact image sensor (CIS) is not moved for detection of dust.
The machine undertakes reading at a point determined by control executed at the end of a job or at the start of a job; if the presence of dust is identified, the machine executes image correction.

T-5-7

Location		Image correction	Gain correction against reference position
A	reading reference location	yes	no
B	point about 0.5 mm toward roller inside from reference position	yes	no
C	point about 1.0 mm toward roller inside from reference position	yes	no
D	point about 4.0 mm toward roller outside from reference position (no dust detection)	no	yes



F-5-28

Service Mode:
COPIER>OPTION>BODY>DST-POS (level 1)
- use it to set an original reading position when the ADF is in use.
COPIER>OPTION>BODY>DFDST-L1 (level 1)
- use it to adjust the dust reading detection level for between sheets.
COPIER>OPTION>BODY>DFDST-L2 (level 1)
- use it to adjust the dust reading detection level for the end of a job.

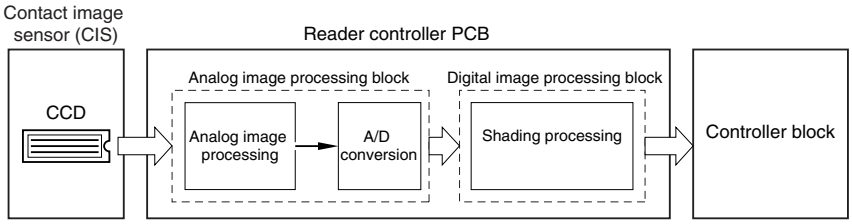
5.3.7 Image Processing

5.3.7.1 Overview

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The image processing system has the following major specifications and functions:

- CCD	Number of lines: 3 (RGB, 1 line each) Number of pixels: 7488 Size of pixel: 42.3 um
- Shading Correction	Shading correction; executed for each job Shading adjustment: executed in service mode

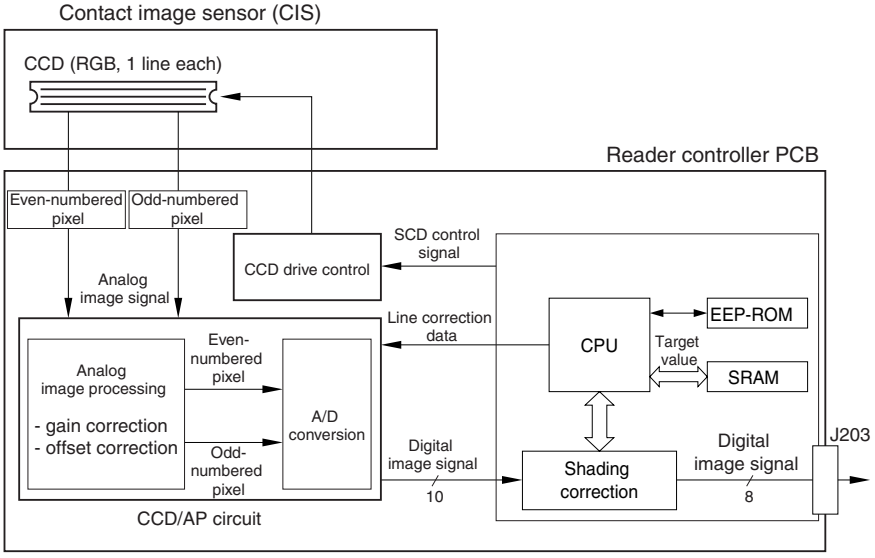


F-5-29

The PCB used by the image processing system has the following functions:

- Reader Controller PCB	drives the CCD, performs analog image processing, performs A/D conversion, performs shading correction

The machine processes images using its reader controller PCB line by line, and the processing consists in the following;
(1) Analog Image Processing
(a) drives the CCD
(b) performs gain correction and offset correction for the CCD output
(c) performs A/D conversion for the CCD output
(2) Digital image Processing
(a) performs shading correction

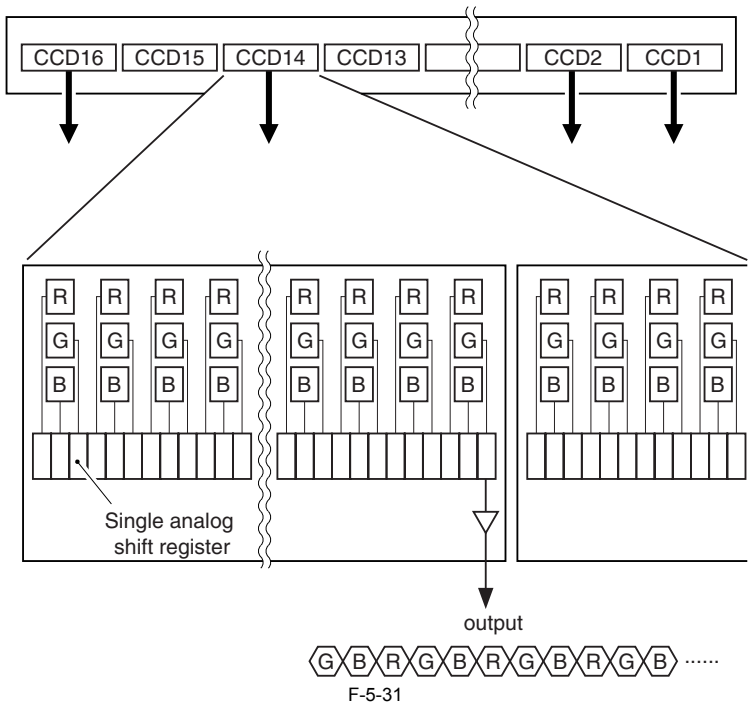


F-5-30

5.3.7.2 Driving the CCD

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The machine's CCD sensor is a linear image sensor that consists of 3 lines (RGB, 1 line each), and it is composed of 7488-pixel photocells. The signals generated through photo conversion at the light-receiving segment are sent as analog signals according to pixels in the order of G, B, and R.



F-5-31

5.3.7.3 Gain Correction and Offset Correction for the CCD Output

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The analog video signal from the CCD is subjected to gain correction (in which the rate of amplification is corrected to a specific level) and offset correction (in which the output voltage in the absence of incident light is also corrected to a specific level).

5.3.7.4 A/D Conversion of the CCD Output

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The analog signal after correction is then converted into 8-bit digital signals that comply with the individual levels of pixel voltage by the A/D converter.

5.3.7.5 Shading Correction (outline)

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

An original of even density does not necessarily mean uniform CCD output because of the following factors:
(1) variation in the sensitivity of each pixel of the CCD
(2) uneven intensity across the rod lens array
(3) difference in intensity of light between the center and ends of the scanning lamp
(4) deterioration of the scanning lamp
The machine performs shading correction to correct any discrepancy in the output of the CCD. It performs shading correction at power-on and or for each job.

5.3.7.6 Shading Adjustment

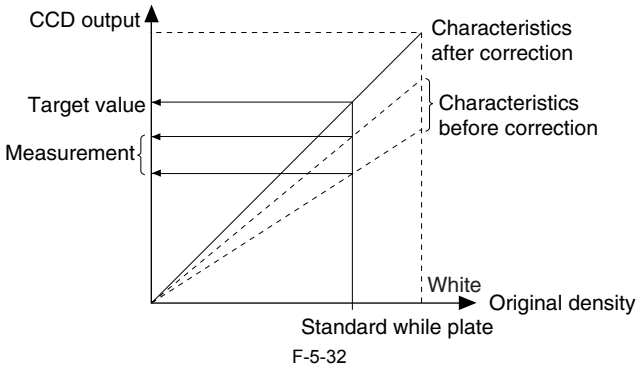
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The machine measures the density of the standard while plate, and uses the result as density data. The data is then subjected to computation to obtain the target value for use during shading correction.

5.3.7.7 Shading Correction

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The machine executes shading correction for each scan of the original. It measures the density of the standard white plate, and compares the measurement against the target value stored in the shading correction circuit; the machine then sets up the difference as the shading correction value, and uses it to correct any variation among CCD pixel when scanning the originals, thus evening out the image density levels.



F-5-32

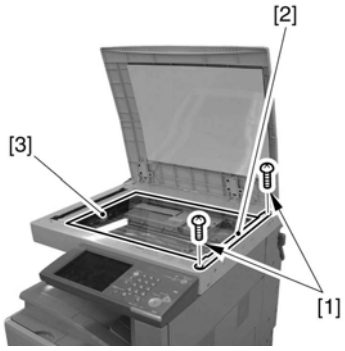
5.4 Parts Replacement Procedure

5.4.1 Copyboard Glass

5.4.1.1 Removing the Copyboard Glass

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

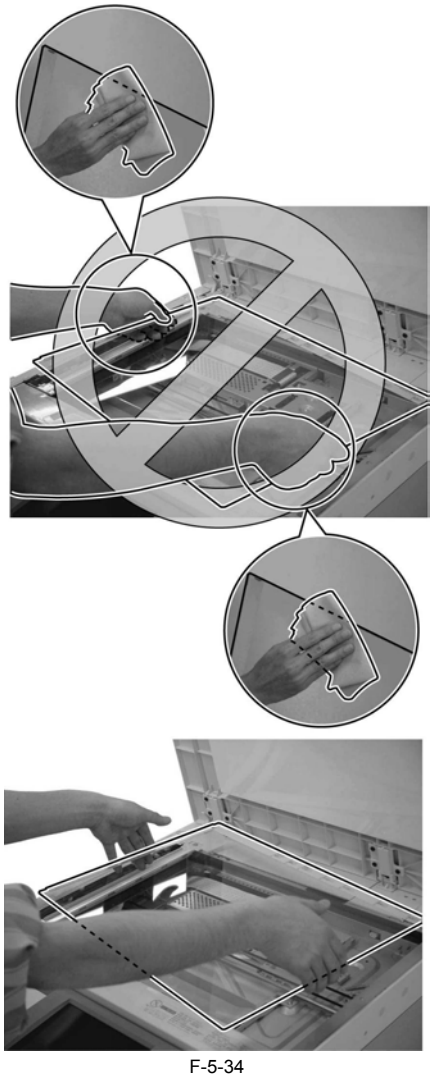
1) Open the copyboard cover (or ADF).
2) Remove the 2 screws [1], and detach the glass retainer [2]; then, detach the copyboard glass [3].



F-5-33

When removing the copyboard glass, take care not to touch the following:
- glass surface
- standard white plate

The presence of dirt can cause white/black lines in the images. If dirt is found, clean it with lint-free paper moistened with alcohol.

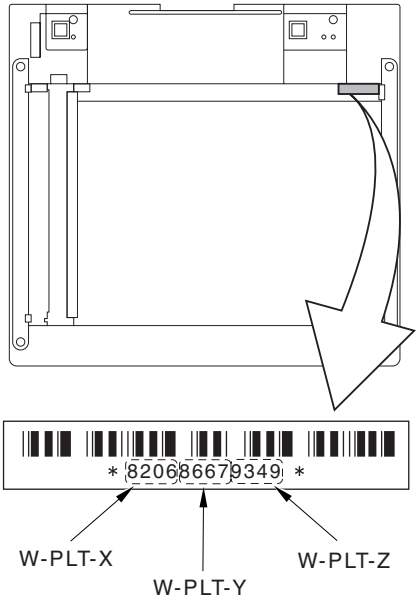


F-5-34

5.4.1.2 After Replacing the Copyboard Glass

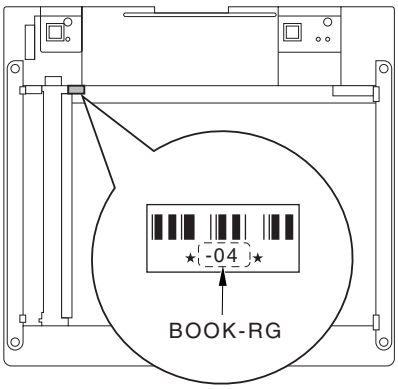
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

A. Enter the value indicated by the bar code found at the upper right on the copyboard glass (copyboard cover) using the following service mode items:
COPIER>ADJUST>CCD>W-PLT-X
COPIER>ADJUST>CCD>W-PLT-Y
COPIER>ADJUST>CCD>W-PLT-Z
(standard white plate white level data X, Y, Z)



F-5-35

B. Enter the value indicated by the bar code found at the upper left of the copyboard glass (copyboard sheet) using the following service mode item:
COPIER>ADJUST>CCD>BOOK-RG
(offset value against color displacement caused by copyboard glass)

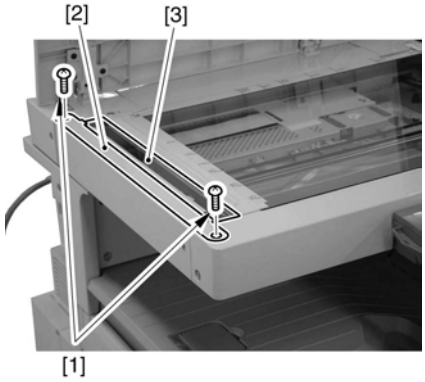


F-5-36

5.4.1.3 Removing the ADF Reading Glass

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Open the copyboard glass (or ADF).
2) Remove the 2 screws [1], and detach the glass retainer [2].
3) Remove the ADF reading glass [3].



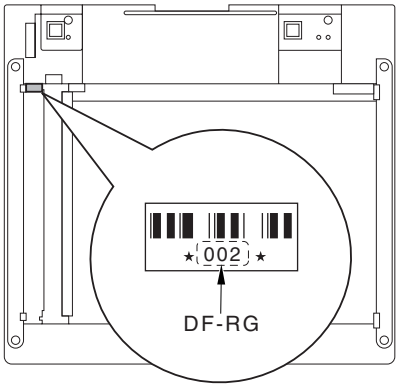
F-5-37

When removing the ADF reading glass, take care not to touch the glass surface.
The presence of dirt can cause white/black lines in the images. If dirt is found, be sure to clean it using lint-free paper moistened with alcohol.

5.4.1.4 After Replacing the ADF Reading Glass

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Enter the value indicated by the bar code found on the ADF reading glass using the following service mode item:
COPIER>ADJUST>CCD>DF-RG
(offset value against color displacement caused by stream reading glass)



F-5-38

5.4.2 Reader Controller PCB

5.4.2.1 Before Replacing the Reader Controller PCB

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

If an ADF is used, be sure to execute P-PRINT of service mode to obtain its printout:
COPIER>FUNCTION>MISC-P>P-PRINT

5.4.2.2 Before Removing the Reader Controller PCB

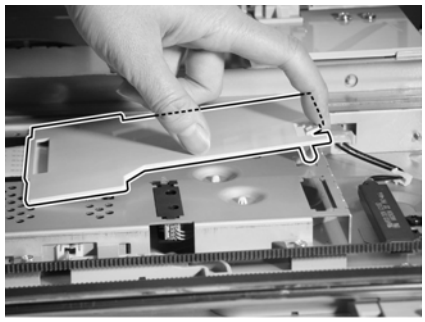
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the copyboard glass. (page 5-17)[Removing the Copyboard Glass]
2) Detach the reader rear cover. (page 10-16)[Detaching the Reader Rear Cover]

5.4.2.3 Removing the Reader Controller PCB

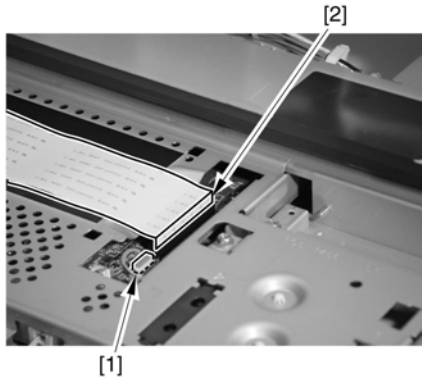
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the cover [1].



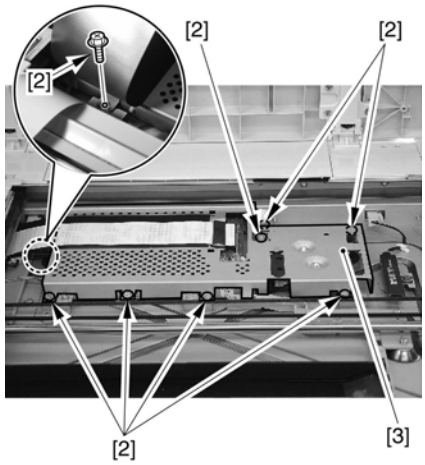
F-5-39

2) Disconnect the connector [1], and detach the flexible cable [2].



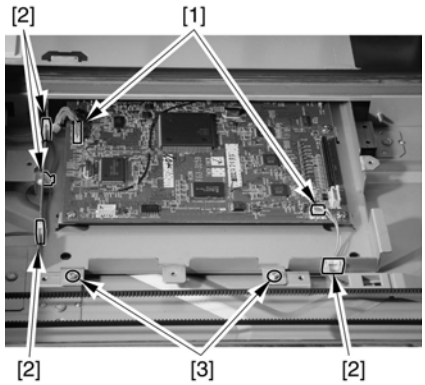
F-5-40

3) Remove the cover [3].
-8 screws [2]



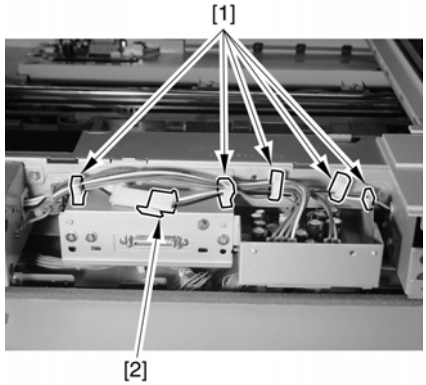
F-5-41

4) Disconnect the 2 connectors [1], and detach the 4 wire saddles [2]; then, remove the 2 screws [3].



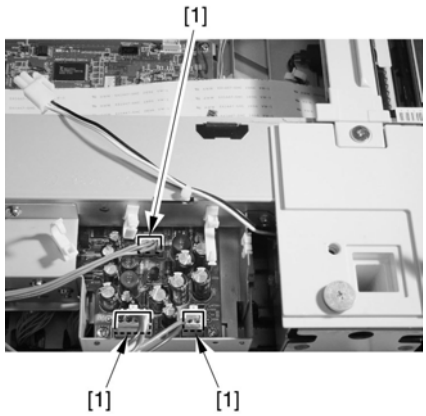
F-5-42

5) Go to the back of the machine, and free the cable from the 5 wire saddles [1]; then, disconnect the connector [2].



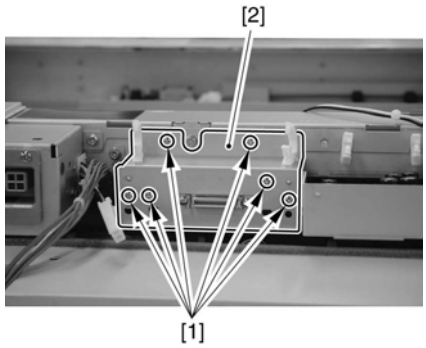
F-5-43

6) Disconnect the 3 connectors [1].



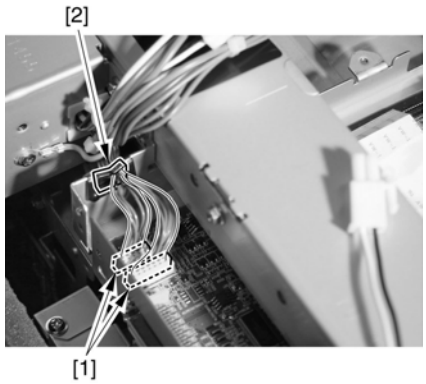
F-5-44

7) Remove the cover [2].
-6 screws [2]



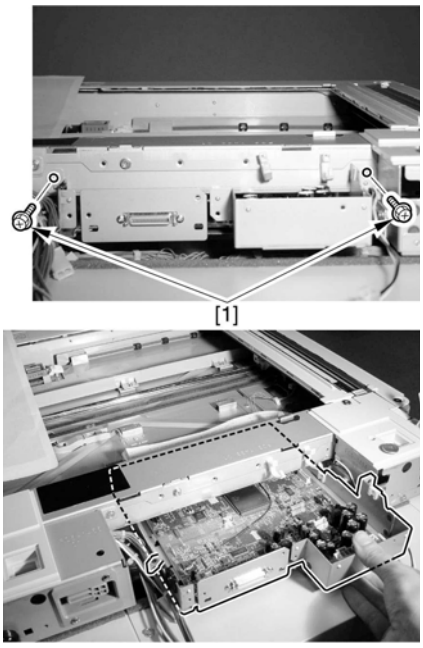
F-5-45

8) Disconnect the 2 connectors [1], and free the cable from the wire saddle [2].



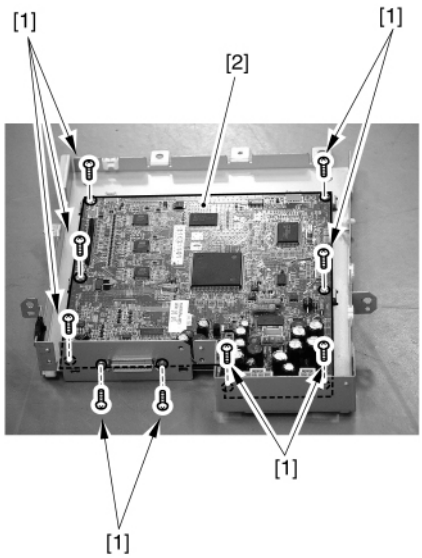
F-5-46

9) Pull out the reader controller PCB base [2].
-2 screws [1]



F-5-47

10) Remove the reader controller PCB [2].
-9 screws [1]



F-5-48

5.4.2.4 After Replacing the Reader Controller PCB

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

⚠

- Before replacing the reader controller PCB, be sure to generate the latest P-PRINT printout.
- If you carry out the power ON and the copier returns to the standby condition after the controller circuit PCB replacement, turn ON/OFF the power supply once again.

<if you are initializing the RAM of the reader controller without replacing the PCB>

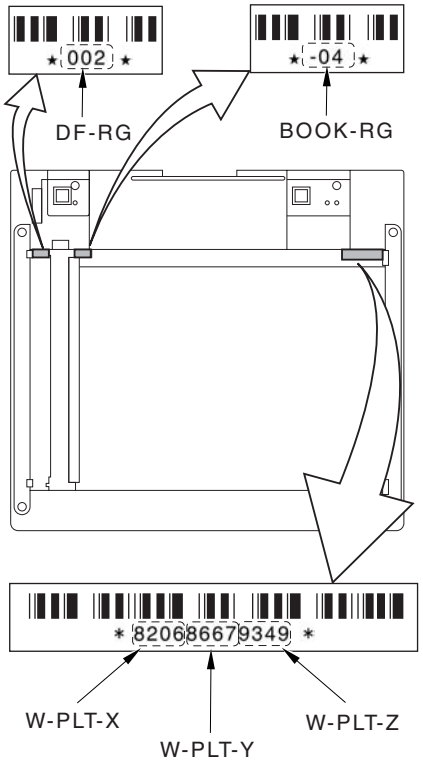
- Using the SST, upload the reader controller backup data; after initializing the RAM, download the data, thus eliminating the need for the following adjustment.

1. Reader Unit-Related Adjustment

1) Using the SST, download the latest system software (R-CON).
2) Make the following selections in service mode: COPIER>FUNCTION>CLEAR>R-CON; then, press the OK key to initialize the RAM. Thereafter, turn off and then on the main power.
3) Enter the appropriate values using the following service mode items:

a. standard white plate white level data
COPIER>ADJUST>CCD>W-PLT-X,Y,Z

b. offset value against color displacement for copyboard glass (copyboard cover)
COPIER>ADJUST>CCD>BOOK-RG
c. offset value against color displacement for copyboard glass (ADF)
COPIER>ADJUST>CCD>DF-RG



F-5-49

d. service label (behind reader unit left cover) values

d-1. CIS read position adjustment (fixed reading)
COPIER>ADJUST>ADJ-XY>ADJ-X
d-2. main scanning direction position adjustment (fixed reading)
COPIER>ADJUST>ADJ-XY>ADJ-Y
d-3. shading position adjustment (fixed reading)
COPIER>ADJUST>ADJ-XY>ADJ-S
d-4. sub scanning direction color displacement correction
COPIER>ADJUST>CCD>CCDU-RG
d-5. main/sub scanning direction MTF value
COPIER>ADJUST>CCD>MTF-MG,SG
d-6. auto gradation correction target value
COPIER>ADJUST>PASCAL>OFST-P-Y,M,C,K

⚠If the value of the following was not 0 before the replacement of the reader controller PCB: COPIER>OPTION>BODY>CCD-LUT.
Set a value other than '0' once again, and make the following adjustments using the D-10 Chart.
COPIER>FUNCTION>CCD>LUT-ADJ2

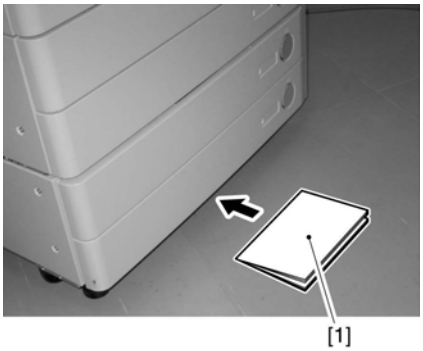
2. ADF-Related Adjustment

⚠The machine keeps ADF-related service mode data in the RAM of the reader controller; as such, you will have to make the appropriate adjustments if you have replaced the reader controller or initialized the RAM.

1) Enter the values indicated in the P-PRINT printout you have previously generated for the following:
a. main scanning direction position adjustment (stream reading)
COPIER>ADJSUT>ADJ-XY>ADJ-Y-DF
b. original stop position adjustment
FEEDER>ADJSUT>DOCST
c. original feed speed (magnification) adjustment
FEEDER>ADUST>LA-SPEED

2) Make adjustments using the following items:
a. tray width adjustment
FEEDER>FUNCTION>TRY-A4
FEEDER>FUNCTION>TRY-A5R
FEEDER>FUNCTION>TRY-LTR
FEEDER>FUNCTION>TRY-LTRR
b. CIS read position adjustment (stream reading)
COPIER>FUNCTION>INSTALL>STRD-POS
c. white level adjustment
COPIER>FUNCTION>CCD>DF-WLVL1
COPIER>FUNCTION>CCD>DF-WLVL2

When you have finished the foregoing adjustments, put the P-PRINT printout [1] you have previously generated in the service book cassette to replace the old P-PRINT printout.



F-5-50

5.4.3 Inverter PCB

5.4.3.1 Before Removing the Inverter PCB

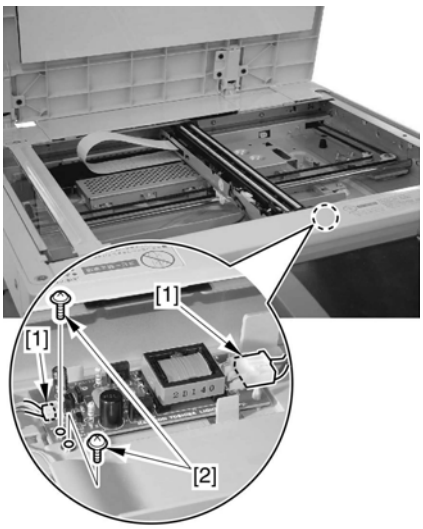
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the copyboard glass. (page 5-17)[Removing the Copyboard Glass]
2) Detach the reader rear cover. (page 10-16)[Detaching the Reader Rear Cover]

5.4.3.2 Removing the Inverter PCB

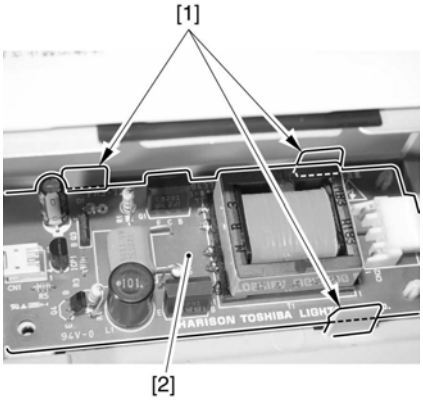
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Disconnect the 2 connectors [1], and remove the 2 screws [2].



F-5-51

2) While freeing the 3 hooks [1], detach the inverter PCB [2].



F-5-52

5.4.4 Scanner Motor

5.4.4.1 Before Removing the Scanner Motor

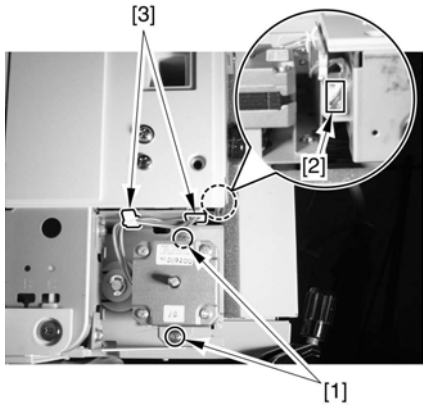
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the reader rear cover. (page 10-16) [Detaching the Reader Rear Cover]

5.4.4.2 Removing the Scanner Motor

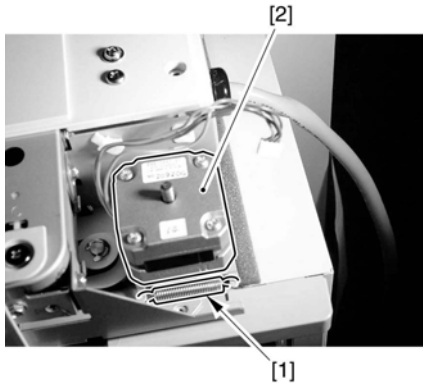
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the 2 screws [1]; then, disconnect the connector [2], and detach the 2 wire saddles [3].



F-5-53

2) Remove the spring [1], and detach the scanner motor [2].



F-5-54

5.4.5 Contact Sensor

5.4.5.1 Before Removing the Contact Image Sensor (CIS)

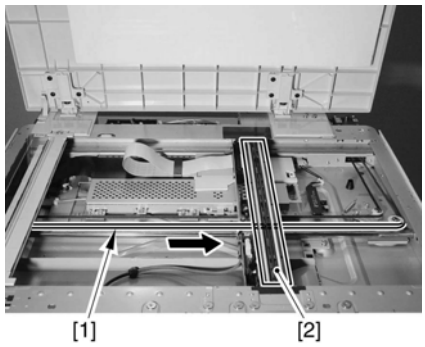
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the reader front cover. (page 10-15) [Detaching the Reader Front Cover]
2) Detach the reader rear cover. (page 10-16) [Detaching the Reader Rear Cover]
3) Detach the copyboard glass. (page 5-17) [Removing the Copyboard Glass]

5.4.5.2 Removing the Contact Image Sensor (CIS)

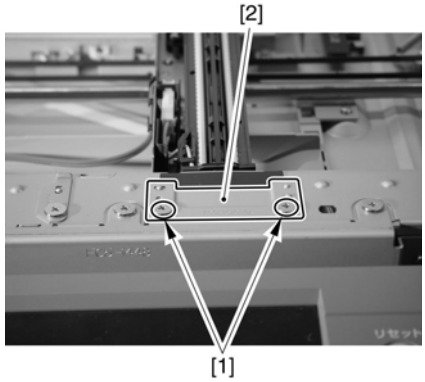
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Pull the drive belt (front) [1] in the direction of the arrow so that the contact image sensor (CIS) [2] will move where it is shown in the figure.



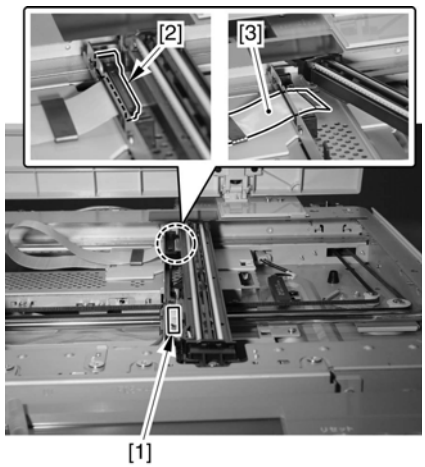
F-5-55

2) Detach the plate [2].
-2 screws [1]



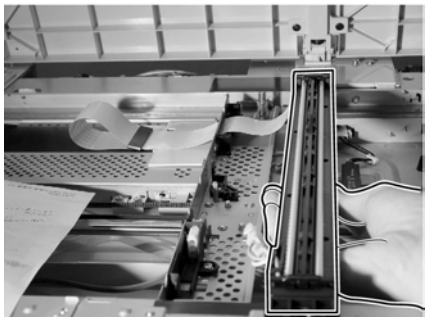
F-5-56

3) Remove the contact image sensor (CIS).
-connector [1]
-flexible cable retainer [2]
-flexible cable [3]



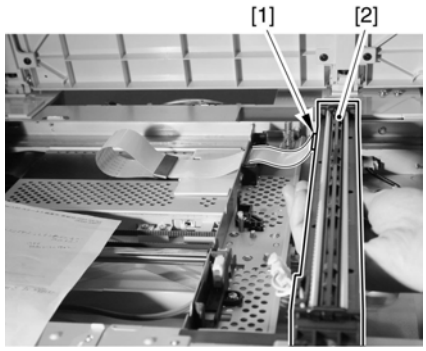
F-5-57

When detaching the contact sensor unit, take care not to touch the scanning lamp and the lens assembly.



F-5-58

⚠
When mounting it, be sure to connect the flexible cable [1] before fitting the contact image sensor (CIS) [2] to the machine.



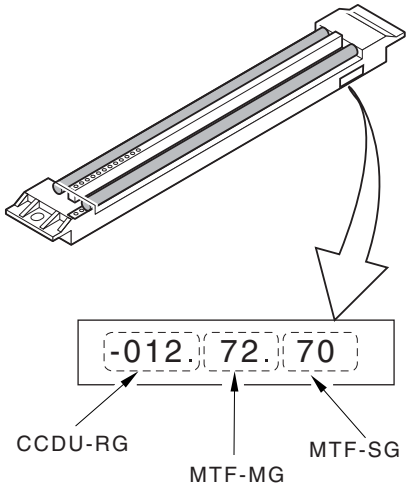
F-5-59

5.4.5.3 After Replacing the CIS

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Be sure to enter the values indicated on the CIS label attached to the contact image sensor (CIS) using the following service mode items:

COPIER>ADJUST>CCD>CCDU-RG
(offset value against color displacement caused by CIS)
COPIER>ADJUST>CCD>MTF-MG
(MTF correction value for main scanning direction)
COPIER>ADJUST>CCD>MTF-SG
(MTF correction value for sub scanning direction)



F-5-60

Also, be sure to update the values indicated on the service label attached behind the reader left cover by the values indicated on the CIS label.

Reference:
The machine is not shipped out of the factory with the CIS label attached to it.

5.4.6 Original Cover Sensor

5.4.6.1 Before Removing the Copyboard Cover Open/ Closed Sensor (front/rear)

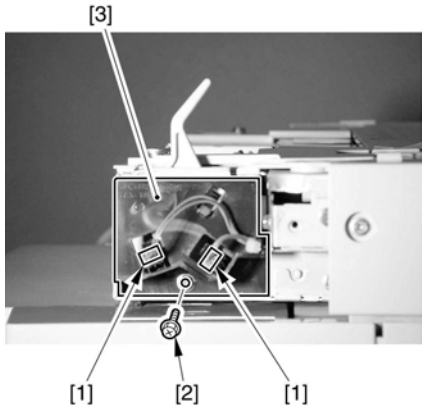
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the reader rear cover. (page 10-16)[Detaching the Reader Rear Cover]

5.4.6.2 Removing the Copyboard Cover Open/Closed Sensor (front/rear)

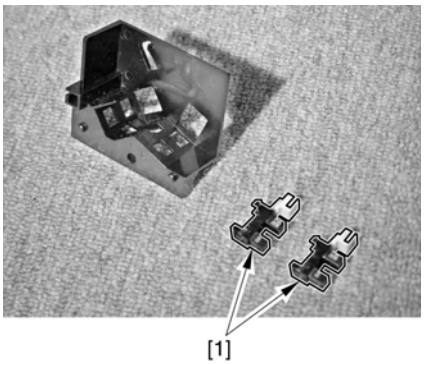
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) detach the sensor base [3].
-2 connectors [1]
-screw [2]



F-5-61

2) Detach the 2 sensors [1] from the sensor base.



F-5-62

5.4.7 Contact Sensor HP Sensor

5.4.7.1 Before Removing the Contact Sensor HP Sensor

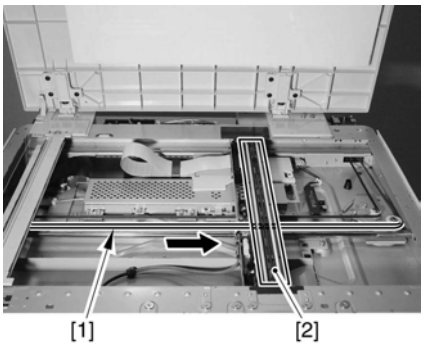
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the copyboard glass. (page 5-17) [Removing the Copyboard Glass]
2) Detach the ADF Reading Glass. (page 5-17) [Removing the ADF Reading Glass]

5.4.7.2 Removing the Contract Sensor Home Position Sensor

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

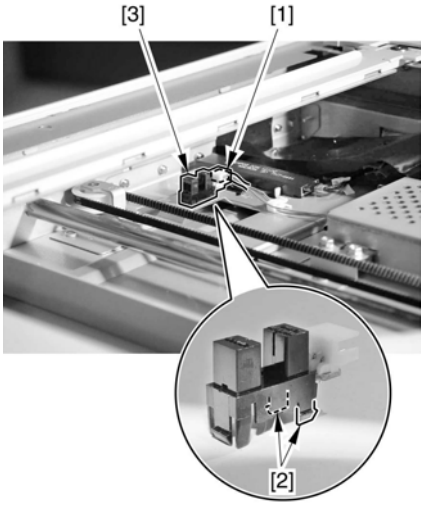
1) Pull the drive belt [1] in the direction of the arrow so that the contact image sensor (CIS) [2] is where indicated in the figure.



F-5-63

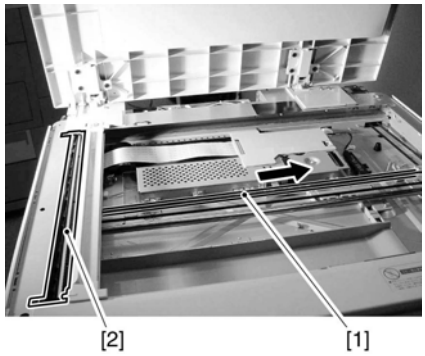
2) Remove the CIS home position sensor [3].
-connector [1]

When detaching the sensor, do so as if to push it under the claw [2] found at the rear.



F-5-64

After replacing the sensor, pull the drive belt (rear) [1] in the direction of the arrow so that the contact image sensor (CIS) [2] is returned to the



F-5-65

5.4.8 Original Sensor

5.4.8.1 Before Removing the Original Size Sensor (AB/Inchconfiguration)

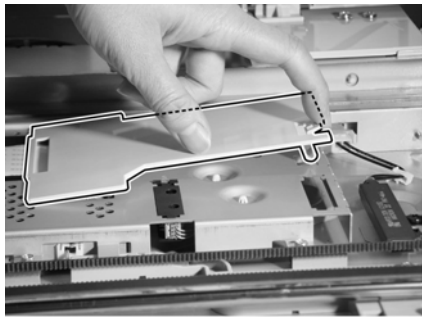
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the copyboard glass. (page 5-17) [Removing the Copyboard Glass]
2) Detach the reader rear cover. (page 10-16) [Detaching the Reader Rear Cover]

5.4.8.2 Removing the Original Size Sensor (AB/Inch-configuration)

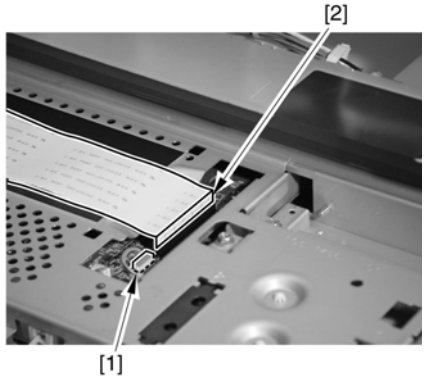
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the cover.



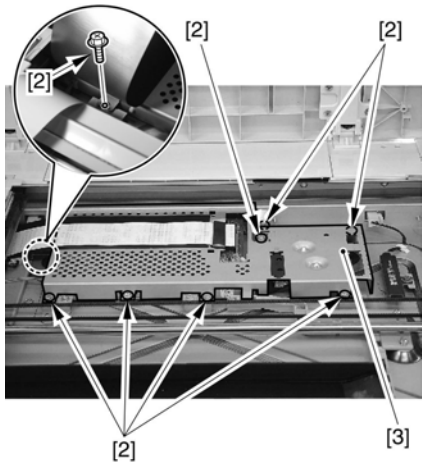
F-5-66

2) Disconnect the connector [1], and detach the flexible cable [2].



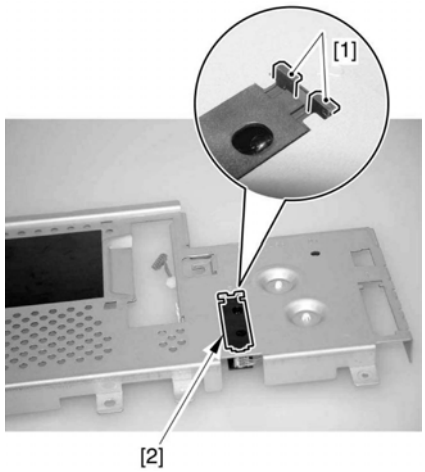
F-5-67

3) Detach the cover [2].
-8 screws [2]



F-5-68

4) Remove the original sensor [2].
- hook [1]



F-5-69

Chapter 6 Laser Exposure

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6.1 Construction

6.1.1 Specifications, Control Mechanisms, and Functions

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

T-6-1

Laser Light	
Wave length	780 to 800nm (infrared rays)
Output	5mW
Number of Laser Light	4-laser (1-beam/color)

T-6-2

Scanner Motor	
Motor type	DC brushless motor
Number of rotation	iR C3380/2880: approx. 34000rpm
Bearing type	Oil

T-6-3

Polygon Mirro	
Number of facets	6-facet

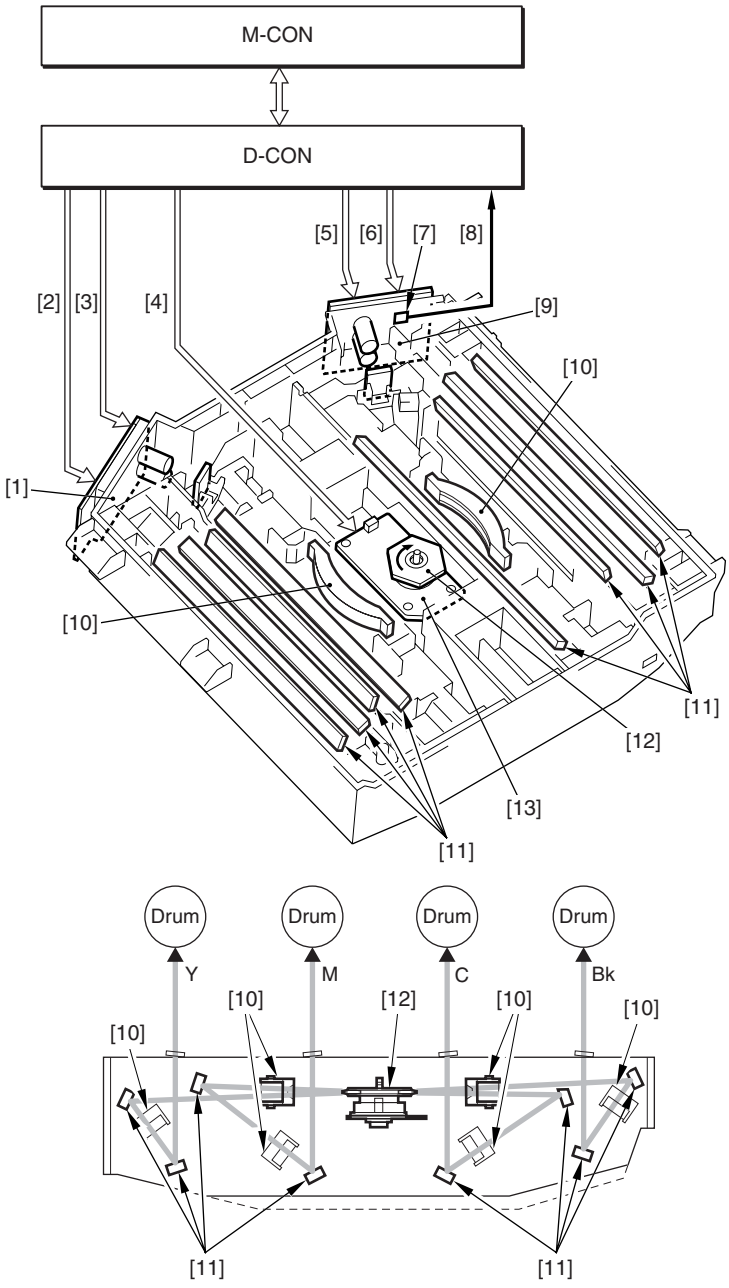
T-6-4

List of Controls	
Timing for laser activation	ON/OFF control
	Main scanning direction sync control
	Sub scanning direction sync control
	BD correction control
Light intensity control	APC control
Others	Scanner motor speed control

6.1.2 Overview

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The machine's laser exposure system serves to form a static (latent) image on the surface of the photosensitive drum according to the video signals from the main controller, and it consists of 2 laser driver PCBs, a BD circuit (Note 1), and a scanner motor among others.
These components are constructed as a single entity (scanner unit), and are controlled by the DC controller.



F-6-1

[1] Y/M laser driver
[2] Y/M video signal
[3] Y/M laser control signal
[4] Scanner motor control signal
[5] C/Bk video signal
[6] C/Bk laser control signal
[7] BD circuit
[8] BD signal
[9] C/Bk laser driver
[10] Imaging lens
[11] Reflecting mirror
[12] Polygon mirror
[13] Scanner motor
M-CON : main controller
D-CON : DC controller

The machine's laser scanner unit uses a single scanner motor (polygon mirror motor) to scan 4 laser beams across the surface of the photosensitive drum, thus saving space (1-polygon mirror/4-laser beam method; Note 2).

The laser/scanner unit uses the following sequence when making a full-color print:
1) The print command arrives from the main controller. In response, the DC controller turns on the scanner motor to rotate the 6-facet mirror.
2) When the scanner motor starts to rotate, the DC controller uses the scanner motor control signal and the BD signal to make sure that the scanner motor rotates at a specific speed.
3) When the revolution of the scanner motor has reached a specific speed, the DC controller sends video signals for individual colors (YMCBk) to the laser driver PCB.
4) In response, the respective laser driver turns on the laser diode.
5) The resulting laser beam hits the 6-facet mirror, which is rotating at a specific speed.
6) The laser beam then is reflected by the 6-facet mirror, and is moved to the imaging lens and the reflecting mirror found in front of the mirror to reach the surface of the photosensitive drum.

7) As the 6-facet mirror rotates at a specific speed, the laser beam scans the surface of the photosensitive drum accordingly.
8) As the 6-facet mirror rotates and, as a result, the laser beams scan the surface of the photosensitive drum at a specific speed, a static image of multiple colors is formed on the drum surface.

1 : The machine's BD circuit is found on its CBk driver PCB, and the BD signal occurs in keeping with the activation of the laser diode of the Bk driver.
2 : 1-Polygon 4-Laser Method
The term refers to a method in which a single polygon mirror is used for 4 laser beams. There are 4 laser diodes, the beams of which are directed to a multiple-facet mirror mounted on a single scanner motor. The method inherently brings about a reduction in space.

6.2 Various Control

6.2.1 Controlling the Laser Activation Timing

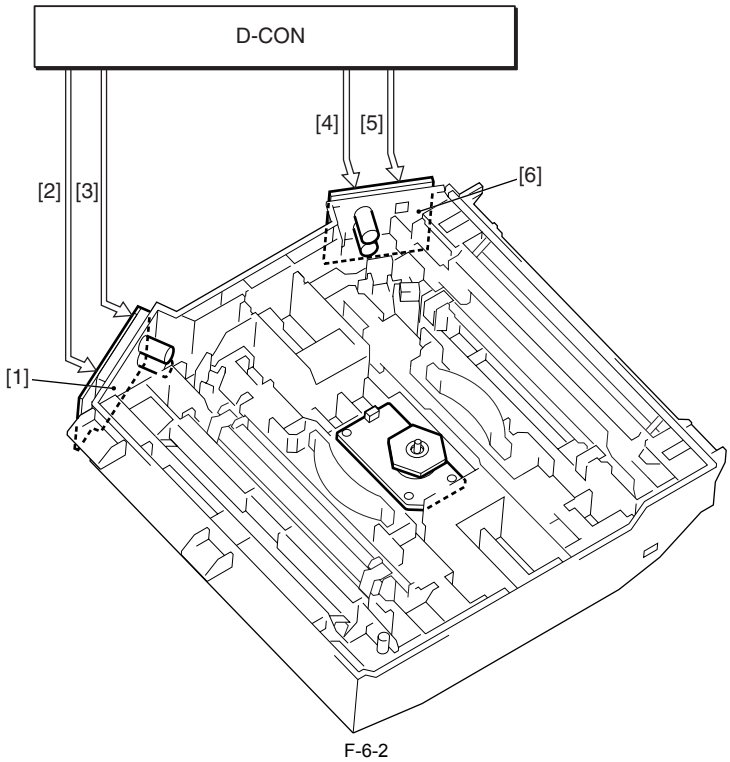
6.2.1.1 Turning On and Off the Laser Light

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The laser light goes on and off when the laser diode of the laser driver PCB goes on and off at a specific intensity. The machine's laser driver PCB consists of 2 PCBs (Y/M laser driver PCB, C/Bk laser driver PCB), each with 2 systems of driver circuitry. The circuit turns on and off the laser light of individual colors according to the combination of laser control signals (LC_CTL0/LC_CTL1) coming from the DC controller.

T-6-5

Laser control signal		Operation	Laser state
LC_CTL0	LC_CTL1		
0	0	forced off	OFF
0	1	APC	ON
1	0	printing	video signal input permitted
1	1	standby	OFF

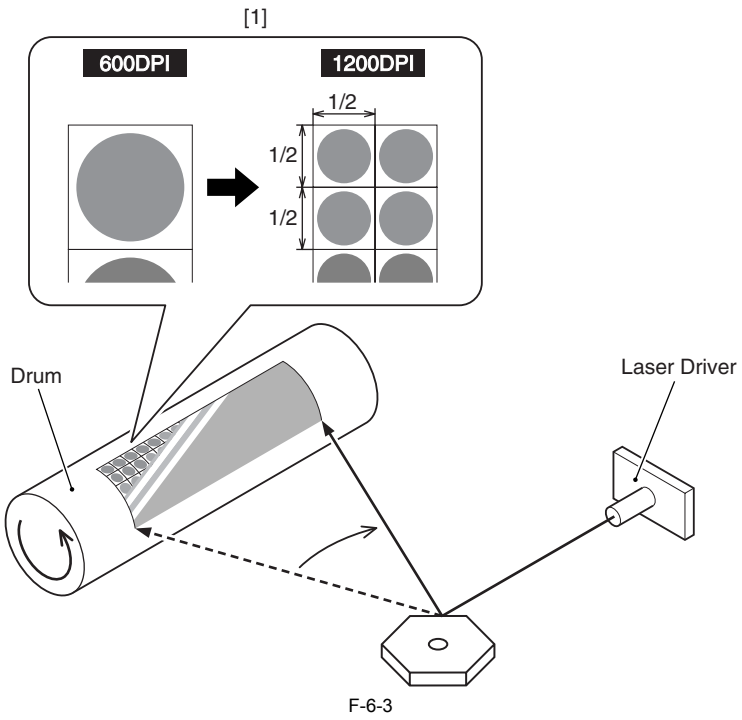


F-6-2

[1] Y/M laser driver
[2] Y laser control signal
[3] M laser control signal
[4] C laser control signal
[5] Bk laser control signal
[6] C/Bk laser driver

In the forced outage mode, the intensity settings made through APC are cancelled.

MEMO: Controlling Laser Activation for a Resolution of 1200 dpi
To enable highly detailed reproduction of images, the machine switches the resolution in main scanning direction and sub scanning direction from 600 to 1200 dpi. At such times, the laser output (intensity) is reduced by 1/2 for main scanning direction, while the speed is reduced by 1/2 for sub scanning direction.



F-6-3

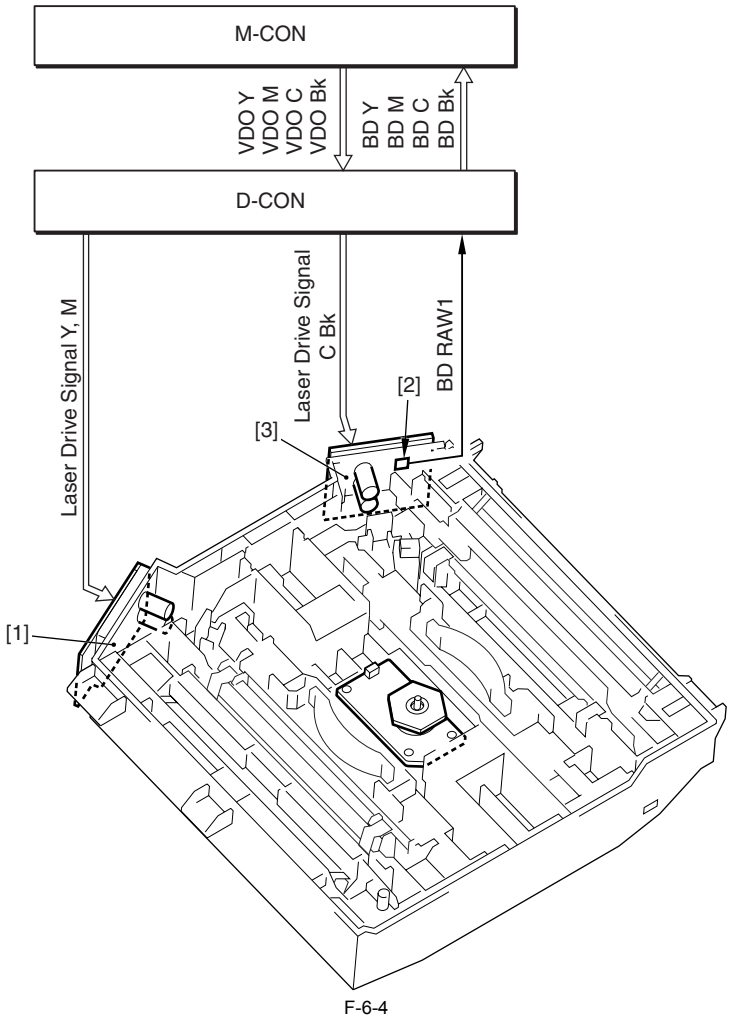
[1] 1 pixel

6.2.1.2 Controlling Synchronization in Main Scanning Direction

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The machine controls synchronization in main scanning direction to ensure the write start position of individual lines in main scanning direction.
Synchronization occurs for each line of each color, and is controlled by the DC controller.

The following is the sequence of operation:
1) The DC controller sets the Bk laser control signal to APC mode (LC_CTLP4(0)=0, LC_CTLP4(1)=1), thus forcing the laser diode of the Bk driver circuit to go on.
2) The laser beam path is equipped with a BD circuit used to receive the beam.
3) The BD circuit detects the laser beam, generates the reference BD signal (BD RAW1), and sends the result to the DC controller.
4) In response, the DC controller sends these reference BD signals to the main controller in the form of the main scanning sync signals (BD Y, BD M, BD C, BD Bk).
5) When these signals arrive, the main controller sends video signals (VDO Y, VDO M, VDO C, VDO Bk) to the DC controller a specific period of time thereafter; as a result, the respective laser drivers go on to emit laser beams that will scan the surface of the photosensitive drum starting at a specific point of individual lines. (See Notes.)

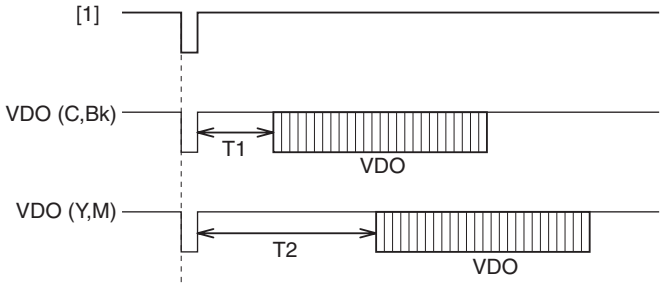


F-6-4

[1] Y/M laser driver
[2] BD circuit
[3] C/Bk laser driver

1BD Control Method

Owing to the spatial relationship between the BD circuit and the laser diode, the machine is not capable of detecting the BD signal of each color individually. As such, it uses the BD signal of Bk to serve as the reference BD signal when generating the BD signal for Y, M, and C.
The following is a timing chart depicting the relationship of the BD signals of individual colors and the video signals:



F-6-5

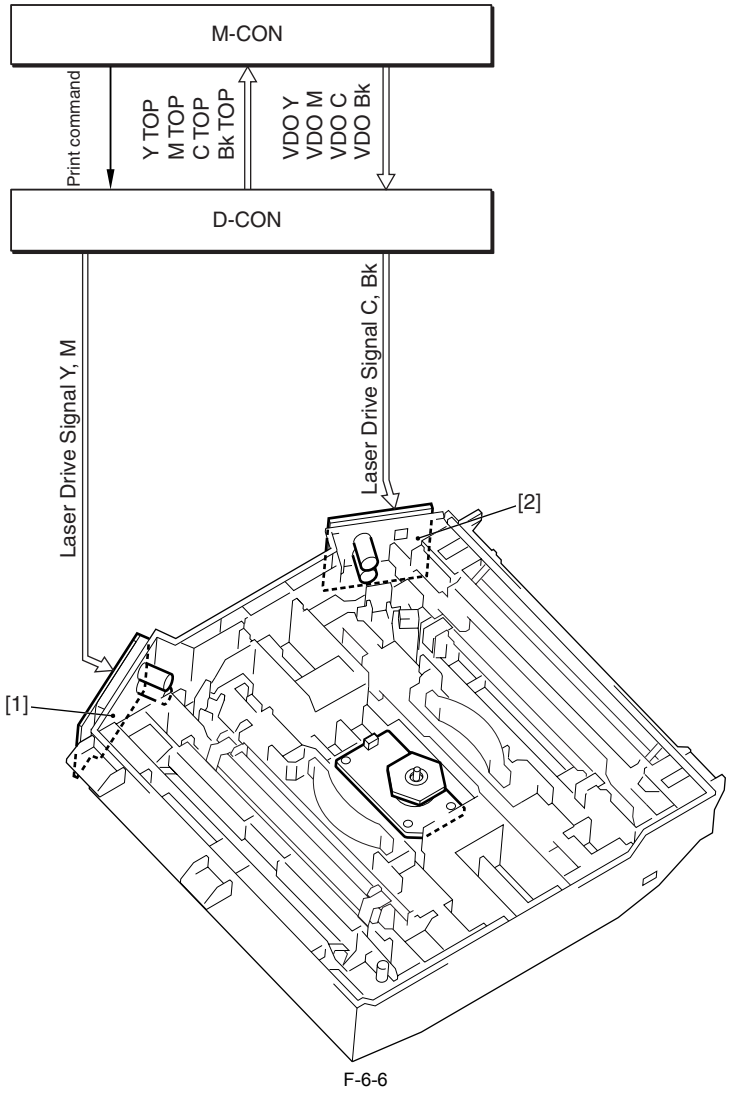
[1] Reference BD

6.2.1.3 Controlling Synchronization in Sub Scanning Direction

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The machine executes synchronization in sub scanning direction so as to match the lead edge of an image and the lead edge of paper. This control is executed for every color, and is controlled by the DC controller.

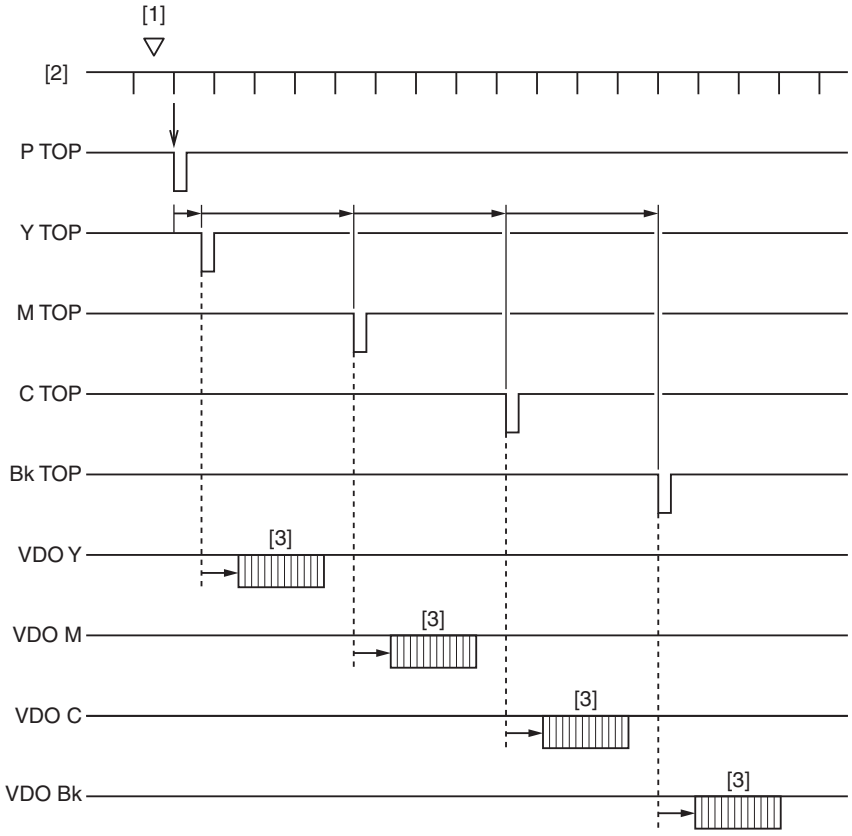
The following is the sequence of operation:
1) When the print command arrives, the DC controller generates the sub scanning sync signal (PTOP) with reference to its internal timer.
2) The DC controller generates the sub scanning sync signals (Y-TOP, M-TOP, C-TOP, Bk-TOP) of individual colors based on the PTOP signal, and sends them to the main controller.
3) When these signals arrive, the main controller generates video signals (VDO Y, VDO M, VDO C, VDO Bk) a specific period of time thereafter, and sends them to the DC controller. As a result, the laser drivers of individual colors go on to emit laser beams that scan the surface of the photosensitive drum starting at a specific point.



F-6-6

[1] Y/M laser driver
[2] C/Bk laser driver

The following is a timing chart depicting the relationship between the TOP signal of individual colors and video signals:



F-6-7

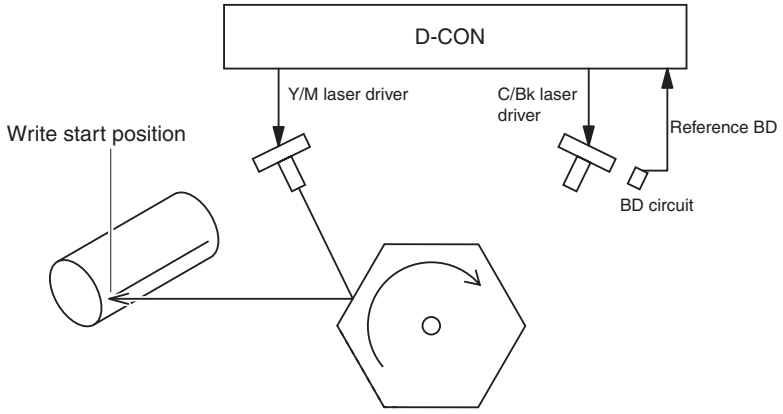
[1] Print command
[2] Internal timer
[3] Video signal for a single page

6.2.1.4 BD Correction

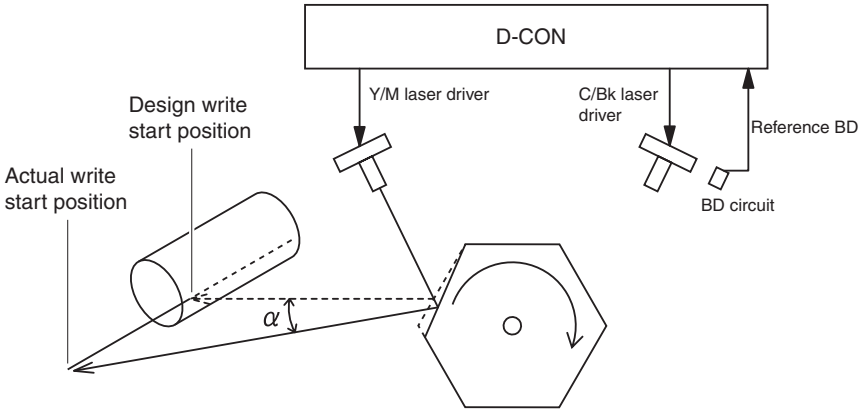
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The polygon mirror used in the machine's laser scanner has resulted in imperceptible manufacturing variation of its mirror surface angle. In other words, the machine, which determines the start points of 4 main scanning lines using the Bk laser as the reference BD, is inherently subject to variation in the starting points of Y and M main scanning lines.
To make up for the variation, the machine computes the variation among the angles of individual mirrors by measuring BD intervals, correcting the start points of the Y and M main scanning lines based on the result of the computation.
The machine executes this correction each time it is turned on or for each print job.

- Ideal Polygon Mirror (equilateral hexahedron)

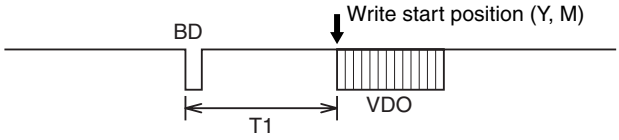


- Actual Polygon Mirror (non equilateral hexahedron)

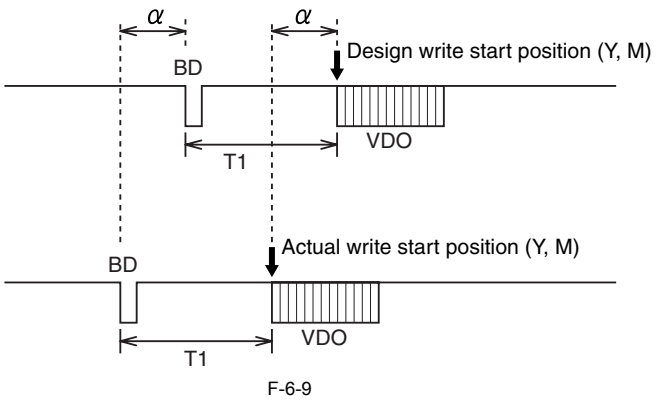


F-6-8

- Ideal Polygon Mirror (equilateral hexahedron)

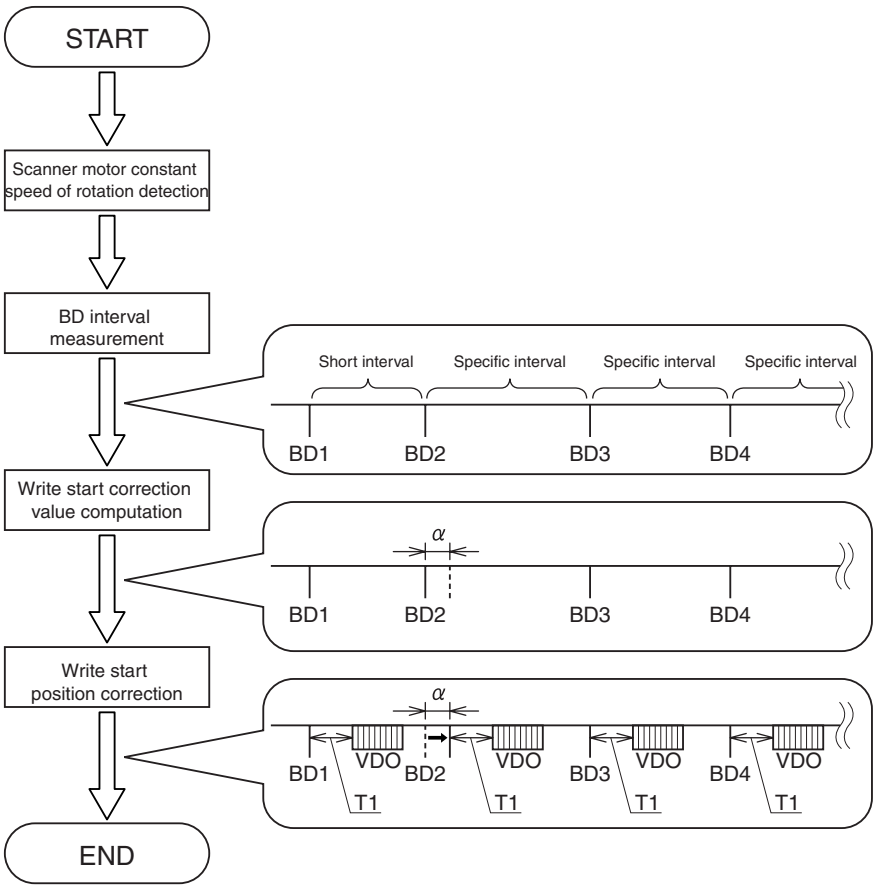


- Actual Polygon Mirror (non equilateral hexahedron)



F-6-9

The following diagram shows the flow of the control mechanism:



F-6-10

Bk is used to detect the reference BD signal and, as such, laser light is directed to the surface of the polygon mirror. In other words, the write start position in main scanning direction for Bk is determined based on actual measurement and, for this reason, the possible presence of variation in the angle of the polygon mirror surface will not lead to variation of Bk write start position.
The laser driver for C is found directly under the Bk laser driver and, for this reason, the C laser driver directs laser light against the same polygon mirror surface as the Bk laser driver, eliminating the effects of variation in the angle of the polygon mirror surface. The write start position of C, for this reason, is also free of variation as in the case of Bk.

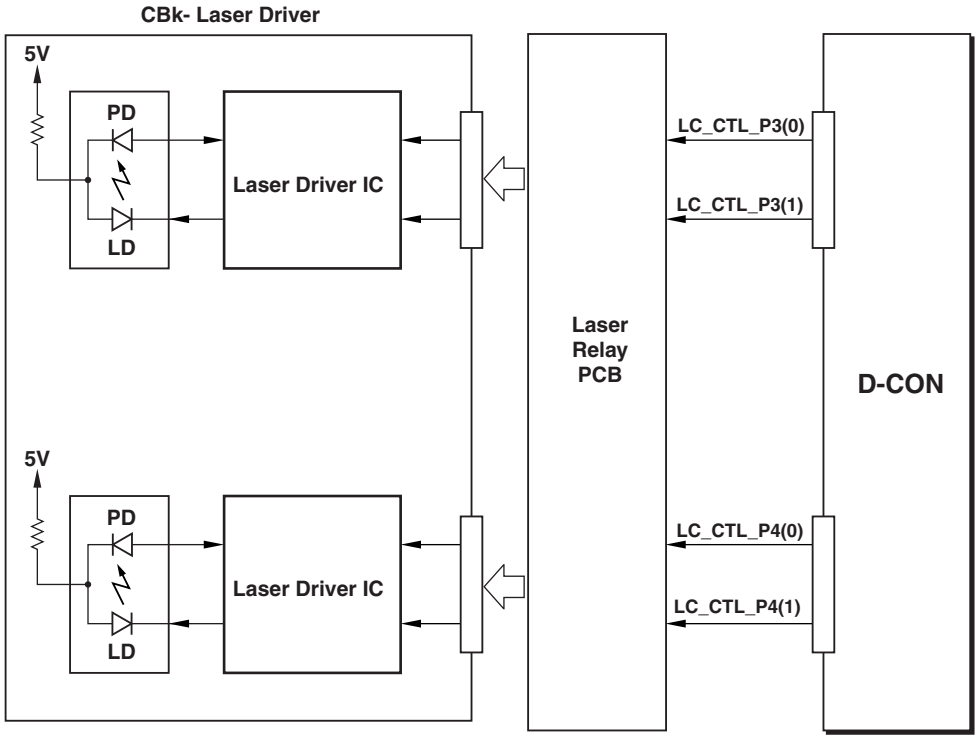
6.2.2 Controlling the Intensity of Laser Light

6.2.2.1 APC Control

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The machine uses APC control to make sure that the intensity of laser light remains at a specific level.
The machine uses 2 laser driver PCBs, each with a laser driver IC taking care of 2 colors and performing APC control for individual colors.

The following is an outline of APC control operation, executed each time the machine is turned on and for each print job:
1) The DC controller sends the laser control signal (LC_CTL_X(0)=0, LC_CTL_X(1)=1) to the laser driver IC on the laser driver PCB. (X differs depending on the color.)
2) The laser driver IC is set to APC mode, thus forcing the laser diode (LD) to go on.
3) The laser driver IC monitors the laser diode (LD) by means of a photo diode (PD), adjusting the output of the laser diode until its light is a specific level of intensity.
4) The laser driver IC stores the laser output in memory for use in the next print job.



F-6-11

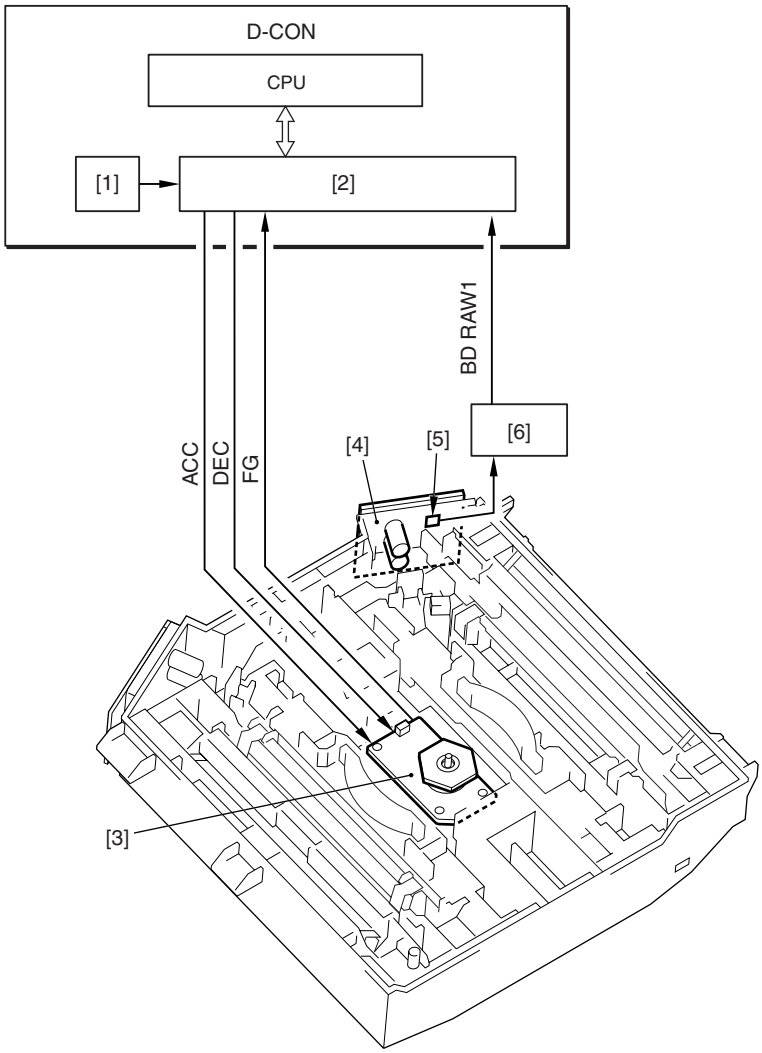
6.2.3 Controlling the Laser Scanner Motor

6.2.3.1 Controlling the Speed of the Laser Scanner Motor

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The machine controls the laser scanner motor so that it rotates at a specific speed.
The control mechanism is governed by the motor speed control block and the reference signal generation block according to the instructions from the CPU of the DC controller.
The motor speed control block compares the speed detection signal (FG, BD) against the reference signal generated by the reference signal generation block to control the acceleration signal (ACC) and the deceleration signal (DEC) so that the scanner motor rotates at a specific speed.
The machine uses 2 speed detection signals with the aim of helping the laser scanner unit last longer (Notes). The FG signal is a detection signal for coarse adjustment used at time of motor start-up, while the BD signal is a detection signal used to fine-adjust the motor to the target speed.

The motor control mechanism operates as follows:
1) The DC controller turns on the ACC signal, thus causing the scanner motor to rotate.
2) The DC controller uses the result of FG signal detection to control the ACC signal and the DEC signal so that the motor will rotate at a specific speed.
3) The DC controller switches from the FG signal to the BD signal; then, using the result of BD signal detection, controls the ACC signal and the DEC signal so that the motor will continuously rotate at the target speed.



F-6-12

[1] Reference signal generation block
[2] Motor speed control block
[3] Scanner motor
[4] C/Bk laser driver
[5] BD circuit
[6] Laser relay PCB

MEMO:
The life of the laser scanner unit is dependent on the length of time during which the laser light is emitted.
To reduce the need for the detection of the BD signal associated with the emission of laser light, the machine also uses the FG signal for speed detection.

Scanner Motor-Related Error Code
The following error codes are associated with the scanner motor:

- **E0100-0000 : BD error**
  Indicates that the interval of the BD signal at time of constant speed rotation has deviated from a specific interval for 1 sec or more.
- **E0110-0000 : scanner motor error**
  Indicates that the scanner motor has failed to reach a specific revolution within 5 sec at start-up (BD control).
- **E0110-0001 : scanner motor error**
  Indicates that the scanner motor has failed to reach a specific revolution within 5 sec at start-up (FG control).

6.3 Parts Replacement Procedure

6.3.1 Laser Scanner Unit

6.3.1.1 Before Removing the Laser Scanner Unit

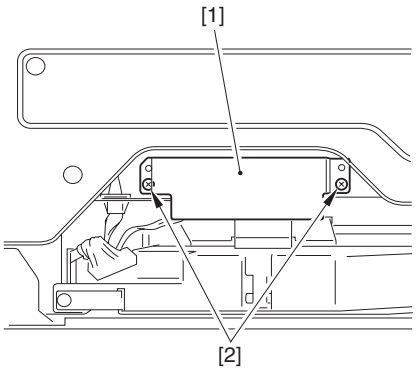
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the left cover. (page 10-14) [Detaching the Left Cover]
2) Remove the processing unit. (page 7-40) [Removing the Process Unit]

6.3.1.2 Removing the Laser Scanner Unit

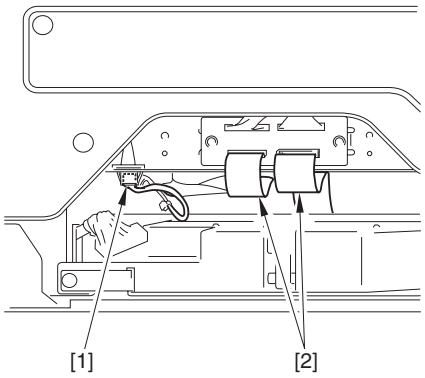
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the connector cover [1].
- 2 screws [2]



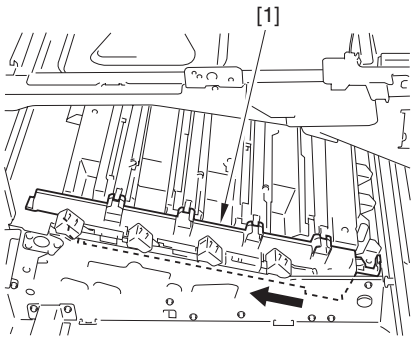
F-6-13

2) Disconnect the connector [1] and the flat cable [2].



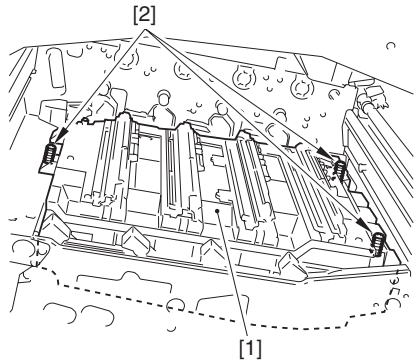
F-6-14

3) Detach the cover [1].



F-6-15

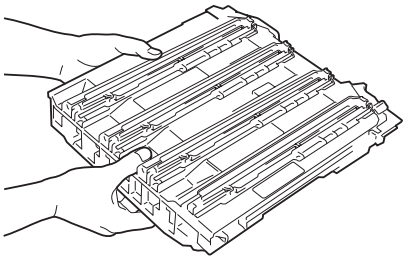
4) Remove the laser scanner unit [1].
- 3 screws [1]



F-6-16

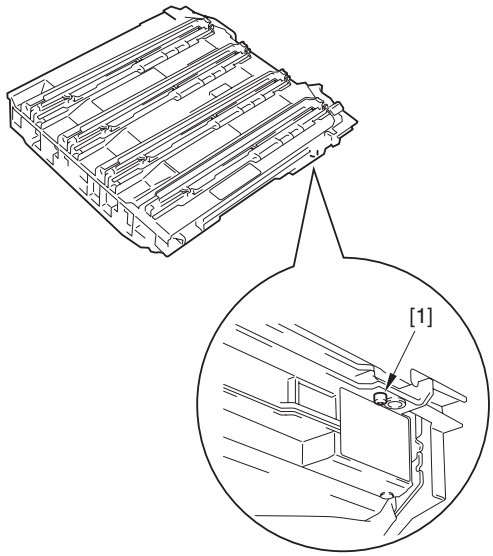
Points to Note when Mounting the Laser Scanner Unit

When removing or mounting the laser scanner unit, hold the front side and the left side of the laser scanner unit. Holding at the right side may cause color displacement due to the positional displacement of the reflection mirror.

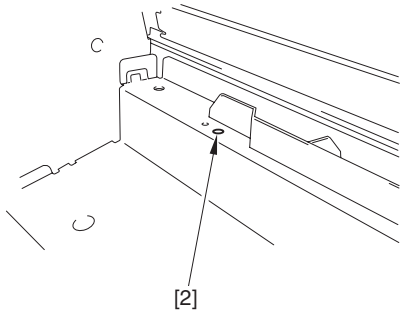


F-6-17

When mounting the laser scanner unit, fit the boss [1] of the scanner unit into the slot of the machine, and be sure that the unit is secured in place.

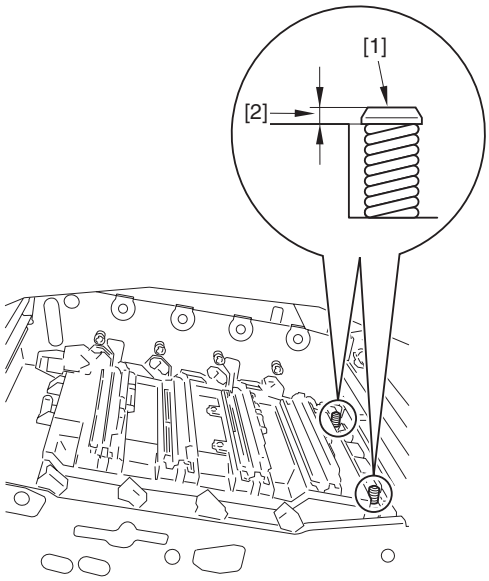


F-6-18



F-6-19

Also, check to see that the heights of the screw [1] on the front side and the screw [2] on the rear side are the same.



F-6-20

6.3.1.3 After Replacing the Laser Scanner Unit

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

When replacing the laser scanner unit, register the values described on the label which is included in the package in the service modes below. After registration, attach the label onto the front cover.
COPIER > FUNCTION > LASER > FSLUT-Y1 to 8
COPIER > FUNCTION > LASER > FSLUT-M1 to 8
COPIER > FUNCTION > LASER > FSLUT-C1 to 8
COPIER > FUNCTION > LASER > FSLUT-K1 to 8
Registration of the main scanner reproduction ratio correction value

Chapter 7 Image Formation

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7.1 Construction

7.1.1 Specifications, Control Mechanisms, and Functions

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The main specifications, controls and functions of the image formation system are as described below.

T-7-1

Drum unit	**Photosensitive drum**		
(D-UNIT) spec.	Drum type	OPC drum	
	Drum diameter	30.6 mm	
	Cleaning construction	Cleaning blade	
		Transfer toner volume control is applied and residual transfer toner is collected by the developing unit.	
	Process speed	Full speed	143mm/ sec.
		Half speed	71.5mm/ sec.
		1/4 speed	35.8mm/ sec.

T-7-2

Developing unit block	
Developing cylinder diameter	13.6 mm
Developing system	Dry type two components
Toner	Non-magnetic negative toner
Remaining toner detection inside cylinder	ATR sensor (magnetic sensor, inside hopper)
Starter	Included in D-UNIT

T-7-3

Primary charger block	
Charging system	Roller contact charging
Charging roller diameter	14 mm
Cleaning mechanism	None

T-7-4

Items managed by built-in memory	No built-in memory
	New product detection resistor only

T-7-5

Primary transfer block	
Charging system	Roller contact charging
Charging roller diameter	16.1 mm crown shaped
Cleaning mechanism	None

T-7-6

Toner vessel spec		
	Toner refill volume	Y : 260g
		M : 260g
		C : 260g
		B : 575g
	Toner low warning	Toner low warning at approx. 10% remaining (variable in service mode)

T-7-7

Intermediate transfer unit spec		
	ITB (Intermediate Transfer Belt)	Seamless
	Belt drive	Gear drive from drum ITB motor (M1)
	Feed speed	Refer to process speed
	Cleaning mechanism	- Cleaning blade - Half-tone printing cleaning

T-7-8

Secondary transfer	
Charging system	Roller contact charging
Charging roller diameter	24.7 mm
Cleaning mechanism	Reverse bias

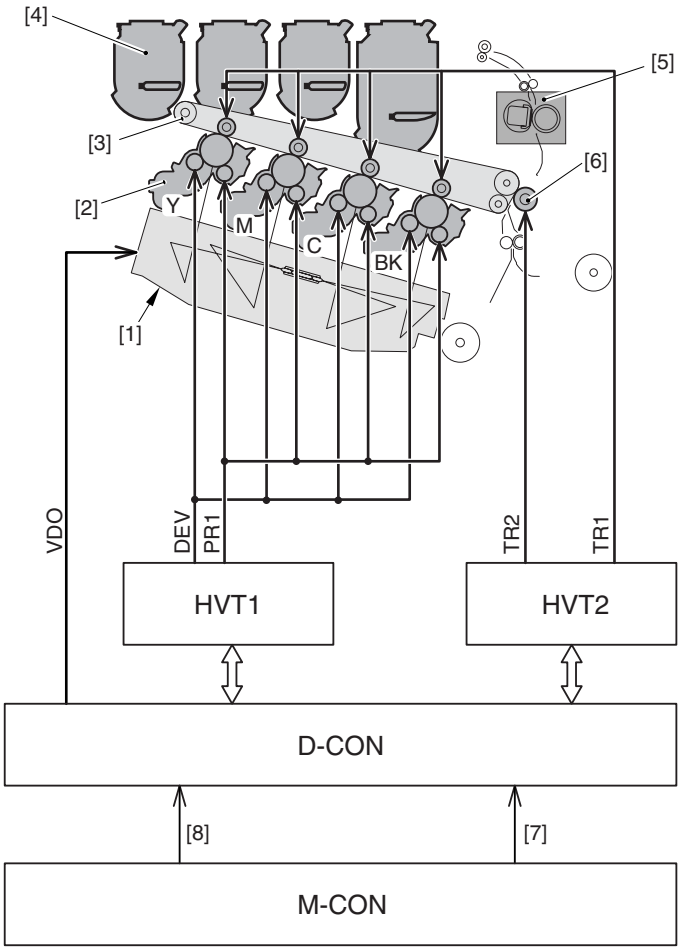
T-7-9

Image stabilisation control		
	ATVC control	Transfer assurance
	ATR control	Toner density (refill quantity) correction
	Drum film pressure detection	Charging voltage control
	Automatic gradation correction:Full control	Gradation correction
	Automatic gradation correction:Quick control	Gradation correction
	ARCDAT control	Decides optimum gradation table

7.1.2 Overview

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The image formation system is the core of the machine, ultimately forming toner images on paper.
The machine's imaging system consists of a photosensitive drum, developing cylinder, 4 drum units containing carrier, 4 toner containers, ITB unit, fixing assembly, and secondary transfer outside roller, all controlled by the DC controller.
When the print command arrives from the main controller, the DC controller controls the laser/scanner unit and HVT1/2 (high-voltage PCB) to form images on paper according to the instructionsarriving in the form of a video signal.



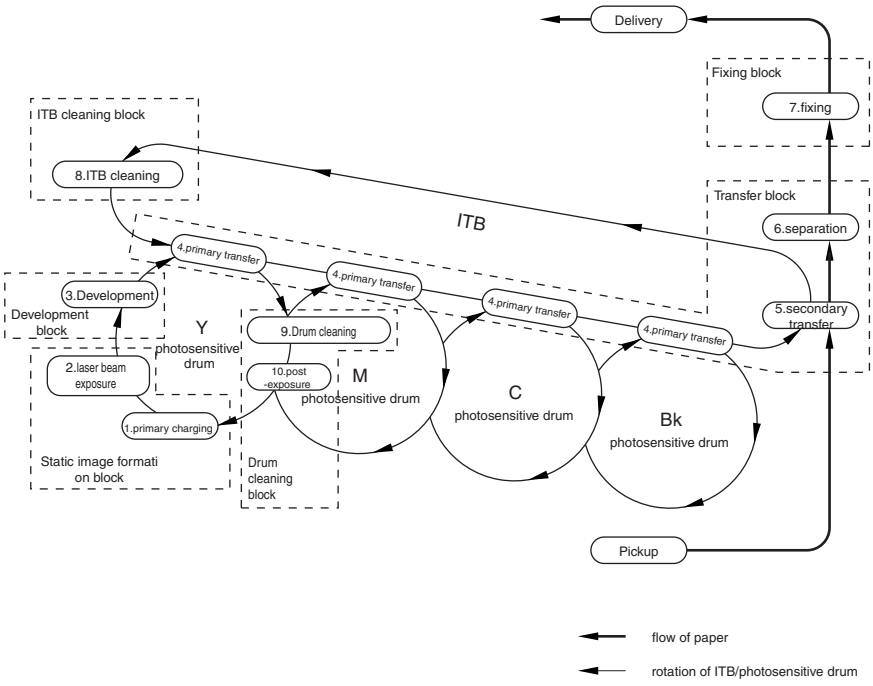
F-7-1

[1] Laser scanner unit
[2] Drum unit
[3] ITB unit
[4] Toner container
[5] Fixing assembly
[6] Secondary transfer outside roller
[7] Video signal
[8] Print command

7.1.3 Printing Process

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The machine's printing process may broadly be divided into 6 blocks, which are made up of a total of 10 steps. The machine forms images on print paper by executing the functions assigned to these blocks.
The following is a block diagram of the printing process, followed by an outline of the steps:



F-7-2

A. Static Image Formation Block
Forms a static image on the surface of the photosensitive drum.
step 1: primary charging (charges the surface of the drum to an even negative potential)
step 2: laser beam exposure (forms a static image on the surface of the photosensitive drum)

B. Developing Block
Deposits toner over the static image on the surface of the photosensitive drum, thus turning it into a visible image.
step 3: development

C. Transfer Block
Moves the toner image from the surface of the photosensitive drum to print paper.
step 4: primary transfer (moves toner from the surface of the photosensitive drum to the ITB)
step 5: secondary transfer (moves toner from the ITB to paper)
step 6: separation (separates paper from the ITB)

D. Fixing Block
Fuses the toner image to the paper.
step 7: fixing

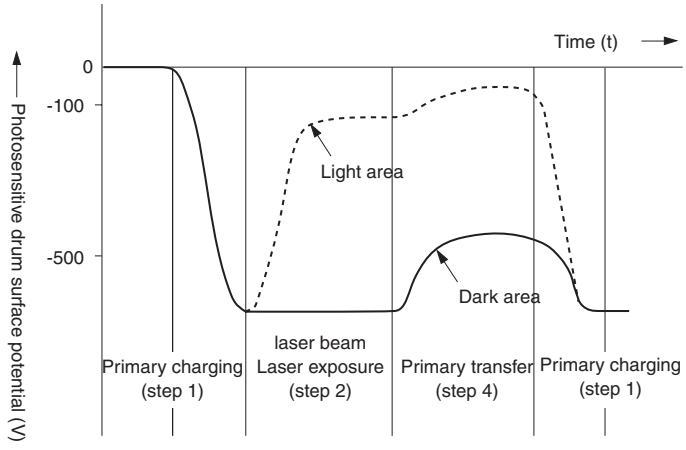
E. ITB Cleaning Block
Cleans the ITB by removing residual toner.
step 8: ITB cleaning (removes residual toner from the ITB)

F. Drum Cleaning Block
Removes residual toner from the surface of the photosensitive drum to prepare for the next print job.
step 9: drum cleaning (removes residual toner from the surface of the photosensitive drum)
step 10: post-exposure (prevents uneven density by evening out the surface of the photosensitive drum)

7.1.4 Static Image Formation Block

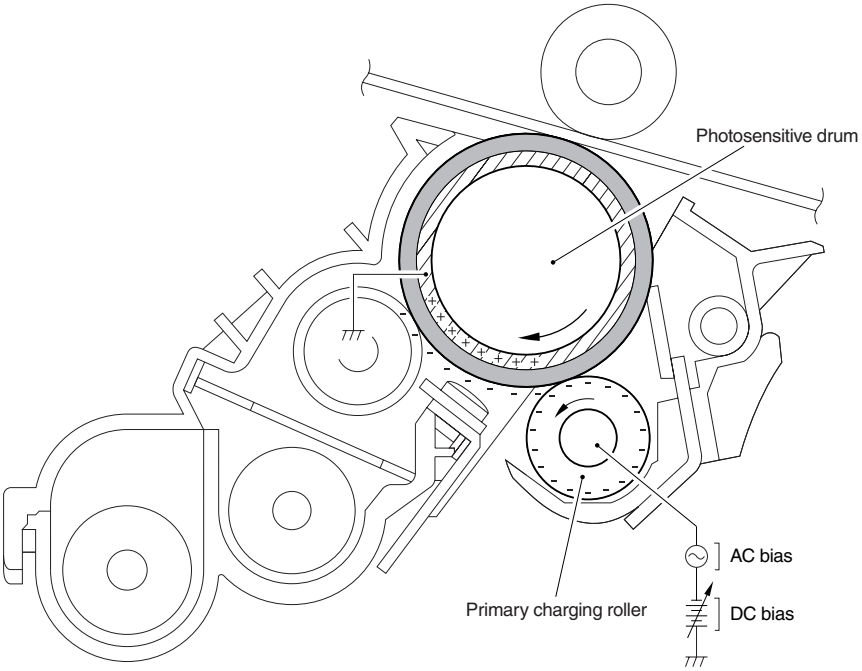
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

This block consists of 2 steps, at the end of which a static image is formed on the surface of the photosensitive drum.
At the end, those areas of the surface of the photosensitive drum that have not been exposed by the laser beam (dark area) retain negative charges, while those exposed by the beam are free of negative charges. The resulting static image is not visible to the human eye and, thus, is called a static "latent" image.



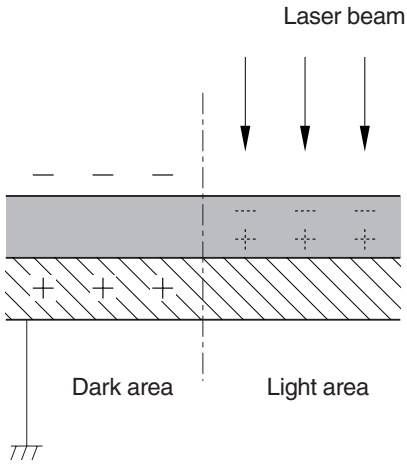
F-7-3

Step 1: primary charging
In this step, the surface of the photosensitive drum is charged to an even negative potential to prepare for the formation of an image. The machine uses a roller charging method, in which charges are directly applied to the surface of the photosensitive drum.
The machine's primary charging roller is made from conducting rubber, and is given both AC and DC biases to keep the surface potential of the photosensitive drum even.



F-7-4

Step 2: laser beam exposure
In this step, a static image is formed on the surface of the photosensitive drum.
The negatively charged surface of the photosensitive drum is exposed by a laser beam. As a result, those areas hit by the beam are neutralized (light area), thus eliminating negative charges and consequently forming a static image on the surface.

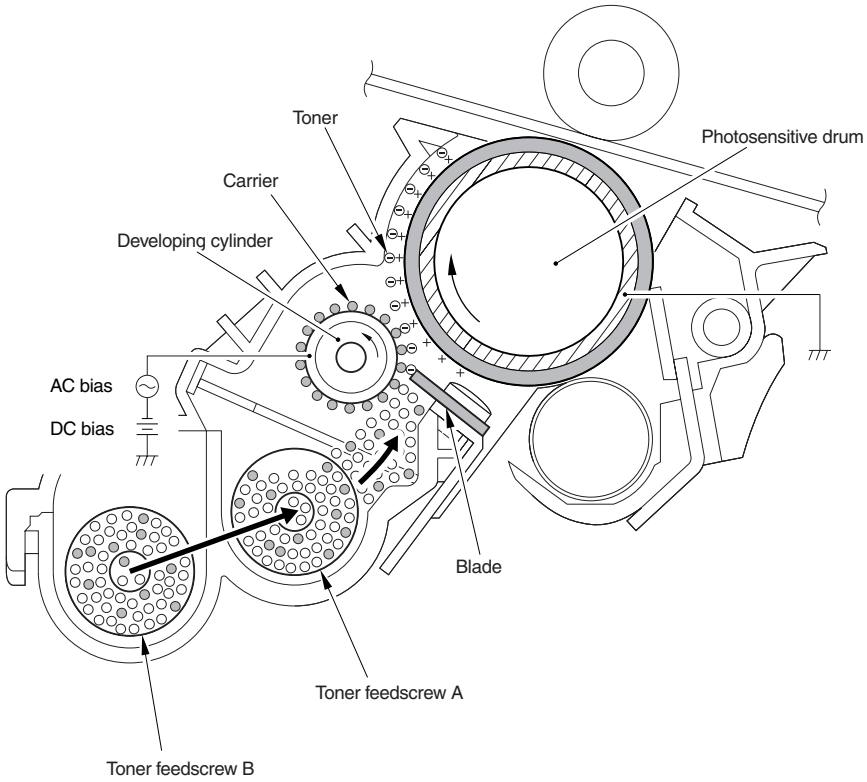


F-7-5

7.1.5 Developing Block

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

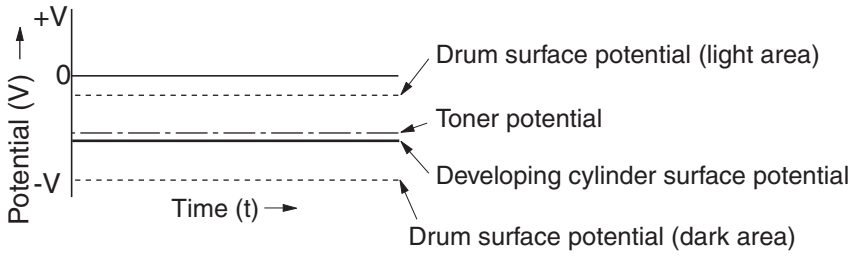
In this block, the machine uses a toner projection method in which it deposits toner over the surface of the photosensitive drum, thus turning the static image into a visible image. The developer used here is a 2-component developer, composed of non-magnetic toner and carrier.



F-7-6

Step 3: development
The drum unit consists of a photosensitive drum, developing cylinder, and a blade.
The developer is composed of toner (mainly of resin and dye) and carrier (iron powder) mixed in a specific ratio. The friction occurring between toner and carrier causes the toner to become negatively charged and carrier to become positively charged.
The developer adheres to the surface of the developing cylinder by the work of a fixed magnet, and a blade is used to form a uniform layer of developer.
At this time, the areas of the photosensitive drum exposed by the laser beam will have a positive potential in relation to the developing cylinder.
As a result, the toner charged to a more or less identical potential as the developing cylinder will move to and stick to the areas of the photosensitive drum exposed by the laser beam. This phenomenon is referred to as "toner projection," and is used to turn the image on the surface of the photosensitive drum into a visible image.

The "light area" of the photosensitive drum is charged to a negative potential; however, the diagram below shows it as being charged to a positive potential, indicating that its potential is higher than that of the developing cylinder when the cylinder is used as the reference.



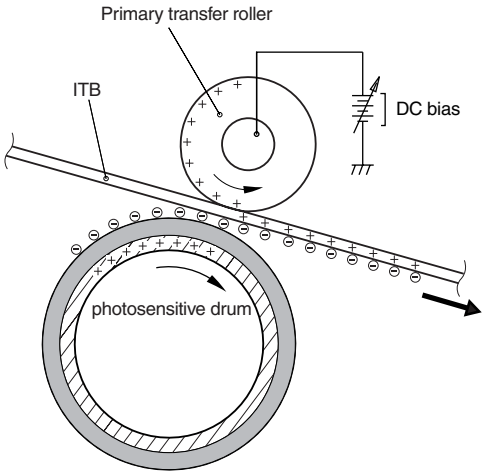
F-7-7

7.1.6 Transfer Block

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

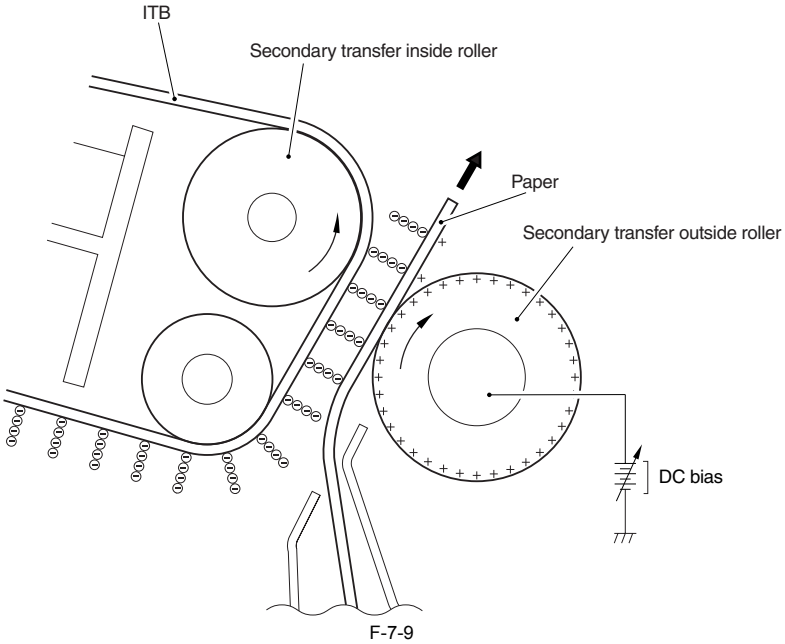
This block consists of 3 steps, in which the toner image is moved from the photosensitive drum surface to paper.

step 4: primary transfer
In this step, toner is moved from the photosensitive drum to the ITB.
A positive bias is applied to the primary transfer roller found on the inner side of the machine, thus charging the ITB to a positive potential. As a result, the negatively charged toner on the surface of the photosensitive drum moves to the positively charged ITB. This whole process is performed for all colors (Y, M, C, Bk).



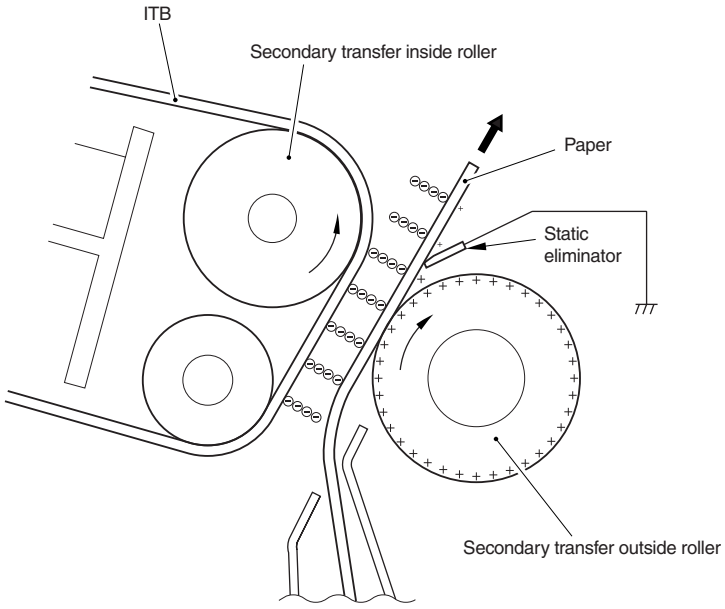
F-7-8

step 5: secondary transfer
In this step, the toner on the ITB is moved to paper.
A positive bias is applied to the secondary transfer outside roller to charge the back of paper to a positive potential. As a result, the toner on the ITB moves to the paper.
To prevent soiling of the back of paper, the secondary transfer outside roller is given a positive and then a negative bias in turns at the end of secondary transfer, thus returning the residual toner on the secondary transfer outside roller to the ITB.
Thereafter, the residual toner returned to the ITB is collected to the waste toner case in the ITB cleaning block.



F-7-9

step 6: separation
In this step, the rigidity of paper is used to separate paper from the ITB.
Thin paper has little body. The static eliminator decreases the charges on paper, thus weakening the static bonding and, consequently, facilitating separation.



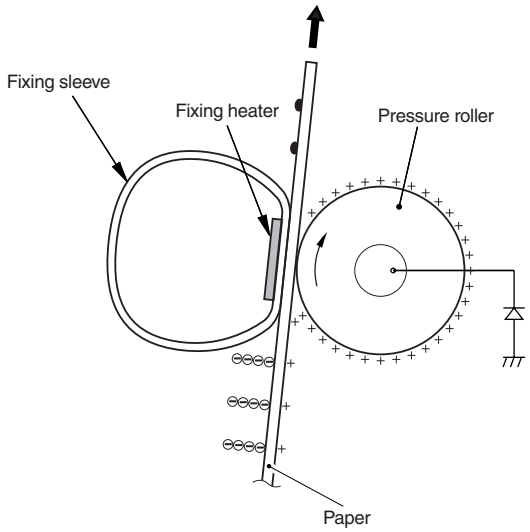
F-7-10

7.1.7 Fixing Block

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The machine uses an on-demand method, which tends to require less heat than other methods. The machine's heater heats up fast and does not require power in a standby state, with the ultimate result that the machine is characterized by a short wait time and high energy efficiency.
The machine's pressure roller has a higher potential than the fixing sleeve, thus enabling the full retention of the negatively charged toner on paper and, at the same time, preventing adhesion of toner to the fixing sleeve.

step 7: fixing
In this step, the toner on the paper is subjected to heat and pressure so that it will melt (while mixing colors) to create a permanent image.



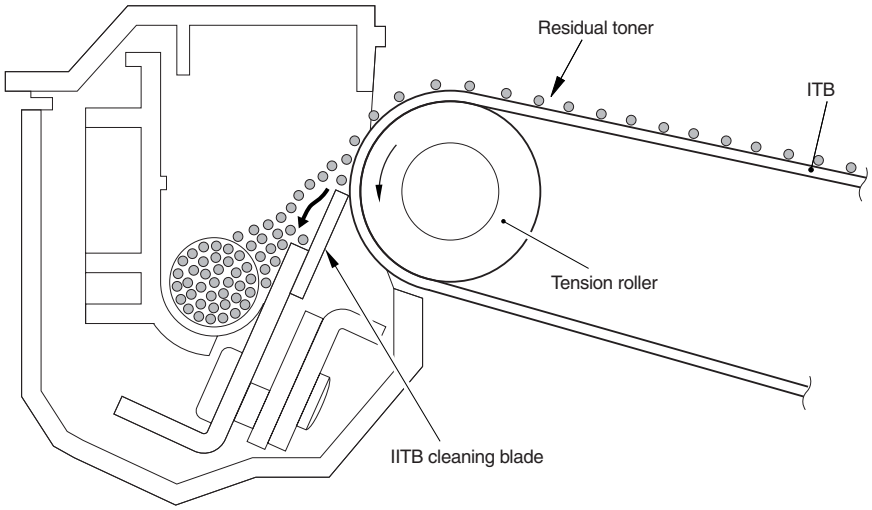
F-7-11

7.1.8 ITB Cleaning Block

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

In this block, the ITB is cleaned to prevent image faults that otherwise could occur because of soiling on the ITB.

step 8: ITB cleaning
In this step, the residual toner on the ITB is scraped by the cleaning blade of the ITB cleaning unit. The toner that has been scraped off by the blade is collected in the waste toner case found at the front left of the machine.



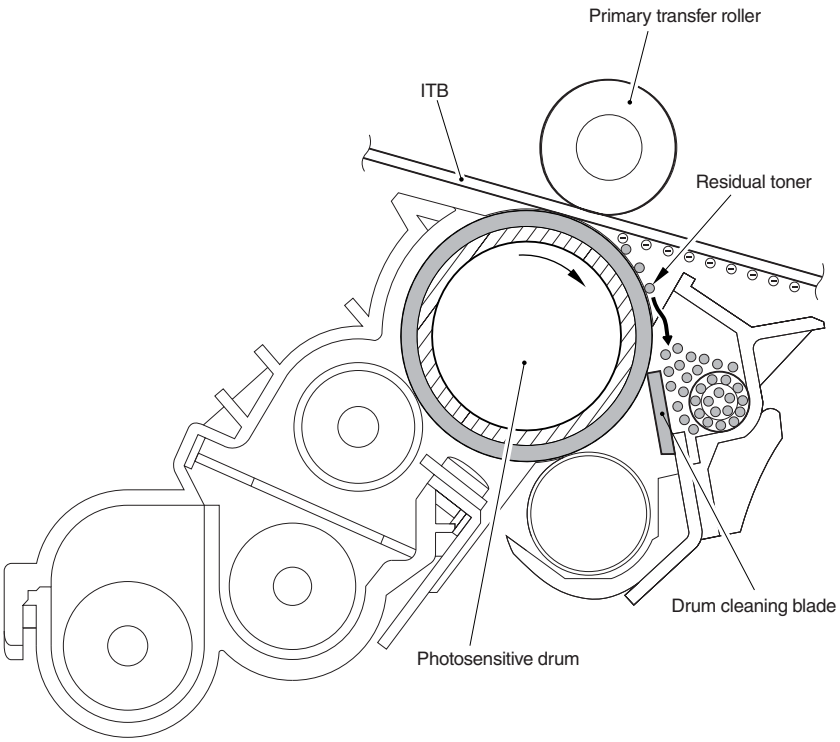
F-7-12

7.1.9 Photosensitive Drum Cleaning Block

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

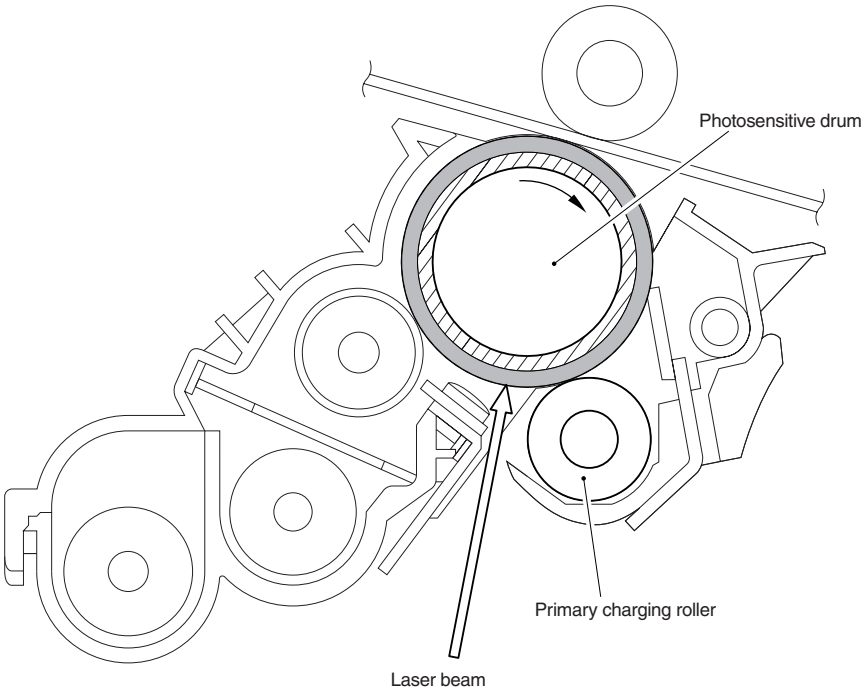
In this block, the photosensitive drum is both physically and electrostatically cleaned (by removing residual charges) to prevent image faults otherwise caused by soiling on the photosensitive drum or uneven charges remaining on the surface of the drum.

step 9: photosensitive drum cleaning
In this step, the toner remaining on the surface of the photosensitive drum is scraped off by the cleaning blade. The toner that has been scraped from the drum is collected in the waste toner case found at the left front of the machine.



F-7-13

step 10: post-exposure
In this step, the laser light from the laser/scanner unit is directed to the surface of the photosensitive drum to free the surface from residual charges in preparation for the next print job, thus preventing uneven density.
This mechanism is executed for every post rotation at the end of a job.



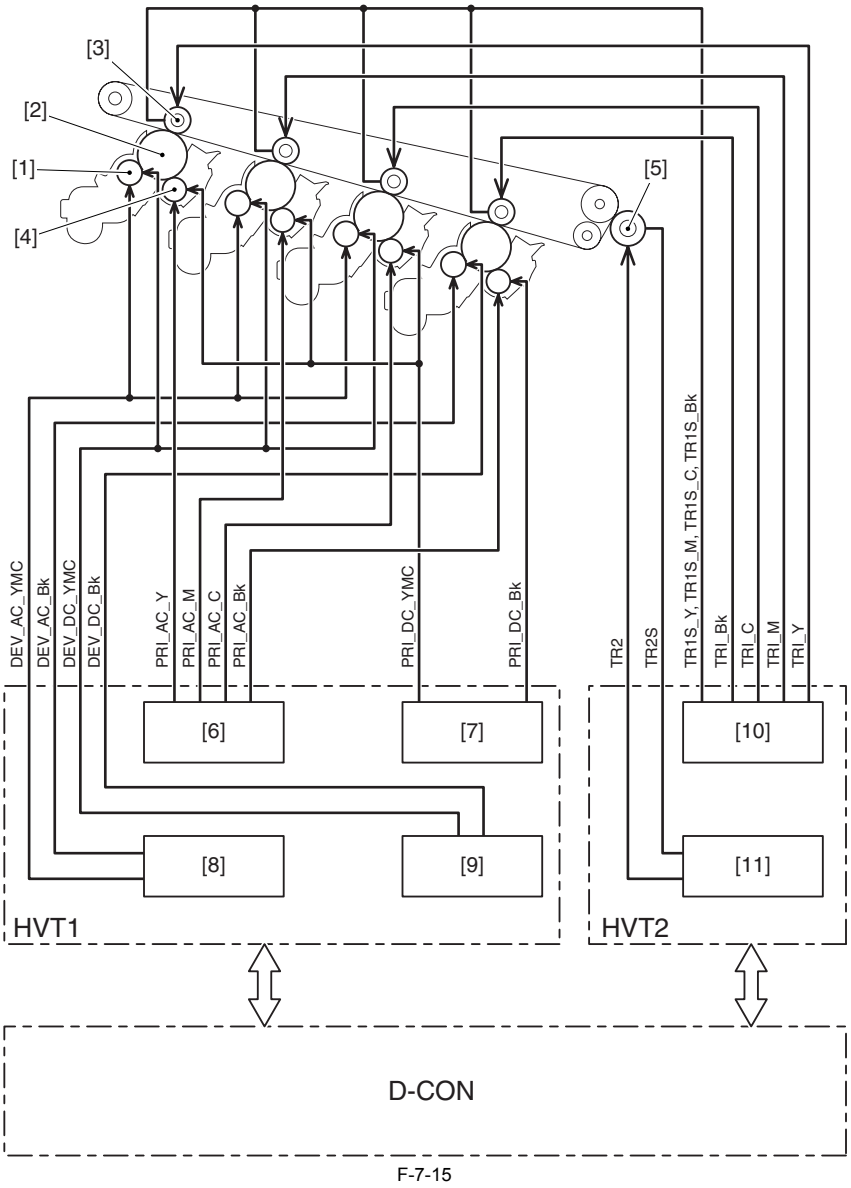
F-7-14

7.2 Driving and Controlling the High-Voltage System

7.2.1 Overview

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

This circuit works for applying bias to the primary charging roller, the developing cylinder, the primary transfer roller and the secondary transfer outer roller. These biases are generated by the control of the DC controller to HVT1 and HVT2.
See the following table for the main circuit



F-7-15

[1] Developing cylinder
[2] Photosensitive drum
[3] Primary transfer roller
[4] Primary charging roller
[5] Secondary transfer outer roller
[6] Primary charging AC high-voltage generation circuit
[7] Primary charging high-voltage generation circuit
[8] Developing AC high-voltage generation circuit
[9] Developing DC high-voltage generation circuit
[10] Primary transfer DC high-voltage generation circuit
[11] Secondary transfer DC high-voltage generation circuit

7.2.2 Generation of the Primary Charging Bias

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The primary charging bias is generated to charge the surface of the photosensitive drum to an even negative potential as preparatory work for image formation.
The bias is generated by the primary charging AC high-voltage generation circuit and the primary charging DC high-voltage generation circuit of HVT1.
The primary charging AC high-voltage generation circuit is used to generate the AC bias applied to the primary charging roller. It generates 4 types of biases (PRI_AC_Y, PRI_AC_MJ, PRI_AC_C, PRI_AC_Bk), independent among individual colors.
The primary charging DC high-voltage generation circuit is used to generate the DC bias applied to the primary charging roller. It generates 2 types of biases (PRI_DC_YMC, PRI_DC_Bk) for color and Bk.
The AC and DC biases that have been generated by these circuits are combined at such times as specified for application to the primary charging roller of the drum unit.
The level of the primary charging bias varies in keeping with the instructions from the DC controller.

7.2.3 Generation of the Developing Bias

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The developing bias is used to retain toner over the static image formed on the surface of the photosensitive drum.
The bias is generated by the 2 circuits of HVT1: developing AC high-voltage generation circuit and DC high-voltage generation circuit.
The developing AC high-voltage generation circuit is used to generate the AC bias applied to the developing cylinder, producing 2 types of biases for color and Bk (DEV_AC_YMC, DEV_AC_Bk).
The developing DC high-voltage generation circuit is used to generate the DC bias applied to the developing cylinder, producing 2 types of biases for color and Bk (DEV_DC_YMC, DEV_DC_Bk).

The AC and DC biases thus generated are combined at such times as specified for application to the developing cylinder.
The level of the developing bias varies in keeping with the instructions from the DC controller.

7.2.4 Generation of the Primary Transfer Bias

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The primary transfer bias is used to transfer toner from the surface of the photosensitive drum to the ITB.
The bias is generated by the primary transfer DC high-voltage generation circuit of HVT2. The circuit is used to provide a DC bias for application to the primary transfer roller, producing 4 independent biases for individual colors (TR1_Y, TR1_M, TR1_C, TR1_Bk). These DC biases are applied to the primary transfer roller at such times as specified.
The level of the primary transfer bias varies according to the instructions from the DC controller.
The DC controller, on the other hand, switches the voltage level of the primary transfer bias for constant voltage control according to the primary transfer current feedback signal (TR1S) arriving from the primary transfer high-voltage generation circuit.

7.2.5 Generation of the Secondary Transfer Bias

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The secondary transfer bias is used to transfer toner from the ITB to paper.
The bias may be either DC positive bias or DC negative bias generated by the DC high-voltage generation circuit of HVT2. The DC positive bias is applied to the secondary transfer roller at time of toner transfer, while the DC negative bias is applied to the secondary transfer roller at time of cleaning.
The high-voltage power supply circuit applies these secondary transfer biases (TR2) to the secondary transfer roller in keeping with a specific printing sequence as follows:

- Print Bias (DC positive bias)
It is a bias used to transfer toner from the ITB to paper as part of printing sequence. It is a DC positive bias and is applied to the secondary transfer roller.
- Sheet-to-Sheet Bias (DC negative bias)
It is a bias used to return the residual toner from the secondary transfer roller to the ITB after forming a patch image or between sheets during continuous printing. The machine applies both DC positive and negative biases to the secondary transfer roller in turns.
- Cleaning bias (DC positive /DC negative bias):
It is a bias used to return the toner sticking to the secondary transfer roller after the formation of a patch image or at power-on. It actually consists of a DC positive bias and a DC negative bias applied alternately to the secondary transfer roller.

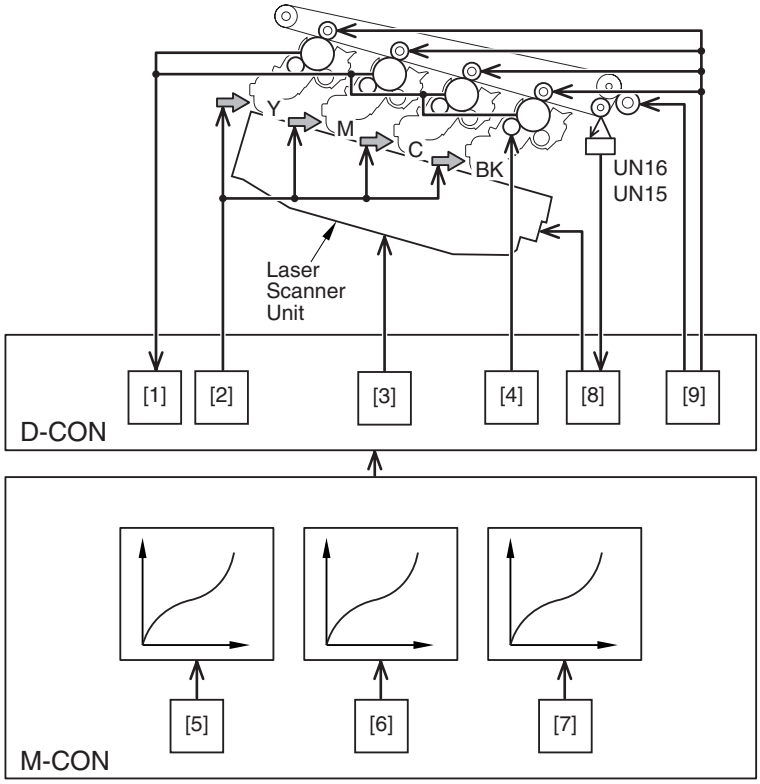
The level of the secondary transfer bias varies in keeping with the instructions from the DC controller.
The DC controller, on the other hand, switches the level of the secondary transfer bias in keeping with the secondary transfer current feedback signal (TR2S) arriving from the secondary transfer DC high-voltage generation circuit for constant voltage control.

7.3 Image Stabilization Control

7.3.1 Overview of Image Stabilization

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

To ensure an ideal image against the deterioration of parts associated with imaging otherwise occurring as a result of changes in the environment or in the machine, the following mechanisms are used:



F-7-16
T-7-10

Item	Description
[1]Drum film thickness detection	computes the film thickness of the photosensitive drum
[2]ATR control	determines the amount of toner to supply

Item	Description
[3]Color Dmax control	determines the best level of laser power
[4]Black Dmax control	determines the best level of developing bias
[5]PASCAL control	determines the best gradation table
[6]Dhalf control	determines the best gradation table
[7]Abridged Dhalf control	determines the best gradation table (abridged)
[8]Color displacement correction control	determines the correction value of color displacement
[9]ATVC control	determines the best level of transfer bias

UN16: color displacement sensor A (also serves as patch image sensor)
UN15: color displacement sensor B

7.3.2 Timing of Image Stabilization Control

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The items that are executed as part of image stabilization control differ depending on the condition of the machine (environment or deterioration of parts associated with the image formation system). The following table shows the items:

T-7-11

Condition	Items									
	Down-time (Max)	Drum film thickness detection	ATR control	Color D-max control	Black D-max control	PASCAL control	D-half control	Abridged D-half control	Color displacement control	ATVC control
Power-on	22 sec (approx.)	Yes						Yes	Yes	Yes
Drum unit replacement (w/ new)	215 sec (approx.) *1	Yes	Yes	Yes	Yes		Yes		Yes	Yes
Return from sleep state *2	22 sec (approx.)	Yes						Yes	Yes	Yes
Initial rotation	10 sec (approx.)	Yes							Yes	Yes
Printing *3	15 sec (approx.)	Yes	Yes						Yes	
Post-rotation	55 sec (approx.)	Yes	Yes		Yes		Yes	Yes		Yes
When user-specific calibration is performed (full correction)	100 sec (approx.)				Yes	Yes	Yes	Yes		Yes
When user-specific calibration is performed (quick correction)	55 sec (approx.)				Yes		Yes	Yes		Yes

*1: The down-time interval includes the time during which the drum unit rotates idly (10 sec).
*2: This item is executed when the ongoing sleep state lasts more than 8 hr (otherwise, nothing will take place).
*3: At times, ATR control and color displacement may be executed by interrupting the ongoing print job.

MEMO:
- When the user mode "auto gradation adjustment $ full adjustment" is selected, PASCAL control, D-half control and ARCDAT control are implemented in this order to adjust the image gradation density (full adjustment).
- When the user mode "auto gradation adjustment $ quick adjustment" is selected, D-half control and ARCDAT control are implemented in this order to adjust image gradation density (quick adjustment).

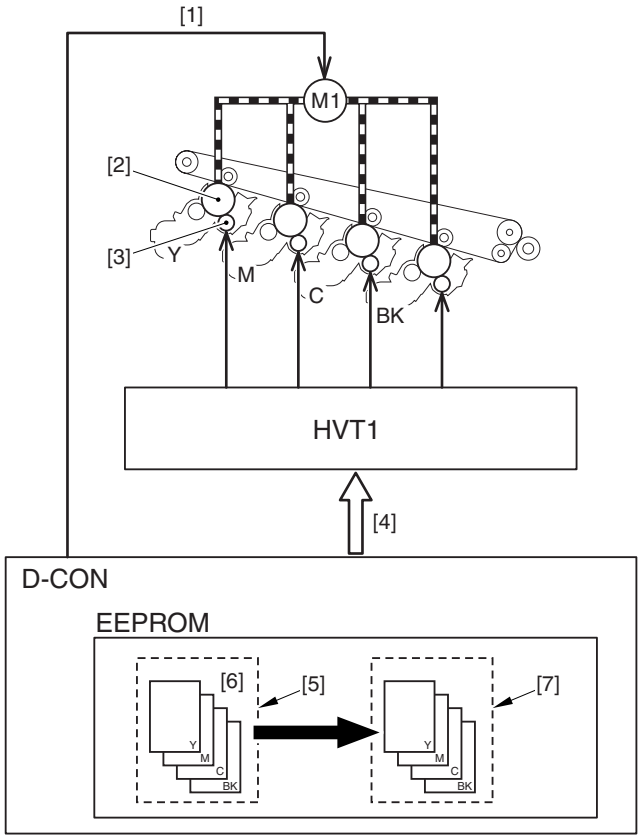
7.3.3 Drum Film Thickness Detection

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

To form an optimum image against the possible wear on the photosensitive drum, the machine checks the thickness of the drum film. The check is made for every drum (color), and the result is recorded in EEPROM of the DC controller.
The DC controller is referred when this data detects the primary charging AC bias, the primary transfer bias, and the ATR control target value.

1. Start-Up Timing
at power-on, when closing/opening the front cover, at time of printing

2. Particulars of Control
The DC controller goes through the following to detect the thickness of the drum film:
1) computes the drum count based on "length of time during which the photosensitive drum has rotated" and "length of time during which the primary charging AC bias is applied."
2) adds the count obtained in 1 above to the count stored in EEPROM.
3) identifies the count as indicating any of the following 3 in terms of the drum film thickness detection data based on the latest count obtained in 2 above: initial condition, normal condition, final condition.
4) in the event of there being a difference as the result of comparison of the latest drum film thickness data against the stored drum film thickness data, the new data is written over the existing data; in the absence of a difference, on the other hand, no write operation will take place and the new data will be discarded.



F-7-17

[1] Drum/ITB motor drive signal
[2] Photosensitive drum
[3] Primary charging roller
[4] Primary charging AC bias drive signal
[5] Internal data
[6] Drum count
[7] Drum film thickness detection data

MEMO:
The drum film thickness-related data stored in EEPROM may be either drum count or drum film thickness detection data, the drum film thickness count being internal data and used when determining bias levels.

7.3.4 ATR Control

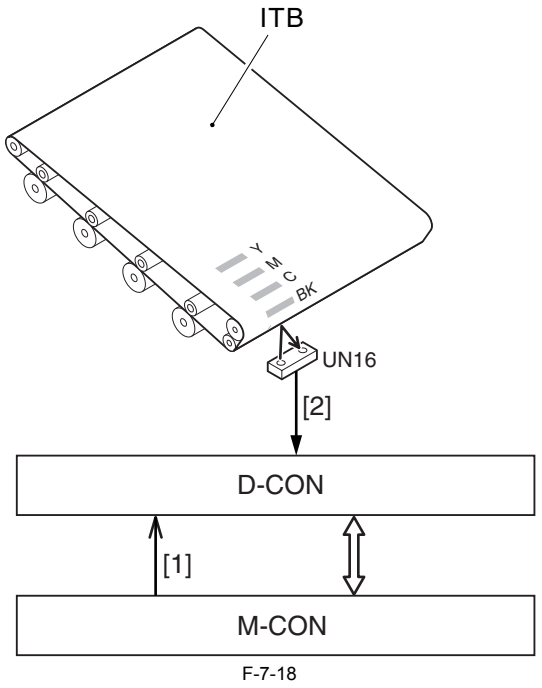
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The machine executes ATR control to supply toner so that the ratio between toner and carrier inside the drum unit may remain ideal.

1. timing for start-up
- When new drum unit is installed
- every print (video count)
- every 80-sheet (patch image reading sensor)

2. Particulars of Control
The machine computes the amount of toner to supply for each color, and supplies it to the drum unit.
The machine uses the following 2 types of data to compute toner amounts:
- Video Count (for each print)
The machine uses the video data arriving from the main controller to compute the amount of toner consumed, and makes up for it by supplying the drum unit with the same amount.
- Result of Detection by the Patch Image Read Sensor (to every 80-sheet *1)
The machine measures the toner image formed on the ITB using the patch image read sensor, and supplies the drum unit so that the density will be identical to the target density.

*1: The condition of execution is based on printing an original with an image ratio of 25%.



F-7-18

[1] Video data
[2] Result of detection by the patch image read sensor
UN16: patch image read sensor (also serves as color displacement sensor A)

This function may cause print jobs to be interrupted.
In the case of a 100 sheet print job, the job will be interrupted at 80 pages and the control will be implemented. When the control is finished, the remaining 20 sheets will be printed out in a print job.

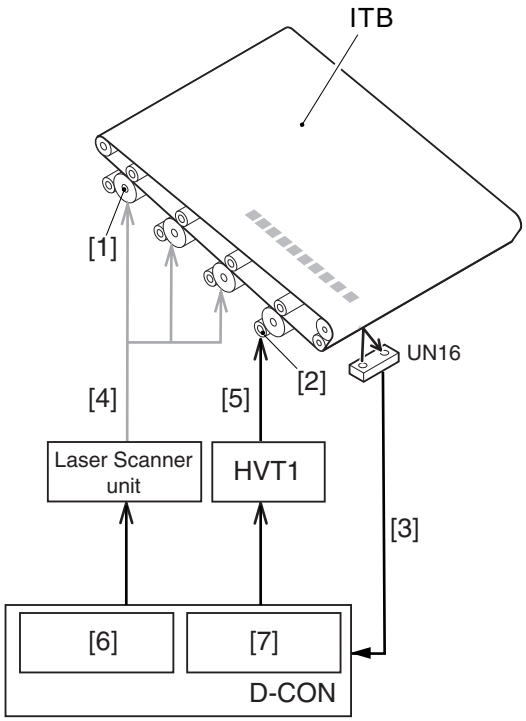
ATR-Related Error Code:
- E020-001x: outside correction range (upper limit) error 1
At time of installation or during replacement of a drum unit, the patch density data of the color in question as determined by ATR control is outside the range of correction (upper limit).
- E020-002x: outside correction range (lower limit) error 1
At time of installation or during replacement of a drum unit, the patch density data of the color in question as determined by ATR control is outside the range of correction (lower limit).
- E020-010x: outside correction range (upper limit) error 2
At time of printing, the patch density data of the color in question as determined by ATR control is outside the range of correction (upper limit).
- E020-020x: outside correction range (lower limit) error 2
At time of printing, the patch density data of the color in question as determined by ATR control is outside the range of correction (lower limit).

Detail Code (rightmost 4 characters, the 1st representing the color in question)
0: Y
1: M
2: C
3: Bk

7.3.5 D-max Control

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The machine uses D-max control to limit changes in the image density possibly occurring as the result of deterioration of the photosensitive drum or toner. The image density is corrected on the printer side.
This control consists of 2 types: color D-max and black D-max.
Color D-max is density correction of colors (Y, M, C), while black D-max is density correction of Bk.
The details of these control mechanisms are as follows:

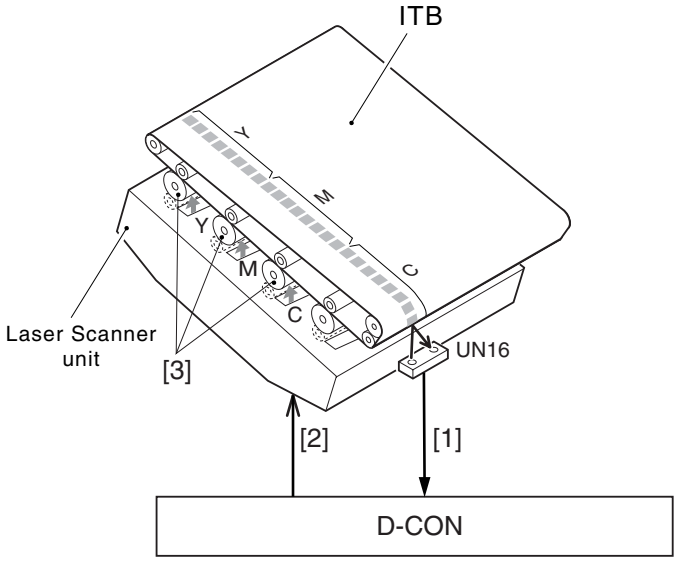


F-7-19

[1] Photosensitive drum
[2] Developing cylinder
[3] Path image data
[4] Laser output
[5] Developing DC bias
[6] Color D-max control
[7] Black D-max control
UN16: patch image sensor

A. Color D-max Control
1. Start-Up Timing
when a color (Y, M, C) drum unit is replaced with a new unit.

2. Particulars of Control
In the presence of a specific condition, the DC controller forms a patch pattern of the color in question on the ITB. Thereafter, it uses the patch image sensor to measure the density of the patch, and corrects the output of the laser light of the color in question so that the density will be identical to the target density.
The machine executes this control only for the color of the drum unit that has been replaced.

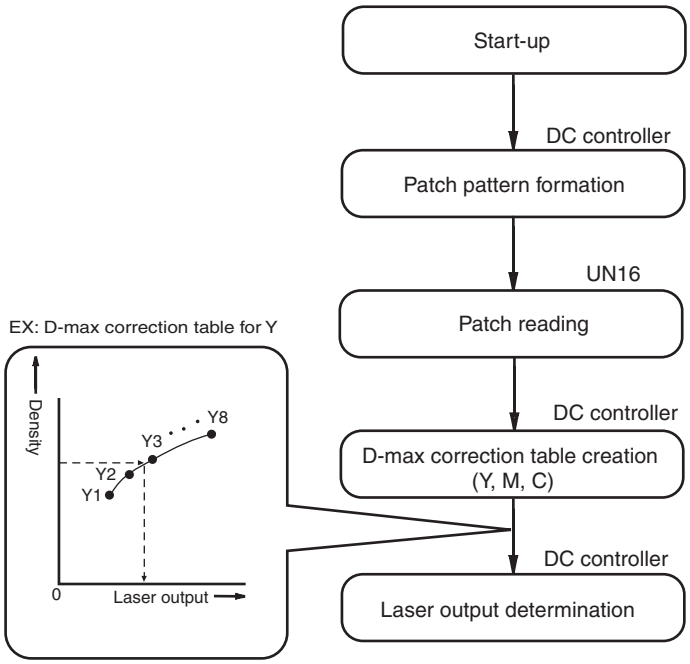


F-7-20

[1] Patch image data
[2] Laser output
[3] Photosensitive drum
UN16: patch image sensor

MEMO:
In previous machines, density is corrected by varying the developing bias of individual colors. The machine uses the same developing bias for all colors (a design consideration made to facilitate work at the factory), not being able to vary the developing bias for individual colors. To work around the fact, the machine corrects the density of individual colors (Y, M, C). It, however, varies the developing bias for Bk as in previous machines.

3. Flow of Operation



F-7-21

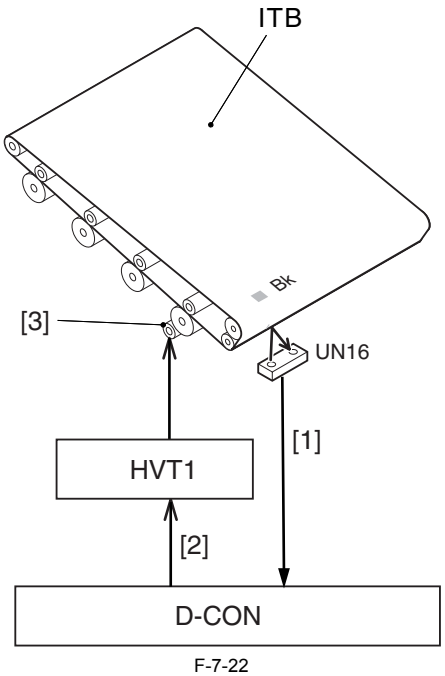
B. Black D-max Control

1. Start-Up Timing

- when the Bk drum unit is replaced with a new one
- during post-rotation executed every 1000 prints
- during execution of calibration (user mode)

2. Particulars of Control

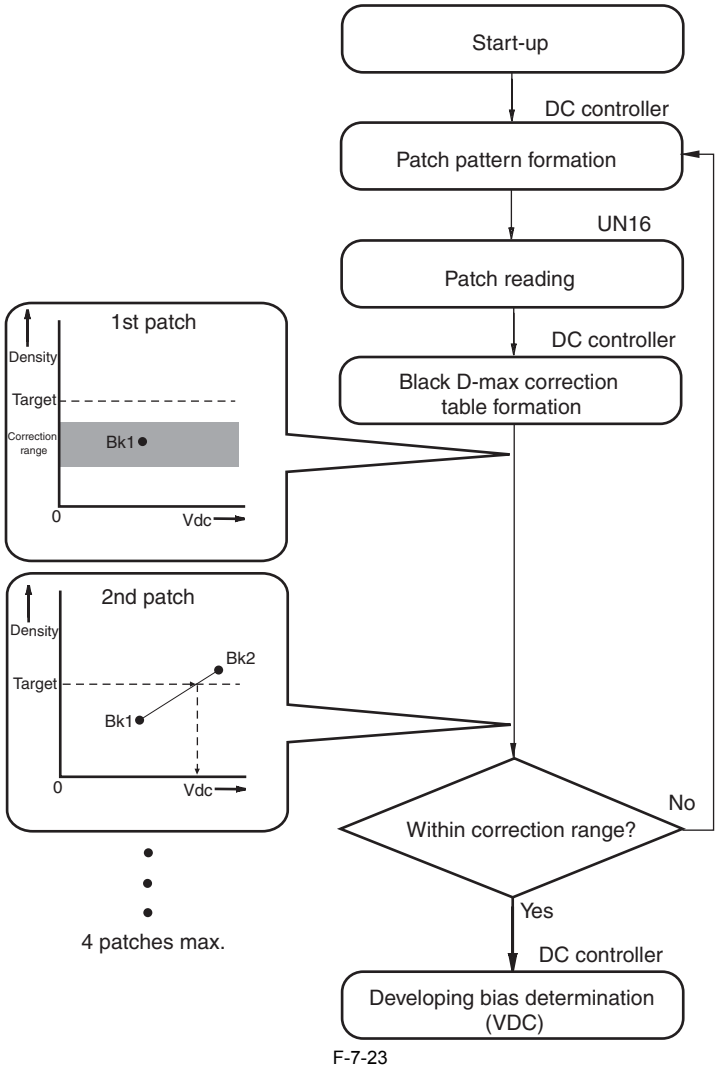
In the presence of a specific condition, the DC controller forms a patch pattern (Notes) of Bk on the ITB.
Thereafter, the DC controller uses the patch image sensor (UN16) to measure the patch density, thereby correcting the developing DC bias of Bk so that the density will be identical to the target density.



F-7-22

[1] Patch image data
[2] Developing DC bias
[3] Developing cylinder
UN16: patch image sensor

MEMO:
To reduce down-time, the machine forms only one patch on the ITB. If, however, the measured patch density is outside the range of correction, it forms an additional patch. If the density is still outside the range of correction for a second time, the machine continues until it has formed as many as 4 patches.



F-7-23

7.3.6 PASCAL Control

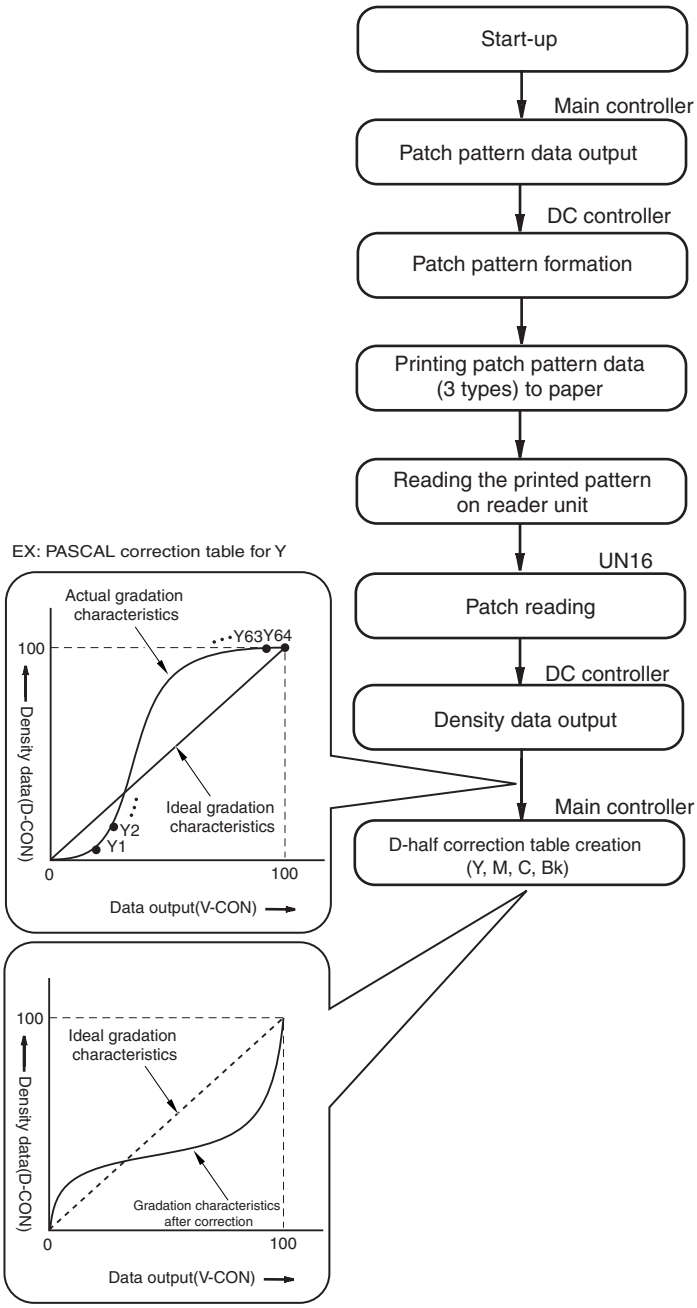
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

This is the control for the stabilization of the image gradation density characteristic. It is executed when 'auto gradation correction $ full correction' of the user mode is selected. The gradation density of the test-printed patch pattern is read by the reader, and the image density correction table is created. By executing this procedure, the correction of the image gradation density characteristic varying due to the environmental change or the deterioration of photosensitive drum.

1. Timing for Start-up
At the time of calibration (while executing 'auto gradation correction $ full correction' of the user mode)

2. Control Description
When the specified conditions are satisfied, the main controller prints three kinds of the stored patch pattern (see MEMO) on paper. Service technician sets the test print to the reader. Reader reads the gradation density of the patch pattern from the test print. After that, the main controller creates the image gradation density correction table from the gradation density data of the patch pattern read by the reader. In this control, the gradation correction for all colors is executed regardless of replaced drum cartridge.

3. Operation Flow



F-7-24

MEMO:
This control creates the following 3 types of patch patterns.
- pattern for copy (64-patch for each color)
- character pattern (64-patch for each color)
- photo pattern (64-patch for each color)

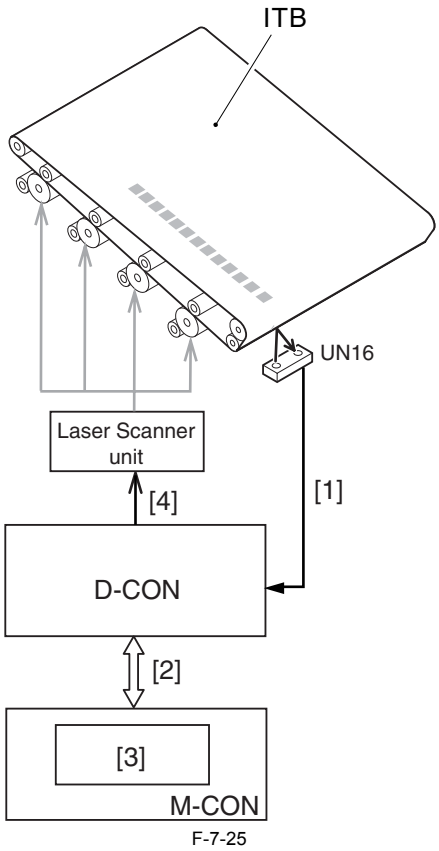
7.3.7 D-half Control

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The machine uses the main controller to execute gradation correction to enable ideal gradation characteristics.

1. Start-Up Timing
- when the drum unit is replaced with a new one
- during post-rotation executed every 1000 prints
- during execution of calibration (user mode)

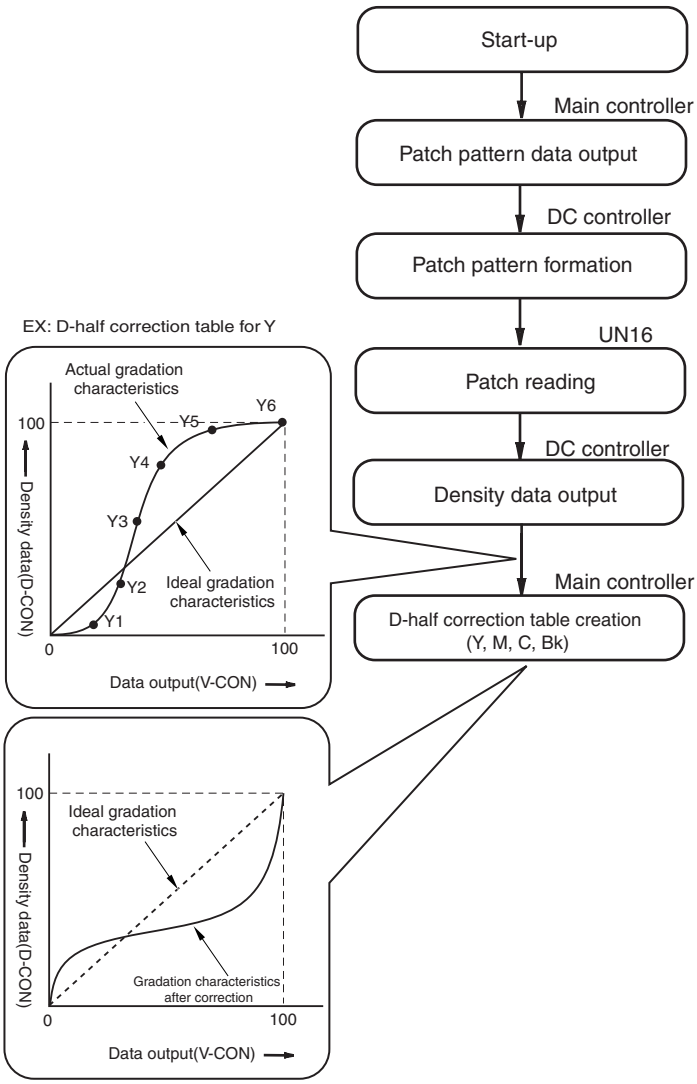
2. Particulars of Control
In the presence of a specific condition, the main controller sends the patch data of individual colors (Y, M, C, Bk) to the DC controller, which in turn forms a patch pattern of each color (Y, M, C, Bk) on the ITB. Thereafter, the DC controller uses the patch image sensor (UN14) to measure the patch pattern, and sends the result back to the main controller, which executes gradation correction based on the data so that ideal halftone images may be obtained.
In this control, the machine also forms a reference patch for use by abridged D-half control, and stores the reference data for abridged D-half control collected from UN14. (See Notes.)
The machine executes gradation correction for all colors, regardless of which drum unit may have been replaced.



F-7-25

[1] Patch image data
[2] Density data
[3] D-half control
[4] Video data
UN16: patch image sensor

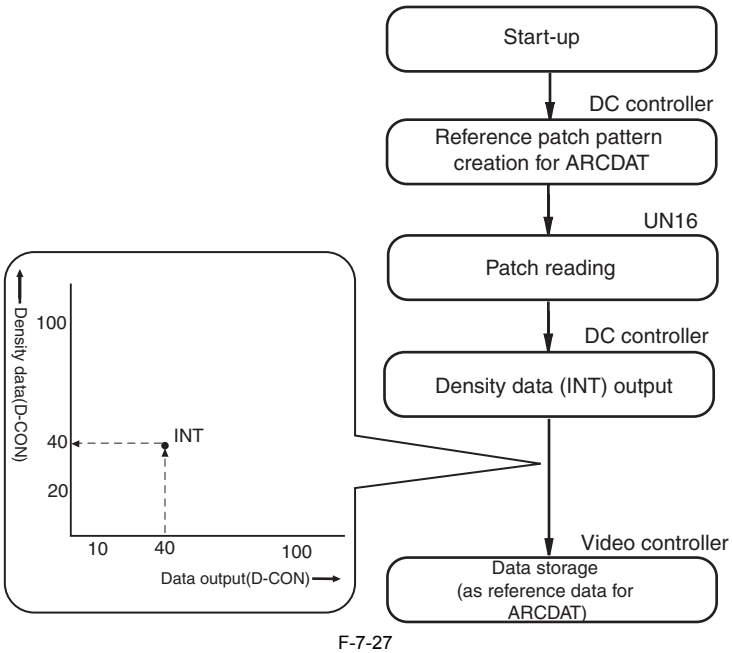
3. Flow of Operation



F-7-26

MEMO:
The patch pattern formed in the course of this control may be either of the following 3 types:
- pattern with priority on characters (6 patches in total for each color)
- pattern with priority on photo (6 patches in total for each color)
- reference pattern for abridged D-half (1 patch for each color)

Flow of Computing the Correction Value for Abridged D-half



F-7-27

7.3.8 ARCDAT Control

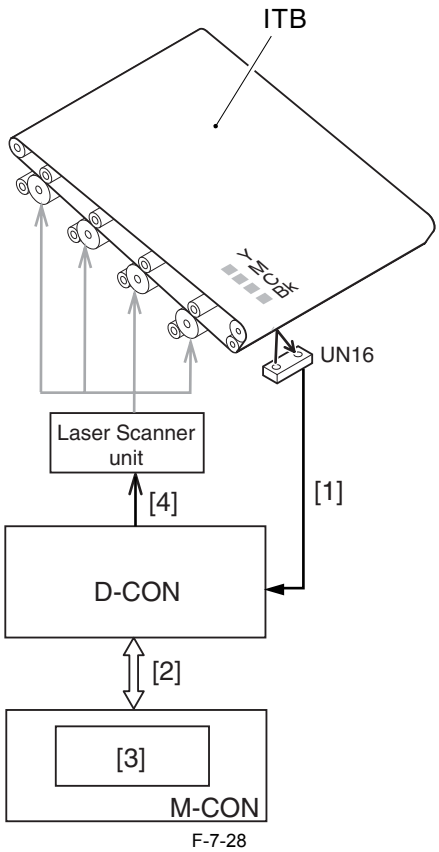
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The machine performs abridged D-half control to attain ideal gradation characteristics and to reduce downtime (by the main controller).

1. Start-Up Timing
- when the power is turned on
- during post-rotation executed every 25 prints (*1)
- during return from sleep

*1: When printing an original with an image ratio of 25% or less.

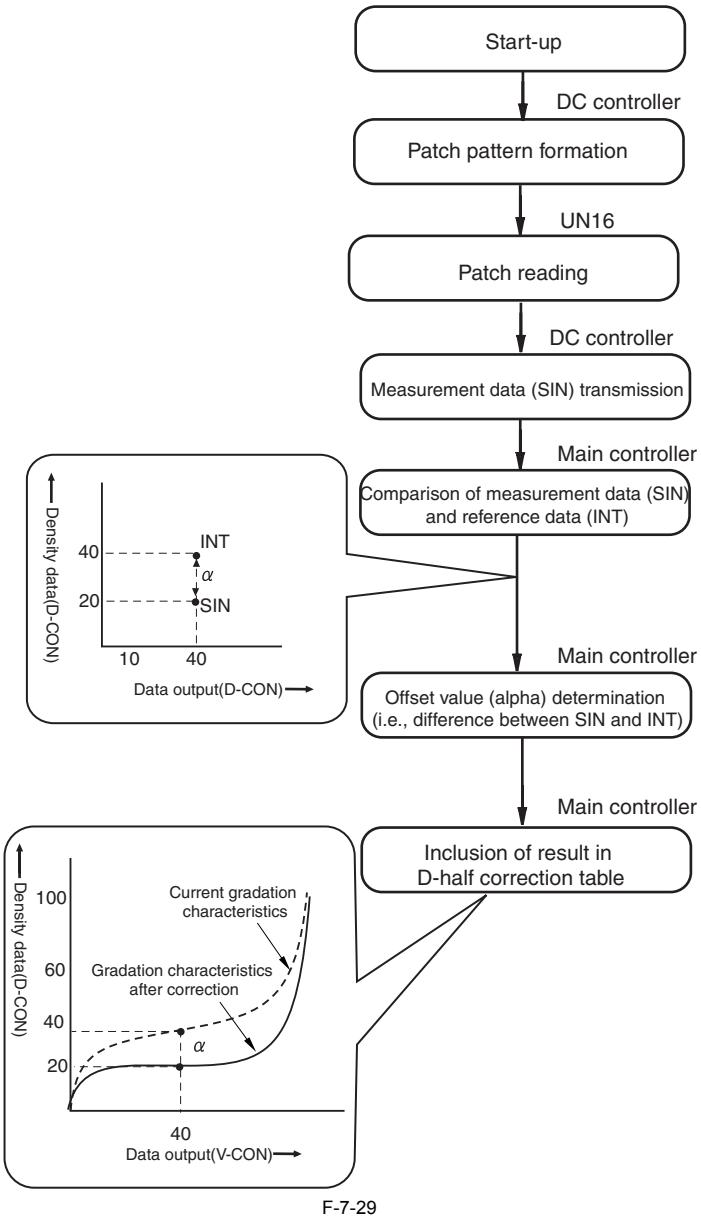
2. Particulars of Control
In the presence of a specific condition, the DC controller forms a patch pattern of each color (Y, M, C, Bk) on the ITB (a single pattern for each color, a total of 4 patterns). Thereafter, the DC controller measures the patch pattern using the patch image sensor (UN14), and sends the result back to the main controller, which in turn compares it against the abridged D-half reference data backed up in memory and uses the difference as the offset value for D-half.



F-7-28

[1] Patch image data
[2] Density data
[3] Abridged D-half control
[4] Video data
UN16: patch image sensor

3. Flow of Operation



F-7-29

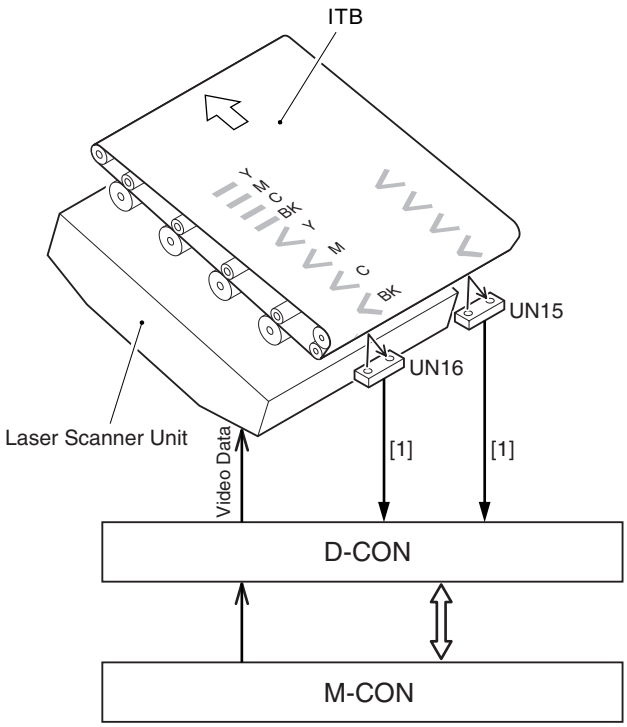
7.3.9 Color Displacement Correction Control

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The machine performs the following 3 types of control to correct displacement of color possibly caused by differences among components of its laser scanner unit and drum unit:

- main scanning write start correction
- sub scanning write start correction
- main scanning magnification correction control

The DC controller forms patterns for detection of color displacement for individual colors, and uses the color displacement sensor to detect the position of the patterns.
The DC controller computes the degree of displacement with reference to the position of the pattern detected; based on the result, the DC controller or the main controller corrects the displacement for individual colors.



F-7-30

[1] Color displacement detection signal
UN16: color displacement sensor A
UN15: color displacement sensor B
D-CON: DC controller
M-CON: Main controller

A. Start-Up Timing

- at power-on
- when the front cover is opened/closed
- during recovery from sleep
- during initial rotation upon detection of a change in the environment (condition 1)
- between sheets upon detection of a change in the environment (condition 2)
- When new drum unit is installed

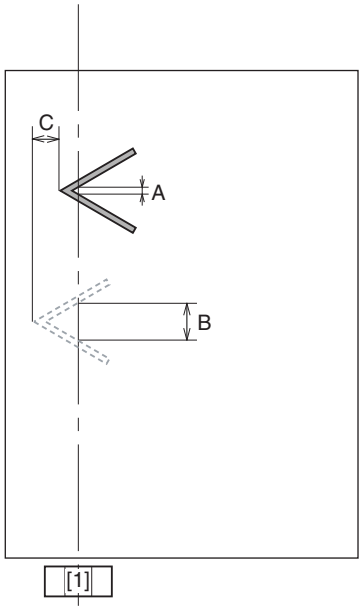
Condition 1:
as a result of comparison against the previously detected machine inside temperature, a change of 4 deg C or more exists
Condition 2:

- the standby time has lasted 10 min or more and the machine inside temperature has changed 1 deg C or more
- during continuous printing, the machine inside temperature is different from the previously detected temperature by 4 deg C or more

B. Main Scanning Write Start Correction

1. Particulars of Control

The machine writes a main scanning position detection pattern of each color on the ITB, and compares the measurement value (A) and the reference value (B) stored in the DC controller to find out the degree of color displacement (C). If displacement is detected in main scanning direction, the machine changes the timing at which writing starts in main scanning direction.



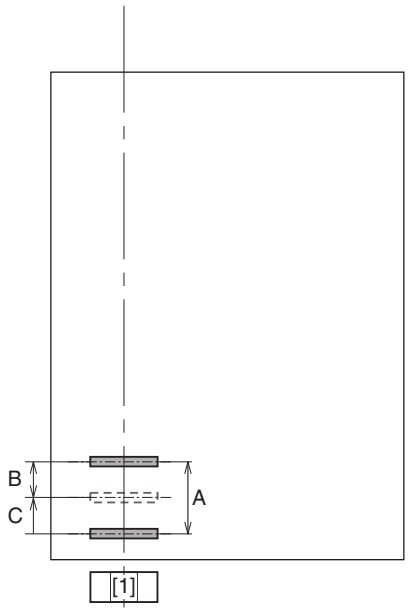
F-7-31

[1] Color displacement sensor A

C. Sub Scanning Write Start Correction

1. Particulars of Control

The machine forms a sub scanning position detection pattern of each color on the ITB, and compares the measurement (A) against the reference value (B) stored in the DC controller to detect the displacement (C) of each color. If the result indicates the presence of color displacement in sub scanning direction, the machine varies the timing at which writing starts in sub scanning direction.



F-7-32

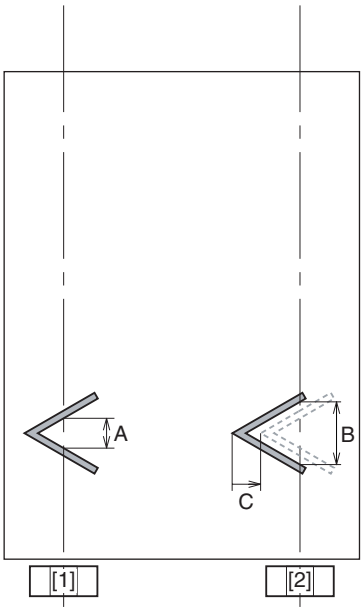
[1] Color displacement sensor A

The machine uses Y as the reference when measuring color displacement and, therefore, does not make correction for the reference color.

D. Main Scanning Magnification Correction

1. Particulars of Control

The machine forms a main scanning magnification detection pattern of each color on the left and right edges of the ITB. Thereafter, it uses the difference (C) between the measurement (A) taken at the left edge and the measurement (B) taken at the right edge to detect the magnification of each color. If there is a difference in main scanning direction, the machine increases the number of pixels in main scanning direction.



F-7-33

[1] Color displacement sensor A
[2] Color displacement sensor B

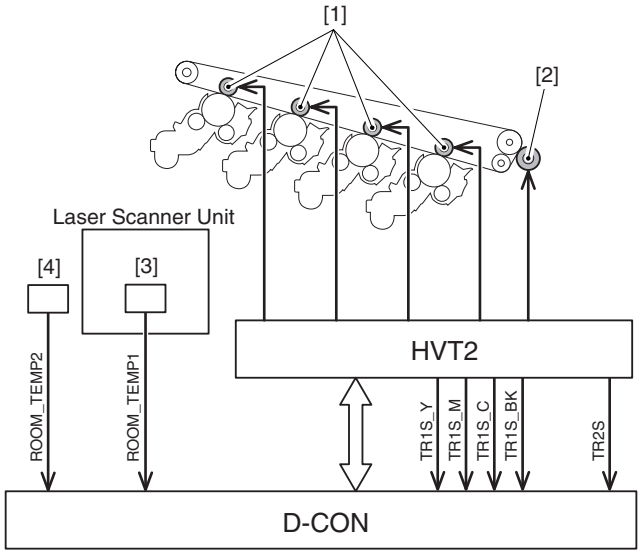
Main scanning magnification correction control computes colour displacement correction values based on the partial magnification adjustment values for the image main scanning direction. There are eight blocks for each of the four colours, Y, M, C and Bk, giving a total of 32 values, which are programmed in the service mode when the device is installed.
Whenever the laser scanner unit is replaced, all 32 of the partial magnification adjustment values for the image main scanning direction (which appear on a label affixed to new laser scanner units) must be entered into the following service modes, otherwise colour displacement will occur.
COPIER > ADJUST > LASER >FSLUT-Y 1 to 8 correction values for partial magnification correction Y blocks 1 to 8
COPIER > ADJUST > LASER >FSLUT-M 1 to 8 correction values for partial magnification correction M blocks 1 to 8

COPIER > ADJUST > LASER >FSLUT-C 1 to 8 correction values for partial magnification correction Y blocks 1 to 8
COPIER > ADJUST > LASER >FSLUT-K 1 to 8 correction values for partial magnification correction K blocks 1 to 8
Also, when the DC controller circuit board is replaced, the above values should be entered as per the details on the service label or on the P-PRINT label.

7.3.10 ATVC Control

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

In the case of transferring toner, this control has 2 types of controls: the primary transfer ATVC and the secondary transfer ATVC, to decide the most suitable transfer bias.



F-7-34

[1] Primary transfer roller
[2] Secondary transfer outside roller
[3] Machine inside environment sensor
[4] Machine outside environment sensor

1. Primary Transfer ATVC
The machine executes primary transfer ATVC when determining the primary transfer bias used to ensure the target transfer current level for transfer.

a. Timing for start-up
- when the power is ON
- during warm-up rotation
- in the case of continuous passage of paper, when the accumulated value is 200 prints from the last time ATVC execution.
- comparing from the last time ATVC execution, the initial rotation when the inside humidity is 10% or more, or when the change of humidity is 2 deg C or more.
- comparing from the last time ATVC execution, the next initial rotation of post accumulating 100 prints.
- immediately before D-half
- warm-up rotation in the case of sleep return of 8 hours or more.
- When new drum unit is installed.

b. Particulars of Control

T-7-12

Sequence	Item	Description
1	Applying the primary transfer bias	A specific bias is applied to the primary transfer roller, and HVT2 is used to detect the level of current for feedback to the DC controller.
2	Monitoring the machine inside environment sensor	The DC controller monitors the output of the machine inside environment sensor.
3	Determining the primary transfer bias	The DC controller determines the best primary transfer bias for individual colors based on the foregoing 3 sets of data.

2. Secondary Transfer ATVC
The machine executes secondary transfer ATVC when determining the secondary transfer bias so that the target transfer current may be obtained for transfer.

a. Start-Up Conditions
- at power-on
- when the drum unit is replaced with a new one
- during initial rotation
- during post-rotation executed every 1000 prints
- during recovery from sleep
- during execution of calibration

b. Particulars of Control

T-7-13

Sequence	Item	Description
1	Applying the secondary transfer bias	A specific bias is applied to the secondary transfer roller, and HVT2 is used to detect the level of current for feedback to the DC controller.
2	Monitoring the machine outside environment sensor	The DC controller computes the secondary transfer bias correction value with reference to the output of the compensatory environment sensor (i.e., the degree of moisture in paper) and print job information (i.e., paper type, 1st/2nd side).

Sequence	Item	Description
3	Determining the secondary transfer bias	The DC controller determines the best secondary transfer bias with reference to the secondary transfer current feedback and the secondary transfer bias correction value.

7.4 Special Control

7.4.1 Black band sequence

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

If continuous print is carried out while there is no toner being sent on to the ITB cleaning blade, the blade may bend backwards. This sequence feeds non-transferred toner to the cleaning blade in order to prevent this problem.

1. Timing
- When belt rotation is performed after 1,000 sheets printing.

2. Sequence details
After image formation in the normal sequence, a black band (half-tone pattern) is formed over the total width of the ITB, for a length of 10mm, with density FFh. Once the black band clears the secondary transfer roller, secondary transfer outer roller cleaning (see Note) is performed.
Further, once the black band is formed, the cumulative counter resets to the default (0).

Negative bias (TR2 signal) is applied to the secondary transfer outer roller to prevent rear soiling of the print paper, and this creates a difference in electro-potential between the ITB and the roller. As a result, residual negative toner sticking to the secondary transfer outer roller returns to the ITB and is collected in the cleaning unit by the ITB cleaning blade.

7.4.2 OHP black band sequence

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

OHP sheets are coated with a resistance adjusting agent which will adversely affect transfer efficiency wherever it sticks to the ITB. Also, if a large quantity of this agent sticks to the ITB, it may cause fusion in the transfer cleaning unit. In order to prevent any image defects or fusion that may arise from the use of OHP sheets, this sequence feeds non-transferred toner to the cleaning blade.

1. Timing
- During the page interval after 15 OHP sheets have been printed consecutively.
- Upon belt rotation after seven or more sheets have been printed since the previous OHP black band operation.

2. Sequence details
After image formation in the normal sequence, a black band (half-tone pattern) is formed over the total width of the ITB, for a length of 80mm, with density FFh. Once the black band clears the secondary transfer roller, secondary transfer outer roller cleaning (see Note) is performed.
Further, once the black band is formed, the cumulative counter resets to the default (0).

Negative bias (TR2 signal) is applied to the secondary transfer outer roller to prevent rear soiling of the print paper, and this creates a difference in electro-potential between the ITB and the roller. As a result, residual negative toner sticking to the secondary transfer outer roller returns to the ITB and is collected in the cleaning unit by the ITB cleaning blade.

7.4.3 Colour band sequence

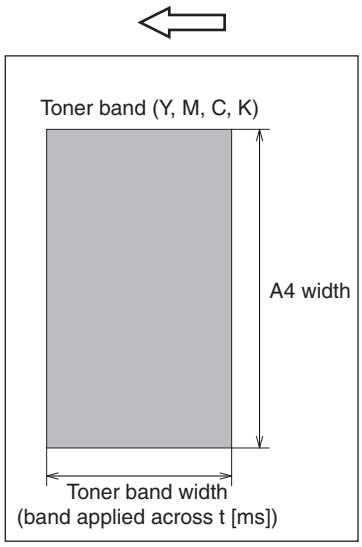
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

This sequence forms a band of toner to prevent any deterioration in developing that may occur after continued formation of low duty images.

1. Timing
When the average image duty per sheet falls below the standard value alpha (image ratio 2%).

2. Sequence details
When ATR control is performed, the cumulate image value duty since the previous ATR is extracted and, when the average image duty per sheet falls below the standard value alpha (image ratio 2%), immediately after ATR patch formation, the toner band width (*1) is calculated and an A4 width colour belt is formed on the ITB. Then, toner volume equivalent to that used to form the colour band is added to the refill counter by the video counter. This initiates toner refill, thus preventing any deterioration in developing.
Also, with this function, even if a colour band is not formed, once ATR control is performed, the average image duty standard value alpha and the cumulative counter both reset to their default values.

*1: The 1dot line (thrust A4 width) x toner band width video count is fixed so that it is equal to the per dot average image duty standard value alpha x average image duty sheet count - cumulative image duty.



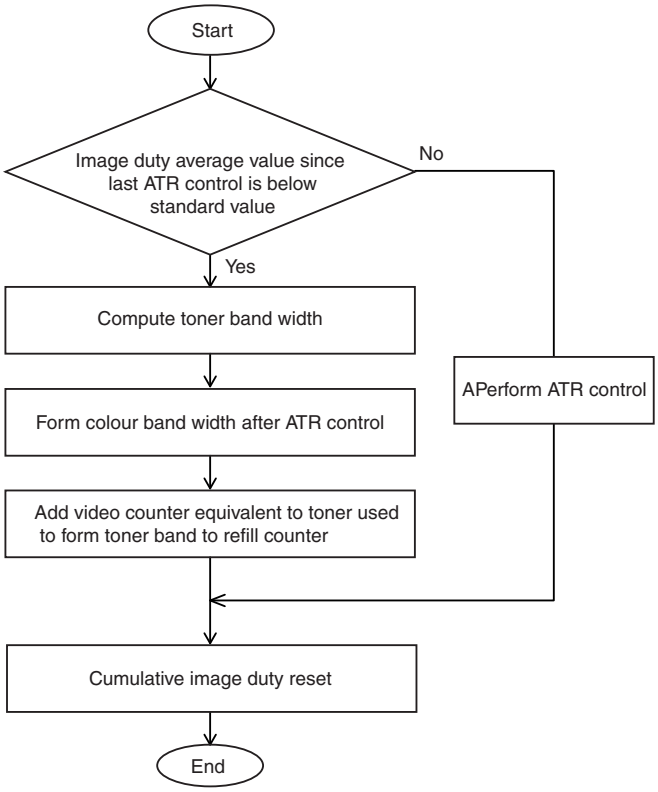
On ITB

F-7-35

Service Modes:
The per sheet average image duty standard value alpha can be changed in the following service mode.
COPIER > OPTION > BODY > DEVL - VTH
Setting range: 1% to 4%

MEMO:
Normally (when ATR control is performed between sheets, etc.), the colour band sequence is performed right after ATR control. However, when ATR is performed when post rotation is being performed, the sequences are carried out in the order ATR control to ARCDAT control to colour band sequence.

3. Control flow



F-7-36

7.5 Drum Unit

7.5.1 Drum Unit

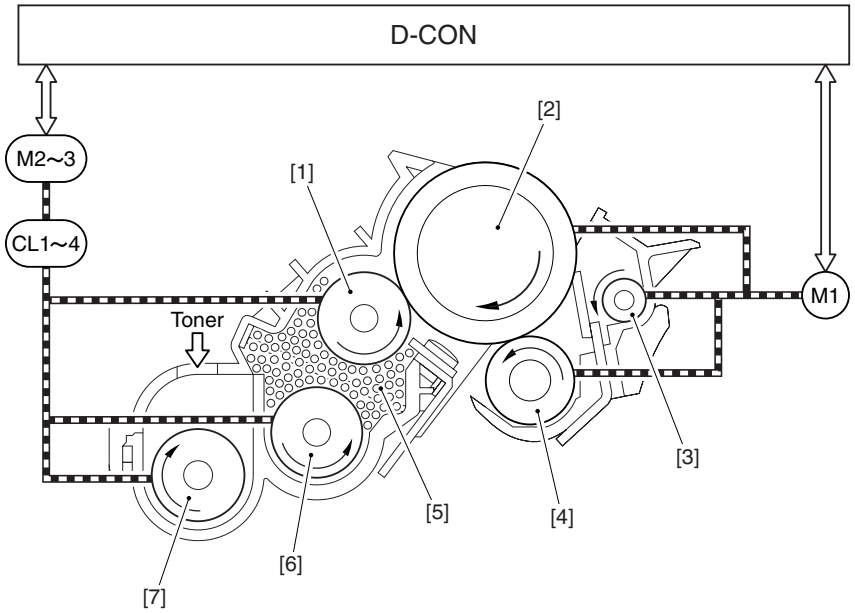
7.5.1.1 Overview

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The machine uses 4 drum units (Y, M, C, Bk), each consisting of a drum unit, developing cylinder, primary charging roller, and carrier and housed under the ITB.

The machine supplies toner as follows:
The toner coming from the hopper assembly is moved to the toner transport feedscrew A of the drum unit; then, it is moved farther by the toner transport feedscrew B while being mixed with carrier to reach the developing cylinder. During printing, a layer of toner is formed on top of the layer of carrier deposited on the developing cylinder; the toner then jumps (toner projection) to the photosensitive drum for development.
The residual toner on the developing assembly after development is scraped off by the cleaning blade, and is moved by the waste toner feedscrew for collection inside the waste toner case.

The following 3 types of electrical loads are associated with the supply path:
- motor: 2 types (development motor, drum/ITB motor)
- clutch: 1 type (developing sleeve clutch)



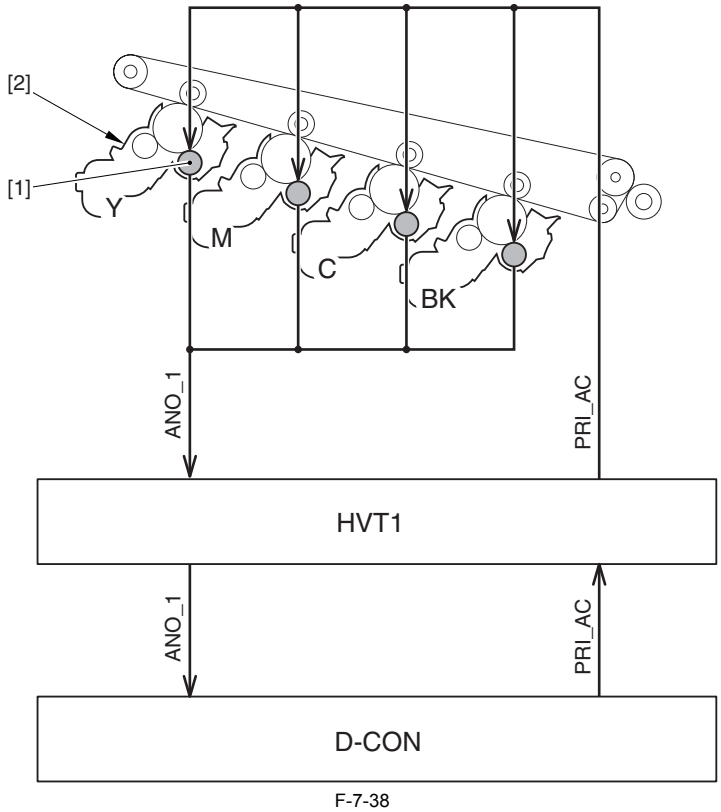
F-7-37

[1] Developing cylinder
[2] Photosensitive drum
[3] Waste toner feedscrew
[4] Primary charging roller
[5] Carrier
[6] Toner transport feedscrew A
[7] Toner transport feedscrew B
M1: drum/ITB motor
M2 and M3: development motor
CL1 through CL4: developing sleeve clutch

7.5.1.2 Detecting the Presence/Absence of the Drum Unit

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The machine uses its DC controller to detect the presence/absence of a drum cartridge with reference to the primary charging AC bias detection signal (ANO_1). The machine executes the detection when the power is turned on or when the front cover is closed, causing the DC controller to check the level of current of ANO_1 for individual drum unit.
If the result of detection indicates a level of the ANO_1 signal above a specific value, the DC controller will assume the absence of the unit in question, and at the same time, notifies 'the absence of drum unit' on the touch panel.



F-7-38

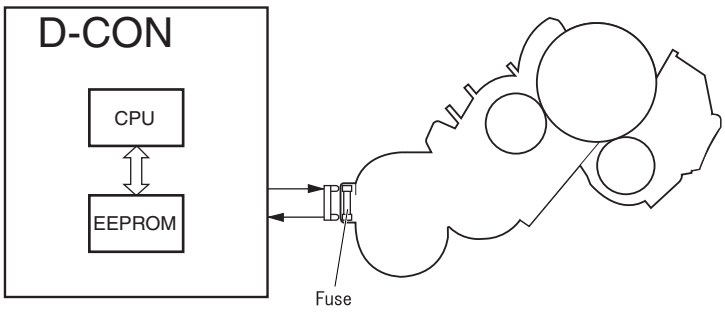
[1] Primary charging roller
[2] Drum unit

7.5.1.3 Identifying a New/Old Drum Unit

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

This device does not have memory in the drum unit so, when a new drum is mounted, the drum life counter value stored in the printed needs to be reset.
The device detects old and new drum units, so that the counter can be reset.

The detection is performed by the DC controller CPU monitoring the fuse detection signal.
When the CPU detects that a new drum unit has been mounted, it outputs a fusing signal and blows the fuse on the drum unit. At the same time, the drum life counter resets to 0.

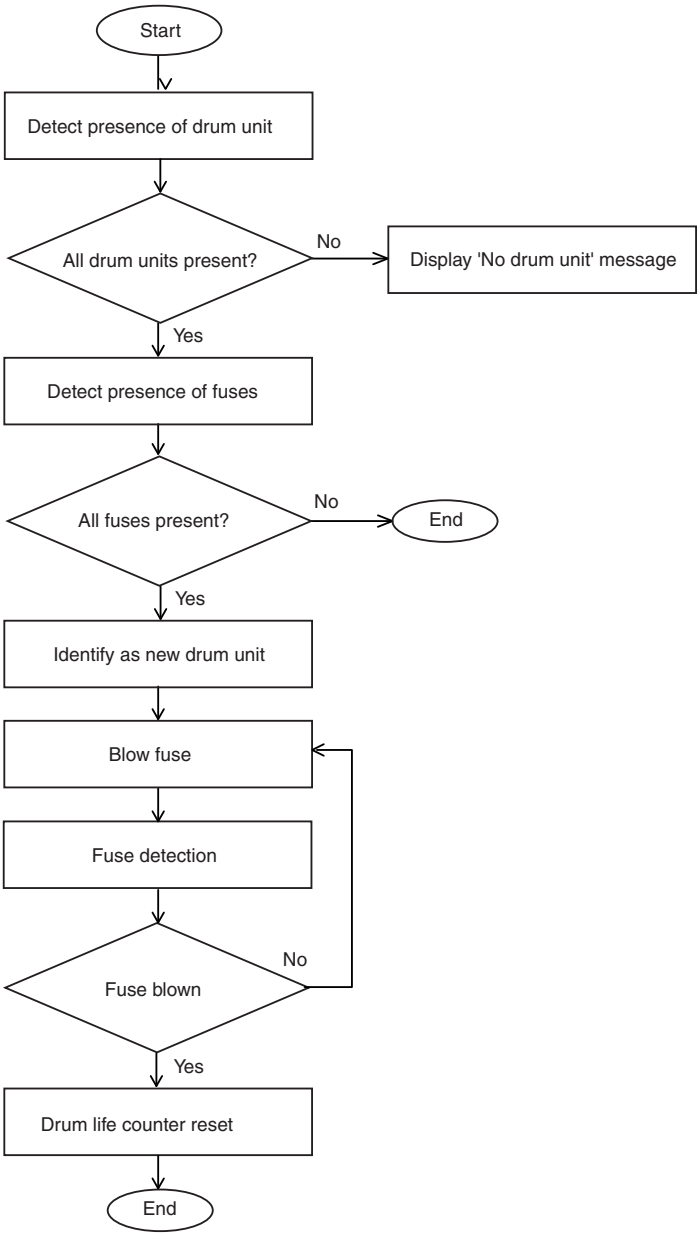


F-7-39

The following shows the timing at which the machine executes the detection and the flow of detection:

1. Timing of Detection
at power-on, after the front cover is opened/closed

2. Flow of Operation



F-7-40

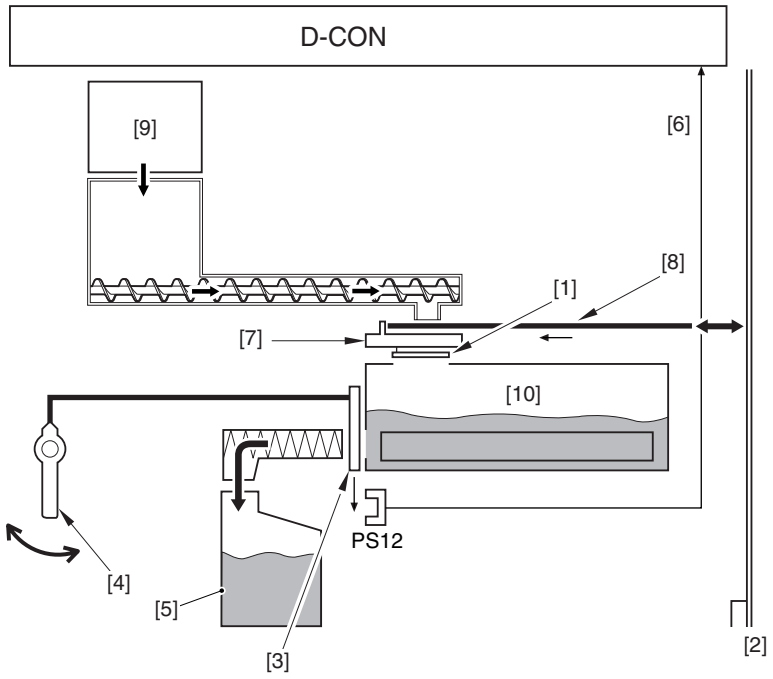
⚠
Do not replace drum units with new ones unnecessarily, in order to check function operations during service, etc. The device blows the drum fuse as soon as it detects a new drum unit and resets the drum life counter to 0. Even if the old drum unit is replaced immediately, the drum life counter will increment as a new drum unit.

Service Mode:
COPIER > FUNCTION > INSTALL > AINR-OFF
Invalidates drum initialisation that is performed when a new drum unit is installed. Also, the fuse is not blown, as it would usually be after drum initialisation is completed.
This mode would be used to replace a drum unit temporarily in order to check image quality, for example when trying to trace the cause of a problem.
0: Initialisation carried out for new unit. Fuse blown. (Default)
1: No initialisation for new unit. Fuse not blown.
Further, this service mode should be set to [1] only when necessary for service. After the service is complete, the setting must always be returned to [0].

7.5.1.4 Opening/Closing the Toner Shutter

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The device is fitted with two toner shutters (the toner refill shutter and the waste toner shutter) to prevent toner soiling from the toner refill inlet or the waste toner outlet when a drum unit is being removed or replaced.
These shutters are not motor driven but are opened and closed manually.
The toner refill shutter is opened/ closed by means of the position of the manually operated lock slide on the drum unit. When the slide is in the lock position, the toner refill shutter is open and when the slide is in the unlock position, the toner refill shutter is closed.
The waste toner shutter is opened/ closed by means locking and unlocking the manually operated lock lever on the process unit. When the lever is in the lock position, the waste toner shutter is open and when the lever is in the unlock position, the toner refill shutter is closed.



F-7-41

[1] Toner refill shutter
[2] Rear main plate
[3] waste toner shutter
[4] lock slide on the drum unit
[5] Waste toner case
[6] Waste toner discharge shutter open/closed detection signal
[7] Drum unit lock slide
[8] Bar
[9] Toner vessel
[10] Drum unit
T-CRG: toner container
D-CRG: drum unit
PS12: waste toner discharge shutter open/closed sensor

Error Code:
- E990-0000 (waste toner transport shutter error)
PS12 (waste toner shutter open/close detection sensor) output is H when waste toner shutter is open.
When the output of the abolition toner shutter opening and shutting detection sensor doesn't become "H" when it WMUPR period after the sleep returns after eight hours or more pass, the door opening and shutting is detected or main power switch turns on, the error is generated.

7.6 Toner Container

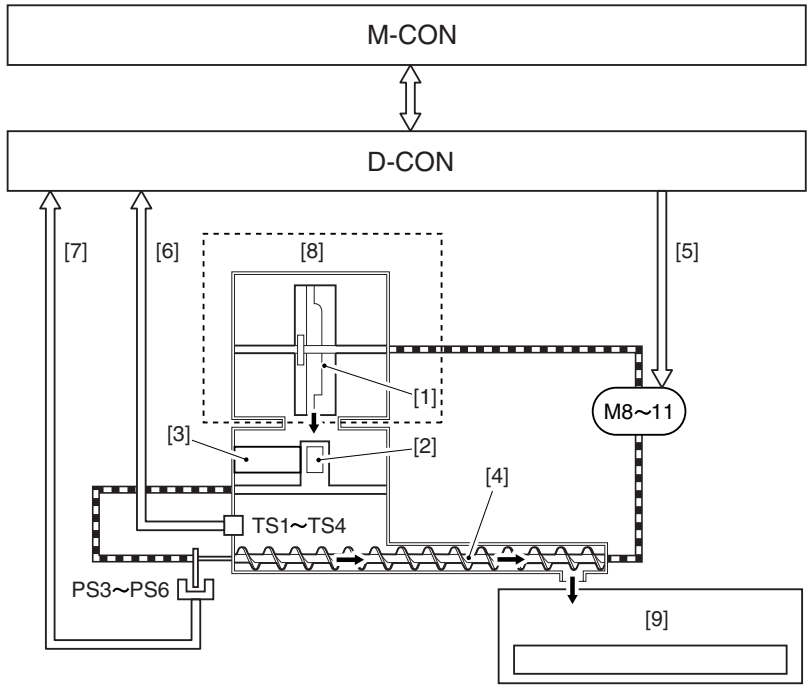
7.6.1 Overview

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

There are four toner retainers for Y, M, C and Bk. The retainer for each color is composed of toner and a stirring plate.
There is a hopper assembly under the toner retainer. There are an agitating plate, scraping spring and toner feed screw in the hopper assembly.

Next is the explanation of the toner feed route.
After a toner retainer is set to the main body, the toner is sent to the hopper assembly. The toner sent to the hopper assembly is fed to the drum unit by the toner feed screw.
The electric load used for the feed route is the following three varieties and twelve loads.

- Motor: One variety, four motors used (toner feed motor)
- Sensor: Two varieties, eight sensors used (toner feed level sensor, toner residual level sensor)



F-7-42

[1] Stirring plate
[2] Agitating plate
[3] Scraping spring
[4] Toner feed screw
[5] Toner feed motor drive signal x4
[6] Toner sensor detection signal
[7] Toner feed level signalx4
[8] Toner container
[9] Drum unit
M8 through M11: Toner feed motor
PS3 through PS6: Toner feed level sensor
TS1 through TS4: Toner residual level sensor (piezosensor)

7.6.2 Supplying Toner

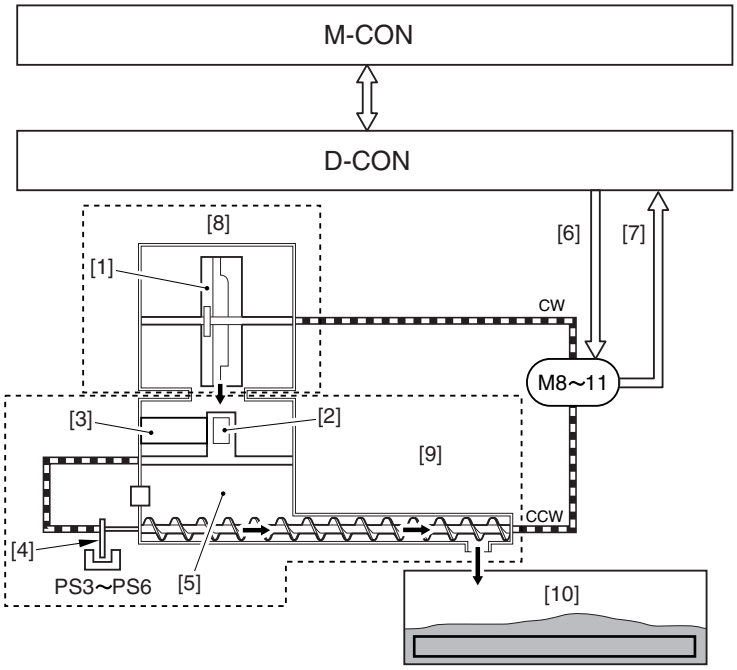
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The toner for each color is fed from the toner retainer, via the hopper assembly, to the drum unit.

1. Toner feed control operation
There are two kinds of toner feeding, one is 'hopper feeding' from the toner retainer to the hopper assembly and another is 'drum feeding' from the hopper assembly to the drum unit.

- Hopper toner refill
When the toner container is set in the main unit, the toner falls automatically into the hopper.
Also, during toner refill, the toner refill motors (M8 to M11) rotate forwards, causing the stirring plate and stirring spring to rotate, making it easier for the toner to fall out.

- Drum unit toner refill
Drum feeding is executed by the toner feed motor (M8 to M11). By the negative rotation (CCW) of the toner feed motor (M8 to M11), the agitating plate, the scraping spring and the toner feed screw are activated, and the toner on the hopper assembly is feed to the drum unit.
The above operations are controlled by the DC controller. The DC controller computes the amount of toner used from the ATR control results, uses this information to judge how long the toner refill motor should be driven, and thus supplies the required amount of refill toner to the drum.

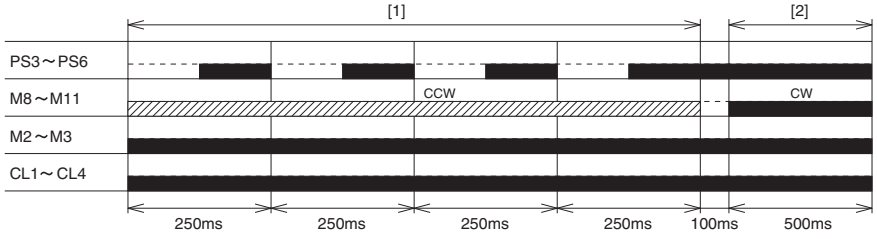


F-7-43

[1] Stirring plate
[2] Agitating plate
[3] Scraping spring
[4] Sensor flag
[5] Toner feed screw
[6] Toner feed motor drive signal
[7] Toner feed motor error detection signal
[8] toner container
[9] drum unit
[10] Hopper assembly
M8 and M11: Toner feed motor
PS3 through PS6: Toner feed level sensor

2. Toner level detection
To execute correct toner feeding, this machine has a toner feed level sensor (PS3~PS6).
This sensor detects the sensor flag mounted on the shaft of the feed screw. This sensor flag executes reciprocating movement by the drive of the toner feed motor. It is the structure that the toner feed screw rotates and the specified amount of toner is fed to the drum unit when the sensor flag moves back and forth once.
At the time of the toner feeding, DC controller monitors this sensor while driving the toner feed motor. The toner feed motor is stopped when the toner feeding is completed. By executing this, the toner feeding is correctly implemented.

The following is a timing chart depicting when 4 A4 full-color prints are made (with an image ratio of 40%):



F-7-44

[1] Drum supply
[2] Hopper supply
PS3 through PS6: Toner feed level sensor
M8 through M11: Toner feed motor

Error code:
E025-0000: Y developing assembly supply error
E025-0001: M developing assembly supply error
E025-0002: C developing assembly supply error
E025-0003: Bk developing assembly supply error
Any of the foregoing errors is identified when there is no change in the output of a specific sensor (PS3 through PS6) used for a particular developing assembly.

Reference:
While toner is being supplied, the toner supply motor (M8 through M11) is rotating counterclockwise (CCW). In other words, if all is normal, the toner supply feedscrew will rotate, thus causing the output of PS3 through PS6 to change.

E025-0000: Y hopper supply error
E025-0001: M hopper supply error
E025-0002: C hopper supply error
E025-0003: Bk hopper supply error
Any of the foregoing errors will be identified in response to a change in the output of a specific sensor (PS3 through PS6) of a specific developing assembly.

Reference:

If all is normal, the toner supply motor (M8 through M11) rotates clockwise (CW). If something goes wrong and the motor rotates counterclockwise (CCW), however, the toner supply feedscrew will rotate to cause a change in the output of PS3 through (with the machine assuming malfunction of the toner supply motor).

E021-0000: Y/M development motor error
E021-0001: C/Bk development motor error
Any of the foregoing errors will be identified if a motor ready state fails to occur 3 sec or more after the start of the development motor.

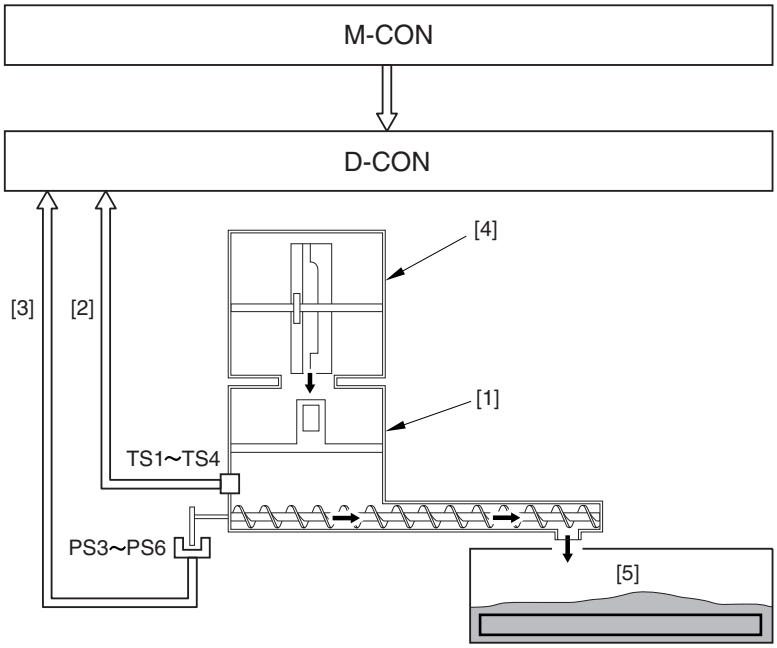
E021-0100: Y/M development motor error
E021-0101: C/Bk development motor error
Any of the foregoing errors will be identified if a motor ready state remains for 3 sec or more while the development motor is at rest.

3. Toner recovery control
In the case that piezo sensor detects the toner absence, it executes toner recovery control when; installing machine, activating machine power (in the case of detecting toner absence), the front door (of the machine) is opened, and during image formation (in the case of detecting toner absence).
Toner recovery control makes the stirring plate (inside TCRG) rotate (drive) for a specified time, and also makes the toner (inside TCRG) transfer inside of the hopper. Thanks to this control, the toner density (inside the hopper) is stabilized, and the toner inside TCRG can be efficiently used up

7.6.3 Detecting the Level of Toner

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

To detect the toner residual level of the hopper assembly for each color, this machine uses the following two kinds of detecting methods.
- Detection by the piezosensor
- Detection by toner refill quantity detection sensor



F-7-45

[1] Hopper assembly
[2] Toner detection signal
[3] Toner refill quantity detection signal
[4] drum unit
[5] toner container
TS1 through TS4: toner sensor (piezoelectric sensor)
PS3 to PS6: Toner feed level sensor

1. Detection by piezosensor
This is the detection for the presence or absence of the toner on the hopper assembly by the piezoelectric-vibrating piezosensor (TS1~4) mounted on the lower area of the hopper assembly. It is executed at power ON, after the hopper assembly feeding and during the toner recovery control (hopper assembly forced feeding). Piezosensor executes one set (sixteen times of reading) and judges the toner presence/absence based on the toner ratio at that time.

Toner absence: When the read value is judged as toner absence twelve times or more out of sixteen times
Toner presence: When judged as toner absence eight times or less out of sixteen times

The result of this detection is sent to DC control roller.
If the toner residual level is less than the specified value, DC controller notices two kinds of messages (toner absence notice, toner absence) to video controller.
The following is the relationship between the display message and the toner residual level.

T-7-14

Message type	Message Descriptio	Toner Level	Detected by:
Toner absence notice	"Black toner is low. Replacement not yet needed."	5%	video count
	"Yellow toner is low. Replacement not yet needed. "		
	"Magenta toner is low. Replacement not yet needed."		
	"Cyan toner is low. Replacement not yet needed."		
Abcence of toner	"Replace toner container. (Black)"	0%	piezo sensor
	"Replace toner container. (Yellow) "		
	"Replace toner container. (Magenta) "		
	"Replace toner container. (Cyan) "		

2. Detection by toner refill quantity detection sensor
This detection sequence works out the quantity of remaining toner from the outputs of the toner refill quantity detection sensors (PS3 to 6) and displays the quantity on the touch panel in units of 1%. The sequence is performed when power is turned ON, upon image formation (for each 1% of consumption), when toner has run out (0% notification) or when the toner status changes from no toner to toner present.

When toner is absence, the printing operation of the main body is stopped.

The toner feed level per one block varies, so the toner residual information is just a target. When the toner residual becomes 1% or less, the residual information is not displayed on the touch panel and 0% is displayed at the time of the toner absence.

When toner is absence, the printing operation of the main body is stopped.

The toner feed level per one block varies, so the toner residual information is just a target. When the toner residual becomes 1% or less, the residual information is not displayed on the touch panel and 0% is displayed at the time of the toner absence.

7.6.4 Toner Container Detection

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The device does not have toner container detection.
Even if there is no toner container in the device, there will be residual toner in the refill screw, etc., so printing can continue for a few more sheets. If printing is continued for just a few sheets, there should be no problem as regards image quality.
Then, the piezo-sensor that carries out the remaining toner quantity detection will detect toner out and will stop the print operation.

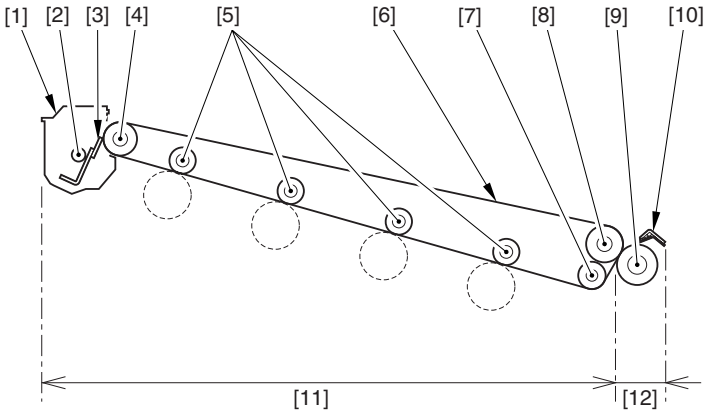
7.7 Transfer Unit

7.7.1 Outline of the Transfer Unit

7.7.1.1 Overview

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The transfer assembly is divided into the primary transfer block and the secondary transfer block.
The primary transfer block serves to move toner from the photosensitive drum to the ITB, while the secondary transfer block functions to move toner from the ITB to print paper.
The transfer assembly consists of the following components: ITB cleaning unit, ITB, primary transfer roller, primary transfer roller, secondary toner inside roller, tension roller, secondary transfer outside roller.



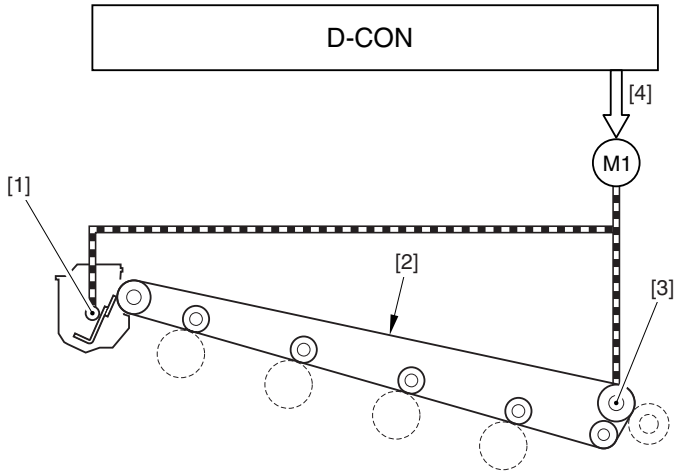
F-7-46

[1] ITB cleaning unit
[2] ITB cleaning feedscrew
[3] ITB cleaning blade
[4] Tension roller
[5] Primary transfer roller
[6] ITB
[7] Idler roller
[8] Secondary transfer inside roller
[9] Secondary transfer outside roller
[10] Secondary transfer static eliminator
[11] Primary transfer block
[12] Secondary transfer block

7.7.1.2 Primary Transfer Block

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The primary transfer block uses the drum/ITB motor (M1) to rotate the secondary transfer roller and the ITB cleaning feedscrew. The drive of M1 is controlled by the DC controller.
The following describes the major control mechanism associated with the primary transfer block:



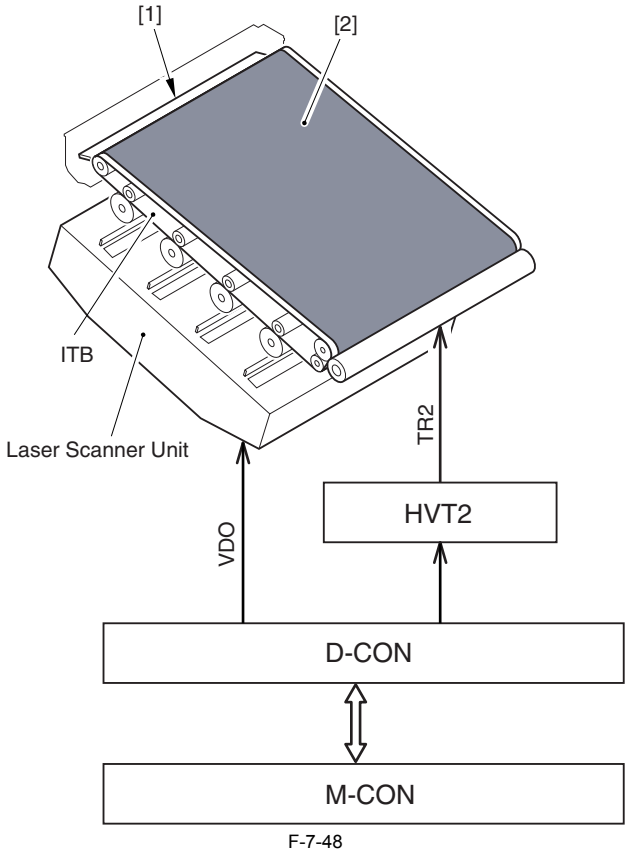
F-7-47

[1] ITB cleaning feedscrew
[2] ITB
[3] Secondary transfer inside roller
[4] Drum/ITB motor drive signal
M1: drum/ITB motor

7.7.1.3 ITB Soiling Removal Sequence Control

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

This controls for removing fingerprint that was left on ITB in the case that users touch the ITB by mistake (e.g., jam removal). This is controlled by the DC controller. In accordance with user mode (cleaning of inside the machine) , the DC controller removes fingerprints that was left on ITB by executing the following operations.



F-7-48

[1] ITB cleaning blade
[2] Bk halftone pattern

1. Particulars of Operation
1) The machine forms a Bk halftone pattern on the ITB over the length of the belt.
2) The machine executes ITB idle rotation. (about 45 sec)
As a result, the ITB cleaning blade removes the Bk band together with the fingerprints from the ITB. (The waste toner is collected in the cleaning unit.)
3) The machine repeats the foregoing steps (1 and 2) 3times.
4) The machine executes secondary transfer outside roller cleaning (Notes).

It takes about 180 seconds for all of the operations described above to be completed.

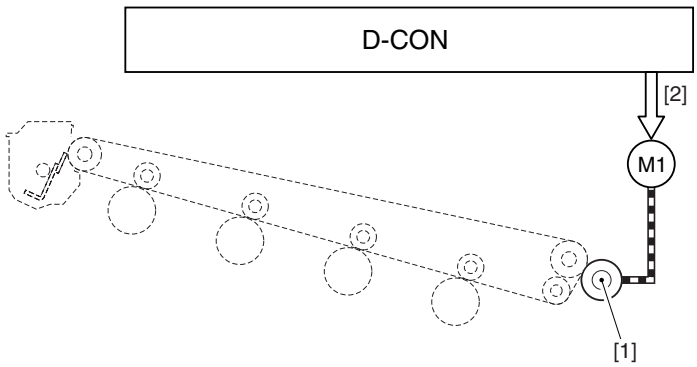
To prevent soiling of the back of print paper, the machine applies a negative bias (TR2 signal) to the secondary transfer outside roller, thus creating a potential between ITB and roller; as a result, the negatively charged residual toner and the secondary transfer outside roller is drawn back to the ITB, where it is scraped off by the cleaning blade for collection in the ITB cleaning unit.

MEMO:
This is a cleaning sequence using toner. The amount of toner used in one sequence is equivalent to that required to print 40 sheets of A4 at 5% image ratio.

7.7.1.4 Secondary Transfer Block

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The secondary transfer block uses the drum/ITB motor (M1) as the source of drive to operate the secondary transfer roller. (M1 is controlled by the DC controller.)



F-7-49

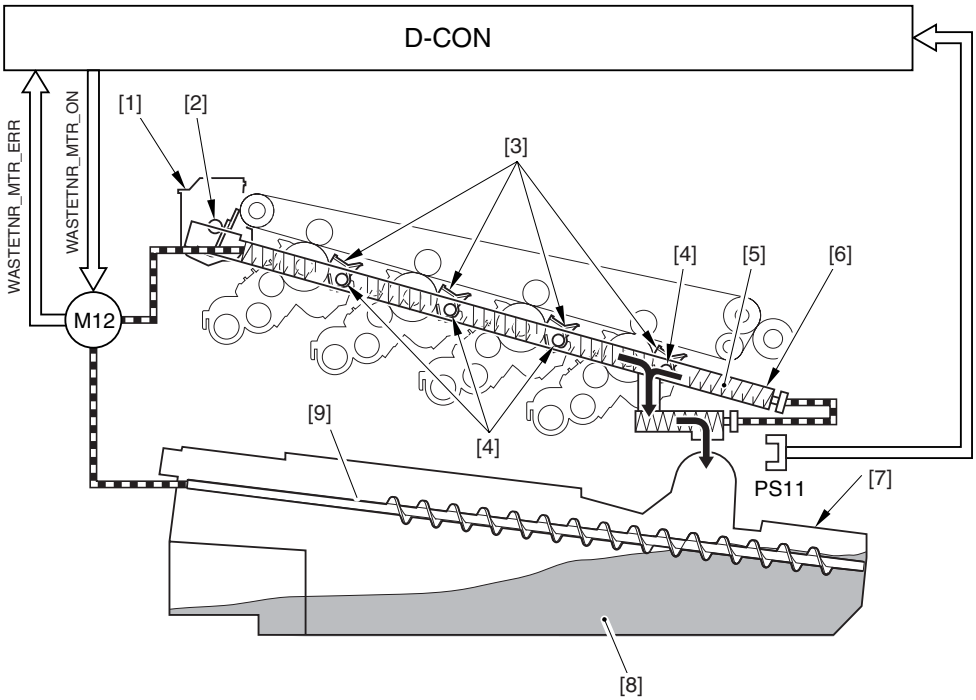
[1] Secondary transfer outside roller
[2] Drum/ITB motor drive signal
M1: drum/ITB motor

7.8 Waste Toner Collection Mechanism

7.8.1 Collecting the Waste Toner

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The machine collects waste toner discharged from the 2 types of cleaning units (ITB cleaning unit, drum cleaning units of individual colors) for collection in the waste toner case.
When the power is turned on or for each print job, the DC controller drives the waste toner transport motor (M12) to rotate the feedscrew inside the waste toner pipe, thereby moving the waste toner.
The waste toner pipe is connected to the discharge outlet of the cleaning unit. When M12 goes on, the waste toner collecting at the discharge outlets is moved through the waste toner pipe for collection in the waste toner case.



F-7-50

[1] ITB cleaning unit
[2] Waste toner discharge outlet
[3] Drum cleaning unit
[4] Waste toner discharge outlet

[5] Screw
[6] Waste toner pipe
[7] Waste toner case
[8] Waste toner
[9] Waste toner screw
M12: waste toner transport motor
PS11: Waste toner case detection sensor

Waste Toner-Related Error Code:
- E013-0000 (waste toner transport motor fault)
Occurs when an over-current (350 mA or more) has been detected about 0.1 sec after the motor is driven.
- E013-0001 (waste toner transport motor open circuit)
Occurs when an open circuit has been detected about 0.1 sec after the motor is driven.

7.8.2 Detecting the Level of Waste Toner

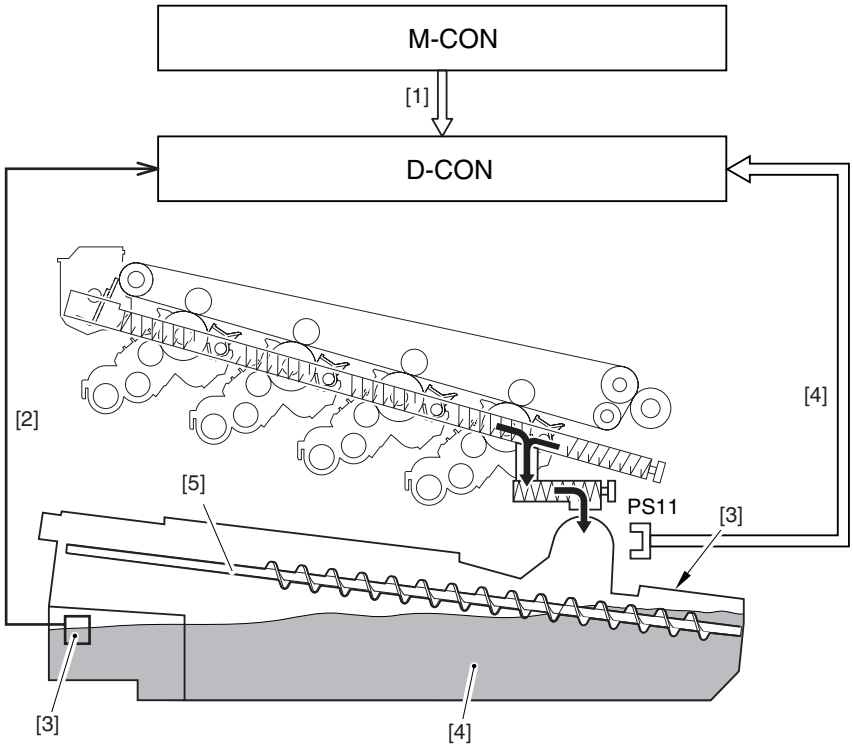
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The machine executes the following 2 types of detection to find out the level of waste toner collected inside the waste toner case:
- detection by an optical sensor
- detection with reference to the video count

The DC controller checks the result of these detection mechanisms when the power is turned on, when the front door is opened/closed, and for each print job. If it finds that the level of waste toner is above a specific value, the DC controller issues to the main controller either of 2 messages (waste toner case full alert, waste toner case full).
The following shows the relationship between messages and waste toner levels:

T-7-15

Message type	Message contents	Waste toner quantity	Detected by
Waste toner full warning	"Waste toner bottle needs to be replaced soon. (Continued printing possible.)"	Approx. 95%	Optical sensor
Waste toner full	"Replace waste toner bottle."	100 %	Video count



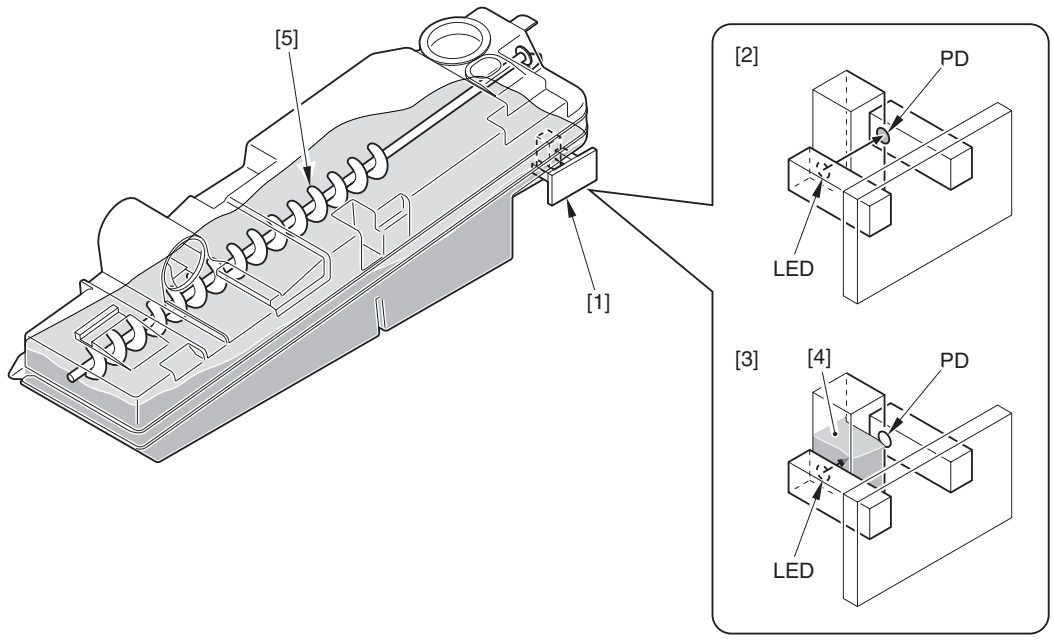
F-7-51

[1] Waste toner count
[2] Waste toner case full alert detection signal
[3] Waste toner case
[4] Waste toner
[5] Waste toner screw
UN6: waste toner sensor (optical sensor)

The following is a brief description of the foregoing types of detection:

1. detection by an optical sensor
The machine uses an optical sensor (UN8) mounted behind the waste toner case to check the amount of waste toner. The detection takes place when the level of waste toner is between 0% and 95%, and the result is sent to the DC controller, which will issue a waste toner case full alert to the main controller when the result indicates the level to be 95%.

MEMO:
The sensor consists of a light-emitting segment (LED) and a light-receiving segment (PD).
When the level of waste toner is low, the light from the LED is received by the photodiode. When the level increases, on the other hand, the presence of waste toner blocks the light from the LED, thus preventing reception of light by the photodiode, thus causing the output of the sensor to change from High to Low. The change in the sensor output causes the DC controller to assume that the waste toner case is 95% full with waste toner.



F-7-52

[1] Waste toner sensor (optical sensor)
[2] Small amount of waste toner
[3] Large amount of waste toner
[4] Waste toner
[5] Waste toner screw

The machine remains ready to make prints even when a waste toner case full alert has been issued.

2. detection based on a video counter reading
The machine executes detection when the waste toner case is 95% full (after a case full alert); the result is sent to the DC controller, which in turn communicates to the main controller if the result of detection indicates that the case is 100% full.

When the waste toner bottle is full, printing stops.
From the time the waste toner full warning is given till printing stops, this device can print out a maximum of 1,000 sheets of both colour and mono-colour (based on A4 sheets with 5% image ratio). These values are estimates and the actual values will depend on the way in which the device has been used.
The waste toner counter clears automatically when the waste toner case is replaced.

MEMO:
In this machine, to prevent the collected waste toner from accumulating like a heap and from overflowing out of the waste toner case, the waste toner screw built in the waste toner case is rotated and the toner is made even. The waste toner screw is rotated by the motor (M12).

MEMO:
This machine also has a waste toner case replacement detection function. After opening and closing the main body front cover at the status of alarm, abnormality of the waste toner level, the case is judged as having been replaced when it was detected as toner absence by the optical sensor (UN8) mounted on the back side of the waste toner case.

7.8.3 Waste toner case detection

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

This machine has the detection system for the waste toner case.
This detection is executed by the waste toner case sensor (P11) prepared at the side of the waste toner sensor.
By monitoring PS11 at the time of closing the front cover, this machine judges whether the toner case is mounted on the main body or not.
Illustration added.
The following message is displayed.
"Please install the waste toner bottle."

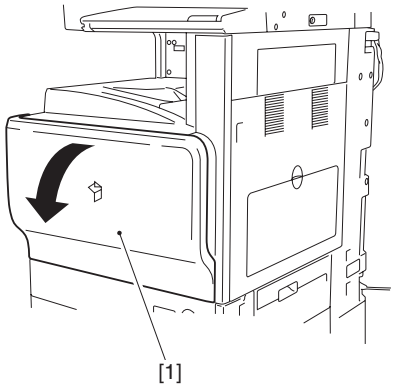
7.9 Parts Replacement Procedure

7.9.1 Process Unit

7.9.1.1 Removing the Process Unit

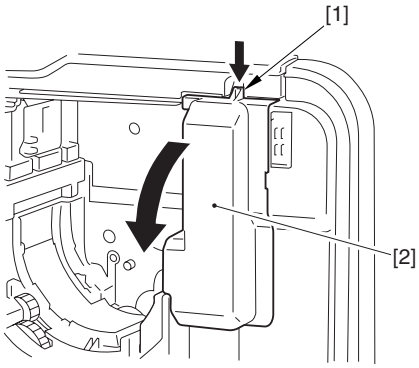
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Open the front cover [1].



F-7-53

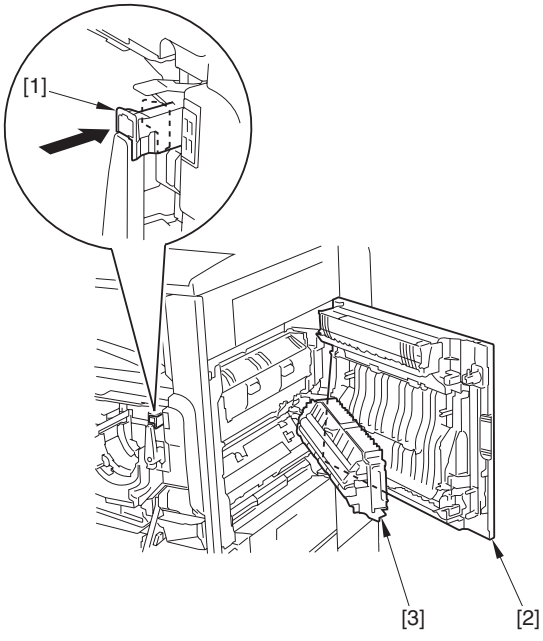
2) Press the claw [1] downward to detach the handle cover [2].



F-7-54

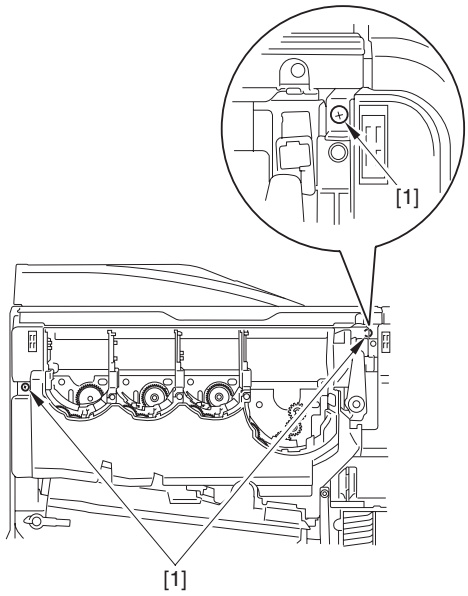
3) Press the release lever [1] to open the right cover [2].

⚠
For taking in/out of the process unit, make sure to do with the duplexing unit [3] open.



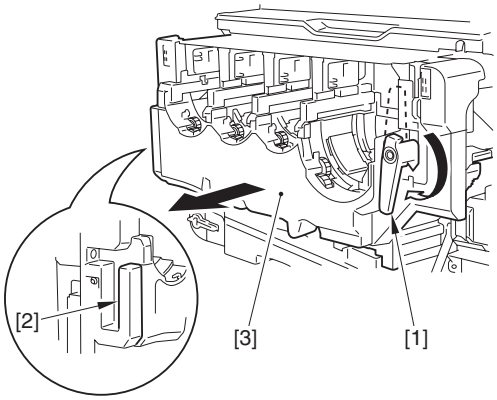
F-7-55

4) Remove the 2 screws [1].



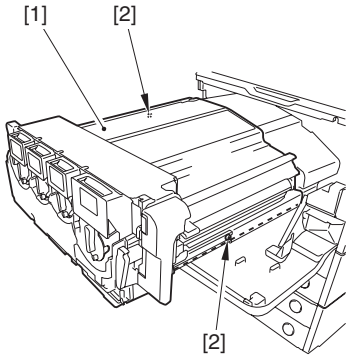
F-7-56

5) Turn the handle [1] by 180 deg, and then, hold the handle [1] and the grip [2] to pull out the process unit [3] until it stops.



F-7-57

6) Remove the process unit [1].
- 2 screws [2]



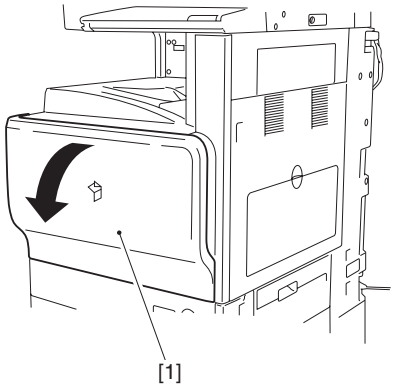
F-7-58

7.9.2 Drum Unit

7.9.2.1 Removing the Drum Cartridge

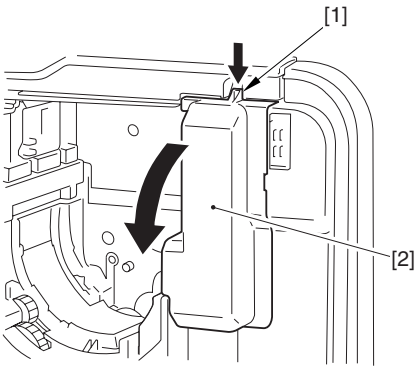
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Open the front cover [1].



F-7-59

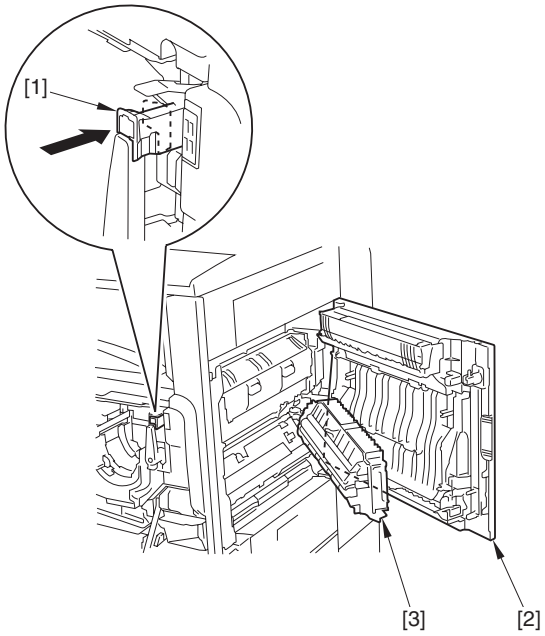
2) Press the claw [1] to detach the handle cover [2].



F-7-60

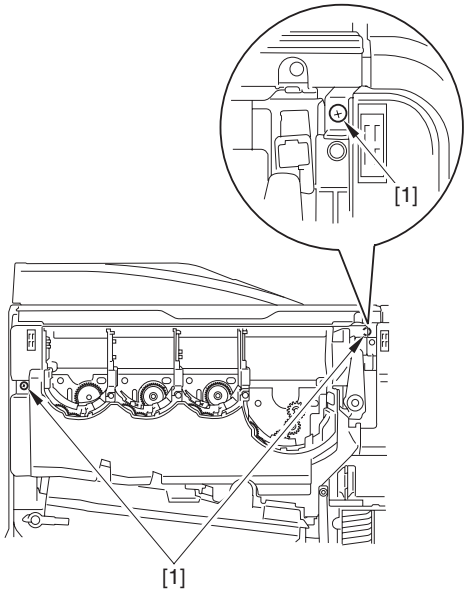
3) Press the release lever [1] to open the right cover [2].

For taking in/out of the process unit, make sure to do with the duplexing unit [3] open.



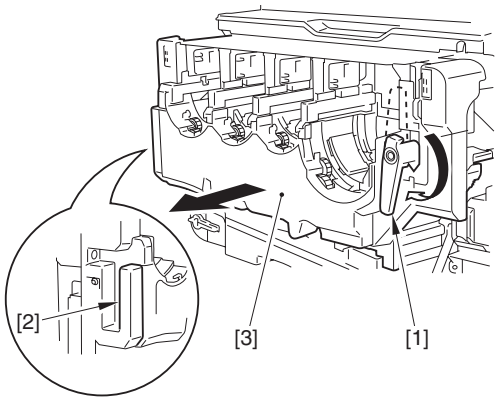
F-7-61

4) Remove the 2 screws [1].



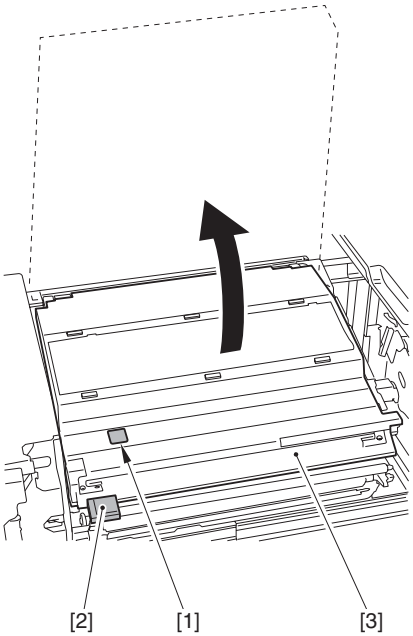
F-7-62

5) Turn the handle [1] by 180 deg, and then, hold the handle [1] and the grip [2] to pull out the process unit [3] until it stops.



F-7-63

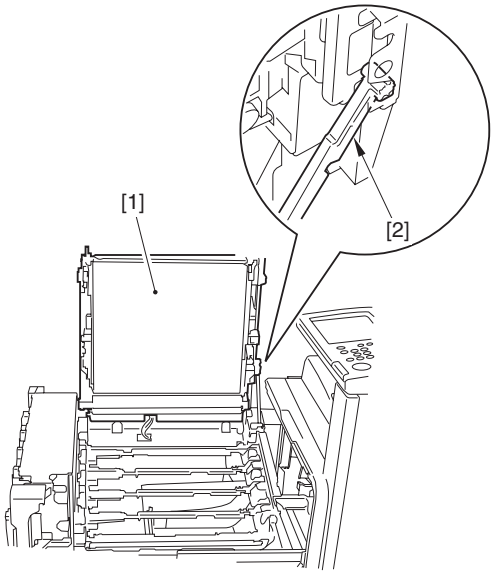
6) Press the push button [1], and hold the grip [2] to open the ITB unit [3] upward.



F-7-64

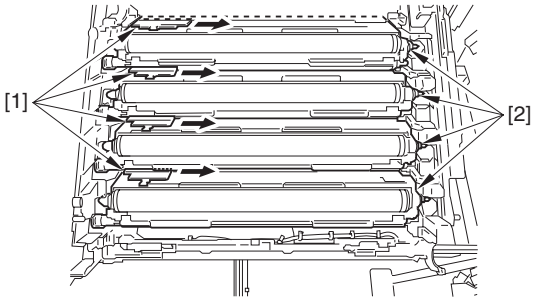
7) Secure the ITB unit [1] in place with the tip-resistant arm [2] (secure in the lower slot of the 2).

Do not touch the ITB. If the ITB is scratched, it may cause the pickup fault or degradation of the print quality.
In case the print quality is degraded due to touching the ITB, clean the ITB with soft and dry cloth.
If the print quality is not improved, execute the following:
[Additional Functions] > [Adjustment/Cleaning] > [Cleaning inside Main Unit] > [Start]



F-7-65

8) Release the shutter [1] of the drum cartridge to remove the drum cartridge [2].



F-7-66

When Replacing the Drum Cartridge
Make sure that the shutter lever is at the Unlock position when removing the drum cartridge. Removing the drum cartridge from the main body and replacing it with a new cartridge when the shutter lever is not at the Unlock position will cause malfunction in opening the drum cartridge shutter. As a result, toner cannot flow from the hopper assembly to the drum cartridge causing overflowed toner to spatter inside the body.
When the drum cartridge has been removed while the shutter lever is not at the Unlock position, put the cartridge back and then position the shutter lever to the Unlock position. After that the drum cartridge can be removed.

7.9.3 Drum ITB Motor

7.9.3.1 Before Removing the Drum ITB Moto

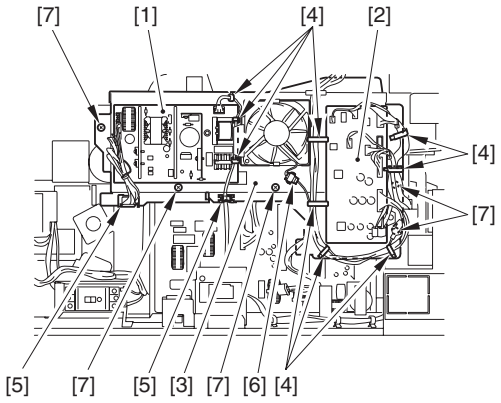
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the upper rear cover. (page 10-14) [Detaching the Upper Rear Cover]
2) Remove the lower rear cover. (page 10-15) [Detaching the Lower Rear Cover]
3) Remove the all-night power supply PCB. (page 10-22) [Detaching the All-Night Power Supply PCB]

7.9.3.2 Removing the Drum ITB Motor

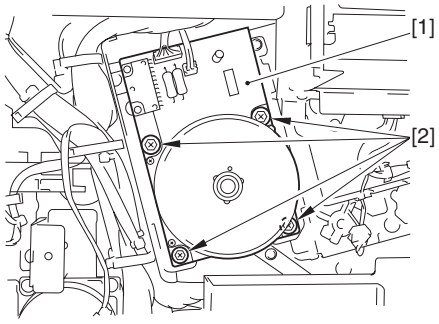
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Disconnect the 7 connectors on the optional power supply PCB [1] and the 12 connectors on the controller power supply PCB [2].
2) Remove the optional power supply/controller power supply mount [3].
- 9 cable clamps [4]
- 3 wire saddles [5]
- 1 connector [6]
- 5 screws [7]



F-7-67

3) Remove the drum ITB motor [1].
- 4 screws [2]



F-7-68

7.9.4 Hopper Assembly

7.9.4.1 Before Removing the Hopper Supply Unit

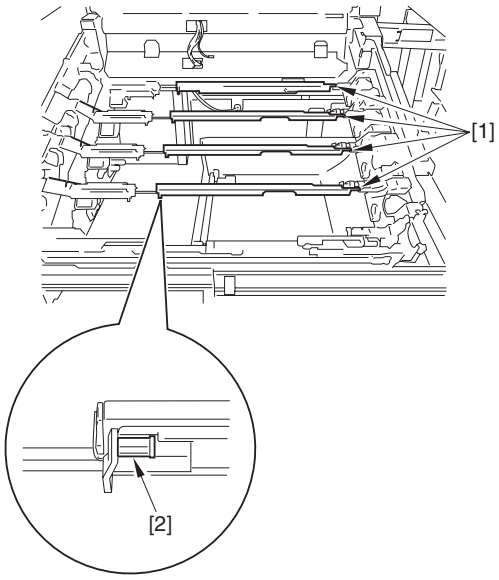
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the hopper drive assembly. (page 10-16) [Removing the Hopper Drive Unit]

7.9.4.2 Removing the Hopper Supply Unit

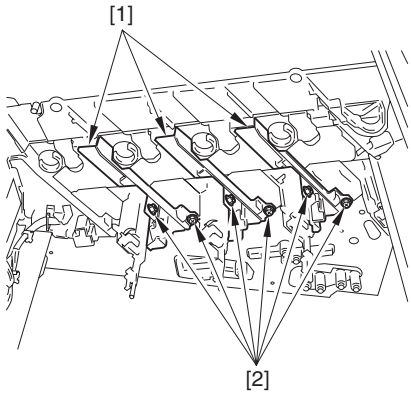
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the supply drive shaft [1].
- 1 claw [2]



F-7-69

2) Remove the toner cartridge guide [1].
- 6 screws [2]



F-7-70

3) Pull out the hopper supply unit [1].
- 4 screws [2]

F-7-71

7.9.5 Developing Motor (Bk/Y/M/C)

7.9.5.1 Before Removing the Developing Motor

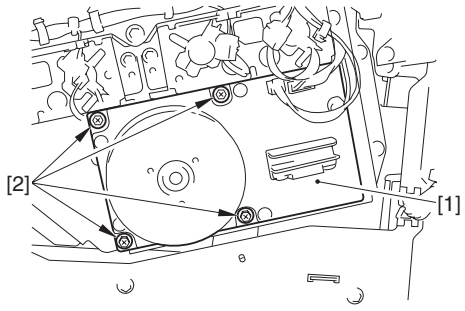
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the upper rear cover. (page 10-14)[Detaching the Upper Rear Cover]
2) Remove the lower rear cover. (page 10-15)[Detaching the Lower Rear Cover]
3) Remove the all-night power supply PCB. (page 10-22)[Detaching the All-Night Power Supply PCB]
4) Remove the printer power supply assembly. (page 10-18)[Detaching the Printer Power Supply Assembly]

7.9.5.2 Removing the Developing Motor

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the developing motor [1].
- 4 screws [2]



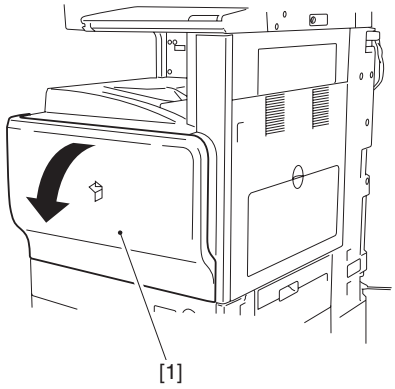
F-7-72

7.9.6 Intermediate Transfer Unit

7.9.6.1 Removing the ITB Unit

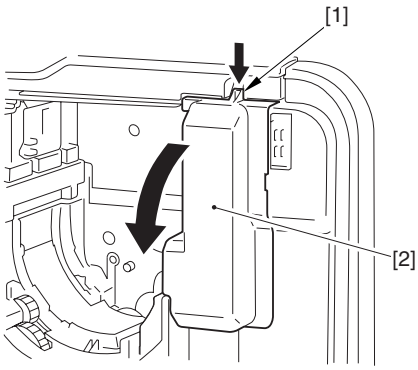
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Open the front cover [1].



F-7-73

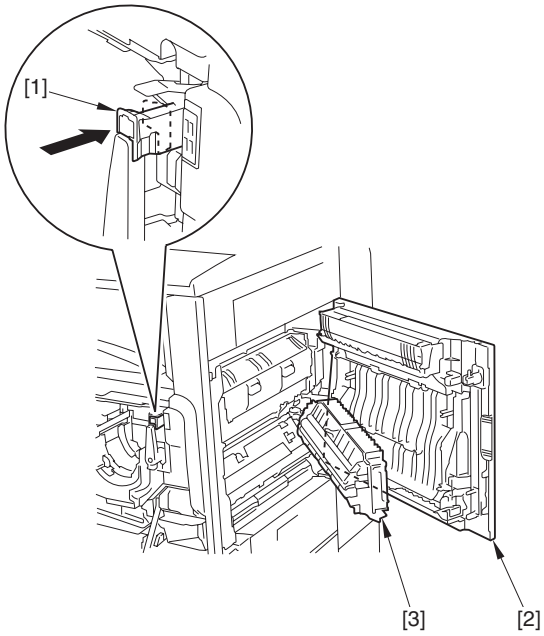
2) Press the claw [1] downward to detach the handle cover [2].



F-7-74

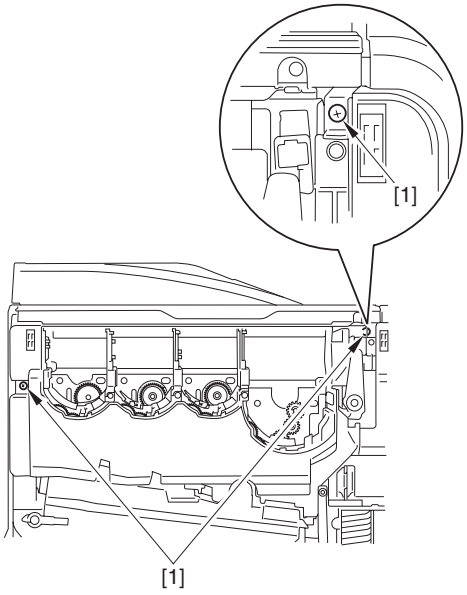
3) Press the release lever [1] to open the right cover [2].

⚠
For taking in/out of the process unit, make sure to do with the duplexing unit [3] open.



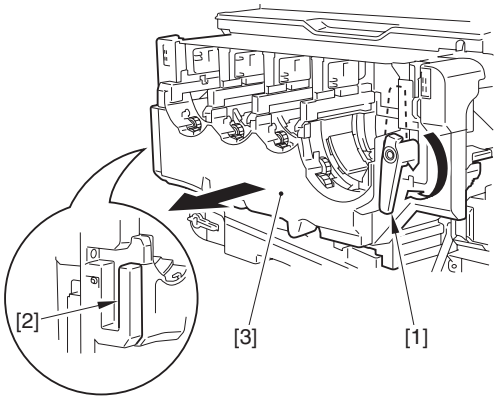
F-7-75

4) Remove the 2 screws [1].



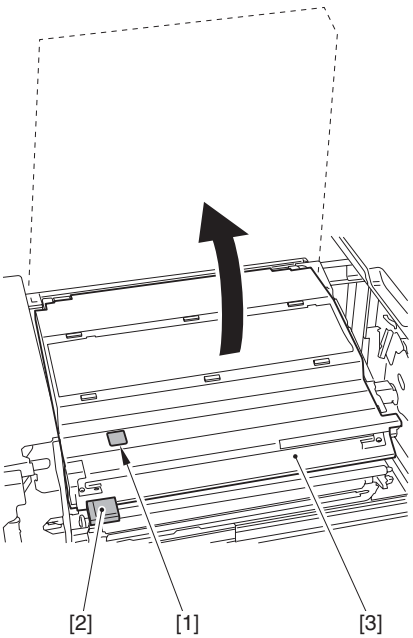
F-7-76

5) Turn the handle [1] by 180 deg, and hold the handle [1] and the grip [2] to pull out the process unit [3] until it stops.



F-7-77

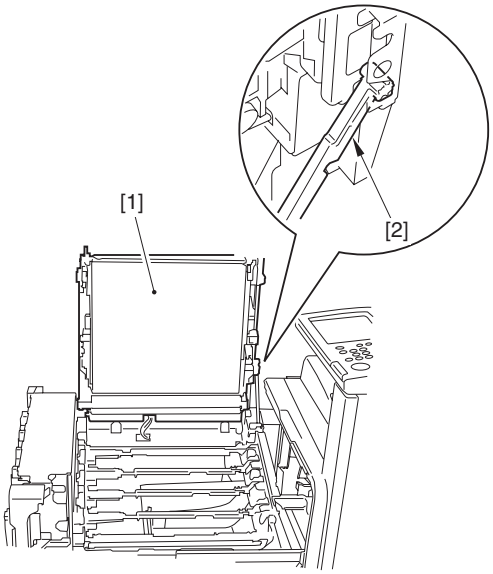
6) Press the push button [1], and hold the grip [2] to open the ITB unit [3] upward.



F-7-78

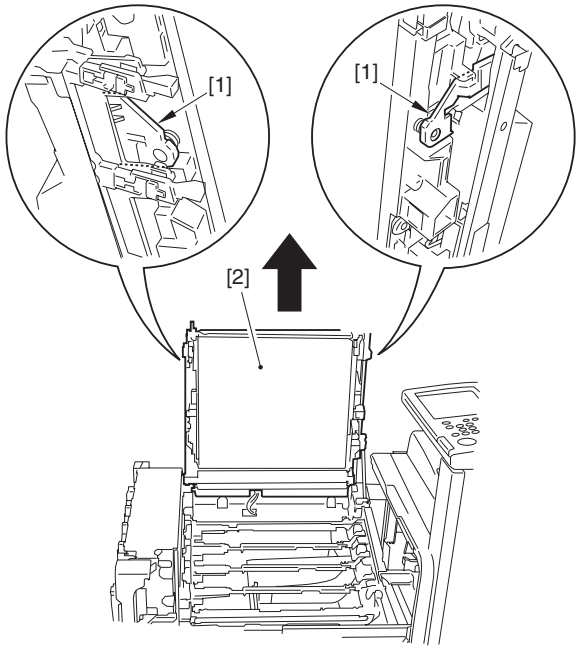
7) Secure the ITB unit [1] in place with the tip-resistant arm [2] (secure in the lower slot of the 2).

Do not touch the ITB. If the ITB is scratched, it may cause the pickup fault or degradation of the print quality.
In case the print quality is degraded due to touching the ITB, clean the ITB with soft and dry cloth.
If the print quality is not improved, execute the following:
[Additional Functions] > [Adjustment/Cleaning] > [Cleaning inside Main Unit] > [Start]



F-7-79

8) By pressing the ITB lock lever [1], remove the ITB unit [2] in the direction of the arrow.



F-7-80

7.9.7 Transfer Cleaning Unit

7.9.7.1 Before Removing the Transfer Cleaner Unit

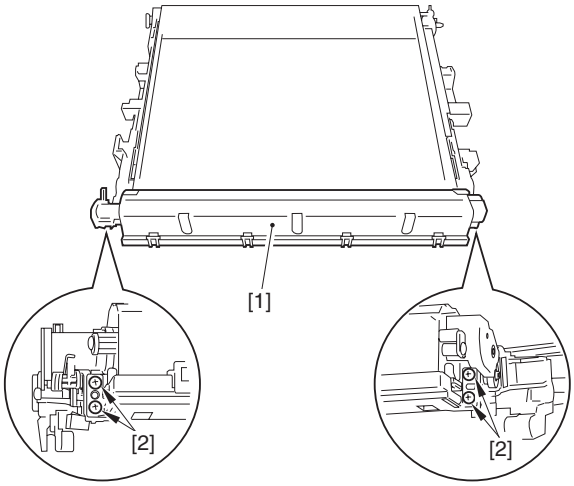
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the ITB unit. (page 7-43)[Removing the ITB Unit]

7.9.7.2 Removing the Transfer Cleaner Unit

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the transfer cleaner unit [1].
- 4 screws [2]



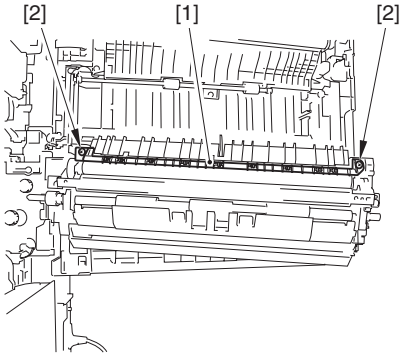
F-7-81

7.9.8 Secondary Transfer External Roller

7.9.8.1 Removing the Secondary Transfer Outer Roller

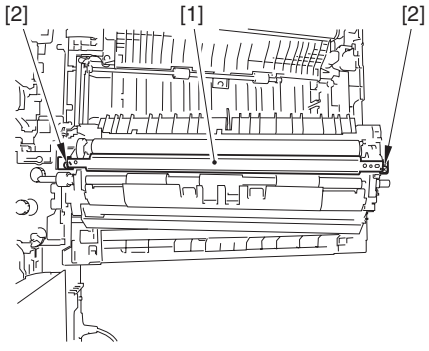
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Open the right cover.
2) Remove the transfer separation guide [1].
   - 2 screws [2]



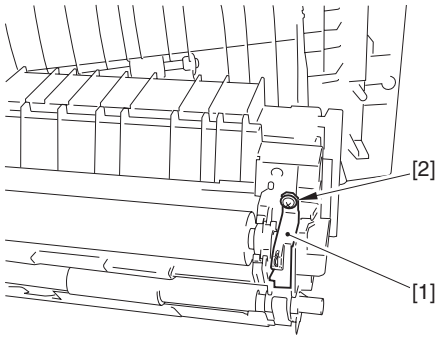
F-7-82

3) Detach the plate [1].
   - 2 screws [2]



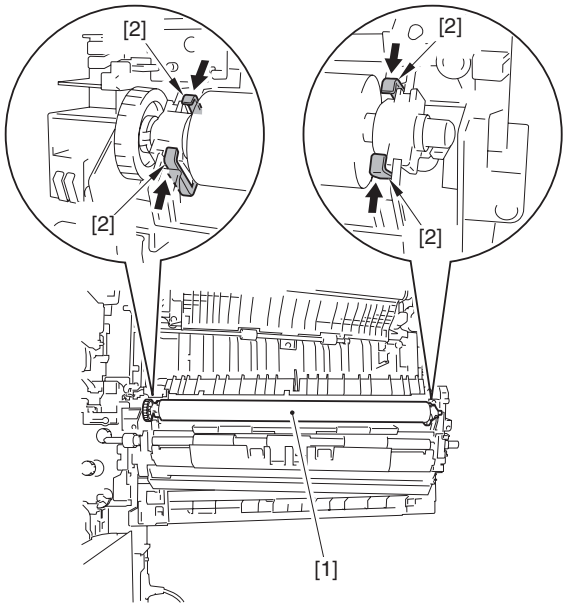
F-7-83

4) Remove the shaft retainer [1].
   - 1 screw [2]



F-7-84

5) Pick the tabs [2] of the both edges to remove the secondary transfer outer roller [1].



F-7-85

7.9.8.2 After Replacing the Secondary Transfer Roller

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Upon replacement to the new secondary transfer outer roller, attachment of the rubber component of the secondary transfer roller onto the ITB belt causes a white spot image.
In order to prevent this, at replacing the secondary transfer outer roller to the new one, coating of toner onto the surface of the roller is required.
When replacing the secondary transfer outer roller, execute the service mode below:
- COPIER > FUNCTION > TNR-COAT
Coating of the Y toner onto the secondary transfer roller

⚠
In case the white spot image occurred after replacing the secondary transfer roller, clean the ITB unit.
Initial settings / registration > adjustment / cleaning > cleaning within the main body

---

Chapter 8 Pickup/Feeding System

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8.1 Construction

8.1.1 Specifications, Controls, and Functions

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

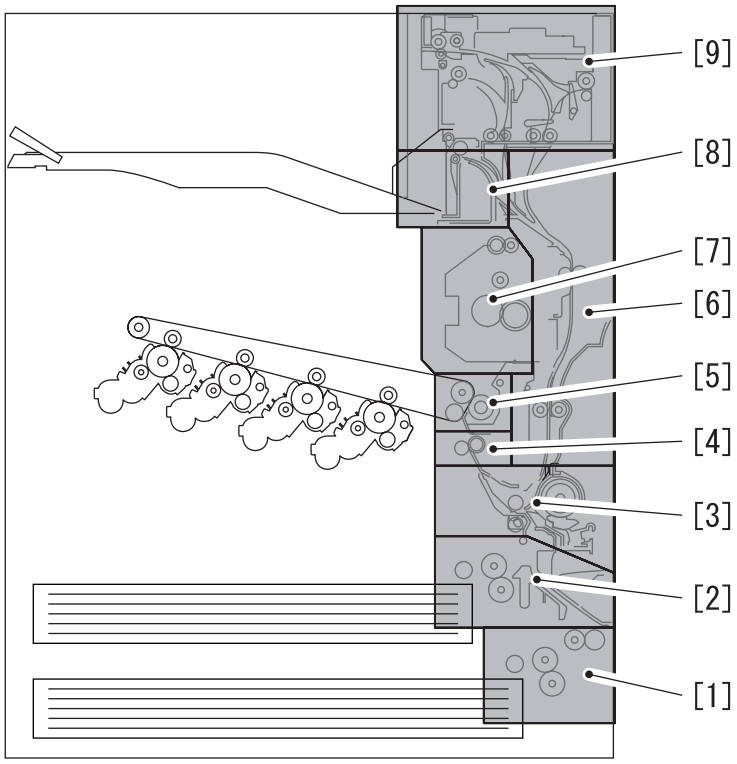
The major specifications, controls, and functions of the pickup/feeding system are as follows:

T-8-1

Item	Description	-
Paper compartment	front loading	
Pickup method	cassette	separation retard
	manual feeder	separation pad
Paper reference	center	
Paper volume	cassette 1/2	550 sheets (80 g/m2)
	manual feed tray	50 sheets (80 g/m2)
Paper size	cassette 1	B4, A4, B5, LGL, LTR, EXE, A4R, B5R, LTRR, A5R. STMTR,
	cassette 2	A3, B4, A4, B5, LGL, LTR, EXE, LDR, A4R, B5R, LTRR, A5R, STMTR, 11x17 to 12x18
	manual feed tray	A3, B4, A4, B5, LDR, LGL, LTR, A4R, B5R, LTRR, A5R, STMTR,11x17 to 12x18, EXE, postcard, envelope, free size
Paper weight	cassette 1/2	64 to 80 g/m2 (single-sided)
		64 to 80 g/m2 (auto double-sided)
	manual feed tray	64 to 128 g/m2 (if double-sided, manual feeding only; no auto duplexing)
Paper size switch-over	cassette 1/2	by the user
	manual feed tray	by the user
Duplexing method	through path	
	envelopes: Com10, Monarch, DL, ISO-C5, ISO-B5	
	postcard: A6R non-default, A5R non-default, A4 non-default	
Speed of process	iR2880/2880F/2880i/2880G	Normal speed: 337 mm/sec Half speed: 143 mm/sec Quater speed: 71.5 mm/sec
	i3380/3380F/3380i/3380G	Normal speed: 337 mm/sec Half speed: 143 mm/sec Quater speed: 71.5 mm/sec
Delivery accessory	Inner 2-Way Tray-D1 Copy Tray-J1 Finisher-Z1 Buffer Path Unit-E2 Finisher-Y1 Saddle Finisher-Y2 Punch Unit-L1/M1/N1/P1	
Pickup accessory	Cassette Feeding Unit-Y2 Side Paper Deck-Z1 Envelope Cassette Attachment-C2	

8.1.2 Division into Blocks

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

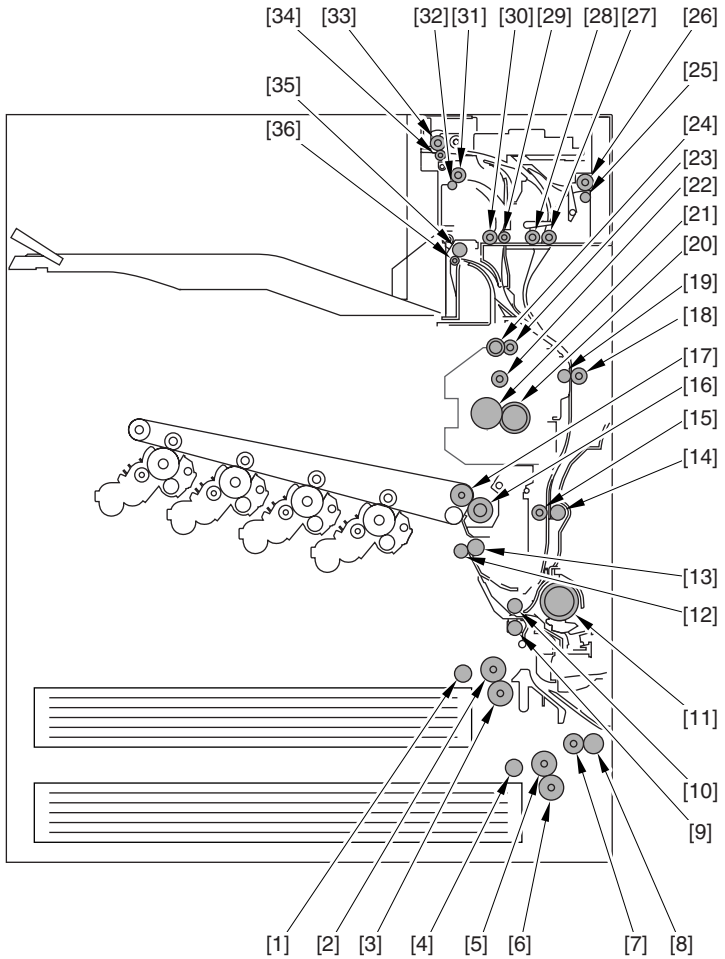


F-8-1

[1] Pickup assembly (cassette 2)
[2] Pickup assembly (cassette 1)
[3] Manual feed pickup assembly
[4] Registration roller assembly
[5] Transfer assembly
[6] Duplexing/feeding assembly
[7] Fixing assembly
[8] No.1 delivery assembly
[9] No.2/No.3 delivery assembly

8.1.3 Arrangement of Rollers

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

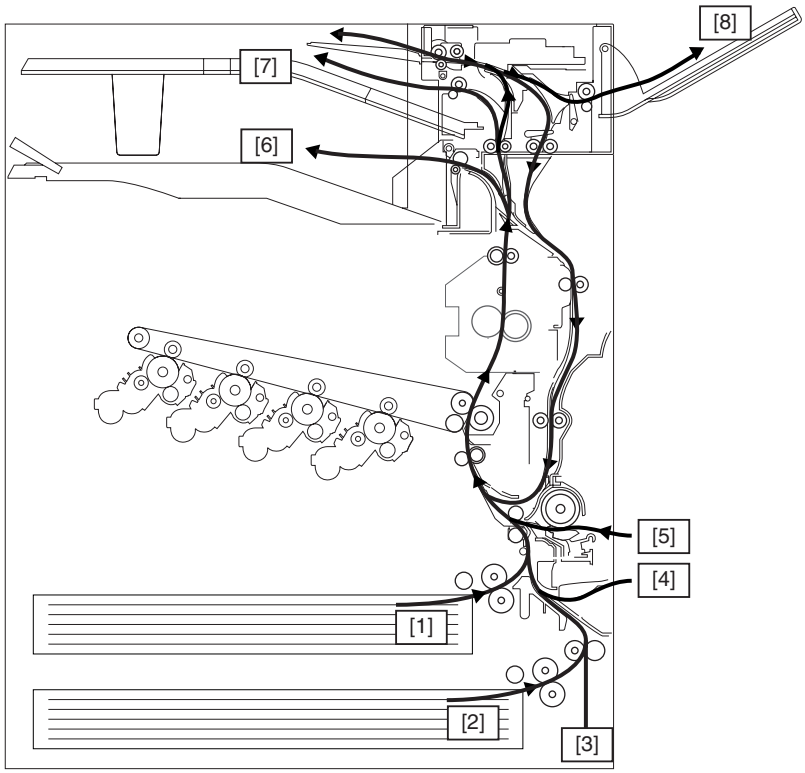


F-8-2

[1] Pickup roller (cassette 1)
[2] Feed roller (cassette 1)
[3] Separation roller (cassette 1)
[4] Pickup roller (cassette 2)
[5] Feed roller (cassette 2)
[6] Separation roller (cassette 2)
[7] Vertical path roller 2
[8] Vertical path slave roller 2
[9] Vertical path roller 1
[10] Vertical path slave roller 1
[11] Manual feed pickup roller
[12] Registration roller (inside)
[13] Registration roller (outside)
[14] Duplexing/feeding roller 2
[15] Duplexing/feeding member 2
[16] Secondary Transfer Outside Roller
[17] Secondary Transfer Inside Roller
[18] Duplexing/feed roller 1
[19] Duplexing/feeding member 1
[20] Presser roller
[21] Fixing film
[22] Fixing Rear Roller
[23] Inner Delivery Roller
[24] Inner Delivery Roll
[25] Delivery Roll 3
[26] Delivery Roller 3
[27] Duplexing inlet roller
[28] Duplexing inlet member
[29] Vertical path slave roller 3
[30] Vertical path roller 3
[31] Delivery Roller 2
[32] Delivery Roll 2
[33] Reversing roller
[34] Reversing member
[35] Delivery roller (No.1 delivery assembly)
[36] Delivery member (No.1 delivery assembly)

8.1.4 Diagram of Paper Paths (w/ copy tray)

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

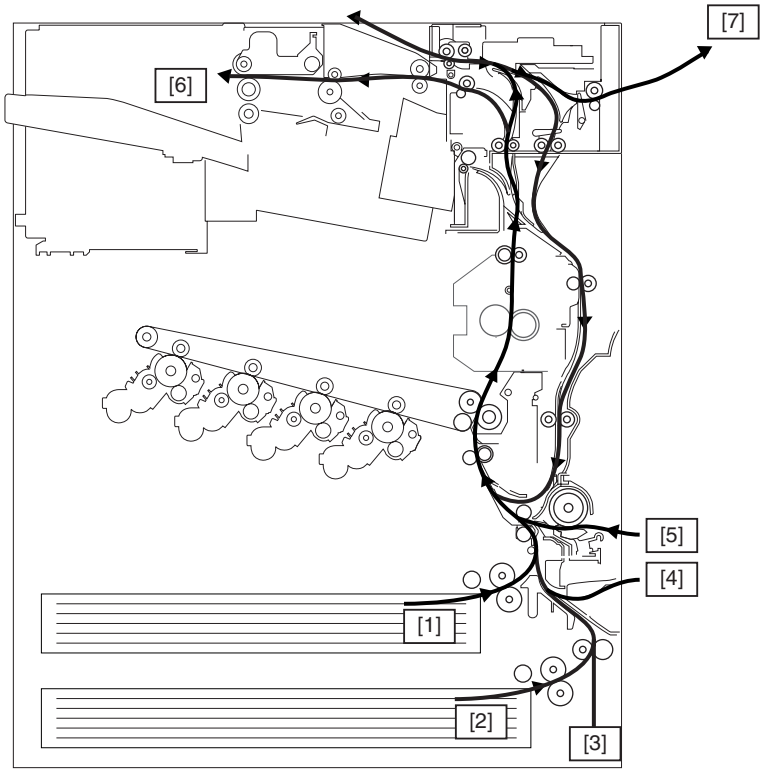


F-8-3

[1] Pickup from cassette 1
[2] Pickup from cassette 2
[3] Pickup from cassette pedestal (option)
[4] Pickup from side paper deck (option)
[5] Pickup from manual feeder
[6] Delivery to copy tray 1
[7] Delivery to copy tray 2 (option)
[8] Delivery to copy tray 3 (option)

8.1.5 Diagram of Paper Paths (w/ Finisher-Z1/copy tray)

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

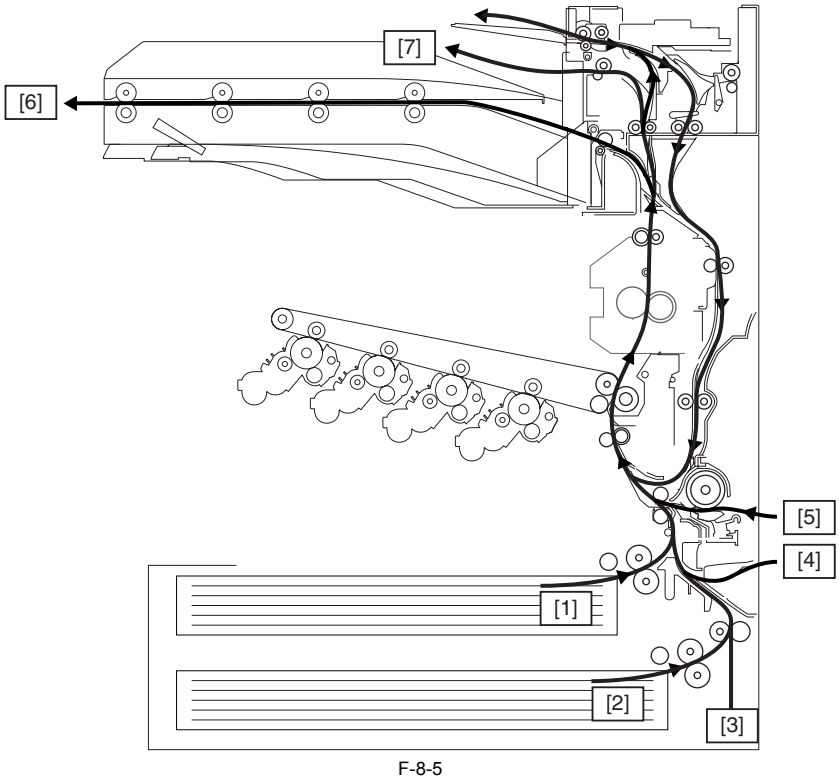


F-8-4

[1] Pickup from cassette 1
[2] Pickup from cassette 2
[3] Pickup from cassette pedestal (option)
[4] Pickup from paper deck (option)
[5] Pickup from manual feeder
[6] Delivery to Finisher-Z1 (option)
[7] Delivery to copy tray 3 (option)

8.1.6 Diagram of Paper Paths (w/ Finisher-Y1/Saddle Finisher-Y2)

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

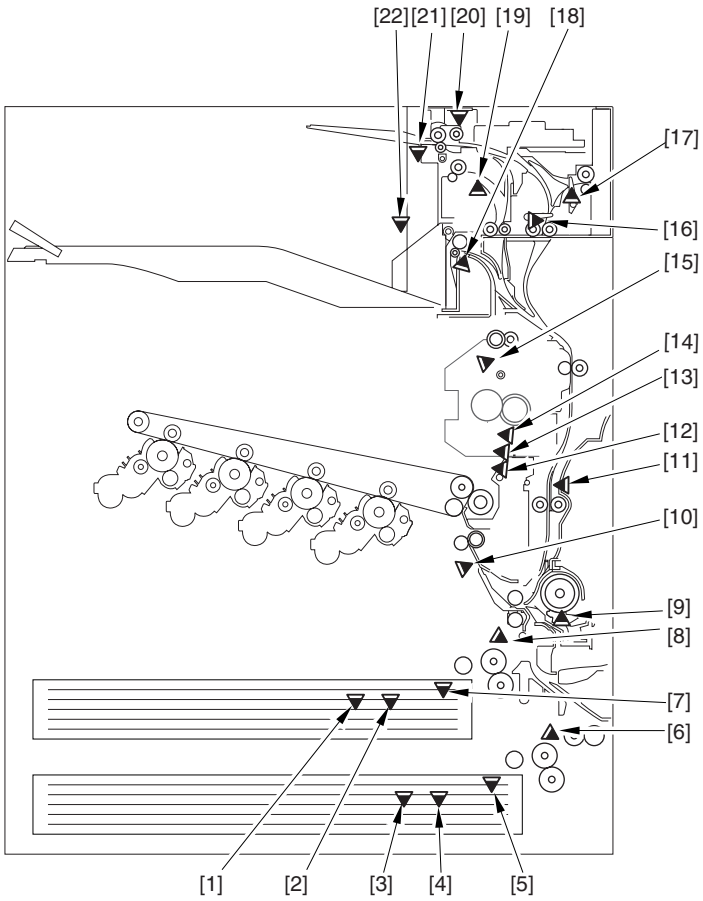


F-8-5

[1] Pickup from cassette 1
[2] Pickup from cassette 2
[3] Pickup from cassette pedestal (option)
[4] Pickup from paper deck (option)
[5] Pickup from manual feeder
[6] Delivery to Finisher-Y1/Saddle Finisher-Y2 (option)
[7] No.2 delivery assembly (option)

8.1.7 Arrangement of Sensors

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880



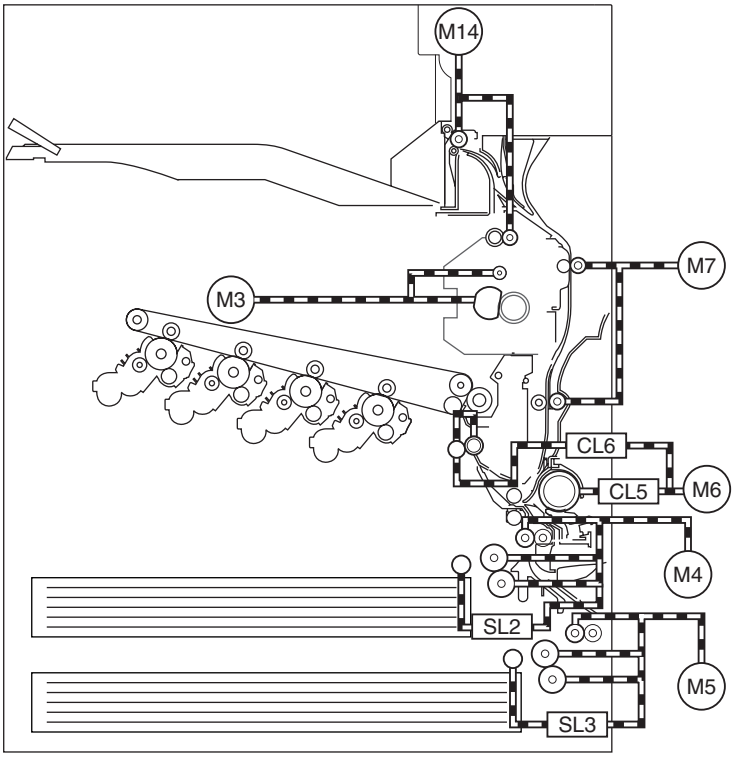
F-8-6

[1] Cassette 1 paper level sensor B (PS22)
[2] Cassette 1 paper level sensor A (PS21)
[3] Cassette 2 paper level sensor B (PS24)
[4] Cassette 2 paper level sensor A (PS23)
[5] Cassette 2 paper sensor (PS20)
[6] Cassette 2 retry sensor (PS26)
[7] Cassette 1 paper sensor (PS8)
[8] Cassette 1 retry sensor (PS25)
[9] Manual feed paper sensor (PS9)
[10] Pre-registration sensor (PS7)
[11] Duplexing paper sensor (PS10)
[12] Arch Sensor 1 (PS2)
[13] Arch Sensor 2 (PS16)
[14] Fixing Inlet Sensor (PS14)
[15] Inner Delivery Sensor (PS1)
[16] Duplexing Inlet Sensor (PS3A)
[17] Delivery sensor 3 (PS5A)
[18] Delivery sensor 1 (PS27)
[19] Delivery sensor 2 (PS1A)
[20] Reversal sensor (PS4A)
[21] Delivery Tray Full Sensor 2 (PS2A)
[22] Delivery Tray Full Sensor 1 (PS15)

8.1.8 Route of Drive

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

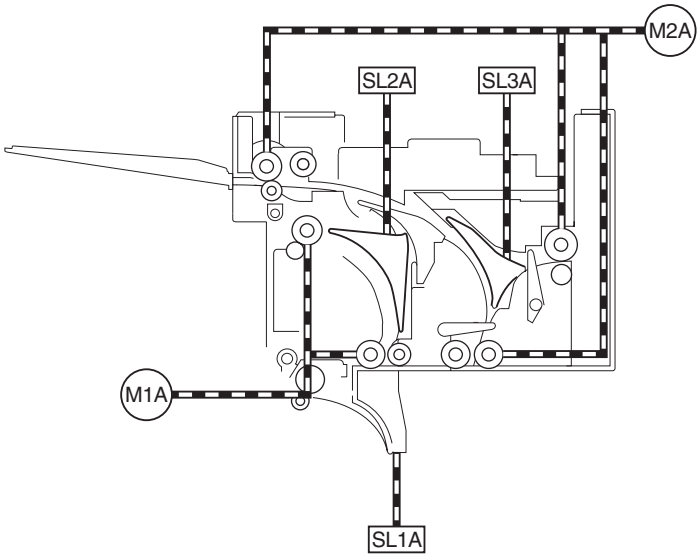
1. Main Body



F-8-7

M3 : Fixing motor
M4 : Cassette 1 pickup motor
M5 : Cassette 2 pickup motor
M6 : Registration Multi Motor
M7 : Duplexing motor
M14: No.1 delivery motor
SL2: Cassette 1 pickup solenoid
SL3: Cassette 2 pickup solenoid
CL5: Manual pickup clutch
CL6: Registration clutch

2. Delivery Assembly 2/3



F-8-8

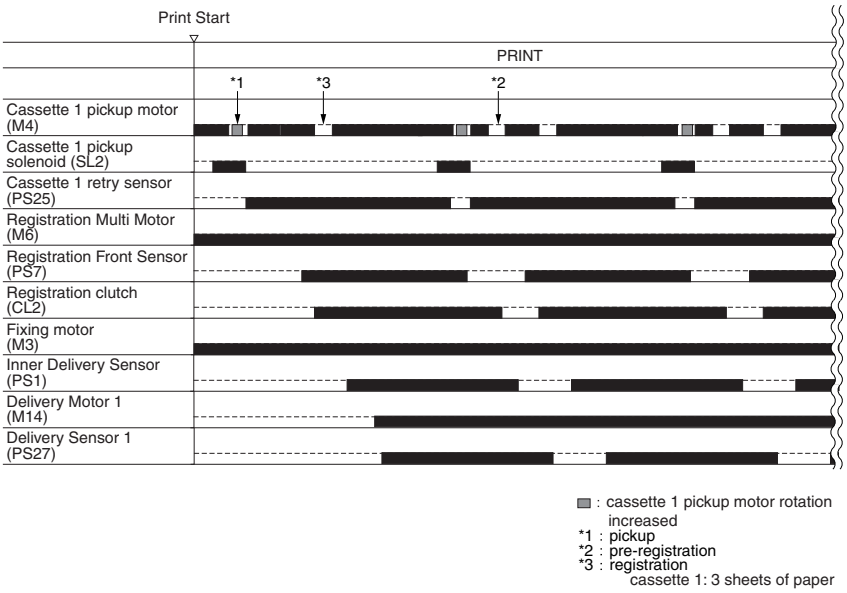
M1A: No.2 delivery motor
M2A: No.3 delivery motor
SL1A: No.1 delivery solenoid
SL2A: No.2 delivery solenoid
SL3A: No.3 delivery solenoid

8.2 Basic Sequence

8.2.1 Basic Sequence

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

- Basic Sequence of Operation for Making 3 Prints



F-8-9

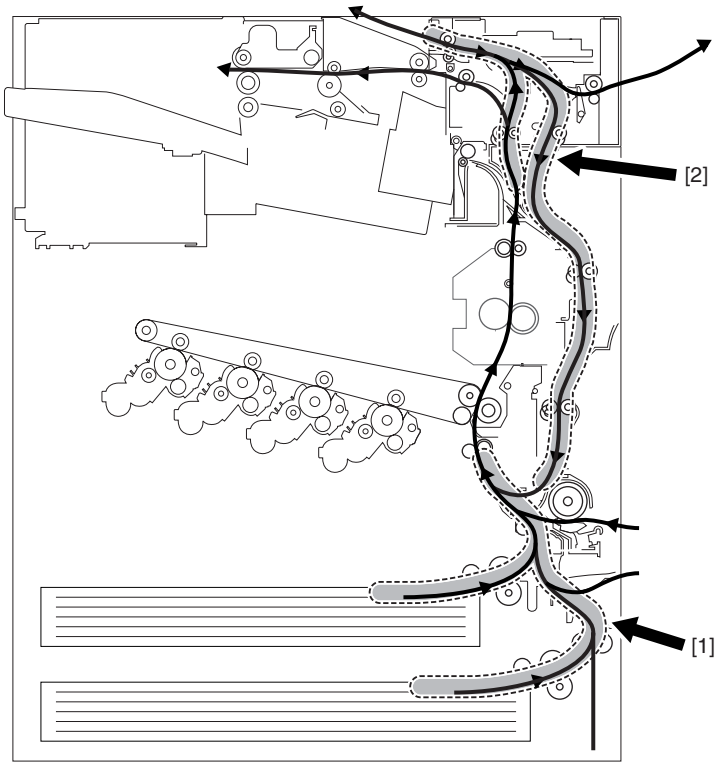
8.3 Controlling the Feeding Speed

8.3.1 Increase in Speed

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The machine increases the speed of moving paper over specific intervals. An overview and the associated accessories for the increase in speed are as follows:

1. Finisher-Z1 in Use

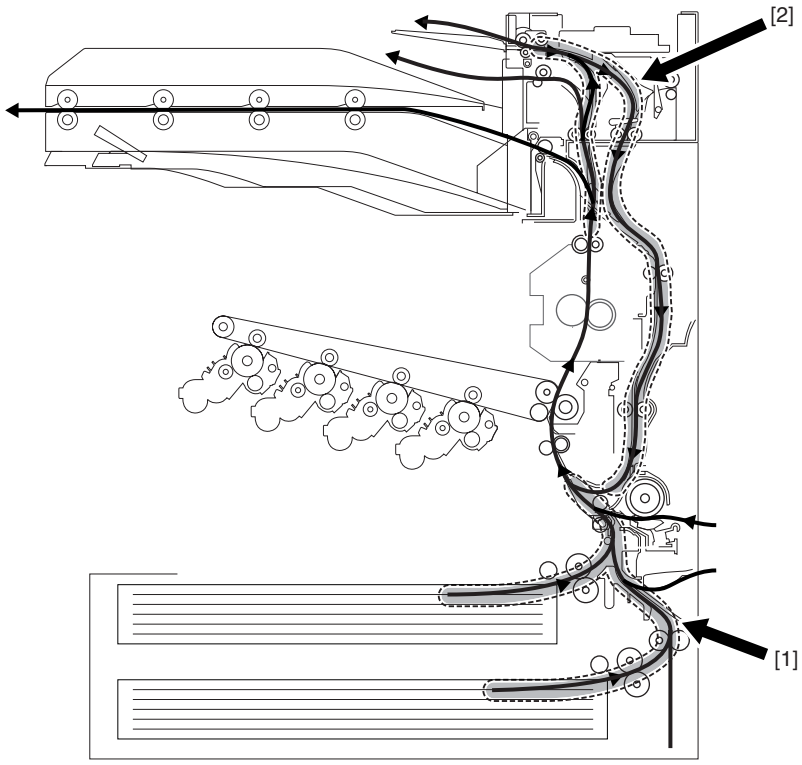


F-8-10

[1] Increase in Speed for Pickup
The speed is 1.5 times as high as the process speed (in the case of manual feed, decelerates to about 0.6).
[2] Increase in Speed for Reversal

The speed is 2 times as high as the process speed (no increase if for delivery to tray 3).

2. Finisher-Y1/Y2 in Use



F-8-11

[1] Increase in Speed for Pickup
The speed is 1.5 times as high as the process speed (in the cassette of manual feed, decelerates to about 0.6).
[2] Increase in Speed for Reversal
The speed is 2 times as high as the process speed.

8.3.2 Feeding Speed According to the Print Media and Resolution

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Execute control to change the feeding speed according to the media type and resolution.

Media Types

T-8-2

Print media		Pickup		Delivery Speed
		Cassette/Side Deck	Manual Feed	
Plain paper	64-105 g/m2	YES	YES	Normal speed
Recycled paper	64-80 g/m2	YES	YES	Normal speed
Color paper	64-105 g/m2	YES	YES	Normal speed
Punched paper	64-105 g/m2	YES	YES	Normal speed
Heavy paper 1	106-163 g/m2	YES	YES	Half speed
OHT		YES	YES*1	Quarter speed
Heavy paper 2	170-220 g/m2	-	YES	Half speed
Coated paper	106-163 g/m2	-	YES	Half speed
Tracing paper		-	YES	Normal speed
Label		-	YES	Half speed
Envelop		-	YES	Half speed
Postcard		-	YES	Half speed

*1: Half speed from tray to registration roller.

Resolution

T-8-3

Resolution	Feeding speed
600 dpi	Normal speed
1200 dpi (only at printing)	Half speed

8.3.3 Feeding Speed of Each Feeding Path and Timing for Switching Feeding Speed

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Acceleration and starting point of acceleration according to each delivery outlet and materials and sizes are as follow:
The following 5 points are the points at which the feeding speed is changed (points to change the speed control).
(1) 10 mm downstream from the fixing rear roller.
(2) 10 mm downstream from the inner delivery roller.
(3) Reversing sensor ON

(4) Buffer inlet sensor ON
(5) Buffer outlet sensor ON

T-8-4

				Primary delivery motor		Secondary delivery motor	
Outlet	**Paper type**	**Size***	**Speed (mm/s)**	**Acceleration point**	**Deceleration point**	**Acceleration point**	**Deceleration point**
Primary delivery	Plain paper	S	337	A point where the trail edge reaches a point 10 mm downstream from the fixing rear roller (detect with the inner delivery sensor)	A point where the trail edge reaches a point 18.6 mm upstream from the primary delivery roller (detect with the primary delivery sensor)	-	-
		L	337	A point where the trail edge reaches a point 10 mm downstream from the fixing rear roller (detect with the inner delivery sensor)	A point where the trail edge reaches a point 18.6 mm upstream from the primary delivery roller (detect with the primary delivery sensor)	-	-
	Heavy paper	S	71.5	N/A	N/A	-	-
		L	71.5	N/A	N/A	-	-
	Transparency	S	71.5	A point where the trail edge reaches a point 10 mm downstream from the fixing rear roller (detect with the inner delivery sensor)	N/A	-	-
Secondary delivery	Plain paper	S	460	N/A	N/A	A point where the trail edge reaches a point 10 mm downstream from the inner delivery roller (detect with the inner delivery sensor)	A point where the trail edge reaches a point 17.5 mm upstream from the secondary delivery roller (detect with the secondary delivery sensor)
		L	460	N/A	N/A	A point where the trail edge reaches a point 10 mm downstream from the inner delivery roller (detect with the inner delivery sensor)	A point where the trail edge reaches a point 17.5 mm upstream from the secondary delivery roller (detect with the secondary delivery sensor)
	Heavy paper	S	71.5	N/A	N/A	N/A	N/A
		L	71.5	N/A	N/A	N/A	N/A
	Transparency	S	71.5	A point where the trail edge reaches a point 10 mm downstream from the fixing rear roller (detect with the inner delivery sensor)	N/A	A point where the trail edge reaches a point 10 mm downstream from the fixing rear roller (detect with the inner delivery sensor)	N/A
Tertiary delivery	Plain paper	S	460	N/A	N/A	Detect the trail edge with the reversing sensor	N/A
		L	460	N/A	N/A	A point where the trail edge reaches a point 10 mm downstream from the inner delivery roller (detect with the inner delivery sensor)	N/A
Finisher Y1/Saddle finisher Y2	Plain paper	S	337	A point where the trail edge reaches a point 10 mm downstream from the fixing rear roller (detect with the inner delivery sensor)	N/A	-	-
		L	337	A point where the trail edge reaches a point 10 mm downstream from the fixing rear roller (detect with the inner delivery sensor)	N/A	-	-
	Heavy paper	S	143	Detect the leading edge with the buffer inlet sensor	N/A	-	-
		L	143	Detect the leading edge with the buffer inlet sensor	N/A	-	-
	Transparency	S	143	Detect the leading edge with the buffer inlet sensor	N/A	-	-
Finisher Z1	Plain paper	S	143	N/A	N/A	N/A	N/A
		L	143	N/A	N/A	N/A	N/A
	Heavy paper	S	71.5	N/A	N/A	N/A	N/A
		L	71.5	N/A	N/A	N/A	N/A
	Transparency	S	71.5	A point where the trail edge reaches a point 10 mm downstream from the fixing rear roller (detect with the inner delivery sensor)	N/A	A point where the trail edge reaches a point 10 mm downstream from the fixing rear roller (detect with the inner delivery sensor)	N/A
Duplexing	Plain paper	S	460	N/A	N/A	Detect the leading edge with the reversing sensor	N/A
		L	460	N/A	N/A	A point where the trail edge reaches a point 10 mm downstream from the inner delivery roller (detect with the inner delivery sensor)	N/A

* Size: S=LTR (216 mm) or shorter, L=longer than 216 mm

T-8-5

				Delivery-3 motor		Buffer motor	
Outlet	**Paper type**	**Size***	**Speed (mm/s)**	**Acceleration point**	**Deceleration point**	**Acceleration point**	**Deceleration point**
Primary delivery	Plain paper	S	337	-	-	-	-
		L	337	-	-	-	-
	Heavy paper	S	71.5	-	-	-	-
		L	71.5	-	-	-	-
	Transparency	S	71.5	-	-	-	-
Secondary delivery	Plain paper	S	460	-	-	-	-
		L	460	-	-	-	-
	Heavy paper	S	71.5	-	-	-	-
		L	71.5	-	-	-	-
	Transparency	S	71.5	-	-	-	-
Tertiary delivery	Plain paper	S	460	Detect the paper leading edge with the reversing sensor	Detect the paper trailing edge at 17.5mm upperstream of delivery-3 roller (detected by the delivery 3 sensor)	-	-
		L	460	Detect the paper trailing edge at 10mm downstream of inside delivery roller (detected with inside delivery sensor)	Detect the paper trailing edge at 17.5mm upperstream of delivery-3 roller (detected by the delivery 3 sensor)	-	-
Finisher Y1/Saddle finisher Y2	Plain paper	S	337	-	-	Detect the paper trailing edge at 10mm downstream of fixing rear roller (detected with the inside delivery sensor)	N/A
		L	337	-	-	Detect the paper trailing edge at 10mm downstream of fixing rear roller (detected with the inside delivery sensor)	N/A
	Heavy paper	S	143	-	-	Detect the paper leading edge with the buffer inlet sensor	N/A
		L	143	-	-	Detect the paper leading edge with the buffer inlet sensor	N/A
	Transparency	S	143	-	-	Detect the paper leading edge with the buffer inlet sensor	N/A
Finisher Z1	Plain paper	S	143	-	-	-	-
		L	143	-	-	-	-
	Heavy paper	S	71.5	-	-	-	-
		L	71.5	-	-	-	-
	Transparency	S	71.5	-	-	-	-
Duplexing	Plain paper	S	460	Detect the paper leading edge with the reversing sensor	N/A	-	-
		L	460	Detect the paper trailing edge at 10mm downstream of inside delivery roller (detected with inside delivery sensor)	N/A	-	-

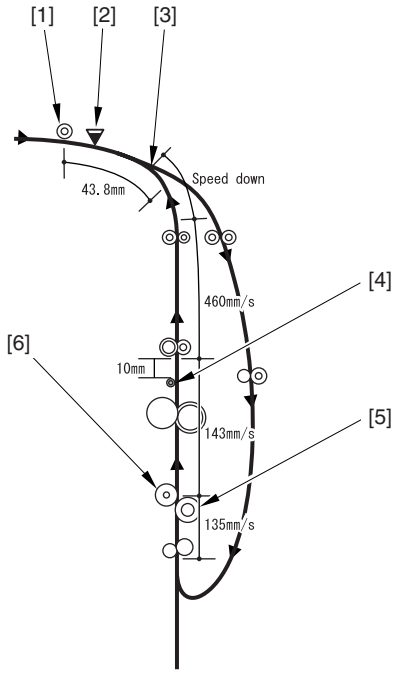
* size: S=LTR (216mm) or shorter, L=longer than 216mm

8.3.4 Reversing Accelerating Control of Large Size Paper

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

This machine executes fixing arch control (details will be explained later at fixing control). In the case of executing reversing of the large size paper, after the paper leading edge turns on the reversing sensor [2], the paper trailing edge is pulled by fixing, resulting in failure to correctly measure time until the paper stops at the reversing point.
So, the following controls are performed for reversing the large size paper.

When the paper leading edge turns on the reversing sensor [2], and if the trailing edge point, which is calculated from the paper size, does not pass over the secondary transfer roller [5] [6] (in the case of executing arch control of fixing), drop the speed of the delivery-2/-3 motors to 135mm/s. Because 135mm/s is the lower speed for fixing arch control, the paper will not be pulled from the point of the fixing to the reversing. When the trailing edge passes over the secondary transfer roller [5] [6], the fixing arch control is completed. And then, the fixing speed is returned to 143mm/s, so as the speed of the delivery-2/-3 motors.
Afterwards, the paper feeding speed accelerates to 460mm/s when the trailing edge is at the point of +10mm from the fixing rear roller [4], and starts to decelerate at the point of 43.8mm from the reversing roller [1] (30mm from the reversing roller = reversing point [3], the distance from when the delivery-3 motor starts at 460mm/s until it completely stops = 13.8mm) to let it stop at the reversing point.
The followings show the timing for reversing accelerating control according to the paper size (after turning on the reversing sensor until the delivery-3 motor is stopped).



F-8-12

[1] reversing roller
[2] reversing sensor
[3] reversing point
[4] fixing rear roller
[5] Secondary transfer outside roller
[6] Secondary transfer inside roller

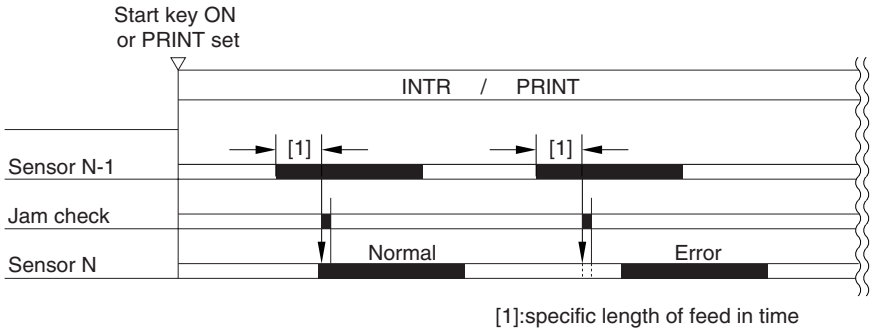
8.4 Detecting Jams

8.4.1 Delay Jams

8.4.1.1 Delay Jam for Those Other Than the Pickup Unit

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

A delay jam outside the pickup unit is identified as follows:
The length of time it takes for paper to move from the sensor N-1 to the delay jam sensor N is kept under control; a delay jam is identified if the delay jam sensor does not go on within a specific length of time after the sensor N has gone on.



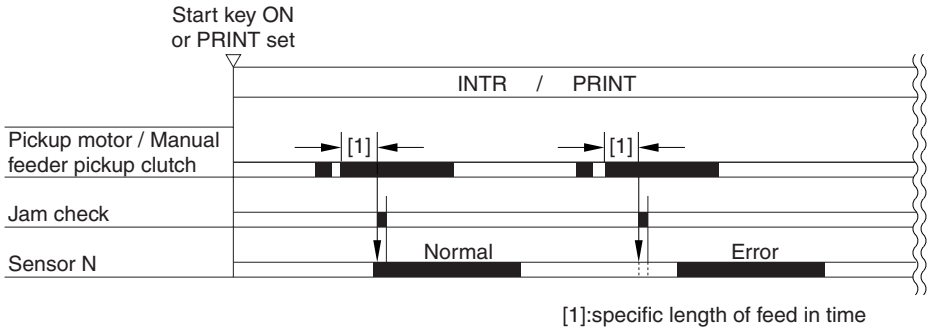
F-8-13

Sensor
Pre-registration sensor (PS7)
Inside delivery sensor (PS1)
No. 1 delivery sensor (PS27)
Duplexing paper sensor (PS10)
Fixing inlet sensor (PS14)
No. 2 Delivery sensor (PS1A)
Reversing sensor (PS4A)
No. 3 Delivery sensor (PS5A)

8.4.1.2 Delay Jam for the Pickup Unit

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The leading edge of paper does not reach the sensor after the cassette 1/2 pickup motor has started to rotate.
Or, in the case that the paper leading edge does not reach to the sensor within specified time after turning on the manual feeder pickup clutch



F-8-14

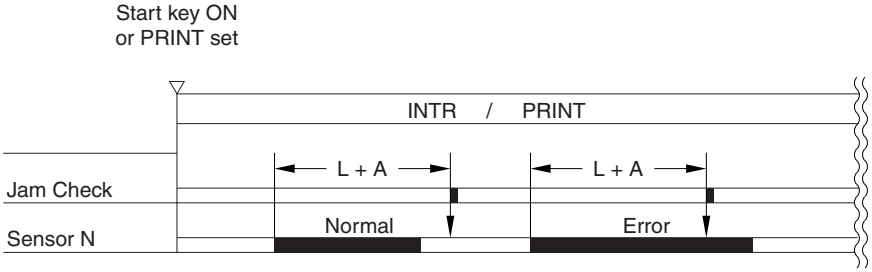
Source of paper	Motor/Clutch	Sensor
Cassette 1	cassette 1 pickup motor (M4)	cassette 1 retry sensor (PS25)
Cassette 2	cassette 2 pickup motor (M5)	cassette 2 retry sensor (PS26)
Manual feeder	Manual feeder pickup clutch (CL5)	Manual feeder paper present/absent sensor (PS9)

8.4.2 Stationary Jams

8.4.2.1 Common Stationary Jam

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The sensor N does not go off within a specific length of time after the sensor has gone on.



F-8-15

Sensor
Cassette 1 retry sensor (PS25)
Cassette 2 retry sensor (PS26)
Pre-registration sensor (PS7)
Inside delivery sensor (PS1)
No. 1 delivery sensor (PS27)
Duplex paper sensor (PS10)

8.4.2.2 Stationary Jam at Power-On

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The machine makes a check to see that there is no paper over the following sensors before it starts initial multiple rotation at power-on:

Sensor
Cassette 1 retry sensor (PS25)
Cassette 2 retry sensor (PS26)
Pre-registration sensor (PS7)
Inside delivery sensor (PS1)
No. 1 delivery sensor (PS27)
Duplex paper sensor (PS10)

8.4.3 Other Jams

8.4.3.1 Size Difference Jam

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

In the case of detecting paper that is shorter than specified

Sensor
Pre-registration sensor (PS7)

8.4.3.2 Material Difference Jam

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

In the case that the transparency sensor detects paper that is different from the specified.

Sensor
Transparency sensor PCB (UN18, UN19)

8.4.3.3 Door Open Jam

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

A door open jam is identified when the machine detects the opening of the door while it is making copies/prints.

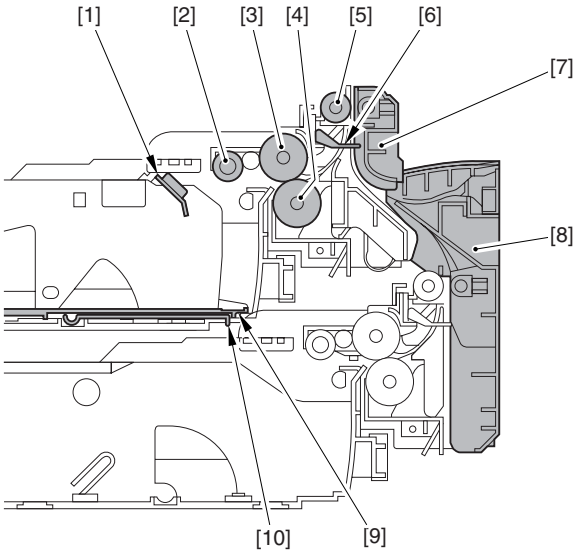
Sensor
Front cover open sensor (PS17)
Right cover open sensor (PS19)

8.5 Cassette Pick-Up Unit

8.5.1 Overview

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The paper inside the cassette is held up by the lifter plate. When pickup takes place, the pickup roller moves down to come into contact with the surface of paper. The pickup roller is moved down when the pickup solenoid goes on.
The feed roller and the separation roller serve to make sure that a single sheet of paper is moved to the feed path, and the paper is moved as far as the registration roller by the work of the vertical path roller.
The pickup vertical path roller, pickup roller, feed roller, and separation roller are driven by the cassette pickup motor.



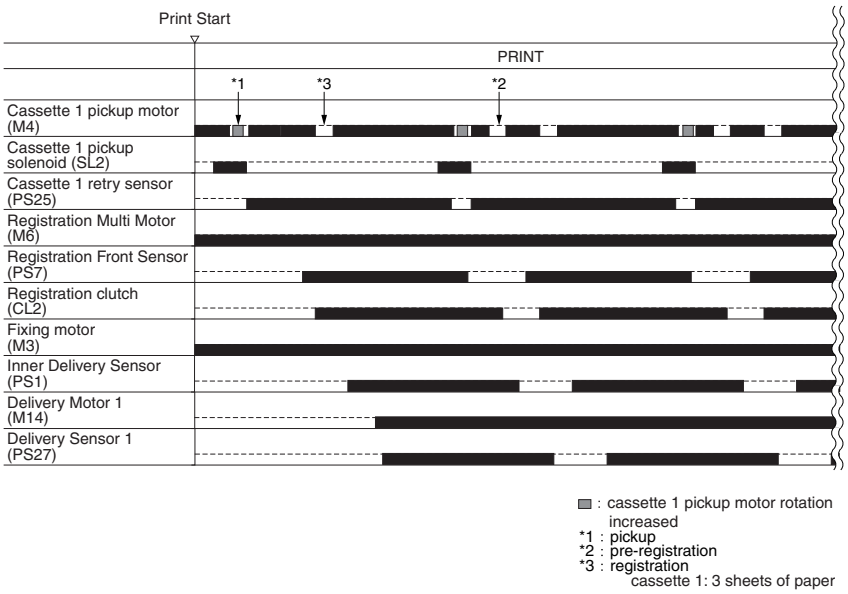
F-8-16

[1] Cassette paper sensor
[2] Pickup roller
[3] Feed roller
[4] Separation roller
[5] Pickup vertical path roller
[6] Cassette retry paper sensor
[7] Vertical path guide
[8] Lower right cover
[9] Holding plate
[10] Lifter plate

8.5.2 Basic Sequence

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Basic Sequence of Operation for Making 3 Prints



F-8-17

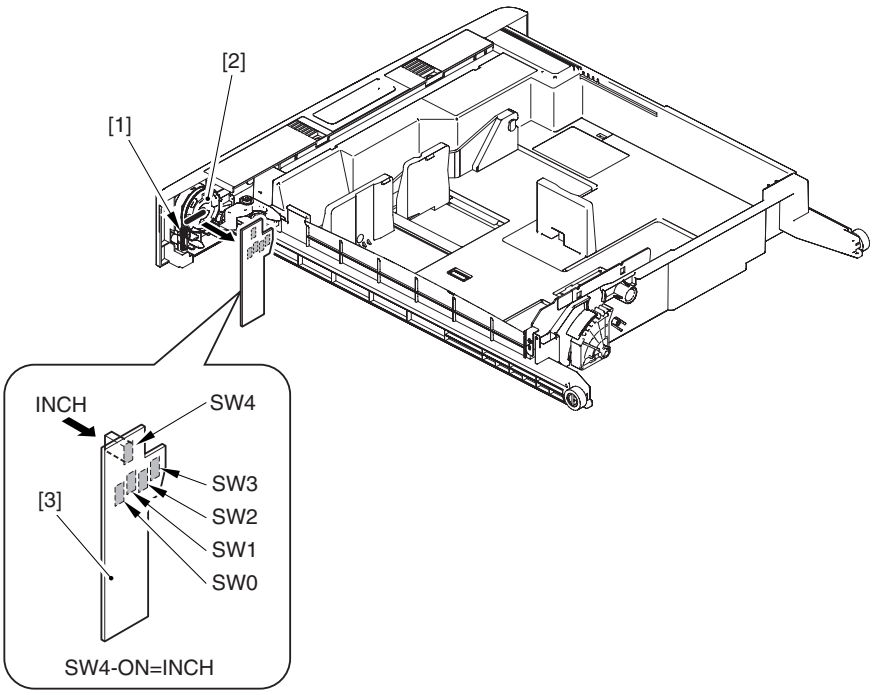
8.5.3 Identifying the Paper Size

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The size of paper inside the cassette is detected by the cassette size dial, and is communicated to the cassette size detection PCB.
As may as 15 positions may be detected with reference to the combinations of on and off states of the array of 4 actuators mounted to the cassette size detection PCB on the printer side and operating in conjunction with the cassette size dial.
In the absence of a cassette, all 4 actuators are off, causing the machine to assume there is no cassette.

1. Size switch of AB configuration/Inch configuration

The cassette size dial is equipped with a switch operated to change between AB and Inch configurations; the cassette size detecting switch will detect the configuration as soon as a cassette is fitted in the machine.



F-8-18

[1] AB/Inch switch
[2] Cassette size dial
[3] Cassette size detection PCB

2. List of paper size (AB configuration)

T-8-6

Size	SW0	SW1	SW2	SW3	SW4
(no-cassette)	OFF	OFF	OFF	OFF	OFF
A5R	ON	OFF	ON	ON	OFF
A4	ON	ON	ON	ON	OFF
A4R	OFF	ON	ON	ON	OFF
A3	OFF	ON	OFF	ON	OFF
B5	ON	ON	OFF	ON	OFF
B5R	OFF	OFF	OFF	ON	OFF
B4	ON	OFF	OFF	ON	OFF
Blank (no-cassette)	ON	OFF	OFF	OFF	OFF
305x457 mm	ON	ON	OFF	OFF	OFF
U1	OFF	ON	OFF	OFF	OFF
Blank (no-cassette)	ON	ON	ON	OFF	OFF
U2	OFF	ON	ON	OFF	OFF
Blank (no-cassette)	OFF	OFF	ON	OFF	OFF
Envelope/ENV *1	ON	OFF	ON	OFF	OFF
Blank (no-cassette)	OFF	OFF	ON	ON	OFF

- SW4 is used to detect the state of the AB/Inch-configuration switch.
- As for the blank (no-cassette), even if inserting the cassette to this point to match the dial, it is regarded that the cassette is not inserted, resulting in no execution of controls such as lifter uprising operation.
- The machine will assume the absence of a cassette if it detects a combination not found in the table. At this time, it does not move up the cassette lifter.Since the paper size is not identified, there will be no indication of a paper size on the control panel; when the cassette in question is selected, the machine will indicate a message prompting the supply of paper.
- As for different terms of size descriptions, such as 12X 18, switch the indication according to the location that the machine is set in service mode.

*1 If an envelope size is detected, an envelope cassette must be fitted.

3. List of paper size (Inch-configuration)

T-8-7

Size	SW0	SW1	SW2	SW3	SW4
(no-cassette)	OFF	OFF	OFF	OFF	OFF
STMTR	ON	OFF	ON	ON	OFF
LTR	ON	ON	ON	ON	OFF
LTRR	OFF	ON	ON	ON	OFF
LGL	OFF	ON	OFF	ON	OFF
11x17	ON	ON	OFF	ON	OFF
EXEC	OFF	OFF	OFF	ON	OFF
Blank (no-cassette)	ON	OFF	OFF	ON	OFF
Blank (no-cassette)	ON	OFF	OFF	OFF	OFF
12x18	ON	ON	OFF	OFF	OFF
U3	OFF	ON	OFF	OFF	OFF
Blank (no-cassette)	ON	ON	ON	OFF	OFF
U4	OFF	ON	ON	OFF	OFF
Blank (no-cassette)	OFF	OFF	ON	OFF	OFF
Envelope/ENV *1	ON	OFF	ON	OFF	OFF
Blank (no-cassette)	OFF	OFF	ON	ON	OFF

- SW4 is used to detect the state of the AB/Inch-configuration switch.
- As for the blank (no-cassette), even if inserting the cassette to this point to match the dial, it is regarded that the cassette is not inserted, resulting in no execution of controls such as lifter uprising operation.
- The machine will assume the absence of a cassette if it detects a combination not found in the table. At this time, it does not move up the cassette lifter.Since the paper size is not identified, there will be no indication of a paper size on the control panel; when the cassette in question is selected, the machine will indicate a message prompting the supply of paper.
- As for different terms of size descriptions, such as 12X 18, switch the indication according to the location that the machine is set in service mode.

*1 If an envelope size is detected, an envelope cassette must be fitted.

8.5.4 Setting Up the Universal Cassette

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The following are default sizes the machine will assume when U1 through U4 are detected:

T-8-8

Universal cassette	Default size
U1	G-LTR
U2	FLSC
U3	G-LGL
U4	A-LTR

The following is a list of sizes that may be assigned in addition to default sizes in service mode:
FLSC
OFI
E-OFI
B-OFI
A-OFI
M-OFI
FOLI

A-FLS
G-LTR
G-LGL
A-LTR (LTR)
A-LTRR (LTRR)

Service mode:
COPIER > OPTION > CST > CST-U1
COPIER > OPTION > CST > CST-U2
COPIER > OPTION > CST > CST-U3
COPIER > OPTION > CST > CST-U4

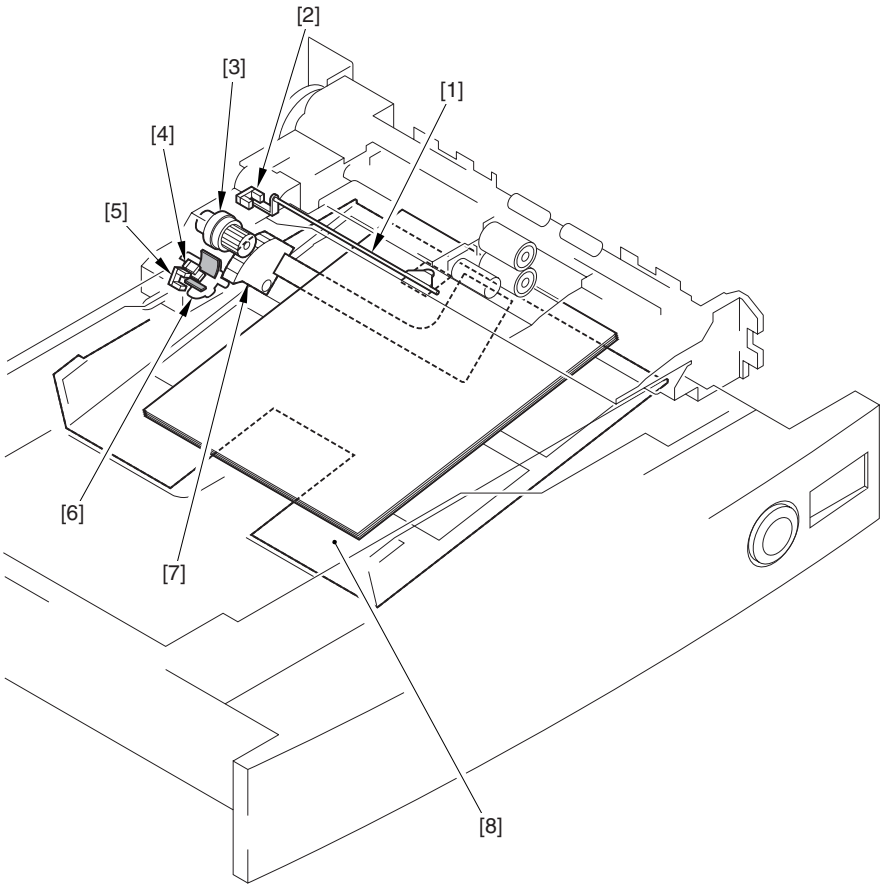
8.5.5 Paper Level Sensor

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The level of paper inside the cassette is checked using the following sensors:

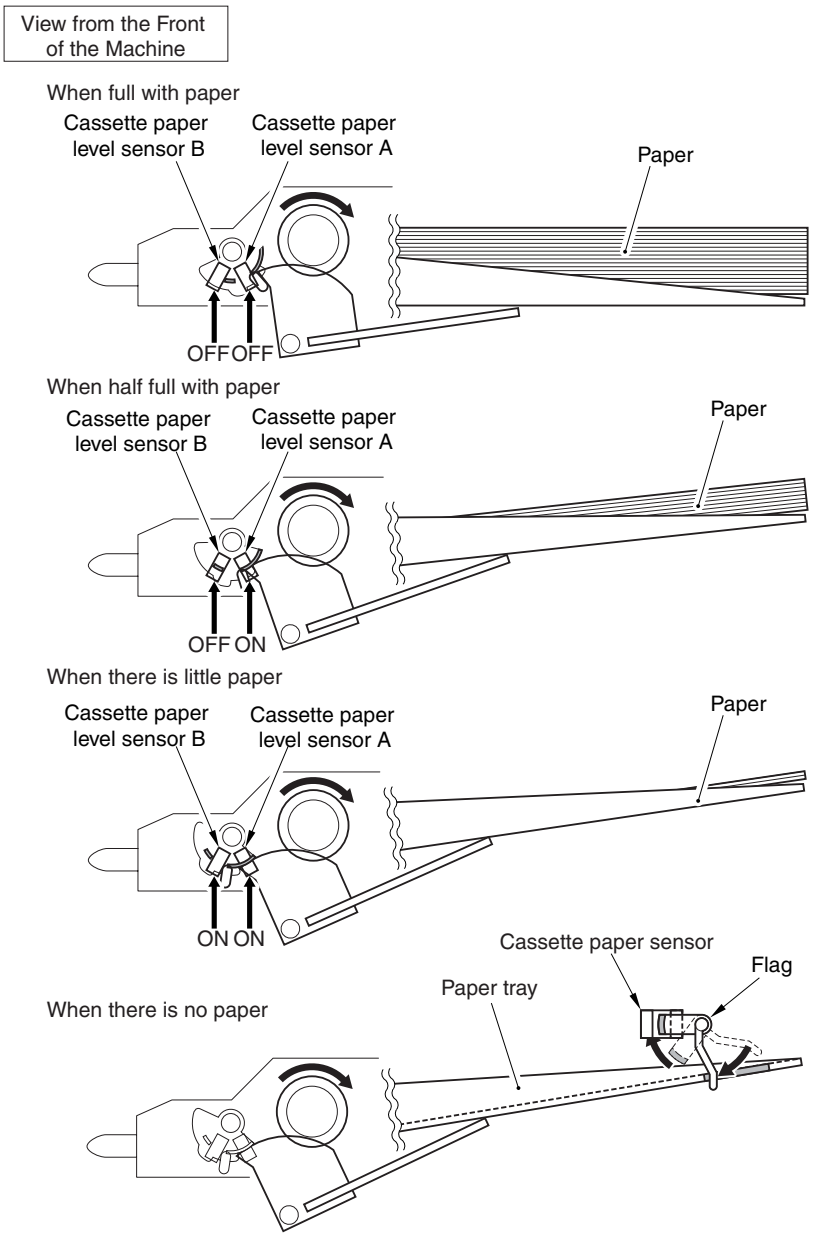
T-8-9

	Cassette 1	Cassette 2
Paper level sensor A	PS21	PS23
Paper level sensor B	PS22	PS24
Paper sensor	PS8	PS20



F-8-19

[1] Flag
[2] Cassette paper sensor
[3] Lifter clutch
[4] Cassette paper level sensor A
[5] Cassette paper level sensor B
[6] Paper level sensor flag
[7] Lifter gear
[8] Tray



F-8-20

T-8-10

Paper level sensor A	Paper level sensor B	Paper sensor	Paper level	Control panel indication
OFF	OFF	OFF	100% to 50% of capacity	
ON	OFF	OFF	50% to 50 sheets (approx.)	
ON	ON	OFF	50 sheets or less (approx.)	
---	---	ON	No paper	

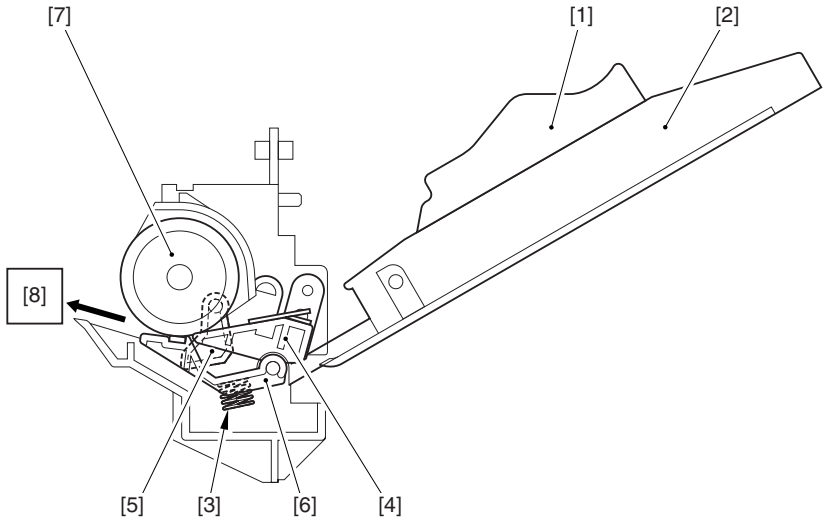
8.6 Manual Feed Pickup Unit

8.6.1 Overview

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The machine executes the manual feeder pickup by carrying down the driving from the registration multi motor (M6) to the manual feeder pickup roller with connecting the manual feeder pickup clutch (CL5).

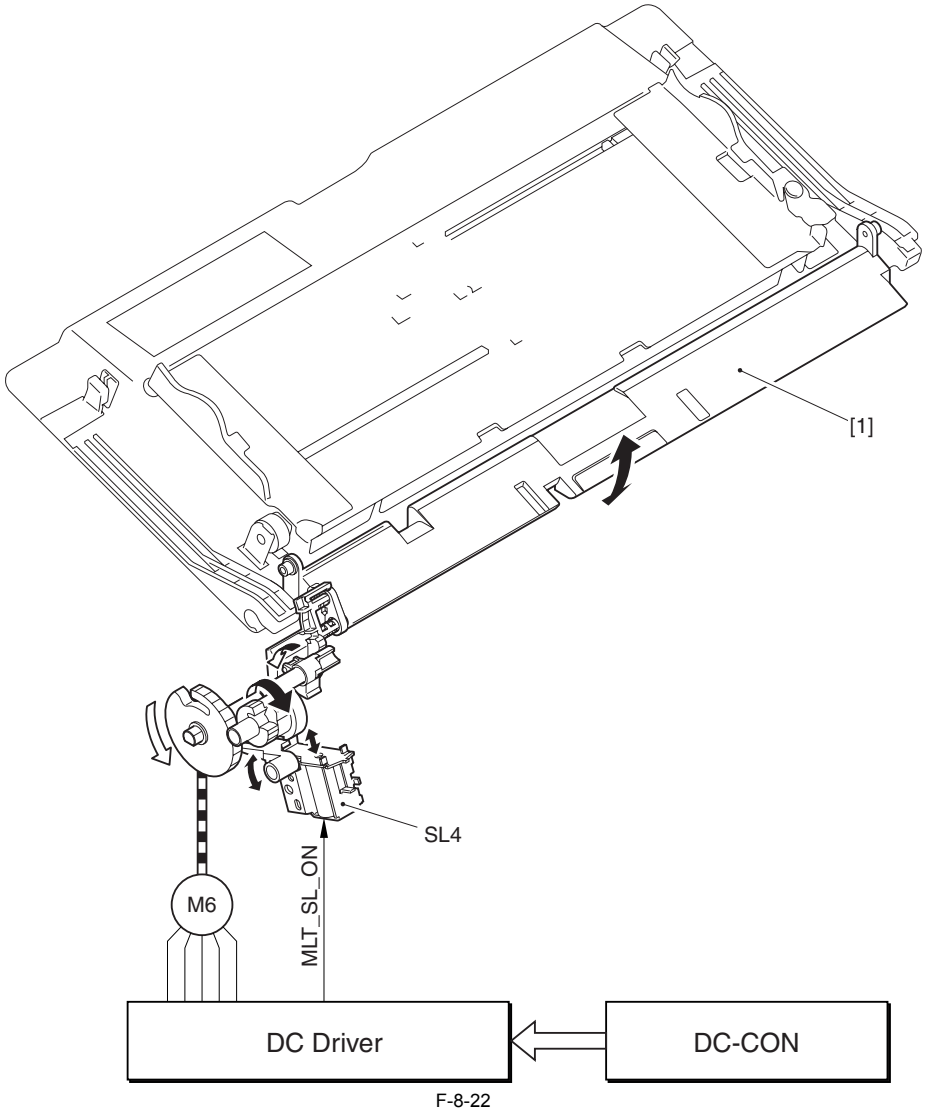
The mechanisms of the manual feeder pickup assembly and the manual feed tray are shown in the following figures.



F-8-21

[1] Side guide
[2] Manual feeder pickup tray
[3] Pressure spring
[4] Lifting plate
[5] Manual feeder paper sensor flag
[6] Separation pad
[7] Manual feeder pickup roller
[8] (To the registration roller unit)

Once the manual feeder pickup operation starts, the multi lifting plate up/down solenoid (SL4) turns ON. Then, the lifting plate of the manual feeder pickup assembly goes up, and a paper on the manual feeder pickup tray is pressed against the manual feeder pickup roller. In terms of paper, one paper is separated and fed by means of the manual feeder pickup roller and the separation pad.



F-8-22

[1] Lifting plate

SL4: Multi lifting plate up/down solenoid
M6: Registration multi pickup motor
A paper that is picked up from the manual feeder pickup assembly moves forward the distance where the predetermined arching (5.5 mm) is added after detecting the leading edge with the pre-registration sensor (PS7). Then, the paper stops at the registration roller once by turning OFF the manual feeder pickup clutch (CL5). As the registration roller turns ON, the manual feeder pickup clutch (CL5) turns ON. After the registration roller feeds a paper for the predetermined amount (55 mm), turn OFF the manual feeder pickup clutch (CL5).

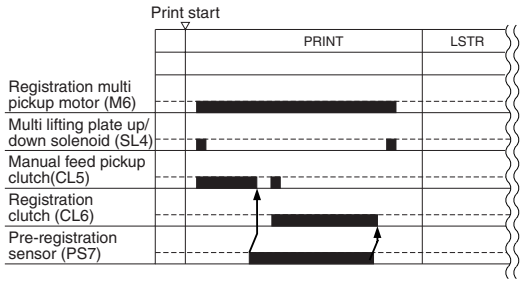
The pickup from the manual feeder pickup assembly is executed either the normal speed (55 mm/min) or the half speed (71.5 mm/min) depending on the media type. In case of the transparency, pickup is executed with the half speed and the paper is fed to the registration roller with the same speed. If there is another paper, pickup is executed by setting back the registration multi pickup motor speed (M6) to half when the first paper moves 5 mm downstream from the registration roller.

Reference:
The sensor that detects the last paper is not equipped with the manual feeder pickup unit of this machine.

8.6.2 Basic Sequence of Operation

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The multi-pickup roller starts to rotate when the manual pickup clutch (CL5) goes on to start upper separation to pick up a single sheet of paper. When the leading edge of the sheet reaches the pre-registration sensor (PS7) and is moved a specific distance, the manual pickup clutch goes off, causing the sheet to arch in the registration roller area.
When the registration clutch (CL6) goes on, the manual feed pickup clutch (CL5) once again goes on to pick up paper. The manual feed pickup clutch (CL5) goes off immediately before the trailing edge of paper moves past the manual feed pickup roller; thereafter, the registration roller serves to pull off the paper.

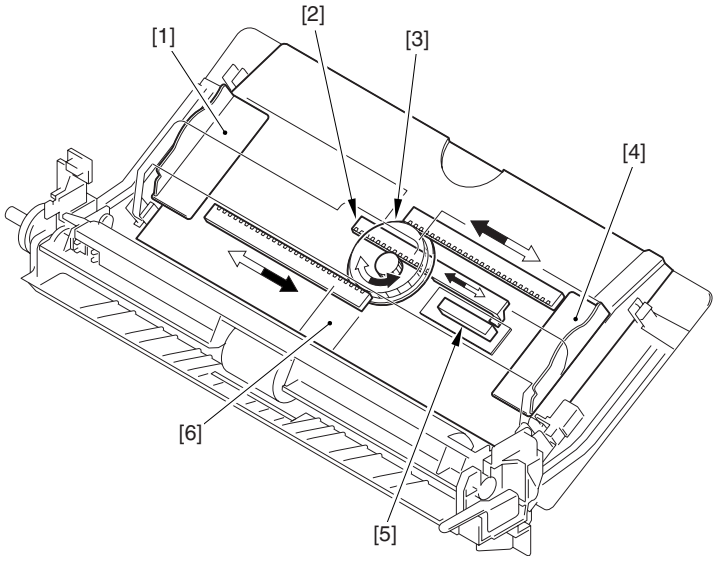


F-8-23

8.6.3 Identifying the Paper Size

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The width of paper is detected with reference to the output of the variable resistor (SVR1), which operates in conjunction with the movement of the side guide. The side guide in the manual feed tray is set when the user moves it to place paper in the cassette.



F-8-24

[1] Side guide (rear)
[2] Stop arm
[3] Center gear
[4] Side guide (front)
[5] Variable resistor (SVR1)
[6] Manual feed tray
Calculate the paper width from the A/D converted value of the manual feed volume.
Register the A/D converted values of 3 points (paper width of A4, A4R, and A6R) that are the reference values to the backup RAM beforehand. (Execute the setup in the service mode.)

Service Modes:
- Register the reference points
COPIER > FUNCTION > CST > MF-A4R
COPIER > FUNCTION > CST > MF-A6R
COPIER > FUNCTION > CST > MF-A4

- Adjustment of the foregoing reference points

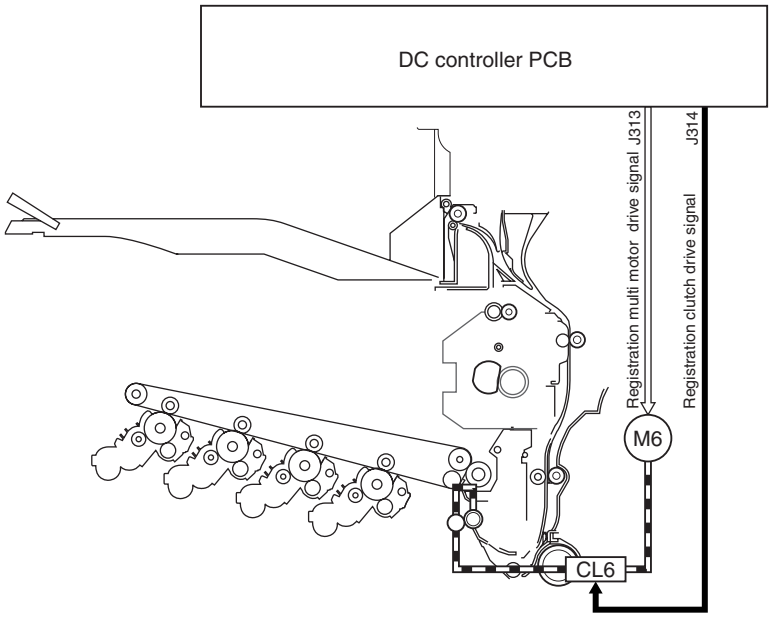
COPIER > ADJUST > CST-ADJ > MF-A4R
COPIER > ADJUST > CST-ADJ > MF-A6R
COPIER > ADJUST > CST-ADJ > MF-A4

8.7 Registration Unit

8.7.1 Overview

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The registration roller is driven with the registration multi motor (M6).
The registration clutch (CL6) is located between the registration roller and the registration multi motor, and it controls ON/OFF of the registration roller in order to match a paper and an image on the drum at the predetermined registration point.



F-8-25

8.7.2 Control of Registration Unit

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

In this machine, it is controlled to turn OFF the pickup motor (in case of cassette pickup), manual feeder pickup clutch (in case of manual feeder pickup), and the duplexing feeding motor (in case of duplexing re-pickup) to make papers stop at the point where the distance from the pre-registration sensor to the registration roller (19.9 mm) + predetermined registration arching (cassette/duplexing: 3 mm, manual feed: 5.5 mm) are added after the pre-registration sensor detects the leading edge.
When executing the accelerated pickup (300 mm/sec), decelerate to 200 mm/sec when the pre-registration sensor turns ON.
When the registration clutch turns ON, the registration roller starts to rotate and feeds paper to the secondary transfer assembly.
The registration clutch is turned OFF either after a paper is fed the predetermined amount (paper length + 50ms) or when the next paper turns ON the pre-registration sensor.

8.7.3 Checking Horizontal Registration

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The machine does not have the horizontal registration adjustment function by the horizontal registration detection at the time of duplexing feeding.
However, practically, adjustment of the horizontal registration point is possible by adjusting the write start timing of the horizontal scanning of the laser (horizontal scanning interval signal) in terms of software in the service mode setting.
In the service mode, set the horizontal registration adjustment value for each source of paper. The range of adjustment value is +/-2.5 mm. In case of duplexing re-pickup, the write start timing of the horizontal scanning of the laser is corrected in accordance with the horizontal registration adjustment value of the source of paper.

Service Mode:
COPIER>ADJUST>FEED-ADJ>ADJ-REFE
Use it to adjust the horizontal registration for the 2nd side of small-size double-sided prints.
COPIER>ADJUST>FEED-ADJ>ADJ-RE-L
Use it to adjust the horizontal registration for the 2nd side of large-size double-sided prints.
COPIER>ADJUST>FEED-ADJ>LOOPREFE
Use it to adjust the degree of arching for the 2nd side of double-sided prints.

The term "2nd side of a double-sided print" as used in relation to the machine's service mode refers to the side that receives an image second in order; in other words, it corresponds to the 1st side of the original.

Reference:
Small paper: a paper whose length of paper feeding direction is LTR (216 mm) or shorter, e.g., A4 and B5.
Large paper: a paper whose length of paper feeding direction is longer than LTR (261 mm), e.g., A3, A4R, and B5R.

8.7.4 Material Difference Jam Detection

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The machine determines the following cases as the material difference jam, and stop its operation.
- In case the material is non-transparency when transparency is set.
- In case the material is transparency when material other than transparency is set.

In this machine, one transparency sensor is used for material difference detection. The transparency sensor is allocated at the almost same position of the pre-registration sensor (a point where 21.5 mm upstream from the registration roller) on the feeding path. (In addition, the pre-registration sensor is allocated at the point where 19.9 mm upstream from the registration roller.) The transparency sensor is comprised of 2 PCBs of LED; the light emission area (UN18) and the light reception area (UN19).
In this machine, the material difference is detected according to the transmittance of material being fed. The transmittance of material is calculated according to the sensor output (reference value A) under the condition that no shielding material presents at the transparency sensor, and the sensor output (measured value B) under the condition that a fed material presents.

1. Reading the Reference Value
The reading of the reference value is executed at the following timing:
- After warm-up rotation when turning the power on.
- After warm-up rotation after opening/closing the right door.

The prism facing to the transparency sensor is allocated at the right door side. Because the detected voltage changes by opening/closing the right door, the reference value must be measured after opening/closing it. Measurement method of the reference value is as follow:
1) Turn ON the LED of transparency sensor, and read the sensor output 3 times with constant interval (every 16 ms).
2) Among the read values, save the smallest value as the reference value A (the 3 read values fall somewhere into the predetermined range).
3) Turn OFF the LED and finish the measurement.

2. Reading the Measured Value
Start to read the transparency sensor when a paper is fed from a source of paper to the registration roller and the pre-registration sensor turns ON.
1) Turn ON the LED of transparency sensor, and read the sensor output 3 times with constant interval (every 16 ms).
2) Among the read values, save the largest value as the measured value B.
3) Turn OFF the LED and finish the measurement.
4) Based on the reference value A and the measured value B, calculate the transmittance of material. If the transmittance is the predetermined value (=45%) or above, the detected material is judged as a transparency. If the result is less than the predetermined value, the material is judged as non-transparency (e.g., plain paper, heavy paper, color paper, tracing paper).

If the result of the step 4 indicates that the material is non-transparency while transparency is set and vice versa, the machine considers as a jam due to the material difference, and stops the machine. (Jam code: 0D93)

Reference:
The detection is not designed to protect a transparency for CLC (a transparency with a white mark on the leading edge) from being fixed in order to avoid the occurrence of symptoms that cause damage on the fixing assembly or error codes when it is used.
In this machine, a transparency for CLC might be wrapped around the fixing assembly when using it, and it causes the fixing inside delivery delay jam (0107 jam). When the fixing motor is stopped because of a jam detection processing, a transparency is not completely wrapped around the fixing roller. By executing the jam processing from the upstream of feeding as a jam processing flow, it prevents the sheet to be wrapped around the fixing assembly. Therefore, the control detecting a transparency for CLC and stopping print is not executed.

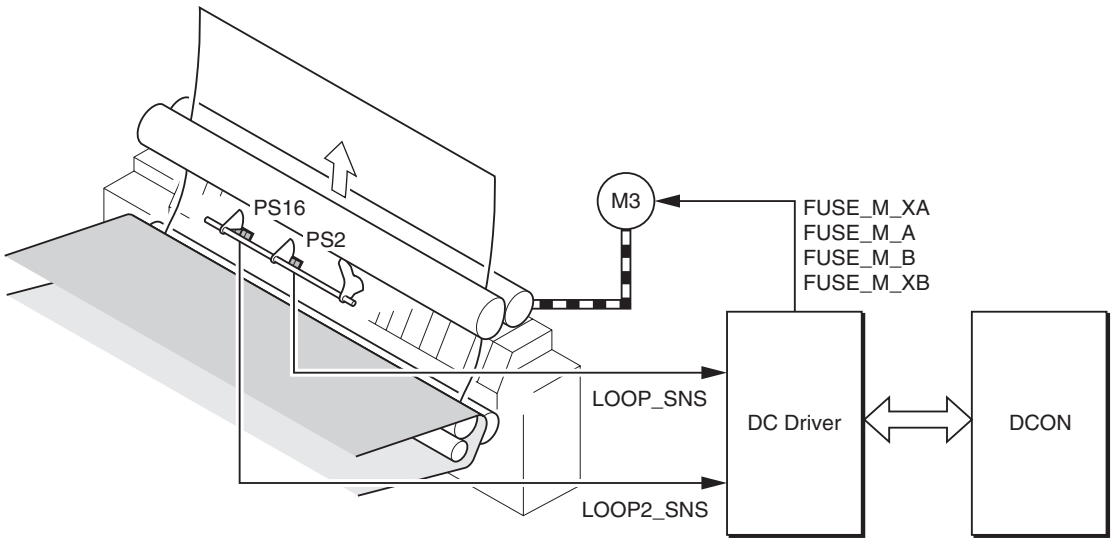
8.8 Pre-Fixing Feeding

8.8.1 Fixing Arch Control

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1. Fixing Arch Control
This is the control performed between the secondary transfer unit and the fixing unit. The perimeter of the roller increases due to heat expansion on the pressure roller of the fixing unit. Therefore, the paper feeding speed on the fixing side becomes faster than the one for secondary transfer at constant rotation speed. This causes papers to be pulled towards the fixing side. When making the speed on the fixing side lower than the one for secondary transfer to make larger arch of paper, papers are pushed into the fixing side from the secondary transfer side. Too large and small arch of papers affects the image. To feed papers to the fixing unit at optimum status, this control system monitors the arch of papers and changes the feeding speed due to according its status.

2. Control Mechanism
The sensors and motors regarding the fixing arch control are shown as below.

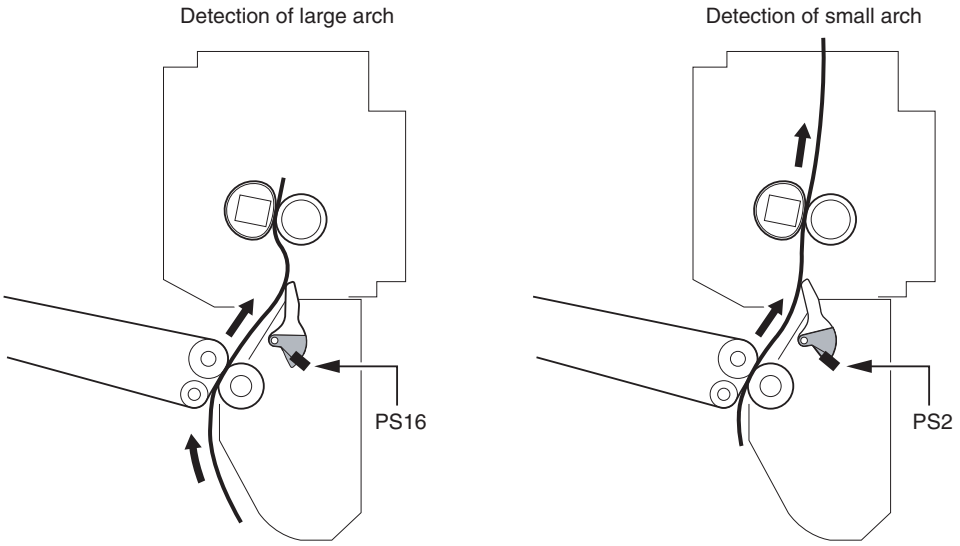


F-8-26

PS2: Arch sensor
PS16: Arch sensor 2
M3: Fixing motor

3. Control Sequence
The sequence of arch control is shown as below.
a. Starting arch monitoring
Start arch monitoring from the point where the leading edge of paper enters fixing (the point of reaching the fixing nip).

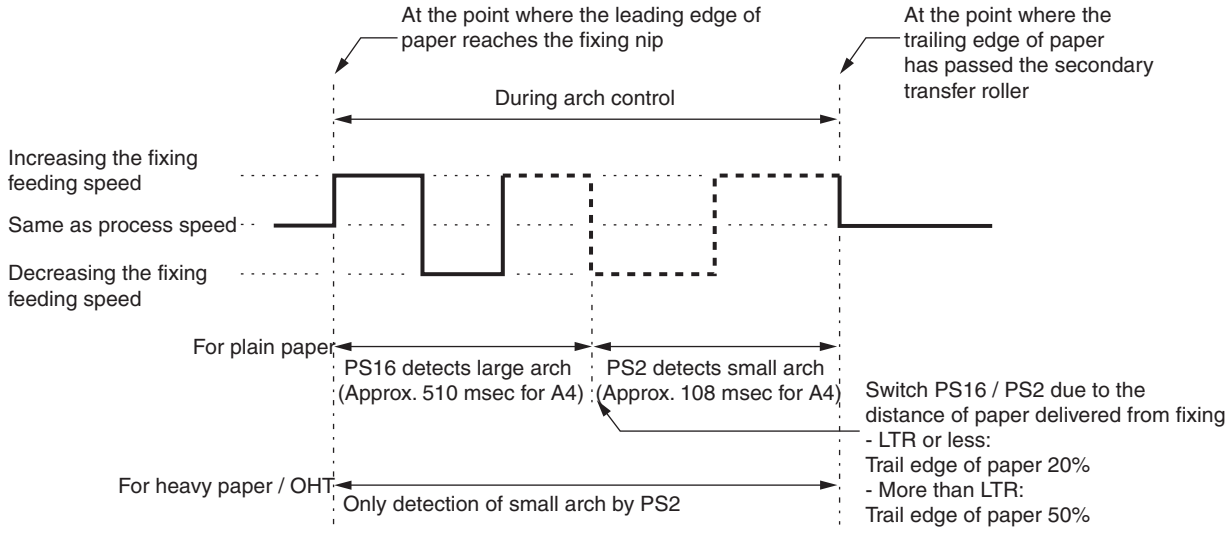
b. Detection of the arch level
Two arch sensors detect the arch level.
- Arch sensor 2 (PS16): Detects large arch (sagging)
- Arch sensor (PS2): Detects small arch (sagging)



F-8-27

Reference:
This machine has two different sensors to detect large and small arch respectively to prevent noise and faulty image.
If there is large arch when a paper passes through the secondary transfer roller, the paper with large arch will straighten and noise occurs. If a paper hits somewhere, faulty image (including soiled paper edge, etc) may occur.
To prevent this symptom, make the arch level of a paper smaller before passing through the secondary transfer roller so that the paper passes through the secondary transfer roller without a large arch.

c. Speed control for the fixing motor (M3)
Control the fixing motor (M3) according to ON / OFF of the arch sensor (PS2) and the arch sensor 2 (PS16) to change the feeding speed.
In the former part of the control, keep the arch level large while the arch sensor 2 (PS16) detects large arch. In the latter part, keep the arch level small while the arch sensor (PS2) detects small arch.
In both sensors, increase the fixing feeding speed when the sensor is ON (the arch level becomes larger). Decrease the fixing feeding speed when the sensor is OFF (the arch level is smaller). This control keeps the arch level optimum.
For heavy paper and OHT, the arch sensor (PS2) usually controls only small arch.
There is no arch control for envelope.



F-8-28

The feeding speeds at the sensor ON / OFF are shown as below.

T-8-11

	Constant speed	Half speed	1 / 4 speed
Process speed	143.0 mm/s	71.5 mm/s	35.8 mm/s
Arch sensor ON (Increasing the fixing feeding speed)	146.8 mm/s	73.4 mm/s	36.7 mm/s

	Constant speed	Half speed	1 / 4 speed
Arch sensor OFF (Decreasing the fixing feeding speed)	135.0 mm/s	67.5 mm/s	33.8 mm/s

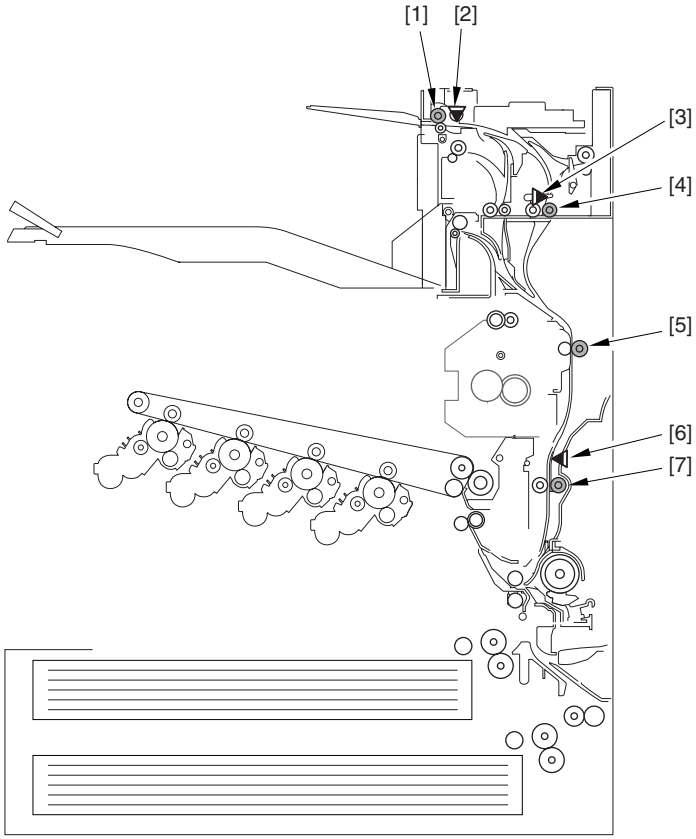
d. Finishing monitoring the arch
Finish monitoring the arch at the point where the tailing edge of paper passes through the secondary transfer roller.

8.9 Duplex Feeding Unit

8.9.1 Overview

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

At both-sided print in this machine, a paper is reversed at the reversal slot of the delivery assembly outside the machine, returned and re-picked up through the duplexing feed assembly to the registration roller assembly.
In reversing, keep the trailing edge of paper at 30mm upstream from the reversing roller [1], and stop temporarily with the remained portion delivered outside the machine from the reversal slot. After that, rotate the reversing roller reversely and return the paper, feed it through the duplexing inlet roller [4] to the duplexing feed assembly. The delivery motor 3 activates the reversing roller and the duplexing inlet roller.
The duplexing feed assembly has two sets of duplexing feed roller [5] [7]. These rollers feed papers to the registration roller assembly. Duplexing motor activates the duplexing feed roller.



F-8-29

[1] Reversing roller
[2] Reversal sensor (PS4A)
[3] Duplexing inlet sensor (PS3A)
[4] Duplexing inlet roller
[5] Duplexing feeding roller 1
[6] Duplexing feed sensor (PS10)
[7] Duplexing feeding roller 2

There are following restrictions regarding duplexing feeding for this machine.
- Duplexing feeding is possible only for plain paper. Heavy paper (105 g or more) is out of specification (since reversing feeding is not assured).
- Sizes available for duplexing feeding are B5 (vertical scanning; 182 mm) to 12X18 (vertical scanning; 457 mm)
- Output of papers of 450mm or more SRA3 and 12X18 to the delivery 3 is out of specification (since it is impossible to stack them on the tray of the delivery 3).

8.9.2 The Number of Circulating Sheets at Duplexing Feeding

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The number of sheets circulating in the passing at duplexing feeding varies due to the delivery position and the paper size.
When outputting to the delivery 1 and 2, the number of circulating papers of small size (smaller than A3) and large size (A3 or more) is 3.
When outputting to the delivery 3, the number of circulating is 3 for small size (smaller than A3) and 1 for large size (A3 or larger).
This is because the reversing roller and the delivery roller 3 has the same drive source (the delivery motor 3) and two sheets of A3 or larger size cannot be delivered simultaneously in the reversing and re-pickup directions.
The following are the number of circulating papers at duplexing feeding according to the delivery position and the paper size.

T-8-12

	Delivery 1 / 2	Delivery 3
Small size (smaller than A3)	3	3

Large size (A3 or larger)	3	1

8.9.3 Duplexing Re-Pickup Control

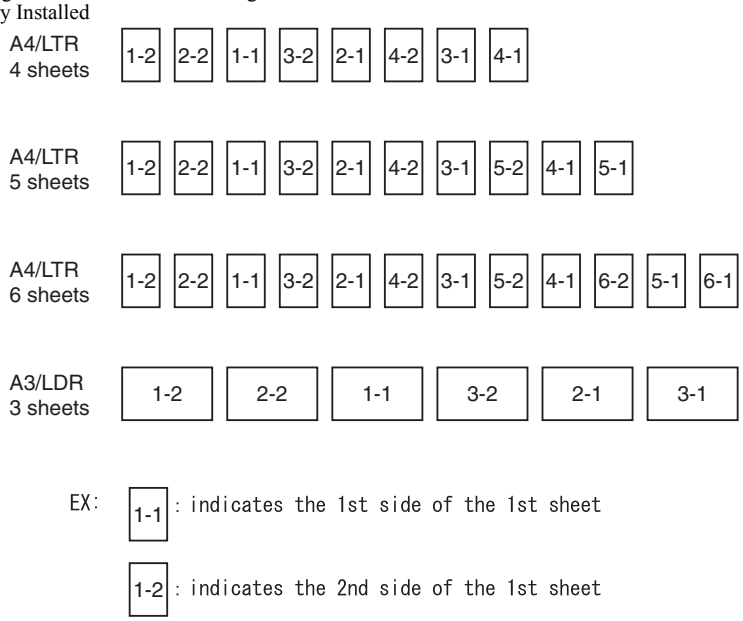
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The timing of duplexing pickup is determined with registration clutch ON of the previous paper as trigger, as in the case of the pickup control of cassette pickup. When specified interval (cassette holder, time due to the size) passed after registration clutch ON for the previous paper, the timing of re-pickup is generated and re-pickup is started.

8.9.4 Sequence of Image Formation

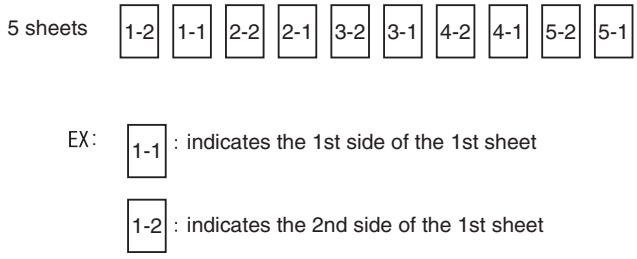
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The order of duplexing image forming is shown as in the following chart.
- Configuration Without an Accessory Installed



F-8-30

However, in the case of delivery to tray 3 (outside), the machine uses single-sheet circulation.
- Configuration with an Accessory Installed

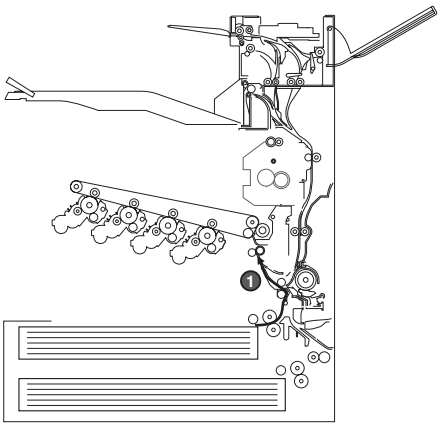


F-8-31

8.9.5 Flow of Paper

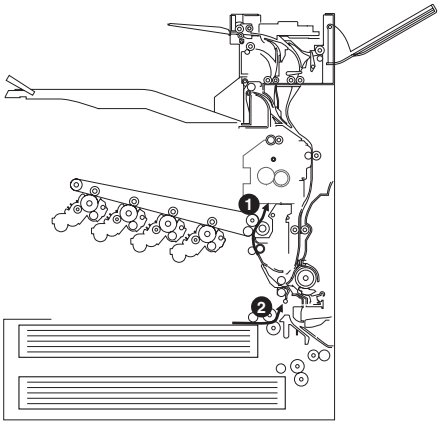
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

A4/LTR, 5 Sheets, Delivery to Tray 1/2
A number in a circle indicates the 1st side, while a number in a square indicates the 2nd side.



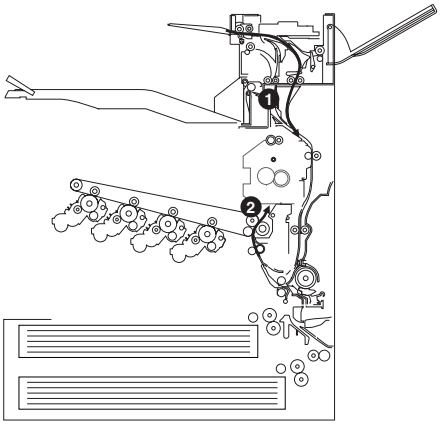
F-8-32

The 1st sheet is picked up.



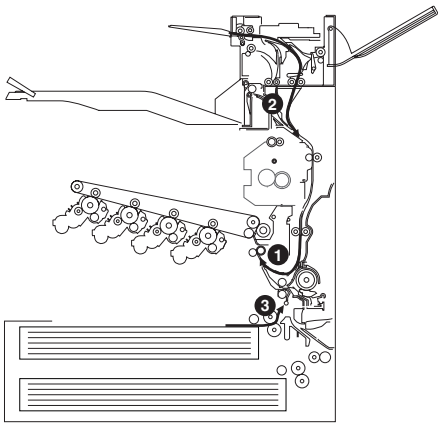
F-8-33

An image is formed for the 2nd side of the 1st sheet. The 2nd sheet is picked up.



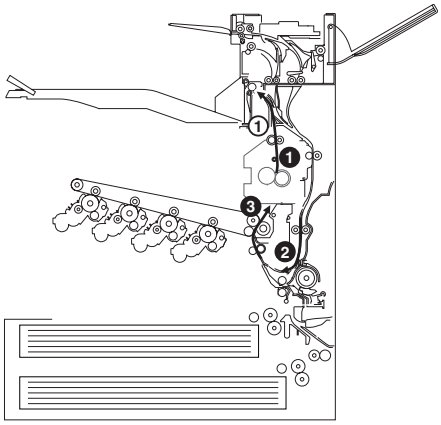
F-8-34

The 1st sheet is turned over, and is moved for duplexing registration. An image is formed for the 2nd side of the 2nd sheet.



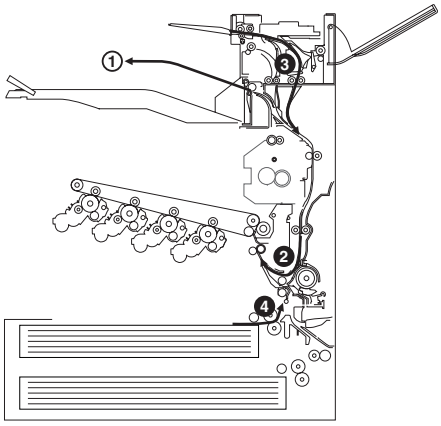
F-8-35

The 1st sheet is moved for registration once again. The 2nd sheet is turned over and moved for duplexing registration. The 3rd sheet is picked up.



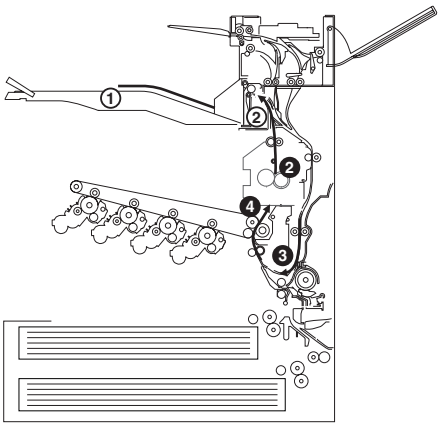
F-8-36

An image is formed for the 1st side of the 1st sheet and the 2nd side of the 3rd sheet. The 2nd sheet is moved for duplexing.



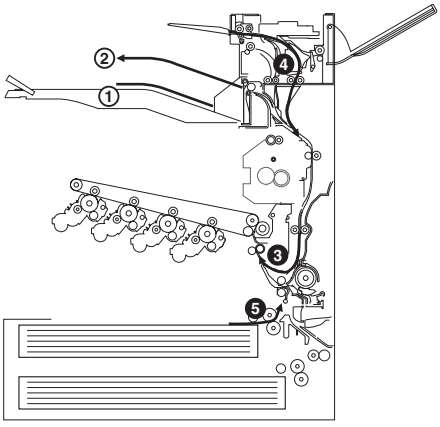
F-8-37

The 1st sheet is delivered. The 3rd sheet is turned over and is moved for duplexing registration. The 2nd sheet is moved for registration once again. The 4th sheet is picked up.



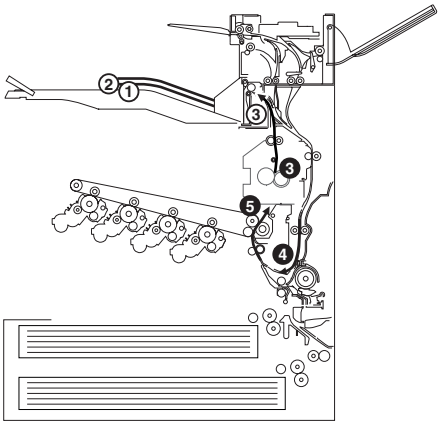
F-8-38

An image is formed for the 1st side of the 2nd sheet and for the 2nd side of the 4th sheet. The 3rd sheet is moved for duplexing.



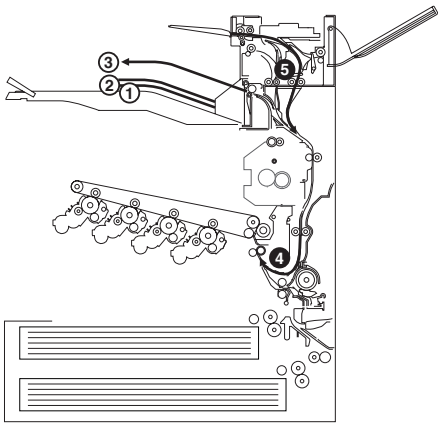
F-8-39

The 2nd sheet is delivered. The 4th sheet is turned over, and is moved for duplexing registration. The 3rd sheet is moved for registration once again. The 5th sheet is picked up.



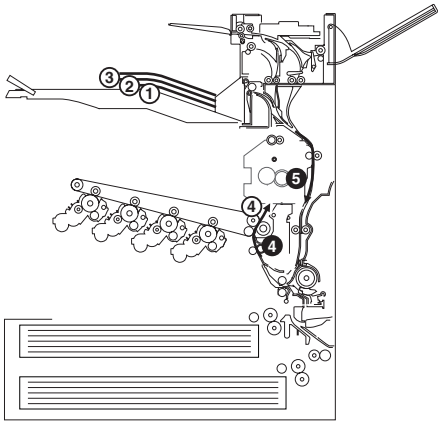
F-8-40

An image is formed for the 1st side of the 3rd sheet and for the 2nd side of the 5th sheet. The 5th sheet is moved for duplexing.



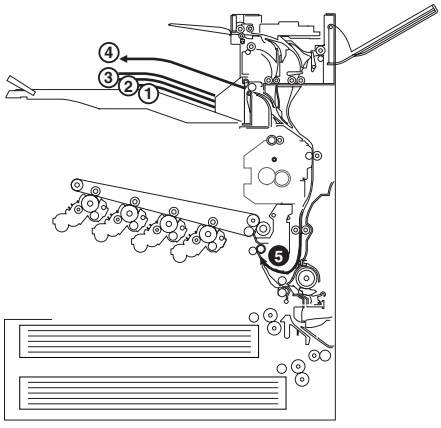
F-8-41

The 3rd sheet is delivered. The 5th sheet is turned over, and is moved for duplexing registration. The 4th sheet is moved for registration once again.



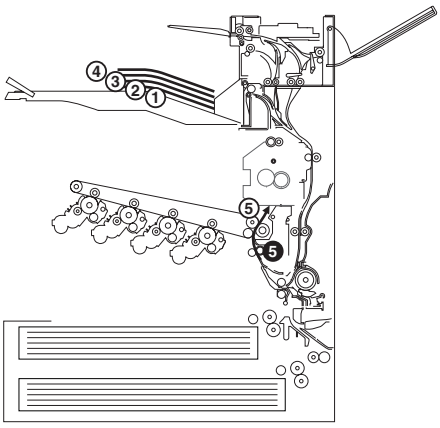
F-8-42

An image is formed for the 1st side of the 4th sheet. The 5th sheet is moved for duplexing.



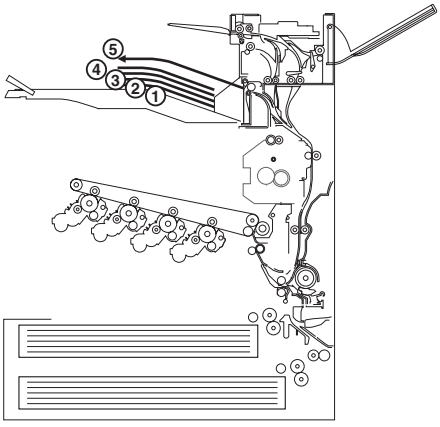
F-8-43

The 4th sheet is delivered. The 5th sheet is moved for registration once again.



F-8-44

An image is formed for the 1st side of the 5th sheet.



F-8-45

The 5th sheet is delivered.

8.10 Delivery

8.10.1 Delivery Control

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

There are some delivery accessories available for this machine: the 2 / 3 delivery units, the finisher Z1 and the saddle finisher Y2. For the purpose of improving the productivity, the 2 / 3 delivery units are connected to the main body as the standard equipments. Also, when mounting the finisher Y1or the saddle finisher Y2, buffer path unit must be mounted.

8.10.2 Delivery to the Main Body Tray

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

In case media is delivered to the delivery outlet 1, the processing speed is accelerated when the trailing edge of media reaches the point of fixing rear roller + 10 mm. Due to the drive configuration of the delivery motor 1, when the motor is rotating at 1/2 speed or slower, feeding speed cannot be accelerated to 1/2 speed or faster. For this reason, the feeding speed is not accelerated when the processing speed is 1/2 speed. When the processing speed is 1/4, the feeding speed is accelerated to 1/2 speed (71.5 mm/s). When the feeding speed of the media is accelerated to 337 mm/s and the media is delivered from the delivery outlet 1, for the purpose of keeping consistency in its speed, the feeding speed is decelerated so that the feeding speed returns to constant speed when the trailing edge (5mm) reaches the fixing rear roller.

When media is delivered to the delivery outlet 1 and 2, the feeding speed is accelerated at the point of inner delivery roller + 10mm. When the processing speed is constant, the feeding speed is accelerated to 460mm/s. Due to the drive configuration of the delivery motor 2 and 3, when the motor is rotating at 1/2 speed or slower, feeding speed cannot be accelerated to 1/2 speed or faster. For this reason, the feeding speed is not accelerated when the processing speed is 1/2 speed. When the processing speed is 1/4, the feeding speed is accelerated to 1/2 speed (71.5 mm/s). When the feeding speed of the media is accelerated to 460 mm/s and the media is delivered from the delivery outlet 2, for the purpose of keeping consistency in its speed, the feeding speed is decelerated so that the feeding speed returns to constant speed when the trailing edge (5mm) reaches the fixing rear roller.

When the media is delivered to the delivery outlet 3, the media stops temporarily after acceleration at the reversal slot, and then is fed to the delivery outlet 3 at 460mm/s. In this case as well, for the purpose of keeping consistency in its speed, the feeding speed is decelerated so that the feeding speed returns to constant speed when the trailing edge (5mm) reaches the fixing rear roller.

In this machine, the delivery method is FD (face-down) delivery only in delivery 1 through 3. There is no so-called "reversal delivery mechanism" in which switch-over of FU (face-up) / FD (face-down) is available.

8.10.3 Delivery Operation when Mounting the Delivery Accessory

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1. Delivery to the Finisher Z1
When the machine is mounted with the finisher Z1, due to the short path length until delivery, there occurs no acceleration during delivery if the image formation is performed at constant speed or 1/2 speed. In the case of 1/4 speed, the feeding speed is accelerated to 1/2 speed when the trailing edge of the paper passes the point 10 mm away after inner delivery roller.

In delivery to the finisher Z1, the activation of the delivery sensor 2 is the trigger of the delivery notice to the finisher Z1.

2. Delivery to the Finisher Y1 / Saddle Finisher Y2
When the machine is mounted with the finisher Y1 / saddle finisher Y2, the buffer path unit is mounted as a standard. When feeding within the buffer path unit, the feeding speed is accelerated to 337mm/s (when the processing speed is constant). The timings of acceleration are shown below:

T-8-13

	acceleration point	accelerated speed
In case the processing speed is constant	trailing edge: fixing rear roller + 10mm	143mm/s(constant speed) -> 337mm/s
In case the processing speed is 1/2 or slower, and the paper length is of LTR or shorter	buffer inlet sensor ON	71.5mm/s(1/2 speed) -> 143mm/s 35.8mm/s(1/4 speed) -> 143mm/s
In case the processing speed is 1/2 or slower, and the paper length is longer than LTR	buffer outlet sensor OFF	71.5mm/s(1/2 speed) -> 143mm/s 35.8mm/s(1/4 speed) -> 143mm/s

The points of acceleration differ by the processing speed as the feeding speed of the media cannot be accelerated to 1/2 speed or faster when the motor is rotating at 1/2 speed or slower due to the drive configuration of the delivery motor 1.
Also, in the case of delivery to the saddle, media is delivered without acceleration although the processing speed is constant as the media is delivered at the constant speed (143mm/s) due to the constraint of saddle processing. When the processing speed is 1/2 speed, the media speed is accelerated to the constant speed (143mm/s) as well as in the case of delivery to the tray, and delivered to the saddle afterwards.

In delivery to the finisher Y1 / saddle finisher Y2, the activation of the buffer outlet sensor is the trigger of the delivery notice to the finisher Y1 / saddle finisher Y2.

8.10.4 Specifying the Delivery Point

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

In this model, when selecting the delivery tray A/B/C in user mode, the output point changes according to the type of accessory.

T-8-14

	tray A	tray B	tray C
delivery 1 only	delivery 1	-	-
w/ inner tray	delivery 1	delivery 2	-
w/ internal tray	delivery 1	delivery 2	delivery 3
finisher Z1	finisher Z1	-	-
finisher Z1 - external tray	finisher Z1	delivery 3	-
finisher Y1 / saddle finisher Y2	finisher Y1 / saddle finisher Y2 upper	finisher Y1 / saddle finisher Y2 lower	delivery 2

8.11 Parts Replacement Procedure

8.11.1 Pickup Unit 1

8.11.1.1 Before Removing the Cassette Pickup Unit 1

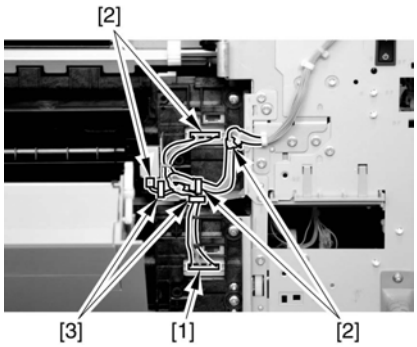
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the rear right cover. (page 10-13)[Detaching the Rear Right Cover]
2) Detach the right cover. (page 10-32)[Removing the Right Cover]
3) Detach the right lower cover. (page 10-12)[Detaching the Right Lower Cover]

8.11.1.2 Removing the Cassette Pickup Unit 1

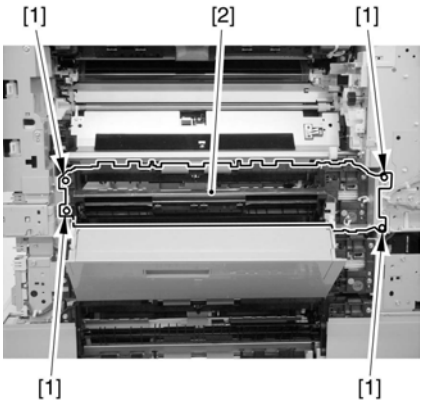
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Pull out the cassette 1 and 2.
2) Disconnect the connector [1], and free harness from the 2 wire saddles [2] and the clamps [3].



F-8-46

3) Remove the cassette pickup unit 1 [2].
-2 screws [4]



F-8-47

8.11.2 Pickup Unit 2

8.11.2.1 Before Removing the Cassette Pickup Unit 2

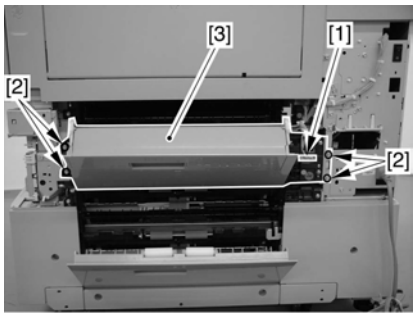
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the rear right cover. (page 10-13)[Detaching the Rear Right Cover]
2) Detach the right cover. (page 10-32)[Removing the Right Cover]
3) Detach the right lower cover. (page 10-12)[Detaching the Right Lower Cover]

8.11.2.2 Removing the Cassette Pickup Unit 2

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Pull out the cassette 1 and 2.
2) Remove the cassette pickup unit 2 [3].
-4 connectors [1]
-4 screws [2]



F-8-48

8.11.3 Sensor Mounting Plate

8.11.3.1 Before Removing the Sensor Mounting Plate

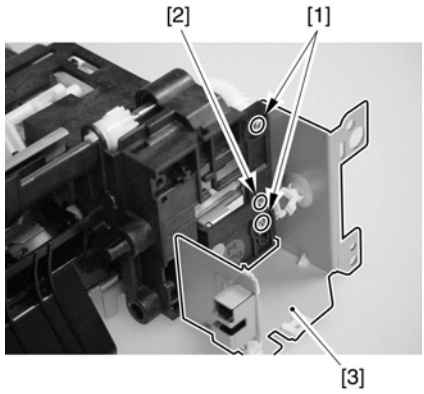
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the rear right cover. (page 10-13)[Detaching the Rear Right Cover]
2) Detach the right cover. (page 10-32)[Removing the Right Cover]
3) Detach the right lower cover. (page 10-12)[Detaching the Right Lower Cover]
4) Remove the cassette pickup unit 2. (page 8-32)[Removing the Cassette Pickup Unit 2]
5) Remove the cassette pickup unit 1. (page 8-32)[Removing the Cassette Pickup Unit 1]

8.11.3.2 Removing the Sensor Mounting Plate

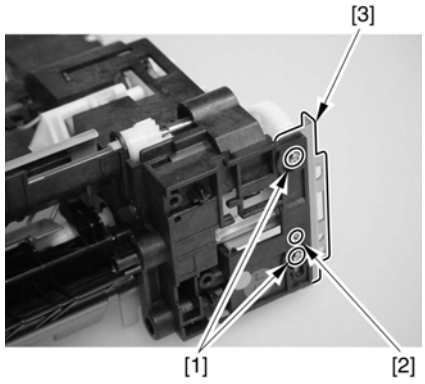
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the bracket [3].
-2 TP screws [1]
-1 binding screw [2]



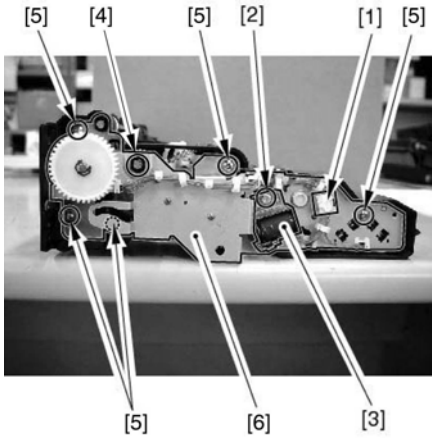
F-8-49

pickup unit 1



F-8-50

pickup unit 2
2) Remove the cassette pickup solenoid [3].
-1 connector [1]
-1 screw [2]
3) Detach the sensor mounting plate [6].
-1 bushing [4]
-5 screws [5]



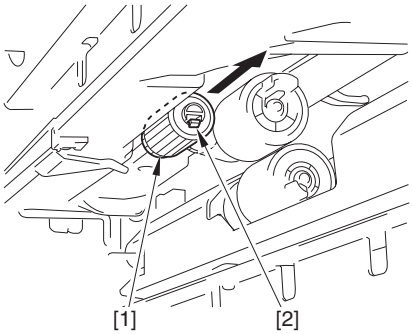
F-8-51

8.11.4 Pickup Roller

8.11.4.1 Removing the Pickup Roller

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the cassette.
2) Remove the pickup roller [1].



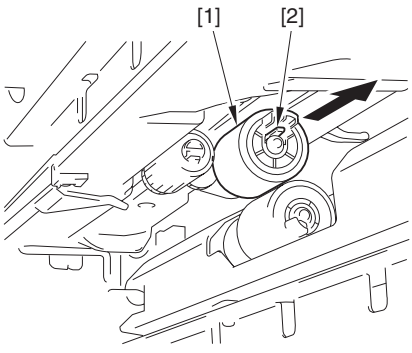
F-8-52

8.11.5 Feed Roller

8.11.5.1 Removing the Feed Roller

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the cassette.
2) Remove the feed roller [1].



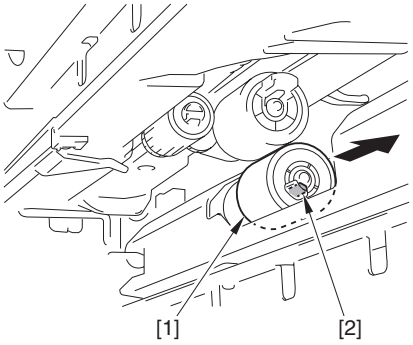
F-8-53

8.11.6 Separation Roller

8.11.6.1 Removing the Separation Roller

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the cassette.
2) Open the right cover.
3) Remove the separation roller [1].



F-8-54

8.11.7 Cassette Pickup Motor 1

8.11.7.1 Before Removing the Cassette Pickup Motor 1

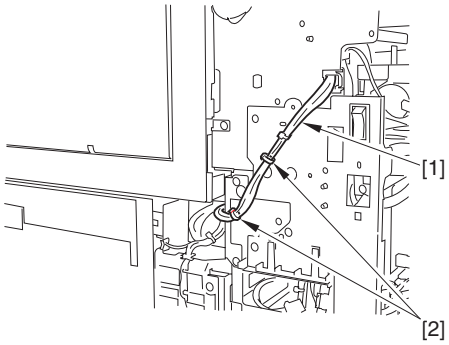
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the rear upper cover. (page 10-14) [Detaching the Rear Upper Cover]
2) Detach the rear lower cover. (page 10-15) [Detaching the Rear Lower Cover]
3) Detach the rear right cover. (page 10-13) [Detaching the Rear Right Cover]

8.11.7.2 Removing the Cassette Pickup Motor 1

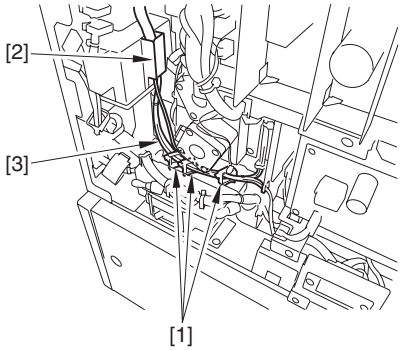
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Free the harness [1] from the 2 wire saddles [2].



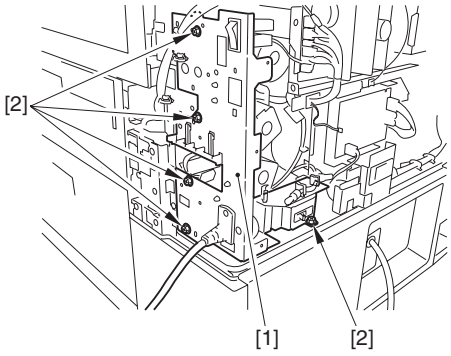
F-8-55

2) Free the harness [3] from the 3 wire saddles [1] and the cable guide [2].



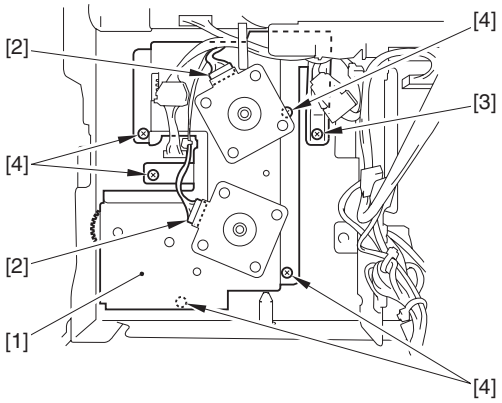
F-8-56

3) Remove the power supply cord base [1].
-5 screws [2]



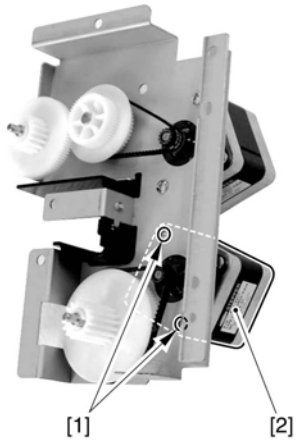
F-8-57

4) Remove the pickup motor base [1].
-2 connectors [2]
-1 screw [3]
-5 screws [4]



F-8-58

5) Remove the cassette pickup motor 1 [1].
-2 screws [2]



F-8-59

8.11.8 Cassette Pickup Motor 2

8.11.8.1 Before Removing the Cassette Pickup Motor 2

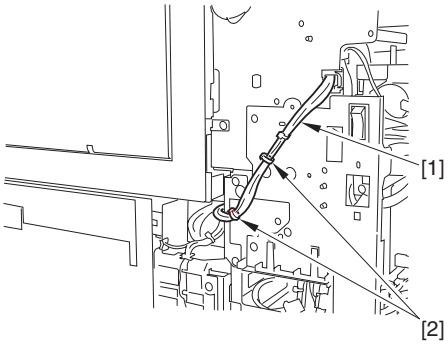
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the rear upper cover. (page 10-14)[Detaching the Rear Upper Cover]
2) Detach the rear lower cover. (page 10-15)[Detaching the Rear Lower Cover]
3) Detach the rear right cover. (page 10-13)[Detaching the Rear Right Cover]

8.11.8.2 Removing the Cassette Pickup Motor 2

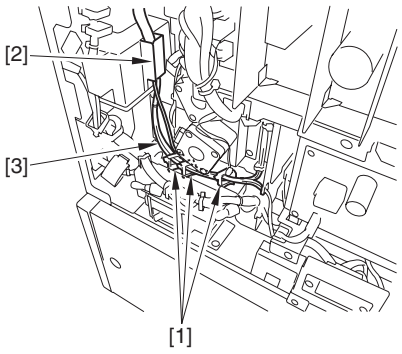
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Free the harness [1] from the 2 wire saddles [2].



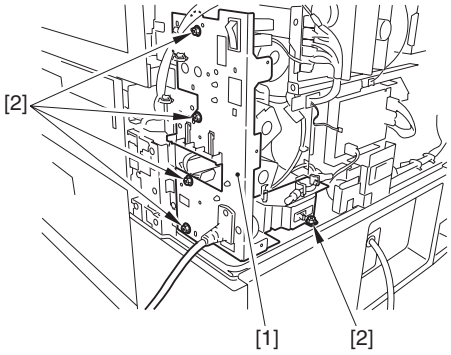
F-8-60

2) Free the harness [3] from the 3 wire saddles [1] and the cable guide [2].



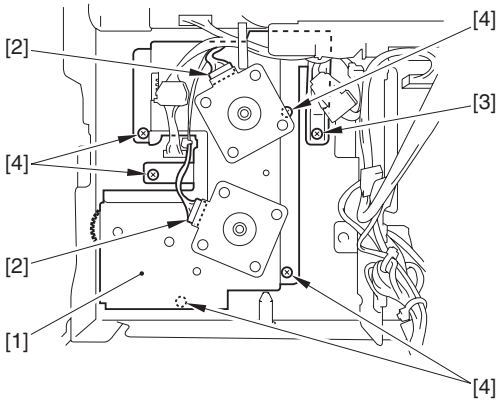
F-8-61

3) Remove the power supply cord base [1].
-5 screws [2]



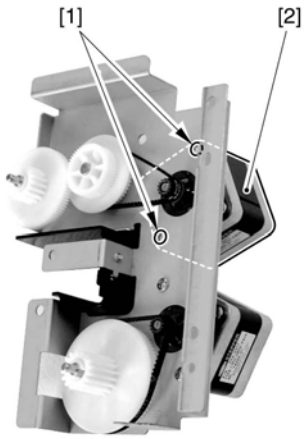
F-8-62

4) Remove the pickup motor base [1].
-2 connectors [2]
-1 screw [3]
-5 screws [4]



F-8-63

5) Remove the cassette pickup motor 2 [1].
-2 screws [2]



F-8-64

8.11.9 Cassette Size Detection Sensor

8.11.9.1 Before Removing the Cassette Size Sensor

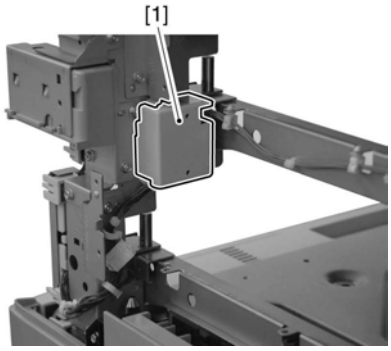
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the rear right cover. (page 10-13)[Detaching the Rear Right Cover]
2) Detach the right cover. (page 10-32)[Removing the Right Cover]
3) Detach the right lower cover. (page 10-12)[Detaching the Right Lower Cover]
4) Remove the cassette pickup unit 2. (page 8-32)[Removing the Cassette Pickup Unit 2]
5) Remove the cassette pickup unit 1. (page 8-32)[Removing the Cassette Pickup Unit 1]

8.11.9.2 Removing Cassette Size Sensor

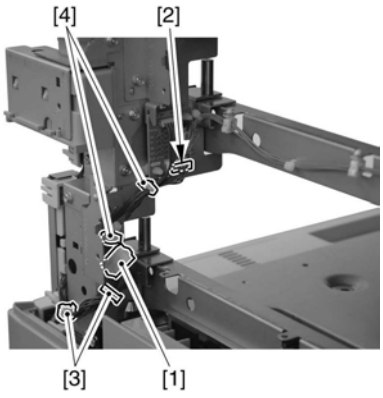
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the mount cover [1].



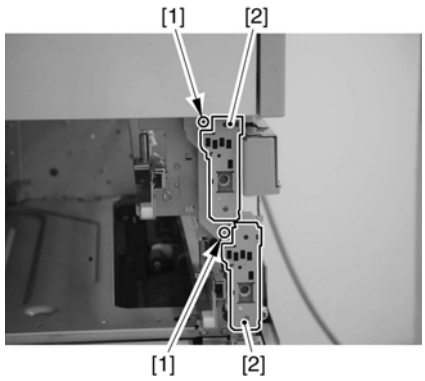
F-8-65

2) Disconnect 2 connectors [1] [2] from the cassette size PCB.
3) Free the harness from the cable clamps [3] [4].



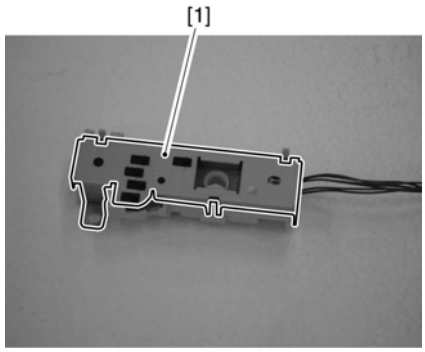
F-8-66

4) Remove the cassette size sensor mount [1].
- 2 screws [1]



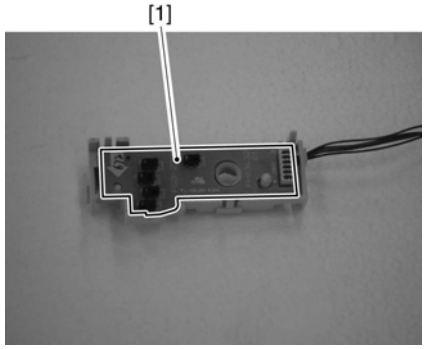
F-8-67

5) Detach the cover [1] from the cassette size sensor mount.



F-8-68

6) Remove the sensor [1] from the cassette size sensor mount.



F-8-69

8.11.10 Cassette Retry Paper Sensor

8.11.10.1 Before Removing Cassette Retry Paper Sensor

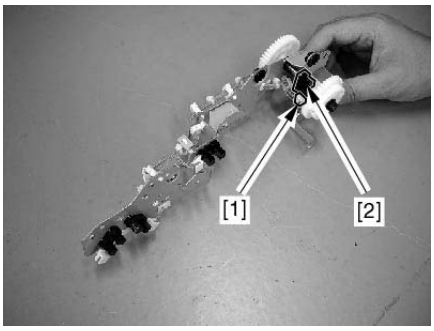
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the rear right cover. (page 10-13)[Detaching the Rear Right Cover]
2) Detach the right cover. (page 10-32)[Removing the Right Cover]
3) Detach the right lower cover. (page 10-12)[Detaching the Right Lower Cover]
4) Remove the cassette pickup unit 2. (page 8-32)[Removing the Cassette Pickup Unit 2]
5) Remove the cassette pickup unit 1. (page 8-32)[Removing the Cassette Pickup Unit 1]
6) Remove the sensor mounting plate. (page 8-32)[Removing the Sensor Mounting Plate]

8.11.10.2 Removing Cassette Retry Paper Sensor

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the cassette retry paper sensor [2].
- 1 connector [1]



F-8-70

8.11.11 Cassette Paper Sensor

8.11.11.1 Before Removing Cassette Paper Sensor

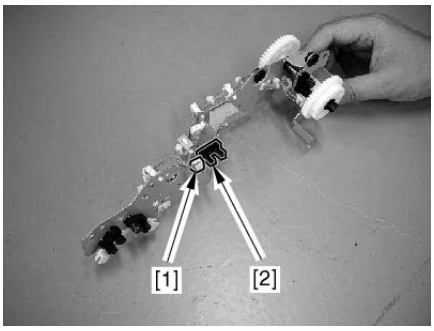
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the rear right cover. (page 10-13) [Detaching the Rear Right Cover]
2) Detach the right cover. (page 10-32) [Removing the Right Cover]
3) Detach the right lower cover. (page 10-12) [Detaching the Right Lower Cover]
4) Remove the cassette pickup unit 2. (page 8-32) [Removing the Cassette Pickup Unit 2]
5) Remove the cassette pickup unit 1. (page 8-32) [Removing the Cassette Pickup Unit 1]
6) Remove the sensor mounting plate. (page 8-32) [Removing the Sensor Mounting Plate]

8.11.11.2 Removing Cassette Paper Sensor

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the cassette paper sensor [2].
- 1 connector [1]



F-8-71

8.11.12 Cassette Paper Level Sensor (A/B)

8.11.12.1 Before Removing Cassette Paper Level Sensor (A/B)

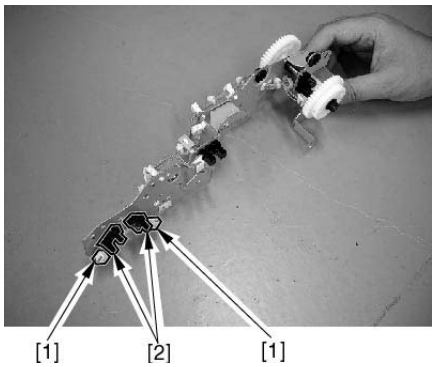
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the rear right cover. (page 10-13) [Detaching the Rear Right Cover]
2) Detach the right cover. (page 10-32) [Removing the Right Cover]
3) Detach the right lower cover. (page 10-12) [Detaching the Right Lower Cover]
4) Remove the cassette pickup unit 2. (page 8-32) [Removing the Cassette Pickup Unit 2]
5) Remove the cassette pickup unit 1. (page 8-32) [Removing the Cassette Pickup Unit 1]
6) Remove the sensor mounting plate. (page 8-32) [Removing the Sensor Mounting Plate]

8.11.12.2 Removing Cassette Paper Level Sensor (A/B)

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the cassette paper level sensor (A/B) [2].
- 1 connector [1]



F-8-72

8.11.13 Slide Resistor

8.11.13.1 Before Removing Slide Resistor

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

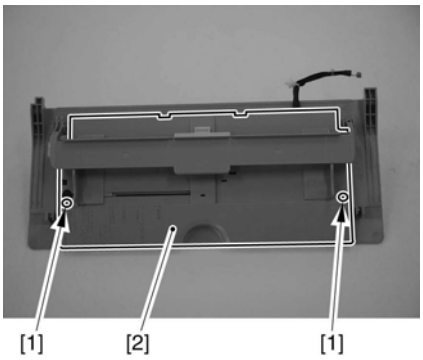
1) Detach the rear right cover. (page 10-13) [Detaching the Rear Right Cover]
2) Remove the right cover. (page 10-32) [Removing the Right Cover]
3) Remove the manual feed unit. (page 8-38) [Removing Manual Feed Unit]
4) Remove the manual feed tray unit. (page 8-38) [Removing Manual Feed Tray Unit]

8.11.13.2 Removing Slide Resistor

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

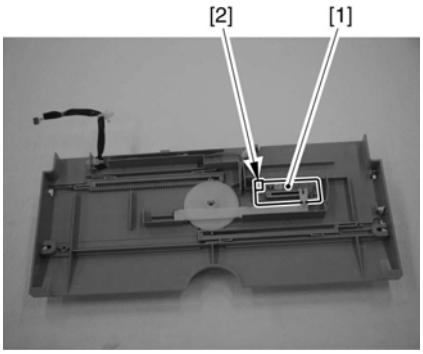
1) Detach the manual feed tray upper cover [2].
- 2 screws [1]

⚠
It is better to put a mark to the side registration position before the removal.



F-8-73

2) Remove the slide resistor [1].
- 1 connector [2]



F-8-74

8.11.14 Cassette Pickup Solenoid

8.11.14.1 Before Removing Cassette Pickup Solenoid

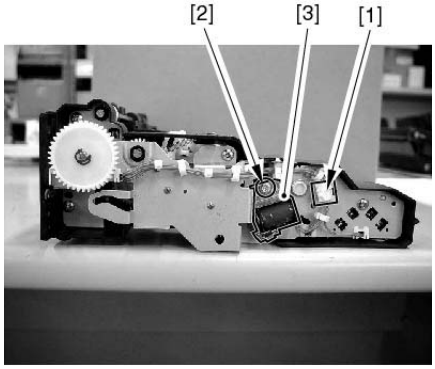
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the rear right cover. (page 10-13)[Detaching the Rear Right Cover]
2) Detach the right cover. (page 10-32)[Removing the Right Cover]
3) Detach the right lower cover. (page 10-12)[Detaching the Right Lower Cover]
4) Remove the cassette pickup unit 2. (page 8-32)[Removing the Cassette Pickup Unit 2]
5) Remove the cassette pickup unit 1. (page 8-32)[Removing the Cassette Pickup Unit 1]

8.11.14.2 Removing Cassette Pickup Solenoid

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the cassette pickup solenoid [3].
- 1 connector [1]
- 1 screw [2]



F-8-75

8.11.15 Cassette Size Sensor Relay PCB

8.11.15.1 Before Removing Cassette Size Sensor PCB

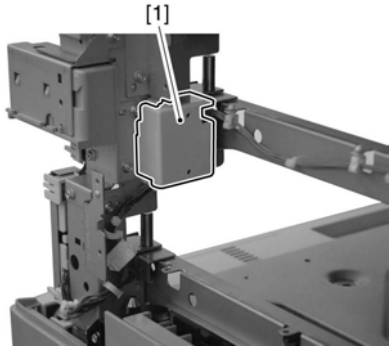
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the rear right cover. (page 10-13)[Detaching the Rear Right Cover]
2) Detach the right cover. (page 10-32)[Removing the Right Cover]
3) Detach the right lower cover. (page 10-12)[Detaching the Right Lower Cover]
4) Remove the cassette pickup unit 2. (page 8-32)[Removing the Cassette Pickup Unit 2]
5) Remove the cassette pickup unit 1. (page 8-32)[Removing the Cassette Pickup Unit 1]

8.11.15.2 Removing Cassette Size Sensor PCB

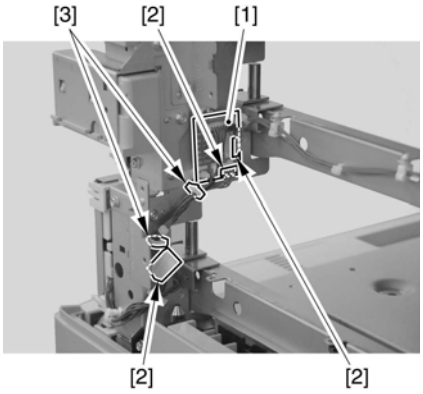
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the mount cover [1]. (Fasten with a snap)



F-8-76

2) Remove the cassette size sensor PCB [1].
- 3 connectors [2]
- 2 clamps [3]



F-8-77

8.11.16 Manual Feed Pickup Clutch

8.11.16.1 Before Removing Manual Feed Pickup Clutch

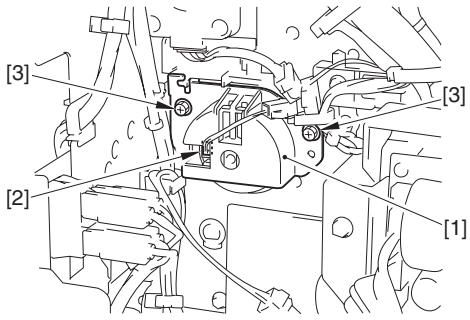
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the rear upper cover. (page 10-14)[Detaching the Rear Upper Cover]
2) Detach the rear lower cover. (page 10-15)[Detaching the Rear Lower Cover]

8.11.16.2 Removing Manual Feed Pickup Clutch

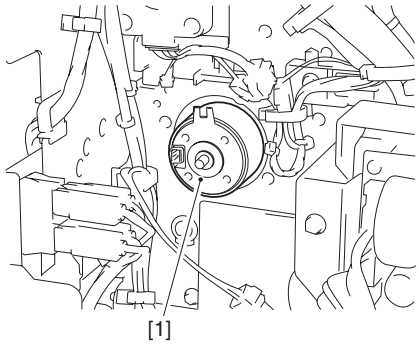
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the fixing cover [1].
- 1 connector [2]
- 2 screws [3]



F-8-78

2) Pull out the manual feed pickup clutch [1] toward the front.



F-8-79

8.11.17 Manual Feed Tray Unit

8.11.17.1 Before Removing Manual Feed Tray Unit

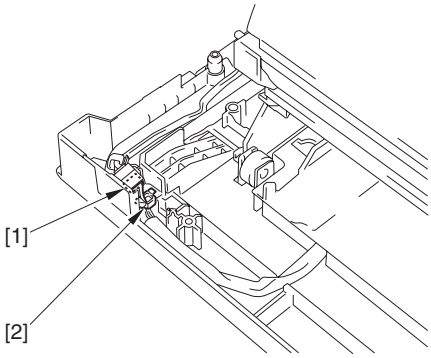
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the rear right cover. (page 10-13)[Detaching the Rear Right Cover]
2) Remove the right cover. (page 10-32)[Removing the Right Cover]
3) Remove the manual feed unit. (page 8-38)[Removing Manual Feed Unit]

8.11.17.2 Removing Manual Feed Tray Unit

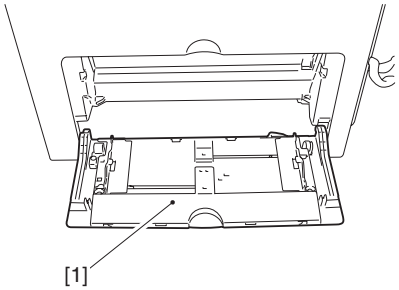
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Disconnect the connector [1] and remove the edge saddle [2].



F-8-80

2) Remove the manual feed tray unit [1].



F-8-81

8.11.18 Manual Feed Unit

8.11.18.1 Before Removing Manual Feed Unit

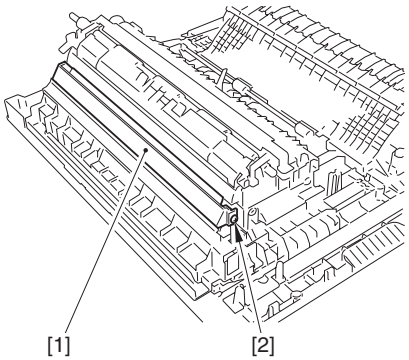
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the rear right cover. (page 10-13)[Detaching the Rear Right Cover]
2) Remove the right cover. (page 10-32)[Removing the Right Cover]

8.11.18.2 Removing Manual Feed Unit

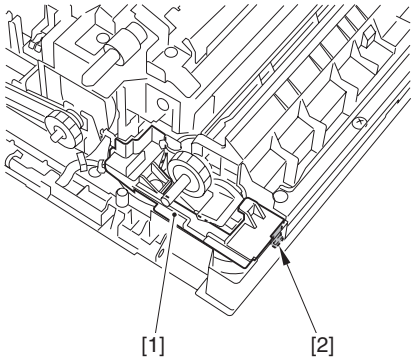
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the manual feed pickup guide [1].
- 1 screw [2]



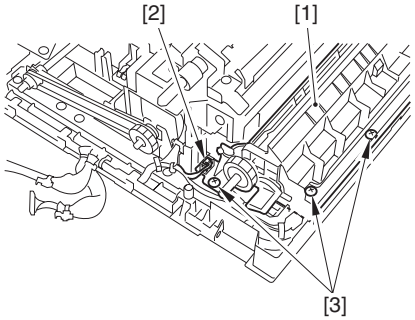
F-8-82

2) Detach the connector cover [1].
- 1 claw [1]

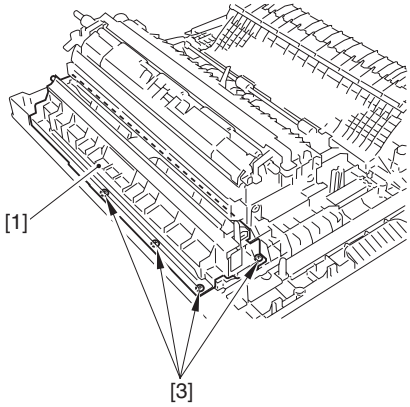


F-8-83

3) Remove the manual feed unit [1].
- 1 connector [2]
- 7 screws [3]



F-8-84



F-8-85

8.11.19 Manual Pickup Roller

8.11.19.1 Before Removing Manual Feed Pickup Roller

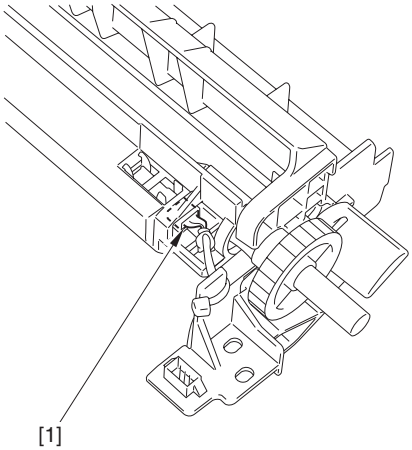
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the rear right cover. (page 10-13)[Detaching the Rear Right Cover]
2) Remove the right cover. (page 10-32)[Removing the Right Cover]
3) Remove the manual feed unit. (page 8-38)[Removing Manual Feed Unit]

8.11.19.2 Removing Manual Feed Pickup Roller

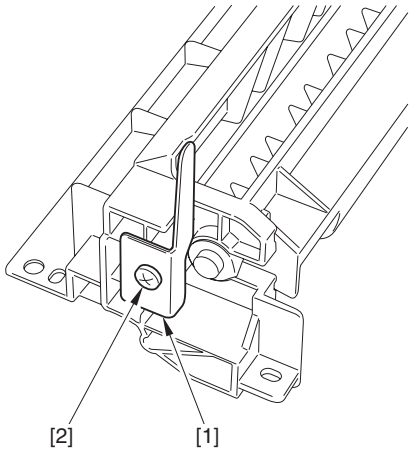
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Disconnect the connector [1].



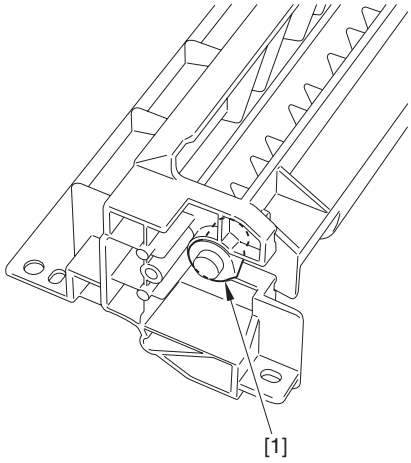
F-8-86

2) Remove the plate [1].
- 1 screw [2]



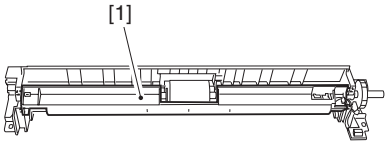
F-8-87

3) Remove the bush [1].



F-8-88

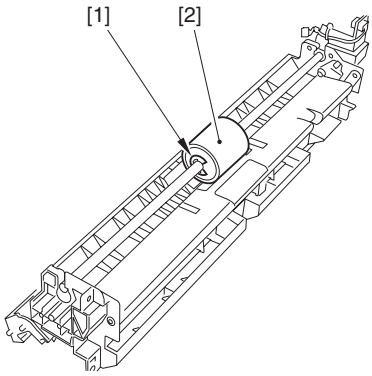
4) Detach the manual feed tray upper cover [1].



F-8-89

5) Remove the plastic E-ring [1]; then, remove the manual feed pickup roller [2] from the shaft.

When removing the manual feed pickup roller, be careful not to drop the dowel pin.



F-8-90

8.11.20 Manual Feed Separation Pad

8.11.20.1 Before Removing Manual Feed Separation Pad

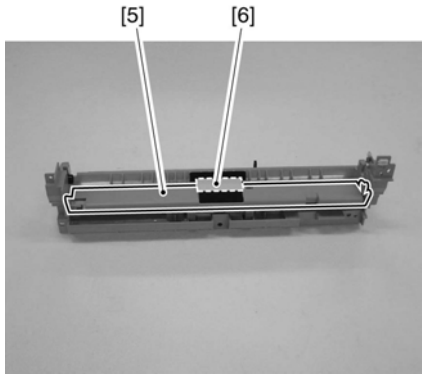
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the rear right cover. (page 10-13)[Detaching the Rear Right Cover]
2) Remove the right cover. (page 10-32)[Removing the Right Cover]
3) Remove the manual feed unit. (page 8-38)[Removing Manual Feed Unit]
4) Remove the manual feed pickup roller. (page 8-38)[Removing Manual Feed Pickup Roller]

8.11.20.2 Removing Manual Feed Pickup Separation Pad

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the lifting plate [5].
2) Remove the manual feed separation pad [6].



F-8-91

8.11.21 Registration Motor

8.11.21.1 Before Removing Registration Motor

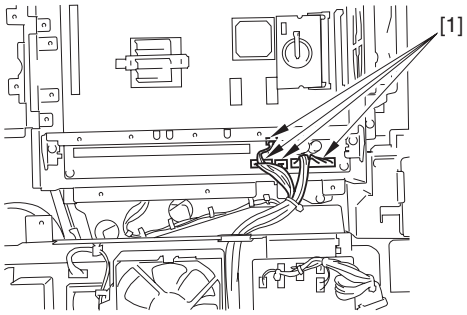
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the rear upper cover. (page 10-14)[Detaching the Rear Upper Cover]
2) Detach the rear lower cover. (page 10-15)[Detaching the Rear Lower Cover]

8.11.21.2 Removing Registration Motor

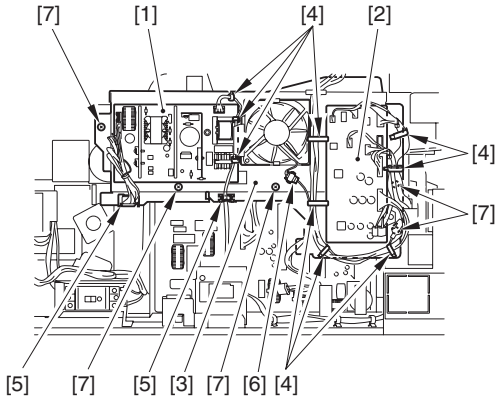
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Disconnect 4 connectors [1] from the main controller PCB.



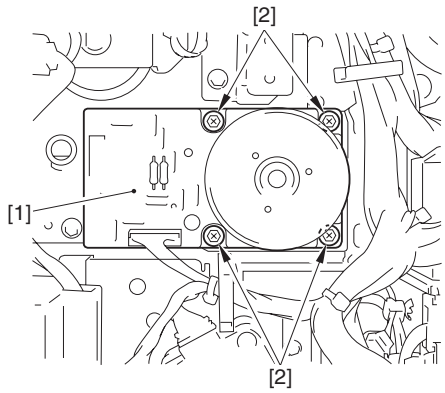
F-8-92

2) Disconnect 7 connectors from the Accessories power supply PCB [1].
3) Disconnect 12 connectors from the controller power supply PCB [2].
4) Remove the Accessories power supply/controller power supply mount [3].
   - 9 cable clamps [4]
   - 3 edge saddles [5]
   - 1 connector [6]
   - 5 screws [7]



F-8-93

6) Remove the registration motor [1].
   - 4 screws [2]



F-8-94

8.11.22 Duplex Unit

8.11.22.1 Before Removing Duplexing Feed frame

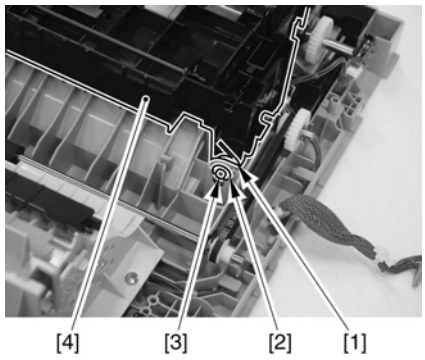
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the rear right cover. (page 10-13)[Detaching the Rear Right Cover]
2) Remove the right cover. (page 10-32)[Removing the Right Cover]

8.11.22.2 Removing Duplexing Feed frame

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the Duplexing Feed frame [4].
   - 1coil spring [1]
   - 1 E-ring [2]
   - 1 shaft [3]



F-8-95

8.11.23 Duplex Feed Sensor

8.11.23.1 Before Removing Duplexing Feed Sensor

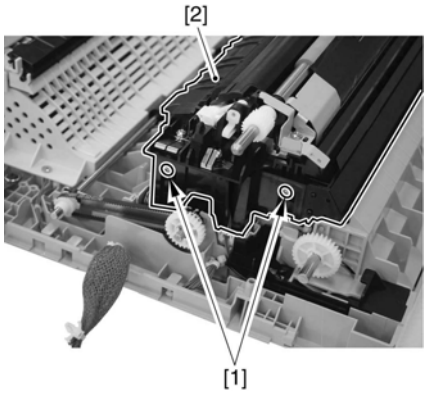
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the rear right cover. (page 10-13)[Detaching the Rear Right Cover]
2) Remove the right cover. (page 10-32)[Removing the Right Cover]

8.11.23.2 Removing Duplexing Feed Sensor

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the transfer flame [1].
   - 2 screws [2]



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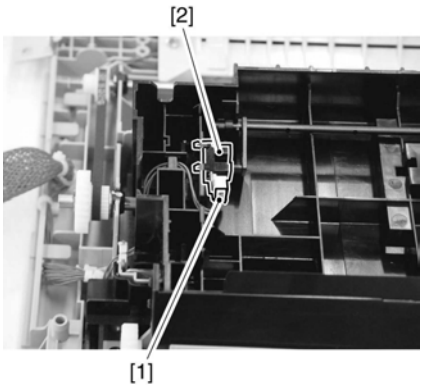
2) Remove the duplexing feed sensor [1].
   - 1 connector [2]



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Chapter 9 Fixing System

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9.1 Construction

9.1.1 Specifications, Controls, and Functions

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The major specifications, controls, and functions of the fixing system are as follows:

T-9-1

item	function/method
Fixing method	on-demand fixing
Fixing heater	Heater (H1 and H2) (Inside the fixing film unit)
Control temperature	220 deg C (normal speed, normal temperature, plain paper)
Fixing drive control	ON/OFF control, constant speed rotation control
Fixing temperature detection	fixing film unit - fixing main thermistor (contact) - fixing sub thermistor 1 (contact) - fixing sub thermistor 2 (contact)
Protection function	execute the following error detection to block the power to the fixing heater in the case of error.
	- thermistor (TH1/TH2/TH3) temperature detection
	- fixing thermo switch (TP1) operating temperature 270 deg C

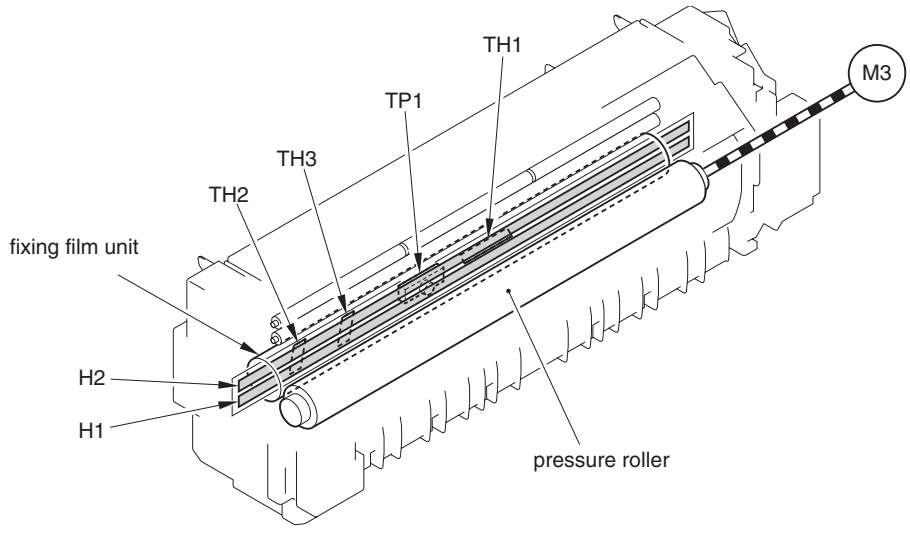
9.1.2 Major Components

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

T-9-2

Component	Notation	Description
Fixing film unit		film
Fixing heater	H1,H2	for heating the fixing film (ceramic heater)
Main thermistor	TH1	temperature control, overheating detection, fixing assembly detection (heater contact type)
Sub thermistor 1	TH2	temperature control, overheating detection (film contact type)
Sub thermistor 2	TH3	overheating detection (film contact type)
Thermal switch	TP1	overheating detection (heater contact type)
Fixing motor	M4	DC brush motor
Fan shutter motor	M15	Opens/closes fan shutter
Edge cooling fan (front)	FM6	cooling the edge of the fixing film
Edge cooling fan (rear)	FM7	cooling the edge of the fixing film
Fan shutter HP sensor	PS28	detection of fan shutter home position
Fan shutter position sensor	PS29	detection of open/close position of the fan shutter

*: M3, M15 or neither FM6 nor FM7 is included in the composition of the established machine.



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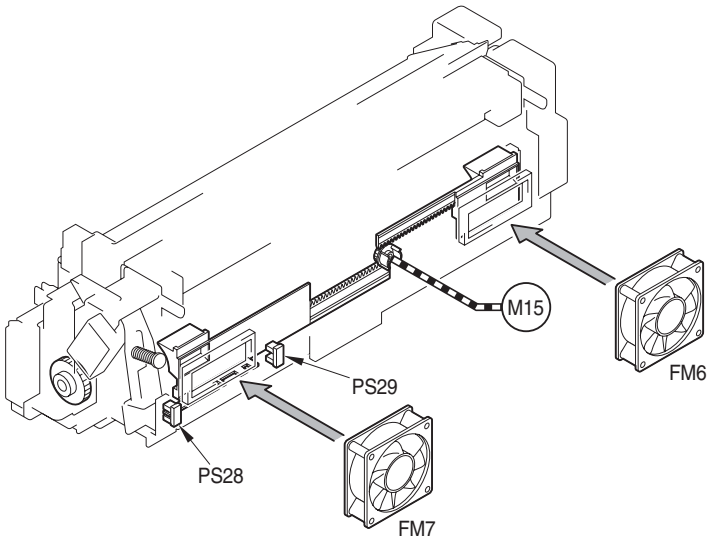
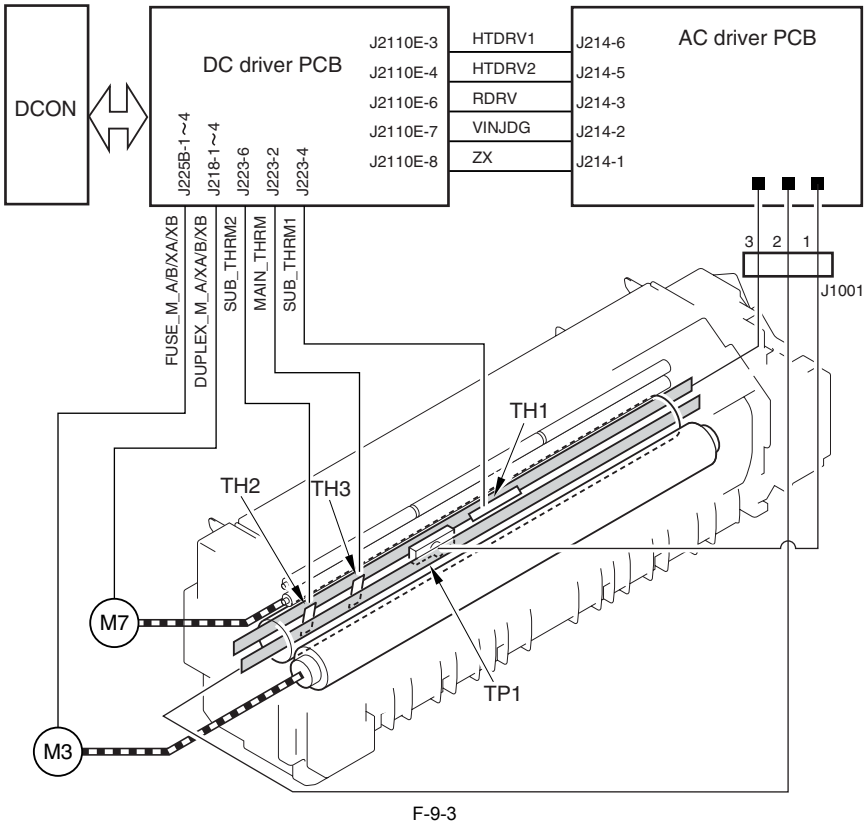


F-9-2

9.1.3 Construction of the Control System

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880



F-9-3

9.2 Various Control Mechanisms

9.2.1 Controlling the Fixing Temperature

9.2.1.1 Overview

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Temperature control of the fixing heater is done by using the main thermistor, which is in contact with the centre part of the heater, to detect temperature. Sub-thermistors 1 and 2, which contact the ends of the film, are there to detect temperature rises at the ends of the fixing film, which happen when small size paper (A4R, etc.) is being fed continuously.

9.2.1.2 Temperature control in standby

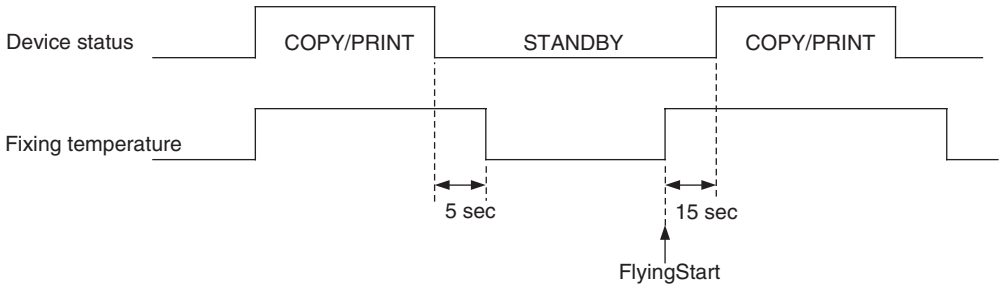
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The purpose of this function is to reduce the time required for the first print by pre-heating the fixing unit in standby, according to prescribed conditions.

A. Flying start temperature control
Applied 15 seconds after receiving flying start. The temperature is adjusted (between 160 deg C and 190 deg C), according to the time elapsed since the previous job finished. The purpose of this function is to reduce the time required for the first print by adjusting the temperature.

Reference:
Specifically, flying start is initiated with the following timings.
- With the control panel Copy/ Copy (quick) screen displayed, one of the control panel soft keys is touched, one of the numeric keys is pressed, or a cassette is opened/ closed.
- Common to all function tabs on the control panel, a control panel tab toggle button (soft key) is pressed.
- In some other mode, the device recovers from sleep1 or sleep2.

B. Temperature control after job ends
Drum rotation will stop 5 seconds after a job has finished.
In this control, it is a target temperature control to shorten the print time that hangs to the job since the consecutive second.
The temperature is adjusted (between 160 deg C and 190 deg C), according to the time elapsed since the previous job finished.



F-9-4

C. Standby temperature control
Standby temperature control is applied as follows, when specified in service mode.
Standby temperature control begins once the temperature adjustment after job completion has finished, and continues for up to 15 minutes (but will stop once a flying start instruction is received). The temperature is adjusted (between 160 deg C and 190 deg C), according to the time elapsed since the previous job finished.
Also, the fixer motor is rotated a prescribed number of times at 1 minute intervals.
The purpose of this function is to reduce the time required for the first print by adjusting the temperature.

---

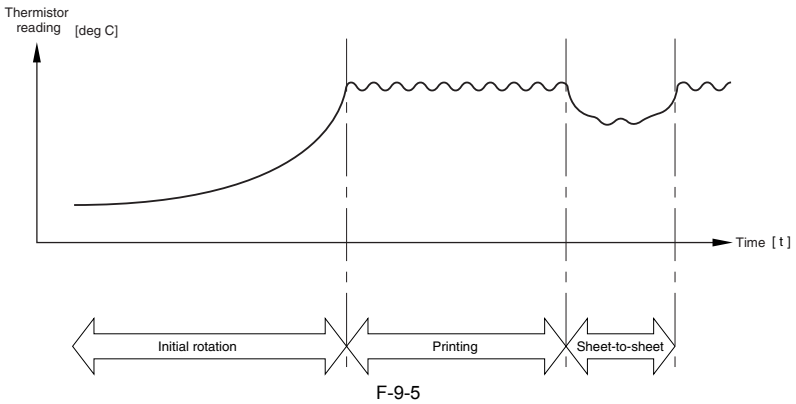
service modes:
COPIER>OPTION>BODY>FX-ASTBY
Standby temperature control ON/OFF 0: OFF (default) 1: ON
To increase the time till 1st sheet print, set to [1].

9.2.1.3 Temperature Control during Printing

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Temperature control during printing regulates temperature from the beginning of the print cycle and until completion. The temperature of the target changes depending on the material kind and the elapsed time and the number of sheets from the print beginning.

The temperature sequence is divided into the following 3 intervals:
- start-up (initial rotation) temperature control
- printing temperature control
- sheet-to-sheet temperature control



F-9-5

A. Start-Up (initial rotation) Temperature Controller
This control has aimed to select an energizing ratio the best so as not to exceed the maximum electric power consumption, and to start up the established machine up to the temperature of the target in the regulation time.

B. Print Temperature Control
Print temperature control regulates temperature based on the number of sheets printed, paper type and main thermistor output upon activation of start-up control during continuous printing in order to achieve a target temperature within the prescribed temperature range.

T-9-3

Speed	Paper type	User setting	Range of temperature adjustment (Ambient Temperature and Humidity / Low Temperature and Humidity) (deg C)
Normal speed	plain paper (64 to 105 g/m2)	plain paper	220 to 200/225 to 200
	thin paper (less than 64 g/m2)	plain paper L	210 to 185/215 to 190
	special fixing mode 2 *3	iRC3380 special printing process >plain paper >mode 2 iRC2880 process option >specific fixing mode >mode 2	235 to 210/240 to 220
Half speed	plain paper (64 to 105 g/m2)	plain paper	190 to 165/200 to 175
	thin paper (less than 64 g/m2)	plain paper L	180 to 155/190 to 165
	rough paper *1	heavy paper 1	205 to 185/215 to 195
	rough paper (strong) *2	heavy paper 2	220 to 200/225 to 205
	special fixing mode 2 *3	iRC3380 special printing process >plain paper >mode 2 iRC2880 process position >special fixing mode >mode 2	200 to 175/205 to 180
1/4 Speed	OHT	OHT	175 to 150/185 to 165

*1 heavy paper: heavy paper (106 to 169 g/m2), bond paper (64 to 105 g/m2), coated paper (106 to 169 g/m2), label
*2 heavy paper(strong): extra heavy paper (170 to 220 g/m2), extra heavy coated paper (170 to 220 g/m2), postcard, 2-pane card, 4-pane card, envelope
*3 For details of special fixing mode 2 settings, see user's guide.

C. Sheet-to-Sheet Temperature Control
If the distance between sheets for fixing is greater than indicated*, the machine executes sheet-to-sheet temperature control using a temperature lower than that used for printing temperature control. It also uses this mechanism if no paper arrives for a specific period of time after start-up. The target temperature used for sheet-to-sheet printing control is -30 to -50 C deg of the temperature used for printing temperature control.

* When the following is true:
- small paper size down sequence
- between 1st side and 2nd side of a double-sided print
- when a command arrives (ATR control, registration control, ATVC control)

D. Temperature Control when Resizing the Paper Size during Down-Sequence Control
The down sequence control is continued as it is when changing to a small size when the down sequence is being controlled. The power supply to the heater and driving the fixing system are stopped once when changing to the size of the form of A4R or more. It shifts to a usual start-up control after the sub-thermistor detects under 150 deg C or 30 seconds pass, and the size after it changes is printed.

Service Mode:
COPIER > OPTION > BODY > P-CGH-TM
Default: 0
Resets the temperature at which job is restarted and the amount of time required before the restart when the paper size is changed to larger sizes (A4R or wider) during down-sequence control.

T-9-4

Entry	-2	-1	0	1	2
Temperature at Return	125	138	150	175	200
Time Before Return	90	90	30	30	30

Enter a greater entry if reducing the downtime during paper size switchover is desired. Enter a smaller entry to prevent hot offset immediately after the switchover.

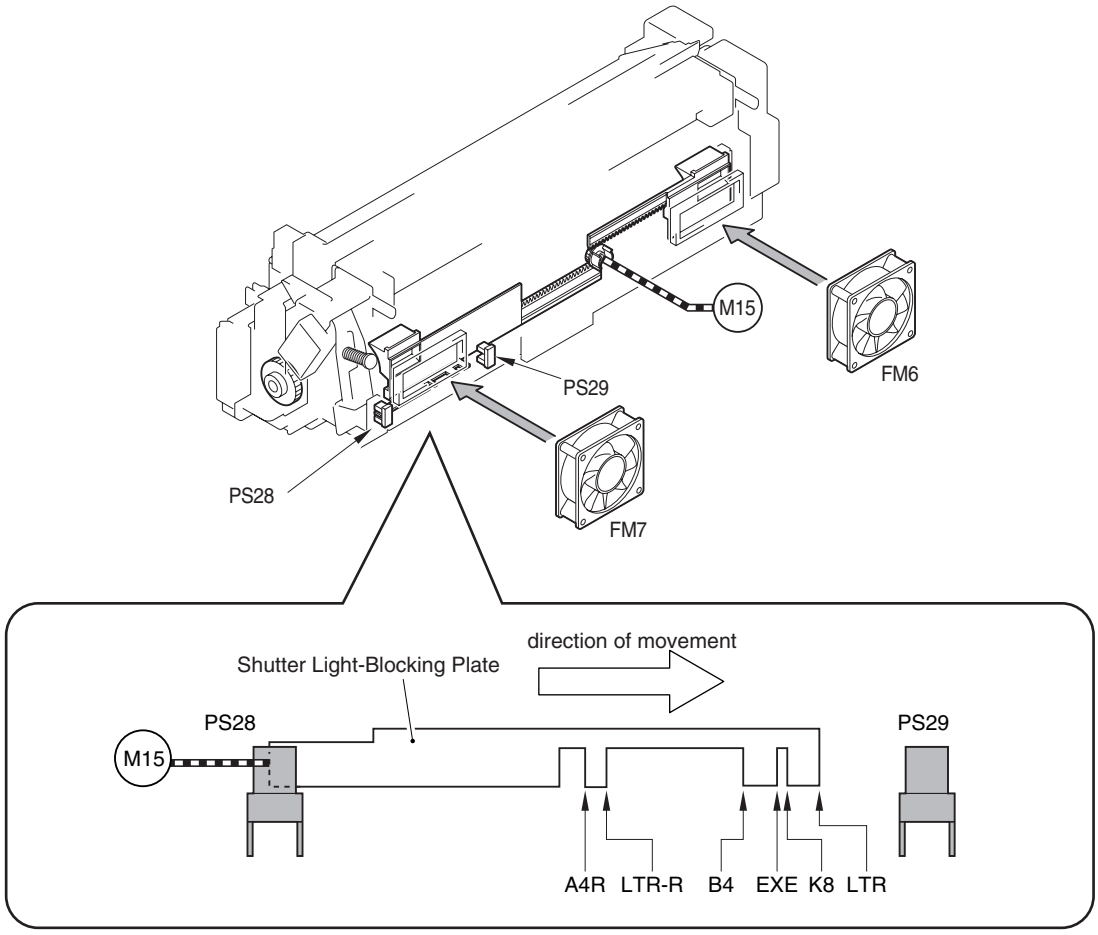
9.2.1.4 Fixing film edge cooling control

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

In the case of continuous prints of the size paper (the width less than A3NC, and as large as A4NC or more), if the sub thermistor detection temperature of the fixing film reaches to the specified temperature, it executes temperature control to prevent the edge temperature rise by feeding air from the 2 cooling fans to the fixing film edge. Thanks to this, it prevents film deterioration by heating of the fixing film edge.

1. Shutter Fan Position Drive Control
The duct that passes air has a shutter mechanism to enable sending air to the ideal area of the fixing film by opening/closing the shutter by 6 steps (from full-close to full-open) according to the paper size. The shutter opening/closing position that corresponds the paper size has 7-point (A4R, LTRR, B4, EXE, K8, LTR, home position).

Open/close positions of the shutter is detected by the fan shutter HP sensor (PS28) and fan shutter position sensor (PS29). When sub-thermistor 1 (TH2) detects temperature listed below, fan shutter motor (M15) is rotated until the fan shutter HP sensor detects the shutter. And then, positive rotation of the fan shutter motor (M15) is initiated and the shutter is moved to a position corresponds to the paper size chosen. The fan shutter motor is reversely rotated in the last-rotation period, and the shutter is returned to the home position. If paper size is changed during continuous printing, the shutter is returned to its home position first and then the shutter is moved to a position corresponds to the paper size chosen.



F-9-6

MEMO:
The shutter can be opened/closed during printing. This does not intervene the printing.
The rate at which the shutter opens/closes is about 50mm / sec, and it takes about 1.15 seconds for the shutter to travel the maximum distance (between home position and LTR position).

2. ON/OFF Control of the Edge Cooling Fan
As the fixing film edge temperature increases / decreases, the edge cooling fan is turned ON / OFF in order to adjust the temperature. The sub-thermistor 1 temperature reading at the fixing film edge, paper size, paper type, the total number of paper passage are the factors that determines the temperature range at which the edge cooling fan will be turned ON / OFF.

Below is a table showing the temperature rages at which the shutter fan will be turned ON.
- At ambient temperature and humidity (at full speed)

T-9-5

Paper Size	Paper Type	ON
A4R	Plain Paper	187 to 195
	Thin Paper	207 to 215
	Special Fixing Mode	192 to 200
LTR-R/LGL	Plain Paper	187 to 195
	Thin Paper	207 to 215
	Special Fixing Mode	192 to 200
B4/B5	Plain Paper	187 to 195
	Thin Paper	207 to 215
	Special Fixing Mode	192 to 200
EXE	Plain Paper	187 to 195
	Thin Paper	207 to 215
	Special Fixing Mode	192 to 200
K8/K16	Plain Paper	187 to 195
	Thin Paper	207 to 215
	Special Fixing Mode	192 to 200
LTR/LDR	Plain Paper	187 to 195
	Thin Paper	207 to 215
	Special Fixing Mode	192 to 200

- At ambient temperature and humidity (at half-speed)

T-9-6

Paper Size	Paper Type	ON
A4R	Plain Paper	167 to 175
	Thin Paper	172 to 180
	Thick Paper	167 to 175
	Thick Paper 2	162 to 170
	Special Fixing Mode	172 to 180
LTR-R/LGL	Plain Paper	167 to 175
	Thin Paper	172 to 180
	Thick Paper	167 to 175
	Thick Paper 2	162 to 170
	Special Fixing Mode	172 to 180
B4/B5	Plain Paper	167 to 175
	Thin Paper	172 to 180
	Thick Paper	167 to 175
	Thick Paper 2	162 to 170
	Special Fixing Mode	172 to 180
EXE	Plain Paper	167 to 175
	Thin Paper	172 to 180
	Thick Paper	167 to 175
	Thick Paper 2	162 to 170
	Special Fixing Mode	172 to 180
K8/K16	Plain Paper	167 to 175
	Thin Paper	172 to 180
	Thick Paper	167 to 175
	Thick Paper 2	162 to 170
	Special Fixing Mode	172 to 180
LTR/LDR	Plain Paper	167 to 175
	Thin Paper	172 to 180
	Thick Paper	167 to 175
	Thick Paper 2	162 to 170
	Special Fixing Mode	172 to 180

- At low temperature and humidity (at full speed)

T-9-7

Paper Size	Paper Type	ON
A4R	Plain Paper	177 to 185
	Thin Paper	197 to 205
	Special Fixing Mode	187 to 195
LTR-R/LGL	Plain Paper	177 to 185
	Thin Paper	197 to 205
	Special Fixing Mode	187 to 195
B4/B5	Plain Paper	177 to 185
	Thin Paper	197 to 205
	Special Fixing Mode	187 to 195
EXE	Plain Paper	177 to 185
	Thin Paper	197 to 205
	Special Fixing Mode	187 to 195
K8/K16	Plain Paper	177 to 185
	Thin Paper	197 to 205
	Special Fixing Mode	187 to 195
LTR/LDR	Plain Paper	177 to 185
	Thin Paper	197 to 205
	Special Fixing Mode	187 to 195

- At low temperature and humidity (at half-speed)

T-9-8

Paper Size	Paper Type	ON
A4R	Plain Paper	167 to 175
	Thin Paper	172 to 180
	Thick Paper	167 to 175
	Thick Paper 2	162 to 170
	Special Fixing Mode	172 to 180
LTR-R/LGL	Plain Paper	167 to 175
	Thin Paper	172 to 180
	Thick Paper	167 to 175
	Thick Paper 2	162 to 170
	Special Fixing Mode	172 to 180

Paper Size	Paper Type	ON
B4/B5	Plain Paper	167 to 175
	Thin Paper	172 to 180
	Thick Paper	167 to 175
	Thick Paper 2	162 to 170
	Special Fixing Mode	172 to 180
EXE	Plain Paper	167 to 175
	Thin Paper	172 to 180
	Thick Paper	167 to 175
	Thick Paper 2	162 to 170
	Special Fixing Mode	172 to 180
K8/K16	Plain Paper	167 to 175
	Thin Paper	172 to 180
	Thick Paper	167 to 175
	Thick Paper 2	162 to 170
	Special Fixing Mode	172 to 180
LTR/LDR	Plain Paper	167 to 175
	Thin Paper	172 to 180
	Thick Paper	167 to 175
	Thick Paper 2	162 to 170
	Special Fixing Mode	172 to 180

When the temperature reading of the sub-thermistor 1 has dropped by 3 degrees C since the fan was turned on, the fan will be stopped.
In the case of continuous printing on smaller size paper (A4R or smaller), the down-sequence control will be activated decreasing print speed instead of turning on the fan shutter in order to regulate the temperature of the fixing film edge.

3. Error detection of fixing end cooling system
a. Fault of end cooling fan
(1) Timing of detection
Implement detection at each time of end cooling fan ON.
(2) Error determination
Error determination is made when the lock signal of the fan has not been ON for one continuous second.
(3) Operation after detection
Display the following message on control panel.
"Check fixing unit cooling mechanism. Call service rep".
At this time, this control is not done, and the down sequence is controlled though the print operation can be continued (control that lengthens between paper and drops the print speed).

b. Unclear position of fan shutter opening/closing
(1) Timing of detection
- At the time of operation of fixing end cooling (using small-sized papers and during raising temperature of fixing end)
- At the time of changing paper size (small size to/from large size)
- At the time of completing printing

(2) Error determination
If 2000msec or more of the input value of fan shutter detection sensor cannot be detected at the time of moving fan shutter to the determined position, error is determined.
(3) Operation after detection
"Check fixing unit cooling mechanism. Call service rep".
At this time, this control is not done, and the down sequence is controlled though the print operation can be continued (control that lengthens between paper and drops the print speed).
c. Unclear fan shutter HP
(1) Timing of detection
- At the time of power ON
- At the time of operation of fixing end cooling (using small-sized papers and during raising temperature of fixing end)
- At the time of changing paper size (small size to/from large size)
- At the time of completing printing

(2) Error determination
If 2000msec or more of the input value of fan shutter HP sensor cannot be detected at the time of moving fan shutter to the determined position, error is determined.

(3) Operation after detection
Stop printing, display the following error message on control panel.

Error code:
E840-0000: Fan Shutter Error

9.2.1.5 Detection of the Fixing Assembly Absence/Presence

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

This machine observes the output of thermistor connection signal (FUSER CNCTX) when walm-up rotating after power supply ON and after the door opens and closes, and is judging the presence of the fixing unit.
When it is judged that there is no fixing unit, the DC controller stops the start-up operation of this machine.
The following messages are displayed at the same time.
"Prepare a new fixing roller. Call service representative."

T-9-9

Source of reference	Result	
	fixing assembly absent	fixing assembly present
thermistor connection signal (FUSER CNCTX)	H (connected)	L (open)

9.2.2 Down Sequence Control

9.2.2.1 Down Sequence Control

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

This equipment runs down-sequence control in the cases listed below. Down-sequence control decreases the print speed by lengthening the interval between sheets in order to prevent film deterioration caused by heated edge of the fixing film during continuous printing of small-sized (smaller than A4R) paper.
- When the sub-thermistor 1 temperature reading exceeds the readings listed below
- When the sub-thermistor 2 temperature reading exceeds 220 degrees C

Also in the case of uncertain paper size (e.g., by manual feeding or unspecified paper size) it executes the down sequence control as well as in the case of printing small sized papers.
The following table indicates the down sequences in accordance with the paper type).

T-9-10

Process speed	Paper type	User setting	Sub-Thermistor 1 Temperature (Reading at Ambient Temperature and Humidity / Low Temperature and Humidity)	Printing speed (ppm)
Normal speed	plain paper (64 to 105 g/m2)	plain paper	220/225	30 to 4
	thin paper (less than 64 g/m2)	plain paper L	210/215	
	special fixing mode 2 *3	LBP3380 special printing process >plain paper >mode 2 LBP2880 process option >special fixing mode >mode 2	235/240	
half-speed	plain paper (64 to 105 g/m2)	plain paper	190/200	15 to 2
	thin paper (less than 64 g/m2)	plain paper L	180/190	
	rough paper *1	heavy paper 1	205/215	
	rough paper (strong) *2	heavy paper 2	220/225	
	special fixing mode 2 *3	LBP3380 special printing process >plain paper >mode 2 LBP2880 processing option >special fixing mode >mode 2	200/205	
1/4 Speed	OHT	OHT	180/185	7 to 2

*1 rough paper: heavy paper (106 to 169 g/m2), bond paper (64 to 105 g/m2), coated paper (106 to 169 g/m2), label paper.
*2 extra heavy paper (170 to 220 g/m2), extra heavy coated paper (170 to 20 g/m2), Jpn postcard, 2-pane Jpn postcard, 4-pane Japan postcard, envelope.
*3 For settings and details of special fixing mode 2, see the User's Guide.

In the case of continuous print of the small size paper (the width less than A4R), it executes fixing film edge cooling control to prevent film deterioration caused by heating of the fixing film edge, as opposed to the down sequence.

9.3 Film Unit Pressurizing Mechanism

9.3.1 Pressure/release control

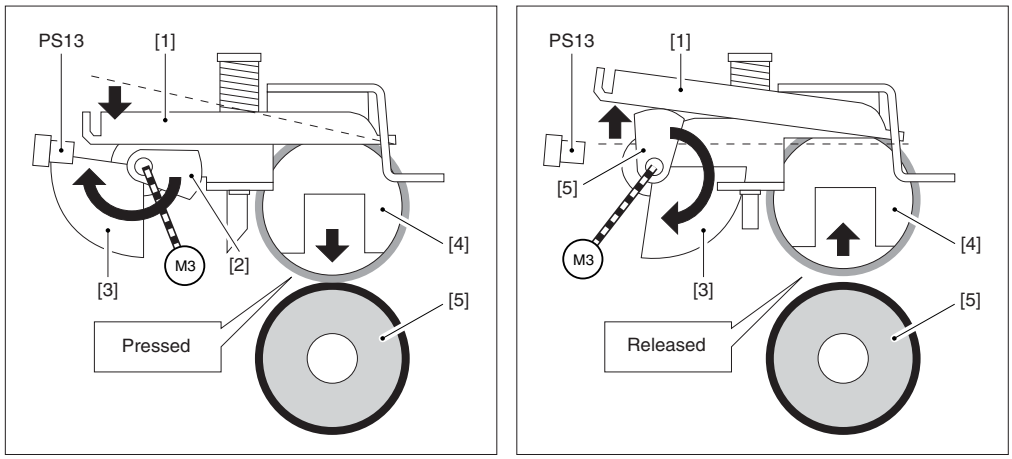
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

This machine does the control to make pressuring/releasing the fixing film unit to prevent the fixing film being transformed.

Pressuring/releasing of fixing film unit are regulated by pressure plate [1] and releasing lever [2]. Pressure plate [1] pushes fixing film unit [4] by a spring to press it to pressure roller [5]. Release lever [2] is rotated by fixing motor (M3), pushes pressure plate [1] down to release fixing film unit [4] from pressure roller [5].

pressuring operation
Fixing motor (M3) rotates in a positive direction. The pressure plate [1] puts down the fixing film unit by the power of the spring and presses to the pressure roller [5].

releasing operation
Fixing motor (M3) reverses, pressure release lever 2 [2] pushes up the pressure plate [2] so that the fixing film unit [4] releases from the pressure roller [5].



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[1] Pressure plate
[2] Release lever
[3] Sensor flag
[4] Fixing film unit
[5] Pressure roller
PS13: Fixing pressure releasing home position sensor
M3: Fixing motor
Below are the cases in which pressure will be applied to the fixing film unit:
- When pressure is not applied at power-on state
- When pressure is applied at power-on state
- When returning from sleep mode
- After jam removal
- When the state of pressure application is not certain after opening / closing doors with interlocks such as front cover (E.g. when a door is opened while pressure is being applied)

Below are the cases in which pressure will be released from the fixing film unit:
- In power ON jam at power-on state
- When paper jam has occurred
- When the equipment enters the sleep mode (both the soft switch and the timer are applicable)

The fixing motor (M3) will be rotated forward (the positive rotation) when pressure is applied. The fixing motor (M3) will be rotated in the opposite direction (the negative rotation) when pressure is released.
The sensor flag [3] in conjunction with the pressure release cover [2] will be rotated, and the fixing automatic pressure release position sensor (PS13) will detect the movement. This regulates the start / end timings of applying and releasing pressure.

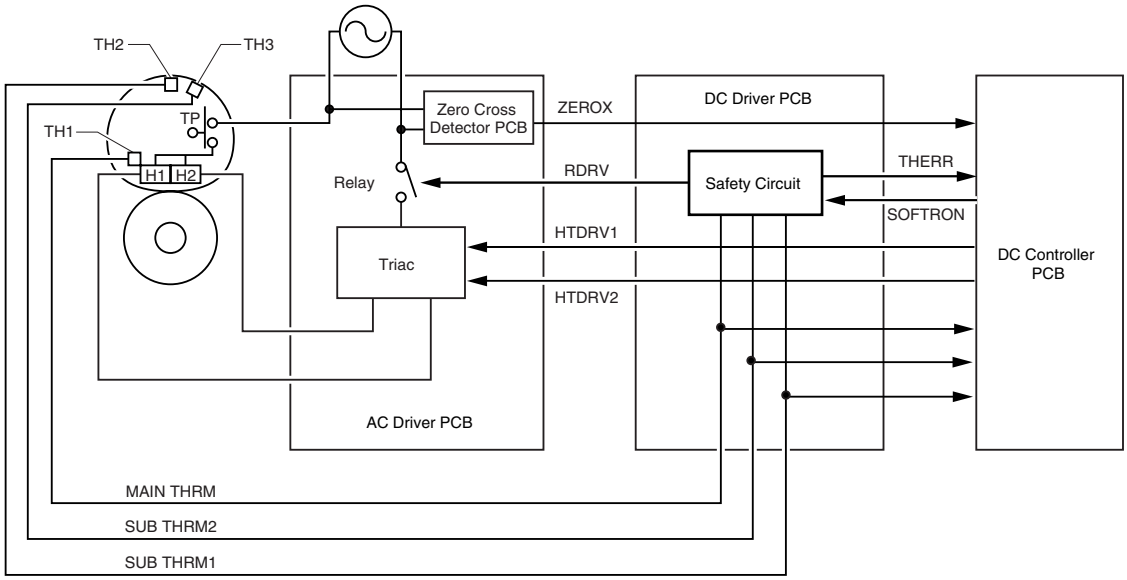
Error code
Error in pressure/release of fixing film unit
In case that the output of fixing automatic pressure phase sensor is not changed although rotating/reversing the fixing motor

9.4 Protective Functions

9.4.1 Overview

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

It is a function that detects overheating of the fixing assembly to cut off the power to the heater.
The machine is equipped with the following mechanisms that detect overheating of the fixing assembly to cut the power to the heater:
- cutting off the power using the DC controller (CPU)
- cutting off the power using a safety circuit
- cutting off the power using a thermal switch



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Cutting Off the Power (thermistor) Using the DC Controller (CPU)
The CPU monitors the output voltage (MAIN_THRM,SUB_THRM1,SUB_THRM2) of the main thermistor/sub thermistor 1/sub thermistor 2; when the voltage of MAIN_THRM is about 0.41 V or lower (equivalent of 260 deg C or more), or that of SUB_THRM1/SUB_THRM2 is about 0.77 V or less (equivalent of 260 deg C or more), the machine assumes a fault in the fixing assembly and executes the following:
- Go low the fixing heater drive signal (HEAT_ON1, HEAT_ON2), thus turning off the heater.
As a result, the triac (of the AC driver PCB) goes off to cut the power to the heater.

- Go low the relay drive signal (SOFTRON), thus the safety circuit on the DC driver PCB turns to low the relay drive command (RDRV).
As a result, the relay turns off to cut off the power to the heater.

Cutting Off the Power Using the Safety Circuit
The machine monitors the output voltage (MAIN_THRM, SUB_THRM1, SUB_THRM2) of the main thermistor/sub thermistor 1/sub thermistor 2. If the output of MAIN_THRM is about 0.38 V or less (equivalent of 258 deg C or more), or that of SUB_THRM1/SUB_THRM2 is about 0.7 V or less (equivalent of 255 deg C or more), the safety circuit on the DC driver PCB outputs the themistor error signal (THERR) to the DC controller PCB.

- The DC controller PCB makes the heater drive signal (HTDRV1,HTDRV2) "L" and turns off the fixing heaters.
Triac (in the AC driver PCB) is turned off, energizing to the fixing heater is intercepted.
- The safety circuit in the DC driver PCB makes the relay drive signal (RDRV) "L". The relay is turned off, and energizing to the fixing heater is intercepted.

Cutting Off the Power Using a Thermal Switch
If the fixing heater overheats and the reading of the thermal switch exceeds about 270 deg C, the thermal switch (TP1) goes off to cut the power to the fixing heater.

9.4.2 Fixing System Error Code

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

T-9-11

Code	Description	Corrective action
E001	Fixing high temperature error	
0000	Condition The reading of the main thermistor is 260 deg C or more. Cause The main thermistor is faulty. The DC PCB is faulty.	- Replace the fixing sleeve unit (main thermistor). - Replace the DC controller PCB. *1
0001	Condition The reading of the sub thermistor is 290 deg C or more. Cause The sub main thermistor is faulty. The DC PCB is faulty.	- Replace the fixing sleeve unit (sub thermistor). - Replace the DC controller PCB. *1
0002	Condition The safety circuit (of the DC controller) has detected a high temperature error (about 260 deg C or more). Cause The thermal switch is faulty. The low-temperature power supply PCB is faulty. The DC PCB is faulty.	Replace the DC controller PCB. *1
E003	Fixing low temperature error	
0000	Condition In 20 sec after the fixing heater has gone on, the reading of the main thermistor is 120 deg C or less. Cause The main thermistor is faulty. The DC controller is faulty. The connector has poor contact, or the harness is faulty.	- Replace the fixing sleeve unit (main thermistor). - Replace the DC controller PCB. *1
0001	Condition In the course of printing temperature control, the reading of the sub thermistor is 80 deg C or less for 2 sec or more. Cause The sub thermistor is faulty. The DC controller PCB is faulty. The connector has poor contact, or the harness is faulty.	- Replace the fixing sleeve unit (sub thermistor). - Replace the DC controller PCB. *1
0002	Condition During initial rotation, the reading of the main thermistor is 50 deg C or less 0.2 sec after the start of temperature control. Cause The DC controller PCB is faulty. The connector has poor contact, or the harness is faulty.	- Replace the fixing sleeve unit (main thermistor). - Replace the DC controller PCB. *1
E004	Thermistor is not connected	
0000	During walm-up rotation, the thermistor connection signal (FUSER CNCTX) is open.	- Confirm the cable connection - Replace the cable exchange, and established - Replace the fixing unit - Replace the DC controller PCB.
E009	Error in pressure/release of fixing film unit	
0001	In case that the output of fixing automatic pressure phase sensor is not changed although rotating/reversing the fixing motor	- Check the pressure/release mechanism. Check the connection of the connector. - Replace the motor.
E808	Low-voltage power supply circuit fault (zero-cross error)	
0000	The low-voltage power supply circuit fault (zero-cross error) Cause The low-voltage power supply PCB is faulty. The DC controller PCB is faulty.	- Replace the low-voltage power supply PCB. - Replace the DC control PCB.
E840	Fan shutter error	
0000	Fan shutter open/close operation Error Cause Abnormal rotation of the fan shutter motor Defect of the fan shutter position sensor Defect of the fan shutter home position error Defect of the DC controller PCB	- Replace the fan shutter motor - Replace the fan shutter position sensor - Replace the fan shutter home position sensor - Replace the DC controller PCB

9.5 Parts Replacement Procedure

9.5.1 Fixing Unit

9.5.1.1 Before Removing Fixing Unit

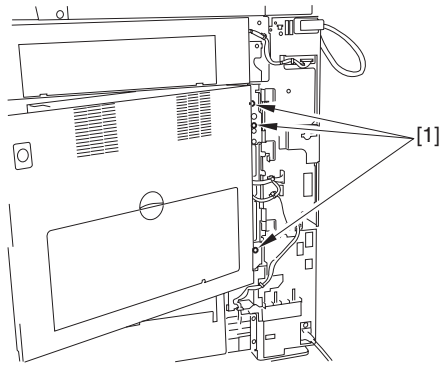
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the rear right cover. (page 10-13)[Detaching the Rear Right Cover]

9.5.1.2 Removing Fixing Unit

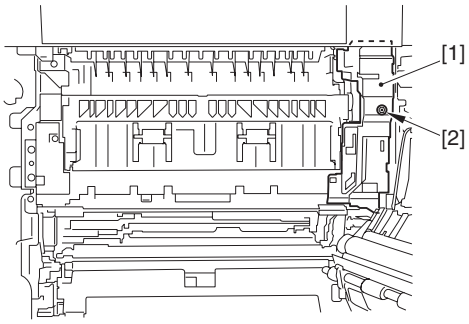
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove three screws [1] and open the double hinge of the right cover.



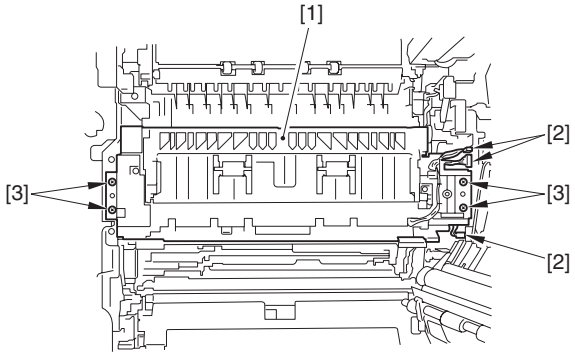
F-9-9

2) Detach the connector cover [1].
- 1 screw [2]



F-9-10

3) Remove the fixing unit [1].
- 3 connectors [2]
- 4 screws [3]



F-9-11

9.5.2 Fixing Film Unit

9.5.2.1 Before Removing Fixing Film Unit

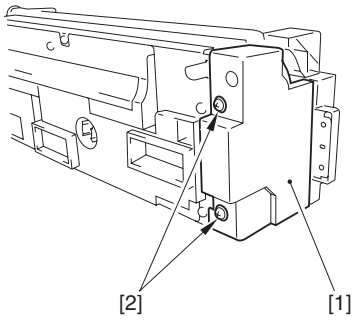
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the fixing unit. (page 9-12)[Removing Fixing Unit]

9.5.2.2 Removing Fixing Film Unit

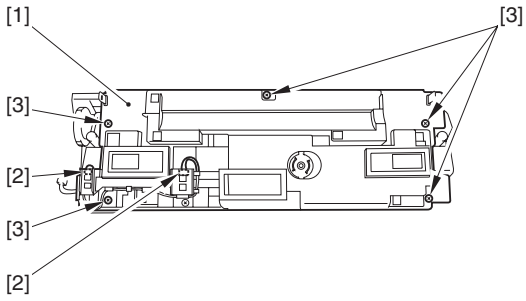
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the fixing front cover [1].
- 2 screws [2]



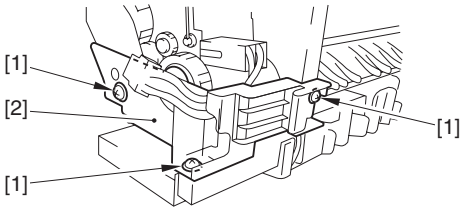
F-9-12

2) Remove the shutter unit [1].
- 2 connectors [2]
- 5 screws [3]



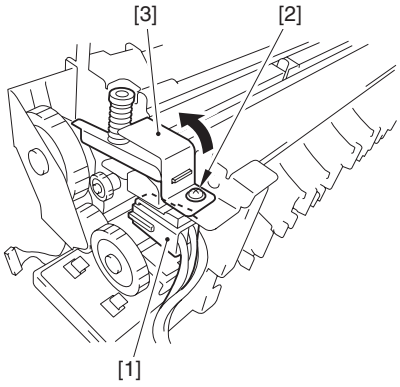
F-9-13

3) Remove 3 screws [1], and detach the cable cover [2].



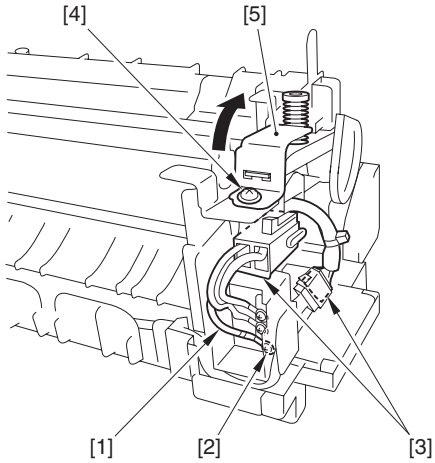
F-9-14

4) Disconnect the connector [1].
5) Remove the screw [2], and open the retainer arm [3].



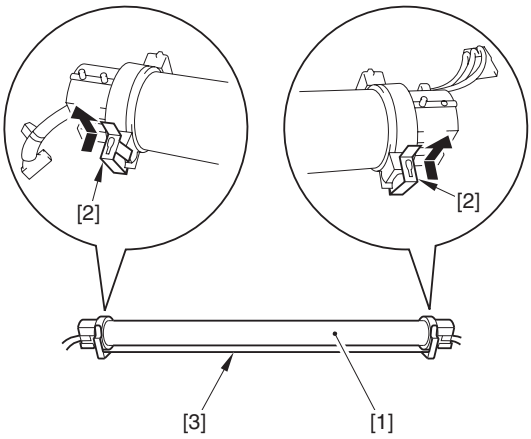
F-9-15

6) Remove the screw [2] that fixes the grounding wire [1].
7) Disconnect 2 connectors [3].
8) Remove the screw [4], and open the retainer arm [5].



F-9-16

9) From the fixing film unit [1], slide the 2 leaf springs [2] in the direction of the arrow, and remove them; then, remove the separation guide [3].



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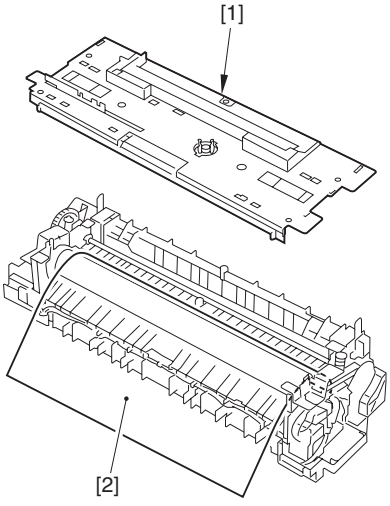
Points to Note when Attaching the Shutter Unit

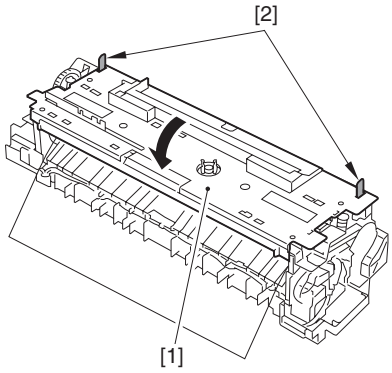
When attaching the shutter unit [1], it could damage the fixing film. Therefore, be sure to go through the following procedure.

1) Cover the fixing film with the protection sheet [2].



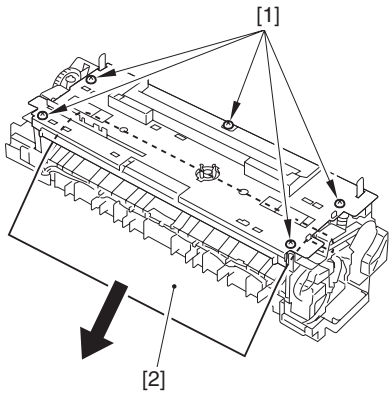
F-9-18

2) Fit the shutter unit [1] onto the positioning pin [2].



F-9-19

3) Tighten the 5 screws [1], and pull out the protection sheet [2].



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9.5.3 Pressure Roller

9.5.3.1 Before Removing Pressure Rolle

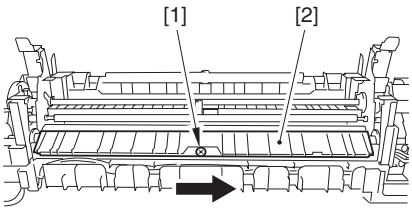
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the fixing film unit. (page 9-12) [Removing Fixing Film Unit]

9.5.3.2 Removing Pressure Roller

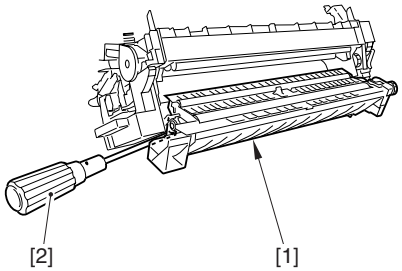
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the screw [1]; then, remove the inlet guide [2] by sliding in the direction of the arrow.



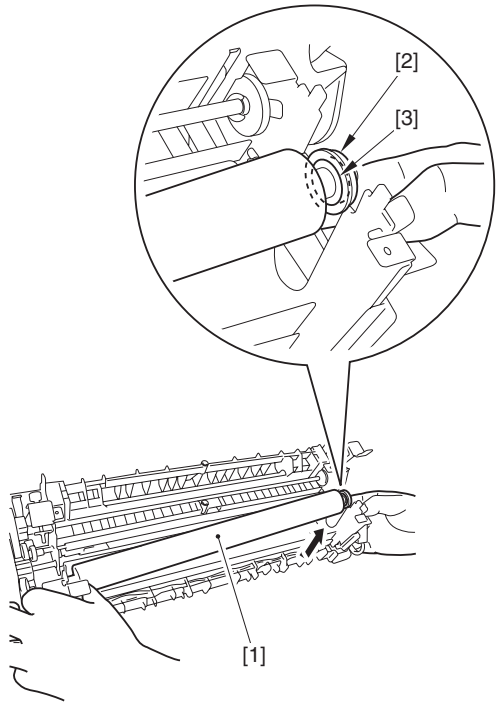
F-9-21

2) Open the jam removal door [1], and inset the screwdriver [2] as indicated in the following figure.



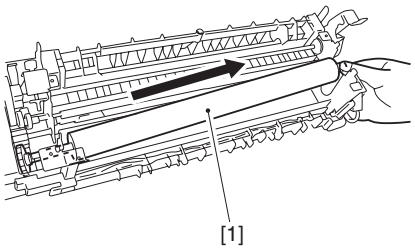
F-9-22

3) By lifting one side of the pressure roller [1], remove the bush [2] and bearing [3].



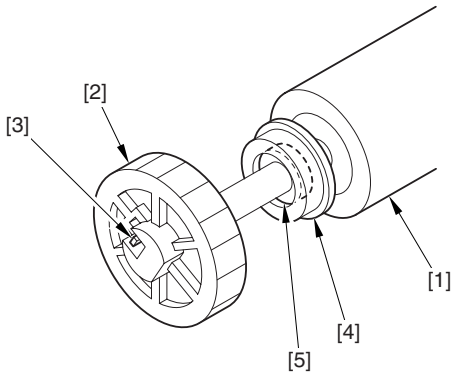
F-9-23

4) Remove the pressure roller [1] by sliding it.



F-9-24

5) From the removed pressure roller [1], remove the following parts.
- 1 gear [2] (1 hook [3])
- 1 bush [4]
- 1 bearing [5]



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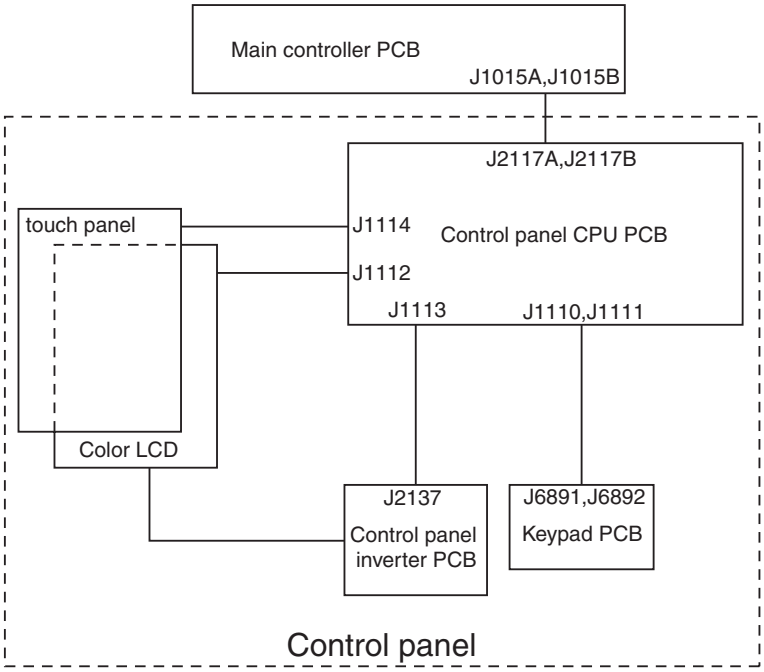
10.1 Control Panel

10.1.1 Overview

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The machine's control panel consists of the following PCBs, LCD, and touch panel, each offering the functions that follow:
- LCD display function
- contrast adjustment
- touch switch input
- hardware key input



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10.1.2 LCD Processing

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The CPU on the main controlled PCB sends data (display data) to the control panel CPU PCB as instructed by the program.
The data is sent through the control panel PCB to reach the color LCD.

10.1.3 Adjusting the LCD Screen Contrast

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The machine is equipped with a density adjustment volume (VR6801) on its keypad PCB for use by the user to adjust the contrast of the LCD screen.

10.1.4 Control Panel CPU

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

- Monitoring the Key Inputs
  It communicates the keypad and function key inputs to the CPU on the main controller PCB.
- Monitoring the Touch Panel Input
  It communicates the key inputs made on the touch panel to the CPU on the main controller PCB.
- Controlling the Buzzer Sound
- Controlling the Control Panel LED

MEMO:
The color LCD is driven by the main controller, and the control panel CPU PCB serves to relay the drive signals.

10.2 Counters

10.2.1 Overview

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The machine is equipped with counters that indicate the counts of output according to types of printers. These counters are indicated in response to a press on the Check key on the control panel, and they operate as follows (as set at time of shipment from the factory):

T-10-1

Model	Counter 1	Counter 2	Counter 3	Counter 4	Counter 5	Counter 6
100V *1 ***	total 1	total (black-and-white 1)	copy (full color + mono; 1)	print (full color + mono; 1)	not indicated**	not indicated**
	101	**108**	**232**	**324**	**000**	**000**

Model	Counter 1	Counter 2	Counter 3	Counter 4	Counter 5	Counter 6
100V *1 ****	total 2	copy (full color + mono color; 2)	total A (full color + mono color; 2)	copy (black-and-white 2)	total A (black-and-white 2)	not indicated**
	102	**231**	**148**	**222**	**133**	**000**
120V TW *2	total 1	total (black-and-white 1)	copy + print (full color, large)	copy + print (full color, small)	total (mono color 1)	not indicated **
	101	**108**	**401**	**402**	**118**	**000**
120V UL *3	total 1	total (black-and-white 1)	copy (full color + mono color, large)	copy (full color + mono color, small)	print (full color+ mono color, large)	print (full color + mono color, small)
	101	**108**	**229**	**230**	**321**	**322**
230V *4	total 1	total (black-and-white 1)	copy + print (full color, large)	copy + print (full color, small)	total (mono color 1)	total 1 (duplex)
	101	**108**	**401**	**402**	**118**	**114**
240V CA*5	total 1	total (black-and-white 1)	copy (full color + mono color, large)	copy (full color + mono color, small)	print (full color + mono color, large)	print (full color + mono color, small)
	101	**108**	**229**	**230**	**321**	**322**
230V AMS*6	total 1	total (full color + mono color, large)	total (full color + mono color, small)	total (black-and-white, large)	total (black-and-white, small)	scan (total 1)
	101	**122**	**123**	**112**	**113**	**501**

Guide to Notations
large: large-size paper (longer than 364 mm in feed direction; count increased by 1).
small: small-size paper (364 mm in feed length or shorter).
total: all (C+P; count increased by 1).
duplex: duplexing (in auto duplexing; count increased by 1).
- The 3-digit number in the counter column indicates the setting of the following service mode item: COPIER >OPTION >USER > COUNTER1 to 6
- counters 2 through 6 may be changed using the following service mode item: COPIER>OPTION>USER.

*1: F14-3019/3011/3029/3012/3049/3014/3059/3015
*2: F14-3001
*3: F14-3031
*4: F14-3041/3060/3070/3044 /3048/3078
*5: F14-3061/3068
*6: F14-3091/3094

**: by default, not indicated; may be changed in service mode.
***: if '0' is set for the following: COPIER>OPTION>USER>CNT-SW.
****: if '1' is set for the following: COPIER>OPTION>USER>CNT-SW.

10.2.2 Timing of Increasing the Count

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The machine increases the count depending on the selected mode (single-sided, double-sided), delivery location, and the type of accessory connected to it.

1. Single-Sided Print, 2nd Side of a Double-Sided Print
In the case of a single-sided print or the 2nd side of a double-sided print, the machine increase the count when the trailing edge of paper is discharged outside the machine, as indicated by the output of the following sensor:

T-10-2

Condition	Delivery location	sensor
w/o finisher	to tray 1	No. 1 delivery sensor (PS27)
	to tray 2	No. 2 delivery sensor (PS1A)
	to tray 3	No. 3 delivery sensor (PS5A)
w/ finisher		delivery sensor of finisher

2. 1st Side of a Double-Sided Print
The machine increases the count when the duplexing paper absent sensor(PS10) goes on, assuming that the printing on the 1st side is over.

10.3 Fans

10.3.1 Overview

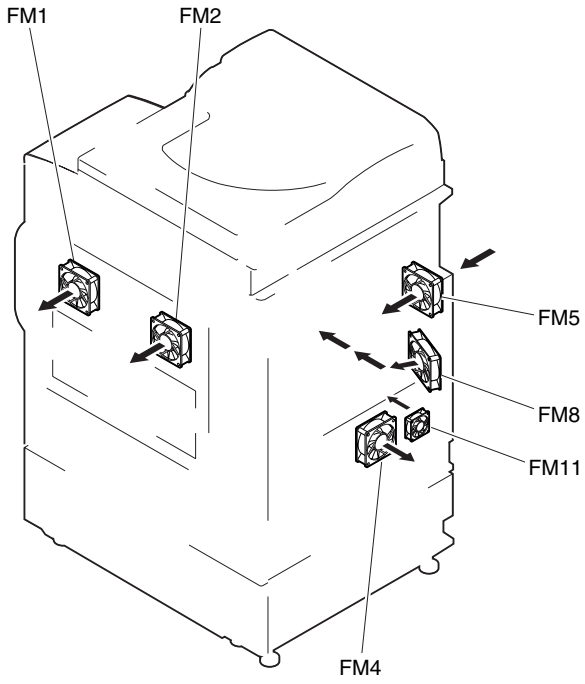
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The machine is equipped with the following fans arranged as shown in the diagram:

T-10-3

Notation	Name	Filter	2-speed control	Remarks	Error code
FM1	Fixing exhaust fan (front)	absent	absent	Cooling the fixing unit.	805-0001
FM2	Fixing exhaust fan (rear)	absent	absent	Cooling the fixing unit.	805-0002
FM3	Front process unit fan	present	absent	Cooling the process unit.	807-0001
FM4	Power supply fan	absent	absent	Cooling the power supply.	804-0000
FM5	Controller fan	absent	absent	Cooling the controller.	
FM6	Edge cooling fan (front)	absent	absent	Cooling the edge of the fixing unit.	840-0000
FM7	Edge cooling fan (rear)	absent	absent	Cooling the edge of the fixing unit.	840-0000

Notation	Name	Filter	2-speed control	Remarks	Error code
FM8	Rear process unit fan	present	absent	Cooling the process unit.	807-0002
FM9	Delivery contact fan	absent	present	Cooling the delivery block.	806-0001
FM10	Secondary transfer heat exhaust fan	absent	absent	Cooling the secondary transfer block.	806-0003
FM11	Power supply fan 2	absent	present	Cooling the power supply.	804-0001



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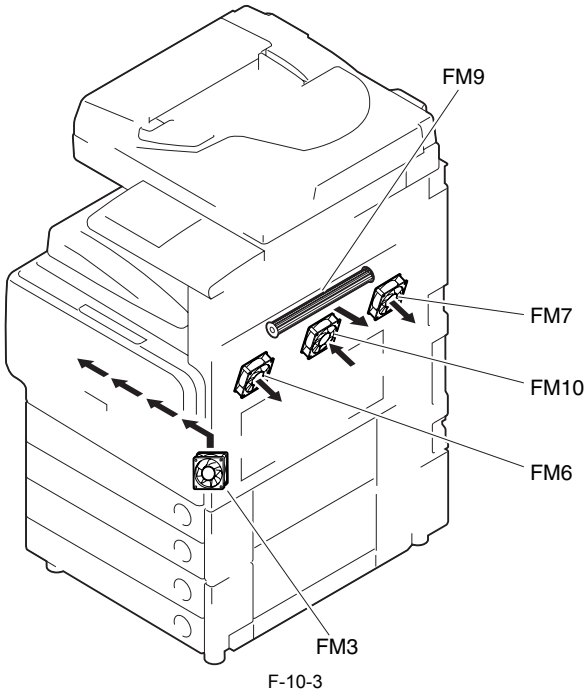
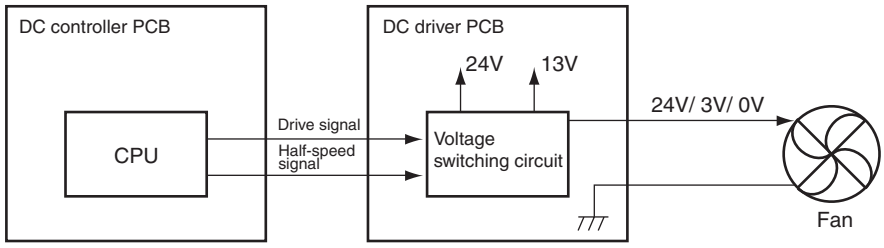


F-10-3

10.3.2 2-Speed Control

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

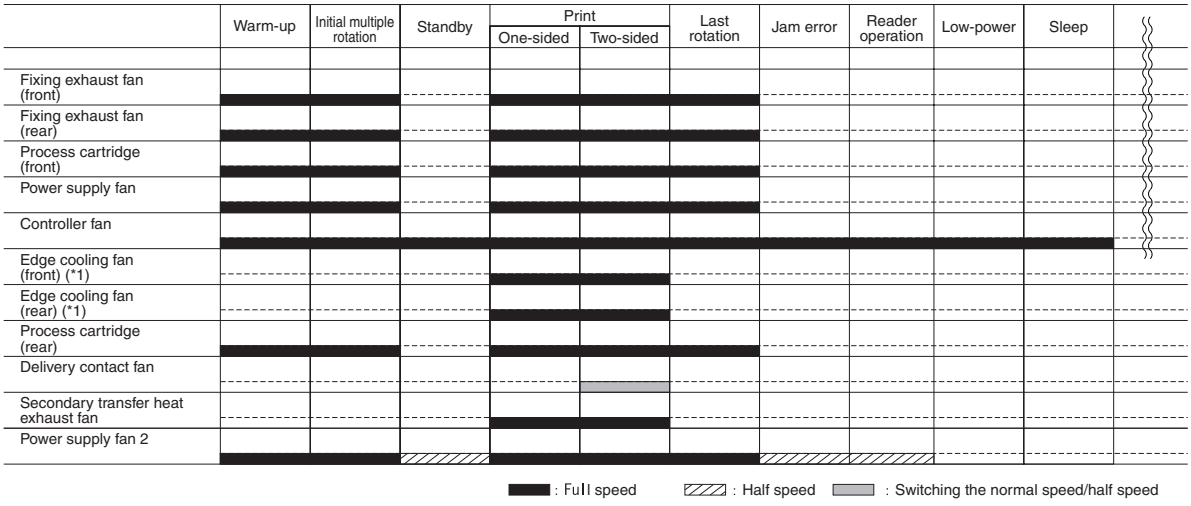
Among the fans mounted to the machine, the delivery adhesive fan and the power supply fan 2 execute 2-speed control. Switching of the rotation speed is executed by switching the voltage by the voltage switching PCB of the fan.



F-10-4

10.3.3 Sequence of Operations

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880



F-10-5

*1: Depending on the environment (paper size and temperature), switch ON/OFF.
*2: Depending on the environment (paper size), switch full speed/half speed.
*3: Depending on the environment (paper size and simplexing or duplexing mode), switch ON/OFF.

10.4 Power Supply

10.4.1 Power Supply

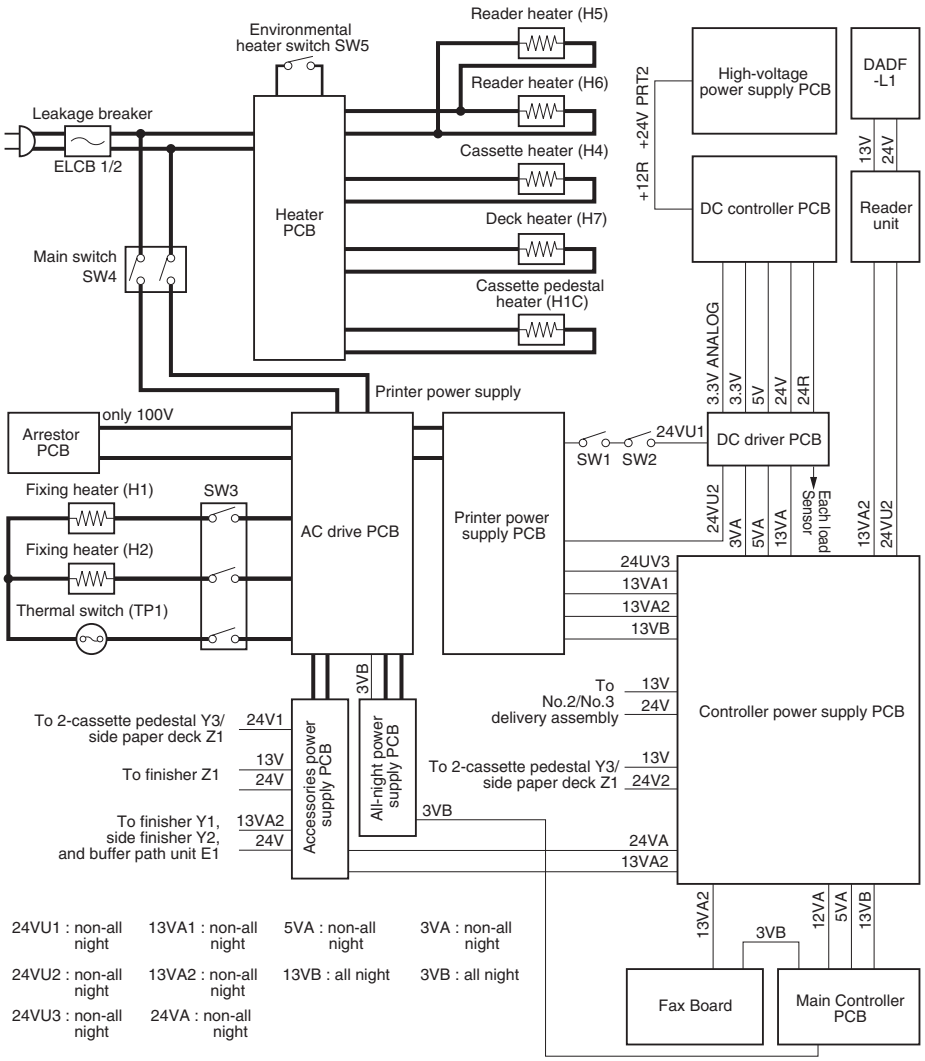
10.4.1.1 Route of Power Supply Inside the Printer

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The machine's DC power is supplied by the printer power supply PCB.

T-10-4

Name	Description	Remarks
Printer power supply PCB	Generate DC power (24V and 13V systems) Supply DC power to the controller power supply PCB	
Accessories power supply PCB	Generate DC power (24V system) Supply DC power to the buffer path, the finisher, the side finisher, the cassette pedestal, and the side paper deck	
Main switch	Switch ON/OFF the AC power to the AC driver PCB	
Interlock switch (DC)	Switch ON/OFF the 24VUI to the DC driver PCB	
Leakage breaker	Block the power supply at abnormal state	
Heater PCB	Switch ON/OF the power supply to the cassette heater, the reader heater, and the deck heater.	Option for 100V/230V
High voltage power supply PCB	Generate various high voltages	
AC driver PCB	Supply AC power to the printer power supply PCB and the accessories power supply PCB. Fixing drive.	
Controller power supply PCB	Supply DC power to the reader unit, the accessories power supply PCB, the No.2/No.3 delivery assembly, the Fax board, the main controller PCB, the DC driver PCB, the cassette pedestal, and the side paper deck	
All-night power supply PCB	Generate and supply the all-night power (3VB)	

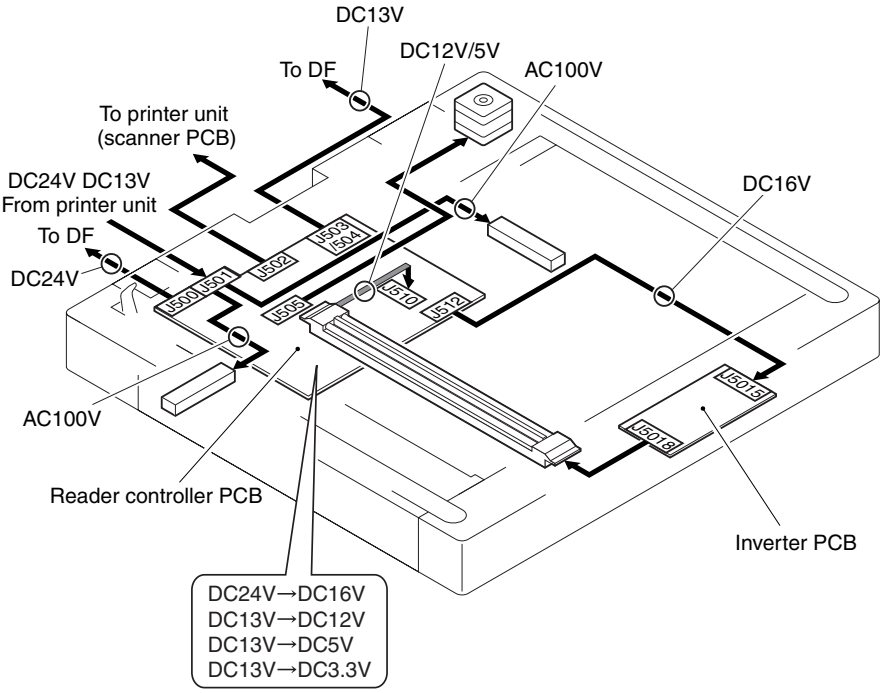

Environmental heater switch SW5
Reader heater (H5)
Reader heater (H6)
Cassette heater (H4)
Deck heater (H7)
Cassette pedestal heater (H1C)
Leakage breaker
ELCB 1/2
Main switch SW4
Heater PCB
High-voltage power supply PCB
DADF -L1
+24V PRT2
+12R
DC controller PCB
13V
24V
Reader unit
3.3V ANALOG
3.3V
5V
24V
24R
Printer power supply
only 100V
Arrestor PCB
AC drive PCB
Printer power supply PCB
24VU1
SW1 SW2
DC driver PCB
Each load Sensor
Fixing heater (H1)
SW3
Fixing heater (H2)
Thermal switch (TP1)
24VU2
3VA
5VA
13VA
13VA2
24VU2
24UV3
13VA1
13VA2
13VB
3VB
To 2-cassette pedestal Y3/ side paper deck Z1
24V1
To finisher Z1
13V
24V
To finisher Y1, side finisher Y2, and buffer path unit E1
13VA2
24V
Accessories power supply PCB
All-night power supply PCB
3VB
To No.2/No.3 delivery assembly
13V
24V
To 2-cassette pedestal Y3/ side paper deck Z1
13V
24V2
Controller power supply PCB
24VA
13VA2
13VA2
3VB
12VA
5VA
13VB
Fax Board
Main Controller PCB
24VU1 : non-all night
13VA1 : non-all night
5VA : non-all night
3VA : non-all night
24VU2 : non-all night
13VA2 : non-all night
13VB : all night
3VB : all night
24VU3 : non-all night
24VA : non-all night

F-10-6

10.4.1.2 Route of Power to the Reader Unit

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The reader controller PCB uses the 24/13 VDC from the printer unit to generate the following DC voltages:
- 16 VDC (for scanning lamp)
- 12 VDC (for CCD)
- 5 VDC (for sensor)
- 3.3 VDC (for IC)

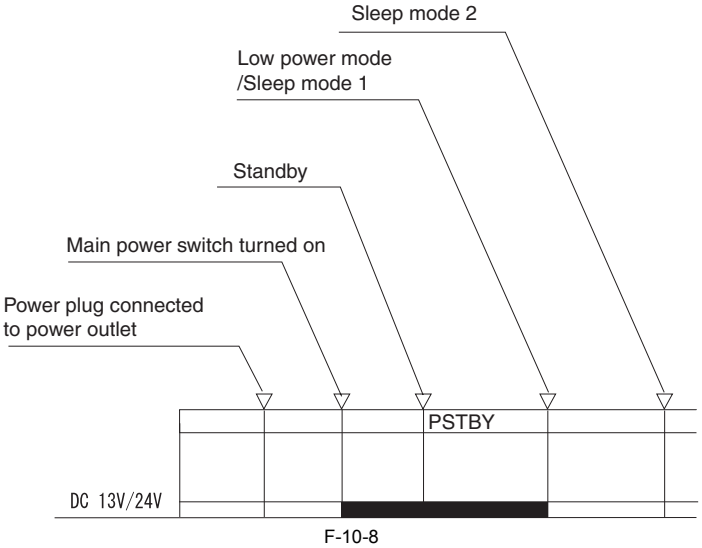


F-10-7

10.4.1.3 Timing of Supplying Power to the Reader Unit

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The reader unit is supplied with 24/13 VDC by the printer unit at the following timing:

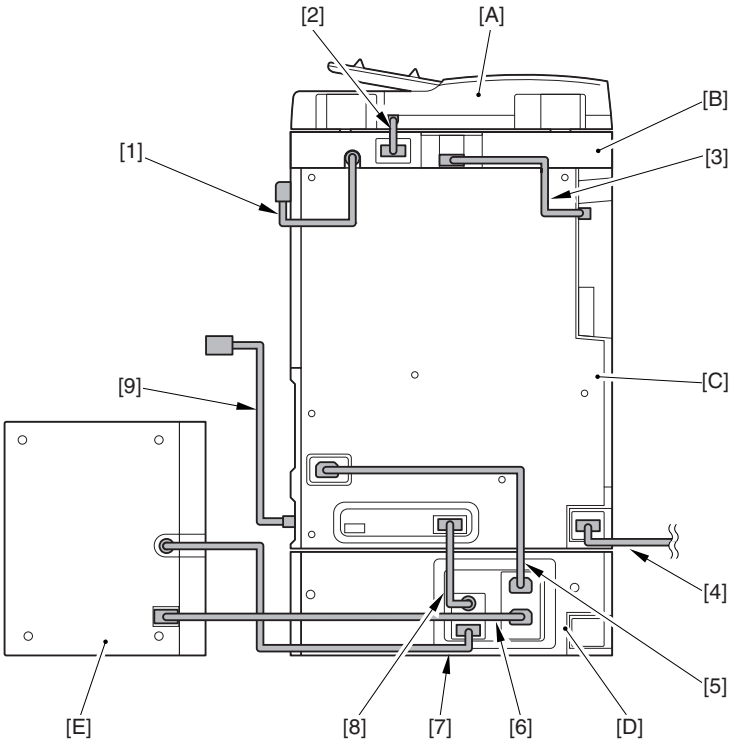


F-10-8

10.4.1.4 Routes of Power to various Options

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The power from the printer unit to the accessories is routed as follows:



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[1] Reader unit power cable
[2] DADF I/F cable
[3] Reader communication cable
[4] Finisher Y1 / saddle finisher Y2 I/F cable
[5] Pickup heater cable
[6] Side deck heater cable
[7] Side deck I/F cable
[8] Cassette pedestal I/F cable
[9] AC input

[A] DADF-L1
[B] Reader unit
[C] Printer unit
[D] Cassette Feeding Unit-Y3
[E] Paper Deck-Z1

10.4.2 Rated Output of DC Power Supply PCB

10.4.2.1 Rated Output of the Printer Unit Power Supply PCB

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The ratings and the power tolerances of the printer power supply PCB are as follows:

T-10-5

Output name	13VA1	13VA2	13VB	24VU1/24VU2/24VU3
all-night/non-all night	non-all night	non-all night	all night	non-all night
rated output	13.2V	13.2V	13.2V	24V
tolerance	±3%	±3%	±3%	±5% (between 0.1 A and 1.2 A) +8%,-6% (between 0 A and 13.5 A)

10.4.2.2 Rated Output of the Controller Power Supply PCB

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The ratings and the power tolerances of the controller power supply PCB are as follows:

T-10-6

Output name	3VA	5VA	12VA
all-night/non-all night	non-all night	non-all night	non-all night
rated output	3.4V	5.1V	12V
tolerance	±4%	±3%	±5% (between 0 A and 2 A) +5%,-6% (between 0 A and 2.5 A)

10.4.2.3 Rated Output of the Options Power Supply PCB

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Rated output and power supply tolerance of the accessory power supply PCB are shown below:

T-10-7

Output name	24V
all-night/non-all night	non-all night
rated output	24V
tolerance	+5%,-6% (between 0.1 A and 6.5 A)
	+8%,-6% (between 0 A and 12 A)

10.4.2.4 Rated output of the all-night power supply PCB

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Rated output and power supply tolerance of the all-night power supply PCB are shown below:

T-10-8

Output name	3VB
all-night/non-all night	all night
rated output	3.4V
tolerance	3%

10.4.3 Protection Function

10.4.3.1 Protective Functions

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The machine's DC power supply PCB and those of its accessories are equipped with protective functions against excess current and voltage, which will automatically cut off the output voltage in response to an error power condition (caused, for example, by a short-circuit on a load).
If any of these protective mechanism has gone on, turn off the main power switch of the printer unit, and remove the cause of activation; then, leave the machine alone for about 3 min, and turn its power back on to reset it.

10.4.4 Backup Battery

10.4.4.1 Backup Battery

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

In this machine's main controller PCB, 1 lithium battery is equipped as data backup power supply for electric outage or disconnection of the power plug.

Main SRAM PCB	Manganese Dioxide/Lithium Battery (3V, 100mAh)
Life of the Battery	10 years or more for both batteries (the state that the power plug is disconnected)
Replacement of the Battery	Replacement of the battery itself is not available in the servicing field.
Remedy after replacement of the battery at the workshop	Enter the value indicated on the service label

When mit dem falschen Typ ausgewechselt, besteht Explosionsgefahr.
Gebrauchte Batterien gemas der Anleitung beseitigen.

10.4.5 Energy-Saving Function

10.4.5.1 Overview

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1. Standby Mode
In standby mode, the machine is more or less ready to start a job, i.e., all its components are supplied with power.
2. Power Save Mode
Power status change control: low-power and sleep mode are called power-save mode as a generic term. The power mode changes from stand-by to low-power, then to sleep automatically.

T-10-9

Low power mode (at time of shipment)	shift	The machine moves through different states in response to the passage of times programmed in advance.
	Description	The machine performs its power save functions in keeping with the requirements of the Energy Star standards.

T-10-10

Sleep mode	Shift	The machine moves through different sates in response to the passage of times selected in Additional Function or in response to a press on the control panel software power switch.
	Description	In sleep mode 1, the DC controller PCB and the main controller PCB are supplied with power. In sleep mode 2, the main controller PCB is supplied with power. In both sleep modes 1 and 2, the power to the fixing AC heater is off. Also, if there is a network communication and RTC communication during the sleep mode 2, the machine can recover without booting the HDD. When booting the HDD, sleep mode 1, the protection time (120 min) to protect the HDD duration number must be retained. Power consumption can be kept at low level by not booting the HDD. When there is network communication and RTC communication during sleep mode 2, the machine recovers as CPU recovery status (without booting HDD). If there is no Network communication for 15 sec after the recovery of CPU, the machine transits to sleep mode 2. If there is a network communication during 15 sec after recovery, the machine transits to sleep mode 2 after service mode setting time (*1) from the last network communication.

*1 Service mode:
COPIER > OPTION > BODY > WUEV-LIV
Default: 15 sec
Setting range: 10 to 600 sec

3. AC Off Mode

The machine remains in this sate when its main power switch remains off. All its power remain off.

10.4.5.2 Power Supply Control

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The machine's power supply conditions are as follows:

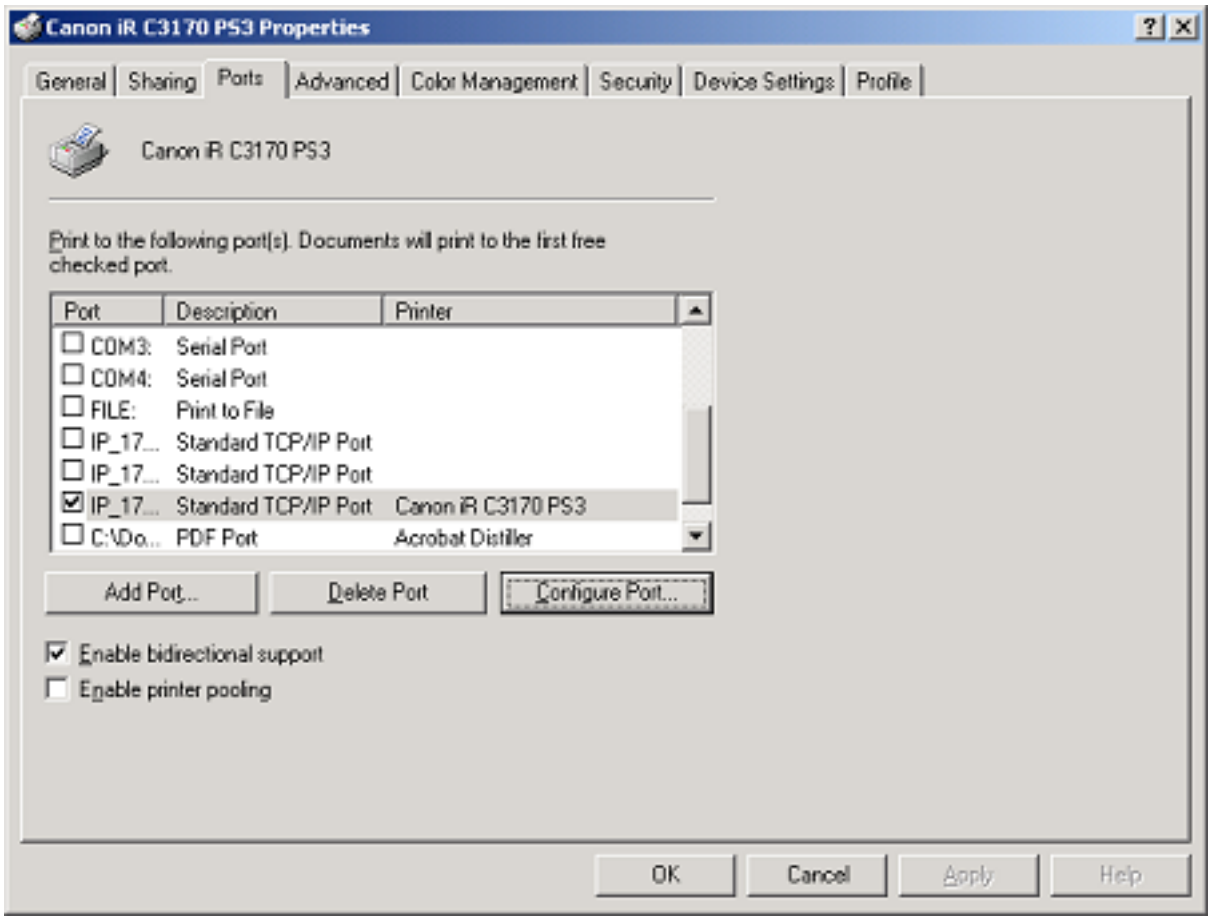
T-10-11

			Copy / stand-by mode	Low-power / sleep 1 mode	Sleep 2 mode	AC OFF mode
		remote 1	ON	ON	OFF	OFF
		remote 2	ON	OFF	OFF	OFF
ACC power supply PCB	non-all night	24VA	ON	OFF	OFF	OFF
Printer power supply PCB	non-all night	24VU1	ON	OFF	OFF	OFF
	non-all night	24VU2	ON	OFF	OFF	OFF
	non-all night	24VU3	ON	OFF	OFF	OFF
	all night	13VB	ON	ON	ON	OFF
Controller power supply PCB	non-all night	24VU1	ON	OFF	OFF	OFF
	non-all night	24VU2	ON	OFF	OFF	OFF
	non-all night	13VA1	ON	ON	OFF	OFF
	non-all night	13VA2	ON	OFF	OFF	OFF
	all night	13VB	ON	ON	ON	OFF
	non-all night	12VA	ON	ON	OFF	OFF
	non-all night	5VA	ON	ON	OFF	OFF
	non-all night	3VA	ON	ON	OFF	OFF
All-night power supply PCB	all night	3VB	ON	ON	ON	OFF
G3 FAX accessory	non-all night	+5V	ON	ON	OFF	OFF
	all night	+5VS	ON	ON	ON	OFF
	non-all night	+3.3V	ON	ON	OFF	OFF
	all night	+3.3VS	ON	ON	ON	OFF
FAX accessory	non-all night	pseudo CI	ON	OFF	OFF	OFF

10.4.5.3 SNMP setup

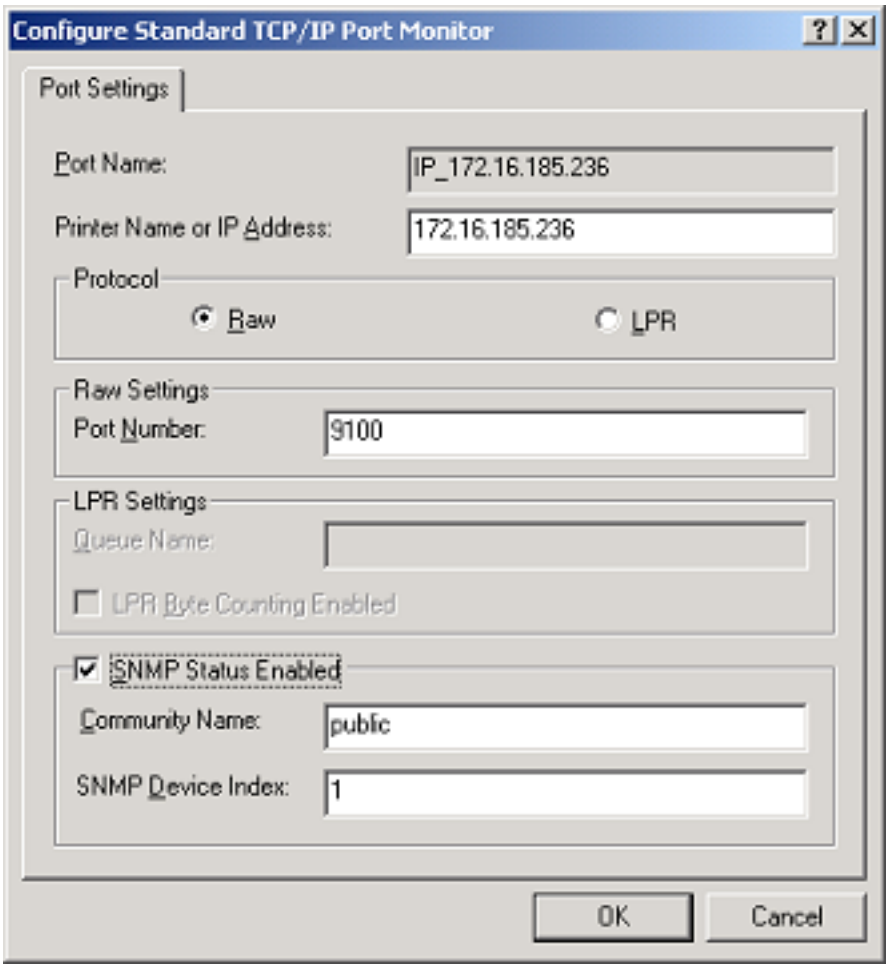
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

When the machine is used as a Windows printer, enabling 'Use SNMP' causes the operating system to collect machine status information at specific intervals, preventing the machine from starting a sleep state.
To avoid the situation, disable the setting (Windows' printer properties).
-Disabling 'Use SNMP'
1) Select 'Configure Port' on the Ports screen (printer properties).



F-10-10

2) Remove the check mark from 'SNMP Status Enabled'.


Configure Standard TCP/IP Port Monitor
Port Settings
Port Name:
IP_172.16.185.236
Printer Name or IP Address:
172.16.185.236
Protocol
Raw
LPR
Raw Settings
Port Number:
9100
LPR Settings
Queue Name:
LPR Byte Counting Enabled
SNMP Status Enabled
Community Name:
public
SNMP Device Index:
1
OK
Cancel

F-10-11

10.5 Parts Replacement Procedure

10.5.1 External Covers

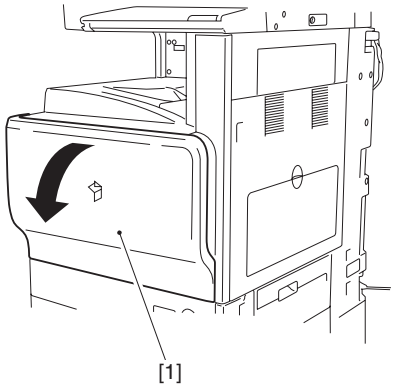
10.5.1.1 Front Cover

10.5.1.1.1 Detaching the Front Cover

0014-0635

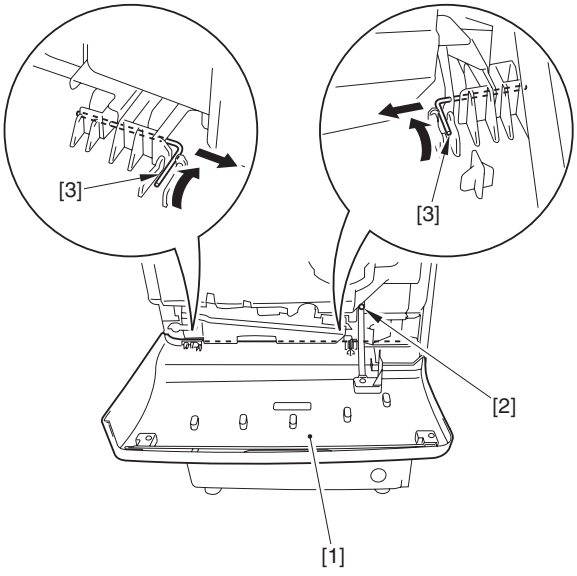
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Open the front cover.



F-10-12

2) Detach the front cover [1].
- 1 screw [2]
- 2 pins [3]



F-10-13

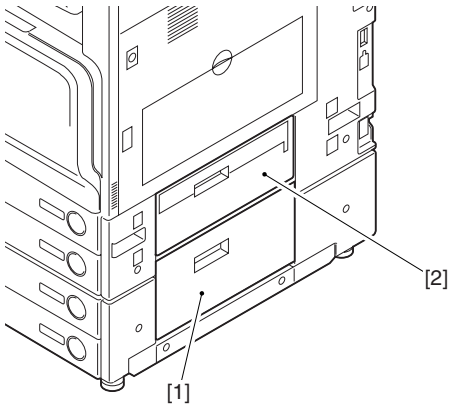
10.5.1.2 Right Lower Cover

10.5.1.2.1 Detaching the Right Lower Cover

0014-0637

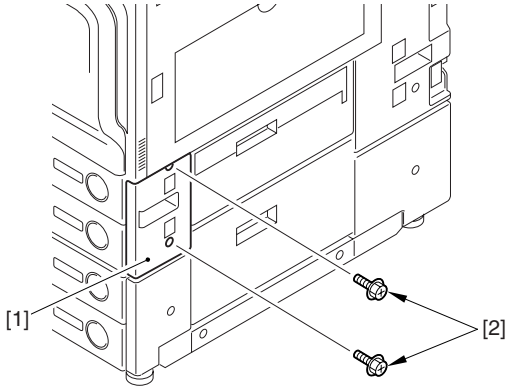
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Open the cassette lower right cover [1].
2) Open the cassette upper right cover [2].



F-10-14

3) Detach the right lower cover [1].
- 2 screws [2]



F-10-15

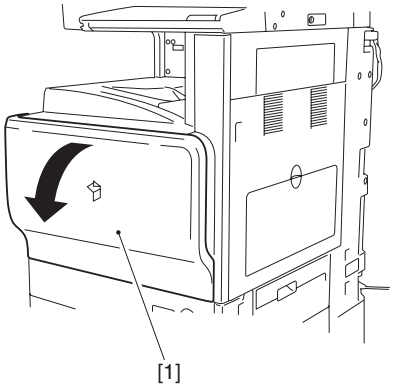
10.5.1.3 Right Front Cover

10.5.1.3.1 Removing the Right Front Cover

0014-5598

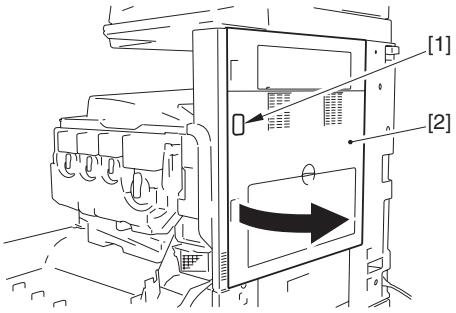
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Open the front cover [1].



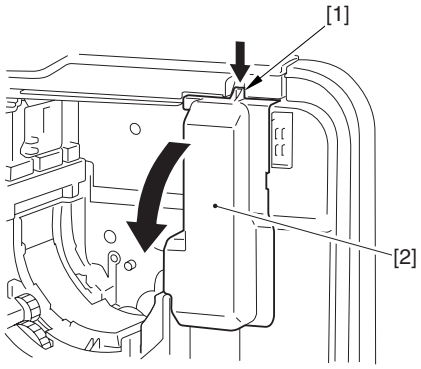
F-10-16

2) Press the open / close button [1] and open the front cover [2].



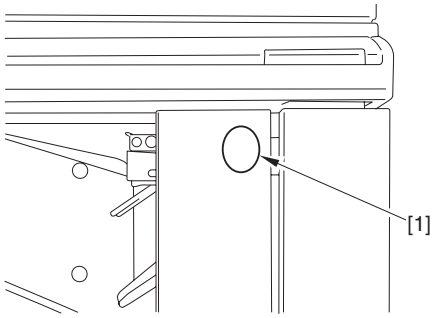
F-10-17

3) Push down the claw [1] and then remove the handle cover [2].



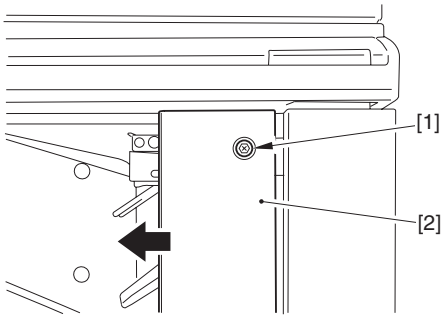
F-10-18

4) Remove the face cover [1].



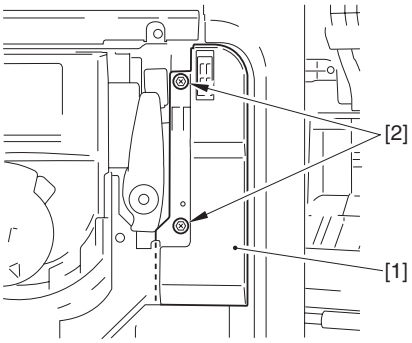
F-10-19

5) Remove the screw [1] and slide the inside right cover [2] to the direction of the arrow.



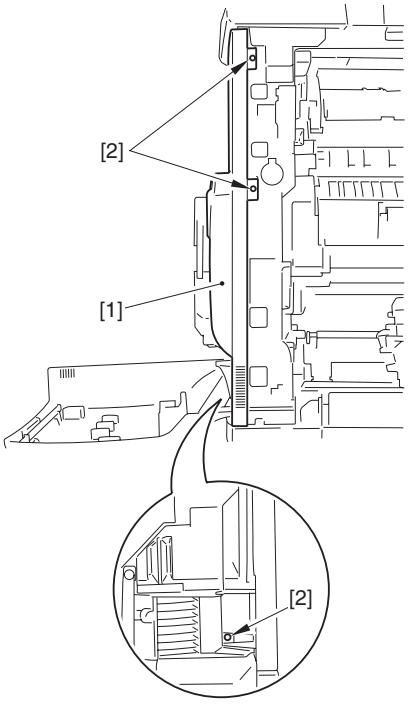
F-10-20

6) Remove the right front inside cover [1].
- 2 screws [2]



F-10-21

7) Remove the right front cover [1].
- 3 screws [2]



F-10-22

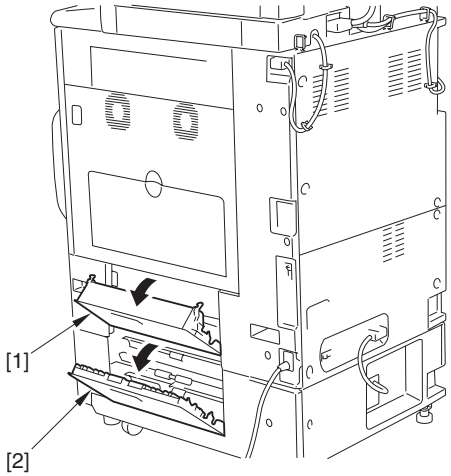
10.5.1.4 Rear Right Cover

10.5.1.4.1 Detaching the Rear Right Cover

0014-0636

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

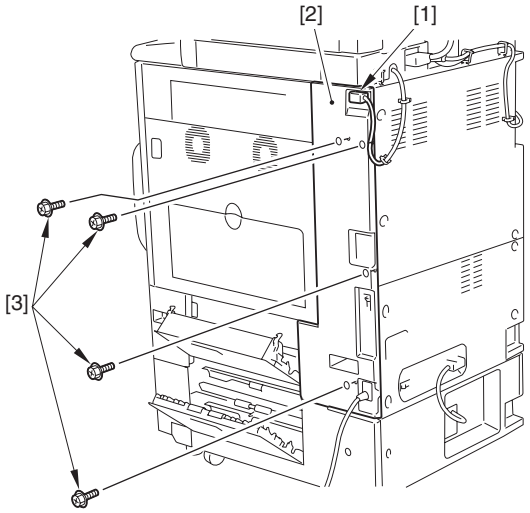
1) Open the cassette lower right cover [2].
2) Open the cassette upper right cover [1].



F-10-23

3) Disconnect the reader power cable [1].
4) Detach the rear right cover [2].

- 4 screws [3]



F-10-24

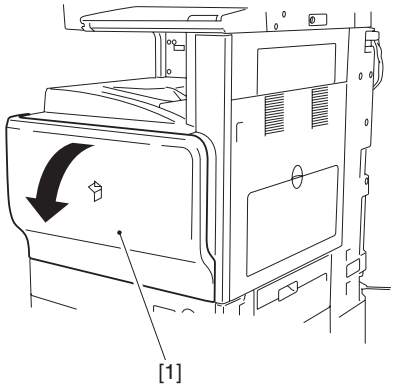
10.5.1.5 Upper Left Cover

10.5.1.5.1 Detaching the Left Cover

0014-0640

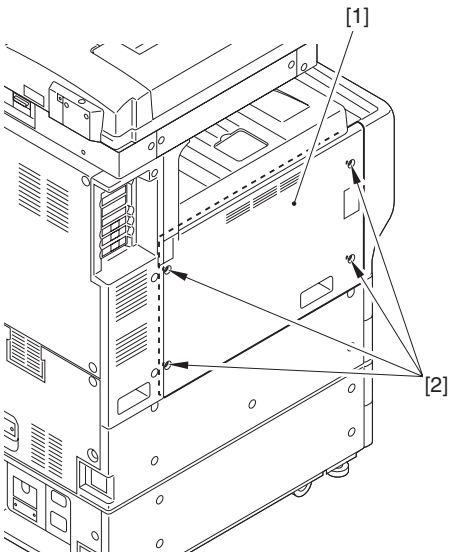
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Open the front cover.



F-10-25

2) Detach the left cover [1].
- 4 screws [2]



F-10-26

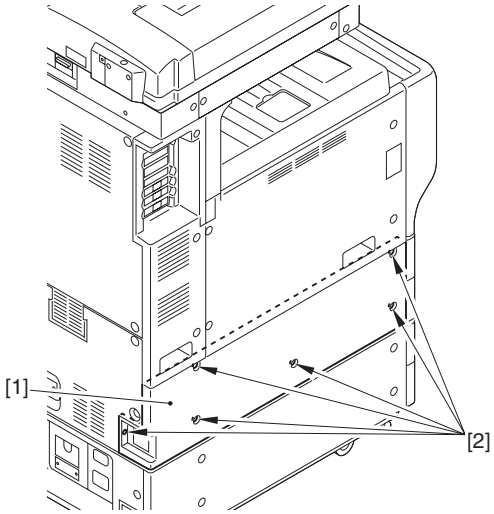
10.5.1.6 Left Lower Cover

10.5.1.6.1 Detaching the Left Lower Cover

0014-0642

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the left lower cover [1].
- 6 screws [2]



F-10-27

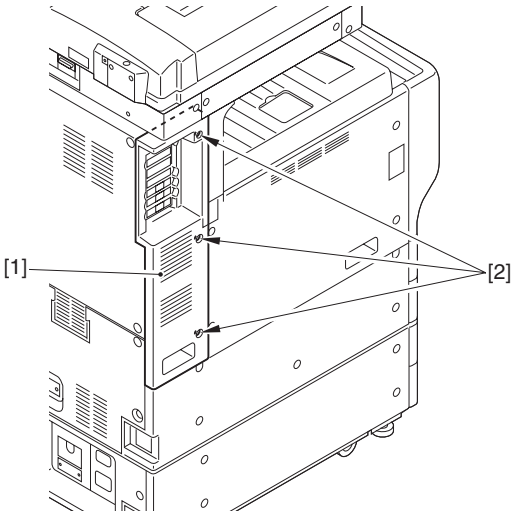
10.5.1.7 Left Rear Cover (Upper)

10.5.1.7.1 Detaching the Left Rear Cover

0014-0641

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the left rear cover [1].
- 3 screws [2]



F-10-28

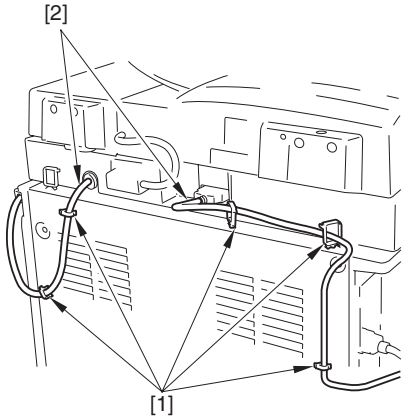
10.5.1.8 Rear Upper Cover

10.5.1.8.1 Detaching the Rear Upper Cover

0014-0644

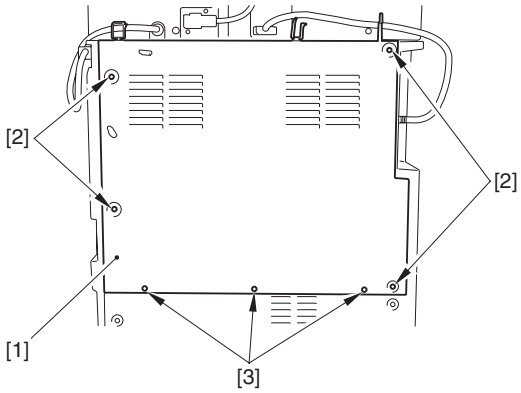
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Release the 4 wire saddles [1] on the rear upper cover to free the cable [2] upward.



F-10-29

2) Detach the rear upper cover [1].
- 4 screws [2] (Remove)
- 3 screws [3] (Loosen)



F-10-30

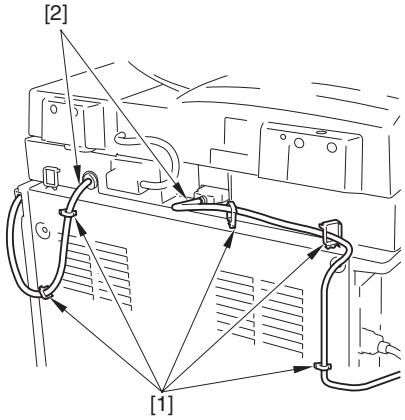
10.5.1.9 Rear Lower Cover

10.5.1.9.1 Detaching the Rear Lower Cover

0014-0647

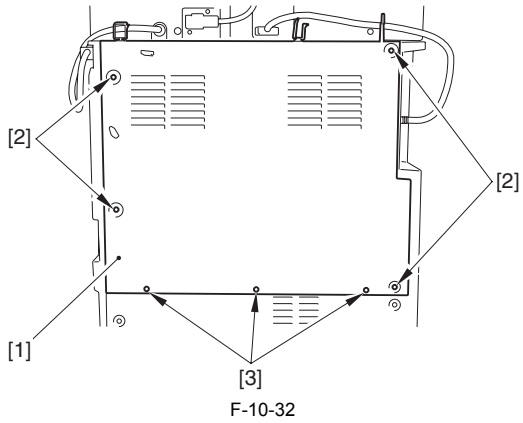
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Release the 5 wire saddles [1] on the upper rear cover to free the 2 cables [2] upward.



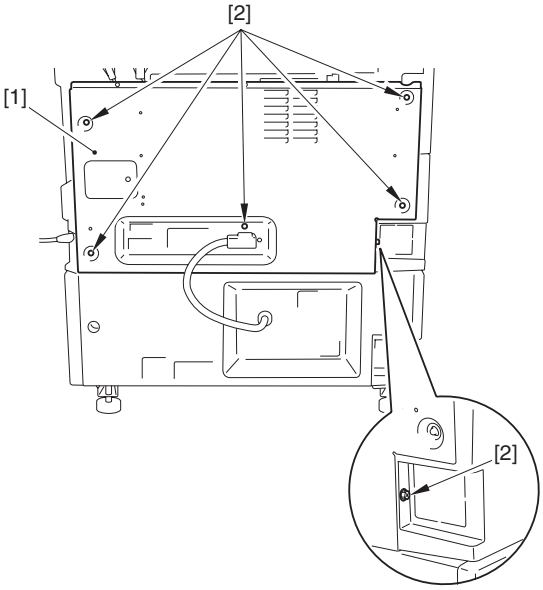
F-10-31

2) Detach the rear upper cover [1].
- 4 screws [2] (Remove)
- 3 screws [3] (Loosen)



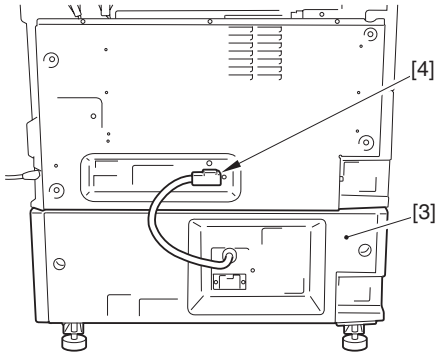
F-10-32

3) Detach the rear lower cover [1].
- 6 screws [2]



F-10-33

If the pedestal [3] has been installed, disconnect the lattice connector [4].



F-10-34

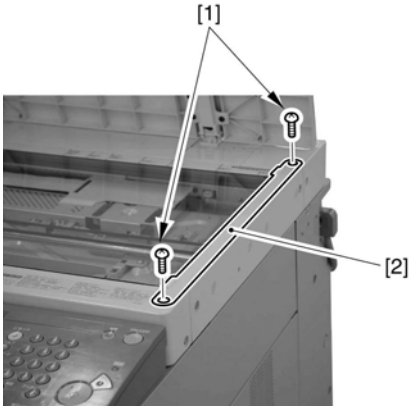
10.5.1.10 Reader Front Cover

10.5.1.10.1 Detaching the Reader Front Cover

0014-1336

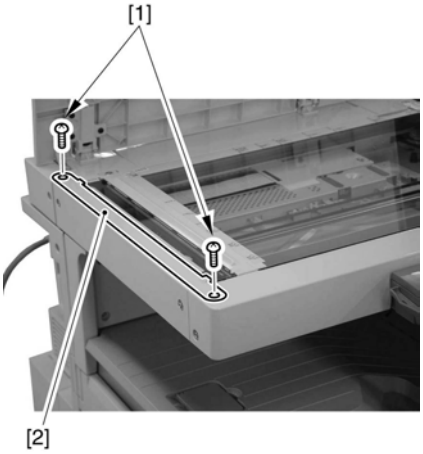
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Open the copyboard cover (pressing plate/ADF).
2) Remove the 2 screws [1] to remove the copyboard glass retainer (right) [2].



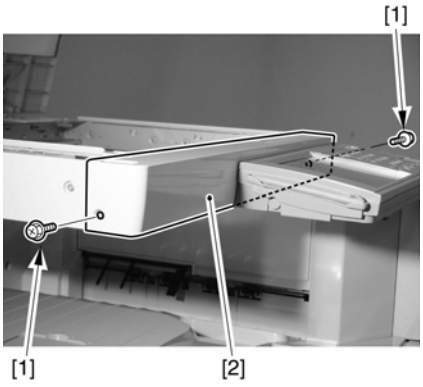
F-10-35

3) Remove the 2 screws [1] to remove the copyboard glass retainer (left) [2].



F-10-36

4) Remove the 2 screws [3] to detach the reader front cover [4].



F-10-37

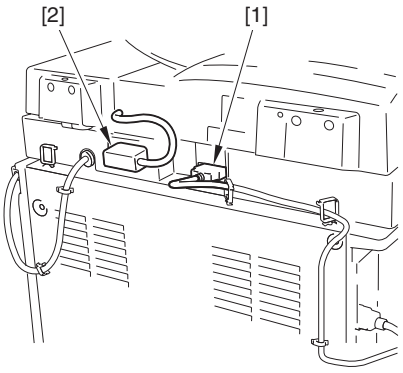
10.5.1.11 Reader Rear Cover

10.5.1.11.1 Detaching the Reader Rear Cover

0014-1331

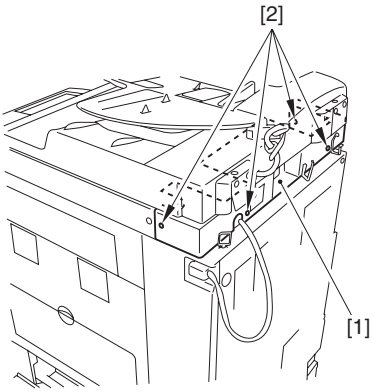
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Open the copyboard cover (pressing plate/ADF).
2) Disconnect the reader unit communication cable [1] and the ADF communication cable [2] (models with ADF only).



F-10-38

3) Remove the 4 screws [1] to detach the reader rear cover [2].



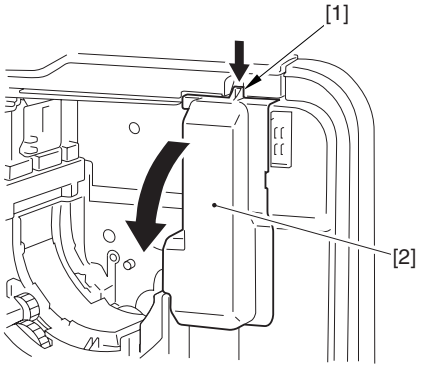
F-10-39

10.5.2 Hopper Drive Unit

10.5.2.1 Removing the Hopper Drive Unit

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the waste toner box.
2) Detach the handle cover [1].
   - 1 claw [2]

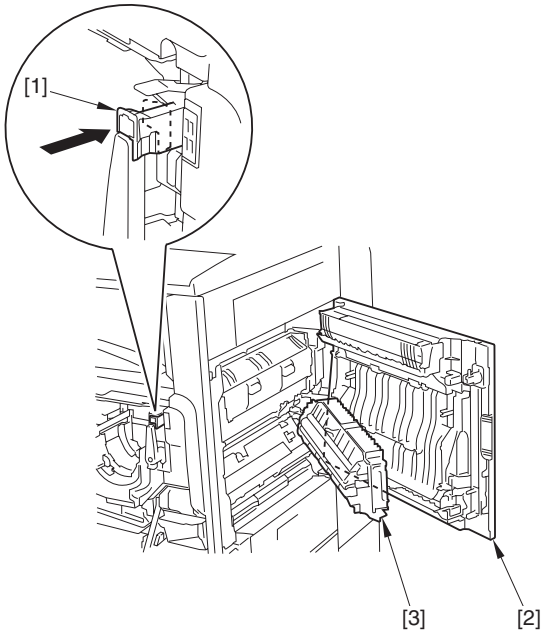


F-10-40

3) Push the release lever [1] to open the right cover [2].

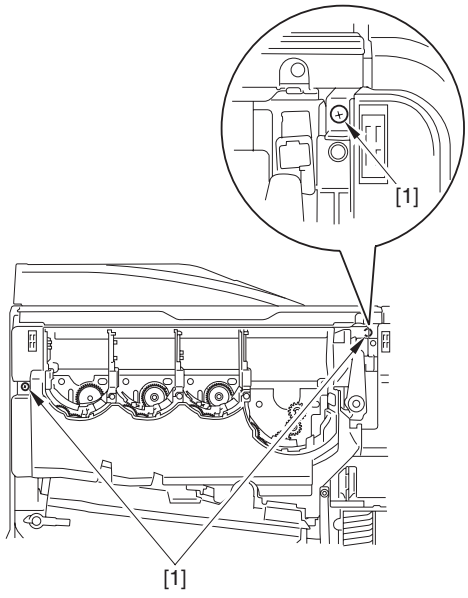
⚠

For taking in/out of the process unit, make sure to do with the duplexing unit [3] open.



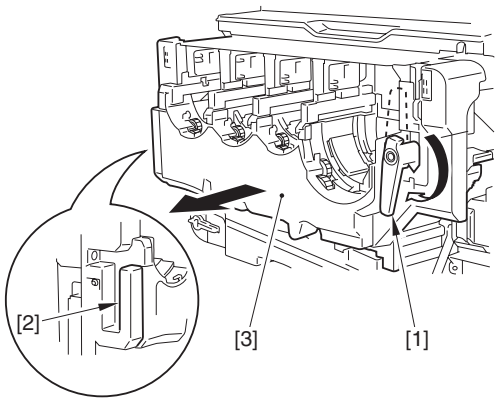
F-10-41

4) Remove the 2 screws [1].



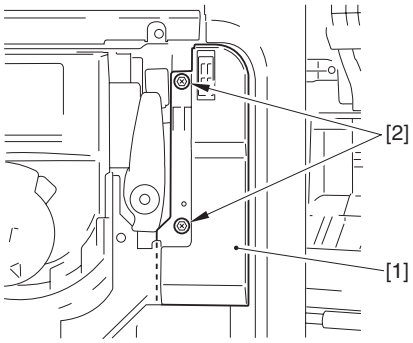
F-10-42

5) Turn the handle [1] 180 deg. Pull the process unit [3] out until it is stopped while holding the handle [1] and the grip [2].



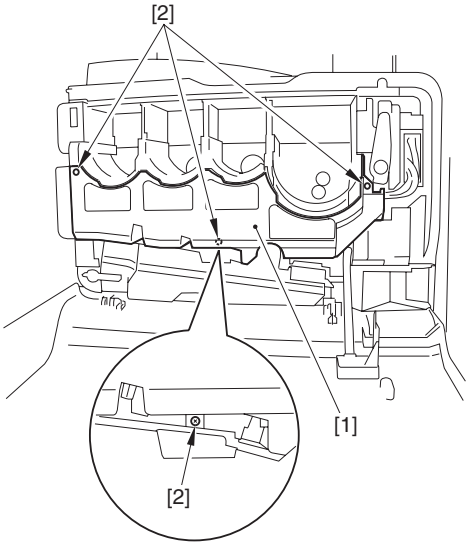
F-10-43

6) Detach the inside front right cover [1].
- 2 screws [2]



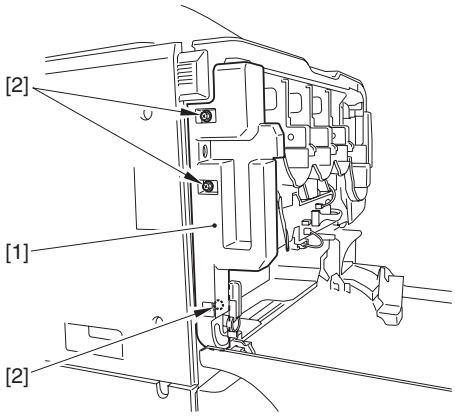
F-10-44

7) Detach the hopper unit cover [1].
- 3 screws [2]



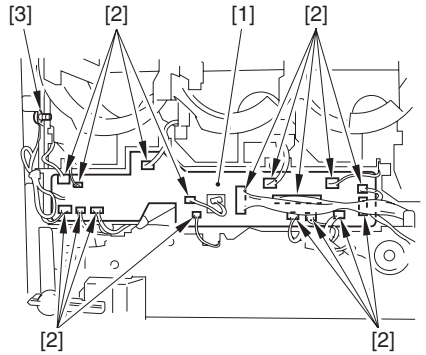
F-10-45

8) Detach the inside front left cover [1].
- 3 screws [2]



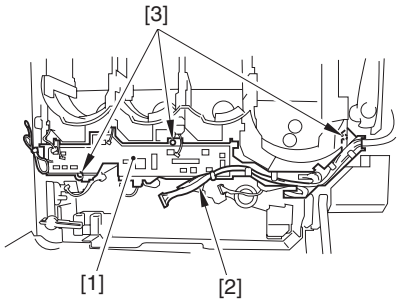
F-10-46

9) Disconnect the 17 connectors [2] and remove the screw [3] from the hopper unit relay PCB [1] to remove the grounding wire.



F-10-47

10) Free the harness [2] from the cable guide [1], detach the cable guide [1].
- 3 screws [3]



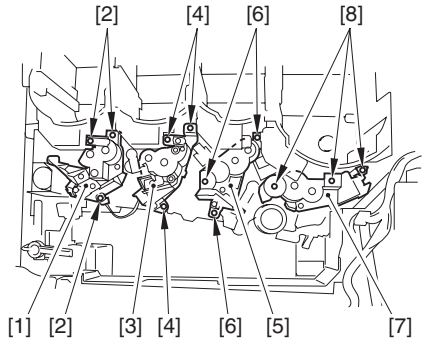
F-10-48

11) Remove the hopper drive unit (Y) [1].
- 3 screws [2]

12) Remove the hopper drive unit (M) [3].
- 3 screws [4]

13) Remove the hopper drive unit (C) [5].
- 3 screws [6]

14) Remove the hopper drive unit (Bk) [7].
- 3 screws [8]



F-10-49

10.5.3 Option Power Supply Assembly

10.5.3.1 Before Detaching the Optional Power Supply PCB

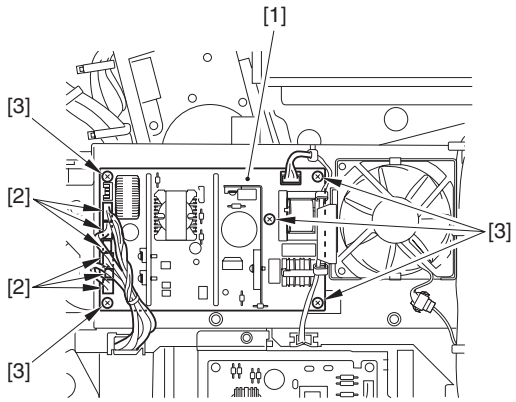
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the rear upper cover. (page 10-14) [Detaching the Rear Upper Cover]
2) Detach the rear lower cover. (page 10-15) [Detaching the Rear Lower Cover]

10.5.3.2 Detaching the Optional Power Supply PCB

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the optional power supply PCB [1].
- 7 connectors [2]
- 5 screws [3]



F-10-50

10.5.4 Controller Power Supply Unit

10.5.4.1 Before Detaching the Controller Power Supply PCB

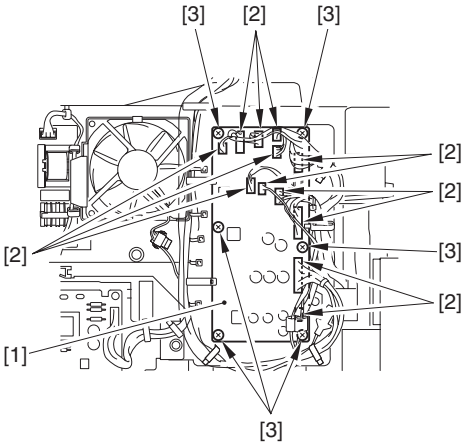
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the rear upper cover. (page 10-14) [Detaching the Rear Upper Cover]
2) Detach the rear lower cover [1]. (page 10-15) [Detaching the Rear Lower Cover]

10.5.4.2 Detaching the Controller Power Supply PCB

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the controller power supply PCB [1].
- 12 connectors [2]
- 6 screws [3]



F-10-51

10.5.5 Printer Power Supply Unit

10.5.5.1 Before Detaching the Printer Power Supply Assembly

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

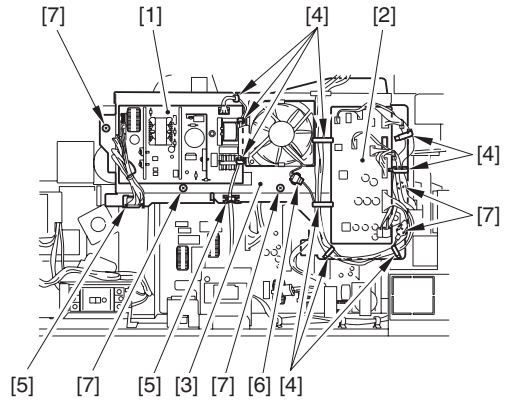
1) Detach the rear upper cover. (page 10-14) [Detaching the Rear Upper Cover]
2) Detach the rear lower cover. (page 10-15) [Detaching the Rear Lower Cover]
3) Detach the left lower cover. (page 10-14) [Detaching the Left Lower Cover]
4) Detach the all-night power supply PCB. (page 10-22) [Detaching the All-Night Power Supply PCB]

10.5.5.2 Detaching the Printer Power Supply Assembly

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

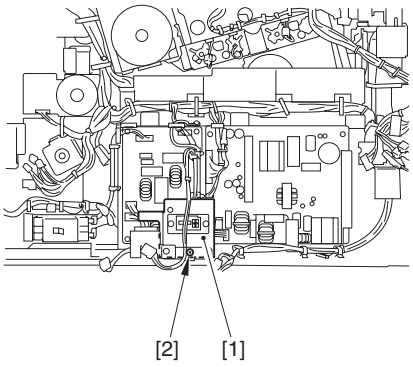
1) Disconnect the 7 connectors on the optional power supply PCB [1] and the 12 connectors on the controller power supply PCB [2].
2) Remove the optional power supply/controller power supply mount [3].
- 9 cable clamps [4]

- 3 wire saddles [5]
- 1 connector [6]
- 5 screws [7]



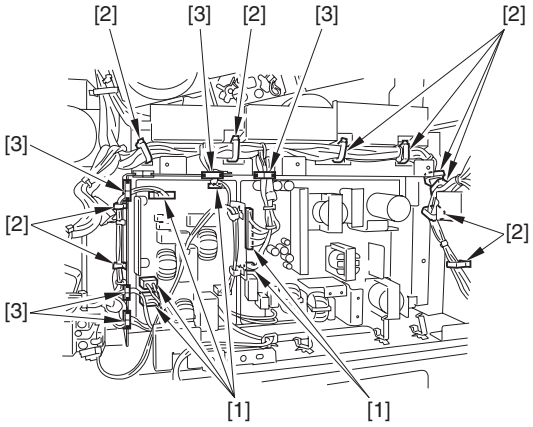
F-10-52

3) Detach the lattice connector [1] to the cassette pedestal.
- 1 screw [2]



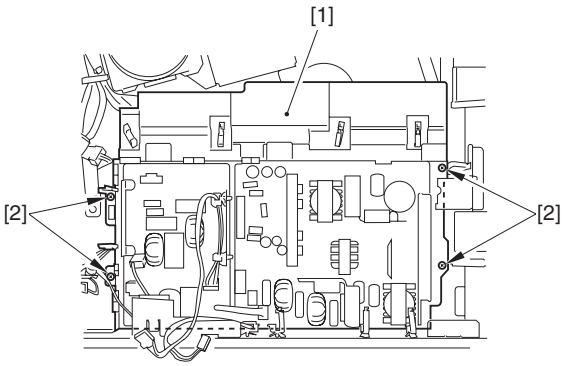
F-10-53

4) Disconnect the 5 connectors [1].
5) Remove the 6 cable clamps [2].
6) Remove the 5 edge saddles [3].



F-10-54

7) Remove the printer power supply assembly.
- 4 screws [2]



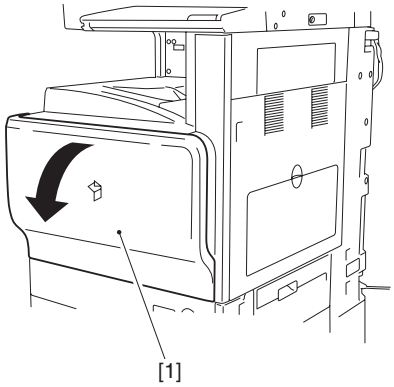
F-10-55

10.5.6 Control Panel

10.5.6.1 Detaching the Control Panel

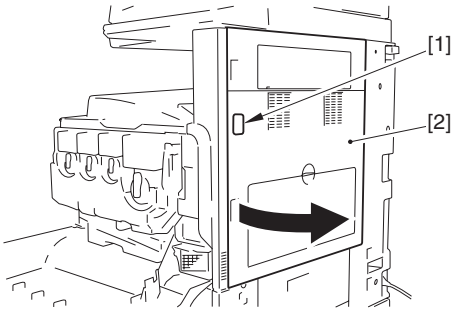
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Open the front cover [1].



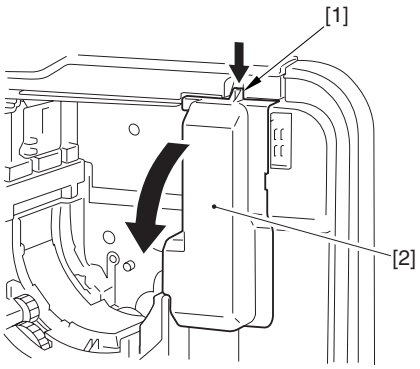
F-10-56

2) Press the open/close button [1] to open the right cover [2].



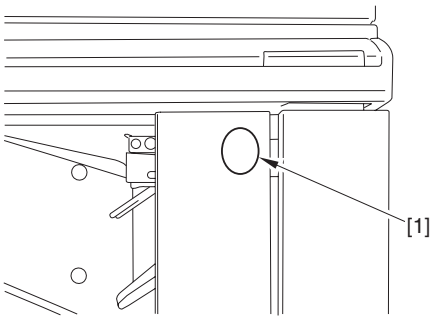
F-10-57

3) Push the claw [1] to detach the handle cover [2].



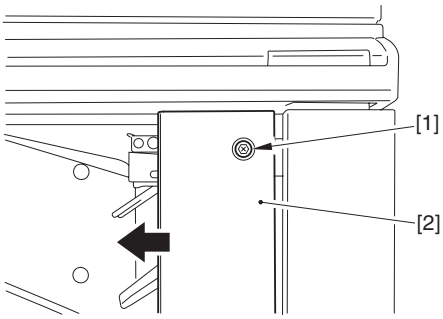
F-10-58

4) Detach the face cover [1].



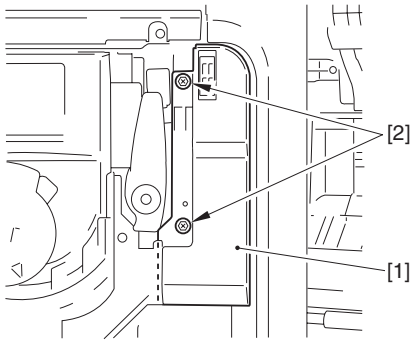
F-10-59

5) Remove the screw [1], slide the inside right cover [2] in the direction of the arrow.



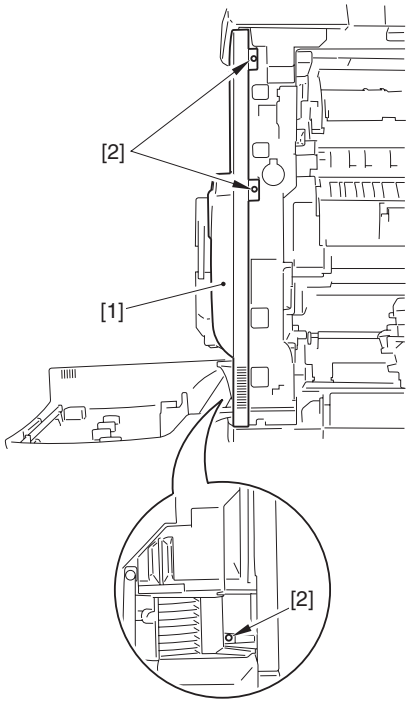
F-10-60

6) Detach the inside front right cover [1].
- 2 screws [2]



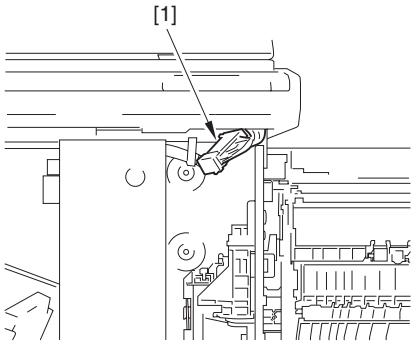
F-10-61

7) Detach the front right cover [1].
- 3 screws [2]



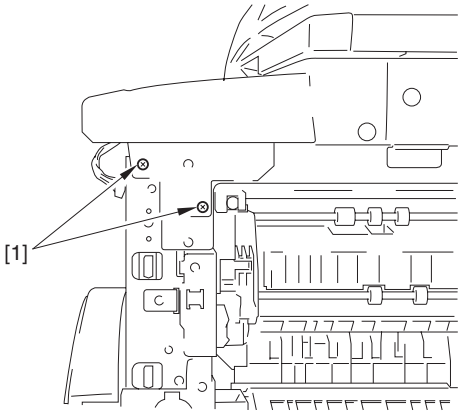
F-10-62

8) Detach the connector [1].



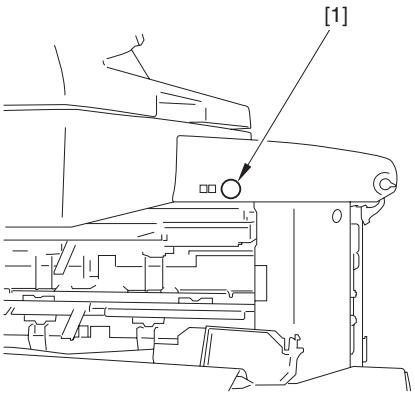
F-10-63

9) Remove the 2 screws [1].



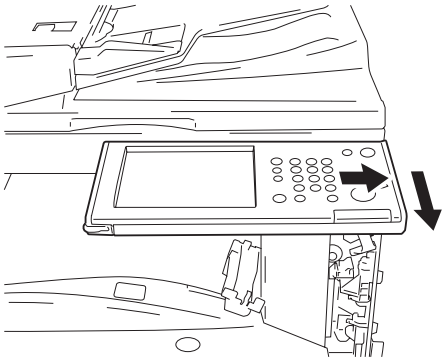
F-10-64

10) Detach the screw cover [1] on the left side of the control panel, and remove the screw at the back of it.



F-10-65

11) Slide the control panel [1] to the right, and pull it out forward.



F-10-66

10.5.7 Control Panel LCD Unit

10.5.7.1 Before Removing the Control Panel LCD Unit

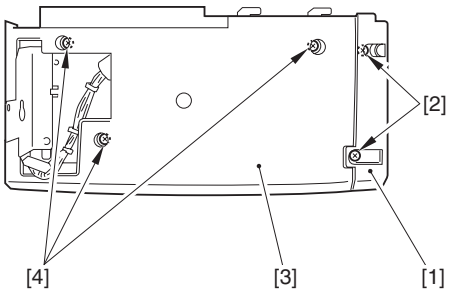
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the control panel. (page 10-19)[Detaching the Control Panel]

10.5.7.2 Removing the Control Panel LCD Unit

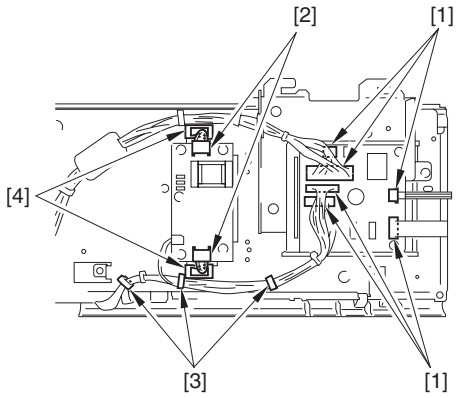
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the control panel left lower cover [1].
   - 2 screws [2]
2) Detach the control panel lower cover [3].
   - 3 screws [4]



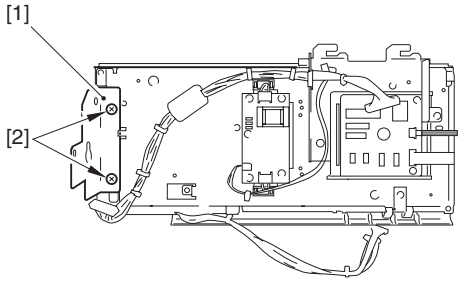
F-10-67

3) Disconnect the 6 connectors [1] on the control panel CPU PCB.
4) Disconnect the 2 connectors [2] on the control panel inverter PCB.
5) Remove the 3 cable clamps [3] and the 2 edge saddles [4] to free the cable.



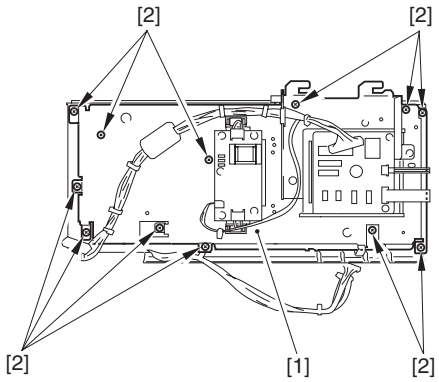
F-10-68

6) Detach the plate [1].
   - 2 screws [2]



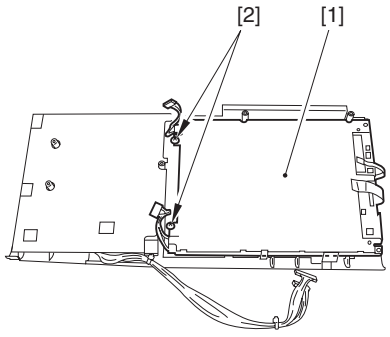
F-10-69

7) Remove the frame [1] inside the control panel.
   - 12 screws [2]



F-10-70

8) Remove the control panel LCD [1].
   - 2 screws [2]



F-10-71

10.5.8 DC Controller PCB

10.5.8.1 Before Detaching the DC Controller PCB

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

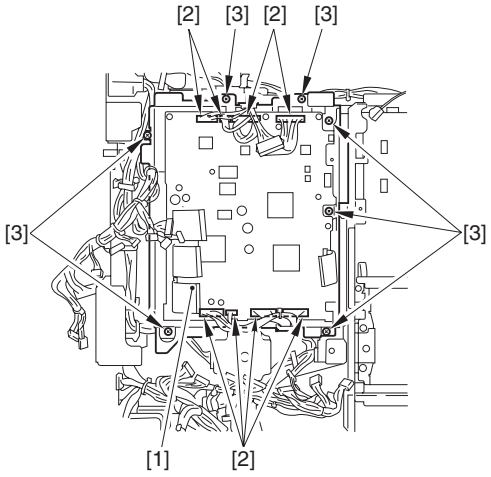
1) Detach the rear upper cover. (page 10-14)[Detaching the Rear Upper Cover]
2) Detach the rear lower cover. (page 10-15)[Detaching the Rear Lower

Cover]
3) Detach the DC driver PCB. (page 10-25)[Removing the DC Driver PCB]

10.5.8.2 Detaching the DC Controller PCB

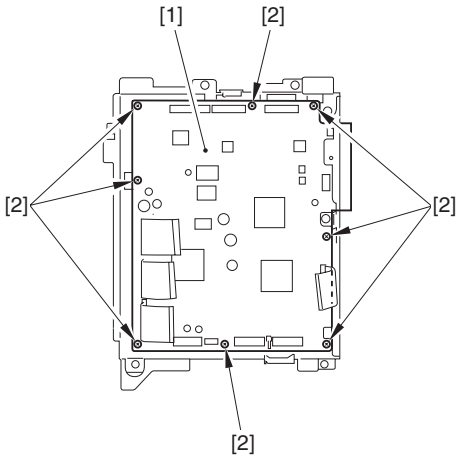
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Removing the DC controller box [1].
- 7 screws [2]
- 7 connectors [3]



F-10-72

2) Detach the DC controller PCB [1].
- 8 screws [2]



F-10-73

10.5.9 Printer Power Supply PCB

10.5.9.1 Before Detaching the Printer Power Supply PCB

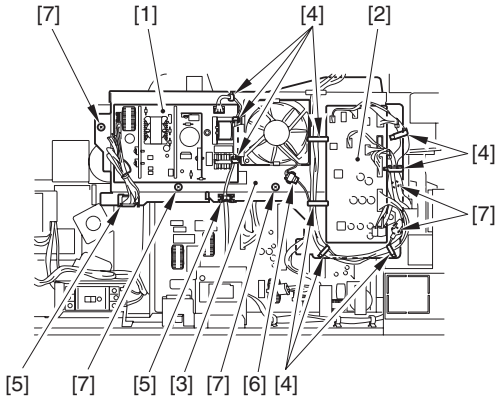
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the rear upper cover. (page 10-14)[Detaching the Rear Upper Cover]
2) Detach the rear lower cover. (page 10-15)[Detaching the Rear Lower Cover]
3) Detach the left lower cover. (page 10-14)[Detaching the Left Lower Cover]

10.5.9.2 Detaching the Printer Power Supply PCB

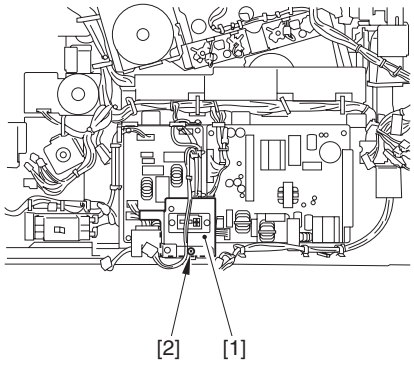
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Disconnect the 7 connectors on the optional power supply PCB [1] and the 12 connectors on the controller power supply PCB [2].
2) Remove the optional power supply/controller power supply mount [3].
- 9 cable clamps [4]
- 3 wire saddles [5]
- 1 connector [6]
- 5 screws [7]



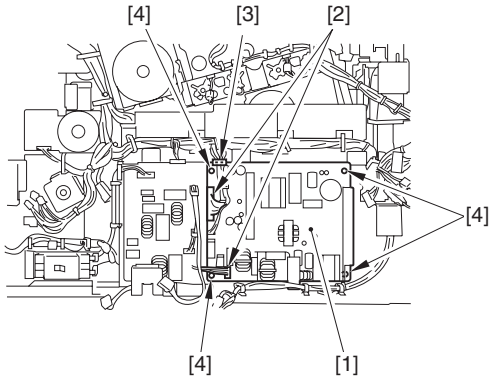
F-10-74

3) Disconnect the lattice connector [1] to the cassette pedestal.
- 1 screw [2]



F-10-75

4) Detach the printer power supply PCB [1].
- 2 connectors [2]
- 1 edge saddle [3]
- 4 screws [4]



F-10-76

10.5.10 All-Night Power Supply PCB

10.5.10.1 Before Detaching the All-Night Power Supply PCB

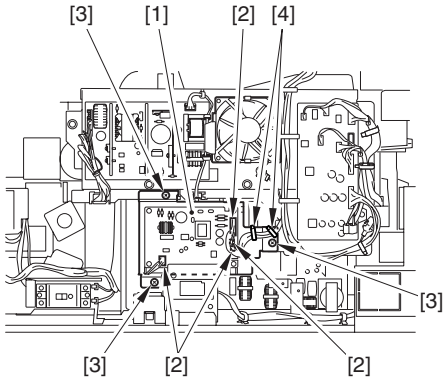
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the rear upper cover. (page 10-14)[Detaching the Rear Upper Cover]
2) Detach the rear lower cover. (page 10-15)[Detaching the Rear Lower Cover]

10.5.10.2 Detaching the All-Night Power Supply PCB

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the all-night power supply PCB [1].
- 4 connectors [2]
- 3 screws [3]
- 2 wire saddles [4]



F-10-77

10.5.11 Leakage Breaker

10.5.11.1 Before Removing the Leakage Breaker

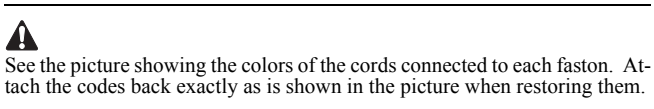
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the rear upper cover. (page 10-14)[Detaching the Rear Upper Cover]
2) Detach the rear lower cover. (page 10-15)[Detaching the Rear Lower Cover]

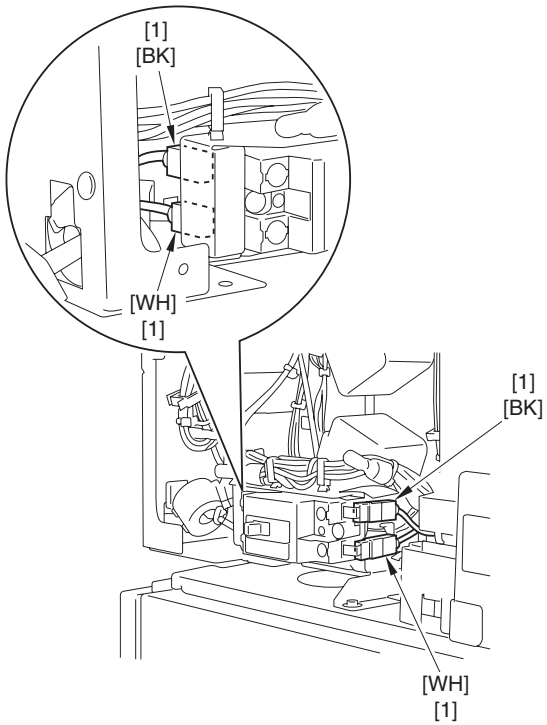
10.5.11.2 Removing the Electric Leak Breaker

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove 4 fastons [1].

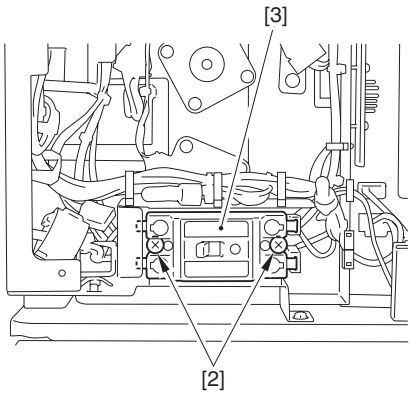


See the picture showing the colors of the cords connected to each faston. Attach the codes back exactly as is shown in the picture when restoring them.



F-10-78

2) Remove 2 screws [2] and remove the electric leak breaker.



F-10-79

10.5.12 HV1 PCB

10.5.12.1 Before Removing the HVT1 PCB (for image forming)

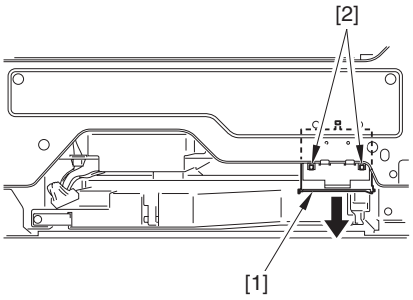
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the left cover. (page 10-14)[Detaching the Left Cover]

10.5.12.2 Removing HVT1 PCB (for image forming)

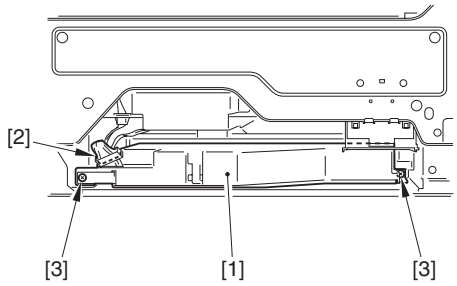
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the grip [1].
- 2 claws [2]



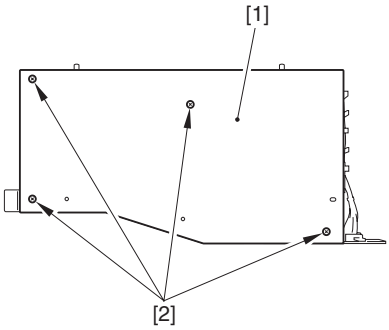
F-10-80

2) Remove HVT1 PCB assembly.
- 1 connector [1]
- 2 screws [2]



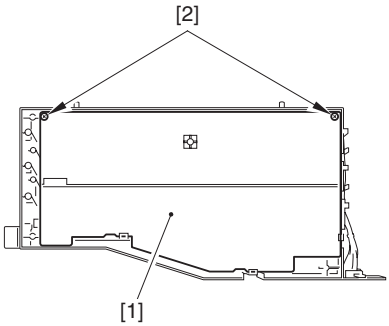
F-10-81

3) Remove the HTV1 cover [2].
- 4 screws {2}



F-10-82

4) Remove the HVT1 PCB [1].
- 2 screws [2]



F-10-83

10.5.13 HV2 PCB

10.5.13.1 Before Removing the HVT2 PCB (for transfer)

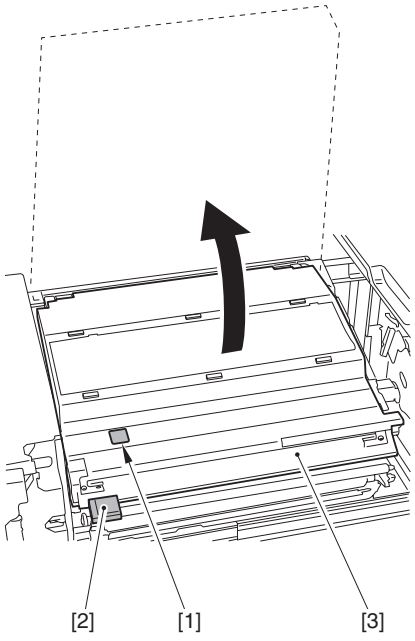
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the processing unit. (page 7-40)[Removing the Process Unit]

10.5.13.2 Removing the HVT2 PCB (for transfer)

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Press the push-button [1], and hold the grip [2] to open the ITB unit [3] upward.



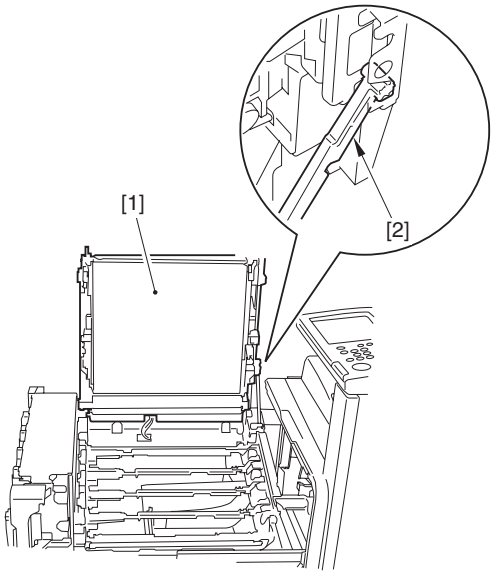
F-10-84

2) Secure the ITB unit [1] in place with the tip-resistant arm [2] (Secure in the lower slot of the 2)

⚠

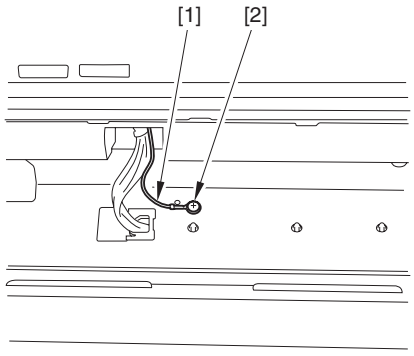
Do not touch the ITB. If the ITB is scratched, it may cause the pickup fault or degradation of the print quality.

In case the print quality is degraded due to touching the ITB, clean the ITB with soft and dry cloth.
If the print quality is not improved, execute the following:
[Additional Functions] > [Adjustment/Cleaning] > [Cleaning inside Main Unit] > [Start]



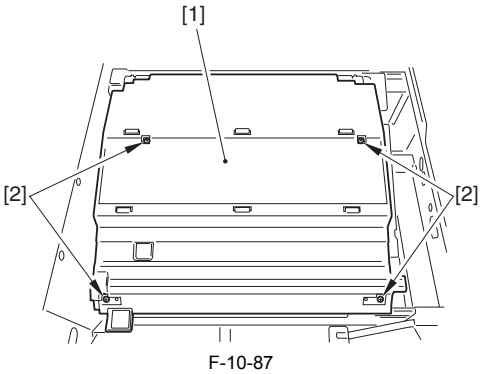
F-10-85

3) Remove the screws [1].



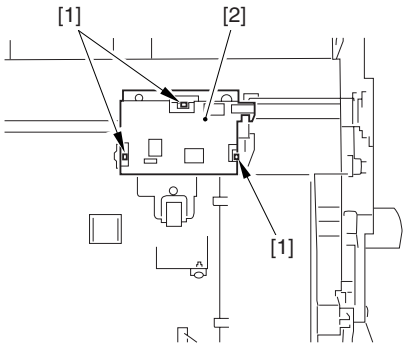
F-10-86

4) Detach the upper ITB cover [1].
- 4 screws [2]



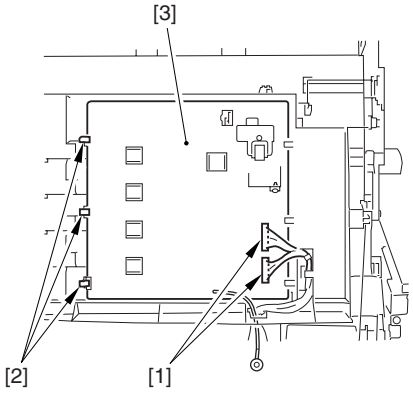
F-10-87

5) Detach the high-voltage contact cover [2].
- 3 claws [1]



F-10-88

6) Remove the HVT2 [3].
- 2 connectors [1]
- 3 claws [2]



F-10-89

10.5.14 AC Driver PCB

10.5.14.1 Before Removing the AC Driver PCB

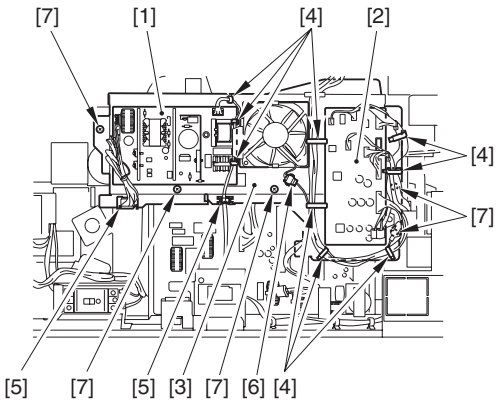
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach rear upper cover. (page 10-14) [Detaching the Rear Upper Cover]
2) Detach rear lower cover. (page 10-15) [Detaching the Rear Lower Cover]

10.5.14.2 Removing the AC Driver PCB

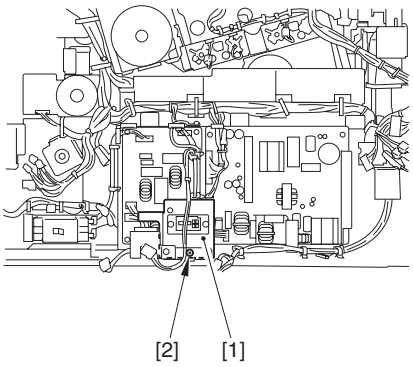
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove 7 connectors attached to the optional power supply PCB [1] and remove 12 connectors connected to the controller power supply PCB [2].
2) Remove the mount [3] for the optional power supply and the controller power supply.
- 9 cable clamps [4]
- 3 wire saddles [5]
- 1 connector [6]
- 5 screws [7]



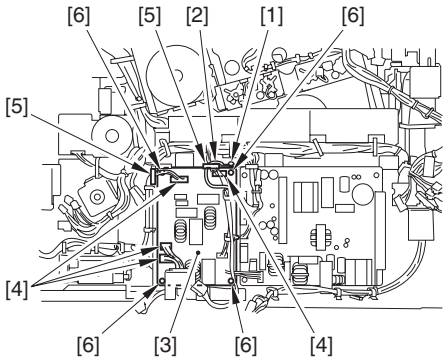
F-10-90

3) Detach the lattice connector to the cassette pedestal.
- 1 screw [2]



F-10-91

4) Remove the screw [1] that fixes the grounding wire [2].
5) Remove the AC driver PCB [3].
- 4 connctors [4]
- 2 edge saddles [5]
- 4 screws [6]



F-10-92

10.5.15 DC Driver PCB

10.5.15.1 Before Removing the DC Driver PCB

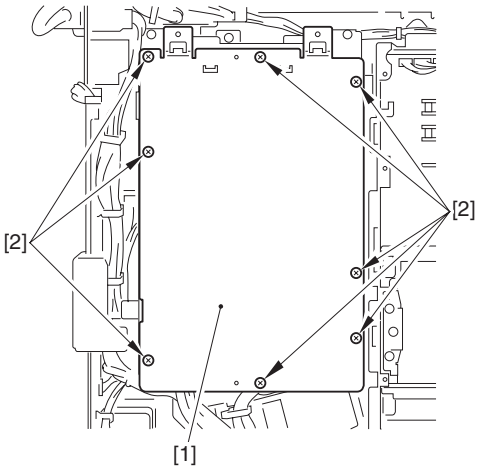
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the rear upper cover. (page 10-14) [Detaching the Rear Upper Cover]
2) Detach the rear lower cover. (page 10-15) [Detaching the Rear Lower Cover]

10.5.15.2 Removing the DC Driver PCB

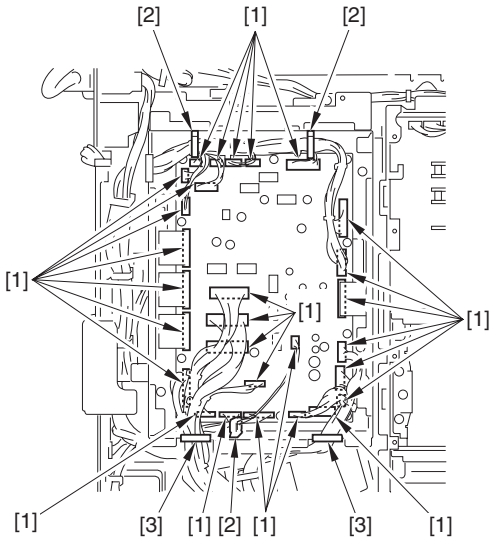
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the DC driver PCB cover.
- 8 screws [2]



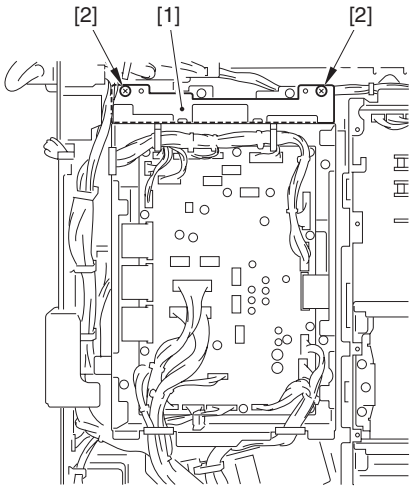
F-10-93

2) Remove 28 connectors [1], 3 wire saddles [2], and 3 edge saddles [3] from the DC driver PCB.



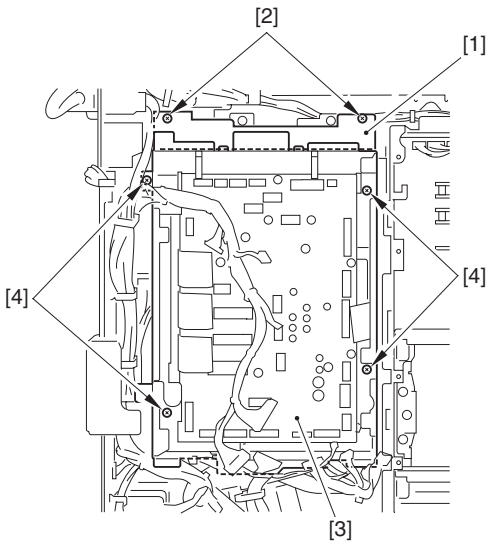
F-10-94

3) Remove the L-shaped sheet metal [1].
- 2 screws [2]



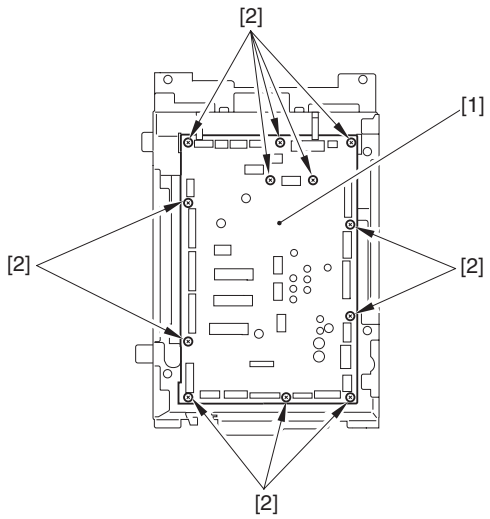
F-10-95

4) Remove the DC driver PCB mount [3].
- 4 screws [4].



F-10-96

5) Remove the DC driver PCB [1].
- 12 screws [2]



F-10-97

10.5.16 Control Panel CPU PCB

10.5.16.1 Before Removing the Control Panel CPU PCB

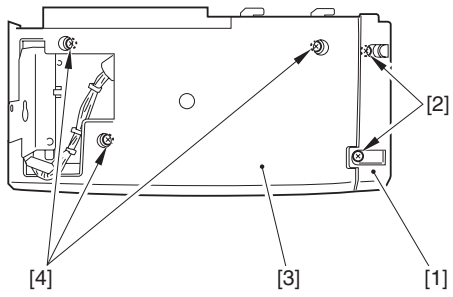
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the control panel. (page 10-19)[Detaching the Control Panel]

10.5.16.2 Removing the Control Panel CPU PCB

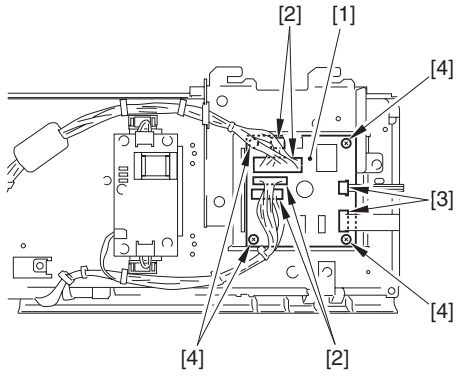
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the lower left cover [1] of the control panel.
- 2 screws [2]
2) Remove the lower cover [3] of the control panel.
- 3 screws [4]



F-10-98

3) Remove the control panel CPU PCB [1].
- 4 connectors [2]
- 2 connectors [3]
- 4 screws [4]



F-10-99

10.5.17 Control Panel Key Switch PCB

10.5.17.1 Before Removing the Control Panel KEY PCB

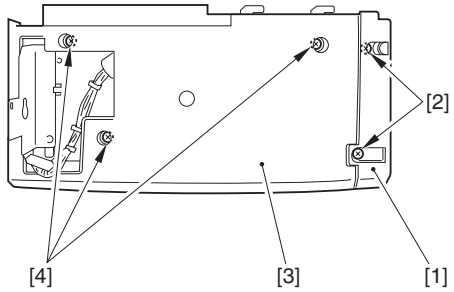
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the control panel. (page 10-19)[Detaching the Control Panel]

10.5.17.2 Removing the Control Panel KEY PCB

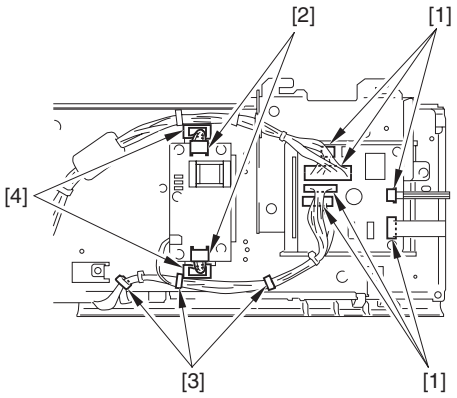
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the lower left cover [1] of the control panel.
   - 2 screws [2]
2) Remove the lower cover [3] of the control panel.
   - 3 screws [4]



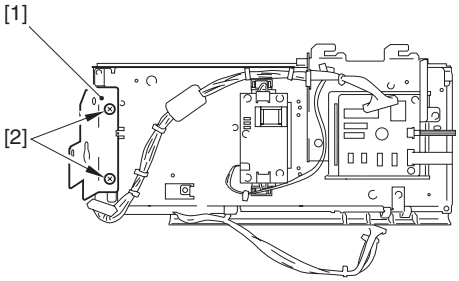
F-10-100

3) Detach 6 connectors [1] from the control panel CPU PCB.
4) Detach 2 connectors [2] from the control panel inverter PCB.
5) Detached the cables from 3 cable clamps [3] and 2 edge saddles [4].



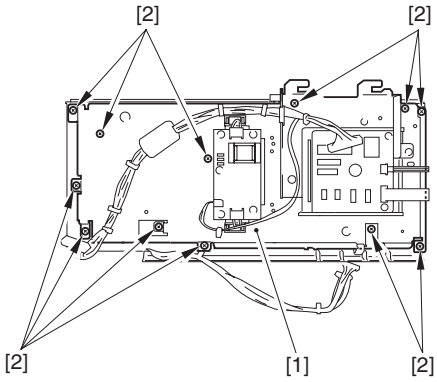
F-10-101

6) Remove the metal sheet [1].
   - 2 screws [2]



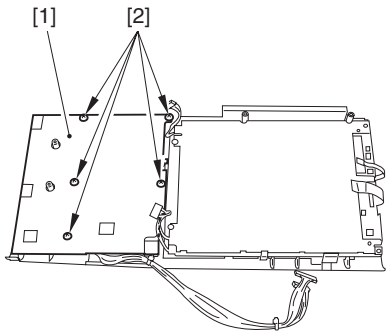
F-10-102

7) Remove the frame [1] inside the control panel.
   - 12 screws [2]



F-10-103

8) Remove the control panel KEY PCB [1].
   - 5 screws [2]



F-10-104

10.5.18 Control Panel Inverter PCB

10.5.18.1 Before removing the Control Panel Inverter PCB

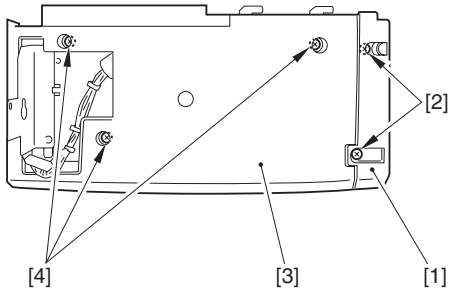
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the control panel. (page 10-19) [Detaching the Control Panel]

10.5.18.2 Removing the Control Panel Inverter PCB

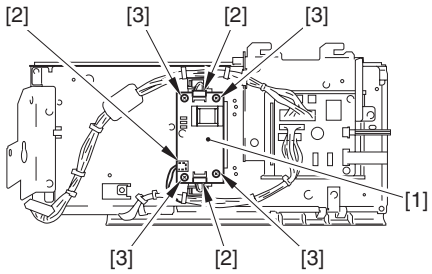
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the lower left cover [1] of the control panel.
   - 2 screws [2]
2) Remove the lower cover [3] of the control panel.
   - 3 screws [4]



F-10-105

3) Remove the control panel inverter PCB [1].
   - 3 connectors [2]
   - 4 screws [3]



F-10-106

10.5.19 Main Power Switch

10.5.19.1 Before Removing the Main Power Switch

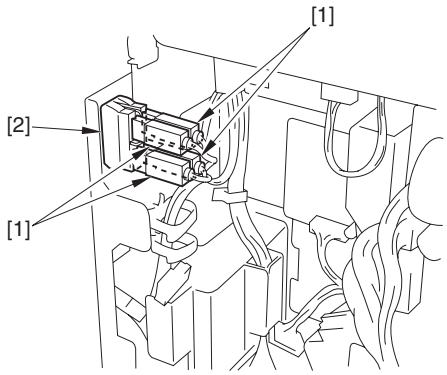
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the rear upper cover. (page 10-14) [Detaching the Rear Upper Cover]
2) Detach the rear lower cover. (page 10-15) [Detaching the Rear Lower Cover]

10.5.19.2 Removing the Main Power Switch

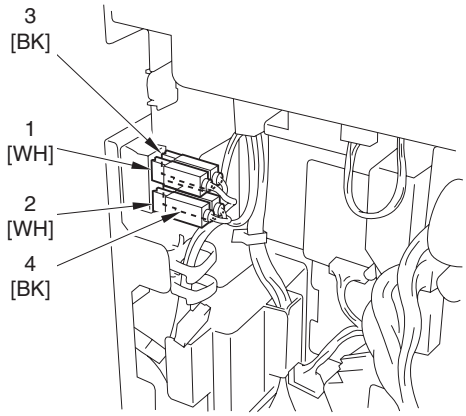
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) After removing the 4 fastons [1], detach the main power switch [2] (snap stop).



F-10-107

When attaching the 4 fastons, make sure the numbers assigned to the fastons match the numbers shown in the below picture.



F-10-108

10.5.20 ProcessUunit Cooling Fan

10.5.20.1 Before Removing the Front Process Unit Fan

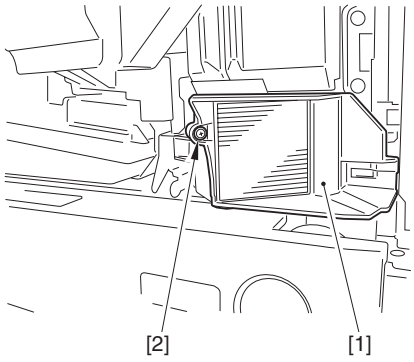
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the front cover. (page 10-12)[Detaching the Front Cover]
2) Remove the right front cover. (page 10-12)[Removing the Right Front Cover]

10.5.20.2 Removing the Front Process Unit Fan

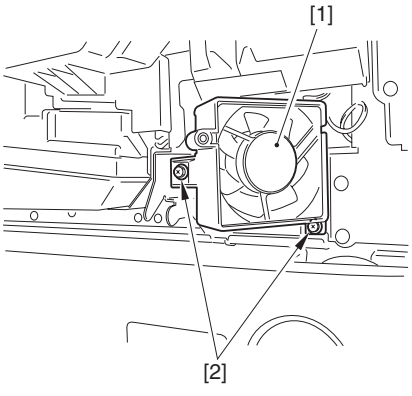
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the fan duct [1].
- 1 screw [2]



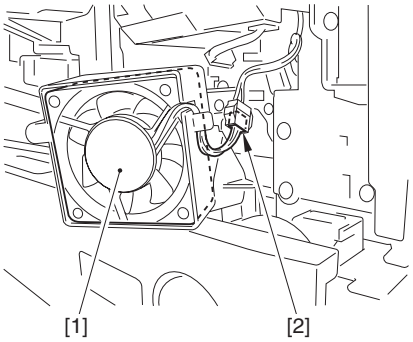
F-10-109

2) Remove the fan unit [1].
- 2 screws [2]



F-10-110

3) Remove the front process unit Fan [1].
- 1 connector [1]



F-10-111

10.5.20.3 Before Removing the Rear Process Unit Fan

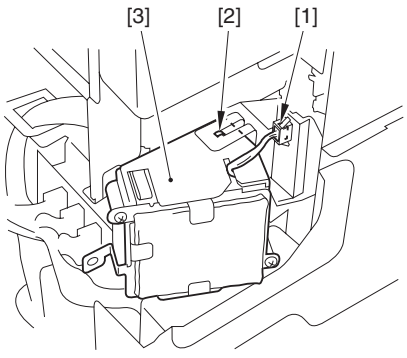
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the rear upper cover. (page 10-14)[Detaching the Rear Upper Cover]
2) Detach the rear lower cover. (page 10-15)[Detaching the Rear Lower Cover]
3) Remove the left rear cover. (page 10-14)[Detaching the Left Rear Cover]

10.5.20.4 Removing the Rear Process Unit Fan

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the rear process unit fan [3].
- 1 connector [1]
- 1 claw [2]



F-10-112

10.5.21 Fixing Heat Discharge Fan

10.5.21.1 Before Removing the Fixing Exhaust Fan

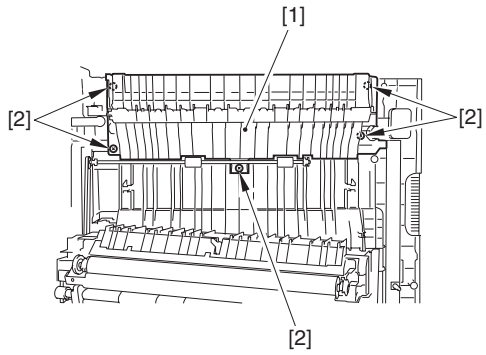
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the rear right cover. (page 10-13)[Detaching the Rear Right Cover]
2) Remove the right cover. (page 10-32)[Removing the Right Cover]

10.5.21.2 Removing the Fixing Exhaust Fan

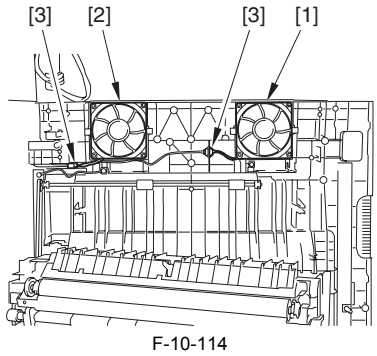
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the right cover feeder guide [1].
   - 5 screws [2]



F-10-113

2) Remove the fixing exhaust fan (front) [1] and then the fixing exhaust fan (rear) [2].
   - 1 group of connectors [3]



F-10-114

10.5.22 Power Supply Cooing Fan

10.5.22.1 Before Removing the Power Supply Fan 2

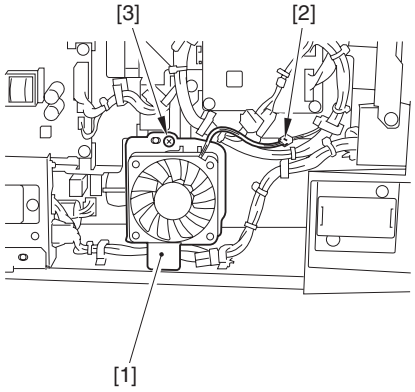
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the rear upper cover. (page 10-14)[Detaching the Rear Upper Cover]
2) Detach the rear lower cover. (page 10-15)[Detaching the Rear Lower Cover]

10.5.22.2 Removing the Power Supply Fan 2

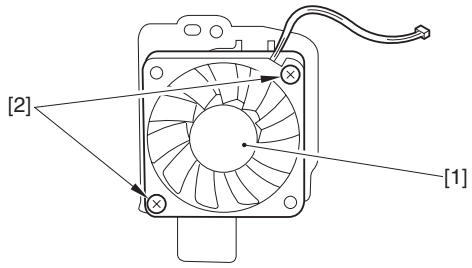
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the power supply fan 2 mount [1].
   - 1 connector [2]
   - 1 screw [3]



F-10-115

2) Remove the power supply fan 2 [1].
   - 2 screws [2]



F-10-116

10.5.23 Power Supply Exhaust Fan

10.5.23.1 Before Removing the Power Supply Fan

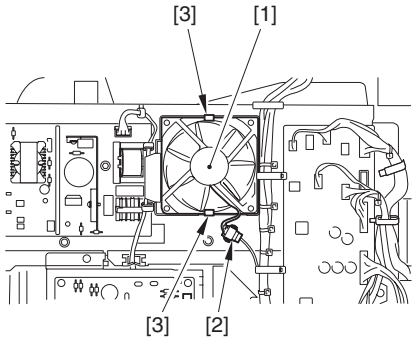
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the rear upper cover. (page 10-14)[Detaching the Rear Upper Cover]
2) Detach the rear lower cover. (page 10-15)[Detaching the Rear Lower Cover]

10.5.23.2 Removing the Power Supply Fan

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the power supply fan [1].
   - 1 connector [2]
   - 2 claws [3]



F-10-117

10.5.24 Delivery Cooling Fan

10.5.24.1 Before Removing the Delivery Contact Fan

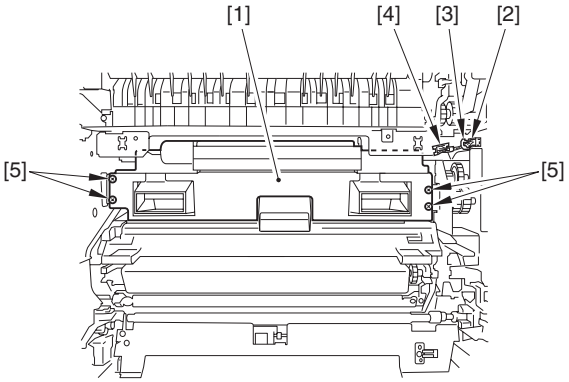
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the rear right cover. (page 10-13)[Detaching the Rear Right Cover]
2) Remove the right cover. (page 10-32)[Removing the Right Cover]
3) Remove the fixing unit. (page 9-12)[Removing Fixing Unit]

10.5.24.2 Removing the Delivery Contact Fan

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the delivery contact fan mount [1].
   - 1 connector [2]
   - 1 cable clamp [3]
   - 1 edge saddle [4]
   - 4 screws [5]



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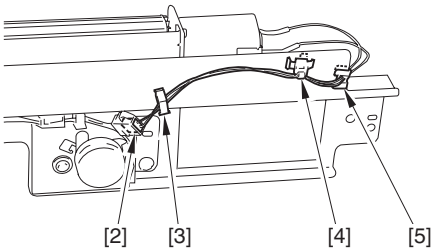
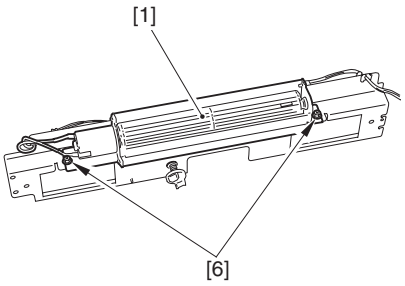
2) Remove the delivery contact fan [1].
- 1 connector [2]
- 1 wire saddle [3]
- 1 reuse band [4]
- 1 edge saddle [5]
- 2 screws [6]



F-10-119



F-10-120

10.5.25 Fixing Edge Cooling Fan

10.5.25.1 Before Removing the Fixing Side Cooling Fan

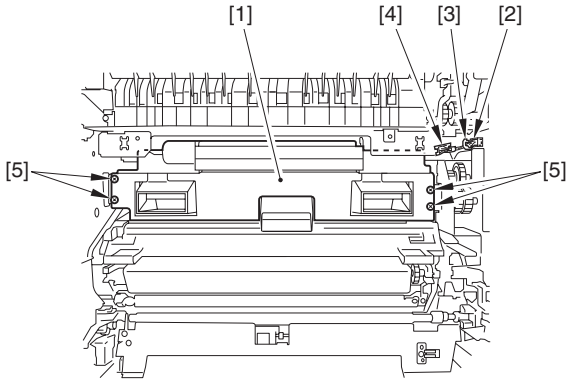
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the rear right cover. (page 10-13)[Detaching the Rear Right Cover]
2) Remove the fixing unit. (page 9-12)[Removing Fixing Unit]

10.5.25.2 Removing the Fixing Side Cooling Fan

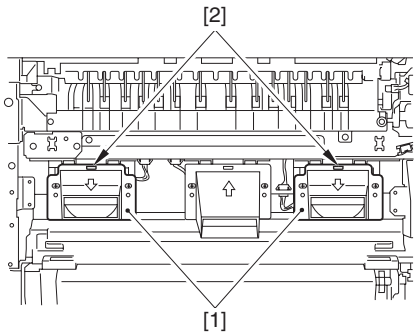
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the delivery contact fan mount [1].
- 1 connector [2]
- 1 cable clamp [3]
- 1 edge saddle [4]
- 4 screws [5]



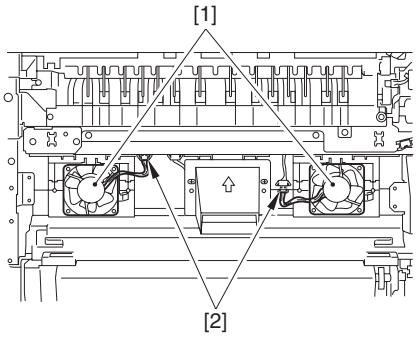
F-10-121

2) Remove the fan duct [1].
- 1 claw [2]



F-10-122

3) Remove the fixing side cooling fan [1].
- 1 connector [2]



F-10-123

10.5.26 Secondarily Transfer Exhaust Fan

10.5.26.1 Before Removing the Secondary Transfer Cooling Fan

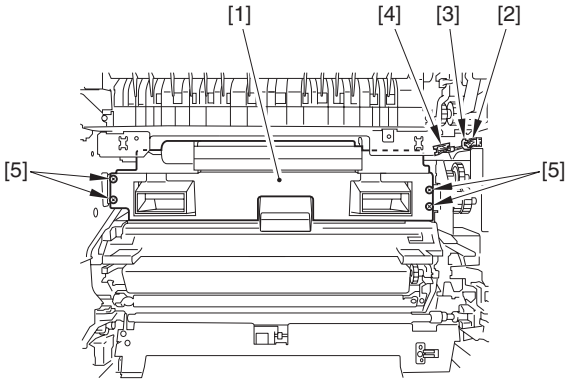
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the rear right cover. (page 10-13)[Detaching the Rear Right Cover]

10.5.26.2 Removing the Secondary Transfer Cooling Fan

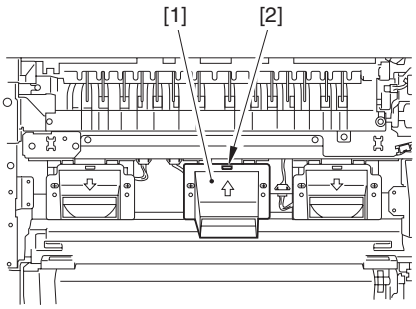
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the delivery cntact fan mount [1].
- 1 connector [2]
- 1 cable clamp [3]
- 1 edge saddle [4]
- 4 screws [5]



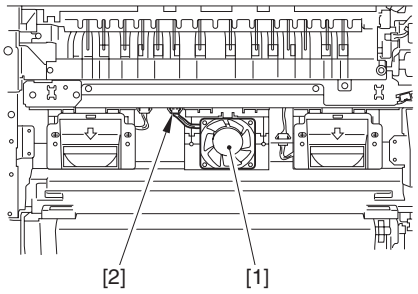
F-10-124

2) Remove the fan duct [1].
- 1 claw [2]



F-10-125

3) Remove the secondary transfer cooling fan.
- 1 connector [2]



F-10-126

10.5.27 Toner Filter

10.5.27.1 Before Removing the Toner Filter

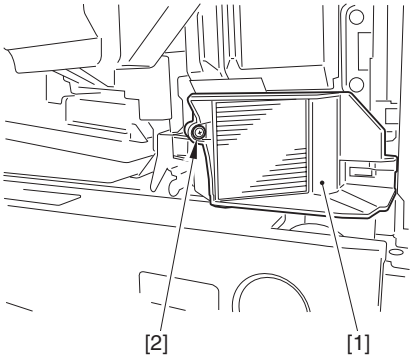
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the front cover. (page 10-12) [Detaching the Front Cover]
2) Remove the right front cover. (page 10-12) [Removing the Right Front Cover]

10.5.27.2 Removing the Toner Filter

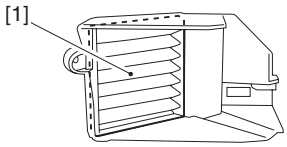
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the fan duct [1].
- 1 screw [2]



F-10-127

2) Remove the toner filter [1].



F-10-128

10.5.28 Fixing Motor

10.5.28.1 Before Removing the Fixing Motor

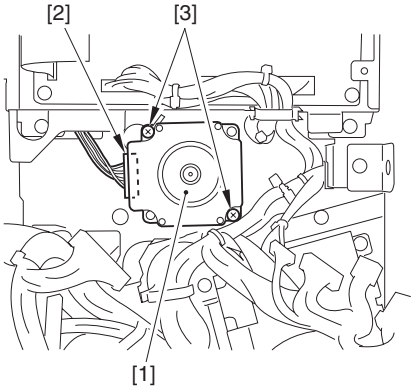
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Detach the rear upper cover. (page 10-14) [Detaching the Rear Upper Cover]
2) Detach the rear lower cover. (page 10-15) [Detaching the Rear Lower Cover]
3) Remove the DC driver PCB. (page 10-25) [Removing the DC Driver PCB]

10.5.28.2 Removing the Fixing Motor

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the fixing motor [1].
- 1 connectors [2]
- 2 screws [3]



F-10-129

10.5.29 Fan Shutter Motor

10.5.29.1 Before Removing the Fan Shutter Motor

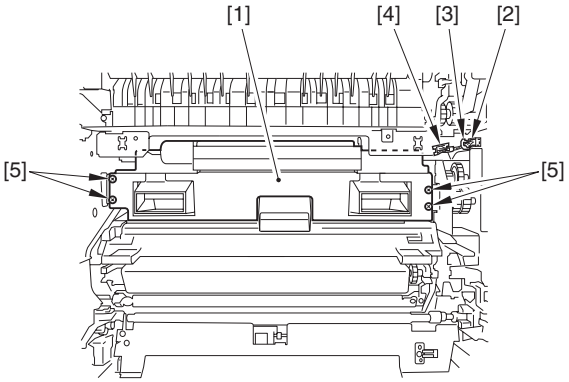
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the rear right cover. (page 10-13) [Detaching the Rear Right Cover]
2) Remove the fixing unit. (page 9-12) [Removing Fixing Unit]

10.5.29.2 Removing the Fan Shutter Motor

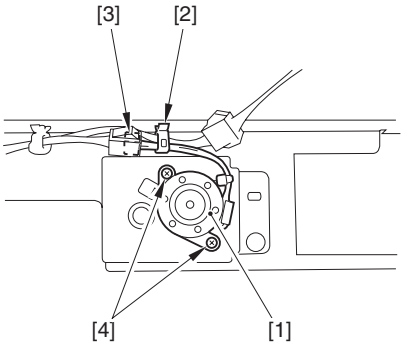
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the delivery contact fan mount [1].
- 1 connector [2]
- 1 cable clamp [3]
- 1 edge saddle [4]
- 4 screws [5]



F-10-130

2) Remove the fan shutter motor [1].
- 1 cable clamp [2]
- 1 connector [3]
- 2 screws [4]



F-10-131

10.5.30 Right Door

10.5.30.1 Before Removing the Right Cover

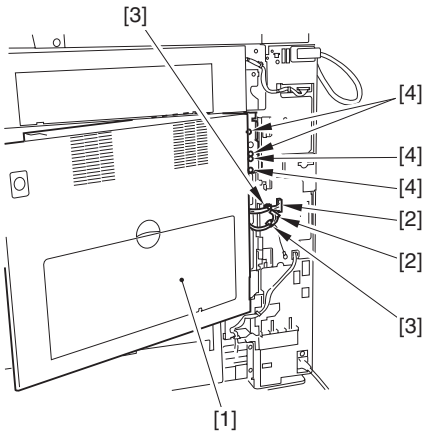
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Remove the rear right cover. (page 10-13)[Detaching the Rear Right Cover]

10.5.30.2 Removing the Right Cover

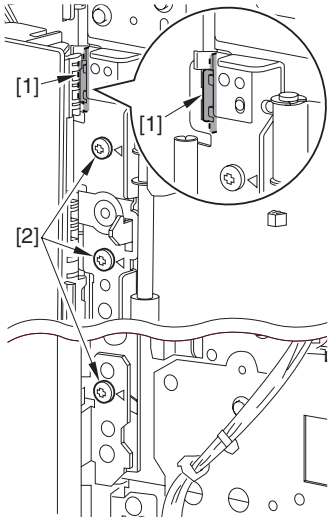
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Open the right cover [1].
2) Remove the 2 connectors [2], 2 reuse bands [3] and 4 screws [4].



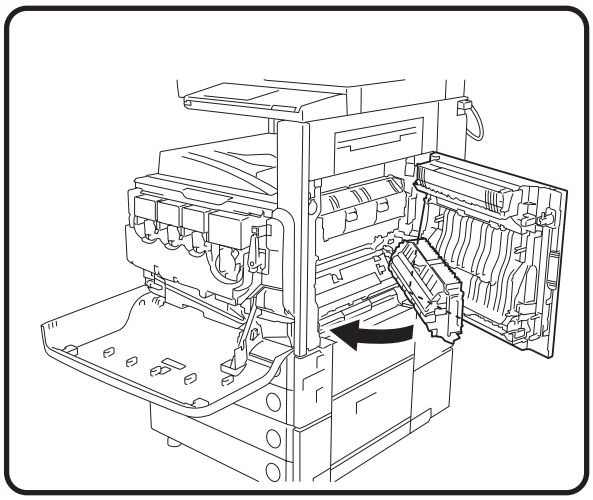
F-10-132

While Attaching the Right Cover
When attaching the right cover, tighten the screws after placing the positioning plate into the proper position following the steps described below.
1) Attach the right cover positioning plate [1].
2) Tighten the 3 screws [2].

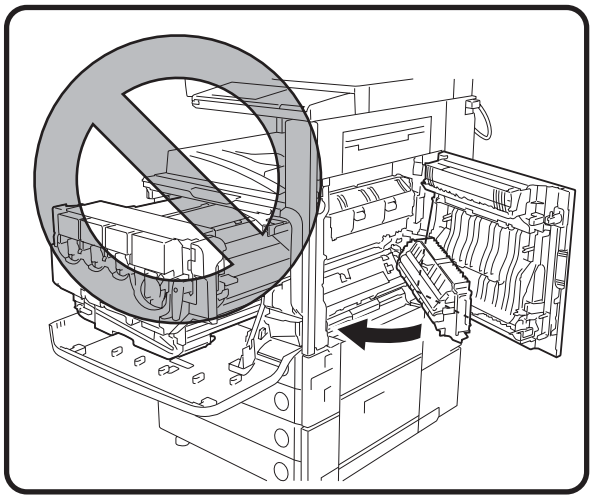


F-10-133

While Closing the Right Cover
Make sure the processing unit is restored back to its original position before closing the right cover.
If the right cover is closed when the processing unit is not completely restored, the high-voltage contact of the secondary transfer roller will pierce the ITB belt causing a broken ITB belt.



F-10-134



F-10-135

Chapter 11 MEAP

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11.1 MEAP

11.1.1 Checking the Operating Environment.

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

This section lists the requirements on the operating environment for the maintenance.

Memo:
Java Script must be enabled in every environment.

Important:
For the following operations in the combined environment of Windows XP and Internet Explorer6, Java2 Runtime Environment Standard Edition 1.3.1 or later is required.
- User registration / edit in SDL
- User registration / edit in SSO local device
- Use of SSO remote login in SSO

Remote Login of Default Authentication or Simple Device Login (SDL), Remote UI, and Portal Services
Remote Login of Default Authentication or Simple Device Login (SDL), Remote UI, and Portal Services guarantee operation under the following system environment.

T-11-1

Operating System	Supported browser
Microsoft Windows 98 SE Microsoft Windows NT Workstation 4.0 SP6a	Microsoft Internet Explorer 5.01 SP2 Microsoft Internet Explorer 5.5 SP2 Microsoft Internet Explorer 6 SP1
Microsoft Windows ME	Microsoft Internet Explorer 5.5 SP2 Microsoft Internet Explorer 6 SP1
Microsoft Windows 2000 Professional SP3	Microsoft Internet Explorer 5.01 SP2 Microsoft Internet Explorer 5.5 SP2 Microsoft Internet Explorer 6 SP1
Microsoft Windows XP Professional / Home	Microsoft Internet Explorer 6 Gold Microsoft Internet Explorer 6 SP1
Mac OS 8.6 - 9.x	Microsoft Internet Explorer 5.0 - 5.1.6
Mac OS X 10 - 10.2.4	Microsoft Internet Explorer 5.2.2

Remote UI (RUI)
RUI guarantees operation under the following system environment.

T-11-2

Operating System	Supported browser
Microsoft Windows 98 SE Microsoft Windows ME Microsoft Windows NT Workstartion 4.0 Microsoft Windows 2000 Professional Microsoft Windows XP	Microsoft Internet Explorer 5.01 SP2 or later Netscape Communicator 4.6 or later
MacOS 8.6 or later	Microsoft Internet Explorer 5.0 or later

SMS
SMS guarantees operation under the following system environment.

T-11-3

Operating System	Supported browser
Microsoft Windows 98 SE	Microsoft Internet Explorer 5.5 SP2 Microsoft Internet Explorer 6 SP1
Microsoft Windows 2000 Professional	Microsoft Internet Explorer 5.5 SP2 Microsoft Internet Explorer 6 SP1
Microsoft Windows XP	Microsoft Internet Explorer 6 Microsoft Internet Explorer 6 SP1

SDL and SSO with Local Devoce Authentication (user registration/edit functions)
For user registration / edit in SDL and SSO(with Local Authentication), following system requirements must be satisfied.
System environment for administrator

T-11-4

Operating System	Supported browser
Microsoft Windows 98 SE	Microsoft Internet Explorer 5.5 SP2 Microsoft Internet Explorer 6 SP1
Microsoft Windows 2000 Professional SP3	Microsoft Internet Explorer 5.5 SP2 Microsoft Internet Explorer 6 SP1
Microsoft Windows XP	Microsoft Internet Explorer 6 Microsoft Internet Explorer 6 SP1

System environment for end user

T-11-5

Operating System	Supported browser
Microsoft Windows 98 SE Microsoft Windows NT Workstation4.0	Microsoft Internet Explorer 5.0.1 SP2 Microsoft Internet Explorer 5.5 SP2 Microsoft Internet Explorer 6 SP1
Microsoft Windows ME	Microsoft Internet Explorer 5.5 SP2 Microsoft Internet Explorer 6 SP1
Microsoft Windows 2000 Professional	Microsoft Internet Explorer 5.0.1 SP2 Microsoft Internet Explorer 5.5 SP2 Microsoft Internet Explorer 6 SP1
Microsoft Windows XP Professional	Microsoft Internet Explorer 6 SP1

SSO (Domain Authentication) Client
SSO client (when accessing MEAP device from web browser) guarantees operation under the following system environment.

Memo:
For use of Domain Authentication in SSO, access privilege for Windows 2000 Domain Name System (DNS) and access privilege for domain controller are required.

Server (for hosting Security Agent)

T-11-6

Operating System
Microsoft Windows 2000 Professional
Microsoft Windows 2000 Server
Microsoft Windows XP Professional
Microsoft Windows Server 2003

System environment for administrator and end user

T-11-7

Operating System	Supported browser
Microsoft Windows 98 SE Microsoft Windows NT Workstation 4.0 SP6a	Microsoft Internet Explorer 5.01 SP2 Microsoft Internet Explorer 5.5 SP2 Microsoft Internet Explorer 6 SP1
Microsoft Windows ME	Microsoft Internet Explorer 5.5 SP2 Microsoft Internet Explorer 6 SP1
Microsoft Windows 2000 Professional SP3	Microsoft Internet Explorer 5.01 SP3 Microsoft Internet Explorer 5.5 SP2 Microsoft Internet Explorer 6 SP1
Microsoft Windows XP Professional	Microsoft Internet Explorer 6 SP1

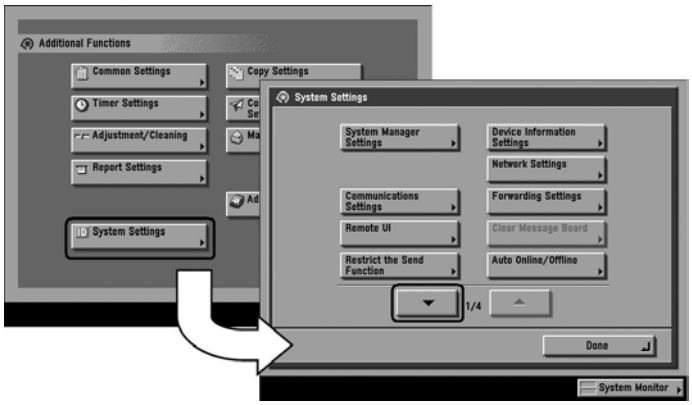
11.1.2 Setting Up the Network

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

To allow a MEAP device to accept accesses through the network, for example you operate a device with SMS, the On option must be selected on Use HTTP screen. The option is selected by default. The setting can be changed on the control panel of the MEAP device.

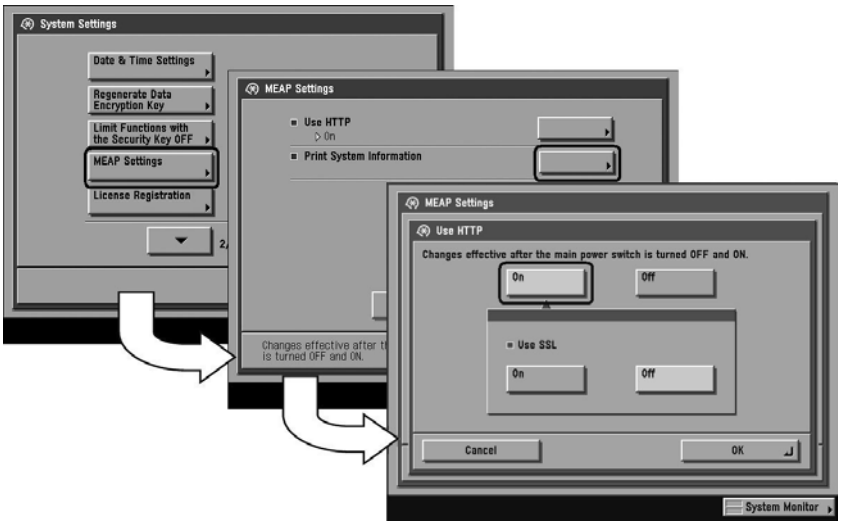
1) Make the following selections: **Ad Func** button > **System Settings** button> **Down-arrow** button.

Memo:
If the System manager ID and system password have already been assigned, ID Entry dialog appears after System Settings button is pressed. Enter the system manager ID and the password, and click ID key to go into System Management Mode.



F-11-1

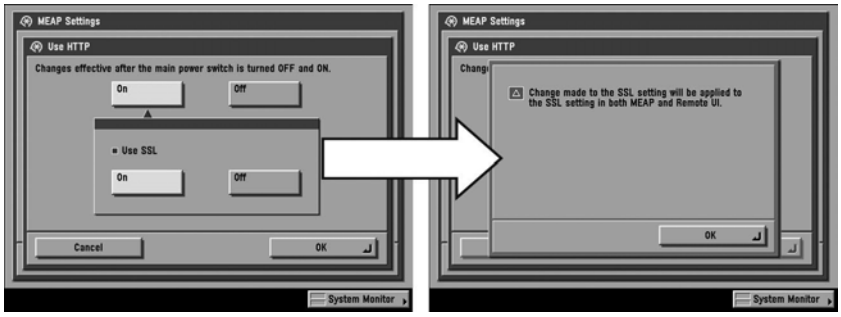
2) Make the following selections: **MEAP Settings** button > **Use HTTP** button> On button > **OK** button .



F-11-2

Memo:
When using SSL, set [Use SSL] ON.
(This setting is also applied to the SSL setting of RUI. Same is true in the case of setting SSL ON on the side of RUI.)

Setting [Use SSL] ON displays the message dialogue 'Changes effective after the main power switch is turned OFF and ON' . Press [OK].



F-11-3

3) Press Done button as many times as necessary until the Basic screen appears.
4) Turn off the device's main power; wait for 10 sec, and then turn the power back on.

- The setting [Use HTTP] is not actually enabled/disabled until you have turned off and then on the device's main power switch.
- You cannot make a connection through a proxy server. If a proxy server is in use, enter the IP address of the MEAP device in the Exceptions field for the browser. Open Internet Options dialog of Internet Explorer and select Connections tab, LAN Settings button, Use a proxy server option, and Advanced button of Proxy server group. Proxy Settings dialog will opens. The Exceptions field is in the dialog. As network settings vary among environments, consult the network administrator.
- If Cookie and JavaScript are not enabled in the Web browser, you will not be able to use SMS.
- To type text using the Web browser, use the characters compatible with the MEAP device's touch panel display. The MEAP device may not properly recognize some characters.
- When [se SSL] is made available, it is necessary to set the key and the certificate necessary for the SSL communication. Set the key and the certificate by SSL with [Certificate Settings] that exists in [System Settings] > [Network Settings] > [TCP/IP Settings] on the iR device.

11.1.3 Setting the method to login to SMS

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

SMS Installer Service, which is used to login SMS includes Password Authentication and Remote Login Service Authentication (henceforce: RLS Authentication). Password Authentication is an authentication method only by password. RLS Authentication is an authentication method using SDL / SSO by ID and password. Either or both of the authentication methods can be enabled by changing the setting.

Memo:
If Default Authentication is selected as the device authentication method, 'RLS Authentication' is not selectable as SMS Login method. Also, if 'RLS Authentication' is selected, the device authentication method (Default Authentication, SDL, SSO) cannot be changed.

Setting of login method to SMS (Start/Stop) must be made after logging-in by the other login method. In other words, setting for Start/Stop of Password Authentication is made after logging-in with RLS Authentication, and setting for Start/Stop of RLS Authentication is made after logging-in with Password Authentication. The table below shows the setting methods for each combination of login method and Start/Stop.

T-11-8

	Start RLS Authentication	**Stop RLS Authentication**
Start Password Authentication	Login available with either method	Login available only with Password Authentication
Stop Password Authentication	Login available only with RLS Authentication	Setting unavailable

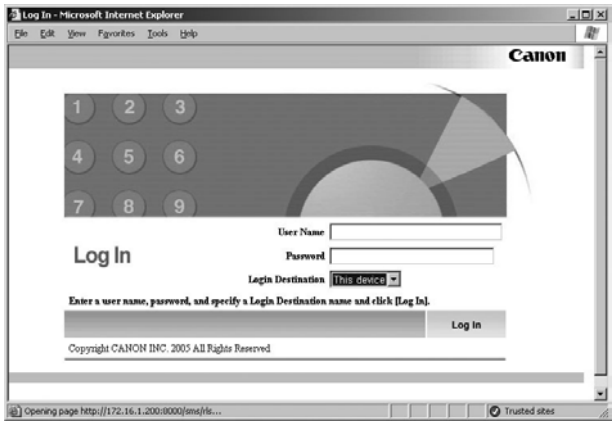
When only RLS Authentication is enabled, there may be a case you cannot login to device for the following reasons.
- Authentication server down
- Disconnection with authentication server due to network failure

In these cases, boot the device as MEAP SAFE mode from device service mode.
By booting the device as MEAP SAFE mode, login to SMS becomes available as Default Authentication is enabled. After login to SMS, set RLS Authentication as Started, return the device to normal mode, and then login by RLS Authentication.

Setting for login by Password Authentication

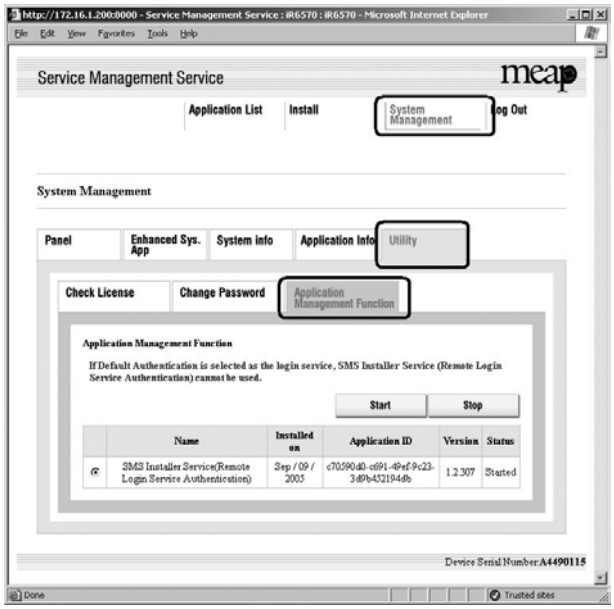
1) In order to make a setting for login by Password Authentication, you need to login by RLS Authentication. Therefore, login by RLS Authentication.

Login screen (In case authentication method is SSO)



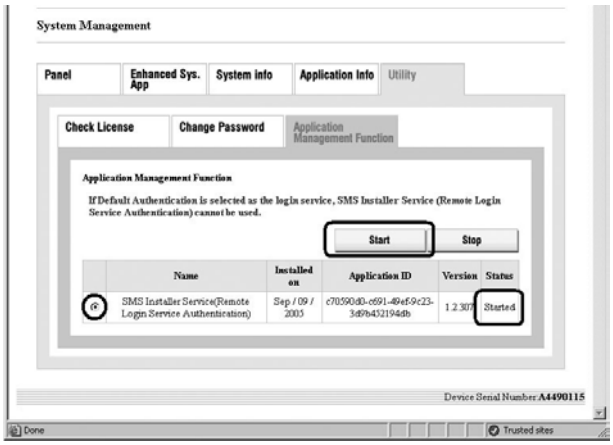
F-11-4

2) Select 'System Management' tab > 'Utility' tab > 'Application Management Function' tab.



F-11-5

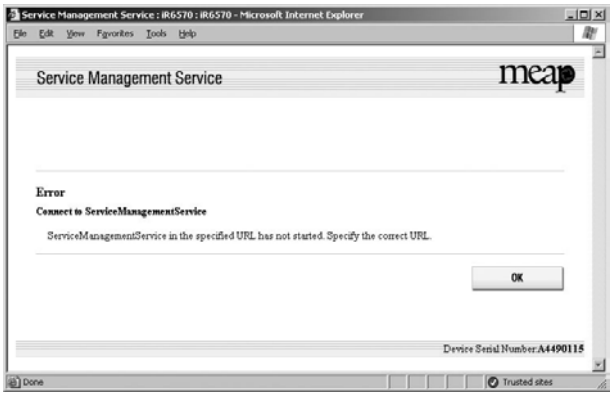
3) In order to enable login by Password Authentication, tick SMS Installer Service (Password Authentication) radio button and then click [Start]. On the other hand, in order to disable login by Password Authentication, clear the tick of SMS Installer Service (Password Authentication) radio button and click [Stop].



F-11-6

4) Logout once and login again to check to see that the setting is applied properly. In case the setting is changed from 'Stop' to 'Start', login screen that was not seen before is displayed. In case the setting is changed from 'Start' to 'Stop', access to login screen leads to the screen below and login becomes unavailable.

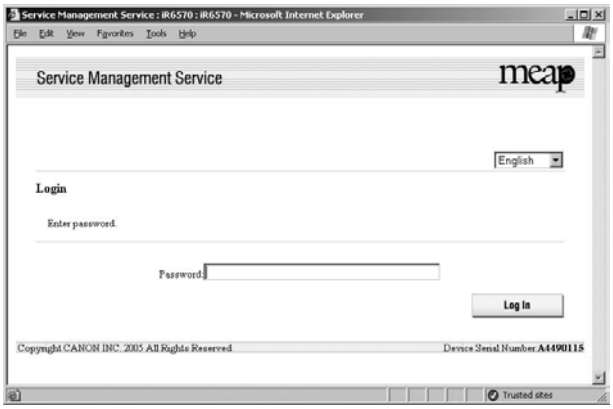
Login error screen



F-11-7

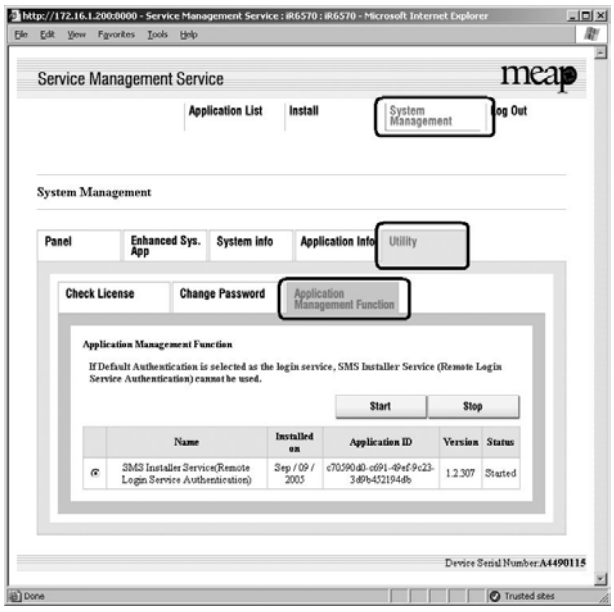
Setting for login by RLS Authentication
1) In order to make a setting for Login by RLS Authentication, you need to Login by Password Authentication.

Login screen by Password Authentication



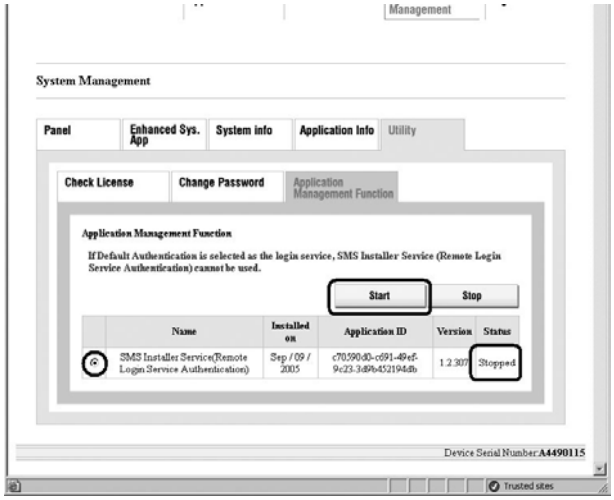
F-11-8

2) Select 'System Management' tab > 'Utility' tab > 'Application Management Function' tab.



F-11-9

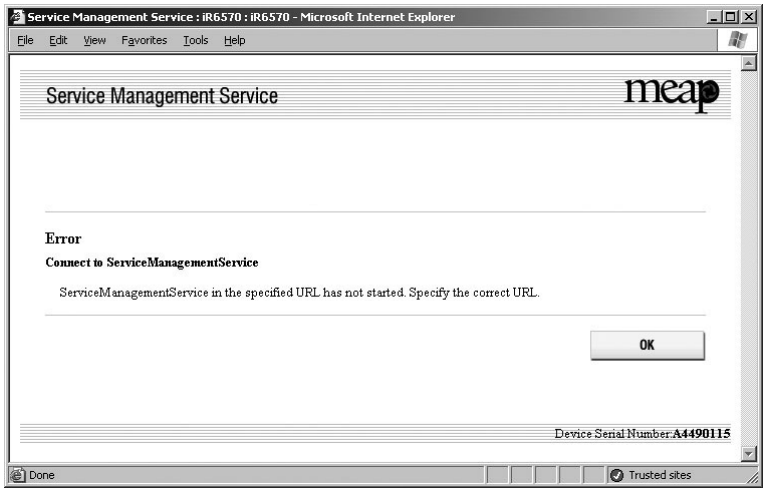
3) In order to enable Login by RLS Authentication, tick SMS Installer Service (Remote Login Service Authentication) radio button and then click [Start]. On the other hand, in order to disable login by RLS Authentication, clear the tick of SMS Installer Service (Remote Login Service Authentication) radio button and click [Stop].



F-11-10

4) Logout once and login again to check to see that the setting is applied properly. In case the setting is changed from 'Stop' to 'Start', login screen that was not seen before is displayed. In case the setting is changed from 'Start' to 'Stop', access to login screen leads to the screen below and Login becomes unavailable.

Login error screen



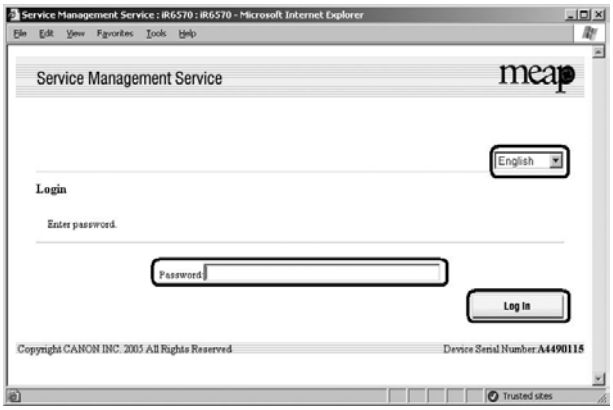
F-11-11

11.1.4 Login to SMS

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

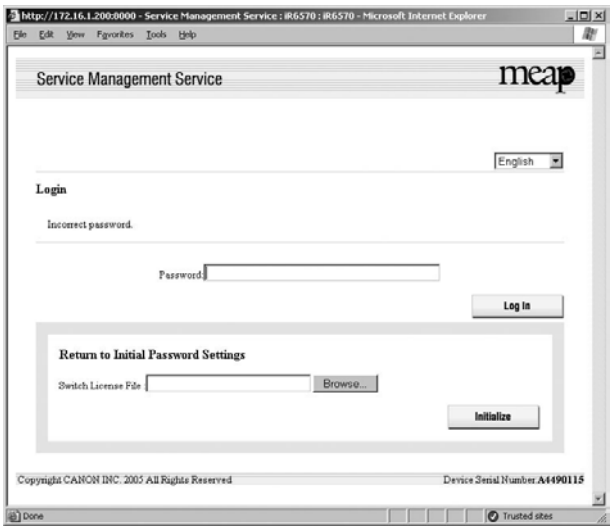
Login by Password Authentication
1) Access SMS from the browser of the PC connected to the network on which the MEAP device operates.
URL: http://<MEAP Device IP address>:8000/sms/
Ex.)http://172.16.188.240:8000/sms/

Memo:
- The default password is "MeapSmsLogin." (The password is case-sensitive.)
- When you want to change the display original language, change in the box in the right of the screen. This setting is not affect by the setting of the language of the device.



F-11-12

2) The following screen appears if the password has been changed by the user's system administrator. If so, check with the system administrator for the new password. Keep in mind that there is no special password offered for service work.



F-11-13

Login by RLS Authentication
1) Access SMS by RLS Authentication from the PC browser on the same network as the MEAP device.
URL: http://<IP address of MEAP device>:8000/sms/rls/
Ex.) http://172.16.188.240:8000/sms/rls

Memo:
- In case the device authentication method is SSO and login to domain, enter User Name, Password, and Login Destination registered in Active Directory, and click 'Log in'.
- In case the device authentication method is SDL or SSO and login to 'this device', enter User Name and Password registered in the device and click 'Log in'.

In the case the device authentication method is SSO

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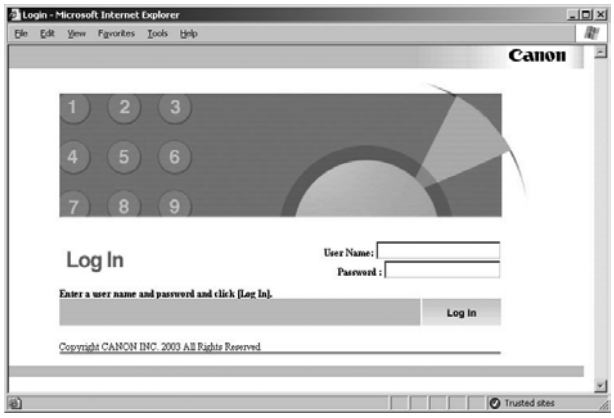
In the case the device authentication method is SDL



F-11-15

11.1.5 Checking Application List

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The page of **Application List** is designed to show resources arranged according to applications. The page gives you a good idea of how much of the device's memory is being used by the applications (both in absolute and relative terms) as well as how much memory still remains. Check this page before adding an application.

The information is collected from the manifest (headers) - in other words, the size of a resource represents the size as it is declared by the application in question, not necessarily the size of resources actually used by the application. The items of information include the following:
- hard disk
- memory
- thread
- socket
- file descriptor

You will not be able to install an application if the size of the remaining memory falls short of the size declared by the application. Moreover, the specifications have been designed so that an application will not be able to start up if there is a shortage of memory for any of the foregoing items (i.e., memory, thread, socket, file descriptor). To find out if there is enough memory, go through the following steps:

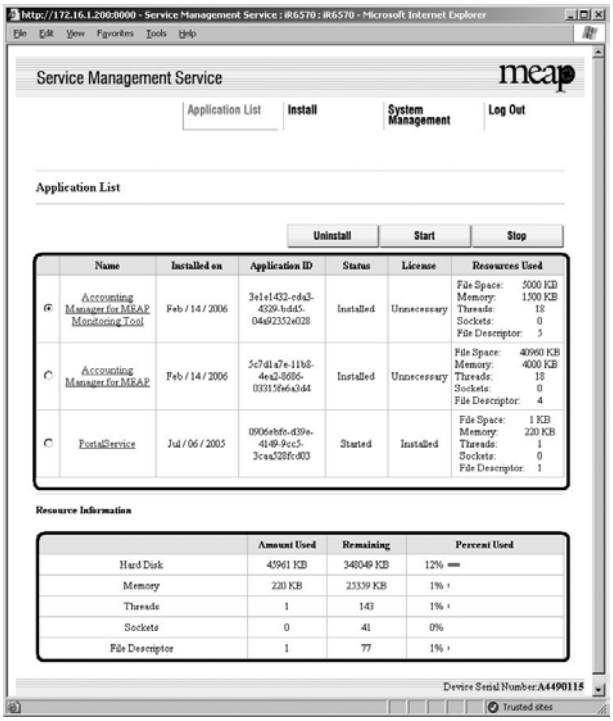
1) Log in to SMS.

2) Click Application List tab.

3) Check the displayed information:

a. Information on Applications
- Name (of the application)
- Installation (date)
- Application ID
- Status
- License
- Resources Used

b. Resource Information
- Amount Used
- Remaining
- Percent Used



F-11-16

11.1.6 Starting and Stopping a MEAP Application

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Log in to the SMS.

2) Click 'Application List'.

3) Click the radio button of the MEAP application in question, and click 'Start' or 'Stop'.

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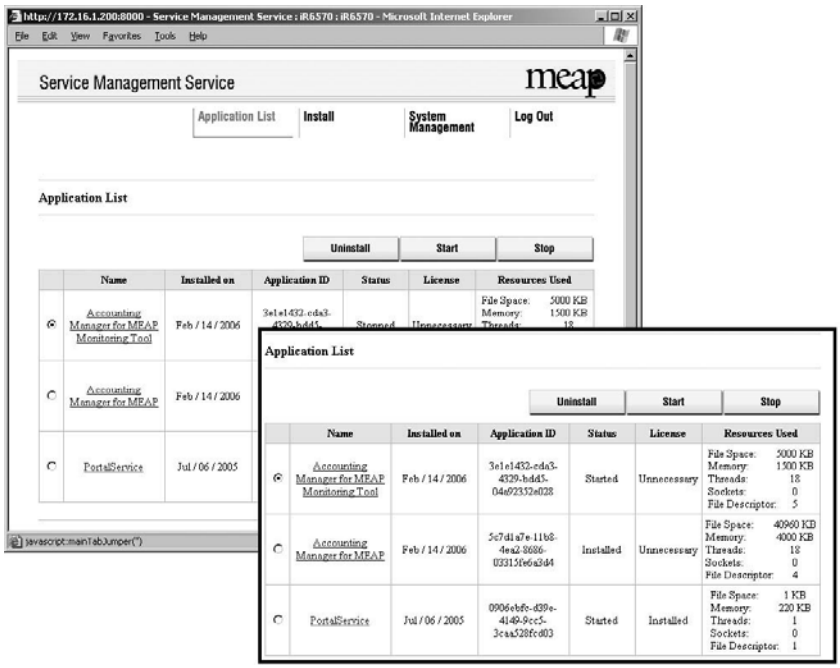
4) Check to see that the status of the MEAP application in question is either "Started" or "Stopped."



F-11-18

11.1.7 Checking the Platform Information

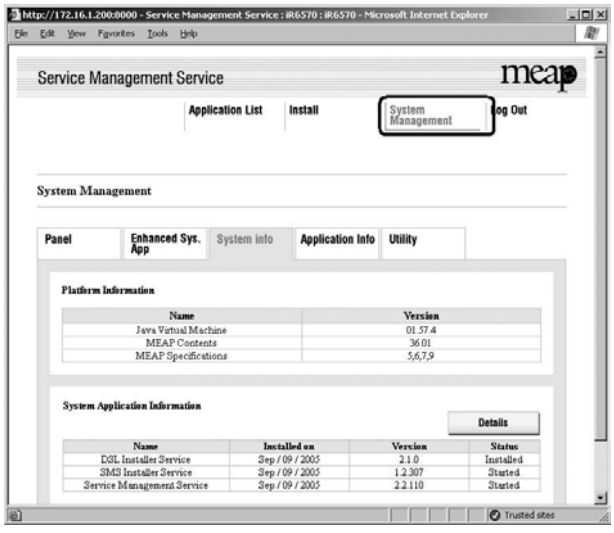
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

You can check the versions of MEAP Contents, MEAP Specifications, and Java Virtual Machine of the device.

Some applications may not be installed to some MEAP devices of specific specifications. (See 'MEAP Specifications').

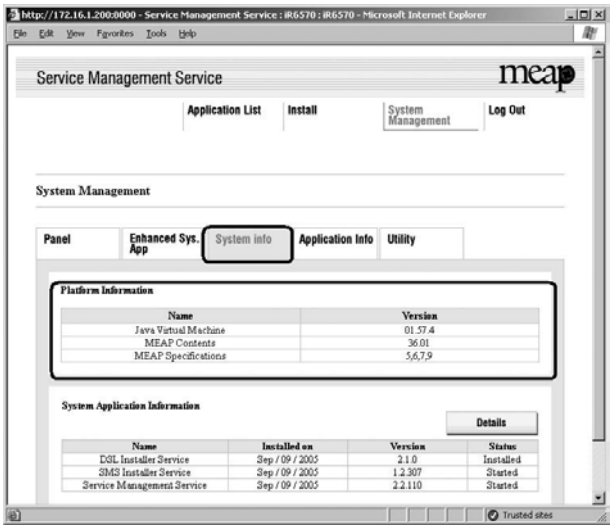
1) Log in to SMS.

2) Click **System Management** tab.



F-11-19

3) Click **System Info** tab.



F-11-20

11.1.8 MEAP Specifications

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

What is MEAP Specifications (MEAP Spec Version)?
MEAP Specifications is one of the information required to judge whether MEAP applications can be operated or not. With MEAP Specifications, you can prevent an application that uses a specific function of device from being installed onto the device that does not have the function.

About Name
MEAP Specification is shown as 'MEAP Specifications' in the screen to check the version on the side of device that supports MEAP (counter confirmation button) and MEAP platform (SMS). On the other hand, in the manifest file of MEAP application, it is shown as 'MeapSpecVersion' (described in the same way in the SDK document)
(Note) 'MEAP Specifications' hereafter in this document.

Mechanism
MEAP platform judges whether MEAP applications can be operated on it using on the 2 information below:
- Device Specification ID
- MEAP Specifications

Device Specification ID shows information such as the original functions of MFP (including print, scan, and copy), and one that differs by model such as maximum copy number, thus each model has a different ID. (It is easy to determine the IDs for this reason.) MEAP application declares 1 or more Device Specification ID required for its execution. Declaration of multiple Device Specification IDs means that the application is operable in all the models declared. Upon installation of MEAP application in (using) SMS or MEAP Enterprise Service Manager, matching of Device Specification ID is executed on the side of MEAP platform machine. The machine which doesn't support the ID declared by the application rejects installation of such an application.

Meanwhile, MEAP Specifications shows other information than defined by Device Specification ID above, including network and security. Thus each model does not always have the same version.

MEAP application declares 1 or more MEAP Specifications required for its execution. Declaration of multiple Device Specification IDs means that the application is operable in all the environments declared. Upon installation of MEAP application in SMS or MEAP Enterprise Service Manager, matching of MEAP Specifications is executed on the side of MEAP platform machine. The machine which doesn't support the version declared by the application rejects installation of such an application.

MEAP Spec Version for each model

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Model	MEAP Spec Version
iR5020/iR5020i/iR6020/iR6020i (Apr 2003 production approval version)	1
iR2220i/2220N/iR3320i/3320N(Oct 2003 production approval version) iR5020/iR5020i/iR5020N/iR6020/iR6020i/iR6020N/iR6020iN(Oct 2003 upgrading)	1,2
iRC2620/iRC2620N/CLC2620/iRC3220/iRC3220N/CLC3200(Apr 2003 production approval version)	1,2,3
iR2270/iR2870/iR3570/iR4570(Aug 2004 MR)*	5
iR6570/iR5570	5,6
iRC3170/iRC2570	5,6,7
iR2270/iR2870/iR3570/iR4570 (May 2005 across-the-board upgrading)	5,6,7
iR6570/iR5570(Jul 2005 upgrading)	5,6,7,9
iRC6870/iRC6870U/iRC6870C/iRC6870i/iRC6870Ci/iRC5870/iRC5870U/iRC5870C/iRC5870i/iRC5870Ci	5,6,7
iR7086/iR7095i/iR7095P/iR7095Printer/iR7105i	5,6,7
iRC4080/iRC4580/iRC5180/iRC5180	5,6,7,9,10,11
imagePRESS C1	5,6,7,9,10,11
iRC2880/iRC3380	5,6,7,9,10,11,13

* Due to the change in I/F specifications, these models support '5' only.

T-11-10

MEAP Spec Version

MEAP Spec Version	Description
1	MEAP basic function
2	1 and SSLTSL and Proxy
3	1 and Compact PDF
5	openCPCA and ERS (Error Recovery Service) and new SSL-IF
6	5 and BillingCode
7	5 and Compact PDF and SearchablePDF and USB-HostBuffering
9	5 and Job Archive System Support
10	5 and CTK2.0
11	5 and iWAMS Support + SSL Client Authentication
13	5 and J2ME1.1Support and Encrypt PDF and Scalable PDF and CTK2.0

11.1.9 Checking the System Information of a MEAP Application with SMS

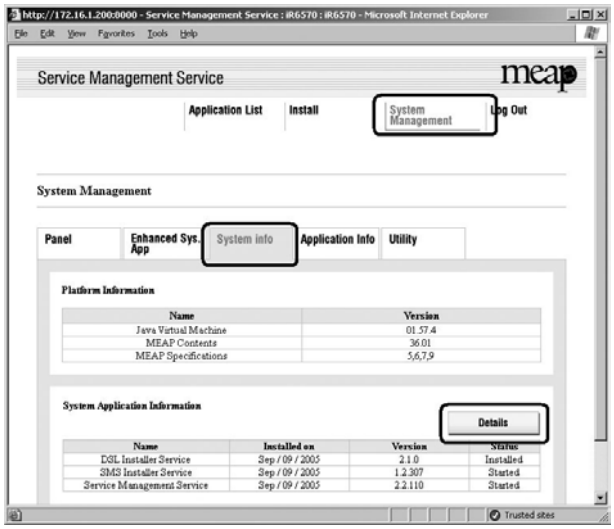
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Log in to SMS.

2) Click **System Management** tab.

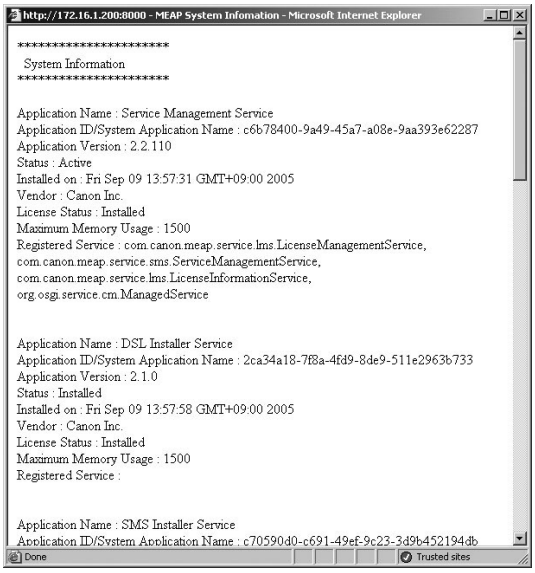
3) On System Management screen, click **System Info** tab.

4) Click **Details** button.



F-11-21

5) When the following status information of MEAP applications (including the system application) appears in a different window, copy and paste all information to create an attachment (text information) for preparing a problem report. You can also use this function whenever you want to check the status of any particular application.



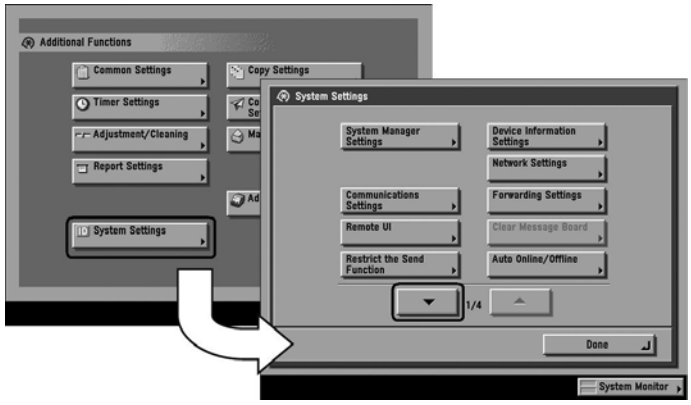
F-11-22

11.1.10 Printing the System Information of a MEAP Application

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

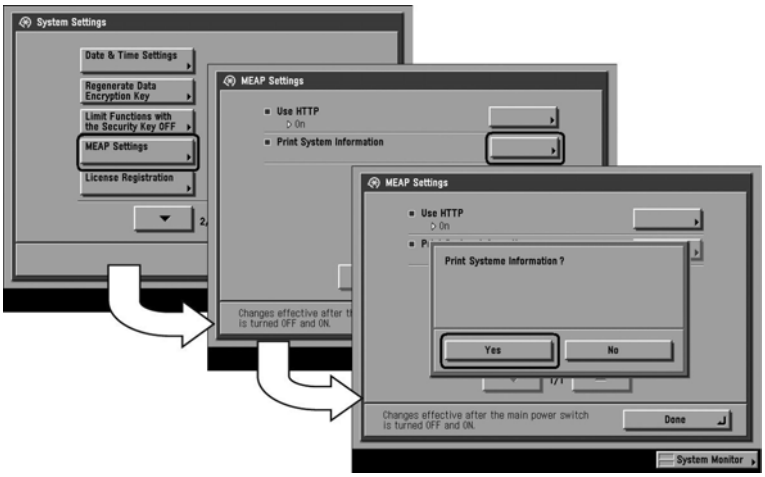
1) Make the following selections: **Additional Functions** button > **System Settings** button> the **down-arrow** button.

Memo:
If the System manager ID and system password have already been assigned, ID Entry dialog appears after System Settings button is pressed. Enter the system manager ID and the password, and click ID key.



F-11-23

2) Make the following selections: **MEAP Settings** button > **Print System Information** button >**Yes** button.



F-11-24

3) Press **Done** button as many times as necessary until the Basic screen appears.
4) Turn off the MEAP device's main power; wait for 10 sec, and then turn the power back on.

Important:
The previous version of printing function for MEAP application status information (system information) was depended on PDL. However, current version of function is not dependent on PDL. So even device for which PDL is not available can print it. (Since iRC3220)

11.1.11 Reference (Application System Information)

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

You can check all applications installed to the device at a glance with the MEAP application status information and, thus, it is important for you to provide it when you are reporting a problem.
The following items of information will be indicated or printed for individual applications:

Memo:
The system information shown on the screen and the system information printed in the MEAP device's user mode are exactly the same.

Application System Information T-11-11

Application Name: C-Cabinet Gateway for MEAP
Application ID/System Application Name: 03a46668-63e4-4636-9cbb-492b6cef05d5
Application Version: 1.0.0
Status: Resolved
Installed on: Tue Oct 21 14:00:11 GMT+09:00 2003
Vendor : Canon Inc.
License Status : Installed
Maximum Memory Usage : 1024
Registered Service :

Application Name
It is the name (bundle-name) declared in a statement within the application program. It may not necessarily be identical to the name of the program.

Application ID/System Application Name
In the case of a system application, it will be the file name. If a general application, it is the application ID (application-ID) declared in a statement within the application program. Within the device, the applications are set apart by means of their application IDs.

Application Version
It is the version of the application (bundle-version) declared in a statement within the application program.

Status
It indicates the status of the application in question; specifically,
Installed: the application has been installed.
Active: the application is being in use.
Resolved: the application is at rest.

Installed On
It indicates the date on which the application was installed.

Vendor
It is the name of the vendor that developed the application, and is the name (bundle-vendor) declared in a statement within the application program.

License Status
It indicates the status of the license; specifically,
None: no license is needed.
Not Installed: no license has been installed.
Installed: the appropriate license has been installed.
Invalid: the license has been invalidated.
Overlimt: the license has been used beyond its permitted limit.

License Expires After
It indicates the date after which the license expires. If the status of the license is 'none', this item will not be printed.

License Upper Limit
It indicates the limit imposed on individual counter readings. If the status of the license is 'none', this item will not be printed.

Counter Value
It is the current counter reading of a specific counter. If the status of the license is 'none', this item will not be printed.

Maximum Memory Usage
It indicates the maximum amount of memory that the application uses. It is the amount (maximum memory usage) declared in a statement within the application program, and is expressed in kilobytes.

Registered Service
It is a list of services that have been registered by the application with the MEAP framework. Some services may not have printable data.

11.1.12 Installing an Application

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Important:
- To install an application, the user needs to use the following URL when accessing the license control system to obtain a license file. In doing so, he/she needs to register the license access number of the application and the serial number of the device.
http://www.canon.com/meap/
- To install an application, the user needs to use the following URL when accessing the license control system to obtain a license file. In doing so, he/she needs to register the license access number of the application and the serial number of the device.
- The applications that can be installed are 20 pieces or less. (In iR5020/iR6020/iR2220/iR3320/iR3320, one is the Portal Service already installed at time of shipment from the factory.)
- The following list shows the resources and their sizes or numbers that the MEAP functions can use. The values are for reference purpose only and actual values vary among system configurations, login or authentication services, and device models.

T-11-12

	iR5020/iR6020/ iR2220/iR3320	**iRC2620/ iRC3220**	**iR2270/iR2870/ iR3570/iR4570/ iR85/iR8070/ iR6570/iR5570**	**iRC3170/ iRC2570**	**iR7086/iR7095/ iR7105**	**iRC4080/ iRC4580/ iRC5180**	**imagePRESS C1**	**iRC2880/ iRC3380**
HDD	300MB	400MB	400MB	400MB	400MB	1024MB	1024MB	1024MB
Memory	20MB	20MB	20MB	20MB	20MB	20MB	20MB	20MB
Thread	128	128	128	128	128	128	128	128
Socket	48	48	48	48	48	48	48	48
File Description	42	42	42	42	42	42	42	42

- The area of the hard disk used by MEAP functions may be checked by referring to the item 'Hard Disk' indicated on the Application List.
- Some applications call for a specific set of conditions for installation. For details, see the User's Guide that comes with the individual applications.

---

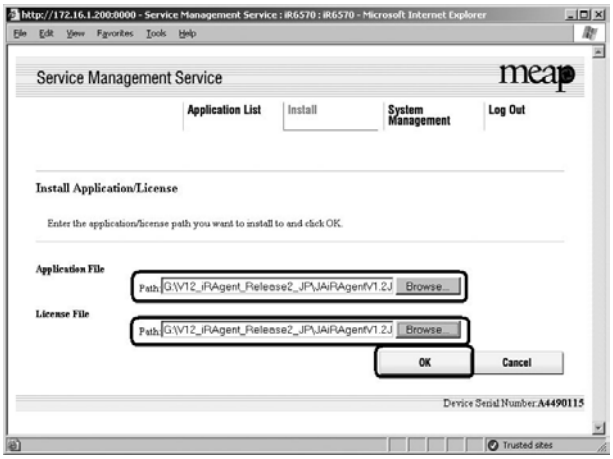
1) Long on to SMS.

2) Click **Install** tab.

F-11-25

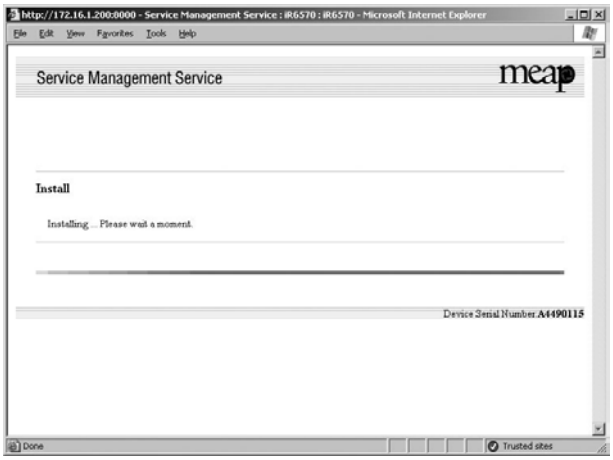
3) Check that **Install Application/License** page appears.
4) Click **Browse** button, and select the application file and the license file of the application; then, click **OK** button.

Memo:
Application File: identified by the extension "jar".
License File: identified by the extension "lic".



F-11-26

5) See the message "Installing...Please wait a moment."



F-11-27

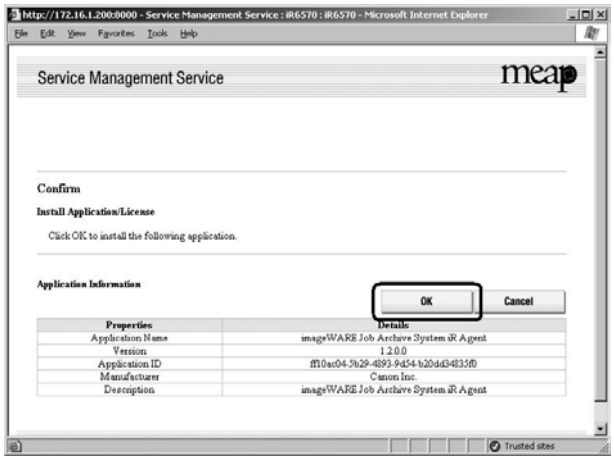
Important:
- You cannot install only the license.

- You will not be able to install the application without using the appropriate license. Be sure to select its license file.

- If you are adding a license to an existing application, see 1.3.10 Adding a License File.

- If you are updating an existing application, stop the application; then, install the new application or its license file. You will not be able to update an application while it is running.

6) Check the contents of the **Confirm** page; then, click **OK** button.



F-11-28

7) Some applications show a screen to indicate the terms of agreement. Read the terms, and click **OK**.
8) Check the message "Installing...Please wait a moment." appears, beginning the installation.
9) Check **Application List** page appears when the installation is completed.

Important:
To use the application that you have just installed, you must make sure that the application status is Started.

11.1.13 MEAP Enterprise Service Manager

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Outline
MEAP Enterprise Service Manager is the PC application utility to perform batch installation, unistallation and management of MEAP application and license files required for installation of applications, on several MEAP-available devices on network.
The main targets are system administrators in big companies and CANON service engineers (end users of devices do not use).
It is used when customized applications delivered to a certain company needs to be managed collectively.
Previous SMS can manage only one device at a time. This utility reduces the management cost of devices and TCO.

Major functions
Discovery of devices available for MEAP
Discovery of devices available for MEAP on network
Storage of the serial number list of discovered device
Installation of application and license file
Management of application (starting / stopping)
Uninstallation of application
Others

System configuration
MEAP Enterprise Service Manager (MEAP ESM) functions in combination with DIS (DSL Installer Service) installed on the MEAP platform side of the device. This system can be used only for MEAP-available device with appropriate DIS installed.

(*) When using this system on the firmware for version upgrading on October 2003 or older, version upgrading of the system software on the field device is necessary.

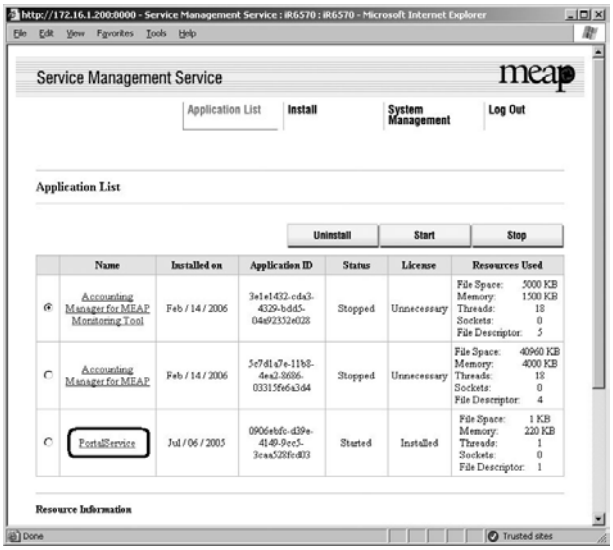
The versions available for ESM are as follows:
iR5160 / iR6020: System v54.02 or newer, MEAP Contents v53.07 or newer
iR2220 / iR3320: System v33.01 or newer, MEAP Contents v33.02 or newer
Other products: Available from the initial version

When installing MEAP Enterprise Service Manager (MEAP ESM) of master CD on PC, Microsoft '.NET Framework' v1.0 or v1.1 is necessary. The user should download it from the Web site of Microsoft.

11.1.14 Adding a License File

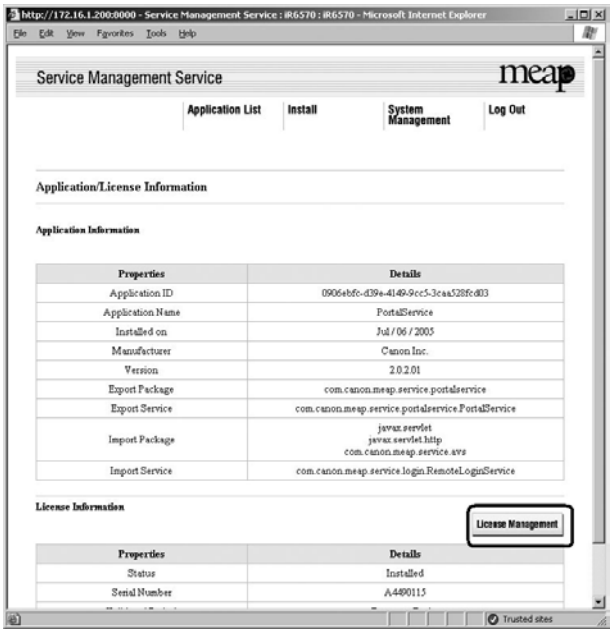
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Log on to SMS.
2) On **Application List**, click the name of the application to which you want to add a license file.



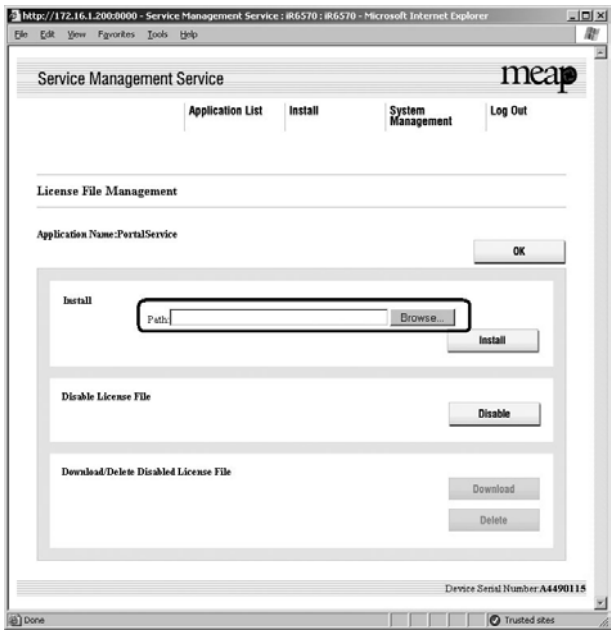
F-11-29

3) Check appears.
4) On Application/License Information page, click **License Management** button.



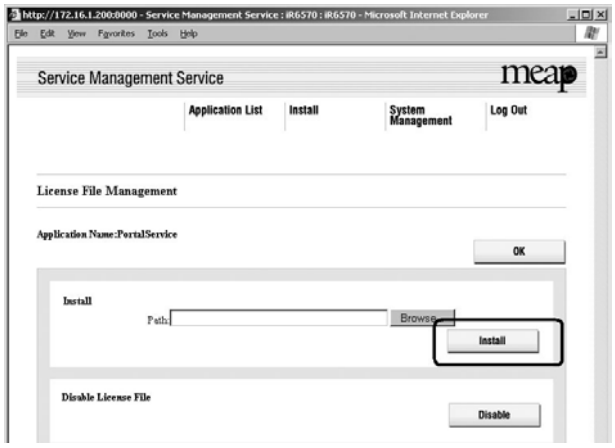
F-11-30

5) Click **Browse** button, and select the license file you want to install.



F-11-31

6) Click **Install** button.



F-11-32

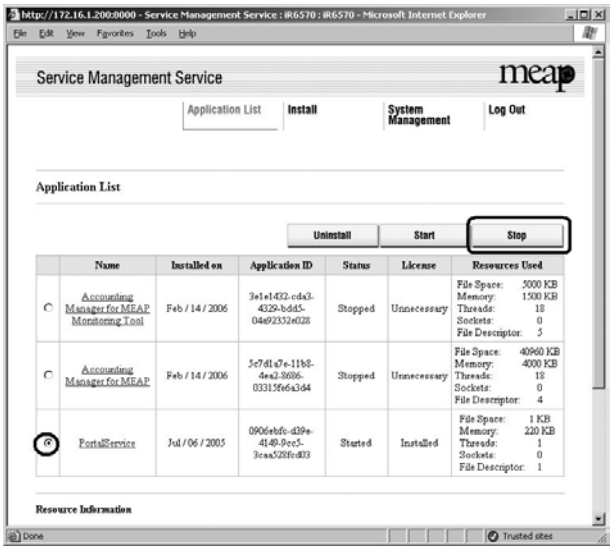
7) Check the content of the confirmation page, and click **OK** button.

11.1.15 Disabling a License File (suspending a license)

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

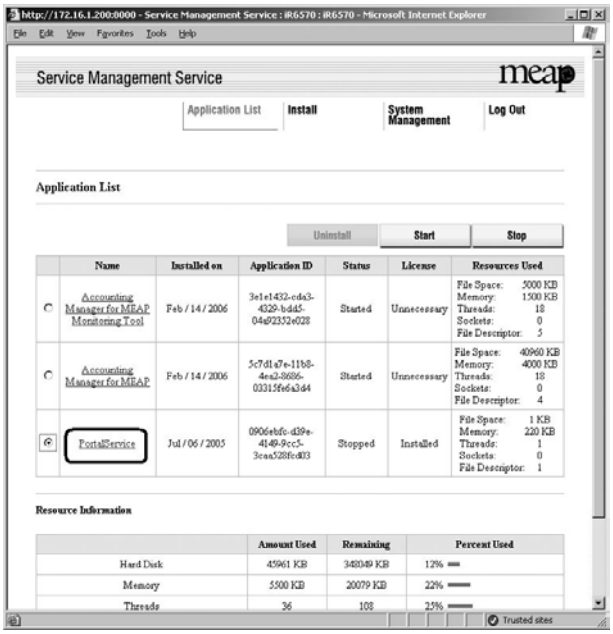
Important:
- To invalidate (or suspend) a license, you must first stop the application in question.
- Once suspended, the status of the license will be 'Not Installed', and its application will no longer be available for use.
- You can later restore a suspended license file as long as you are doing so on the same iR, the device with the same device serial number.
- When replacing the device due to lease up or trouble, use the license for forwarding (See 'License for forwarding').

1) Stop the application you want to uninstall on **Application List** page.



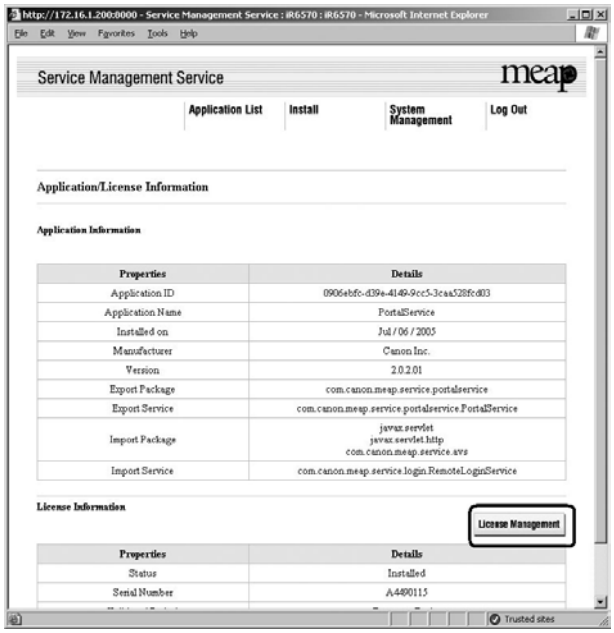
F-11-33

2) Click the name of the application that you want to disable.



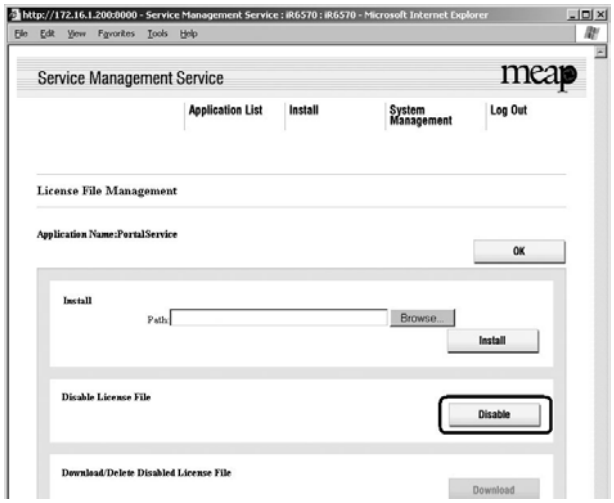
F-11-34

3) License File Management page appears. On Application/License Information page, click **License Management** button.



F-11-35

4) Click **Disable** button.



F-11-36

5) Click **OK**.

11.1.16 Downloading/Removing an Invalidated License File

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

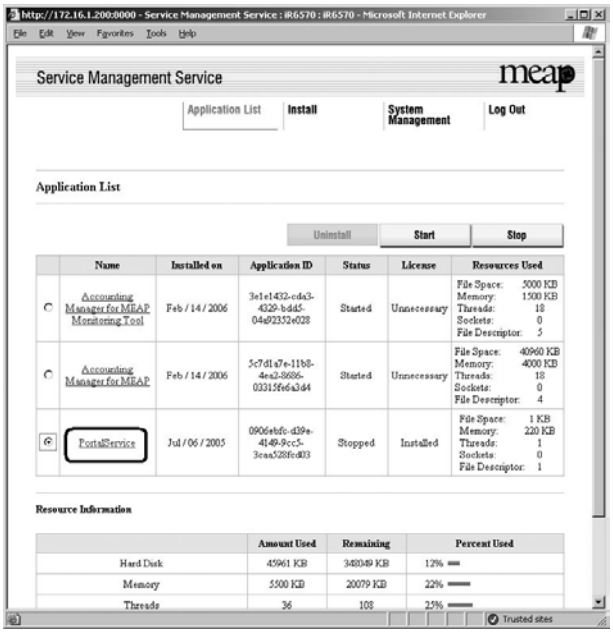
You must remove the invalidated license file before uninstalling an application. If re-installation is a possibility, you may download the license file to a PC for storage. To download or delete a license file, first disable it.

Important:
- Once you have removed an invalidated license file, you will no longer be able to download it form the MEAP device.

1) Login to SMS.

2) **Application List** page appears.

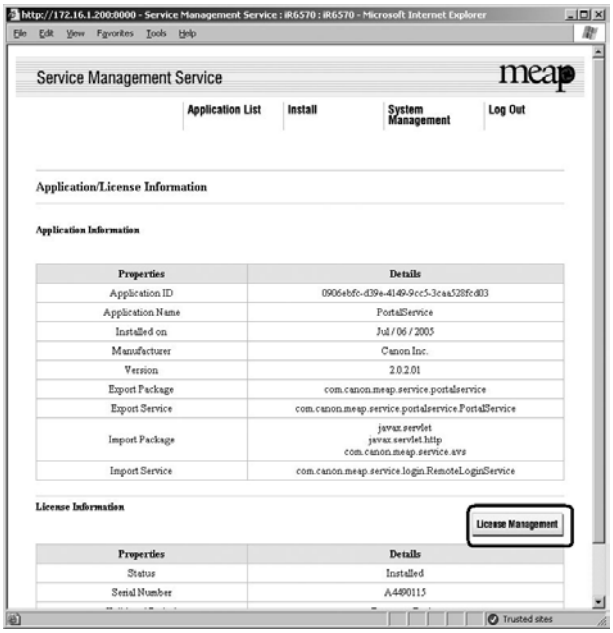
3) On **Application List page**, click the name of the application you want.



F-11-37

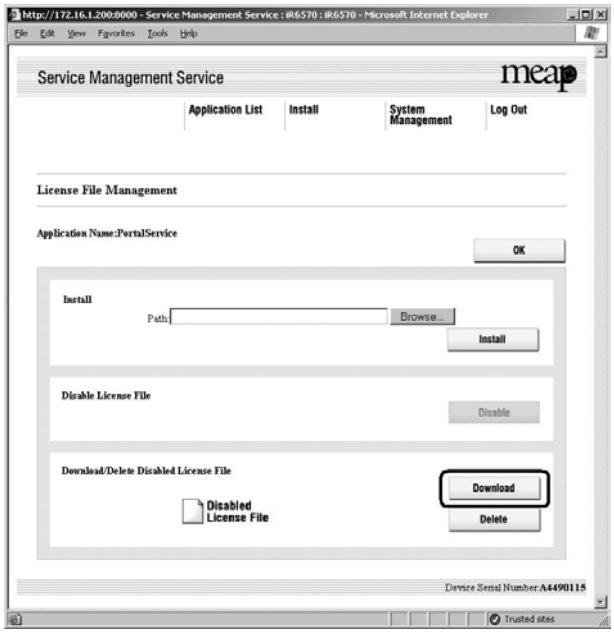
4) Check Application/License Information page appears.

5) On Application/License Information page, click **License Management** button.



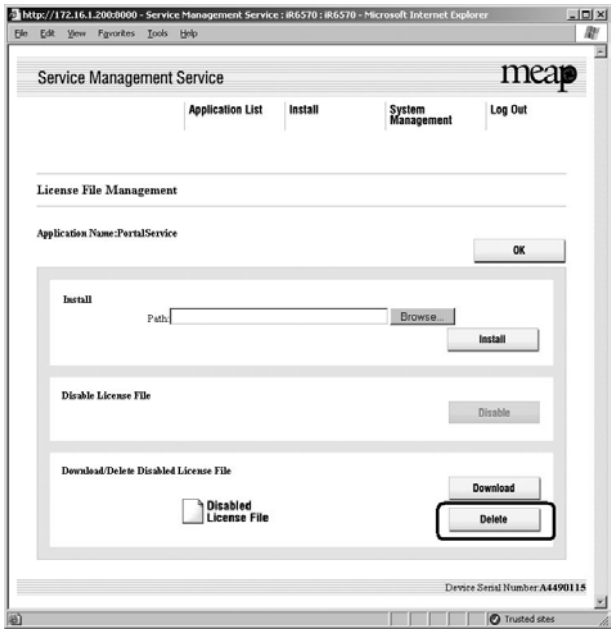
F-11-38

6) License File Management page appears. To download, click **Download** button.



F-11-39

7) When you have selected **Download** button, specify where you want to store the file by following the instructions on the screen.
8) To delete, click **Delete** button.



F-11-40

9) Check the confirmation page appears.

10) Click **OK** button.

Important:
- Without the license file, an application cannot be reinstalled even to the MEAP device that the application had been installed last time. Download and save the license file before deleting the application.

11.1.17 Reusable license

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

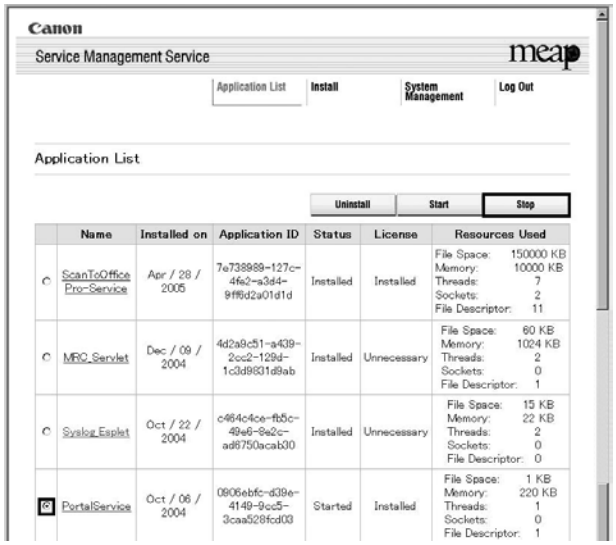
Reinstallation was not able to perform for all license files. When reinstalling, Disable License file should be downloaded (see 'Disabling a License File' and 'Downloading / Removing an Invalidated License File' in this manual) or a license for reinstallation should be obtained from LMS, before reinstallation.
This specification aims to prevent misuse of applications.
To increase convenience of users, only application with unlimited validity date and application counter (e.g. Portal Service, SDL, SSO) has been made to be able to install as many times as needed by the same license file. This kind of license is called 'Reusable license'.

Memo:
For devices for System version of 33.01, 54.02 (iR 2220 series / iR5020 series) or older, version upgrading is required. It is already installed in the model with iR C3220 or newer.

11.1.18 License for forwarding

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

When the device is replaced due to lease up or trouble, it is possible to continue using the current license information of MEAP application by forwarding it to a new device. The license is forwarded by CE because the hidden page of SMS is used.
1) Log in to SMS, stop the application to be forwarded (see 'Starting and Stopping a MEAP Application' in this manual).

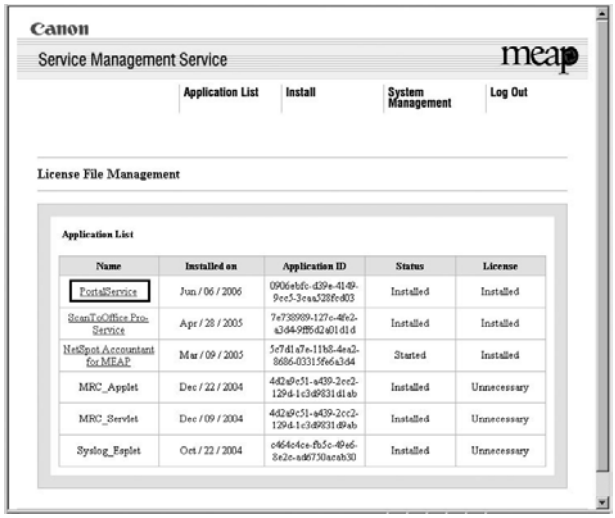


F-11-41

2) Move to the download page of license forwarded for the device as sender (http:// IP address of device: 8000/sms/ForwardLicense).

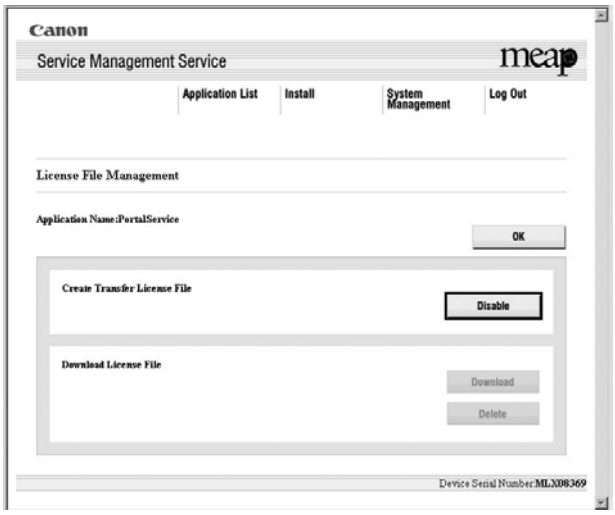
F-11-42

3) Specify the application to be forwarded.



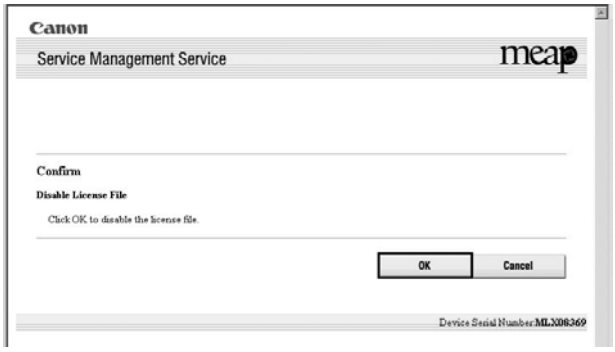
F-11-43

4) Click 'Disable' at Create Transfer License File.



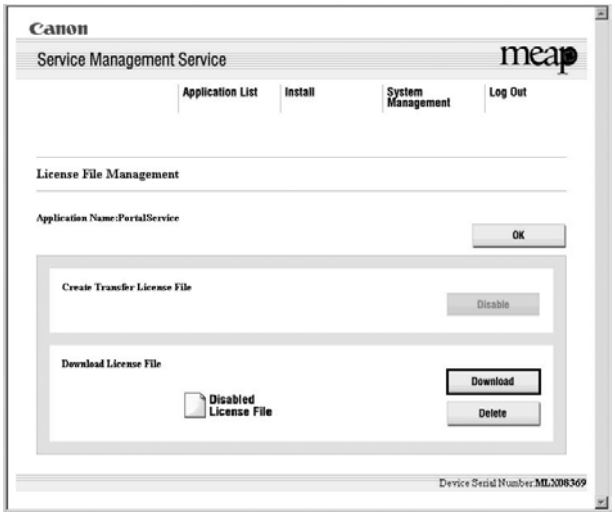
F-11-44

5) The screen to check invalidation of the license is displayed. Click 'OK',



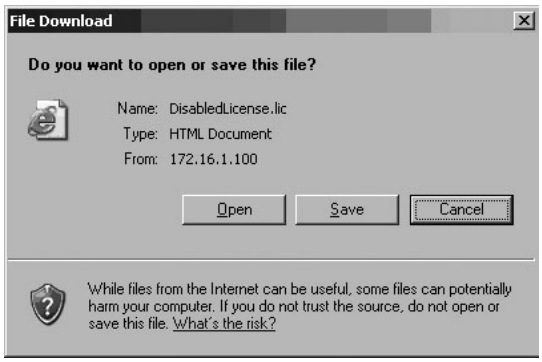
F-11-45

6) Icon of license file for forwarding is displayed in the box of license file downloading. Click 'Download'.



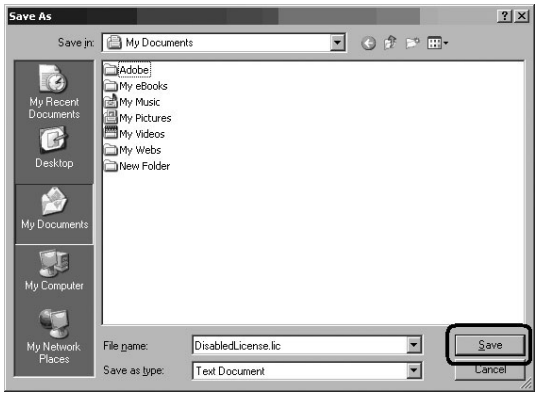
F-11-46

7) The dialogue 'File Download' is displayed. Click 'Save'.



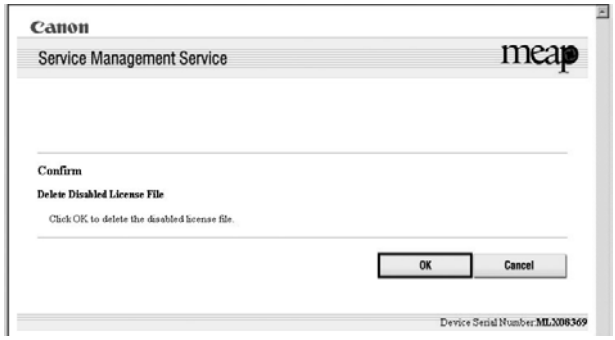
F-11-47

8) Specify the download destination, click 'Save'.



F-11-48

9) After downloading the license file for forwarding, click 'Delete' to display the confirmation screen and click 'OK' to delete the file (in consideration of breakage of license for forwarding, deleting disabled license can be executed after all steps have been completed).



F-11-49

10) Log out of SMS.
11) Ask the sales company to issue a license for forwarding.

Memo:
When requesting issuance of license for forwarding, inform the sales company of the name of product name and serial No. of the device as sender, and of the name of product name and serial No. of the forwarding destination.

12) Install application using the license for forwarding issued by the sales company.

11.1.19 Uninstalling an Application

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Log on to SMS, and click 'Application List' tab.

2) Check 'Application List' page appears.

3) On the application list, select the radio button of the application you want to uninstall, and click 'Uninstall' button.

Memo:
Dimmed Uninstall button shows that the selected application cannot be removed.

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4) Check the screen to make sure that what is shown is the application you want to uninstall; then, click **OK** button.
In response, the system runs an uninstall sessions.

Important:
- The status of the license must be 'Not Installed' or 'Unnecessary' for its application to be uninstalled. As necessary, go to License File Management page, and disable the license file before starting to remove it.
- A license file may be invalidated only when its application is not active.
- If the application you are uninstalling is associated with another application, a message will appear to indicate that the package exported by the application will no loner be available. Uninstalling such an application may also disable its associated applications.

11.1.20 Changing Login Services

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Login Service Overview
The login service is used to authenticate users who logs in to a MEAP device. You can change login services or uninstall them using System Management site.

At time of shipment, the login service offers the following 3 modes of authentication:

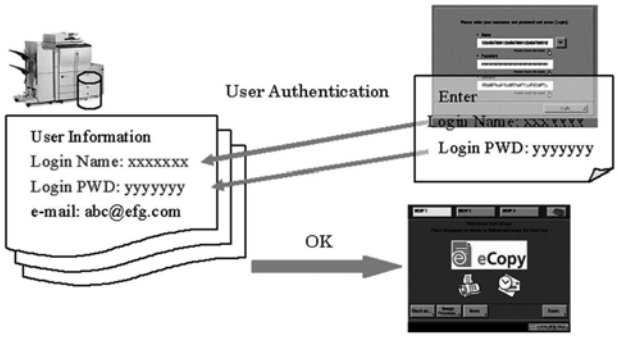
- Default authentication
- SDL (Simple Device Login)
- SSO (Single Sign-On)

Important:
- To set SDL, the registered information in SDL and the registered user data (Department ID and Password) in Department ID Management of the machine have to match.
- To set up SDL or SSO, Department ID Management must be set to Off in advance. To use SDL and Department ID Management simultaneously, set Department ID Management to On after switching the login service to SDL.
- If SSO is set as the login service, NetSpot Accountant is necessary for using Department ID Management.
- If SSO is set, you cannot use an optional card reader.
- To set to SSO, first adjust the current time for the PC where Active Directory is running, the iR, and the PC where users log on. If there is more than a 30-minute difference among them, an error occurs at logon.
- If SSO or SDL is set as login service, it takes time until the iR is ready to start up.
- When the SEND function is used in the environment of SDL and SSO, it is necessary to set each user's mail address to transmit E-mail. When the mail address is not set, E-mail cannot be transmitted. However, when i-Fax is transmitted, the mail address set to the device is used.

Outline of Default Authentication
In this mode of authentication, you will be using Department ID Management or you will not be using any authentication mechanism. If you enable the Department ID Management in the MEAP device's Additional Functions mode, the user can use the device only when he/she enters an ID number (a 7-character ID and password) that has been registered from the device's touch panel display or through Remote UI.

Outline of SDL (Simple Device Login)
In this mode of authentication, you will be operating on a MEAP device on its own. You will store user information to the MEAP device's memory by accessing the device through a Web browser. SDL offers the following functions:

a. it brings up the Login screen on the MEAP device's touch panel display for user authentication.
b. it brings up the Login page when you access the MEAP device from Web browser to manage the numbers of printed and scanned sheets for each department ID working with the department ID management function. it operates in conjunction with the group ID control mechanisms to keep track of the number of print pages or scan pages according to group IDs.
c. it enables register/editing of user authentication information through a Web browser.



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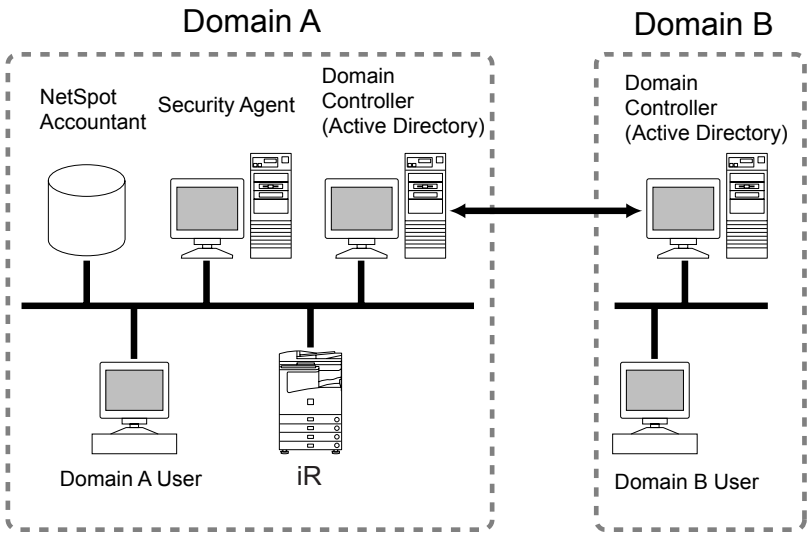
Outline of SSO (Single Sign-On)
This is the log-in service that can be operated on the domain of Active Directory environment network or at iR device. The following are the user authentication systems.
- Domain Authentication
- Local Device Authentication
- Domain Authentication + Local Device Authentication

- The three user authentication systems can be changed at Web browser (See 'Setting the User Authentication System' on MEAP Administrator Guide).
- The default setting is 'Domain Authentication + Local Device Authentication'. To increase security, set 'Domain Authentication' as user authentication system or change the user name and password of the administrator of Local Device Authentication from the default ones, just after starting to use SSO.

Domain Anthentication
This is the authentication of the domains on network simultaneously with log-in to iR device, in combination with the domain controller on Active Directory environment network. It authenticates up to four domain users (multi domain) with trusts as well as the domain with iR device installed. Users select the domain name of log-in destination when they log in.
Optional NetSpot Accountant or imageWARE Accounting Manager enables analysis / management of the usage of iR device.

Local Device Anthentication
This is the user authentication used for only iR device itself. The users to be authenticated is registered / managed by the database of iR device. The method of registration / management is the same as the one for SDL. The log-in destination is [this device].

Domain Authentication + Local Device Anthentication
This is the user authentication system with the functions of both 'Domain Authentication' and 'Local Device Authentication'. Domain Authentication is useful to authenticate the users registered / managed by Active Directory, and Local Device Authentication is for authentication of the temporary users being not able to be added to Active Directory. In the case that any trouble of domain controller or Security Agent occurs, using Local Device Authentication enables emergency action until recovery.
In the following example, Domain A user with iR installed and Domain B having trusts with Domain A, and also the users registered in iR device itself can be authenticated. Users select the login destination (domain name or [This Device]) when they log in.



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- Optional NetSpot Accountant or imageWARE Accounting Manager is necessary to use Domain Authentication and department ID management simultaneously. When Domain Authentication is set without combination with NetSpot Accountant or imageWARE Accounting Manager, log-in is impossible.

Therefore, department ID management should not be 'ON'. If department ID management is set to 'ON' while using Domain Authentication and log-in becomes impossible, change the log-in service to Default Authentication and turn department ID management to [OFF].
- For combination with NSA / iWAM, it is necessary to set the user with administrative privilege of the domain on the SA service account.
- When the print count and scan count for each department ID needs to be managed in conjunction with Local Device Authentication and department ID management, turn department ID management to [ON]. To use simultaneously Local Device Authentication and department ID management, the information registered with Local Device Authentication should be matched with the user information of department ID management (department ID and password).
- The user information registered by SDL and the one by Local Device Authentication are managed separately in the iR device. The user information registered in one system is not reflected to the other.
- The card reader for optional control card cannot be used for Local Device Authentication. When using the card reader for control card, set SDL.
- Security Agent is necessary only for Domain Authentication.
- Security Agent should be installed on the computer in the domain with iR device installed.
- Installation of Security Agent is included in MEAP Administrator CD-ROM.

Operating Environment
The operation is guaranteed for SDL or SSO if the system environment is in keeping with the following requirements:

SDL (registering/editing user information)
a. Operating System and Supported Browsers

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Operating System	Supported browser
Windows 98 SE	Microsoft Internet Explorer 5.5 SP2 Microsoft Internet Explorer 6 SP1
Windows 2000 Professional SP3	Microsoft Internet Explorer 5.5 SP2 Microsoft Internet Explorer 6 SP1
Windows XP	Microsoft Internet Explorer 6 Microsoft Internet Explorer 6 SP1

Important:
- If you use Internet Explorer 6 on Windows XP, you will need Java 2 Runtime Environment Standard Edition 1.3.1.

SSO
To use SSO, you must have a Widows server to which Active Directory has been installed as well as Security Agent.

1) PC for hosting Security Agent
a. Supported OS

T-11-14

Operating System
Microsoft Windows 2000 Professional
Microsoft Windows 2000 Server
Microsoft Windows XP Professional
Microsoft Windows Server 2003

When using SA on WindowXP SP2, it is necessary to exclude Security Agent from the targets of firewall at the setting of the firewall.

b. Others
Access right to Windows 2000 domain Name System (DNS)Access right to domain controller

For combination with NetSpot Accountant / iW Accounting Manager, and department ID management is turned on to use it, it is necessary to set the user with administrative privilege of the domain on the SA service account.

2) Client PC (if access from Web browser to MEAP device is desired)
a. Operating System and Supported Browsers

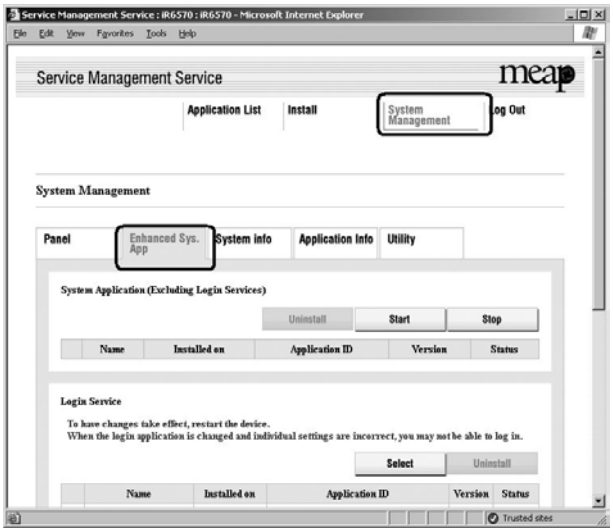
T-11-15

Operating System	Supported Browsers
Windows 98 SE Windows NT Workstation 4.0 SP6a	Microsoft Internet Explorer 5.01 SP2 Microsoft Internet Explorer 5.5 SP2 Microsoft Internet Explorer 6 SP1
Windows ME	Microsoft Internet Explorer 5.5 SP2 Microsoft Internet Explorer 6 SP1
Windows 2000 Professional SP3	Microsoft Internet Explorer 5.01 SP3 Microsoft Internet Explorer 5.5 SP2 Microsoft Internet Explorer 6 SP1
Windows XP Professional	Microsoft Internet Explorer 6 SP1

b. Others
Access right to Windows 2000 Domain Name System (DNS)
Access right to Domain Controller Client

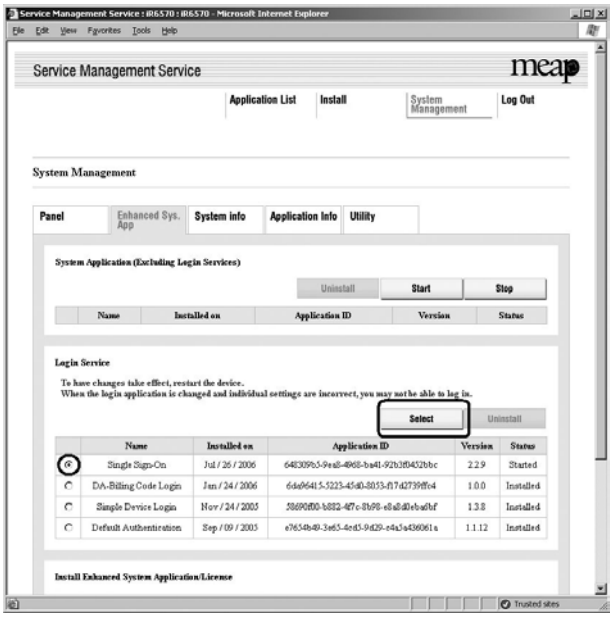
Steps to Change Login Services

1) Make the following selections: **System Management > Enhanced Sys. App.**



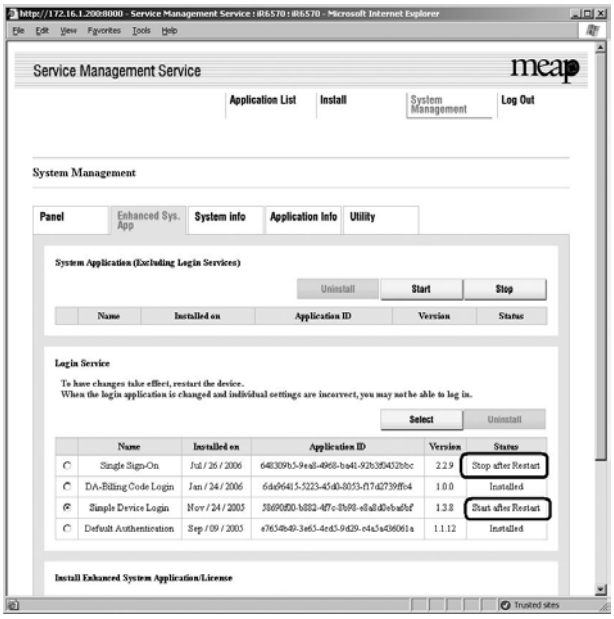
F-11-53

2) A page will appear showing the various selections you can make for the login service. Select the radio button of the login service mode you want to use; then, click **Select** button.



F-11-54

3) When login service application you have selected turns to **Start after Restart**, turn off the device's main power, and turn it back on after 10 seconds.



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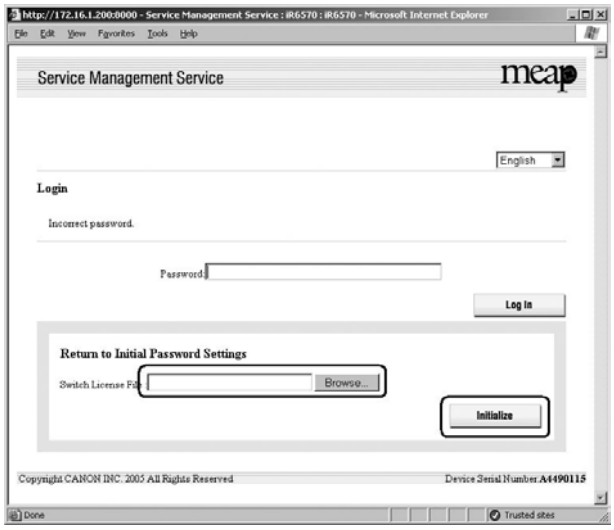
11.1.21 Initializing the Password

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Get the switch license for initializing the password.
Request the support of the regional headquarters of the Canon for switch license for initializing the password presenting the device serial number.

2) Click **Login** button leaving **Password** field blank or entering incorrect password. The Return to install Password Settings area appears. Click **Browse** button and select the switch license file prepared in advance.



F-11-56

3) When you click **Initialize** button, the confirmation message appears. Click **OK** button. Then Login page opens. Enter the default password 'MeapSmsLogin' to log in. The password is case-sensitive.

If you click **Cancel** button, the Login page opens without initializing the password.

11.1.22 Creating a Backup for MEAP Application Area, Formatting the Hard Disk, Restoring the MEAP Application Area with the Backup, Using the SST (Service Support Tool)

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

You can back up the area of the HDD where MEAP applications reside to a PC, as when you want to format the HDD. MEAP devices use a license-based mechanism to control applications so that formatting the HDD will necessarily delete the jar files and application data, requiring you to not only reinstall them but also make necessary settings. (Doing so consists in obtaining special license files for reinstallation and downloading user data/settings, increasing your work load.)

If you use the SST's backup function, you will be able to temporarily put aside the area of MEAP applications, thus being free of the foregoing extra work. This function, however, is limited to a specific MEAP device (serial number), and cannot be used for illegal copying of applications.

⚠
You must not perform any other work (including checking operation) until the HDD has been backed up. This arrangement is to prevent a mismatch of MEAP counter readings and the HDD contents, and any fault in operation arising as the result of failure to observe this will not be covered by the guarantee of operation.

Memo:
The application that is installed with a reusable license can be reinstalled by using the same license.

The following list shows the details of area that SST backs up;
Jar files of MEAP applications
Settings set with MEAP applications.
Note that SST does not back up images in Mailboxes that MEAP applications use.
User information data registered with SDL

Requirements for Backup Using the SST
The following conditions must be met for use of the function:

1) Device Firmware Version

T-11-16

	Boot ROM	System	SST
iR2220 Series iR2250 Series	24.42 later	33.01 later	Since Ver 1.81
iR5020 Series iR5160 Series	24.42 later	54.02 later	Since Ver 1.81
Devices ither than those listed the above.	Already supported since the 1st version.	Already supported since the 1st version.	The version supporting the corresponding devices.

2) SST Version
Version 1.81 or later. An earlier version will not permit the use of the function. If needed, upgrade the SST.

3) Space for backup

To back up the HDD of the iR, the PC must have approx 300 MB of free space at maximum.

Making a Backup and Formatting Hard Disk Drive with Service Support Tool

1) If SDL or SSO is used for the login service, switch to default authentication before backing up the user information. Although SST will back up SDL user information, it is recommended to export the user information just in case. For SDL user information backup, go to User Management page of Simple Device Login site and export the data. (The SDL login page opens with the URL **"http://<device IP address>:8000/sdl/"**).

⚠

If a hard disk of a system that uses SDL or SSO is formatted without changing the login service to the default authentication, the error message "The login service must be set again with SMS" appears and the system cannot start up when you attempt to restart the system after formatting. If this problem occurs, change the login service to SDL or SSO with SMS. If you cannot access to SMS since you do not have the IP address of the device, start the system with FIXIP mode - hold down the numeric keys 1 and 7 and turn the power switch on. The IP address "172.16.1.100" will be automatically assigned for the device. Then log in to SMS specifying the address.

---

2) While holding down the 2 and 8 buttons, start up the device in download mode.
As in the case of Sramimg.bin, the function is available only when the device is in Download Mode.

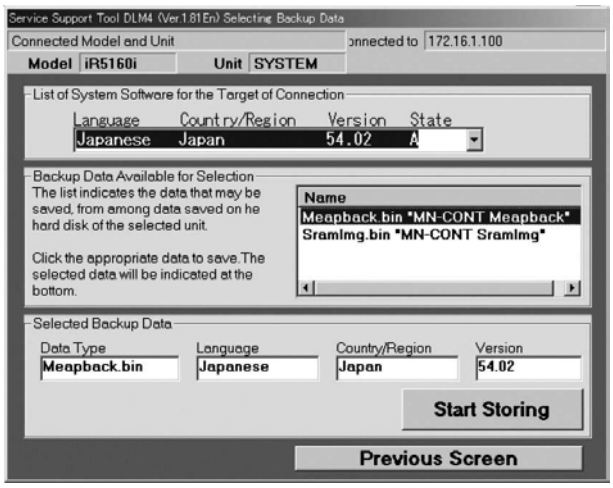
3) Connect the PC to the device and start the Service Support Tool.

4) In Download/Upload session of SST, select the appropriate device model, System in the tree view, and take necessary steps to connect to the device.

5) Click Upload the Backup Data button.

6) Click the option "Meapback.bin" from **Name** list of **Backup Data Available for Selection**, and click **Start Storing** button.

Selecting Meapback.bin



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7) When the data has been generated, enter an appropriate name in **File name** field and click **Save** button; then, click **OK** button to end the backup session.

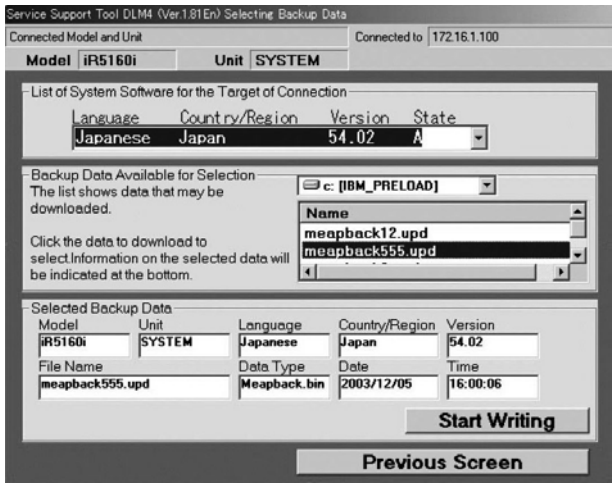
8) In **Selecting Model/Unit** screen, select **HDFormat** and start formatting. All the partitions in the hard disk drive will be formatted.

Restoring the Backup Data
1) After formatting the hard disk drive with SST, install the System, MEAP Contents, Language, and Remote UI files.

2) To restore the backup "Meapback.bin," click **Download the Backup Data** button.

3) Select the backup data file and click **Start Writing** button to download the backup data. Note that SST cannot restore backup data created with a different version.

Selecting Backup Data



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4) When the screen with OK button appears, the restoration of backup data finishes. Click **OK** button.

5) Reboot the main power and access the device with SMS and check that the MEAP applications are restored.

6) Restore non-MEAP backup data and settings that are saved before formatting the hard disk drive. The SDL user information is included in the backup data. You do not have to restore it.

11.1.23 Replacing the Hard Disk Drive

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

If you must replace the hard disk drive because of a fault, all MEAP application files stored on it will also be lost, requiring you to re-install the applications and their license files in addition to performing the normal work associated with the replacement of the hard disk.

Like other counter information, MEAP counter information will remain after replacement. Reinstallation of MEAP applications calls for special license files designed to continue with the current counter readings, thus enabling the use of the applications until the date of their expiration. These special licenses are service tools, and are not offered to general users.

If you cannot make a backup of the license files as hard disk suffers a fault, contact the support staff of the regional headquarters of Canon telling the device serial number and the names of MEAP applications installed to the device to obtain the necessary special license files.

In the support departments of regional headquarters of Canon, all license files of the applications that have been issued are filed according to device serial numbers, enabling you to obtain a series of license files through a single screen as long as you can identify the serial number of the device in question.

The following shows the steps to follow after you have obtained a special license from the support staff of the regional headquarters of Canon.

1) Copy the set of special license files on the PC you are using for service work.
Register the following with the Service Support Tool (SST): system file, language file, remote UI file, hard disk drive format file, MEAP contents file. (Be sure to pay attention to the version compatibility of individual files.)

2) Have the new hard disk drive at hand and replace it on site.
While holding down the 2 and 8 keys at the same time, turn on the main power so that the machine will start up in download mode. The IP address 172.16.1.100 will automatically be used, which enables you to download files in high speed through a network.)

3) Using the SST, format the new HDD, and install the System, MEAP Contents, Language, and Remote UI files.

4) When the device has started normally, obtain the jar files of the MEAP applications from the user, and install them using the license files of the applications in the same way as you would when installing them for the first time.

5) As necessary, make login service selections and import user information.

Memo:
If you format the hard disk without uninstalling MEAP applications, always reinstall the applications previously installed. Unless reinstalling them, lots for the MEAP counters the applications use will not be released. The message "The number of applications that can be installed has exceeded the limit. Try to install this application after uninstalling other applications." may appear and the device does not accept to install new application. To install new applications, once reinstall the applications installed before formatting and uninstall unnecessary applications.

11.1.24 MEAP Safe Mode

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Use safe mode if you need to start up the system without worrying about extra applications. It will start up only those system software files (including SMS) that normally start up as default files while preventing MEAP applications and the like from starting up.

When you have made changes and turned off and then on the device, the control panel will indicate 'MPSF' in its lower right corner. The MEAP applications that may have been active before you shut down the equipment will not start up on their own. Make use of safe mode when restoring the system software as when MEAP applications or services cause a fault as the result of a conflict or wrong sequence of registration/use. You can access to SMS in this condition so that you can take necessary measures, for example, you can stop application that may cause the trouble.

If default authentication has been selected, the mode of authentication remains valid; otherwise, the message "The login service must be set again with SMS" appears. Change the login service as necessary.

Starting in Safe Mode
1) Start the device in service mode: click **Ad Func** key, press 2 and 8 buttons at the same time, and then click **Ad Func** key once again so that the service mode screen appears.

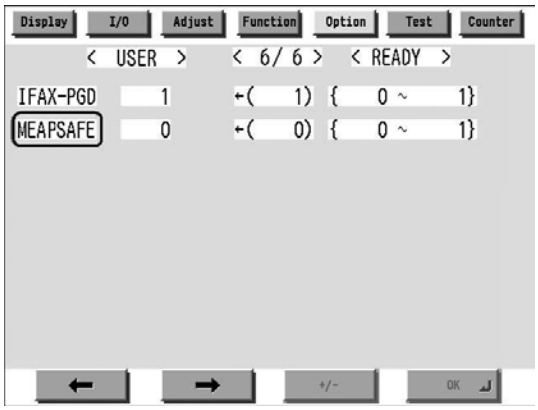
2) Press **COPIER** button.

3) Press **OPTION** button.

4) Press **USER.**

5) Press the right-arrow button.

6) Press **MEAPSAF**E.



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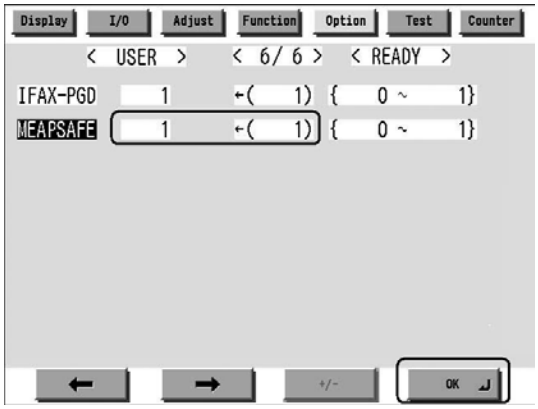
7) Press the 1 key on the control panel keypad to change the setting to '1'; then, click **OK** button.



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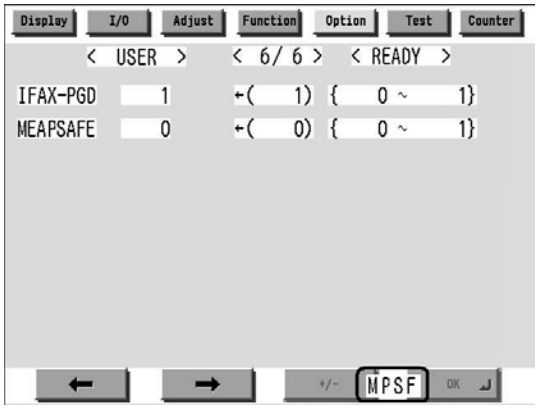
8) Check that the notation 'MPSF' has appeared in the lower right corner of the screen; then, turn off and then on the main power.



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If you want to end safe mode, repeat the steps but change '1' to '0' in step -7 and turn off and then on the main power.

11.1.25 Setting HTTP port for MEAP application (level 2)

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

For the ports in which the MEAP application uses, the default is 8000 for the port on HTTP server, and 8443 for the port on HTTPS server. In the case that these ports have already used by the customer who is to introduce this application, the MEAP application cannot use the HTTP (or HTTPS) server(s).
By changing the following ports to use, however, the MEAP application can be used as well as the existing system.

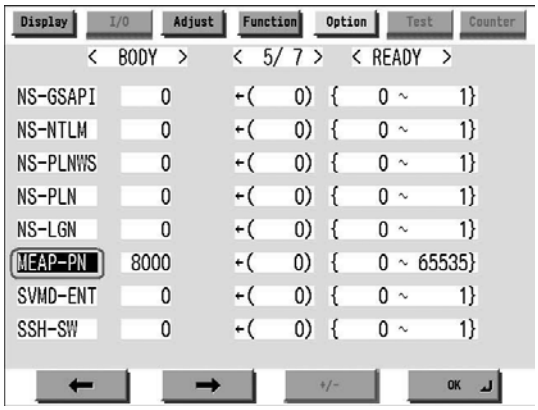
HTTP server
Setting value is 0 through 65535 [the value at factory shipment/after clearing RAM: 8000]

HTTPS server
Setting value is 0 through 65535 [the value at factory shipment/after clearing RAM: 8443]

Memo:
-As for port on HTTPS server, it only applies to the device that supports SSL function.
-Make sure not to use 1 through 1023 other than 80 (HTTP) as a port for MEAP. Because the ports in this range are used by general servers, there is a possibility that the ports in this range will be duplicated in the future.

<Setting Procedure of Port on HTTP server>
1) Startup [SERVICE MODE] (After pressing [USER MODE] button of MEAP device, press [2] button and [8] button at the same time on control panel. Then by

pressing [USER MODE] button again, [SERVICE MODE] screen is displayed).
2) Startup level 2 of [SERVICE MODE] (After starting up [SERVICE MODE] in step 1, press [USER MODE] button again. Then, by pressing [2] button on control panel, the screen is displayed.
3) Press [COPIER] button.
4) Press [Option] button.
5) Press [BODY] button.
6) Press [<-] button.
7) Press [MEAP-PN] button.



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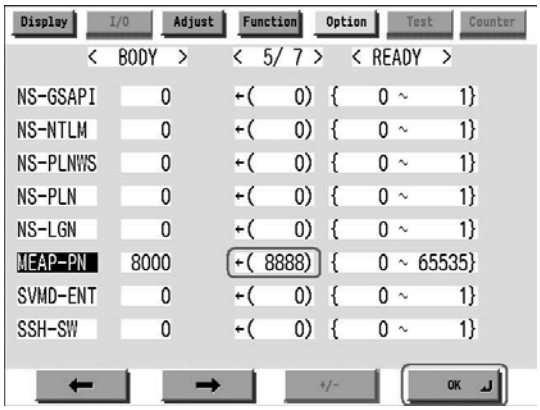
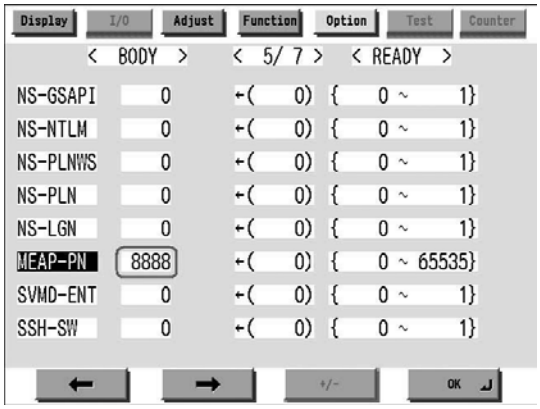
8) Press the port number to specify on the control panel (the numerical value input in the field is displayed), and press [OK] button.



F-11-63

9) Check to see that it is reflected in setting field, and turn off the main power, and then, turn on the main power.



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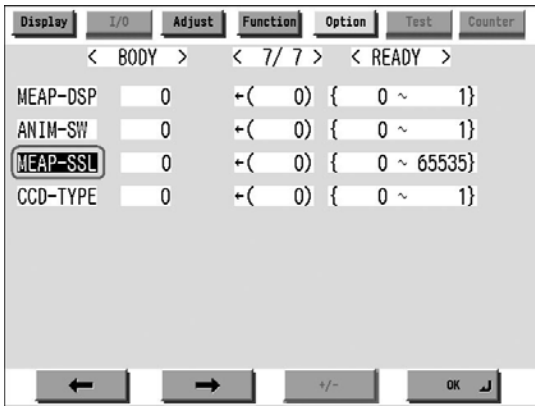
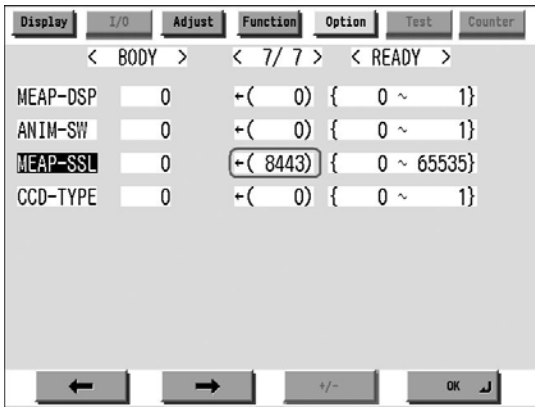
<Setting Procedure of port on HTTPS server>
1) Startup [SERVICE MODE] (After pressing [USER MODE] button of MEAP device, press [2] button and [8] button at the same time on control panel. Then by pressing [USER MODE] button again, [SERVICE MODE] screen is displayed).
2) Startup level 2 of [SERVICE MODE] (After starting up [SERVICE MODE] in step 1, press [USER MODE] button again. Then, by pressing [2] button on control panel, the screen is displayed.
3) Press [COPIER] button.
4) Press [Option] button.
5) Press [BODY] button.
6) Press [<-] button.
7) Press [MEAP-SSL] button.



F-11-65

8) Press the port number to specify on the control panel (the numerical value input in the field is displayed), and press [OK] button.



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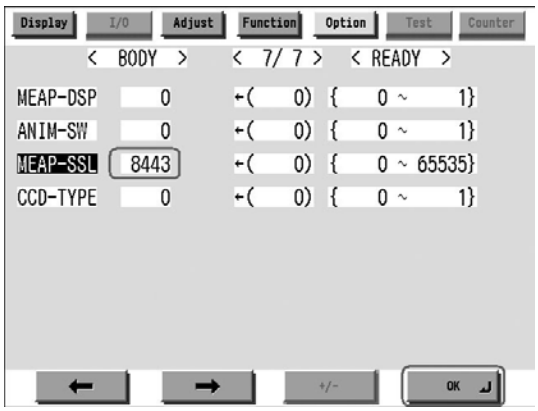
9) Check to see that it is reflected in setting field, and turn off the main power, and then, turn on the main power.



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11.1.26 Reference material

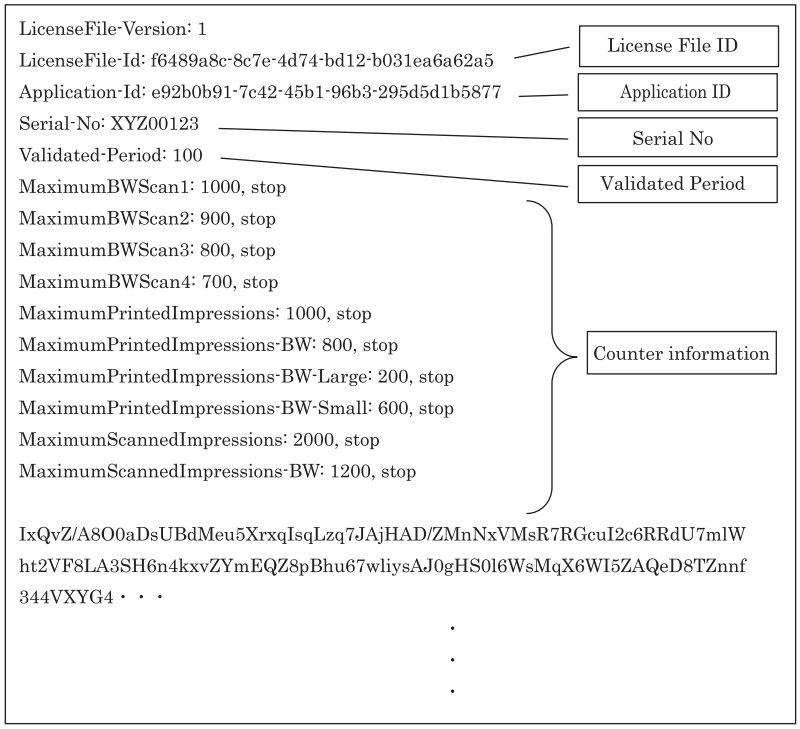
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Glossary

T-11-17

Terms & Acronyms	Definitions and Explanations
Applet	Applet Type Application. A Type of MEAP application that is designed to display user interface on device control panel.
Application	A software unit that provides a solution to users.
Application ID	A unique identifier assigned to each application. Used for indicating memory usage of the application in the MEAP system.
ASP	Application Service Provider. A business to provide the application service on Internet.
AVS	Applet Viewer Service. One of the MEAP system services that shows the user interface of the current applet type service on the console.
Code Sign	To attach Digital Signature to software code. MEAP has the mechanism to reject MEAP application without Code Sign for security reason.
CPCA	Common Peripheral Controlling Architecture. CPCA defines an object model of peripheral deices. A client can control a device by creating or modifying objects in the device.
CPCA Java CL	CPCA Java Class Library. A Java class library, which is used to control a device.
Default Authentication - Department ID Management	The login service used when the department ID control is used but other authentication controls are not used. When the Department ID control is turned on, the login dialog prompts the users to enter the department ID and password. The dialog appears the initial screen of both the control panel on the MEAP device and Remote UI
Device Specification ID	ID assigned for each device model. It shows the usage of functions that are equipped by MFP, as well as CPCA API specification and version numbers that is necessary for acquiring the values such as maximum number of copies, etc.
DIS	Dynamic Service Loading Installer Service. Receives data from the DSL on the MEAP platform. Enables an application to install to two or more devices.
DSL	Dynamic Service Loading. While the SMS installs a license file and application to one device, the DSL can install them to two or more devices. It consists of MEAP ESM and the DIS.
Esplet	Esplet Type Application. A type of MEAP application that does not have a user interface on the device console or on the web browser. The term of "Esplet" is a coinage by Canon inspired from Applet, Servlet, and "Espresso".
File descriptor	With a file descriptor, an OS identifies the files that a program accesses. The file descriptor includes information such as file name and size as well as the identifier. An OS determines files to operate with the identifier.
iR Native Application	The functionalities that existing imageRUNNER has such as Copy, Universal Send and Mailbox.
ISV	Independent Software Vender. Software manufacturer who develops and/or sells applications and tools but does not entire computer systems. Refers application developer in this document.
J2ME	Java 2 Platform Micro Edition. One of Java Platforms licensed by Sun Microsystems, Inc. It is applied for MEAP. Other devices such as cellular phones and PDA.
Java	A programming language developed by Sun Microsystems, in the U. S. A. Low dependent on models and OSes and runs on various platforms. Taking advantage of this feature, many applications that runs on web servers uses Java. The MEAP platform uses J2ME - a type of Java.
Java Script	A script language developed by Netscape Communications, in the U.S. A., runs on web browsers such as Netscape Navigator and Internet Explorer. Allows web designers to create interactive pages with HTML files such as animated buttons and display of timetables.
Java VM	JAVA Virtual Machine. The Java byte code interpreter. The Virtual Machine acts as an interpreter for processing the byte code using the native instruction set.
License Access Number	A number issued for accessing license file. The Licensing server requires entries of application ID, expiration date/times information, and the number of access numbers, to issue license access numbers.
License File	A software manufacture of a MEAP application provides the users with the license files. Specifies the terms of agreement that a user concludes with the manufacturer. Required for installing a MEAP application.
Login Service	Manages user information of MEAP device. Authenticates users with user names and passwords. Three login services are available for MEAP device - Default Authentication, which provides department ID control, SDL (Simple Device Login) and SSO (Single Sign-On).
MEAP	Multifunctional Embedded Application Platform. Provides an environment for executing application programs on a peripheral device. Uses the Java platform (J2ME - Java 2 platform Micro Edition) to run Java application for MEAP.
MEAP AMS	MEAP Application Management System. The license issuing server that issues "License File" necessary for MEAP applications to be installed onto MEAP device. Also used for issuing the "License Access Number".
MEAP Application	Runs on MEAP platform. Consists of application files (*.jar) and the license file (*.lic).
MEAP Contents	Required to install an MEAP application to a MEAP device.
MEAP ESM	MEAP Enterprise Service Manager. One of software programs composing the DSL, to be installed on a PC in a Windows environment. Works as the interface with the DSL.
MEAP Specifications	MEAP Spec Version, the term used for the SDK. The version number that shows the APIs of the MEAP platform other than CPCA, such as network and security. The version number is not assigned for each device model.
MEAP device	imageRUNNER (iR) device that has MEAP Platform incorporated.
MFP	Multi Function Peripheral. Peripheral device that supports more than one function, such as digital copier, printer, scanner, and fax.
OSGi	Open Service Gateway Initiative. See "**http://www.osgi.org/**".
Portal Service	The service displayed on a Web browser by inputting the address "**http://<device IP address>:8000/**" or "**http://<device IP address>/**" A portal to access a MEAP device from a Web browser.
Proxy Server	Provides functions to store data fetched from remote servers. When a user request to display a web page that has been displayed and stored in the proxy, the proxy server read the stored data but does not access the remote server where the original page is present, for efficient access services. When a proxy server receives a URL from a PC, it searches the file in the cache and sends it to the PC if the requested file is found. If the requested file is not stored in the cache, it accesses the remote server of the URL to acquire the file and, at the same time, stores the acquired file in the cache so that the proxy server can quickly send the file at the next request.

Detail of License File



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11.1.27 Option for exclusive individual measure

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

-Display Setting of Copy Tab
Make a setting as to whether to display/hide the copy screen (copy tab) on the control panel. This is the specification for users who want to customize hiding it on control panel.

Default value
1: display

Setting range, item
0: hide 1: display

Setting Procedure
1) Startup [SERVICE MODE] (After pressing [USER MODE] button of MEAP device, press [2] button and [8] button at the same time on control panel. Then by pressing [USER MODE] button again, [SERVICE MODE] screen is displayed).
2) Press [COPIER] button.
3) Press [Option] button.
4) Press [BODY] button.
5) Press [<-]or[->] (arrow) button.
6) Press [UI-COPY] button.
7) Press either 0 (hide) or 1 (display) on control panel (the numerical value input in the field is displayed), and press [OK] button.
8) Check to see that it is reflected in setting field, and turn off the main power, and then, turn on the main power.

-Error at starting up the MEAP application/Setting to hide JAM screen (level 2)
In the case that operation is restricted by MEAP application, hide the warning screen of error/JAM (such as JAM screen, door opening, no-toner). In the case that these errors occur, there will be a display indicating 'call the service personnel' etc.

Memo:
Part of the warning screens is displayed if shifting to the device screen.
- As for the screens for jam and no-toner, the warning screen (animation) can be displayed by pressing the followings: [Device Screen] > [Recovery Procedure]
- As for the screen for door opening, the warning screen cannot be displayed because there is no display for [[Device Screen] > [Recovery Procedure]

Default value
1: No activation of warning display

Setting range, item
0: display warning screen 1: hide warning screen

Setting Procedure
1) Startup [SERVICE MODE] (After pressing [USER MODE] button of MEAP device, press [2] button and [8] button at the same time on control panel. Then by pressing [USER MODE] button again, [SERVICE MODE] screen is displayed).
2) Startup level 2 of [SERVICE MODE] (After starting up [SERVICE MODE] in step 1, press [USER MODE] button again. Then, by pressing [2] button on control panel, the screen is displayed.
3) Press [COPIER] button.
4) Press [Option] button.
5) Press [BODY] button.
6) Press [<-]or[->] button.

7) Press [ANIM-SW] button.
8) Press either 0 (display warning screen) or 1 (hide warning screen) on control panel (the numerical value input in the field is displayed), and press [OK] button.
9) Check to see that it is reflected in setting field, and turn off the main power, and then, turn on the main power.

-Setting of Screen Transition from MEAP Screen to the Standard Screen
In the case that the operation is restricted by MEAP application, make a setting to hide Native applications such as Copy/Send/Box. With this setting, disable screen transition with => key.

Default value
0: OFF (transit to Native screen)

Setting range, item
0: OFF (transit to Native screen) 1: ON (No-transition to Native screen)

Setting Procedure
1) Startup [SERVICE MODE] (After pressing [USER MODE] button of MEAP device, press [2] button and [8] button at the same time on control panel. Then, by pressing [USER MODE] button again, [SERVICE MODE] screen is displayed).
2) Startup level 2 of [SERVICE MODE] (After starting up [SERVICE MODE] in step 1, press [USER MODE] button again. Then, by pressing [2] button on control panel, the screen is displayed.
3) Press [COPIER] button.
4) Press [Option] button.
5) Press [BODY] button.
6) Press [<-] (arrow) button.
7) Press [ANIM-DSP] button.
8) Press either 0 (transit to Native screen) or 1 (no-transition to Native screen) on control panel (the numerical value input in the field is displayed), and press [OK] button.
9) Check to see that it is reflected in setting field, and turn off the main power, and then, turn on the main power.

Chapter 12 RDS

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12.1 RDS

12.1.1 Application operation mode

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Serviceman selects the operation mode of OFF/ON by the setting in e-RDS setting screen of the service mode. (Menu Screen: E-RDS)
- OFF (default): e-RDS doesn't operate.
- ON: e-RDS operates every function.

12.1.2 Service Center URL and Port Specification

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The URL and the port number of the equipment information destination can be specified as follows.
- Default (specified beforehand)
- Specified by the service mode. (Menu Screen: RGW-ADR, RGW-PORT)

12.1.3 Communication test

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Serviceman can distinguish the communication status with the UGW by executing the communication test in the service mode (Menu Screen: COM-TEST), and referring to the communication log
Error information is displayed in the latest communication log at communication error.

12.1.4 Communication log

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The list of the log of the communication error (proxy server error etc.)(For 30) can be displayed in display panel in the service mode. (Menu Screen: COM-LOG)

12.1.5 Detailed Communication log

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Detailed information of the error in the communication log can be displayed in display panel. (Log List Screen: Each error)

12.1.6 SOAP communication function

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The following processing is achieved by the SOAP communication (SSL client communication).
e-RDS does the host authentication by using the CA*1 certificate of the VeriSign Co..
When the host certificate or the CA certificate is expired, e-RDS doesn't connect to UGW.
*1: CA: Certificate Authority: Organization that issues electronic certificate used by electronic commerce etc

(1) Communication test:
- Do the communication test

(2) Regularly collect the following data, and transmit it.
- Copy Counter
- Service mode counter
- Parts counter
- Mode Counter
- ROM version
- Scheduling information
- Application log

(3) When jam or alarm/service call error is detected from the device, e-RDS transmits to UGW.
- Transmission of alert code(Counter information is transmitted at the same time.)

When the state of the device changes, e-RDS sends the alert code list.
The main alert codes used are Toner LOW/OUT, Jam, and Door open.
When recovering from an error, e-RDS transmits data that shows the recovering from an error again.
- Transmission of Jam log (Counter information is transmitted at the same time.)
- Transmission of Alarm log (Counter information is transmitted at the same time.)
- Transmission of Service Call (Error code) log (Counter information is transmitted at the same time.)

(4) Change of the device scheduling information
- Scheduling information can be changed by the instruction from UGW.

List of Transmissions:

Content of transmission	Transmission timing
Communication test	When Service mode of device is executed
Copy counter collection/transmission	Every 6 hours
Service mode counter collection/transmission	Every 6 hours
Mode counter collection/transmission	Every 6 hours
Parts counter collection/transmission	Every 6 hours
ROM version transmission	Every 6 hours
Application log	When the log file size exceeds 10kbytes

Content of transmission	Transmission timing
Transmission of alert code	When the state of the device is changed.
Jam	When Jam occurs
Alarm	When Alarm occurs
Error	When Error occurs
Confirmation whether there is processing that e-RDS executes	Every 6 hours

12.1.7 Resend at SOAP transmission error

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

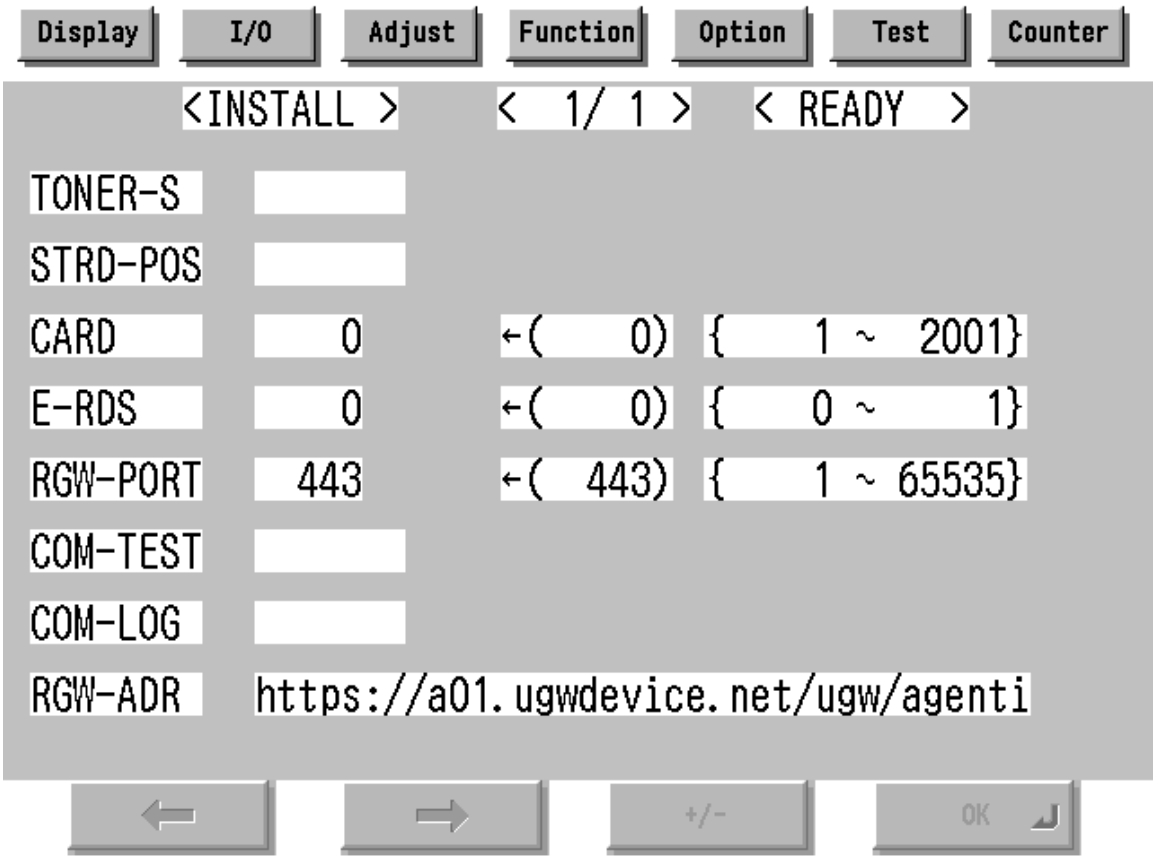
When SOAP send error is generated by the trouble on UGW side etc. at the transmission of an alert code, the latest three batches of data that failed in the transmission are stored in HDD, and e-RDS resends it at prescribed intervals.

12.1.8 e-RDS setting screen

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The e-RDS setting screen is in the service mode screen.
When the tab above is selected on any e-RDS setting screen, it changes to the mid item screen. Moreover, it returns to previous screen when reset key is pressed.

Menu Screen



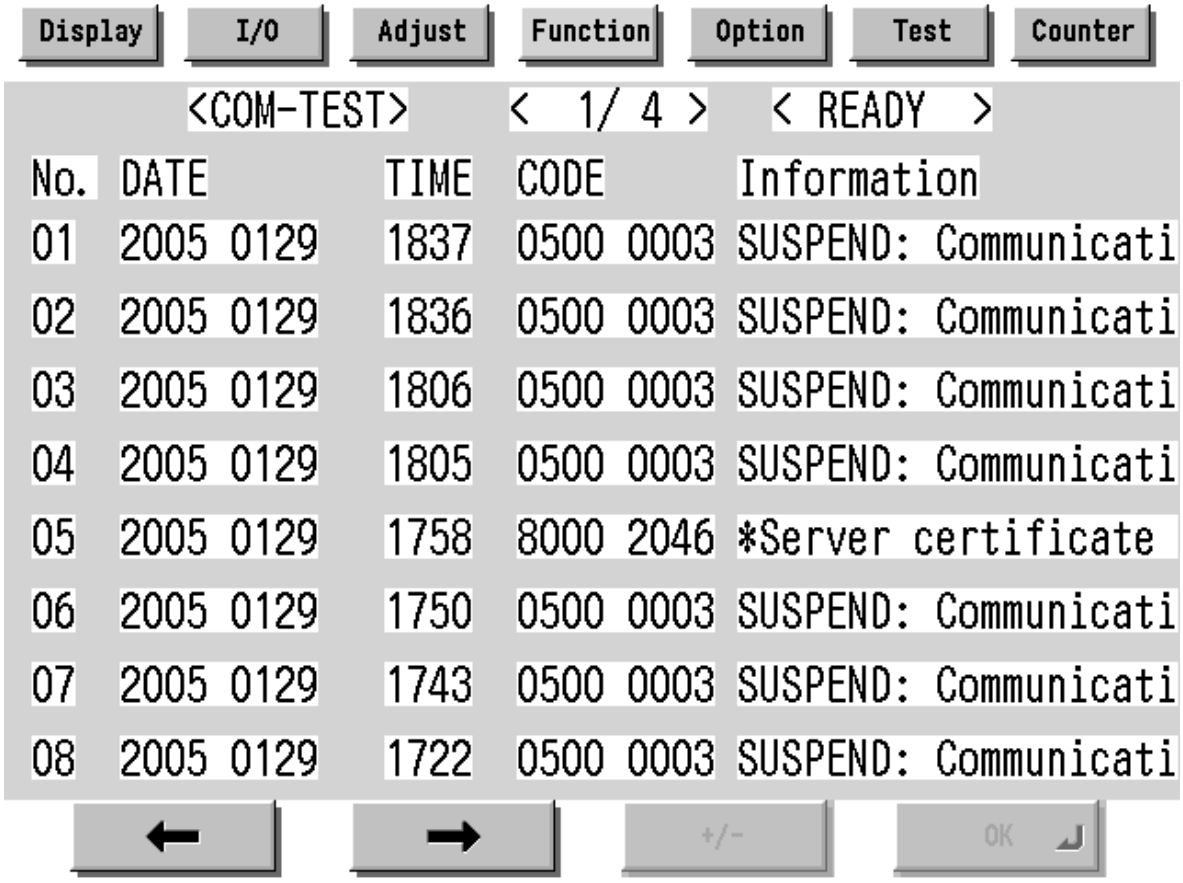
F-12-1

Setting screen of e-RDS. The form and the initial value of each setting item are as follows.

Item(meaning)	Explanation
E-RDS (Embedded-RDS)	Turning OFF/ON e-RDS. 0:OFF / 1:ON Counter information and error information are transmitted to the host at ON. Initial value: 0: OFF
RGW-ADR (RDS-Gateway ADDRESS)	URL of the host (When the input area is selected (touched), shift to the keyboard screen) Initial value: URL of an actual host. Length: 129 characters (NULL is contained)
RGW-PORT (RDS-Gateway PORT)	Port Number of the host Initial value: 443 Range of available number: 1-65535
COM-TEST (Communication Test)	Execution of Communication test Communication test starts when you select (touch) this and press the [OK] key. e-RDS tries the connection with the host, and displays the result by "OK!" or "NG!". (NG: No Good, the communication test is failed)

Item(meaning)	Explanation
COM-LOG (Communication Log)	The result of communication test When this is selected (touched), and the blank rectangle on right side is selected, it switches to "Log list screen".

Log list screen



F-12-2

History list of communication test error (error generation date, error code and error information) is displayed.
When the each line is selected (touched), it shifts to "Log detailed screen".
It shifts to "Menu screen" by the [Function] > [INSTALL].
The list screen changes by a right arrow or a left arrow.
Maximum log number: 30
Notes: Only the first part of error information is displayed.

Log detailed screen

F-12-3

Detailed information of individual communication test error is displayed.
Refer to the displayed message to "Error message list".
It shifts to "Log list screen" by the [OK] button pressing.
Maximum length of error information: 128 characters (not include NULL)

12.1.9 Sleep operation

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

When there is a method that should be transmitted while e-RDS is operating (ON), e-RDS wakes from the state of sleep and begins transmitting.

12.1.10 Network Setting (Maintenance)

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

You should do the network setting of Device appropriately before the e-RDS setting.
A. Display the Additional Functions screen.
- Press [Additional Functions (*)] key.
- Input ID code.

B. Display the TCP/IP Settings screen.
- Select (touch) [System Settings] > [Network Settings] > [TCP/IP Settings] on the Touch Panel Display.

C. Setting of items related to IP address
- Select (touch) [IP Address Settings] => IP Address Settings screen is displayed.
- Set each items such as IP Address, Subnet Mask, Gateway Addresses, and DHCP, etc.
- Return to the TCP/IP Settings screen by pushing the [OK] button after the setting ends.

D. DNS Settings
- Select (touch) [DNS Settings] => DNS Settings screen is displayed.
- Set necessary items.
- Return to the TCP/IP Settings screen by pushing the [OK] button after the setting ends.

E. Proxy Settings
- Select (touch) [Proxy Settings] (Press Down arrow button until [Proxy Settings] is displayed on the TCP/IP Settings screen.) => Proxy Settings screen is displayed.
- Set necessary items.
- Return to the TCP/IP Settings screen by pushing the [OK] button after the setting ends.

F. Display the normal screen.
- Press [Additional Functions (*)] key pressing or press [Done] button to a necessary frequency.

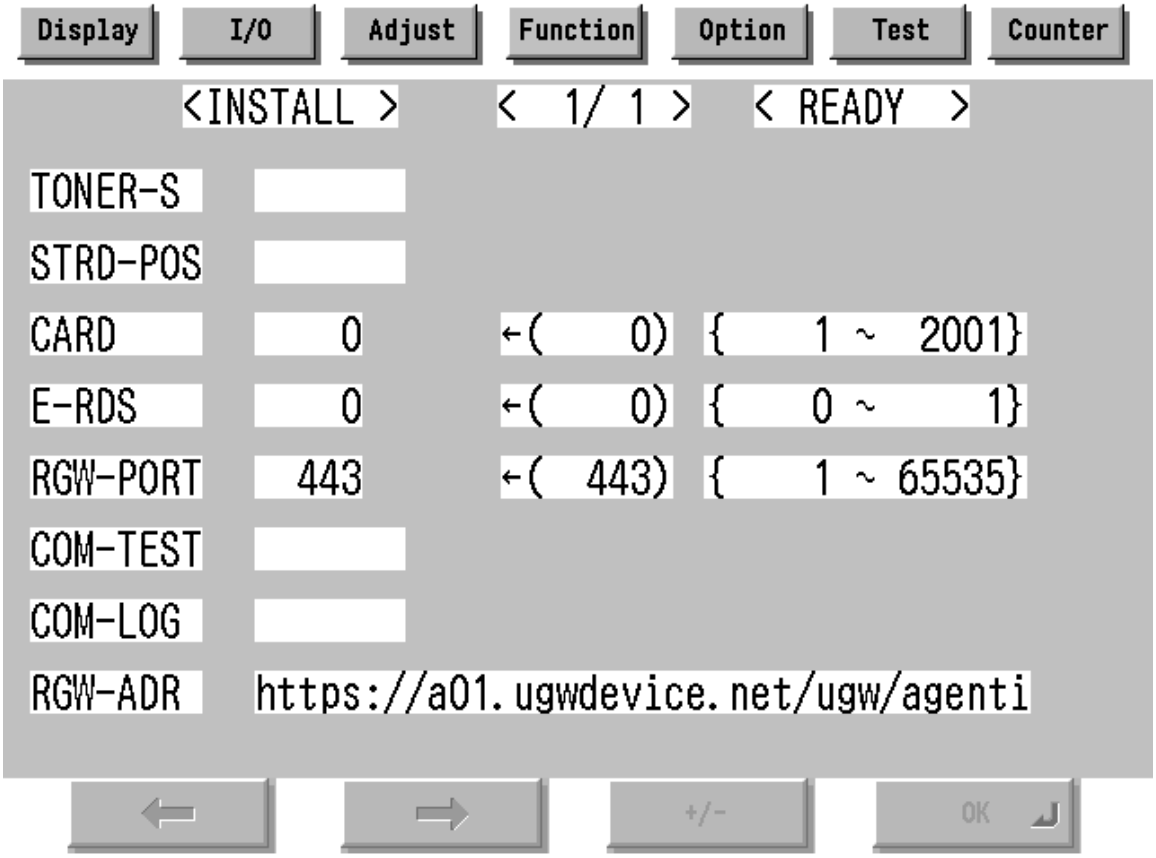
12.1.11 e-RDS Setting (Maintenance)

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

A. Display the Menu screen of e-RDS from the service mode.
A-1. Shift to the service mode
- Press [Additional Functions (*)] key.
- Press 2 and 8 of the numeric keys at the same time.
- Press [Additional Functions (*)] key. => SERVICE MODE LEVEL1

A-2. Initialize e-RDS
- Select (touch) [COPIER] > [Function] > [CLEAR] > [ERDS-DAT] on the Touch Panel Display.

A-3. Display Menu screen of e-RDS
- Select (touch) [COPIER] > [Function] > [INSTALL] => Menu screen



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B. Set 1 in [E-RDS].
C. Input the URL of UGW in [RGW-ADR]. (Select the input area to shift to the keyboard screen, and Input URL.)
D. Input the port number of UGW in [RGW-PORT].
E. Select [COM-TEST] and push [OK] button to start the communication test with UGW.
F. While the result is "NG!", repeat to correct the setting and try [COM-TEST] until the result becomes "OK!". You need checking the setting of the network of the device and the connection of the network if necessary.

Notes: In the environment with the proxy server, you should set the proxy server. Refer to the proxy setting in the network guide of the device for details.

12.1.12 Trouble shoot

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1-1
Q. There is no setting item.
A. Confirm the network setting.
Confirm the model

1-2
Q. The communication test fails.
A. Confirm the firmware version.
Confirm the network setting.
Confirm the communication test result.

12.1.13 Error message

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Error information displayed in "Log list screen" or "Log detailed screen" is as follows.

Notes: Only the first part of error information is displayed in "Log list screen". Maximum length of error information in "Log detailed screen": 128 characters (not include NULL)

When the communication test is not completed end e-RDS is 1 (ON), following string is displayed:
"SUSPEND: Communication test is not performed."

Moreover, when it fails in the event waiting in the device and either of a Jam notification, an Alarm notification, and a Service call notification or an Alert notification is specified, following string is displayed.

"Event Registration is Failed."

In other cases error information is displayed in the form of the following.

"[*] [Error string]: [Method name] [Server side detailed error]"

The enclosed character string by [] is replaced as follows.

[*]:
*(asterisk) is added to the head of the string only at the communication test.

[Error string]:
As for number 1 and 2 of the following Error string lists, only the Error string is displayed. Besides, it is displayed as "[*] [Error string]: [Method name] [Server side detailed error]". ([Server side detailed error] might not go out.)

	Error string	Cause	Counter Measure
1	SUSPEND: Communication test is not performed	The e-RDS is started (the device is rebooted) when e-RDS is ON and communication test isn't done.	Complete the communication test.
2	Event Registration is Failed.	The device failed event processing.	Turn OFF/ON of the device main switch. Or, replace the system software of the device (upgrade).
3	URL Scheme error (not https)	The header of registered URL of UGW is not https.	Change the header on URL of UGW to https
4	Server connection error	Communication failure of TCP/IP occurred. Or IP address of the device isn't set.	Check the network connection.
5	URL server specified is illegal	Illegal URL (other than UGW) is specified.	Correct URL.
6	Proxy connection error	The e-RDS cannot connect it with the proxy server.	Check and correct the proxy server address etc.
7	Proxy authentication error	The e-RDS fails the authentication to proxy.	Check and correct username and password to log in proxy.
8	Server certificate error	- The certificate is not installed in The device. - The certificate that The user is using is not registered in The device or The server.	Register the root certificate in the device or register the VeriSign certificate in the server.
9	Server certificate expired	- Expired certificate is registered in the device or the server. - The date of the device is outside the time limit of the certificate.	- Register the root certificate in expiration date in the device or register the VeriSign certificate in the server. - Set an accurate date to the device.
10	Unknown error	Other communication error occurs.	After waiting for a while, try again.
11	Server response error (NULL)	UGW returns the error but communication to UGW is succeeded. If (NULL) is displayed after the message, the error occurs in the HTTPS communication.	After waiting for a while, try again.
12	Server response error (Hexadecimal)	UGW returns the error but communication to UGW is succeeded. (Hexadecimal) displayed after the message is error code that UGW returns. [server side detailed error] is added at the end of error information only at this error.	After waiting for a while, try again.
13	Device internal error	Device internal error such as the memory cannot be taken occurs.	Turn OFF/ON of the device main switch. Or, replace the system software of the device (upgrade).
14	Server schedule is invalid	The schedule setting value given by UGW is found faulty at the time of communication test.	Report the detailed information of error occurrence to the support department. After the remedy by UGW, retry the communication test.
15	Server response time out	There was no reply from UGW in predetermined time. (The congestion of the network etc.) It is the timeout at HTTPS level.	After waiting for a while, try again.
16	Service not found	The URL of UGW is illegal, and UGW is inaccessible.	Check and correct the URL of UGW.
17	E-RDS switch is set OFF	You execute the communication test while the E-RDS switch is OFF.	Turn ON E-RDS switch, and execute the communication test.
18	Server schedule is not exist	The e-RDS receives empty schedule data from UGW.	Check setting file. (Call the help desk of UGW.)
19	Network is not ready, try later	You execute the communication when the connection to the network has not been established. (The network connection might not be established from the start-up of the device for 60 seconds.)	Confirm that the network connection has been established. Moreover, execute again after enough waiting.
20	URL error	Illegal URL (Syntax error etc.)	Correct URL.

[Method name]:

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	Method name	Meaning
1	postServiceModeCount	Account counter acquisition phase
2	postModeCount	Mode counter acquisition phase
3	postPartsCount	Parts counter acquisition phase
4	postFirmwareInfo	ROM version acquisition phase
5	getOperationList	Check/acquisition phase whether the information file for me is in UGW.
6	postOperationOutcome	
7	postConfiguration	Phase in which E-RDS configuration is transmitted to UGW
8	postGlobalClickCount	Counter acquisition phase
9	postJamLog	Jam notification acquisition phase
10	postServiceCallLog	Error notification acquisition phase
11	postAlert	Alert notification acquisition phase
12	postDebugLog	Log acquisition phase
13	getConfiguration	Information acquisition phase (Schedule transmission etc.)
14	communicationTest	Communication test phase

[Server side detailed error]:
Detailed error information returned from UGW is displayed for "Server response error".
However, only the first 128 characters are displayed by the entire error information.
Nothing is displayed here at other errors.

Chapter 13 Maintenance and Inspection

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13.1 Periodically Replaced Parts

13.1.1 Overview

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Some parts of the machine must be replaced on a periodical basis so as to ensure a specific level of performance. They may be free of external changes or damage, but they can significantly affect the machine performance once they lose their function.
It is best if replacement work is scheduled to coincide with a scheduled visit to the user's.

The values indicated herein are estimates only and are subject to change depending on the site environment and how the machine is used.

13.1.2 Reader Unit

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The machine's reader unit does not have parts that must be replaced on a periodical basis.

13.1.3 Printer Unit

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The machine's printer unit does not have parts that must be replaced on a periodical basis.

13.2 Durables and Consumables

13.2.1 Outline

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Some parts of the machine may require replacement once or more over the life of the product because of deterioration or damage. Replace them as needed by referring to the guide.
Find Out When to Replace
Use the following service mode to find out when it is best to replace a specific durable part.
- Copier
  COPIER>COUNTER>DRBL-1
- Option
  COPIER>COUNTER>DRBL-2

13.2.2 Reader Unit

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The reader unit does not have parts that are designated as "durables."

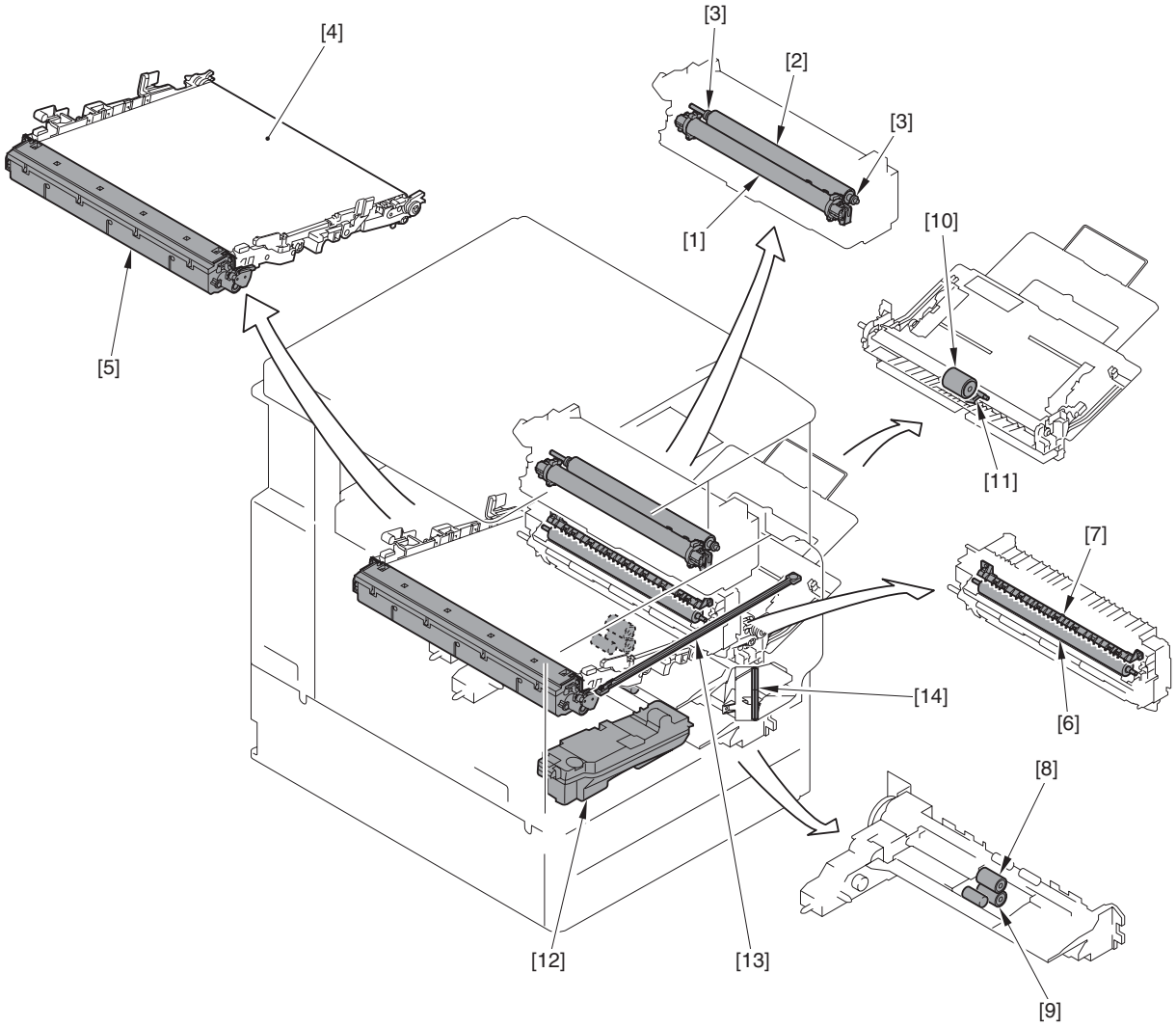
13.2.3 Printer Unit

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

T-13-1

No.	Parts name	Parts Number	Quantity	Replacement Timing	
1	Fixing Film Unit (100V)	FM3-1992	1	150,000	
	Fixing Film Unit (120V)	FM3-1993	1	150,000	
	Fixing Film Unit (230V)	FM3-1994	1	150,000	
2	Pressure Roller	FC7-4453	1	150,000	
3	bearing	XG9-0172	2	150,000	Pressurizing roller and exchange simultaneously
4	ITB Unit	FM2-5522	1	300,000	
5	Transfer Cleaner Unit	FM2-5523	1	150,000	
6	Secondary Transfer Roller	FC7-7387	1	300,000	
7	Transfer Separation Guide	FM2-9971	1	300,000	
8	Cassette Feed Roller	FF6-2058	1	120,000	
9	Cassette Separation Roller	FC6-6661	1	120,000	
10	Manual Feed Pickup Roller	FB1-8581	1	240,000	
11	Manual Feed Separation Pad	FL2-4453	1	240,000	
12	Waste Toner Box	FM2-5533	1	200,000	5% image ratio and 100% color image ratio.
13	Dust-blocking glass cleaning pad	FL2-4425	1	125,000	
14	Dust-proofing filter	FC6-9549	1	100,000	

MEMO:
The estimated life is in terms of the median value found in the evaluation data. The parts number, further, is subject to change to reflect design changes.



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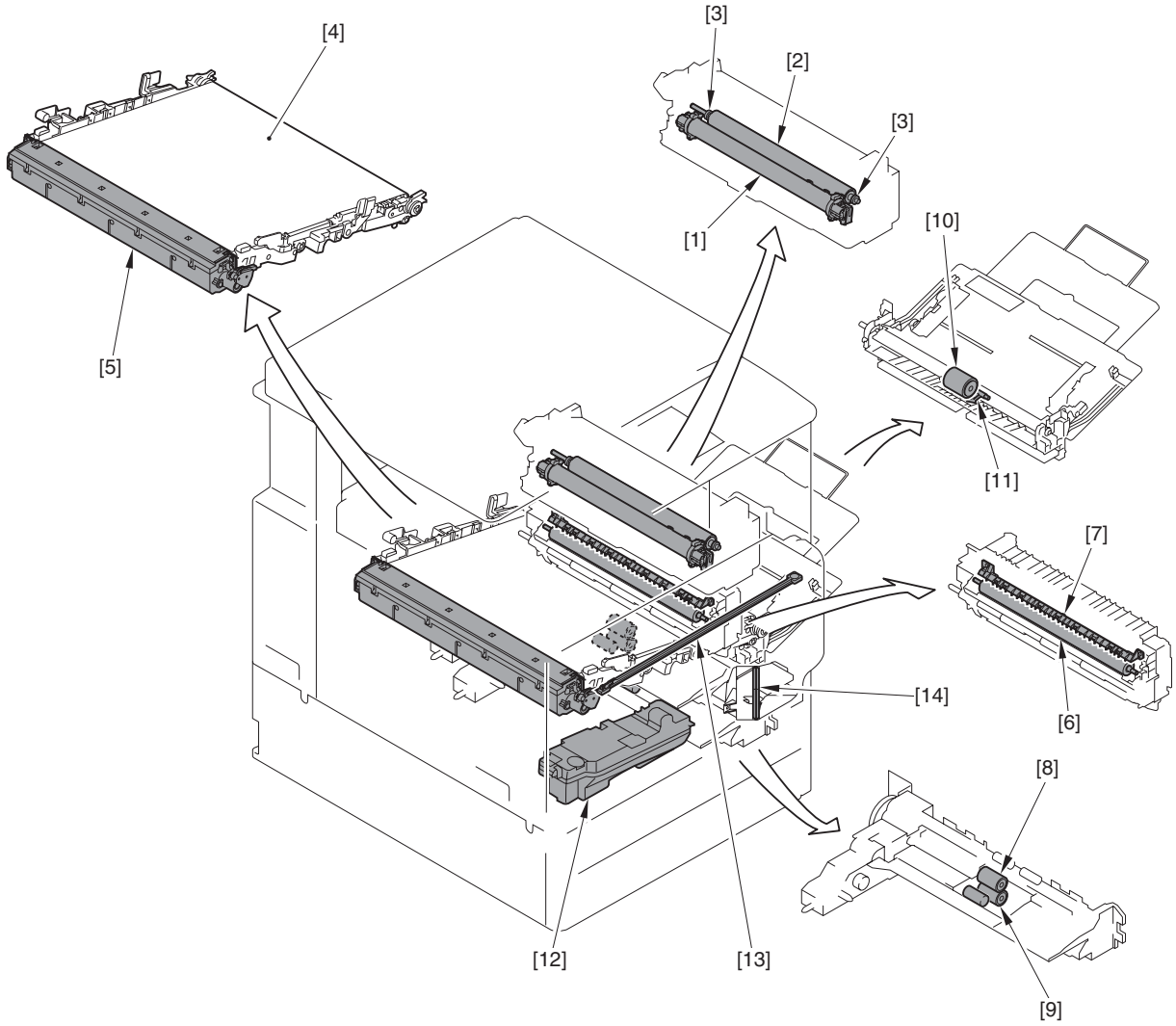

F-13-2

13.3 Scheduled Servicing Basic Procedure

13.3.1 Scheduled Servicing Basic Procedures

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

⚠

- As a rule, perform scheduled servicing every 55,000 prints.
- Before setting out on a scheduled visit, check with the Service Book, and take parts for which replacement is expected.
- If the power plug is exposed to dust, humidity, or oily smoke, the resulting buildup can prove to be a fire hazard. (The buildup of dust, for instance, can absorb moisture and suffer insulating failure.) Be sure to disconnect the power plug on a periodical basis, and remove any buildup of dust and dirt with a dry cloth.

<Work Procedure>
1) Report to the person in change, and have an understanding of the situation.
2) Record the counter reading, and check the faulty prints.
3) Check the following items, and adjust or clean the parts as needed.

T-13-2

Item		
Test copy	image density	
	background (for soiling)	
	characters (for clarity)	
	margin	
	fixing	misregistration, soiled back
	margin (single-sided)	leading edge:2.5±1.5mm
		left:2.5±1.5mm
	margin (double-sided)	leading edge:2.5±2.0mm
		left edge:2.5±2.0mm
Laser exposure system	dust-blocking glass (cleaning)	
Feeding system	toner/feed guide	
	fixing inlet guide	

Item	
Developing system	developing butting spacer

4) Check the waste toner collection case.
If the case is half full or more, empty it in an appropriate bag for collection. Or, replace the waste toner collection case.

- When disposing of the waste toner, be sure to follow all applicable regulations of the local government.
- Do not dispose of waste toner in fire. (Doing so can cause an explosion.)

5) Clean the copyboard glass and the reading glass.
6) Make test copies.
7) Make sample copies.
8) Check the operation of the leakage breaker.
While the machine is supplied with power (power switch ON), press the test switch of the leakage breaker to see if the breaker operates normally (i.e., the lever will shift to OFF to cut off the power).

If the leakage breaker fails to operate normally, replace the breaker, and make a check once again.
<Resetting>
When you have checked the operation of the leakage breaker, turn off the power switch, shift the lever to ON, and turn on the power switch.
9) Put the sample copies in order, and clean up the area around the machine.
10) Record the latest counter readings. At this time, be sure to also record the settings of the following: 'FX-UP-RL' and 'DV-UNIT-K'.
11) Fill out the form in the Service Book, and report to the person in charge. be sure also to indicate the check on the leakage breaker in the history of checks.

13.3.2 Items of Work for Scheduled Servicing (reader unit)

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The machine's reader unit does not have items that must be serviced on a scheduled basis.

Be sure to clean the copyboard glass and the ADF reading glass during each visit you make for scheduled servicing.

13.3.3 Items of Work for Scheduled Servicing (printer unit)

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Do not use solvents or oils other than those indicated.

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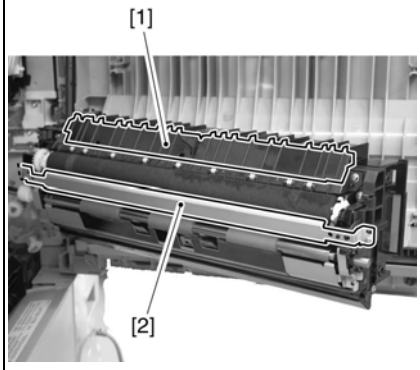
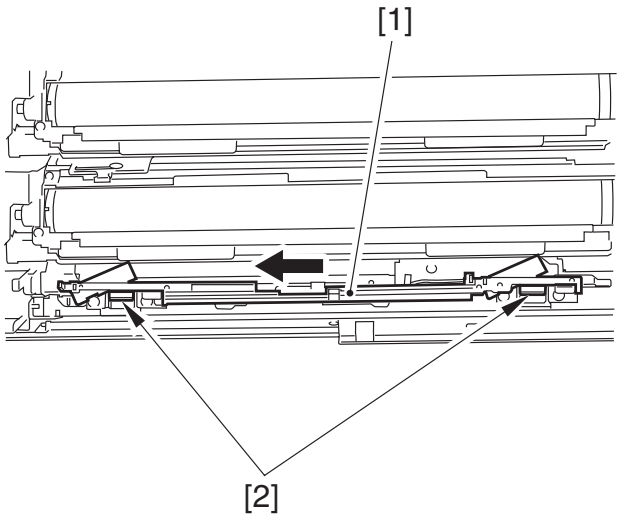
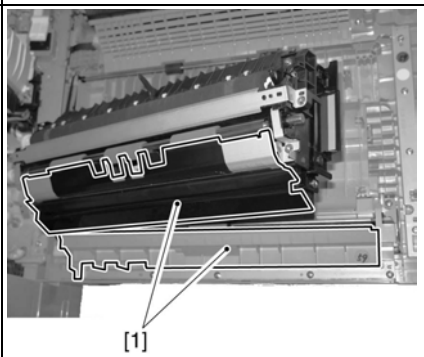
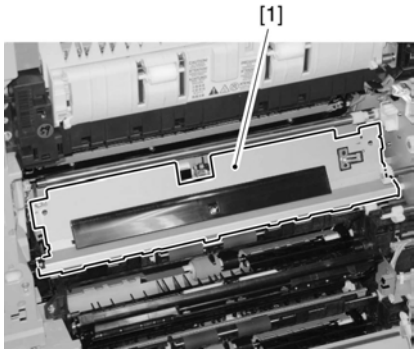
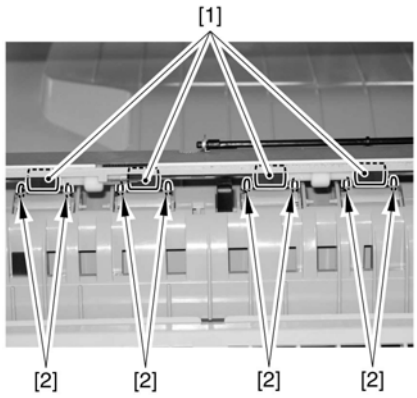
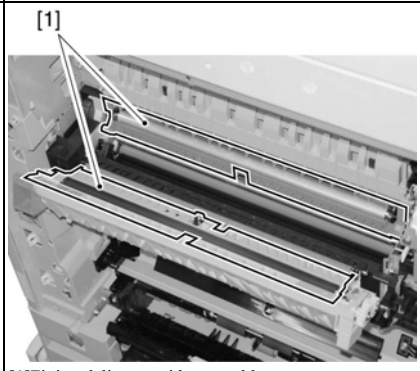
Unit	Location	Item of work	Inter-vals	Remarks
Transfer assembly	Transfer/feed guide	clean	55,000 images	 [1]Feed guide [2]Secondary transfer iner delivery roller guide

Unit	Location	Item of work	Inter-vals	Remarks
Transfer assembly	patch image read sensor	Check	55,000 images	 Clean the part only when dirt is conspicuous. 1) Slide the sensor shutter unit [1] in the direction of the arrow. 2) Wipe after extracting firmly the cloth which wet the sensor [2] with water.
Feeding assembly	Registration roller	clean	55,000 images	
Feeding assembly	Registration front guide	clean	55,000 images	  [1]Registration front guide
Feeding assembly	Transparency sensor surface	clean	240,000 images	

Unit	Location	Item of work	Inter-vals	Remarks
Feeding assembly	Feeding roller, scraping ring	clean	as needed	 [1]Feeding roller [2]scraping ring Clean the part only when dirt is conspicuous.
Feeding assembly	Duplex feed roller 1/2	clean	as needed	Clean the part only when dirt is conspicuous.
Feeding assembly	Inner delivery roller	Check	55,000 images	Clean the part if adhesion is found.
Fixing assembly	Fixing delivery roller	Check	55,000 images	Clean the part if adhesion is found.
Fixing assembly	Fixing delivery guide assembly	clean	as needed	 [1]Fixing delivery guide assembly Clean the part only when dirt is conspicuous.
Others	Dust-blocking glass	clean	At the time of the process unit drawer	Clean with the glass cleaning tool.

⚠The above values are estimates only, and are subject to change according to future data.

Chapter 14 Standards and Adjustments

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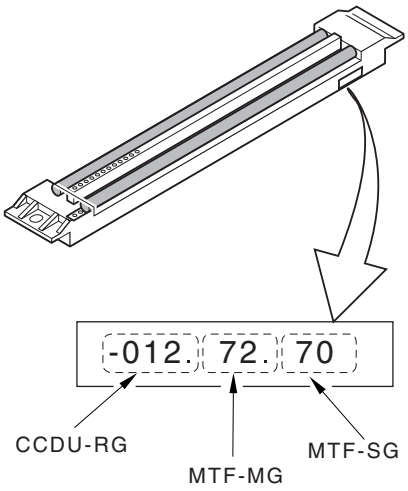
14.1 Scanning System

14.1.1 After Replacing the CIS

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Be sure to enter the values indicated on the CIS label attached to the contact image sensor (CIS) using the following service mode items:

COPIER>ADJUST>CCD>CCDU-RG
(offset value against color displacement caused by CIS)
COPIER>ADJUST>CCD>MTF-MG
(MTF correction value for main scanning direction)
COPIER>ADJUST>CCD>MTF-SG
(MTF correction value for sub scanning direction)



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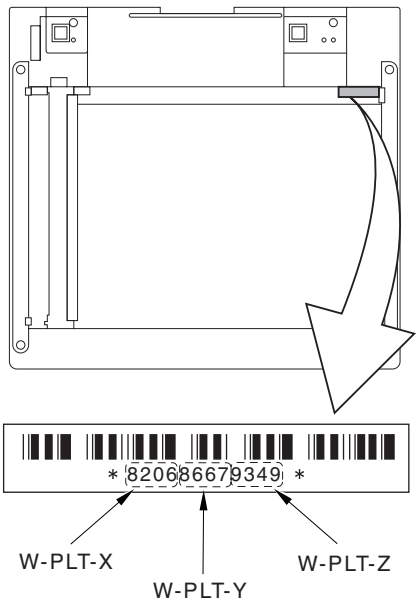
Also, be sure to update the values indicated on the service label attached behind the reader left cover by the values indicated on the CIS label.

Reference:
The machine is not shipped out of the factory with the CIS label attached to it.

14.1.2 After Replacing the Copyboard Glass

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

A. Enter the value indicated by the bar code found at the upper right on the copyboard glass (copyboard cover) using the following service mode items:
COPIER>ADJUST>CCD>W-PLT-X
COPIER>ADJUST>CCD>W-PLT-Y
COPIER>ADJUST>CCD>W-PLT-Z
(standard white plate white level data X, Y, Z)



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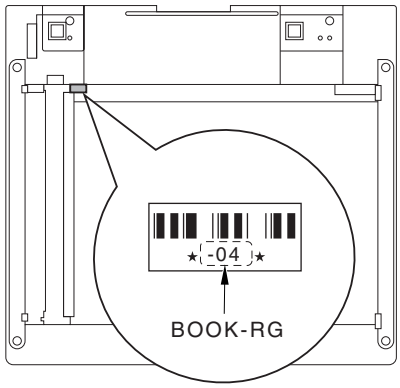
B. Enter the value indicated by the bar code found at the upper left of the copyboard glass (copyboard sheet) using the following service mode item:
COPIER>ADJUST>CCD>BOOK-RG
(offset value against color displacement caused by copyboard glass)



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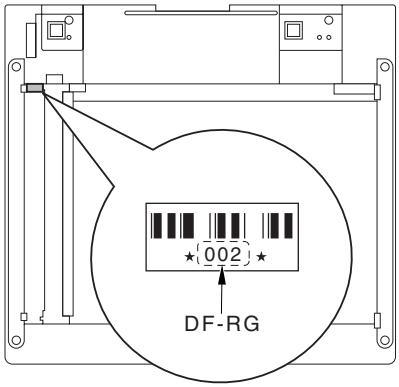
14.1.3 After Replacing the ADF Reading Glass

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Enter the value indicated by the bar code found on the ADF reading glass using the following service mode item:
COPIER>ADJUST>CCD>DF-RG
(offset value against color displacement caused by stream reading glass)



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14.1.4 After Replacing the Reader Controller PCB

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

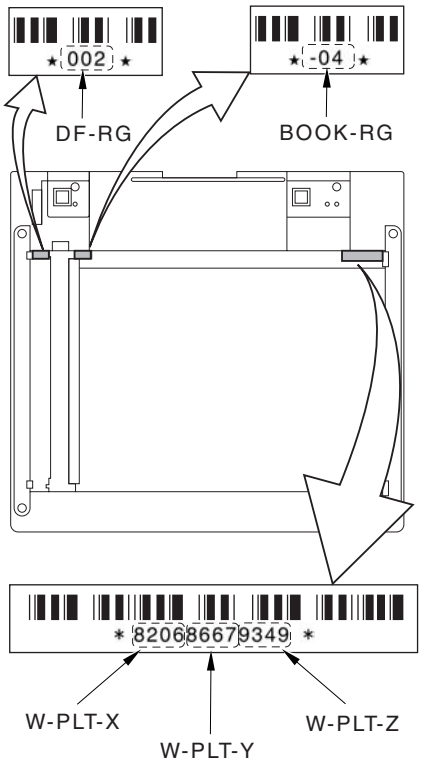
- Before replacing the reader controller PCB, be sure to generate the latest P-PRINT printout.
- If you carry out the power ON and the copier returns to the standby condition after the controller circuit PCB replacement, turn ON/OFF the power supply once again.

<if you are initializing the RAM of the reader controller without replacing the PCB>

- Using the SST, upload the reader controller backup data; after initializing the RAM, download the data, thus eliminating the need for the following adjustment.

1. Reader Unit-Related Adjustment
1) Using the SST, download the latest system software (R-CON).
2) Make the following selections in service mode: COPIER>FUNCTION>CLEAR>R-CON; then, press the OK key to initialize the RAM. Thereafter, turn off and then on the main power.
3) Enter the appropriate values using the following service mode items:

a. standard white plate white level data
COPIER>ADJUST>CCD>W-PLT-X,Y,Z
b. offset value against color displacement for copyboard glass (copyboard cover)
COPIER>ADJUST>CCD>BOOK-RG
c. offset value against color displacement for copyboard glass (ADF)
COPIER>ADJUST>CCD>DF-RG



F-14-5

d. service label (behind reader unit left cover) values

d-1. CIS read position adjustment (fixed reading)
COPIER>ADJUST>ADJ-XY>ADJ-X
d-2. main scanning direction position adjustment (fixed reading)
COPIER>ADJUST>ADJ-XY>ADJ-Y
d-3. shading position adjustment (fixed reading)
COPIER>ADJUST>ADJ-XY>ADJ-S
d-4. sub scanning direction color displacement correction
COPIER>ADJUST>CCD>CCDU-RG
d-5. main/sub scanning direction MTF value
COPIER>ADJUST>CCD>MTF-MG,SG
d-6. auto gradation correction target value
COPIER>ADJUST>PASCAL>OFST-P-Y,M,C,K

⚠ If the value of the following was not 0 before the replacement of the reader controller PCB: COPIER>OPTION>BODY>CCD-LUT.
Set a value other than '0' once again, and make the following adjustments using the D-10 Chart.
COPIER>FUNCTION>CCD>LUT-ADJ2

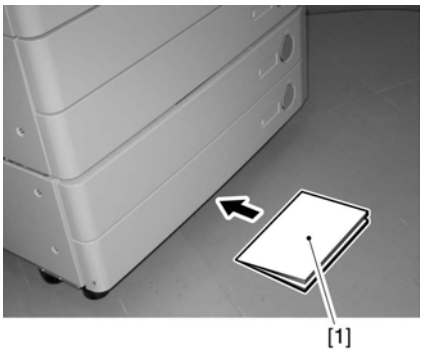
2. ADF-Related Adjustment

⚠ The machine keeps ADF-related service mode data in the RAM of the reader controller; as such, you will have to make the appropriate adjustments if you have replaced the reader controller or initialized the RAM.

1) Enter the values indicated in the P-PRINT printout you have previously generated for the following:
a. main scanning direction position adjustment (stream reading)
COPIER>ADJSUT>ADJ-XY>ADJ-Y-DF
b. original stop position adjustment
FEEDER>ADJSUT>DOCST
c. original feed speed (magnification) adjustment
FEEDER>ADUST>LA-SPEED

2) Make adjustments using the following items:
a. tray width adjustment
FEEDER>FUNCTION>TRY-A4
FEEDER>FUNCTION>TRY-A5R
FEEDER>FUNCTION>TRY-LTR
FEEDER>FUNCTION>TRY-LTRR
b. CIS read position adjustment (stream reading)
COPIER>FUNCTION>INSTALL>STRD-POS
c. white level adjustment
COPIER>FUNCTION>CCD>DF-WLVL1
COPIER>FUNCTION>CCD>DF-WLVL2

When you have finished the foregoing adjustments, put the P-PRINT printout [1] you have previously generated in the service book cassette to replace the old P-PRINT printout.



F-14-6

14.2 Laser Exposure System

14.2.1 After Replacing the Laser Scanner Unit

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

When replacing the laser scanner unit, register the values described on the label which is included in the package in the service modes below. After registration, attach the label onto the front cover.
COPIER > FUNCTION > LASER > FSLUT-Y1 to 8
COPIER > FUNCTION > LASER > FSLUT-M1 to 8
COPIER > FUNCTION > LASER > FSLUT-C1 to 8
COPIER > FUNCTION > LASER > FSLUT-K1 to 8
Registration of the main scanner reproduction ratio correction value

14.3 Image Formation System

14.3.1 After Replacing the Secondary Transfer Roller

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Upon replacement to the new secondary transfer outer roller, attachment of the rubber component of the secondary transfer roller onto the ITB belt causes a white spot image.
In order to prevent this, at replacing the secondary transfer outer roller to the new one, coating of toner onto the surface of the roller is required.
When replacing the secondary transfer outer roller, execute the service mode below:
- COPIER > FUNCTION > TNR-COAT
Coating of the Y toner onto the secondary transfer roller

⚠
In case the white spot image occurred after replacing the secondary transfer roller, clean the ITB unit.
Initial settings / registration > adjustment / cleaning > cleaning within the main body

14.4 Fixing System

14.4.1 Confirming of the nip width

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Executed the following item of the service mode, and measure the nip width.
COPIER>FUNCTION>FIXING>NIP-CHK
*:The sheet stops temporarily at the fixing unit and it is delivered.

Standard of the nip width
Center part: 8mm or more
Difference of right and left edge: 1mm or less

14.5 Electrical Components

14.5.1 After Replacing the Reader Controller PCB

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

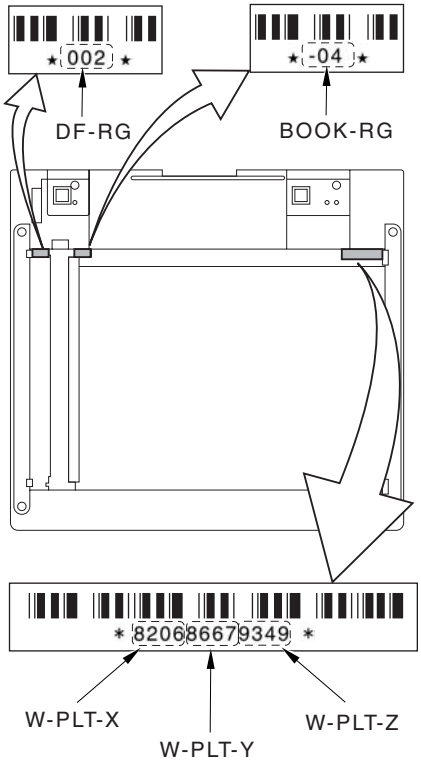
⚠
- Before replacing the reader controller PCB, be sure to generate the latest P-PRINT printout.
- If you carry out the power ON and the copier returns to the standby condition after the controller circuit PCB replacement, turn ON/OFF the power supply once again.

<if you are initializing the RAM of the reader controller without replacing the PCB>
- Using the SST, upload the reader controller backup data; after initializing the RAM, download the data, thus eliminating the need for the following adjustment.

1. Reader Unit-Related Adjustment

1) Using the SST, download the latest system software (R-CON).
2) Make the following selections in service mode: COPIER>FUNCTION>CLEAR>R-CON; then, press the OK key to initialize the RAM. Thereafter, turn off and then on the main power.
3) Enter the appropriate values using the following service mode items:

a. standard white plate white level data
COPIER>ADJUST>CCD>W-PLT-X,Y,Z
b. offset value against color displacement for copyboard glass (copyboard cover)
COPIER>ADJUST>CCD>BOOK-RG
c. offset value against color displacement for copyboard glass (ADF)
COPIER>ADJUST>CCD>DF-RG



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d. service label (behind reader unit left cover) values

d-1. CIS read position adjustment (fixed reading)
COPIER>ADJUST>ADJ-XY>ADJ-X
d-2. main scanning direction position adjustment (fixed reading)
COPIER>ADJUST>ADJ-XY>ADJ-Y
d-3. shading position adjustment (fixed reading)
COPIER>ADJUST>ADJ-XY>ADJ-S
d-4. sub scanning direction color displacement correction
COPIER>ADJUST>CCD>CCDU-RG
d-5. main/sub scanning direction MTF value
COPIER>ADJUST>CCD>MTF-MG,SG
d-6. auto gradation correction target value
COPIER>ADJUST>PASCAL>OFST-P-Y,M,C,K

If the value of the following was not 0 before the replacement of the reader controller PCB: COPIER>OPTION>BODY>CCD-LUT.
Set a value other than '0' once again, and make the following adjustments using the D-10 Chart.
COPIER>FUNCTION>CCD>LUT-ADJ2

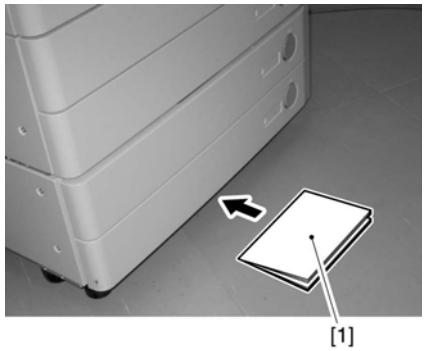
2. ADF-Related Adjustment

The machine keeps ADF-related service mode data in the RAM of the reader controller; as such, you will have to make the appropriate adjustments if you have replaced the reader controller or initialized the RAM.

1) Enter the values indicated in the P-PRINT printout you have previously generated for the following:
a. main scanning direction position adjustment (stream reading)
COPIER>ADJSUT>ADJ-XY>ADJ-Y-DF
b. original stop position adjustment
FEEDER>ADJSUT>DOCST
c. original feed speed (magnification) adjustment
FEEDER>ADUST>LA-SPEED

2) Make adjustments using the following items:
a. tray width adjustment
FEEDER>FUNCTION>TRY-A4
FEEDER>FUNCTION>TRY-A5R
FEEDER>FUNCTION>TRY-LTR
FEEDER>FUNCTION>TRY-LTRR
b. CIS read position adjustment (stream reading)
COPIER>FUNCTION>INSTALL>STRD-POS
c. white level adjustment
COPIER>FUNCTION>CCD>DF-WLVL1
COPIER>FUNCTION>CCD>DF-WLVL2

When you have finished the foregoing adjustments, put the P-PRINT printout [1] you have previously generated in the service book cassette to replace the old P-PRINT printout.



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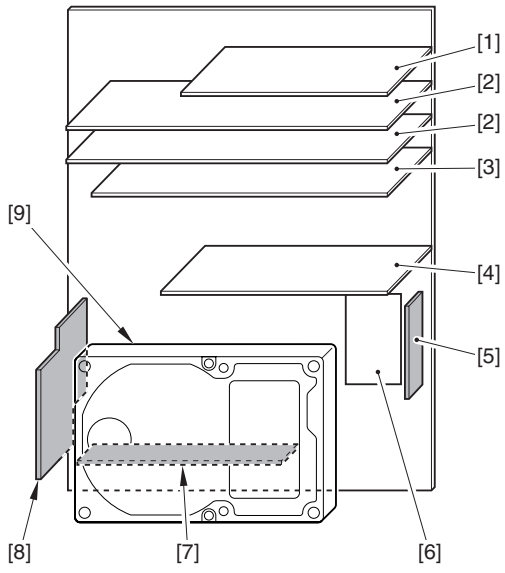
14.5.2 Replacing Main Controller PCB

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

After mounting the main controller PCB (main), mount each PCB that is removed before the replacement.
[1] Main Controller PCB (Sub R-A)
[2] Main Controller PCB (Sub PDEM-EF-A)
[3] Main Controller PCB (Sub SJ-A)
[4] Main Controller PCB (Sub LANBAR-C)
[5] Storage of program for BOOT ROM BOOT
[6] SRAM PCB
[7] DDR-SDRAM
[8] Main Controller PCB (Sub RB-A)
[9] HDD



F-14-9

14.5.3 When Replacing the SRAM PCB

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

When the SRAM PCB is replaced, all data in its memory will be lost (file-related, user mode-related, service mode-related, history-related files). There will be no error operation, and initialization will take place automatically.
If you pull out the SRAM PCB from machine B and mount it to machine A, the PCB will be initialized and be rendered useless for machine A or B. Take full care.

1) When you turn on the power after replacing the SRAM PCB, the machine will perform automatic initialization and will indicate a message on its panel to the effect that you are to turn off and then on the power switch found on its right side. Follow the message and turn off and then on the machine.
2) Using service mode, initialize the RAM.
COPIER>FUNCTION>CLEAR>MN-CON

⚠
Before starting the work, be sure to inform the user that all image data stored in the Box will be lost and obtain his/her consent.

14.5.4 When Replacing the HDD

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1. If NetSpot Accountant (NSA) Is Not Used
1) Formatting the HDD
While holding down the 2 and 8 keys on the control panel, turn on the power to start up. Using the HD formatting function of the SST, format all partitions.
2) Downloading the Software
Using the SST, download the various software (system, language, RUI). The machine will take about 10 min to start up after downloading.

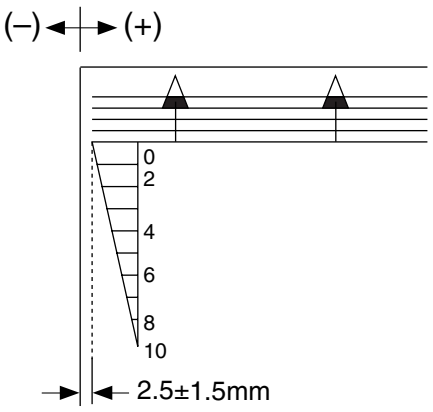
2. If NetSpot Accountant (NSA) Is Used Together with a Card Reader
The card ID used by the NSA resides on the HDD. If you have replaced the HDD, therefore, you will have to newly download the card data from NSA to enable the statistical operations of NSA. After going through steps 1) and 2) above, perform the following:
1) Set the following in service mode:
Select the following : COPIER >FUNCTION >INSTALL >CARD; then, enter the number of the first card, and press [OK].
(For instance, if cards No. 1 through No. 1000 are used for group control, enter '1')
2) Turn off and then on the machine; when the machine has started up, perform the following in user mode:
Select the following : user mode >system control settings >group ID control >count control; then, check that IDs from 00000001 through 00001000 have been prepared.
Select the following : user mode >system control settings >network settings >TCP/IP settings >IP address; then, set up 'IP address' 'gateway address' and 'subnet mask'
Select the following : user mode >system administrator setup; then, fill in 'system control group ID' and 'system control ID No.' thereafter, turn off and then on the machine.
If you leave out 'system control group ID' and 'system control ID No.' the service engineer will not be able to 'register card to device' as part of setup work for NSA.
3) With the machine in standby state, download the card ID to be used from NSA.
4) When the card data has been downloaded from NSA, check that the ID data has correctly been downloaded on the screen brought up by making the following selections:
user mode>system control settings>group ID control
(Only the downloaded ID data must be indicated.)
5) Make copies using a user card registered with NSA, and check that statistical operations are made for the device in question.

14.6 Pickup/Feeding System

14.6.1 Adjusting the Horizontal Registration When Replacing the Pickup Cassette

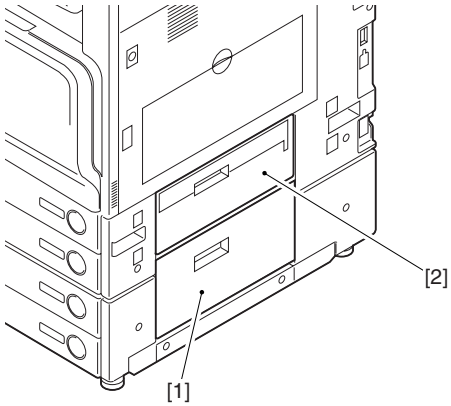
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1. Adjusting the Margin (1st side; mechanical adjustment)
1) Make a copy using the cassettes 1 and 2 as the source of paper; then, check to see that the margin on the front side is 2.5±1.5 mm.



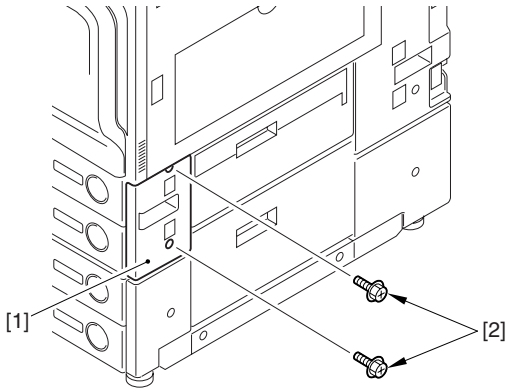
F-14-10

<In the case that the cassette 1, or the cassette 2 is out of specification>
1) In the case of the device with the 2-cassette pedestal, detach the cassette lower right cover [1].
2) Open the cassette upper right cover [2].



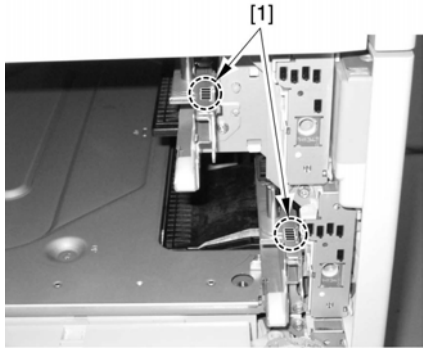
F-14-11

3) Detach the front right cover [1].
- 2 screws [2]



F-14-12

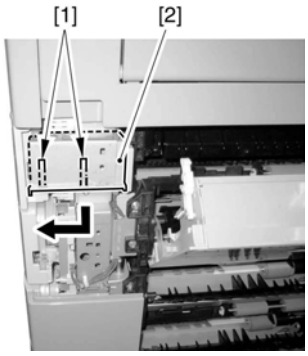
4) Slide out the cassettes 1 and 2.
5) Check the index position [1] on the adjusting plate.



F-14-13

A. Making Adjustments for the Cassette 1

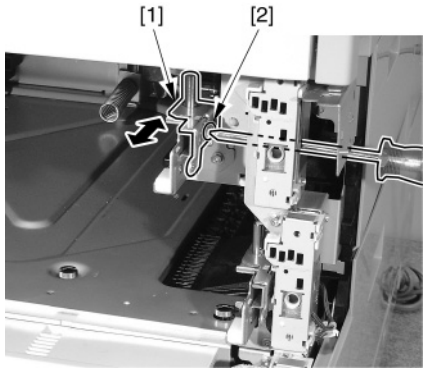
A-1) Free the 2 claws [1], and pull the grip (right front) [2] in the direction of the arrow to detach.



F-14-14

A-2) Loosen the fixing screw [2] of the adjusting plate [1].

A-3) By referring to the index you took note of in step 5), move the adjusting plate back and forth. Moving it toward the rear of the machine will increase the margin on the image front.



F-14-15

A-4) Tighten the fixing screw.

A-5) Slide in the cassette 1.

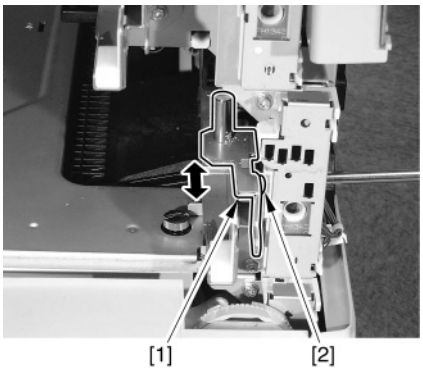
A-6) Make a copy using the cassette 1 as the source of paper; then, check to see that the margin in the image front direction is 2.5 +/-1.5 mm.

A-7) Mount back the grip (front right).

B. Making Adjustments to the Cassette 2

B-1) Loosen the fixing screw [2] of the adjusting plate [1].

B-2) By referring to the index you took note of in step 5), move the adjusting plate back and forth. Moving it toward the rear of the machine will increase the margin on the image front side.



F-14-16

B-3) Tighten the fixing screw.

B-4) Slide back the cassette 2.

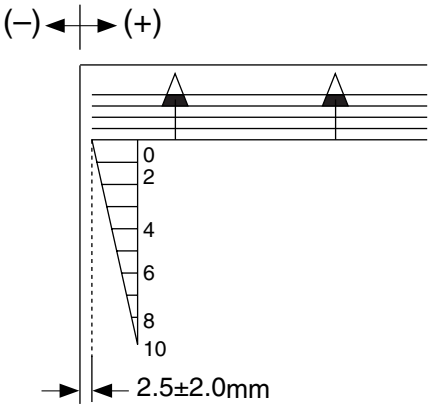
B-5) Make a copy using the cassette 2 as the source of paper; then, check to see that the margin in the image front direction is 2.5 +/-1.5 mm.

3) Mount back the machine's cassette front right cover.

4) Close the cassette lower right cover and the cassette upper right cover.

2. Adjusting the Margin (2nd side)

1) Make a copy using the cassette 1 as the source of paper; then, check to make sure that the margin on the front side is 2.5 +/-2.0 mm.



F-14-17

2) If the margin is as indicated, change the adjustment value of the horizontal registration for the 2nd side for the cassette 1.
- COPIER > ADJUST > FEED-ADJ > ADJ-C1RE

An increase by '1' will decrease the margin on the front side by 0.1 mm.

3) Enter the adjustment value for the horizontal registration of the 2nd side for the cassette 1 as the adjustment value for the horizontal registration of the 2nd side of the cassette 2.
- COPIER > ADJUST > FEED-ADJ > ADJ-C2RE

4) Make a copy using the cassette 2 as the source of paper; then, check to make sure that the margin on the front side is 2.5 +/-2.0 mm.

5) If the value is not as indicated, change the adjustment value of the 2nd side for the cassette 2.
- COPIER > ADJUST > FEED-ADJ > ADJ-C2RE

An increase by '1' (for DJ-C2RE) will decrease the horizontal registration on the front side by 0.1 mm.

6) Record the new values on the service label.
- ADJ-C1RE
- ADJ-C2RE

7) Press the Reset key twice to end service mode.

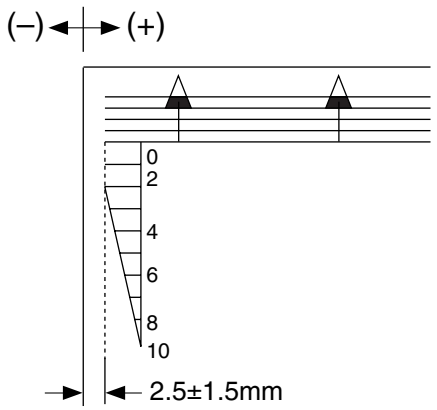
14.6.2 Adjust the Horizontal Registration for the Manual Feed Tray

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1. Adjusting the Margin for the Manual Feed Tray (1st side; mechanical adjustment)

1) Place paper in the manual feed tray. For instructions, see the label attached to the manual feed tray.

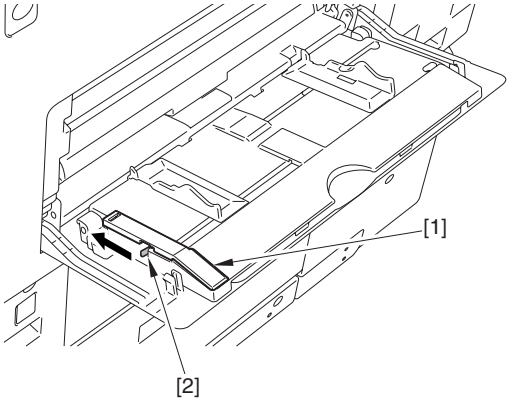
2) Make a copy using the manual feed tray as the source of paper; then, check to make sure that the margin on the front side is 2.5 +/-1.5 mm.



F-14-18

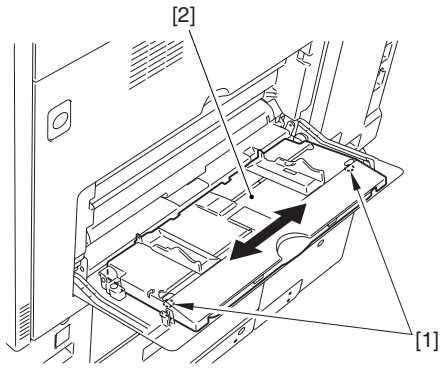
- If the value is not as indicated, make the following adjustments:

3) Remove the paper from the manual feed tray.
4) In case the MP side guide plate stopper [1] is attached, slide the knob [2] in the direction of the arrow and unlock the stopper.



F-14-19

5) Loosen the 2 fixing screws [1] on the manual feed tray upper cover.
6) With reference to the value you took note of in step 2), move the manual feed upper cover [2] back and forth. Moving it toward the rear of the machine will increase the margin on the front side.

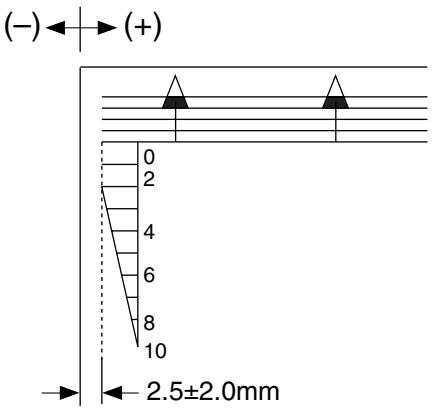


F-14-20

7) Tighten the fixing screw of the manual feed tray upper cover.
8) Place paper in the manual feed tray.
9) Make a copy; then, check to make sure that the margin on the image front side is 2.5 +/-1.5 mm.

2. Adjusting the Margin (manual feed tray; 2nd side)

1) Make a double-sided copy using the manual feed tray as the source of paper; then, check to make sure that the margin on the front side for the 2nd side is 2.5 +/-2.0 mm.



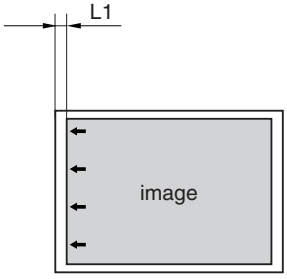
F-14-21

2) If the value is not as indicated, change the horizontal registration adjustment value for the 2nd side for the manual feed tray.
   - COPIER > ADJUST > FEED-ADJ > ADJ-MFRE
   An increase by '1'(ADJ-MFRE) will decrease the margin on the front side by 0.1 mm.
3) Record the new adjustment value on the service label.
   - ADJ-MFRE
4) Press the Reset key twice to end service mode.

3. Adjusting the Margin Along the Leading Edge (1st side)

Make a copy using the cassette 1 as the source of paper; then, check to make sure that the margin along the image leading edge (L1) is 4.0 +1.5/-1.0 mm. If not, make adjustments as follows:

1) Make the following selections in service mode: COPIER > ADJUST > FEED-ADJ > REGIST.
2) Change the setting to make adjustments. (A change of '1' will cause a shift of 0.1 mm, with a higher value moving the image toward the leading edge.)



F-14-22

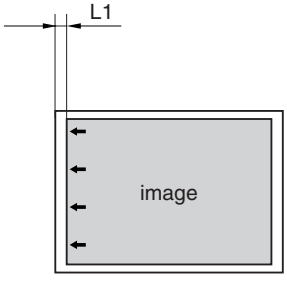
An increase in REGIST will shift the image toward the leading edge of the paper.

3) Record the new adjustment value on the service label.
   - REGIST

4. Adjusting the Margin Along the Leading Edge (2nd side)

Make a double-sided copy using the cassette 1 as the source of paper; then, check to see if the margin along the image leading edge for the 2nd side (L) is 4.0 +1.5/-1.0 mm. If not, make adjustments as follows:

1) Make the following selections in service mode: COPIER > ADJUST > FEED-ADJ > RG-REFE.
2) Change the setting, and make adjustments. (A change of '1' will cause a shift of 0.1 mm, with a higher setting moving the image toward the leading edge.)



F-14-23

An increase in RG-REFE will shift the image toward the leading edge of paper (toward the trailing edge of feed).

3) Record the new adjustment value on the service label.
   - RG-REFE

Chapter 15 Correcting Faulty Images

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15.1 Making Initial Checks

15.1.1 Checking the Site Environment

iR C3380i / iR C3380 / iR C2880i / iR C2880

- The voltage of the source of power must be as indicated (+/-10%), and the power plug must remain connected day and night. (if the cassette heater is installed.)
- The temperature and humidity of the site must be as indicated, and the site must be away from a water faucet, water boiler, humidifier; moreover, the machine must not be near a fire or subjected to dust.
- The site must be free of ammonium gas.
- The machine must not be subjected to the direct rays of the sun. As necessary, curtains must be furnished.
- The site must be well ventilated, and its floor must keep the machine level.
- The machine must remain connected to the wall outlet at all times.

15.1.2 Checking the Paper

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

- Check if the paper is dry. If moist, try paper fresh out of package.
- Check that the amount of paper placed in the cassette and the manual feed tray is as indicated.
- If transparencies are used, check to see if they are placed in the correct orientation.

15.1.3 Checking the Durables

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

- Check the Durables Table, and replace those parts that have reached the end of the indicated lifetimes.

15.1.4 Checking the Units and Functional Blocks

iR C3380i / iR C3380 / iR C2880i / iR C2880

1. Reader Unit
- Check the optical system (contact sensor, white plate, copyboard glass, reading glass) for a scar, dirt, and foreign matter.
- Check the contact sensor unit to see if it moves smoothly. Check its rail for dirt.
- Check the contact sensor for flickering.
- Check the scanner for condensation.

2. Process
- Check the drum unit to see if it is attached properly.
- Check the photosensitive drum for a scar and dirt.
- Check the patch image read sensor window for dirt.

3. Transfer
- Check the secondary transfer outside roller for wear, scar, dirt, and deformation.
- Check the blade of the cleaning unit for a tear, warping, deformation, and stray toner.

4. Fixing
- Check the fixing film/ pressure roller for wear, scar, dirt, and deformation.
- Check the fixing thermistor for an open circuit.
- Check the thermal switch for electrical continuity.

5. Paper Movement
- Check if there is foreign matter such as paper lint.
- Check the pickup/feed/separation roller for a buildup of paper powder, wear, scar, dirt, and deformation.
- Check the registration roller (middle, outside)/paper path roller for wear, scar, dirt, and deformation.
- Check the feed guide for wear, scar, dirt, and deformation.
- Check the paper for a bent leading edge, curling, waving, and moisture.
- As necessary, try transparencies of a type recommended by Canon to see if the problem, if any, is corrected.

6. Machine
- Check if an excess load is imposed on the drive system.
- Check the gears for wear and chipping.

7. Cassette
- Check if the cassettes are fitted properly. Check also to see that the dial is set an appropriate paper size . As necessary, try a normal cassette if the problem, if any, stops.
- Check the movement of the cassette holding plate is smooth. Check also to see that the holding plate is free of deformation.
- Check if the side guide plate/trailing edge plate inside the cassette are set correctly.
- Check if the cassette heater switch is at the ON side (if a cassette heater is fitted).

8. Service Mode
- Check that the various CCD adjustment values are as indicated on the service label.
  (COPIER>ADJUST>CCD>all items)
- Check if registration adjustment is correct.
  (COPIER>ADJUST>FEED-ADJ>REGIST)
- Check if the machine inside temperature/humidity is the correct reading.
  (COPIER>DISPLAY>ANALOG>TEMP/ABS-HUM)
- Check the image read position adjustment is correct.
  (COPIER>ADJUST>ADJ-XY>ADJ-X/ADJ-Y)
- Check if the value for ADJUST/OPTION is as indicated on the service label.
- Check if error initialization has been executed.
  (COPIER>FUNCTION>CLEAR>ERR)

9. General
- Check the power plug is connected properly.
- Check there is the rated AC voltage at the power outlet.
- Check the sensors, clutches, motors, and solenoids operate normally. Check the connectors for poor contact.
  (Be sure to check with the General Timing Chart for reference to power/signal routes.)
- Check the leakage breaker/circuit breaker operates normally.
- Check the wiring for trapping and loose screws.
- Check the external cover are all fitted properly.
- Check the main power switch/control panel power switch are at the ON side.
- Check the power cable/signal cable to accessories are correctly routed.
- Check the cover switch operates normally.
- Check the fuses on the PCBs to see if they have blown.
- Check the user knows how to use the machine correctly.

15.1.5 Others

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

If a machine is brought in from a cold to a warm place, its inside can develop condensation, which will lead to various problems.
(1) condensation on the BD sensor can cause faults associated with E100.
(2) condensation on the dust-blocking glass can cause the images in sub scanning direction to be too light.
(3) condensation on the contact sensor of the reader unit or the copyboard glass can lead to light images.
(4) condensation on the pickup/feed guide can cause faulty paper movement.

If (4) above is noted, be sure to dry wipe the units involved in the feed system.
The same is true of toner cartridges and drum units, i.e., when they are unpacked after being brought in from a cold place. To prevent condensation, advise the user to leave the package alone (for about 1 to 2 hr) before opening it.

15.2 Test Print

15.2.1 Overview

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The machine offers the following 6 types of test prints (TYPE), each designed for identification of a specific type of image fault. The data for these test prints is prepared by the main controller: if the output of a test print is free of the fault in question, suspect a fault on the BDL/PCL/PS input or the reader unit.

15.2.2 TYPE of test print

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

T-15-1

Type No.	Description	Originator
0	normal copy/print	-
1-3	- (for R&D)	-
4	16 gradations	Main controller PCB (main)
5	full half-tone	Main controller PCB (main)
6	grid	Main controller PCB (main)
7-9	- (for R&D)	-
10	MCYBk horizontal stripe (sub scanning direction)	Main controller PCB (main)
11	- (for R&D)	-
12	64 gradations	Main controller PCB (main)
13	- (for R&D)	-
14	full color 16 gradations	Main controller PCB (main)
15-100	- (for R&D)	-

15.2.3 Selecting Test Print TYPE

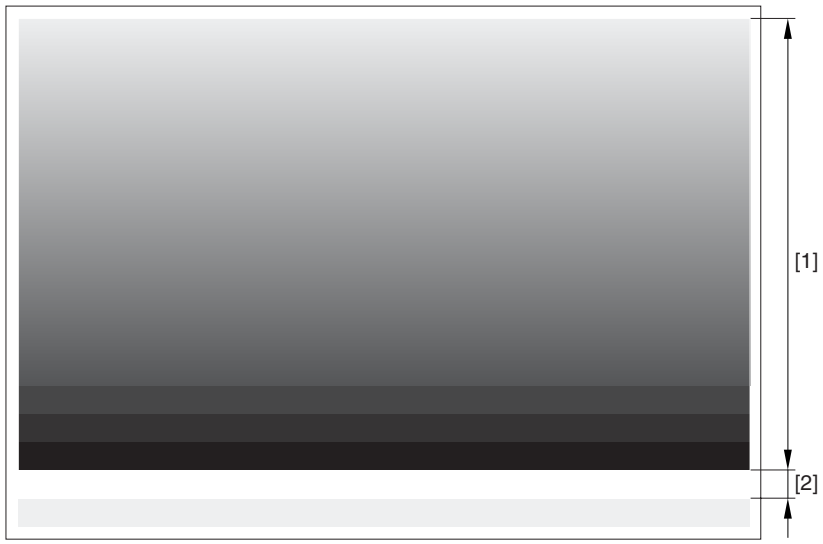
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Set the copy count, paper size, and pickup mode (single-sided or double-sided).
2) Make the following selections in service mode: COPIER>TEST>PG.
3) Make the following selections: COPIER>TEST>PG>TYPE.
4) Enter the appropriate TYPE No. using the keypad, and press the OK key.
5) Select the appropriate color using COLOR-Y/M/C/K (output at 1).
6) Set the density using DENS-Y/M/C/K (valid only if TYPE=5).
7) Set the image mode by TXPH
8) Press the start key.

15.2.4 16-Gradation (TYPE=4)

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Use this test print to check gradation, fogging, white line, and uneven density at the front/rear.
- Gradation
If the 16-gradation[1] is not properly produced, suspect a fault in the drum unit or the laser exposure system.
- Fogging
If fogging is found only in the white area[2], suspect a fault in the drum unit or the laser exposure system.
- White Line
If a white line is found in the image, suspect a fault in the developing system.
- Uneven Density at the Front/Rear
If uneven density is found at the front/rear, suspect a fault in the drum unit, laser exposure system, or transfer system.



F-15-1

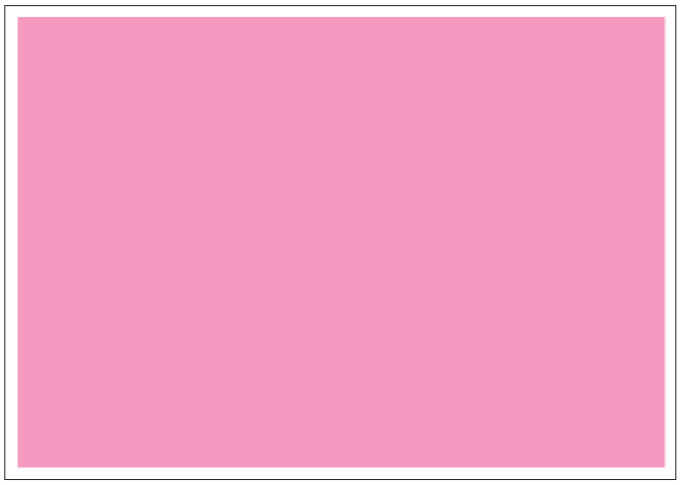
15.2.5 Full Page Halftone (TYPE=5)

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Use this test print to check a transfer fault, black line, white line, and uneven density at specific intervals.

MEMO:
- You can print out test prints for individual colors by making the following selections in service mode: COPIER>TEST>PG and then COLOR-Y/M/C/K.
- You can also change the density of the test prints by making the following selections in service mode: TEST>PG>DENS>Y/M/C/K.

(1) Transfer Fault
If a transfer fault (white spot) occurs, suspect a fault in the ITB unit or the secondary transfer outside roller.
(2) Black Line
If a black line occurs, suspect a scratch in the photosensitive drum or dirt on the primary charging roller.
(3) White Line
If a white line occurs, suspect a fault in the ITB unit, secondary transfer outside roller, or laser exposure system.
(4) Uneven Density
If the density is uneven at specific intervals, suspect the following:
(a) photosensitive drum (if at 92.4 mm)
(b) developing cylinder (if at 42.7 mm)
(5) Uneven Density
If uneven density occurs, suspect dirt on the dust-blocking glass of the laser unit or deterioration of the ITB.



COLOR-M=1, COLOR-Y/C/K=0

F-15-2

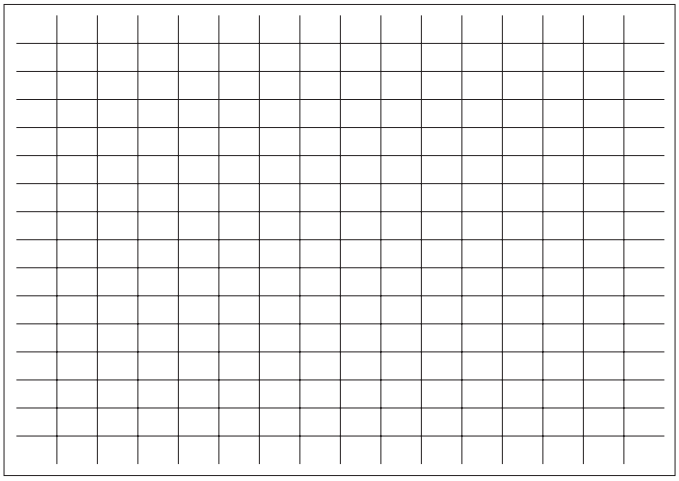
15.2.6 Grid (TYPE=6)

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Use this text print to check color displacement, right angles, and straight lines.

- Color Displacement
If color displacement is found, suspect a scar in the ITB and a fault in the drum unit.

- Right Angle, Straight Lines
If the right angles or straight lines are not correct, suspect a fault in the laser exposure system, a fault in the shape of the registration (inside/ outside) roller, and a fault in the secondary transfer outside roller.



F-15-3

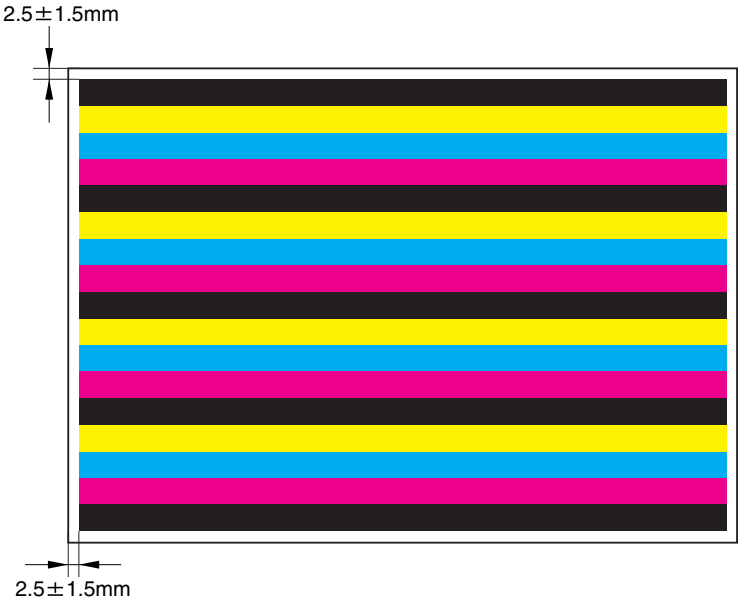
15.2.7 MCYBk Horizontal Stripes (TYPE=10)

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Use this test print to check the density of dark areas of individual colors, balance among colors, and white lines associated with development.
(1) Solid Density of Individual Colors and Balance Among Colors
(a) the density must not be appreciably low (too light).
(b) if the density of a specific color is too low (too light), suspect a fault in the developing system.

(2) While Line
If a white line is found in a specific color, suspect a fault in the development system, transfer system and drum of that particular color.

(3) Uneven Density at the Front/Rear
If uneven density is found in a specific color, suspect a fault in the development system, transfer system and drum of that particular color.



F-15-4

15.2.8 64-Gradation (TYPE=12)

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Use this test print to check the gradation of Y, M, C, and Bk at once.

F-15-5

15.2.9 Full Color 16-Gradation (TYPE=14)

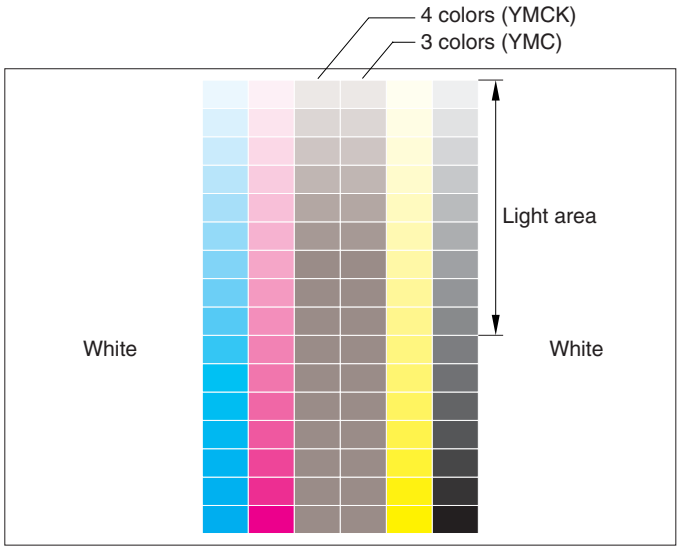
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Use this test print to check the gray balance, gradation of individual colors (YMCBk), and fogging.

- Gray Balance
Check the grayscale area to see if the densities of all colors are even.

- Gradation
Check the gradation of individual colors (YMCBk) and for any difference in color.

- Fogging
If fogging is found in the white area, suspect a fault in the developing system, a fault in the drum, and poor adjustment of the laser exposure system.



F-15-6

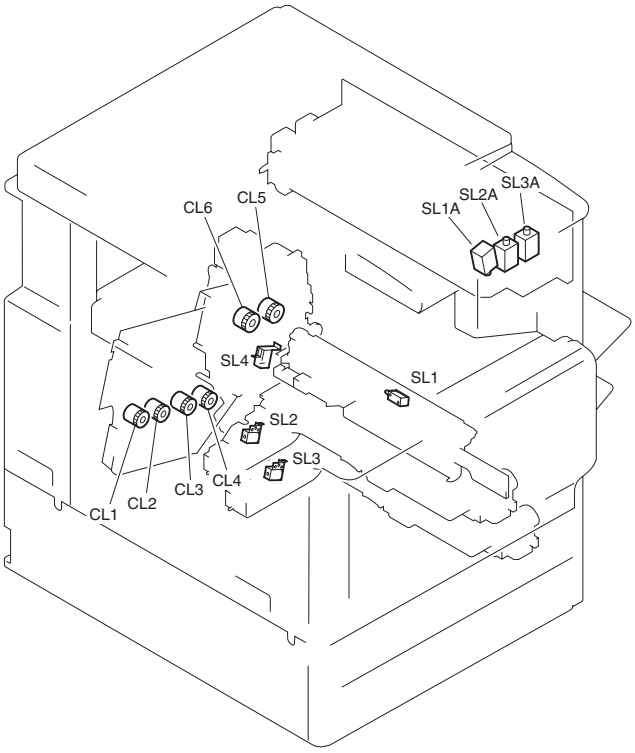
15.3 Outline of Electrical Components

15.3.1 Clutch/Solenoid

15.3.1.1 Clutch/Solenoid Table

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

<Reader Unit>
The reader unit does not have clutches or solenoids.
<Printer Unit>



F-15-7
T-15-2

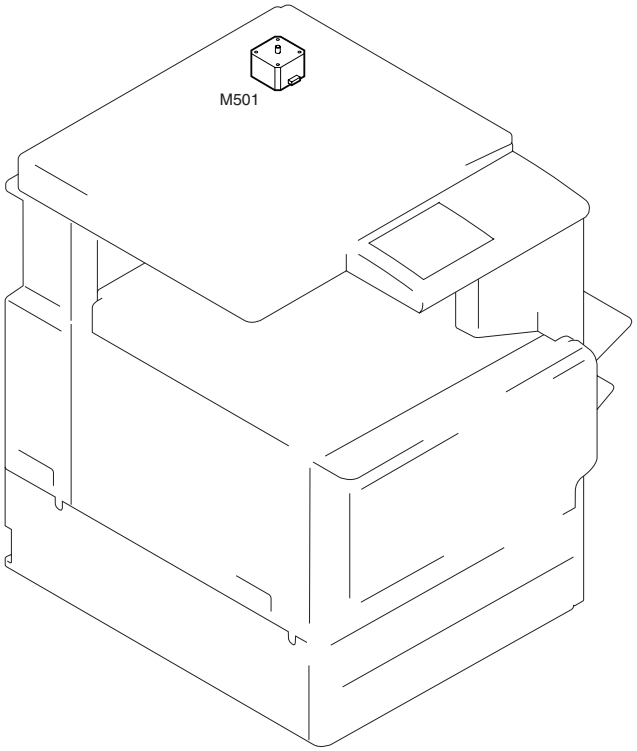
Ref.	Description	Parts number	DC controller PCB
CL1	Yellow develop sleeve clutch	FM2-3581	J210A-2
CL2	Magenta develop sleeve clutch	FM2-3581	J210A-4
CL3	Cyan develop sleeve clutch	FM2-3581	J210A-6
CL4	Black develop sleeve clutch	FM2-3581	J210A-8
CL5	Multi feeder pick-up clutch	FH6-5076	J211-2
CL6	Registration clutch	FK2-2063	J211-4
SL1	Shutter solenoid	FK2-0484	J221A-18
SL2	Cassette 1 pick-up solenoid	FK2-0408	J219A-14
SL3	Cassette 2 pick-up solenoid	FK2-0408	J219B-14
SL4	Multi feeder pad up/ down solenoid	FK2-2070	J217-11
SL1A	No. 1 delivery solenoid	FL2-1203	J744-2(2/3-delivery controller PCB)
SL2A	No. 2 delivery solenoid	FL2-1206	J742-1/ 2(2/3-delivery controller PCB)
SL3A	No. 3 delivery solenoid	FL2-1205	J742-8(2/3-delivery controller PCB)

15.3.2 Motor

15.3.2.1 Motor Table

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

<Reader Unit>



F-15-8

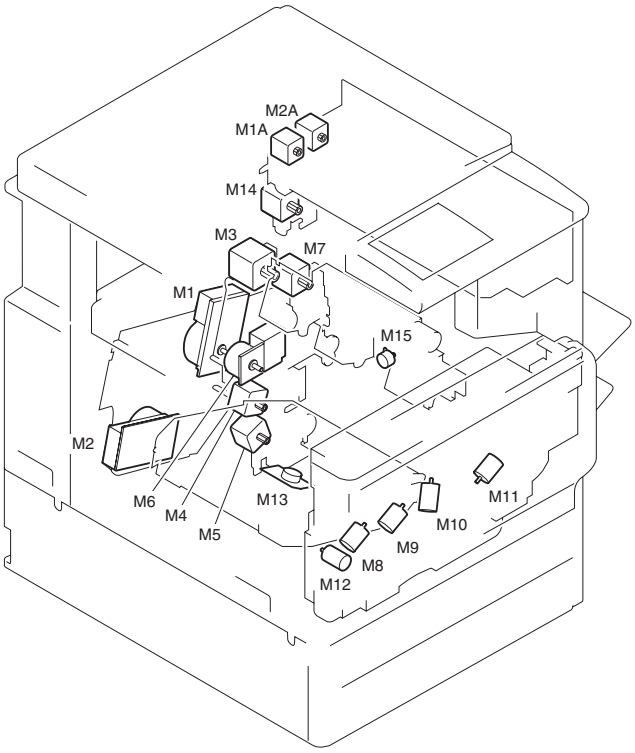
T-15-3

Ref.	Name	Description
M501	reader motor	drives the carriage

T-15-4

Ref.	Parts number	I/O		reader controller PCB
M501	FH5-1028	P002-2	1: forward	J505
			0: reverse	

<Printer Unit>



F-15-9

T-15-5

Ref.	Description	Parts number	DC controller PCB	Error
M1	Drum/ IT motor	FK2-2066	J210-B1 to 7/ J209-3 to 4	E012-0000/0100
M2	Developing motor	FK2-2067	J210-B8 to 12/ J209-1 to 2	E021
M3	Fixing motor	FK2-0478	J225-B11 to 14	-
M4	Cassette 1 pick-up motor	FM2-0388	J222-B15 to 18	-
M5	Cassette 2 pick-up motor	FM2-0388	J222-B11 to 14	-
M6	Multi feeder registration motor	FK2-2068	J211-5 to 13	E014
M7	Dupolexing feed motor	FL2-3266	J218	-
M8	Toner supply motor (Y)	FM2-5597	J2012	E025-0000/0100
M9	Toner supply motor (M)	FM2-5597	J2010	E025-0001/0101
M10	Toner supply motor (C)	FM2-5597	J2008	E025-0002/0102
M11	Toner supply motor (K)	FM2-5597	J2005	E025-0003/0103
M12	Waste toner feeding motor	FK2-0482	J2014	E013-0001/0002
M13	Polygon motor	FM2-3640	J114	E110-000/0001
M14	No. 1 delivery motor	FM2-0388	J225-B1 to 4	-
M15	Fan shutter motor	FK2-2069	J225-A1 to 4	-
M1A	No. 2 delivery motor	FK2-3302	J703-1 to 6(2/3-delivery controller PCB)	-
M2A	No. 3 delivery motor	FH5-1021	J703-7 to 12(2/3-delivery controller PCB)	-

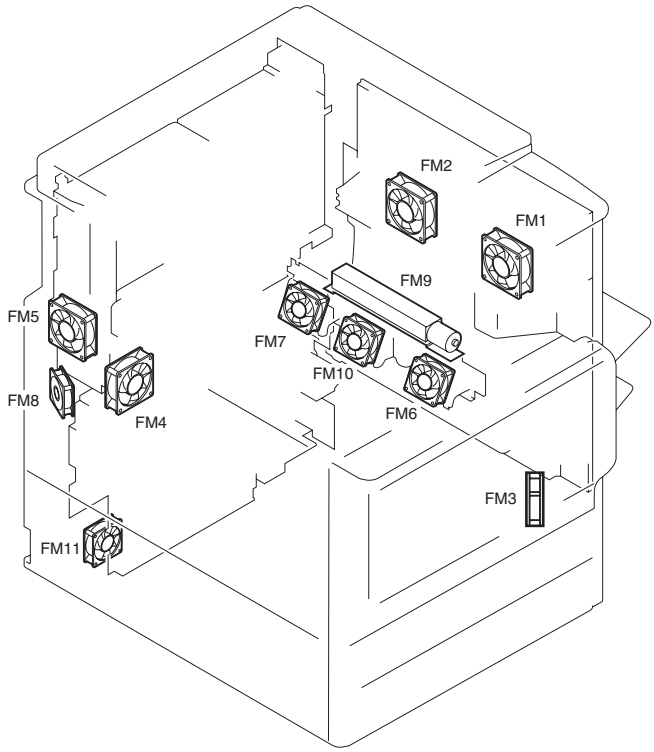
15.3.3 Fan

15.3.3.1 Fan Table

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

<Reader Unit>
The reader unit does not have a fan.

<Printer Unit>



F-15-10
T-15-6

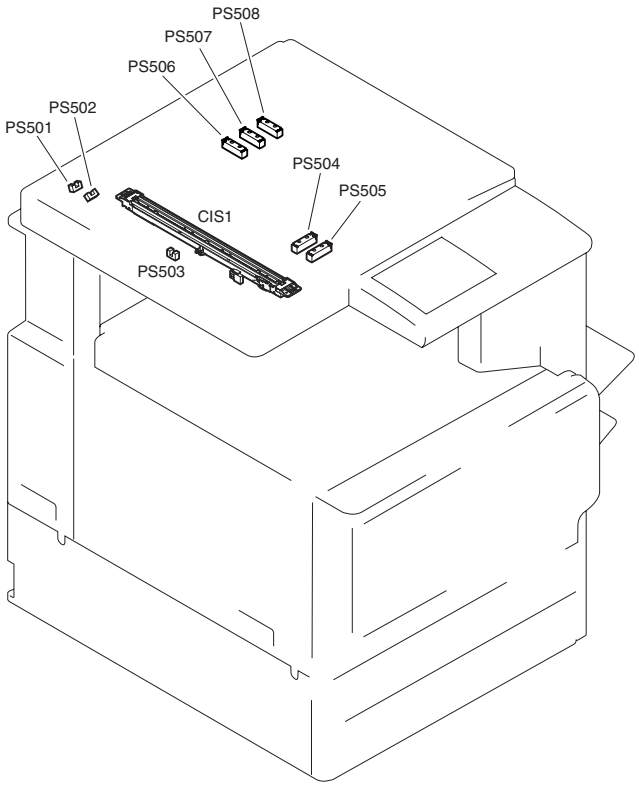
Ref.	Description	Parts number	DC controller PCB	Error
FM1	Fixing exhaust fan (front)	FK2-0360	J222-A10 to 12	E805
FM2	Fixing exhaust fan (rear)	FK2-0360	J222-A13 to 15	E805
FM3	Front process unit fan	FK2-0360	J216-7 to 9	
FM4	Power supply fan	FK2-0360	J211-1416	E804-0000
FM5	Controller fan	FK2-3234	J1007	
FM6	Edge cooling fan (front)	FK2-2064	J225-A7 to 9	
FM7	Edge cooling fan (rear)	FK2-2064	J225-A11 to 12	
FM8	Rear process unit fan	FK2-0472	J115	
FM9	Delivery contact fan	FK2-2065	J225-A5 to 6	E806-0001/ 0002
FM10	Secondary transfer heat exhaust fan	FK2-2064	J225-A13 to 15	E806-0003
FM11	Power supply fan 2	FK2-0472	J233	E804-0001

15.3.4 Sensor

15.3.4.1 Sensor Table

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

<Reader Unit>

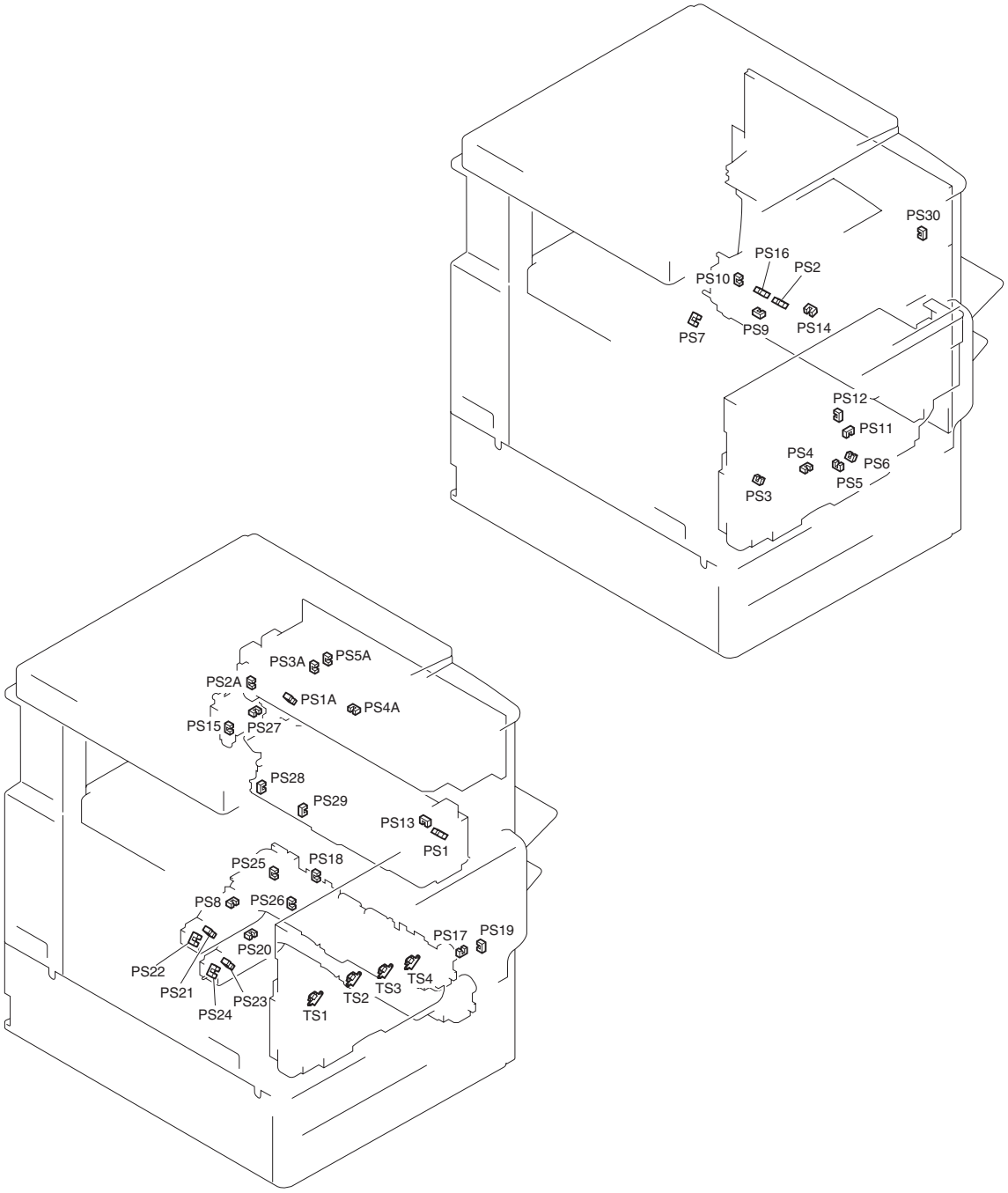


F-15-11

T-15-7

Ref.	Name	Description	Parts number	reader controller PCB
PS501	CIS HP sensor	detects CIS home position	FH7-7462	J506
PS502	copyboard cover open/closed sensor (front)	detects the state (open/closed) of the copyboard cover	FH7-7312	J506
PS503	copyboard cover open/closed sensor (rear)	detects the state (open/closed) of the copyboard cover	FH7-7312	J506
CIS1	CIS	reads originals	FM2-1563	
SIZE1	original size sensor	identifies the size of originals	FH7-7569	J511

<Printer Unit>



F-15-12

T-15-8

Ref.	Description	Parts number	DC controller PCB	Jam code/ error code
PS1	Inner delivery sensor	WG8-5772	J223-9 to 11	0103/ 0203/ 0A03/ 0B03
PS2	Loop detection sensor	WG8-5772	J217-1 to 3	0104/ 0204/ 0A04/ 0B04
PS3	Toner rotation volume sensor (Y)	WG8-5772	J2016	-
PS4	Toner rotation volume sensor (M)	WG8-5772	J2011	-
PS5	Toner rotation volume sensor (C)	WG8-5772	J2009	-
PS6	Toner rotation volume sensor (K)	FK2-0149	J2007	-
PS7	Pre-registration sensor	FK2-0149	J216-4 to 6	0210/ 0A10
PS8	Cassette 1 paper absent sensor	FK2-0149	J219-A1 to 3	-
PS9	Multi feeder paper absent sensor	FK2-0149	J222-A4 to 6	0105/ 0205/ 0A05/ 0A05
PS10	Duplexing paper absent sensor	FK2-0149	J222-A7 to 9	0101/ 0201/ 0A01/ 0B01
PS11	Waste toner container absent sensor	WG8-5772	J223-12 to 14	0102/ 0202/ 0A02/ 0B02
PS12	Waste toner open/ closed sensor	WG8-5772	J2006-1 to 3	-
PS13	Fixing pressure releasing home position sensor	WG8-5772	J2006-4 to 6	0107/ 0207/ 0A07/ 0A07
PS14	Fixing inlet sensor	WG8-5772	J217-7 to 9	0108/ 0208/ 0A08/ 0A08
PS15	Delivery tray full detection sensor	FK2-0149	J225-B8 to 10	-

Ref.	Description	Parts number	DC controller PCB	Jam code/ error code
PS16	Loop detection sensor 2	WG8-5772	J217-4 to 6	-
PS17	Front door sensor	WG8-5772	J213-4 to 6	010D/ 020D/ 0A0D
PS18	Lower right door sensor	FK2-0149	J222-B8 to 10	-
PS19	Right door sensor	WG8-5772	J213-1 to 3	-
PS20	Cassette 2 paper absent sensor	FK2-0149	J219-B1 to 3	-
PS21	Cassette 1 paper level sensor A	FK2-0149	J219-A4 to 6	-
PS22	Cassette 1 paper level sensor B	FK2-0149	J219-A7 to to 9	-
PS23	Cassette 2 paper level sensor A	FK2-0149	J219-B4 to 6	-
PS24	Cassette 2 paper level sensor B	FK2-0149	J219-B7 to 9	-
PS25	Cassette 1 re-try sensor	FK2-0149	J219-A10 to 12	-
PS26	Cassette 2 re-try sensor	FK2-0149	J219-B10 to 12	-
PS27	No. 1 delivery sensor	FK2-0149	J225-B5 to 7	-
PS28	Fan shutter home position sensor	WG8-5772	J223-18 to 20	-
PS29	Fan shutter position detection sensor	WG8-5772	J223-15 to 17	-
PS30	2/3 delivery door open/ closed detection sensor	FK2-0149	J212-5 to 7	-
TS1	Toner sensor (Y)	FH7-7422	J2015	-
TS2	Toner sensor (M)	FH7-7422	J2017	-
TS3	Toner sensor (C)	FH7-7422	J2003	-
TS4	Toner sensor (K)	FH7-7422	J2004	-
PS1A	No. 2 delivery sensor	FH7-7312	J744-3 to 5(Extension delivery controller PCB)	0109/ 0209/ 0A09/ 0A09
PS2A	No.2 delivery tray full detection sensor	FH7-7312	J743-1 to 15 (Extension delivery controller PCB)	-
PS3A	Duplexing paper inlet sensor	FH7-7312	J742-4 to 6 (Extension delivery controller PCB)	010C/ 020C/ 0A0A/ 0A0C
PS4A	Reverse sensor	FH7-7312	J745 (Extension delivery controller PCB)	010A/ 020A/ 0A0B/ 0A0A
PS5A	No. 3 delivery sensor	FH7-7312	J742-9 to 11 (Extension delivery controller PCB)	010B/ 020B/ 0A0B

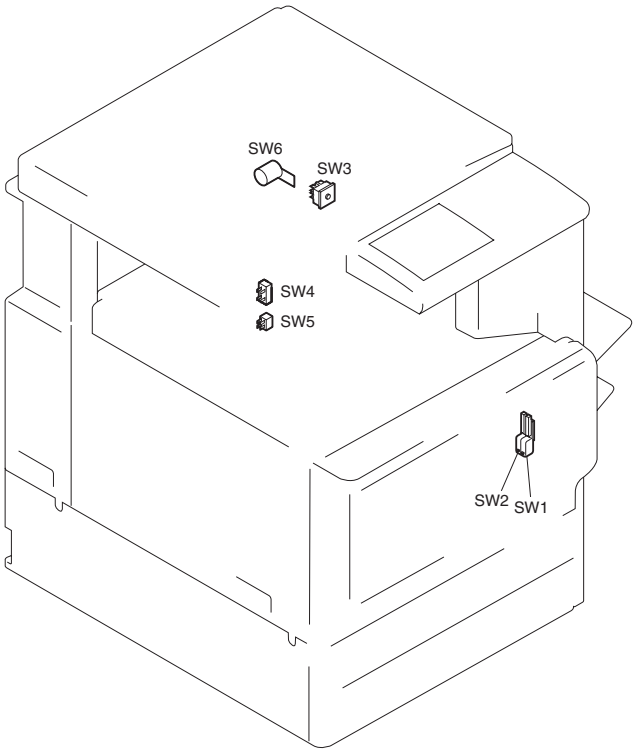
15.3.5 Switch

15.3.5.1 Switch Table

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

<Reader Unit>
The reader unit does not have a switch.

<Printer Unit>



F-15-13

T-15-9

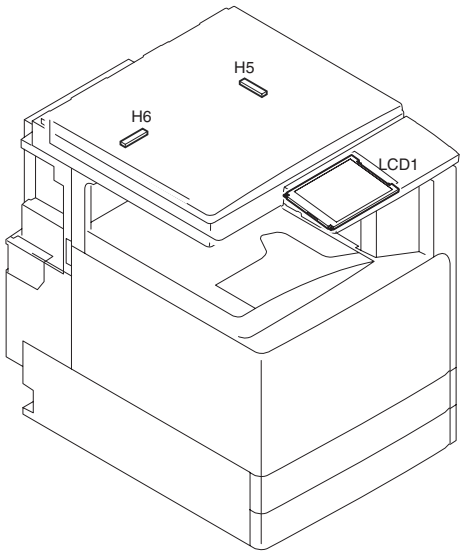
Ref.	Description	Parts number
SW1	Inter-lock switch (DC)	FK2-0506
SW2	Inter-lock switch (DC)	FK2-0506
SW3	Inter-lock switch (AC)	WC8-5178
SW4	Main switch	FK2-0140
SW5	Environmental heater switch	WC1-5182
SW6	Control key switch (option)	FG3-3644

15.3.6 Lamps, Heaters, and Others

15.3.6.1 Lamp. Heaters, and Others Table

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

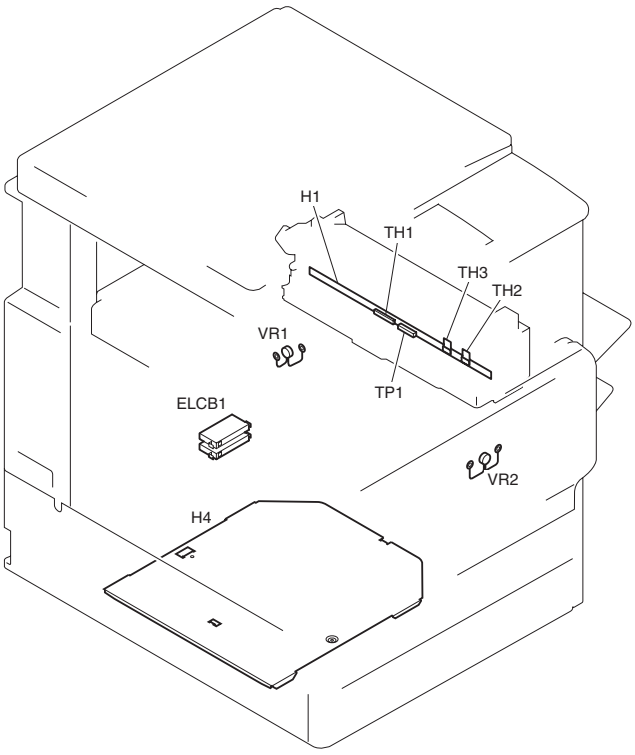
<Reader Unit>



F-15-14
T-15-10

Ref.	Name	Parts number	Description
H5	anti-condensation heater (left)	NPN	prevents condensation on the copyboard glass
H6	anti-condensation heater (right)	NPN	prevents condensation on the reading glass
LCD1	LCD panel	FL2-1148	provides visual indications on the control panel (touch panel)

<Printer Unit>



F-15-15
T-15-11

Ref.	Description	Parts number
H1	Fixing heater (100V)	FK2-0496
H1	Fixing heater (115V)	FK2-2071
H1	Fixing heater (230V)	FK2-0513

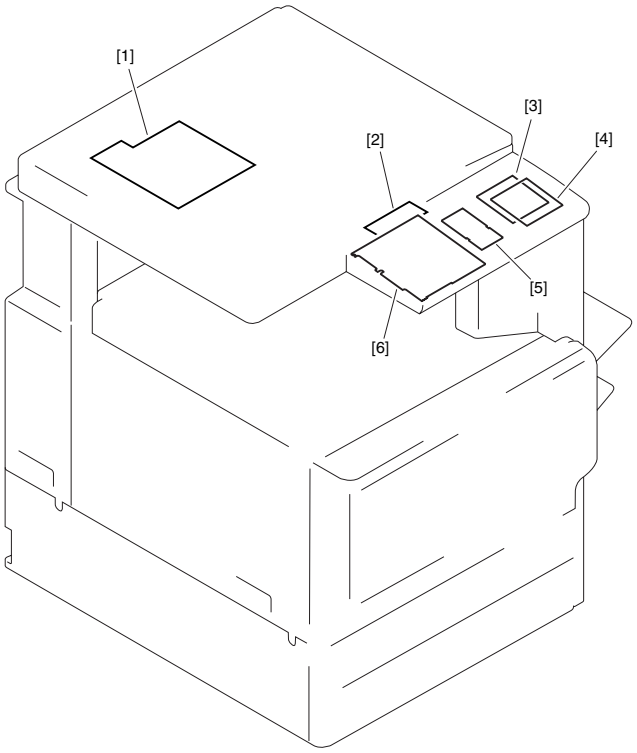
Ref.	Description	Parts number
H4	Cassette heater (100V)	FK2-0375
H4	Cassette heater (230V)	FK2-0376
TH1	Fixing main thermistor	FK2-3069
TH2	Fixing sub thermistor 1	
TH3	Fixing sub thermistor 2	
TP1	Fixing thermoswitch	FK2-0486
VR1	Process kit frame varistor	FL2-5805
VR2	Registration front guide varistor	FL2-5804
ELCB1	Circuit breaker (100/ 115V)	FK2-0166
ELCB1	Circuit breaker (230V)	FK2-0165

15.3.7 PCBs

15.3.7.1 PCBs Table

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

<Reader Unit>

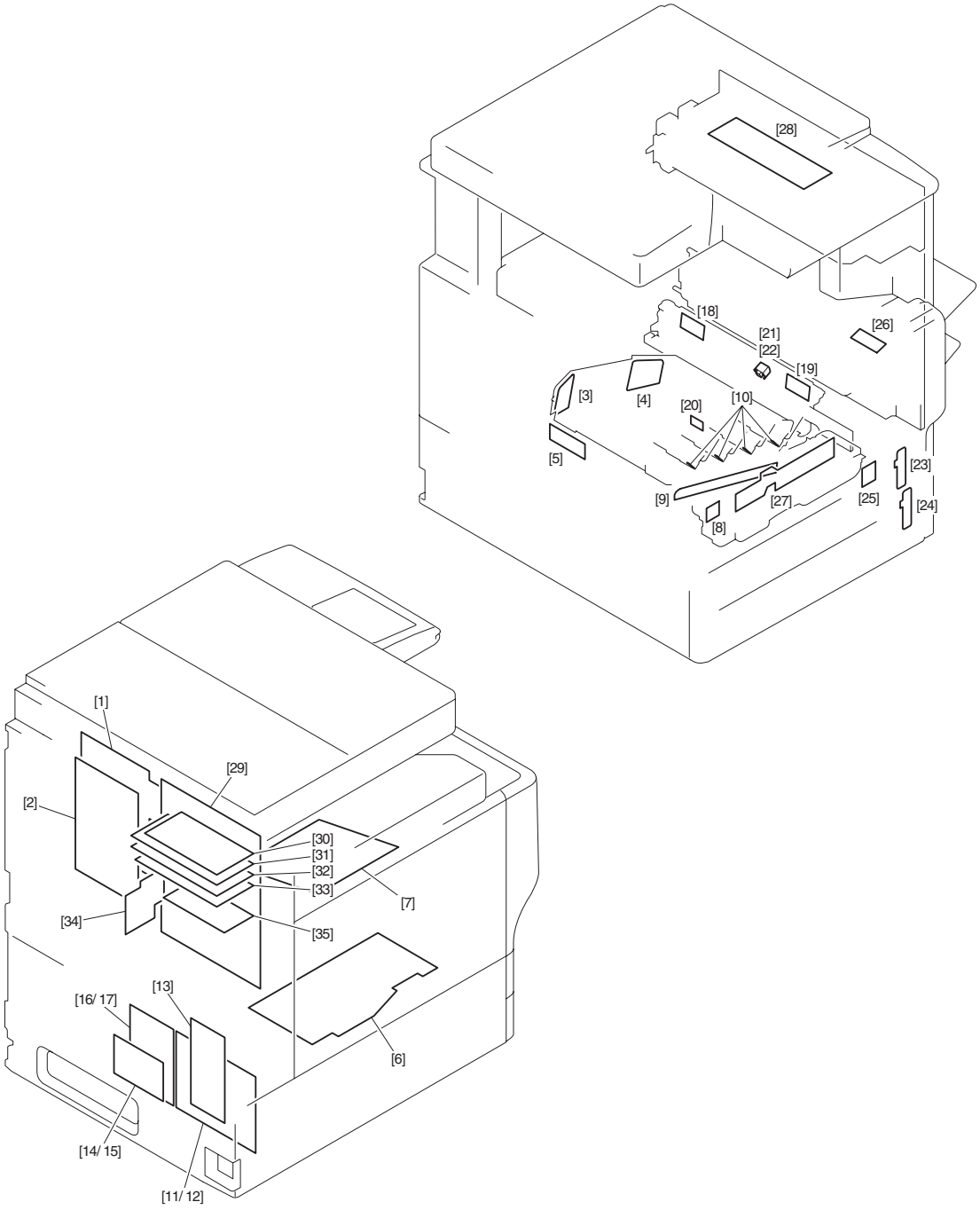


F-15-16

T-15-12

Ref.	Parts number	Description	Parts number
[1]	FG3-3159	Reader controller PCB	FG3-3159
[2]	FG6-8939	CIS inverter PCB	FH3-7215
[3]	FG3-3965	Control panel CPU PCB	FG3-3965
[4]	FG3-2834	Control panel key PCB	FG3-2834
[5]	FG3-2376	Control panel inverter PCB	FG3-2376
[6]	FL2-1148	Control panel LCD	FL2-1148

<Printer Unit>



F-15-17

T-15-13

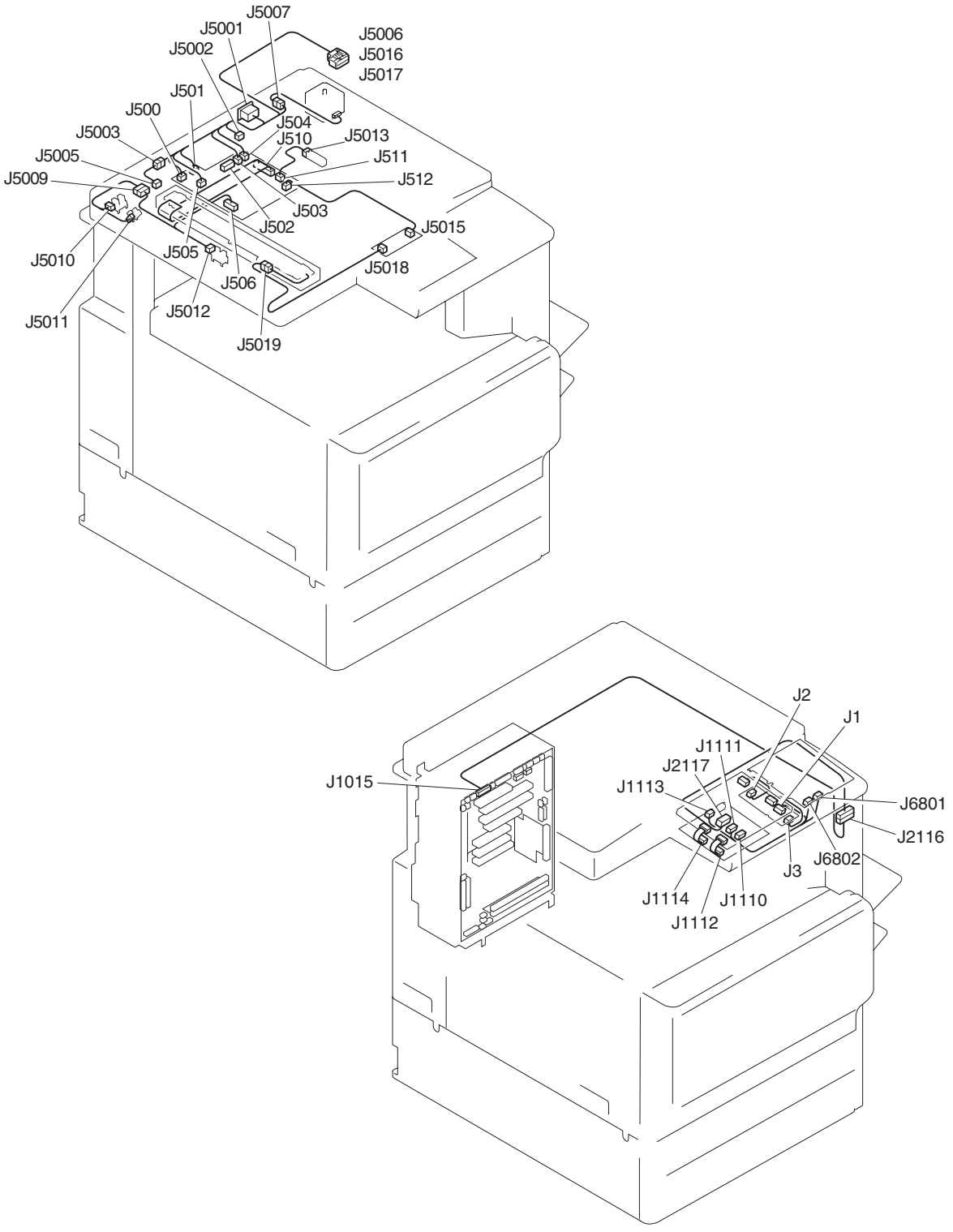
Ref.	Unit number	Parts number	Description
[1]	UN1	FM2-8263	DC controller PCB
[2]	UN2	FM2-8264	DC driver PCB
[3]	UN3	FM2-3636	Laser driver PCB (CK)
[4]	UN4	FM2-3636	Laser driver PCB (YM)
[5]	UN5	FM2-8265	Laser relay PCB
[6]	UN6	FM2-5548	Image formation high voltage PCB (HV1)
[7]	UN7	FK2-0489	Transfer high voltage PCB (HV2)
[8]	UN8	FM2-3470	Waste toner sensor PCB
[9]	UN9	FM2-3471	Contact PCB
[10]	UN10	FM2-3472	Fuse PCB
[11]	UN11	FK2-3070	Low voltage power supply PCB 100V/ 120V
[12]	UN11	FK2-3071	Low voltage power supply PCB 230V
[13]	UN12	FG3-3843	Controller power supply PCB
[14]	UN13	FK2-0340	All-night power supply PCB 100V/ 120V
[15]	UN13	FK2-0341	All-night power supply PCB 230V
[16]	UN14	FM2-2759	AC driver PCB 100V/ 120V

Ref.	Unit number	Parts number	Description
[17]	UN14	FM2-2760	AC driver PCB 230V
[18]	UN15	FK2-0493	Registration detection sensor PCB
[19]	UN16	FK2-0494	Batch detection sensor PCB
[20]	UN17	FK2-0495	Environment sensor PCB
[21]	UN18	RH7-7129	Transparency sensor PCB (emit)
[22]	UN19	RH7-7129	Transparency sensor PCB (submit)
[23]	UN20	FM2-0305	Cassette size detection switch PCB (CST1)
[24]	UN21	FM2-0305	Cassette size detection switch PCB (CST2)
[25]	UN22	FM2-2771	Cassette size relay PCB
[26]	UN23	FM2-2768	Multi feeder size detection PCB
[27]	UN24	FM2-8266	Process kit relay PCB
[28]	-	FM2-3221	3-way unit driver PCB
[29]	-	FM2-9163	Main controller PCB (S)
[30]	-	FM2-3677	R-A PCB
[31]	-	FM2-9166	PDRM-EF-A PCB (S)
[32]	-	FM2-9166	PDRM-EF-A PCB (S)
[33]	-	FM2-3676	SJ-A PCB
[34]	-	FM2-9161	RB-A PCB
[35]	-	FM2-9165	LANBAR-C PCB
[36]	-	FK2-3077	Accessories power supply PCB 100/120V
[37]	-	FK2-3078	Accessories power supply PCB 230V

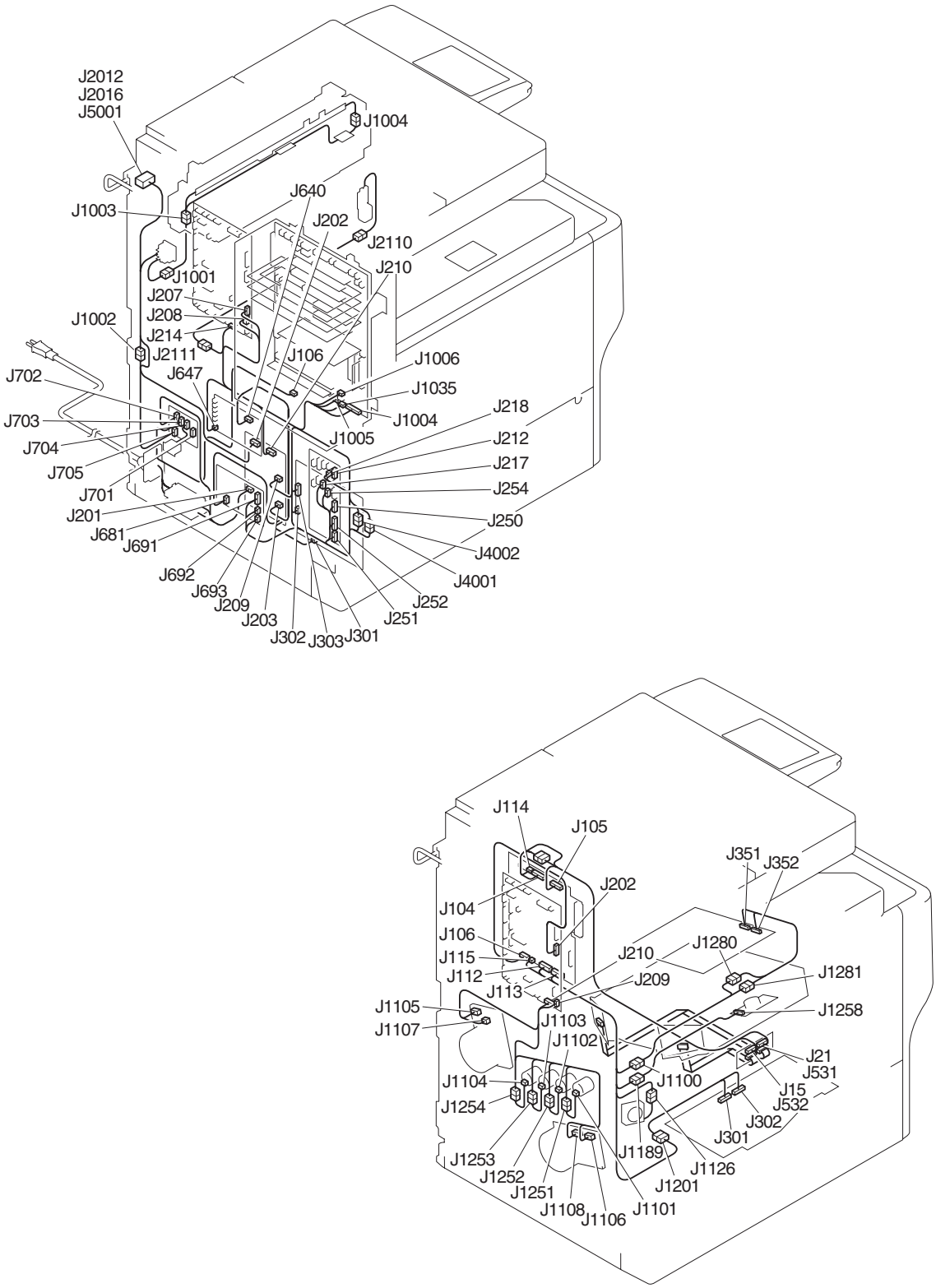
15.3.8 Connectors

15.3.8.1 Connectors

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880



F-15-18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J1003
J202
J2110
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J1001
J207
J208
J1002
J214
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J106
J1006
J702
J647
J1035
J703
J1004
J218
J704
J1005
J212
J705
J217
J701
J254
J201
J250
J681
J691
J4002
J692
J4001
J693
J209
J252
J203
J251
J302
J303
J301
J114
J105
J351
J352
J202
J104
J106
J115
J210
J1280
J112
J209
J1281
J113
J1105
J1258
J1103
J1107
J1102
J21
J1100
J531
J1104
J15
J1254
J532
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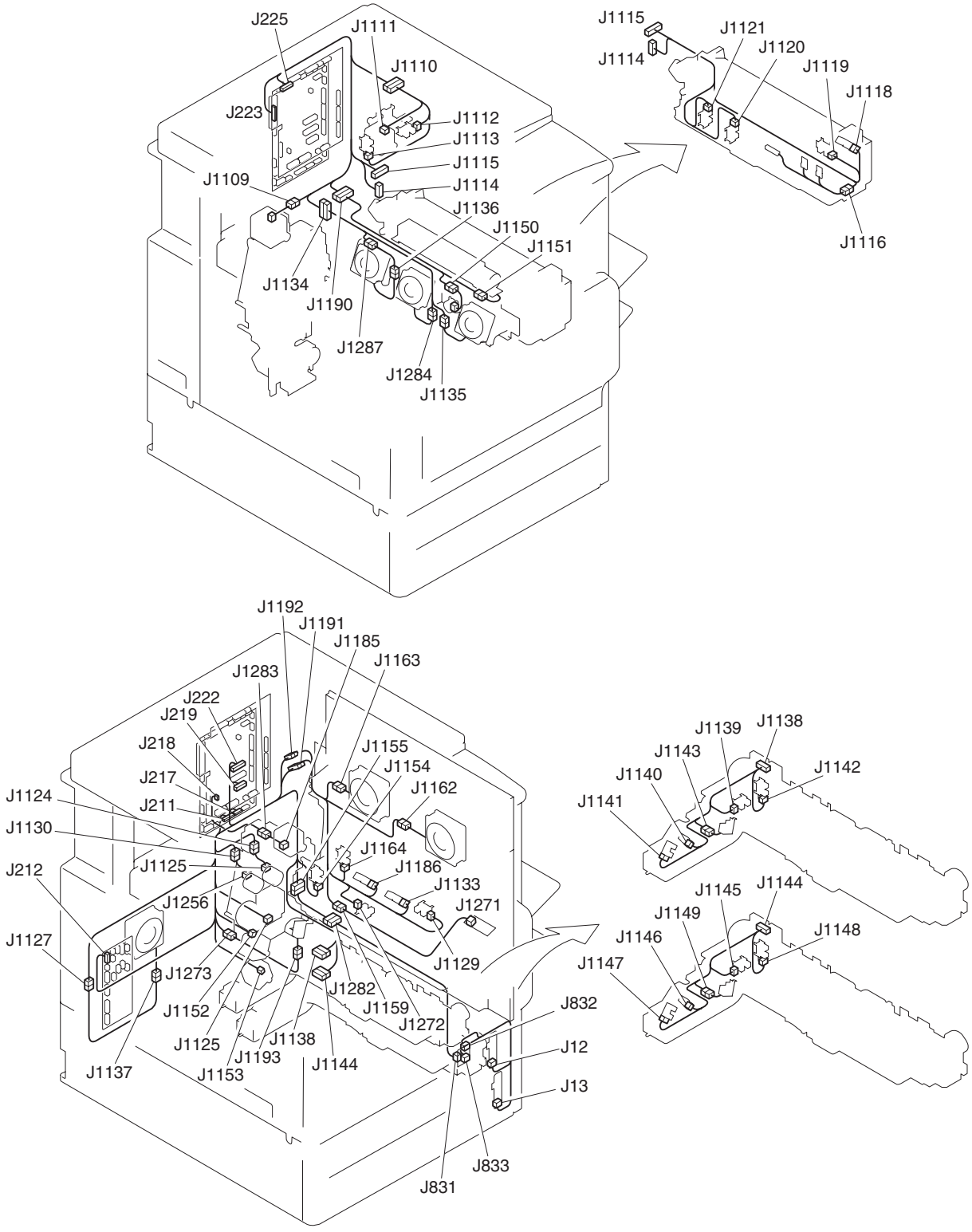
J1201
J1251
J1101
J1108
J1106

F-15-19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J1110
J223
J1112
J1113
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J1151
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J1190
J1287
J1284
J1135
J1115
J1121
J1120
J1119
J1118
J1114
J1116
J1192
J1191
J1185
J1163
J1283
J222
J219
J218
J1155
J1154
J217
J1162
J1124
J211
J1130
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J1125
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J212
J1133
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J1129
J1273
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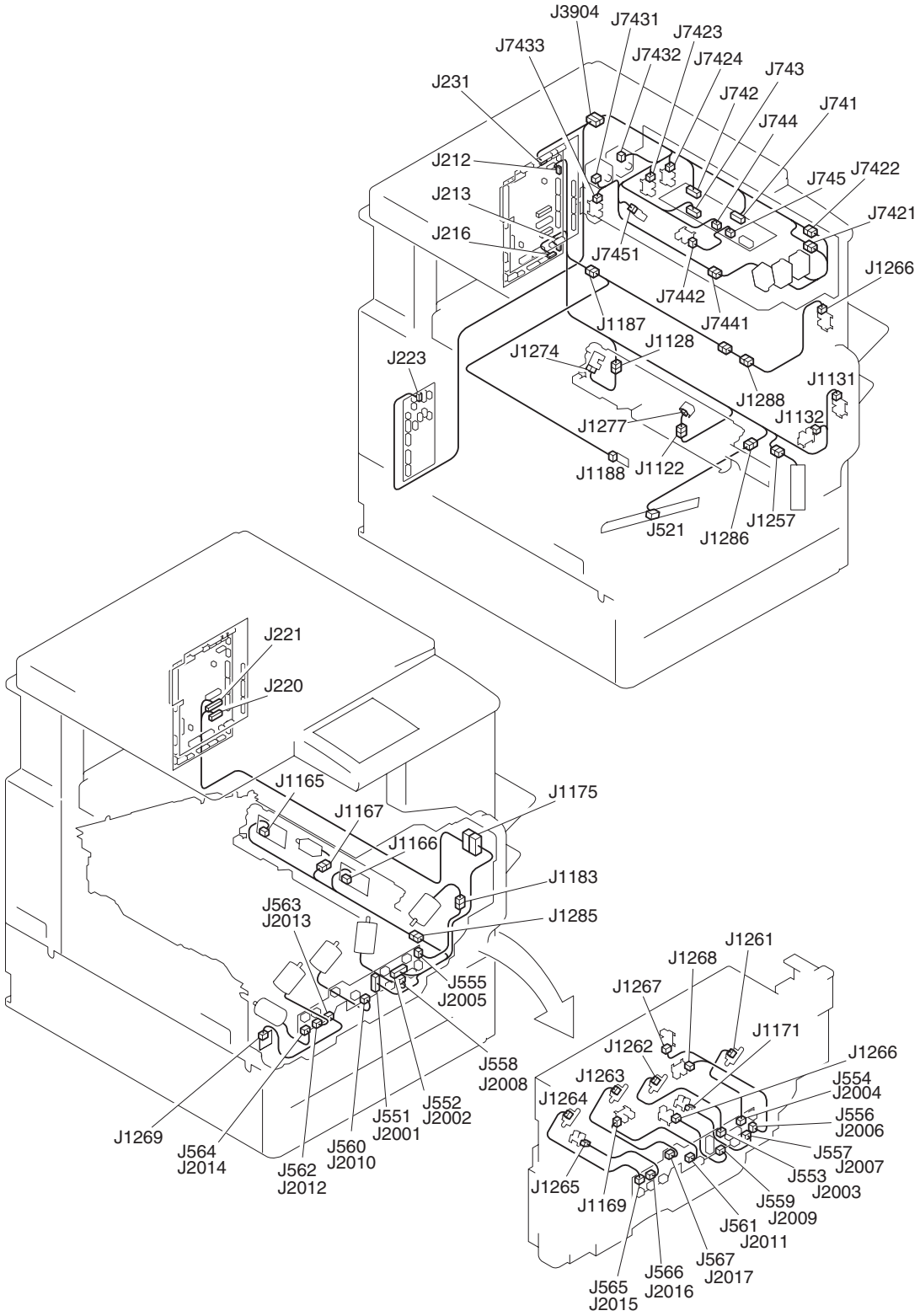
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J212
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J213
J7421
J216
J7451
J1266
J7442
J7441
J1187
J1128
J1274
J223
J1131
J1288
J1277
J1132
J1188
J1122
J1257
J521
J1286
J221
J220
J1165
J1175
J1167
J1166
J1183
J563
J2013
J1285
J1261
J1268
J555
J2005
J1267
J1171
J1262
J1266
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J2010
J562
J2012
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J566
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J565
J2015

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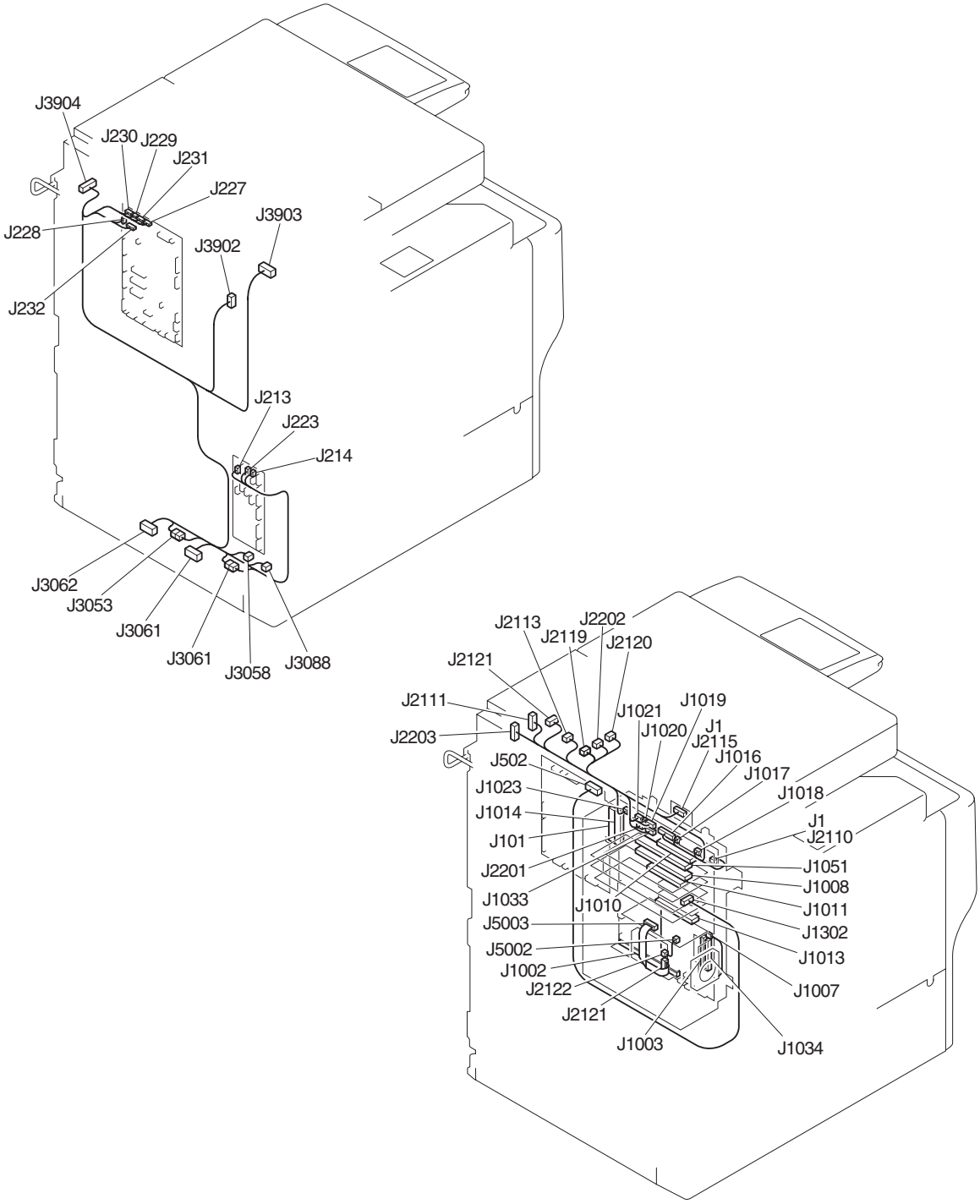


F-15-22

15.3.9 Variable Resistors (VR), Light-Emitting Diodes (LED), and Check Pins by PCB

15.3.9.1 Variable Resistors (VR), Light-Emiting Diodes (LED), and Check Pins by PCB

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Of the variable resistors (VR), light-emitting diodes (LED), and check pins used in the machine those needed in the field are discussed.

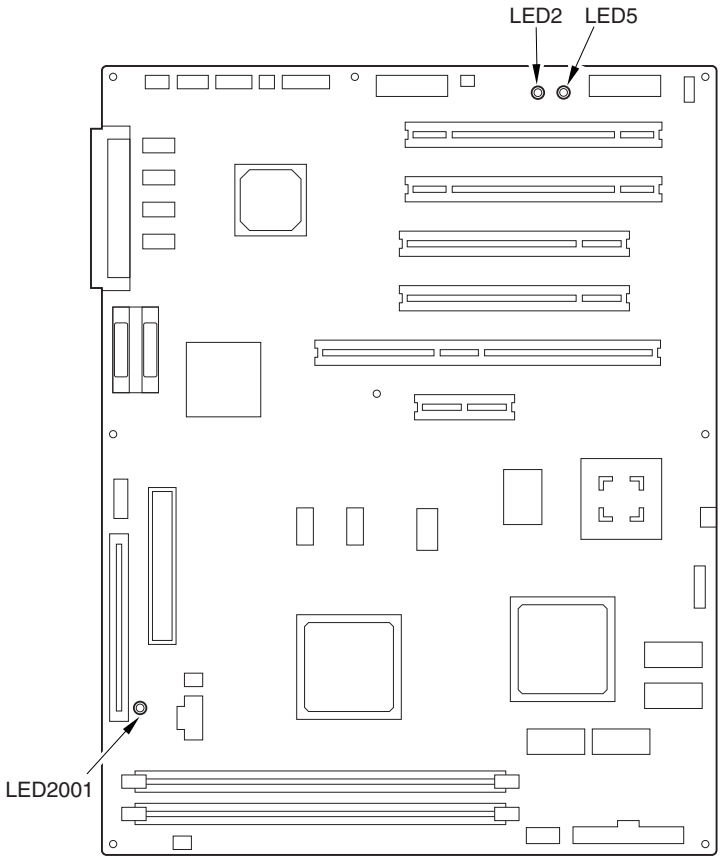
⚠
- Although normal, some LEDs may emit dim light when they remain off becouse of leakege current.
- Keep the following symbols in mind;

⊘---VR that may be used in the field.

⊘---VR that must not be used in the field.

15.3.9.2 Main Controller PCB (main)

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880



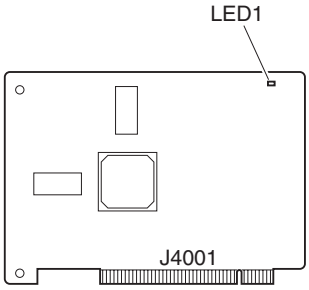
F-15-23

T-15-14

Notation	Description
LED2001	in operation
LED2	+3.3V (all-night) being supplied
LED5	+3.3V (non-all night) being supplied

15.3.9.3 Main Controller PCB (sub R-A)

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

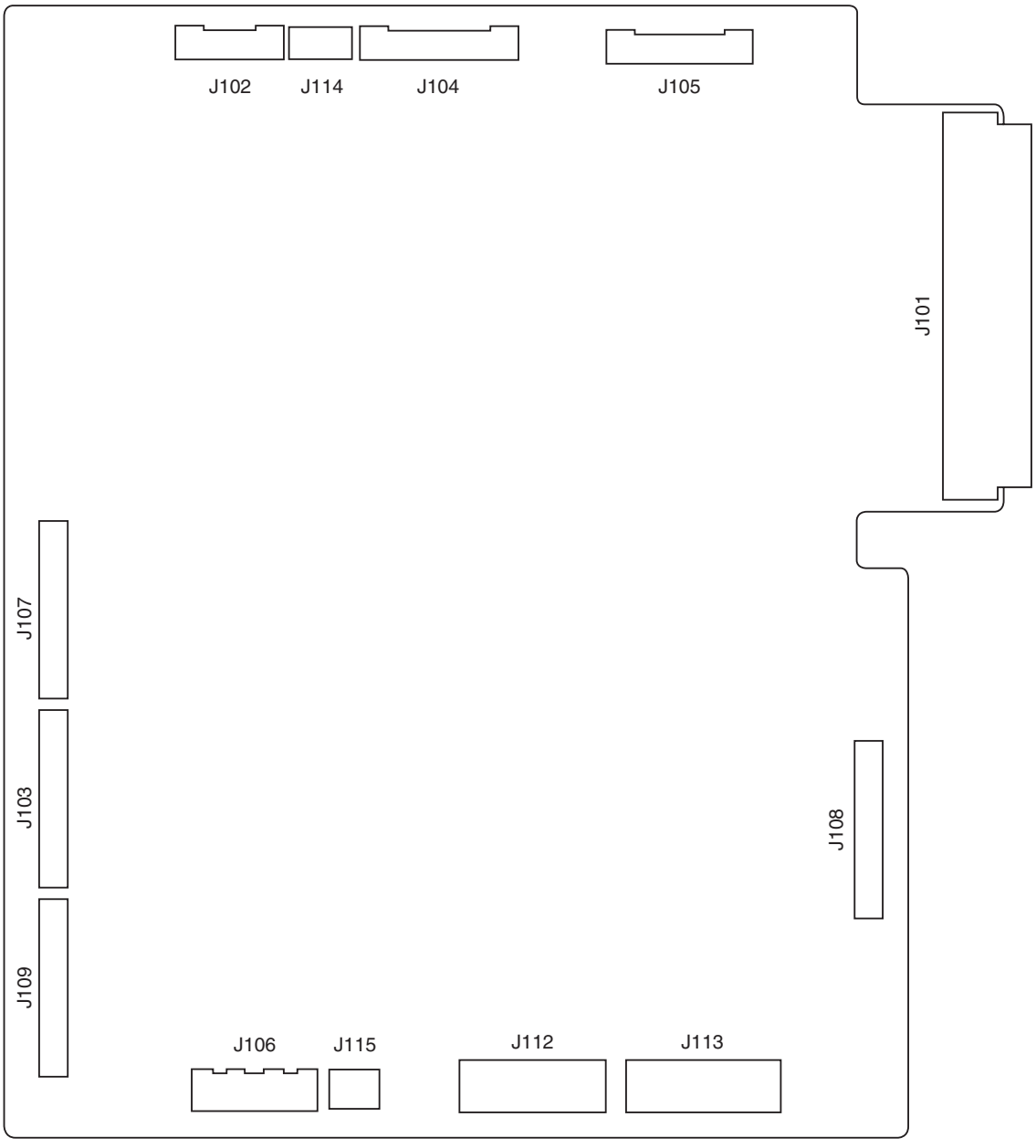


F-15-24

Code	Role
LED1	+3.3V (Non-all night; for ASIC drive) feed is being executed.

15.3.9.4 DC Controller PCB

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880



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Chapter 16 Self Diagnosis

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16.1 Error Code Table

16.1.1 Error code tables

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

T-16-1

Code	Description
*****: Finisher-Z1 ****: Finisher-Y1, Saddle Finisher-Y2 *****: Puncher Unit**	
E001	Abnormality high temperature error of the fixing unit
E003	Low temperature of the fixing unit after standby
E004	Thermistor is not connected
E009	Error in pressure/release of fixing film unit
E012	Drum motor error
E013	Error in the waste toner motor
E014	Error in the registration motor
E020	Error in the developing assembly (Toner fault: ATR error)
E021	Developing motor error
E025	Error in the toner motor
E026	Toner empty error XX=01:Y XX=02:M XX=03:C XX=04:K
E032	The counter of the NE controller fails to operate.
E045	OHP sensor error
E067	High voltage-related error (Primary transfer)
E069	Error in the relation of high-voltage (Secondary transfer)
E070	ITB HP detection error
E100	BD error
E110	Error in the polygon motor
E193	Error in IMG1 (failure of add-on)
E202	CIS unit HP detection error
E225	CIS light quantity error
E227	Power supply error in the reader unit
E240	Error in communication of controller
E243	Control panel unit error
E248	Backup memory error
E315	Abnormality of image data
E351	Main controller PCB error
E400	Feeder communication error
E490	Model error
E500	Finisher communication error
E503 ***	Finisher internal communication error
E505	Finisher backup memory error
E514	*** Stack delivery error / **** End assist motor error
E519 ****	Gear change motor error
E530	*** Rear alignment error / **** Front alignment error
E531	Staple error
E532	Staple unit shift error
E535	Swing error
E537	*** Front alignment error / **** Rear alignment error
E540	*** Stack tray up/down error / **** Upper tray up/down error
E542 ****	Lower tray up/down error
E577 ***	Paddle error
E580	Stack tray up/down error
E584 ****	Shutter unit error
E590 *****	Puncher motor error
E591 *****	Puncher dust sensor error
E592 *****	Puncher side registration sensor error
E593 *****	Puncher shift motor error
E5F0 ****	Saddle paper positioning error
E5F1 ****	Saddle paper folder error
E5F2 ****	Saddle guide error
E5F3 ****	Saddle alignment error
E5F4 ****	Saddle rear side staple error
E5F5 ****	Saddle front side staple error
E5F6 ****	Saddle paper push-on error
E5F8 ****	Saddle connector error
E5F9 ****	Saddle switch error

Code	Description
: Finisher-Z1 *: Finisher-Y1, Saddle Finisher-Y2 *****: Puncher Unit	
E601	Abnormality of image memory
E602	Hard disk error
E604	The image memory (SDRAM) is faulty/insufficient
E609	Abnormal low temperature of the hard disk
E610	Failure in the hard disk cryptographic key
E611	Error in repeating reboot due to SRAM failure
E674	FAX board communication error
E677	Abnormality of the external controller
E710	IPC initialization error
E711	IPC communication error
E712	Communication error between the ADF and the reader
E713	Communication error between the finisher and the printer
E716	Error in communication with the cassette pedestal and delivery unit 2/3
E717	Communication error with the NE controller
E719	Communication error with the coin vender/card reader
E730	PDL error
E731	UFR PCB error
E732	Reader communication error
E733	Printer communication error
E740	Abnormality of the Ethernet board
E743	DDI communication error
E744	Language file/BootROM error
E745	Token ring board error
E746	Option board error
E747	Main controller PCB error (Image processing ASIC or memory control/communication control ASIC)
E748	Main controller PCB error
E749	Restart in accordance with a change of the product configuration
E803	Door close error
E804	Controller fan error
E805	Fan error
E806	Error in the fan of the machine
E807	Error in the fan of the process cartridge
E808	Error in the low-voltage power circuit (Xerox error)
E811	Error in detecting new parts of the drum unit
E840	Error in the cooling fan of the end
E990	Error in the toner container

16.2 Error Code Details

16.2.1 Table of error code details

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

T-16-2

Code	Main Cause/Detail of Detection	Countermeasures
: Finisher-Z1 *: Finisher-Y1 Saddle Finisher-Y2 *****: Puncher Unit		
E001	Abnormality high temperature error of the fixing unit	
0000	Detect high temperature by the main thermistor (software). Software detects that the temperature detected by the main thermistor is abnormally high (above 255 deg C) for 500 ms continuously.	Replace the fixing unit, Replace the main power supply PCB, Replace the DC controller PCB To recover from the error: In service mode COPIER>FUNCTION> CLEAR>ERR
0003	Detect high temperature by the sub thermistor (software). Software detects that the temperature detected by the sub thermistor is abnormally high (above 290 deg C) for 500 ms continuously.	
0003	Detect high temperature by the sub thermistor (hardware). Hardware detects that the temperature detected by the contact type thermistor is abnormally high (above 230 deg C).	
E003	Error in the low temperature of the fixing unit	
0000	Detects the temperature detected by the main thermistor is abnormally low (below 120 deg C) for 1 sec continuously after passing 20 sec from turning ON the fixing heater.	Check the connection of the main thermistor/thermal switch. Check open circuit of heater. Replace the cover switch. Replace the fixing unit. Replace the main power supply PCB. Replace the DC controller PCB. Clear the error in service mode: COPIER > FUNCTION > CLEAR > ERR.

Code	Main Cause/Detail of Detection	Countermeasures
0001	Detects the temperature detected by the sub thermistor is abnormally low (below 90 deg C) for 1 sec continuously while adjusting print temperature.	Check on connection of the sub thermistor/thermo switch, Replace the fixing unit, Check on a break in the heater, Replace the cover switch, Replace the main power supply PCB, Replace the DC controller PCB To recover from the error: In service mode COPIER>FUNCTION>CLEAR >ERR
0002	Detects the abnormally low temperature (open circuit) when turning ON the fixing heater.	Replace the fixing heater. Clear the error in service mode: COPIER > FUNCTION > CLEAR > ERR.
E004	Thermistor is not connected	
0000	During walm-up rotation, the thermistor connection signal (FUSER CNCTX) is open.	- Confirm the cable connection - Replace the cable exchange, and established - Replace the fixing unit - Replace the DC controller PCB.
E009	Error in pressure/release of fixing film unit	
0001	In case that the output of fixing automatic pressure phase sensor is not changed although rotating/reversing the fixing motor	Check the pressure/release mechanism. Check the connection of the connector. Replace the motor.
E012	Drum/ITB motor error	
0001	Lock of the motor fails to be detected 3 sec or more after the motor starts to operate.	Check on connection of the connector, Replace the motor
0100	Detects the motor lock signal for more than 3 sec although the motor is not ordered to startup.	
E013	Error in the waste toner motor	
0001	Detects the fault in the waste toner motor	Replace the waste toner motor.
0002	Indicates that the waste toner motor does not rotate due to the open circuit.	Replace the waste toner motor. Replace the DC controller PCB.
E015	Error in the registration/multifeeder motor	
0000	Indicates that the signal indicates the motor rotates with the target speed is not sent to the port after passing more than 3 sec from the startup of the motor.	Check on connection of the connector, Replace the motor, Replace the fixing roller
E020	Error in the developing assembly (toner fault: ATR error)	
0010	Indicates that the patch level is higher than the upper limit of the target although setting it as the minimum when initializing Yellow ATR.	Clean the ATR sensor window. Check the mounting of the developing assembly. Check the ATR sensor open circuit. Replace the ATR sensor.
0011	Indicates that the patch level is higher than the upper limit of the target although setting it as the minimum when initializing Magenta ATR.	
0012	Indicates that the patch level is higher than the upper limit of the target although setting it as the minimum when initializing Cyan ATR.	
0013	Indicates that the patch level is higher than the upper limit of the target although setting it as the minimum when initializing Black ATR.	
0020	Indicates that the patch level is lower than the lower limit of the target although setting it as the maximum when initializing Yellow ATR.	
0021	Indicates that the patch level is lower than the lower limit of the target although setting it as the maximum when initializing Magenta ATR.	
0022	Indicates that the patch level is lower than the lower limit of the target although setting it as the maximum when initializing Cyan ATR.	
0023	Indicates that the patch level is lower than the lower limit of the target although setting it as the maximum when initializing Black ATR.	
0100	Measured density value of patch for Yellow is higher than the upper limit.	Check the toner leakage from the toner buffer block within the developing assembly. Replace the patch image reading sensor
0101	Measured density value of patch for Magenta is higher than the upper limit.	
0102	Measured density value of patch for Cyan is higher than the upper limit.	
0103	Measured density value of patch for Black is higher than the upper limit.	
0200	Measured density value of patch for Yellow is lower than the lower limit.	
0201	Measured density value of patch for Magenta is lower than the lower limit.	
0202	Measured density value of patch for Cyan is lower than the lower limit.	
0203	Measured density value of patch for Black is lower than the lower limit.	
E021	Developing motor error	
0000	Indicates that the signal indicates the motor rotates with the target speed is not sent to the port after passing more than 3 sec from the startup of the motor.	Check on connection of the developing motor and the DC controller PCB, Replace the DC controller PCB, Replace the developing motor
E025	Error in the toner motor	
0000	Indicates an error of Y developing assembly toner supply	Check on connection of the toner motor and the DC controller PCB, Replace the DC controller PCB, Replace the toner motor
0001	Indicates an error of M developing assembly toner supply	
0002	Indicates an error of C developing assembly toner supply	
0003	Error of Bk developing assembly toner supply	
0100	Y buffer supply error	
0101	M buffer supply error	
0102	C buffer supply error	
0103	Bk buffer supply error	
E026	Toner empty error XX=01:Y XX=02:M XX=03:C XX=04:K	
XX01	After toner runs out, toner density fails to go back to normal even if toner replacement and toner recovery have been performed 5 times or more in succession.	Replace the toner container, Check on a position of the developing shutter
E032	The counter of the NE controller fails to operate.	
0001	A break in the count pulse signal is detected.	Check on a break in the cable

Code	Main Cause/Detail of Detection	Countermeasures
E045	OHP sensor error	
0001	The sampling data measured during initial multiple rotations is lower than the specific level.	Replace the OHP sensor
E067	High voltage-related error (Primary transfer)	
0100	The measured current of the primary transfer ATVC is abnormal twice in succession.	Check on the primary transfer roller spring, Clean the position where the primary transfer roller contacts, Replace the primary transfer roller, Replace the drum unit Check a value of COPIER> DISPLAY> MISC> DRM-LIFE, and replace the drum unit if the value is near 100 because the drum may have reached its life expectancy.
0101	The first detected current of primary transfer ATVC is the threshold or more.	
0102	The two detected currents of primary transfer ATVC are both the threshold or less.	
0103	The two detected currents of primary transfer ATVC are the same each other.	
0110	The measured voltage of the primary transfer ATVC is abnormal twice in succession.	Turn OFF and back ON the main power
E069	Error in high-voltage unit (secondary transfer)	
0000	The detected current of secondary transfer ATVC is fault.	Check the connector, replace high-voltage unit
E070	ITB HP detection error	
0001	HP of the ITB fails to be detected even after the specific period of time. Abnormality of the HP sensor, Deviation of the belt from its position to either edge, or soiling of the seal	Clean the HP detection seal, Clean/Replace the HP sensor
0002	The next HP fails to be detected within the specific period of time after the HP of the ITB is detected.	Clean the ITB back side and the drive roller
0003	The next HP is detected earlier than the specific period of time after the HP of the ITB is detected. The ITB is torn due to scratches, and the sensor detects the tear as a HP by mistake.	Clean the HP detection seal, Clean/Replace the HP sensor
E100	BD error	
0000	Lock of the BD control fails while rotation of the polygon motor is stable.	Check on connection between the laser scanner unit and the DC controller PCB, Check on 24V line fuse, Replace the laser scanner unit
E110	Error in polygon motor	
0000	BD control is not locked when 5 sec passed after the activation of polygon motor.	Check on connection between the laser scanner unit and the DC controller PCB, Check on 24V line fuse, Replace the laser scanner unit
0001	Speed lock of the FG speed control fails to be executed 5 sec after the polygon motor starts to operate (Does not reach the specified speed).	
E193	Error in IMG1 (error in add-on)	
0001	Error in initialization of image ASIC of DC controller PCB (IMG)	Replace DC controller PCB
E202	CIS unit HP detection error	
0001	The HP sensor fails to be ON after the CIS unit moves backward for a specific distance or more.	Disconnect and then connect the connector, Replace the scanner HP sensor, Replace the scanner motor, Replace the reader controller PCB
0002	The HP sensor fails to be OFF after the CIS unit moves forward for a specific distance or more.	
E225	CIS light quantity error	
0001	Normal light-up of the lamp fails to be confirmed at the time of power-on and shading correction when a job starts.	Disconnect and then connect the connector, Replace the document lamp (xenon tube), Replace the CIS, Replace the inverter PCB, Replace the reader controller PCB
E227	Power supply error in the reader unit	
0001	24V port is off at power-on.	Disconnect and connect the power supply connector, Replace the power supply
0002	24V port is off when a job starts.	
0003	24V port is off when a job terminates.	
0004	24V port is off during a drive under load.	
E240	Error in communication of controller	
0000	Error in communication data	Check connector, check connection of sub PCB in the controller box, check / replace DC controller PCB / main controller PCB
0001	There is no response when 3 sec passed since the main controller had sent the pickup request to DC controller during printing.	
0002	There is no response when 4 sec passed since the main controller had sent the request for image output to DC controller during printing.	
0003	The engine is activated when jam occurs.	
E243	Control panel unit error	
0000	Communication between the main controller and the control panel unit is abnormal.	Check on connection between the main controller PCB and the control panel unit
E248	Backup memory error	
0000	Check error of the SRAM PCB (at start up)	Check on connection of the SRAM PCB, Replace the SRAM PCB
0001	Reader controller EEPROM error at power-on	Replace the reader controller PCB
0002	Reader controller EEPROM writing error	
0003	Reader controller EEPROM reading error after check error writing	
E315	Abnormality of image data	
000e	Data is corrupt (Abnormality of memory/HDD) Soft decode error	Replace the image memory (SDRAM) , Replace the HDD
E351	Main controller PCB error	
0000	Communication error of the main controller PCB occurs at start-up.	Check on connection between the main controller PCB and the main controller PCB (sub) , Replace the main controller PCB, Replace the main controller PCB (sub)
E400	Feeder communication error	

Code	Main Cause/Detail of Detection	Countermeasures
0001	Checksum error	Check on connection between the ADF controller PCB and the main controller PCB (sub), Replace the ADF controller PCB, Replace the main controller PCB (sub)
0002	Reception status error	
0003	Reception interrupt error	
E490	Model error	
0001	Feeder for other model is detected.	Connect an appropriate feeder
E500	Finisher communication error	
0001	Communication error is detected between the main body and the finisher for specific times and specific period of time.	Check on connection between the DC controller PCB and the finisher controller PCB, Replace the finisher controller PCB, Replace the DC controller PCB
E503 ***	Finisher internal communication error	
0002	Communication error between the finisher and the saddle unit	Check on connection between the saddle stitcher controller PCB and the finisher controller PCB, Replace the finisher controller PCB, Replace the saddle stitcher controller PCB
0003	Communication error between the finisher and the puncher unit	Check on connection between the puncher controller PCB and the finisher controller PCB, Replace the finisher controller PCB, Replace the puncher controller PCB
E505	Finisher backup memory error	
0001	Data stored in the backup memory is abnormal.	Check on connection between the DC controller PCB and the finisher controller PCB, Replace the finisher controller PCB, Replace the DC controller PCB
**** 0002	Abnormality of puncher unit EEPROM data	Check on connection between the puncher controller PCB and the finisher controller PCB, Replace the finisher controller PCB, Replace the puncher controller PCB
E514	*** Stack delivery error / **** End assist motor error	
*** 0001	The HP sensor fails to be ON within 1500ms after the return belt starts to move to its HP.	Check on a drive of the stack retaining roller, Replace the return belt U-turn HP sensor (SR5) , Replace the stack delivery motor (M2)
*** 0002	The HP sensor fails to be OFF within 1500ms after the return belt starts to move to the belt contact position.	
**** 0001	The HP sensor fails to be OFF after the end assist motor rotates for a specific period of time.	Replace the end assist HP sensor (PI39) , Replace the end assist motor (M39)
**** 0002	The HP sensor fails to be ON after the end assist motor rotates for a specific period of time.	
E519 ****	Gear change motor error	
0001	The HP sensor fails to be OFF after the gear change motor rotates for a specific period of time.	Replace the gear change HP sensor (PI49) , Replace the gear change motor (M40)
0002	The HP sensor fails to be ON after the gear change motor rotates for a specific period of time.	
E530	*** Rear alignment error / **** Front alignment error	
*** 0001	The HP sensor fails to be ON within 2000ms after the rear adjuster plate starts to move to its HP.	Replace the rear adjuster plate HP sensor (SR4) , Replace the rear adjuster plate motor (M4)
*** 0002	The HP sensor fails to be OFF within 1000ms after the rear adjuster plate starts to move from its HP.	
**** 0001	The HP sensor fails to be OFF after the front jog motor rotates for a specific period of time.	Replace the front adjuster plate HP sensor (PI36) , Replace the front adjuster plate motor (M33)
**** 0002	The HP sensor fails to be ON after the front job motor rotates for a specific period of time.	
E531	Staple error	
*** 0001	The HP sensor fails to be ON within 500ms after the staple motor starts to drive in the reverse direction to recover from a staple jam.	Replace the stapling HP sensor (SR18) , Replace the staple motor (M9)
*** 0002	The HP sensor fails to be OFF within 500ms after the staple motor starts to drive.	
**** 0001	The HP sensor fails to be OFF after the staple motor rotates for a specific period of time.	Replace the staple HP sensor (PI50) , Replace the staple motor (M41)
**** 0002	The HP sensor fails to be ON after the staple motor rotates for a specific period of time.	
E532	Staple unit shift error	
*** 0001	The HP sensor fails to be ON within 11000ms after the staple unit starts to move to the stapling HP.	Replace the stapler slide HP sensor (SR6) , Replace the stapler slide motor (M8)
*** 0002	The HP sensor fails to be OFF within 1000ms after the staple unit starts to move from its HP.	
**** 0001	The HP sensor fails to be OFF after the staple shift motor rotates for a specific period of time.	Replace the stapler shift HP sensor (PI50) , Replace the stapler shift motor (M35)
**** 0002	The HP sensor fails to be ON after the stapler shift motor rotates for a specific period of time.	
E535	Swing error	
*** 0001	The HP sensor fails to be ON within 2000ms after the swing arm starts to move to its HP.	Check on operation of the stack delivery motor swing mechanism, Replace the swing cam HP sensor (SR7) , Replace the swing cam motor (M5)
*** 0002	The HP sensor fails to be OFF within 1000ms after the swing arm starts to move from its HP.	
**** 0001	The HP sensor fails to be OFF after the swing motor rotates for a specific period of time.	Replace the swing HP sensor (PI35) , Replace the swing motor (M36)
**** 0002	The HP sensor fails to be ON after the swing motor rotates for a specific period of time.	
E537	*** Front alignment error / **** Rear alignment error	

Code	Main Cause/Detail of Detection	Countermeasures
*** 0001	The HP sensor fails to be ON within 2000ms after the front adjuster plate starts to move to its HP.	Replace the front adjuster plate HP sensor (SR3) , Replace the front adjuster plate motor (M3) , Replace the adjuster plate drive belt
*** 0002	The HP sensor fails to be OFF within 1000ms after the front adjuster plate starts to move from its HP.	
**** 0001	The HP sensor fails to be OFF after the swing motor rotates for a specific period of time.	Replace the rear adjuster plate HP sensor (PI37) , Replace the rear adjuster plate motor (M34)
**** 0002	The HP sensor fails to be ON after the swing motor rotates for a specific period of time.	
E540	*** Stack tray up/down error / **** Upper tray up/down error	
*** 0002	Paper surface detection fails to end within 1000ms.	Replace the stack tray top paper sensor (SR9) , Replace the stack tray bottom paper sensor (SR10) , Replace the stack tray upper limit sensor (SR13) , Replace the stack tray lower limit sensor (SR12) , Replace the stack tray shift motor (M7)
*** 0003	Encoder lock within 200ms fails to reach 10pulse during paper surface detection.	
*** 0004	Outputs of the top paper sensor, bottom paper sensor, tray upper limit sensor, and tray lower limit sensor have abnormality during paper surface detection.	
**** 0001	The upper tray up/down motor clock is abnormal.	Replace the shift motor (M37) of the tray 1, Replace the shift area sensor PCB of the tray 1
**** 0002	Area is abnormal.	
**** 0003	The safety switch is activated.	
E542 **	Lower tray up/down error	
0001	The lower tray up/down motor clock is abnormal.	Replace the shift motor (M38) of the tray 2, Replace the shift area sensor PCB of the tray 2
0002	Area is abnormal.	
0003	The safety switch is activated.	
E577 *	Paddle error	
0001	The HP sensor fails to be ON within 1500ms after the paper retaining paddle starts to move to its HP.	Replace the paddle HP sensor (SR8) , Replace the paddle motor (M6)
0002	The HP sensor fails to be OFF within 1000ms after the paper retaining paddle starts to move from its HP.	
E580	Stack tray up/down error	
0001	The stack tray fails to reach the stack tray height sensor 4sec. after the stack tray up/down motor starts to move up the tray; or the stack tray fails to come out of the height sensor.	Check on overload on the stack tray up/down motor, Replace the stack tray up/down motor (M5), Replace the stack tray paper height sensor (S10) , Replace the stack tray up/down motor clock sensor (S9)
E584 **	Shutter unit error	
0001	The shutter open sensor fails to be OFF (The shutter cannot be closed).	Replace the stack ejection motor (M32) , Replace the shutter open/close clutch (CL31), Replace the shutter HP sensor (PI45)
0002	The shutter open sensor fails to be ON (The shutter cannot be opened).	Replace the stack ejection motor (M32) , Replace the shutter open/close clutch (CL31), Replace the shutter HP sensor (PI45)
E590 ***	Puncher motor error	
0001	The puncher HP sensor fails to be detected after the puncher motor is driven for 200ms.	Replace the puncher HP sensor, Replace the puncher motor
0002	The puncher fails to detect the puncher HP sensor after the puncher motor stops during initial operation.	
E591 ***	Puncher dust sensor error	
0001	Light receiving voltage at the time of light emission is abnormal.	Replace the puncher dust sensor
0002	Light receiving voltage at the time of non-light-emission is abnormal.	
E592 ***	Puncher side registration sensor error	
0001	Light receiving voltage at the time of light emission is abnormal.	Replace the end sensor
0002	Light receiving voltage at the time of non-light-emission is abnormal.	
0003	Light receiving voltage at the time of light emission is abnormal.	Replace the side registration sensor 1
0004	Light receiving voltage at the time of non-light-emission is abnormal.	
0005	Light receiving voltage at the time of light emission is abnormal.	Replace the side registration sensor 2
0006	Light receiving voltage at the time of non-light-emission is abnormal.	
0007	Light receiving voltage at the time of light emission is abnormal.	Replace the side registration sensor 3
0008	Light receiving voltage at the time of non-light-emission is abnormal.	
0009	Light receiving voltage at the time of light emission is abnormal.	Replace the side registration sensor 4
000A	Light receiving voltage at the time of non-light-emission is abnormal.	
E593 ***	Puncher shift motor error	
0001	The HP sensor fails to be OFF.	Replace the HP sensor, Replace the puncher shift motor
0002	The HP sensor fails to be ON.	
E5F0 **	Saddle paper positioning error	
0001	The paper positioning plate HP sensor fails to be ON after the paper positioning plate motor is driven for 1.33 sec.	Replace the paper positioning plate motor (M4S), Replace the paper positioning plate HP sensor (PI7S)
0002	The paper positioning plate HP sensor fails to be OFF after the paper positioning plate motor is driven for 1 sec.	
E5F1 **	Saddle paper folder error	
0001	The number of detection pulses for the paper folder motor clock sensor is below the specific level.	Replace the paper folder motor (M2S), Replace the paper folder motor clock sensor (PI4S)
0002	The paper folder HP sensor fails to change after the paper folder motor is driven for 3 sec.	
E5F2 **	Saddle guide error	
0001	The guide HP sensor fails to be ON after the guide motor is driven for 0.455 sec.	Replace the guide motor (M3S), Replace the guide HP sensor (PI13S)
0002	The HP sensor fails to be OFF after the guide motor is driven for 1 sec.	
E5F3 **	Saddle alignment error	

Code	Main Cause/Detail of Detection	Countermeasures
0001	The adjuster plate HP sensor fails to be ON after the jog motor is driven for 0.5 sec. (for 1.67 sec. during initial operation)	Replace the jog motor (M5S), Replace the adjuster plate HP sensor (PI5S)
0002	The adjuster plate HP sensor fails to be OFF after the jog motor is driven for 1 sec.	
E5F4 ****	Saddle rear side staple error	
0001	The stitching HP sensor fails to be ON after the stitcher motor (rear) rotates in the adverse direction for 0.5 sec. or more.	Replace the stitcher motor (rear, M6S), Replace the stitching HP sensor (rear, MS5S)
0002	The stitching HP sensor fails to be OFF after the stitcher motor (rear) rotates for 0.5 sec. or more.	
E5F5 ****	Saddle front side staple error	
0001	The stitching HP sensor fails to be ON after the stitcher motor (front) rotates in the adverse direction for 0.5 sec. or more.	Replace the stitcher motor (front, M7S), Replace the stitching HP sensor (front, MS7S)
0002	The stitching HP sensor fails to be OFF after the stitcher motor (front) rotates for 0.5 sec. or more.	
E5F6 ****	Saddle paper push-on error	
0001	The paper pressure plate HP sensor fails to be ON after the paper pressure plate motor is driven for 0.3 sec. or more.	Replace the paper pressure plate motor (M8S), Replace the paper pressure plate HP sensor (PI14S)
0002	The paper pressure plate HP sensor fails to be OFF after the paper pressure plate motor is driven for 80ms or more.	
0003	The number of detection pulses for the paper pressure plate motor clock sensor is below the specific level.	Replace the paper pressure plate motor (M8S), Replace the paper pressure plate motor clock sensor (PI1S)
0004	The paper pressure plate leading edge sensor fails to be OFF after the paper pressure plate motor is driven for 80ms or more.	Replace the paper pressure plate motor (M8S), Replace the paper pressure plate leading edge sensor (PI15S)
0005	The paper pressure plate leading edge sensor fails to be ON after the paper pressure plate motor is driven for 0.3 sec. or more.	
E5F8 ****	Saddle connector error	
0001	Disconnection of the guide HP sensor connector is detected.	Disconnect and then connect the guide HP sensor (PI13S) connector
0002	Disconnection of the paper pressure plate HP sensor connector is detected.	Disconnect and then connect the paper pressure plate HP sensor (PI14S) connector
0003	Disconnection of the paper pressure plate leading edge sensor connector is detected.	Disconnect and then connect the paper pressure plate leading edge sensor (PI15S) connector
E5F9 ****	Saddle switch error	
0001	Open of the inlet cover is detected for 1 sec. or more after the host machine starts initial rotation/printing while the following sensors detect their covers closed. - Inlet cover sensor (PI9S) - Front cover open/close sensor (PI2S) - Delivery cover sensor (PI3S) Or, the front cover switch (MS2S) or the delivery cover switch (MS3S) is open.	Replace the inlet cover switch (MS1S), Replace the front cover switch (MS2S), Replace the delivery cover switch (MS3S)
0002	Open of the front cover switch is detected for 1 sec. or more after the host machine starts initial rotation/printing while the following sensors detect their covers closed. - Inlet cover sensor (PI9S) - Front cover open/close sensor (PI2S) - Delivery cover sensor (PI3S)	Replace the front cover switch (MS2S), Replace the delivery cover switch (MS3S)
0003	Open of the delivery cover switch is detected for 1 sec. or more after the host machine starts initial rotation/printing while the following sensors detect their covers closed. - Inlet cover sensor (PI9S) - Front cover open/close sensor (PI2S) - Delivery cover sensor (PI3S) - Delivery cover switch (MS3S)	Replace the inlet cover switch (MS1S), Replace the front cover switch (MS2S), Replace the delivery cover switch (MS3S)
E601	Abnormality of image memory	
0000	Communication error of the image memory (SDRAM)	Replace the SDRAM
E602	Hard disk error	Refer to [Details of E602]
E604	The image memory (SDRAM) is faulty/insufficient	
0000	Memory capacity required for a model fails to be recognized.	Add on the SDRAM
0001	Memory for MEAP application is insufficient.	
0002	The image memory of larger than 1.5GB is installed (at activation)	Make the memory 1.5GB or less.
0768	Memory is faulty/insufficient (768MB is required)	Add on the SDRAM
1024	Memory is faulty/insufficient (1024MB is required)	
E609	Abnormal low temperature of the hard disk	
0008	At start-up, temperature of the HDD fails to reach the specific level within a specific period of time.	Replace the HDD
0009	During recovery from sleep mode, temperature of the HDD is below the specific level within the specific period of time.	
E610	Failure in the hard disk cryptographic key	
0001	The encryption board is not attached.	Attach the encryption board
0002	Memory is faulty/insufficient	Add on memory
0101	Initialization of a key storage area in the memory ends in failure.	Turn OFF and back ON the main power, Replace the main controller PCB
0102	Initialization of code processing ends in failure.	Turn OFF and back ON the main power, Replace the encryption board
0201	Code processing error	
0202	Code processing error	
0301	Creation of a cryptographic key ends in failure.	
0302	Failure in the cryptographic key is detected.	Turn OFF and back ON the main power, Replace the main controller PCB The HDD will be initialized due to the error.
0303	Failure in the cryptographic key is detected.	

Code	Main Cause/Detail of Detection	Countermeasures
0401	Error is detected during encrypting.	Turn OFF and back ON the main power, Replace the encryption board
0402	Error is detected during decoding.	
E611	Error in repeat of reboot due to fault of SRAM, etc.	
0000	SRAM information is broken, job information stored in SRAM cannot be read and reboot is repeated at recovery from power-off	Execute clear of SRAM
E674	FAX board communication error	
0001	Communication error between the FAX board and the main controller PCB is detected for the specific number of times.	Check on connection between the FAX board and the main controller PCB, Replace the FAX board, Replace the main controller PCB
0004	Access to the modem IC is abnormal.	
0008	Access to the port IC is abnormal.	
000C	Access to the modem IC and port IC is abnormal.	
0010	Abnormality is detected when the timer device is open.	Replace the main controller PCB
0011	Abnormality is detected when the timer device starts.	
E677	Abnormality of the external controller	
0003	Abnormality of the external controller Abnormality is detected in configuration check when the external controller starts up.	Check on connection of the cable, Re-install the external controller system
0010	Controller for other mode is connected.	Connect an appropriate controller, Re-install the external controller system
0080	Communication with the printer is abnormal after the external controller starts up properly.	Check on connection of the cable, Re-install the external controller system
E710	IPC initialization error	
0000	Error in initialization of IPC chip	Check the connection of cable, Replace the DC controller PCB
0001	The status fails to be ready within 3 sec after the IPC chip starts up.	Check on connection of the cable
E711	IPC communication error	
0001	Error is set to the error register of the IPC chip 4 times or more within 1.5 sec.	Check on connection of the cable, Replace the ADF controller PCB, Replace the reader controller PCB
0002	Error is detected 4 times or more within 1.5 sec. after communication between the finisher and the printer stops, and recovery ends in failure.	Check on connection of the cable, Replace the finisher controller PCB, Replace the DC controller PCB
E712	Communication error between the ADF and the reader	
0001	Communication between the reader and the ADF stops, and the communication cannot recover for 5 sec. or more.	Check on connection of the cable, Replace the ADF controller PCB, Replace the reader controller PCB
E713	Communication error between the finisher and the printer	
0000	Communication between the finisher and the copier stops.	Check on connection of the cable, Replace the finisher controller PCB, Replace the DC controller PCB
E716	Error in communication to cassette pedestal, 2 / 3 delivery unit	
0000	Error in data communication with cassette pedestal	Check cable connection, replace pedestal PCB, replace DC controller PCB
0001	Error in data communication with 2 / 3 delivery unit	Check cable connection, replace 2 / 3 delivery unit PCB, replace DC controller PCB
E717	Communication error with the NE controller	
0001	The NE controller connected before the power is turned off fails to be recognized at power-on.	Check on connection of the cable To recover from the error: In service mode COPIER>FUNCTION>CLEAR >ERR
0002	A break in the IPC, IPC communication fails to recover	
E719	Communication error with the coin vender/card reader	
0001	The coin vender connected before the power is turned off fails to be recognized at power-on.	Check on connection of the cable To recover from the error: In service mode COPIER>FUNCTION>CLEAR >ERR
0002	- A break in the IPC cable connected to the coin vender, IPC communication fails to recover - A break in the paper pickup/delivery signal line - Incorrect connection is detected (Short circuit in Tx and Rx of IPC)	
0011	The card reader connected before the power is turned off fails to be recognized at power-on.	
0012	A break in the IPC cable connected to the card reader, IPC communication fails to recover	
E730	PDL error	
1001	PDL software error Initialization error when a job starts.	Reset PDL, Turn OFF and back ON the main power
100A	PDL software error System error such as a failure in initialization occurs during job processing.	
9004	Open interface communication error PAI communication error with the external controller	Turn OFF and back ON the main power, Check on connection of the Open interface board/cable, Replace the external controller, Replace the Open interface board, Replace the main controller PCB
9005	Connection error between the video cable and the external controller is detected.	
A006	PDL communication error PDL has no response	Reset PDL, Turn OFF and back ON the main power, Check on connection of the UFR board, Re-install the system, Replace the main controller PCB, Format and re-install the whole system.
A007	PDL version mismatch Machine control software version and PDL control software version do not match at start-up.	Reset PDL, Turn OFF and back ON the main power, Format and re-install the whole system
B013	PDL built-in font error Font data is corrupt at start-up.	Turn OFF and back ON the main power, Re-install the system, Format and re-install the whole system.
C000	Initialization error	Format and re-install the whole system, Replace the main controller PCB.

Code	Main Cause/Detail of Detection	Countermeasures
C001	HDD access error	Format and re-install the whole system, Replace the HDD, Replace the main controller PCB.
E731	UFR PCB error	
3000	The UFR PCB fails to be recognized at start-up.	Check on connection of the UFR PCB , Replace the UFR PCB , Replace the main controller PCB
3001	The UFR PCB fails to be initialized at start-up.	
3002	Rambus fails to be initialized.	
3015	Image data fails to be sent to the tip on the main controller PCB (main).	Turn OFF and back ON the main power, Replace the UFR PCB , Replace the main controller PCB
E732	Reader communication error	
0001	DDI-S communication error	Check on connection between the reader controller PCB and the main controller PCB, Check on the reader power supply
E733	Printer communication error	
0000	The printer fails to be detected at start-up.	Check on connection between the DC controller PCB and the main controller PCB, Check on the printer power supply
0001	DDI-P communication error	
E740	Abnormality of the Ethernet board	
0002	Incorrect MAC address is detected at start-up.	Replace the Ethernet board , Replace the main controller PCB (sub LAN-bar)
0003	Incorrect network ID is detected at start-up.	
E743	DDI communication error	
0001	The reader controller PCB detects communication error between the main controller PCB and the reader controller PCB.	Disconnect and then connect the reader communication cable connector, Replace the reader controller PCB, Replace the main controller PCB
E744	Language file/BootROM error	
0001	Language version and Bootable version in the HDD differ.	Upgrade the version of the Language file
0002	The language size in the HDD is too large.	
0003	Language in Config.txt in the HDD that should be switched fails to be found. Switch to the language in the HDD cannot be done.	
0004	Switch to the language in the HDD cannot be done.	
1000	The BootROM for other model is connected.	Replace the BootROM
1001	System version and BootROM version do not match.	Replace the BootROM, Upgrade the system version
2000	Incorrect engine ID is detected.	Re-install the system
4000	Incorrect DC controller PCB is detected.	Upgrade the DC controller PCB version
E745	Token ring board error	
0001	Initialization of the token ring driver using PCI ends in failure.	Check on connection of the token ring board, Replace the token ring board
0002	MAC address is abnormal when the token ring driver is initialized.	
0003	Board information acquisition/setting is abnormal when the token ring board is initialized.	
0004	Connection error when the token ring driver starts up.	Check on connection of the cable, Check on power supply of the MAU
E746	Option board error	
0003	The UFR PCB for other model is detected at start-up.	Replace with an appropriate UFR PCB
0004	The main controller PCB (sub) for other model is detected at start-up.	Replace with an appropriate main controller PCB (sub)
E747	Main controller PCB error (Image processing ASIC or memory control/communication control ASIC)	
XXXX	IC12 (image processing ASIC) or IC23 (memory control/communication control ASIC, CPU) on the main controller PCB is abnormal (such as image data transfer error)	Turn OFF and back ON the main power, Replace the main controller PCB (main)
E747	Main controller PCB error	
0000-1217	An error occurs in the main controller PCB (Main).	Turn the main power off and turn it back on. Replace the main controller PCB (Main).
2000-3D00	An error occurs in the communication with the main controller PCB (Sub PE).	Disconnect and connect the main controller PCB (Sub PE), or replace it. Replace the main controller PCB (Main).
3F00,3F02	When Unmounting of the main controller PCB (Sub PE) is detected.	Disconnect and connect the main controller PCB (Sub PE), or replace it.
6000-7D00	An error occurs in the communication with the main controller PCB (Sub R)	Disconnect and connect the main controller PCB (Sub R), or replace it. Replace the main controller PCB (Main).
7F00	When unmounting of the main controller PCB (Sub R) is detected.	Disconnect and connect the main controller PCB (Sub R), or replace it.
8000-9C00	A error occurs in the communication with the open interface PCB.	Disconnect and connect the open interface PCB, or replace it. Replace the main controller PCB (Main).
9F00	When unmounting of the main controller PCB (Sub R) is detected.	Disconnect and connect the main controller PCB (Sub R), or replace it.
C000-DC00	An error occurs in the communication with the main controller PCB (Sub SJ).	Disconnect and connect the main controller PCB (Sub SJ), or replace it. Replace the main controller PCB (Main).
DF00	When unmounting of the main controller PCB (Sub SJ) is detected.	Disconnect and connect the main controller PCB (Sub SJ), or replace it.
FF00	Incorrect main controller PCB (Sub SJ/PE/R) or incorrect open interface PCB is detected.	Replace with an appropriate main controller PCB (Sub SJ/PE/R) or open interface PCB.

Code	Main Cause/Detail of Detection	Countermeasures
EXXX	When an interrupt occurs from unexpected ASIC.	Turn the main power off and turn it back on. Replace the main controller PCB (Main).
E748	Main controller PCB error	
4000	Any ASIC of the main controller PCB (Sub SJ/PE/R) or ASIC of the open interface PCB is not detected.	Disconnect and then connect the main controller PCB (Sub SJ/PE/R), Replace the main controller PCB (Sub SJ/PE/R), Disconnect and then connect the relay PCB (GU-short), Replace the relay PCB (GU-short), Disconnect and then connect the open interface PCB, Replace the open interface PCB, Replace the main controller PCB (main)
4010	Failure of the main controller PCB (Sub SJ/PE/R) or failure of the open interface PCB is detected.	Disconnect and then connect the main controller PCB (Sub SJ/PE/R), Replace the main controller PCB (Sub SJ/PE/R), Disconnect and then connect the relay PCB (GU-short), Replace the relay PCB (GU-short), Disconnect and then connect the open interface PCB, Replace the open interface PCB, Replace the main controller PCB (main)
4020	When connecting of an incorrect board to the PCB expansion slot is detected:	Mount the PCI expansion board (encrypted board or voice board) for the host machine.
4021	When the /SERROR signal of the PCI is detected (such as the address parity error).	Disconnect and connect the PCI expansion board, or replace it. Replace the main controller PCB (Main).
4030	An error occurs in accessing to the HDD controller.	Replace the main controller PCB (Sub LAN-bar) Replace the main controller PCB (Main)
4040	Access error to the main controller PCB (Sub SJ/PE/R) or access error to the open interface PCB.	Disconnect and then connect the main controller PCB (Sub SJ/PE/R), Replace the main controller PCB (Sub SJ/PE/R), Disconnect and then connect the relay PCB (GU-short), Replace the relay PCB (GU-short), Disconnect and then connect the open interface PCB, Replace the open interface PCB, Replace the main controller PCB (main)
4041	An error occurs in accessing to the counter memory PCB.	Disconnect and connect the counter memory PCB, or replace it. Replace the main controller PCB (Main).
4042	An error occurs in size of SDRAM.	Disconnect and connect SDRAM, replace it, or add another. Replace the main controller PCB (Main)
4043	An error occurs in reading MAC address.	Replace the main controller PCB (Sub LAN-bar). Replace the main controller PCB (Main).
4044	An error occurs in accessing to ECO-ID PCB.	Connect and disconnect ECO-ID PCB, or replace it. Replace the main controller PCB (Main)
4045	An error occurs in accessing to RTC.	Disconnect and connect SRAM, or replace it. Replace the main controller PCB (Main).
4050	An error occurs in accessing to LAN controller.	Replace the main controller PCB (Sub LAN-bar). Replace the main controller PCB (Main).
4150	When an exhaustion of battery to backup SRAM/RTC is detected	Turn off the main power and turn it back on. Replace the SRAM PCB.
4160	An error occurs in accessing to the FAX I/F controller.	Replace the main controller PCB (Main)
4170	An error occurs in accessing to the USB host controller.	Replace the main controller PCB (Sub LAN-bar). Replace the main controller PCB (Main).
4180	An error occurs in accessing to the USB device controller.	Replace the main controller PCB (Sub LAN-bar). Replace the main controller PCB.
4190	An error occurs in accessing to the I/F controller (Card reader, Coin robot) in IPC communication.	Replace the main controller PCB (Sub LAN-bar). Replace the main controller PCB (Main).
4210	An error occurs in accessing to the ASIC for I/O and interrupt.	Replace the main controller PCB (Main).
4220	An error occurs in reading SDRAM(Slot position; Upper)	Disconnect and connect SDRAM, or replace it.
4221	An error occurs in reading SDRAM(Slot position; Lower).	Disconnect and connect SDRAM, or replace it.
4230	An error occurs in accessing to the LCD controller.	Replace the main controller PCB (Main).
4260	An error occurs in writing when the BootROM version is upgraded.	Replace the BootROM.
4901	When turning off the 3.3V emergency night power is detected during operation.	Replace the controller power PCB. Replace the main controller PCB (Main).
E749	Restart in accordance with a change of the product configuration	
0001	The BootROM is replaced with a different type (when the PDL option is installed) .	Turn OFF and back ON the main power to recover
0003	Replaced with other kind of BootROM (e.g. at installation of mAccele accessory)	Recovered by turning the main power OFF / ON
E803	Door close error	
0001	Remote (+24V) OFF is detected soon after the door is closed.	Check on connection of the front cover open/close switch (SW3) , Replace the front cover open/close switch
0002	Remote (+13V) OFF is detected soon after the door is closed.	
E804	Controller fan error	
0000	Stop of power supply cooling fan was detected	Check the connection of power supply cooling fan, replace it
0001	Stop of power supply cooling fan 2 was detected	Check the connection of power supply cooling fan 2, replace it
0004	Stoppage of the controller fan is detected for 16 sec continuously.	Check on connection of the controller fan, Replace the controller fan
E805	Fan error	
0000	Stop of fixing fan was detected	Check the connection of fixing fan, replace it

Code	Main Cause/Detail of Detection	Countermeasures
0001	Lock fails to be detected for 5sec continuously while the exhaust fan (front) is driven. Disconnection of the fan connector. Lock signal fails to be sent due to a fan failure.	Check on connection of the exhaust fan (front), Replace the exhaust fan (rear)
0002	Lock fails to be detected for 5sec continuously while the exhaust fan (rear) is driven. Disconnection of the fan connector. Lock signal fails to be sent due to a fan failure.	Check on connection of the exhaust fan (rear), Replace the exhaust fan (rear)
0003	Lock fails to be detected for 5sec continuously while the ITB fan is driven. Disconnection of the fan connector. Lock signal fails to be sent due to a fan failure.	Check on connection of the ITB fan, Replace the ITB fan
0004	Lock fails to be detected for 5sec continuously while the toner intake fan is driven. Disconnection of the fan connector. Lock signal fails to be sent due to a fan failure.	Check on connection of the toner intake fan, Replace the toner intake fan
E806	Error in fan of main body	
0001	Error in delivery adhesive fan was detected	Check the connection of delivery adhesive fan, replace it
0002	The drop of connector of delivery adhesive fan / the disconnection was detected	Check the connection of delivery adhesive fan, replace it
0003	Error in secondary transfer exhaust fan was detected	Check the connection of secondary transfer exhaust fan, replace it
E807	Error in fan of process cartridge	
0001	Error in fan (front) of process cartridge was detected	Check the connection of fan (front) of process cartridge, replace it
0002	Error in fan (rear) of process cartridge was detected	Check the connection of fan (rear) of process cartridge, replace it
E808	Error in low-voltage power supply PCB (error in zero cross)	
0000	Error in low-voltage power supply PCB	Replace low-voltage power supply PCB, replace DC controller PCB
E811	Error in detection of new drum unit	
0000	Error in blowout of fuse for detection of new drum unit (process cartridge)	Check the connection of drum unit, replace it Replace DC driver PCB
0001	Error in blowout of fuse for detection of new drum unit (process cartridge)	Replace DC driver PCB
E840	Fan shutter error	
0000	Fan shutter open/close operation Error Cause Abnormal rotation of the fan shutter motor Defect of the fan shutter position sensor Defect of the fan shutter home position error Defect of the DC controller PCB	- Replace the fan shutter motor - Replace the fan shutter position sensor - Replace the fan shutter home position sensor - Replace the DC controller PCB
E990	Error in toner container	
0000	When the output of the abolition toner shutter opening and shutting detection sensor doesn't become "H" when it WMUPR period after the sleep returns after eight hours or more pass, the door opening and shutting is detected or main power switch turns on.	The abolition toner shutter is shut.

16.2.2 E602 in Detail

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

E602-XXYY

- if XX='00'

T-16-3

XX	YY	Description	Remedial action
00	01	The HDD is not recognized. The boot partition (BOOTDEV) is not found at time of start-up.	1. Turn off the main switch, and check the HDD cable. Thereafter, turn on the main switch. 2. Check to see if the HDD rotates at power-up. Check to see if 5V/12V power is being supplied. 3. If the foregoing fails to correct the fault, replace the HDD and reinstall the system software. If the fault still persists, replace the main board.
	02	There is no system software for the main CPU.	1. Start up in safe mode; then, execute full formatting using the SST, reinstall the system software (System, Lang, RUI), and turn off and then on the main switch. 2. If the foregoing fails, suspect a fault on the HDD. Replace the HDD, and reinstall the system software.
	03	WriteAbort has been detected in BootDevice.	1. Locate the sector that shows WriteAbort, and repair it. <in the case of black-and-white E code> 1-1 Go through the following, as service mode cannot be started: 1-2 Turn off the power; then, while holding down the 1 and 9 keys, turn on the power so that the WriteAbort sector repair routine will start automatically, causing the screen to go solid black. 1-3 Allow for some time (40 to 50 min). A progress indictor will appear. When the screen turns solid white, the repair is over. <in the case of spanner icon indication> 1-1 Set CHK-TYPE=0, and execute HD-CHECK (40 to 50 min); then, turn off the main switch. 2. If the foregoing fails, start up in safe mode, and execute full formatting using the SST and reinstall the system software (System, Lang, RUI); then, turn off and then on the main switch. 3. If the fault still persists, suspect a fault on the HDD, and replace the HDD and reinstall the system software.
	06	The system software of the sub CPU is missing.	1. Start up in safe mode, and execute full formatting using the SST and reinstall the system software (System, Lang, RUI); then, turn off and then on the main switch. 2. If the foregoing fails, suspect a fault on the HDD, and replace the HDD and reinstall the system software.
	07	ICCProfile is missing.	1. Start up in safe mode, and execute full formatting using the SST and reinstall the system software (System, Lang, RUI); then, turn off and then on the main switch. 2. If the foregoing fails, suspect a fault on the HDD, and replace the HDD and reinstall the system software.

XX				YY					
				YY=03	YY=05	YY=00,01,02,04	YY=11,21	YY=13,25	YY=10,12,14,22,23,24
				At time of start-up			During normal operation		
XX	CHK-TYPE	Partition in question	Description	Remedy	Remedy	Remedy	Remedy	Remedy	Remedy
01	1	FSTDEV	image data storage area (e.g., Box)	*1	*5	*9	*10	*11	*12
02		IMG_MNG	image management data	*1	*5	*9	*10	*11	*12
03		FSTCDEV	image data storage area (for Chasing)	*1	*5	*9	*10	*11	*12
04	2	APL_GEN	general-purpose data storage area	*1	*5	*9	*10	*11	*12
05		TMP_GEN	general-purpose data storage area (temporary file)	*1	*5	*9	*10	*11	*12
06		TMP_FAX	fax (temporary file)	*1	*5	*9	*10	*11	*12
07		TMP_PSS	PSS (temporary file)	*1	*5	*9	*10	*11	*12
08	3	PDLDEV	PDL-related file storage area (font, registration form, ICCProfile PDL function color correction information file)	*1	*5	*9	*10	*11	*12
09	4	BOOTDEV	Firmware storage area (Booktable, MEAP, Key, certificate, PDF dictionary, RUI content, voice dictionary (ICC profile, PS test data))	*3	*8	*9	*10	*11	*12
10	5	APL_MEAP	MEAP	*1	*5	*9	*10	*11	*12
11	6	APL_SEND	address book, filter	*2	*5	*9	*10	*11	*12
FF	0	Not identified	HDD full fault check and recovery	*4	*7	*9	*10	*11	*12

- if XX='01 to FF'

XX				YY						HDD formatting			
				YY=03	YY=05	YY=00, 01,02,04	YY=11, 21	YY=13, 25	YY=10, 12,14,22 ,23,24				
				At time of start-up			During normal operation						
XX	CHK-TYPE	Partition in question	Description	Remedy	Remedy	Remedy	Remedy	Remedy	Remedy	Items deleted (typical)	HDD formatting by HD-CLEAR	HDD formatting by normal mode + SST	HDD formatting by safe mode + SST
01	1	FSTDEV	image data storage area (e.g., Box)	*1	*5	*9	*10	*11	*12	all stored data (e.g., Box)	possible (3 partitions simultaneous)	FSTDEV selected (3 partitions simultaneous)	
02		IMG_MNG	image management data	*1	*5	*9	*10	*11	*12				
03		FSTCDEV	image data storage area (for Chasing)	*1	*5	*9	*10	*11	*12				
04	2	APL_GEN	general-purpose data storage area	*1	*5	*9	*10	*11	*12	General	possible (4 partitions simultaneous)	APL_GEN selected (4 partitions simultaneous)	
05		TMP_GEN	general-purpose data storage area (temporary file)	*1	*5	*9	*10	*11	*12	General			
06		TMP_FAX	fax (temporary file)	*1	*5	*9	*10	*11	*12	FAX			
07		TMP_PSS	PSS (temporary file)	*1	*5	*9	*10	*11	*12	PSS			
08	3	PDLDEV	PDL-related file storage area (font, registration form, ICCProfile, PDL function color correction information file)	*1	*5	*9	*10	*11	*12	UserFont Icc Profile	possible	PDLDEV selected	
09	4	BOOTDEV	Firmware storage area (Booktable, MEAP, Key, certificate, PDF dictionary, RUI content, voice dictionary (ICC profile, PS test data))	*3	*8	*9	*10	*11	*12	System	Not possible	Not possible	
10	5	APL_MEAP	MEAP	*1	*5	*9	*10	*11	*12	MEAP	possible	possible	
11	6	APL_SEND	address book, filter	*2	*5	*9	*10	*11	*12	SEND	Not possible	Not possible	
FF	0	Not identified	HDD full sector fault check and repair	*4	*7	*9	*10	*11	*12	-	-	-	-

	YY	Description	Remedial action
*1	03	WriteAbort(start-up)	1. Indicate the partition in question for CHK-TYPE; then, execute HDD-CHECK (several min to several 10s of min); then, turn off and then on the power. 2. If the foregoing fails, indicate the partition for CHK-TYPE, and execute HDD-CLEAR; then, turn off and then on the main power switch.
*2	03	WriteAbort(start-up)	1. If possible, ask the user to make a backup of the data (address book) using the remote UI. 2. Indicate the partition in question for CHK-TYPE, and execute HDD_CHECK (several min to several 10s of min); then, turn off and then on the main power switch. 3. If the foregoing fails, start download mode, and execute full formatting and reinstall the system software (System, Lang, RUI); then, turn off and then on the main power switch.
*3	03	WriteAbort(start-up)	Recovery on the boot partition always calls for the use of SST in safe mode: 1. Set CHK-TYPE=0, and execute HDD-CHECK (several 10s of min); then, turn off and then on the power. 2. If the foregoing fails, start download mode, and execute full formatting and reinstall the system software (System, Lang, RUI); then, turn off and then on the main power switch.
*4	03	WriteAbort(start-up)	1. Set CHK-TYPE=0, and execute HDD-CHECK (several 10s of min); then, turn off and then on the power. 2. If the foregoing fails, use CHK-TYPE-1, 2, 3, 5 to execute HDD-CLEAR; then, turn off and then on the power.
*5	05	file system error	1. Indicate the partition for CHK-TYPE, and execute HDD-CLEAR; then, turn off and then on the main switch. 2. If the foregoing fails, suspect a fault on the HDD, and replace the HDD and reinstall the system software.
*6	05	file system error	HDD-CLEAR cannot be executed in service mode so as to prevent inadvertent deletion of data for address book, filter, and the like. 1. If possible, ask the user to make a backup of the data for address book using the remote UI. 2. Start in service mode, and start download mode. Execute full formatting using the SST, and reinstall the system software (System, Lang, RUI); then, turn off and then on the main power switch.
*7	05	file system error	This error seldom occurs. 1. Using CHK-TYPE=1, 2, 3, 5, execute HDD-CLEAR; then, turn off and then on the power. 2. If the foregoing fails, suspect a fault on the HDD, and replace the HDD and reinstall the system software.
*8	05	file system error	Repair of the boot partition always calls for the use of the SST in safe mode. 1. Start up in safe mode, and execute full formatting using the SST and reinstall the system software (System, Lang, RUI); then, turn off and then on the main power switch. 2. If the foregoing fails, suspect a fault on the HDD, and replace the HDD and reinstall the system software.
*9	00,01, 02,04	HDD contact fault, or v x Works system error	1. Check the cable and power supply connectors. 2. If the foregoing fails, start up in safe mode, and execute full formatting using the SST and reinstall the system software; then, turn off and then on the main power switch. 3. If the foregoing fails, suspect a fault on the HDD, and replace the HDD and reinstall the system software.

	YY	Description	Remedial action
*10	11,21	HDD contact fault	This error seldom occurs in the course of normal read/write operations. 1. Check the cable and power connectors. 2. If the foregoing fails, suspect a fault on the HDD, and replace the HDD and reinstall the system software.
*11	13,25	WriteAbort	The text file on the HDD (e.g., Box) may be damaged. 1. Indicate the partition for CHK-TYPE, and execute HDD-CHECK (several min to several 10s of min); then, turn off and then on the power. 2. If the forgoing fails, indicate the partition for CHK-TYPE, and execute HDD-CLEAR; then, turn off and then on the main switch. (In the case of BOOTDEV, BOOTDEV2, or APL_SEND, execute formatting using the SST and reinstall the system software.) 3. If the foregoing fails, suspect a fault on the HDD, and replace the HDD and reinstall the system software.
*12	10,12,14 22,23,24	system error, or packet data error	This error occurs in response to corruption of data or a bug in software. 1. Start up in safe mode, and execute full formatting using the SST and reinstall the system software (System, Lang, RUI); then, turn off and then on the main power switch. 2. If the foregoing fails, suspect a fault on the HDD; replace the HDD, and reinstall the system software.

16.3 Error Codes (SEND)

16.3.1 Self-Diagnostic Display

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Cause	Remedy
Scanning has stopped because the size of the data for the scanned original exceeds the limit. Scanning may be possible if [Data Cmprssn] is set to [High Ratio], Resolution is lowered, or [Sharpness] is reduced.	
Scanning was stopped because the data size of the scanned original exceeded the maximum data size that the machine could handle.	By selecting [High Ratio] for Data Compression Ratio, lowering the Resolution, and lowering the Sharpness setting, scanning may become possible.
Out of resources. Wait for a moment, then perform operation again.	
You cannot browse the network. There is a lack of TCP/IP resources because documents have just been continuously sent or are being continuously sent through FTP or Windows (SMB).	Wait for a while, and try browsing again.
Set the IP Address.	
This machine is not set with an IP address.	Specify the IP Address Settings in TCP/IP Settings in Network Settings in System Settings (from the Additional Functions screen), then turn the machine's main power OFF and back ON again.
No response from the server. Check the settings.	
The specified server settings are incorrect, or the server is not turned ON. Alternatively, the machine's TCP/IP resources may be low.	Wait for a while, and try browsing again. If there is still no response from the server, try selecting another server.
NetWare is in use. Wait for a moment, then perform operation again.	
You cannot browse the network because NetWare is printing through a Pserver or NDS PServer.	Wait until printing is complete, then try browsing again.
There are too many subdirectories.	
You have exceeded the maximum number of subdirectory levels allowed.	Specify a different destination because the directory level that you are trying to access cannot be specified.
No response.	
The server was not running when you tried to send.	Make sure that the server is ON, and check the destination.
The network connection was lost when you tried to send. (Either you could not connect to the destination, or the connection was lost before the job could be completed.)	Check the status of the network.
You tried to send through NetWare, but the Tree name was not entered.	Enter the Tree name.
A TCP/IP error occurred when you tried to send an e-mail message or an I-fax.	Check that the network cables and connectors are properly connected.
Check the TCP/IP.	
Cause The machine's TCP/IP connection is not operating.	Check the IP Address Settings (IP Address, DHCP, RARP, BOOTP) in TCP/IP Settings in Network Settings in System Settings (from the Additional Functions screen).
Cannot find the selected server. Check the settings.	
The IP address that the machine should connect to cannot be determined.	1. Check the DNS Server Settings in TCP/IP Settings in Network Settings in System Settings (from the Additional Functions screen). 2. Check whether the DNS server's DNS settings are correct.
If Login Information in Register LDAP Server in System Settings (from the Additional Functions screen) is set to 'Use (security auth.)' for the LDAP server, the machine will not be able to determine the host name.	Check the DNS Server Settings in TCP/IP Settings in Network Settings in System Settings (from the Additional Functions screen).
Cannot connect to the selected server. Check the settings.	
The machine cannot connect to the specified IP address/port.	1. Check the Gateway Address setting in IP Address Settings in TCP/IP Settings in Network Settings in System Settings (from the Additional Functions screen). 2. Check the Server Address and Port Number in Register LDAP Server in System Settings (from the Additional Functions screen). 3. Check whether the LDAP server is operating normally. 4. If Login Information in Register LDAP Server in System Settings (from the Additional Functions screen) is set to 'Use (security auth.)' for the LDAP server, check whether UDP (User Datagram Protocol) packages are blocked by the filter.
Check the user name and password or check settings.	
When setting Login Information for the LDAP server to 'Use' or 'Use (security auth.)', the user name or password is incorrect.	Check the User and Password settings when Login Information in Register LDAP Server in System Settings (from the Additional Functions screen) is set to 'Use' or 'Use (security auth.)'.

Cause	Remedy
When setting Login Information for the LDAP server to 'Use (security auth.)', the domain name is incorrect.	Check the Domain Name setting when Login Information in Register LDAP Server in System Settings (from the Additional Functions screen) is set to 'Use (security auth.)'.
Cannot complete searching due to timeout. Check the settings.	
The search could not be completed within the time specified under <Search Timeout>.	Increase the time setting for Search Timeout in Register LDAP Server in System Settings (from the Additional Functions screen).
The number of search results has exceeded limits. Change search conditions and try again.	
The number of addresses that meet the search criteria exceeds the specified maximum number of addresses to search.	1. Narrow down the search criteria, and then search again. 2. Increase the maximum number of addresses to search.
Search condition includes characters that cannot be used with the selected server.	
"/" is used in the search criterion.	Remove "/" from the search criterion, and search again.
The combination of characters used in the search criterion does not constitute an acceptable search criterion. There is an unequal number of "(" and ")". "*" is not placed within "( )".	Make sure that the characters for the search criterion are combined properly, and search again.
If <Server LDAP version and character code> is set to 'ver.2 (JIS)', characters other than ASCII Code (0x20-0x7E) are being used.	Omit characters that cannot be used, and search again.
Cannot start searching because the version setting for the server is incorrect. Check the settings.	
Although 'ver. 3' is set as the server LDAP version number in Register LDAP Server in System Settings (from the Additional Functions screen), the LDAP server is running on version 2.	Set Server LDAP version and character code in Register LDAP Server in System Settings (from the Additional Functions screen) to 'ver. 2'.

16.3.2 List of Error Codes without Messages

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Cause	Remedy
# 001	
Paper or originals are jammed.	Place the document properly in the feeder or on the platen glass, and remove any jammed paper or originals.
# 003	
Communications that take longer than the preset time (64 minutes) caused the error.	1. Reduce the resolution, and try sending the document again. 2. When receiving a document, ask the remote party to either reduce the resolution at which the document is scanned, or divide the document into two or more parts before sending it.
# 005	
The other party did not answer within 35 seconds.	Confirm that the remote machine is able to communicate, and try again.
The receiving machine is not a G3 fax.	Check the type of receiving machine with the receiving party.
# 009	
There is no paper.	Load paper.
The paper drawer is not correctly inserted into the machine.	Insert the paper drawer properly.
# 011	
The document that you are sending is not placed correctly.	Place the document properly in the feeder or on the platen glass, and repeat the whole procedure from the beginning.
# 012	
The document could not be sent because the receiving fax machine was out of paper.	Ask the receiving party to load paper into their fax machine.
# 018	
The receiving machine did not respond when your machine redialed.	Confirm that the receiving machine is able to communicate, and try again.
The documents could not be sent because the receiving machine was engaged.	Confirm that the receiving machine is able to communicate, and try again.
The settings on your machine do not match the settings on the receiving machine.	Confirm that the receiving machine is able to communicate, and try again.
# 022	
Forwarding could not be performed because all of the addresses stored under the specified Group destination have been deleted, or User Inboxes are specified as the Group destination.	Re-enter the forwarding address and try sending again.
Transmission could not be performed because the specified destination was deleted while the documents were waiting to be sent.	Re-enter the address in the address book and try sending again.
# 037	
Documents could not be received because there was insufficient memory available.	Erase unwanted documents and documents with errors from memory to increase the amount of available memory.
# 080	
A subaddress is not set in the remote machine.	Check the subaddress of the remote machine, and try again.
# 081	
A password is not set in the remote machine.	Check the password of the remote machine, and try again.
# 099	
Sending was interrupted.	Try sending again.
# 102	
The subaddress and/or password do not match.	Check the subaddress and/or password of the remote machine, and try again.
# 107	
The document could not be sent because there was insufficient memory available.	1. Resend the document in a lower resolution. 2. Erase unwanted documents to make memory available. 3. If this problem occurs frequently, contact your local authorized Canon dealer.
# 701	

Cause	Remedy
The specified Department ID does not exist, or the password has changed.	Enter the correct Department ID or password using 0-9 (numeric keys) on the control panel, and try sending again.
# 702	
The document could not be sent because the memory is full.	1. Wait a few moments, and try again after the other send jobs are complete. 2. Do not send the document to too many recipients at the same time. Send the document to a smaller number of recipients each time.
# 703	
The memory for the image data is full.	1. Wait a few moments, and try again after the other send jobs are complete. 2. Erase documents stored in inboxes. If the machine still does not operate normally, turn the main power OFF, and then back ON again.
# 704	
An error occurred while reading address information from the Address Book.	Check the address settings. If the machine still does not operate normally, turn the main power OFF, and then back ON again.
# 705	
The send operation was interrupted because the size of the image data is larger than the Maximum Data Size for Sending set in E-mail/I-Fax Settings in Communications Settings in System Settings (from the Additional Functions screen).	Change the Maximum Data Size for Sending setting in E-mail/I-Fax Settings in Communications Settings in System Settings (from the Additional Functions screen). Select a lower resolution, or if you are using I-fax, decrease the number of pages containing images that you are sending each time, so that you do not exceed the Maximum Data Size for Sending limit.
# 706	
The Address Book is being imported or exported from the Remote UI, or it is being used by another sending component.	Wait until the Address Book import/export function from the Remote UI or the other sending component is complete, and try sending again.
# 711	
The inbox memory is full.	Erase the unnecessary documents stored in the inbox.
# 712	
The maximum number of documents is already stored in the inbox.	Erase the unnecessary documents stored in the inbox.
# 751	
The server is not functioning. The network is down (the server is unable to connect to the network or was disconnected).	Check the recipient's address. Check that the network is up.
# 752	
The SMTP server name for e-mail or I-fax is not correct, or the server is not functioning. The domain name or e-mail address may not be set. The network is down.	Check the SMTP Server name and E-mail Address in E-mail/I-Fax in Network Settings in System Settings (from the Additional Functions screen). Check that the SMTP server is operating properly. Check the network status.
# 753	
A TCP/IP error occurred while sending an e-mail message. (Socket, Select error, etc.)	Check the network cables and connectors. If the machine still does not operate normally, turn the main power OFF, and then back ON again.
# 754	
The server is not functioning or the network is down. The destination setting is not correct.	Check the server and network. Check the destination's address settings.
# 755	
You cannot send jobs because TCP/IP is not functioning correctly.	Check TCP/IP Settings in Network Settings in System Settings (from the Additional Functions screen).
The IP address is not set.	Check TCP/IP Settings in Network Settings in System Settings (from the Additional Functions screen).
When the machine was turned ON, an IP address was not assigned to the machine by the DHCP, RARP, or BOOTP server.	Check TCP/IP Settings in Network Settings in System Settings (from the Additional Functions screen).
# 756	
NetWare in NetWare Settings in Network Settings in System Settings (from the Additional Functions screen) is set to 'Off'.	Turn NetWare to 'On'.
# 801	
A timeout error occurred while the machine was communicating with the SMTP server to send an e-mail message or send/receive an I-fax.	1. Check that the SMTP server is functioning normally. 2. Check the network status.
The SMTP server returned an error while trying to connect. The destination is not correct. An error occurred on the server side during transmission to a file server.	1. Check that the SMTP server is functioning normally. 2. Check the network status. 3. Check the destination setting. 4. Check the status and setting of the file server.
You are sending a file to a destination to which you have no write permission.	Check the destination setting.
When the machine tried to send a file to the server, a file with the same name already exists on the FTP server and that file cannot be overwritten.	Change the setting on the file server to enable the file to be overwritten.
When the machine tried to send a file to the server, either the folder name is incorrectly specified or the password is incorrect.	Check the destination setting.
# 802	
The name of the SMTP Server in E-mail/I-Fax settings in Network Settings in System Settings (from the Additional Functions screen) is incorrect. The DNS server name in DNS Server Settings in TCP/IP Settings in Network Settings in System Settings (from the Additional Functions screen) is incorrect. Connection to the DNS server failed.	Check the name of the SMTP Server in E-mail/I-Fax and DNS Server Settings in TCP/IP Settings in Network Settings in System Settings (from the Additional Functions screen). Check that the DNS server is functioning normally.
# 803	
The connection was interrupted due to reasons on the recipient's side before all of the pages could be sent.	Try sending again.
# 804	
Unable to match the specified directory name when sending data to a file server.	Check the destination.
You have no permission to access the folder.	Change the setting on the server to enable access to the folder.
# 806	

Cause	Remedy
An incorrect user name or password was specified for the sending of a file to a file server.	Change the user name or password.
An incorrect destination was specified for the sending of an e-mail message or I-fax.	Check the e-mail or I-fax address.
# 810	
A POP (Post Office Protocol) server connection error occurred while receiving an I-fax.	Check the POP Server name in E-mail/I-Fax in Network Settings in System Settings (from the Additional Functions screen). Confirm that the POP server is functioning normally. Check the network status.
The POP server returned an error during the connection.	Check the POP Server name in E-mail/I-Fax in Network Settings in System Settings (from the Additional Functions screen). Confirm that the POP server is functioning normally. Check the network status.
A timeout error occurred on the server while connecting to the POP server.	Check the POP Server name in E-mail/I-Fax in Network Settings in System Settings (from the Additional Functions screen). Confirm that the POP server is functioning normally. Check the network status.
# 815	
You cannot log on to the file server because the machine is printing a document sent to that server. Simultaneous connections are not possible.	Wait for a few moments before trying to send the data again, or change the NetWare server to which you are sending your documents. Alternatively, stop the Pserver.
# 818	
The received data is not in a printable file format.	Ask the sender to change the file format and resend the data.
# 819	
You have received data that cannot be processed (MIME information is incorrect).	Check the settings, and ask the sender to resend the data.
# 820	
You have received data that cannot be processed (BASE 64 or uuencode is incorrect).	Check the settings, and ask the sender to resend the data.
# 821	
You have received data that cannot be processed (TIFF analysis error).	Check the settings, and ask the sender to resend the data.
# 822	
You have received data that cannot be processed (image data cannot be decoded).	Check the settings, and ask the sender to resend the data.
# 827	
You have received data that cannot be processed (contains MIME information that is not supported).	Check the settings, and ask the sender to resend the data.
# 828	
You have received HTML data.	Ask the sender to use a file format other than HTML, and resend the data.
# 829	
Data that contains more than 1,000 pages is received.	This machine can print or store up to 999 pages of data in memory, but will delete any data that exceeds this limit. Ask the sender to resend the remaining pages.
# 830	
A DSN (Delivery Status Notification) error notification is received because of an incorrect I-fax address or destination setting, or the data size of the sent documents exceeds the mail server capacity.	1. Check the I-fax address or destination setting. 2. Set Maximum Data Size for Sending in E-mail/I-Fax Settings in Communication Settings in System Settings (from the Additional Functions screen) so that it is less than the mail server capability. 3. Check the status of the mail server, DNS server, and network.
# 831	
An I-fax document could not be received using SMTP because of the RX/Print Range setting in IP Address Settings in TCP/IP Settings in Network Settings in System Settings (from the Additional Functions screen).	Reset the RX/Print Range setting in IP Address Settings in TCP/IP Settings in Network Settings in System Settings (from the Additional Functions screen).
# 832	
DSN (Delivery Status Notification) mail was not sent because TCP/IP Settings or E-mail/I-Fax in Network Settings in System Settings (from the Additional Functions screen) have not been set, or trouble has occurred in the mail server.	1. Check the DNS Server Settings and IP Address Settings in TCP/IP Settings, and E-mail/I-Fax in Network Settings in System Settings (from the Additional Functions screen). 2. Check the status of the mail server and DNS server.
# 833	
MDN (Mail Delivery Notification) mail was not sent because TCP/IP Settings or E-mail/I-Fax in Network Settings in System Settings (from the Additional Functions screen) have not been set, or trouble has occurred in the mail server.	1. Check the DNS Server Settings and IP Address Settings in TCP/IP Settings, and E-mail/I-Fax in Network Settings in System Settings (from the Additional Functions screen). 2. Check the status of the mail server and DNS server.
# 834	
An MDN error notification is received because of an incorrect I-fax address or destination setting, or trouble has occurred in the network or mail server. Alternatively, the memory of the receiving machine is full.	Check the I-fax address and destination settings.
# 835	
The maximum number of text lines for receiving an I-fax has been exceeded.	Ask the sender to reduce the amount of text data in the body of the document, and resend the data.
# 837	
A connection request was received from a host whose connection is restricted by IP Address Settings, which can be set in TCP/IP Settings in Network Settings in System Settings (from the Additional Functions screen).	Check the settings in IP Address Settings in TCP/IP Settings in Network Settings in System Settings (from the Additional Functions screen). Make sure that the connection request is made from an authorized host.
# 839	
The user name or password for the SMTP authentication (SMTP AUTH) in Authent./Encryption in E-mail/I-Fax in Network Settings in System Settings (from the Additional Functions screen) is incorrect.	Check the user name and password for SMTP Authentication (SMTP AUTH) in Authent./Encryption in E-mail/I-Fax in Network Settings in System Settings (from the Additional Functions screen).
# 841	

Cause	Remedy
The encryption algorithm that matches the mail server does not exist for sending e-mail or I-fax.	1. Set Allow SSL in Network Settings in System Settings (from the Additional Functions screen) to 'Off'. 2. Add the same encryption algorithm as the mail server in the mail server settings.
# 842	
Authentication using the client certificate was requested by the mail server for sending e-mail or I-fax.	1. Set Allow SSL in Network Settings in System Settings (from the Additional Functions screen) to 'Off'. 2. Change the mail server settings so that the client certificate is not requested.
# 843	
There is large difference between the current time set in the KDC (Key Distribution Center) server and the one set in the machine.	1. Change the current date and time in Date & Time Settings in Timer Settings (from the Additional Functions screen). 2. Change the current time set in the KDC (Key Distribution Center) server.
# 851	
There is insufficient memory remaining in the system.	Check the system's available memory, and delete unwanted documents in the inboxes.
The scanned document cannot be stored because there are more than 100 documents in the specified inbox.	Delete unnecessary documents from the specified inbox.
# 852	
An error occurred because the main power switch was turned OFF while a job was being processed.	Check to see if the main power switch is turned ON. Try processing the job again, if necessary.
# 899	
The e-mail message or I-fax has been successfully sent, but reception may be incomplete because the transmission was relayed via multiple servers.	1. Confirm whether reception was complete. 2. Check if you received an error notification.
# 995	
Reserved communication jobs were cleared.	Reserve the jobs again, if necessary.

Chapter 17 Service Mode

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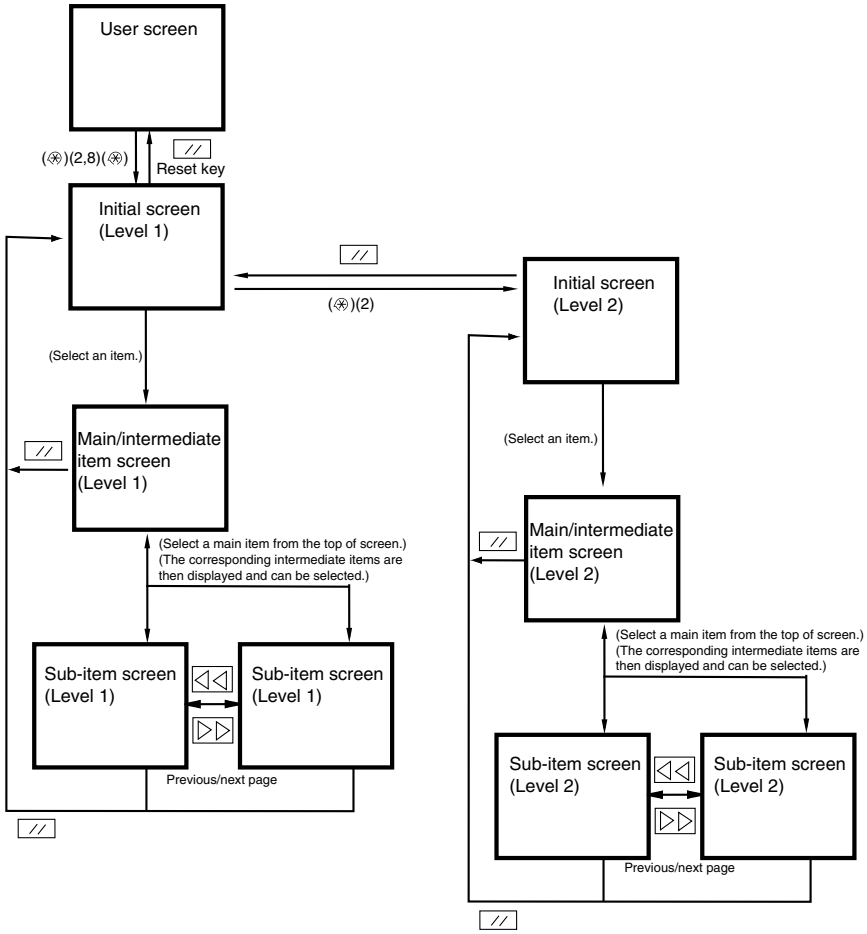
17.1 Outline

17.1.1 Construction of Service Mode

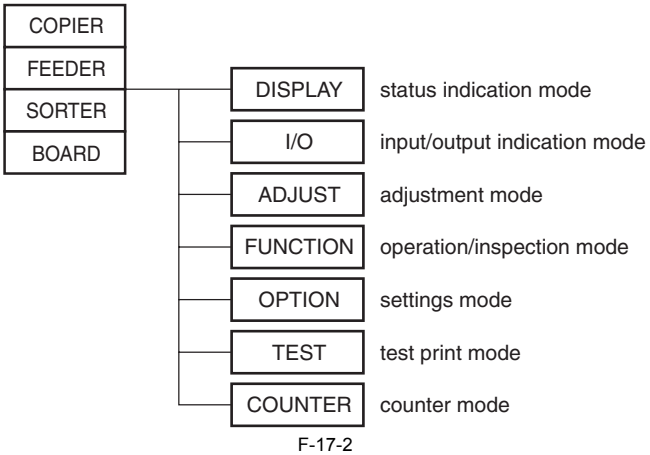
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The machine's service mode has a 3-layer screen construction: Initial screen, Level 1/2 screen, and Level 3 screen.
Its mode items are grouped into those used in regular maintenance work (Level 1 items) and those used in response to faults (Level 2 items).



F-17-1

The machine's service mode is divided into the following 7 types:



F-17-2

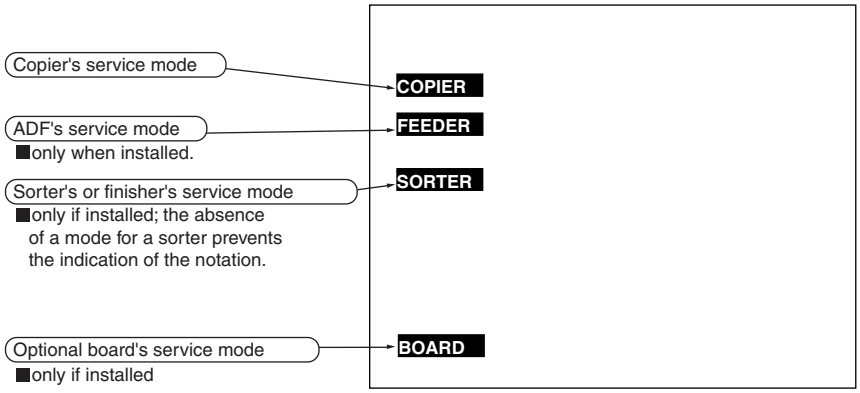
17.1.2 Entering or selecting service modes

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

If you want to execute a machine operation using a service mode item, be sure to disconnect all cables from an external controller or a network before starting service mode. Particularly, if you are using a FUNCTION (operation/inspection) mode item, the arrival of a print job from an external source can cause the machine to malfunction, leading to damage.

1) Press the asterisk key "✳" on the control panel.
2) Press the 2 and 8 keys of the keypad at the same time.
3) Press the asterisk key "✳" on the control panel.

In response to the foregoing key operations, the machine will bring up the following Initial screen:



F-17-3

17.1.3 Exiting service modes

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

A press on the Reset key will bring back the Service Mode Initial screen.
Another press on the Reset key will end service mode, and bring back the User screen (standard screen).

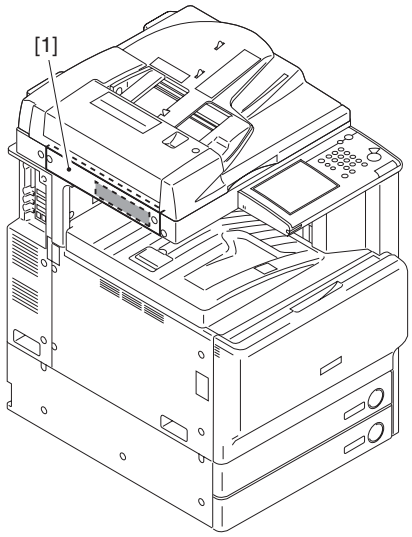
If you used service mode (ADJUST, FUNCTION, OPTION), be sure to turn off and then on the main power switch after ending service mode.

17.1.4 Back-up of service mode

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

At time of shipment from the factory, all machines are adjusted individually, and adjustment values are recorded in their respective service labels.
If you have replaced the reader controller PCB or the DC controller PCB, or if you have initialized the RAM, the adjustment values (for ADJUST and OPTION) will return to their default settings. If there has been any change in a service mode item, be sure to update its setting indicated on the service label. As necessary, make use of the space in the service label (as when recording an item not found on the label).

- Service Label for the Reader Controller PCB (behind the left cover [1] of the reader unit)

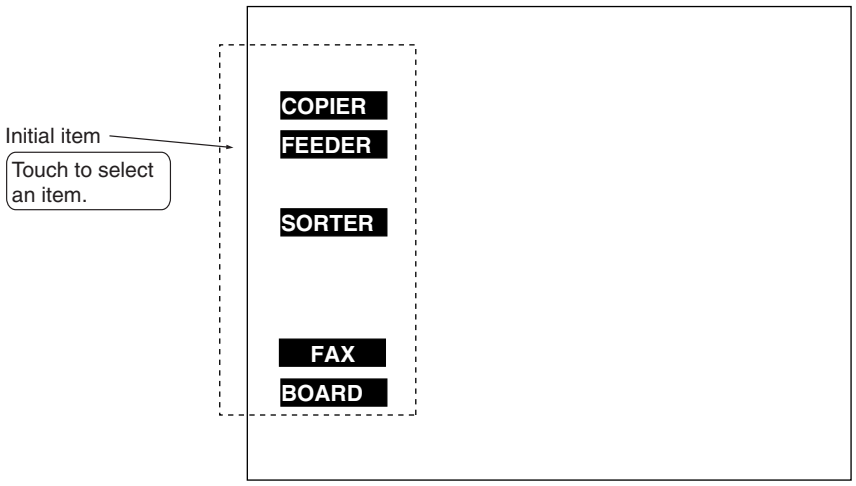


F-17-4

- Service Label for the Main Controller PCB/DC controller PCB (behind the front cover of the printer unit)

17.1.5 Initial Screen

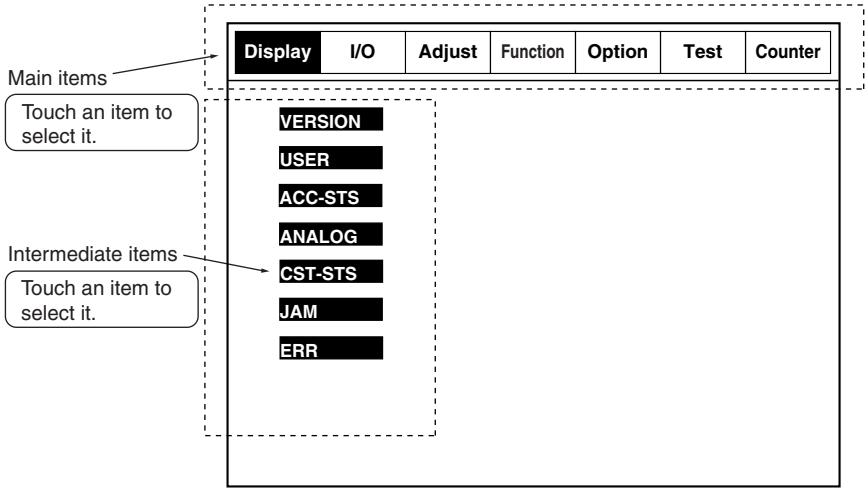
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880



F-17-5

17.1.6 Main/intermediate Item Screen

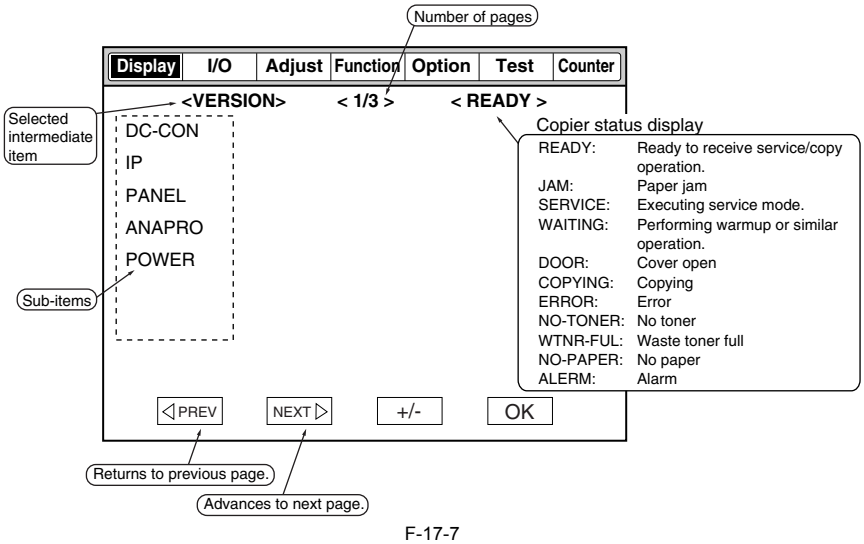
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880



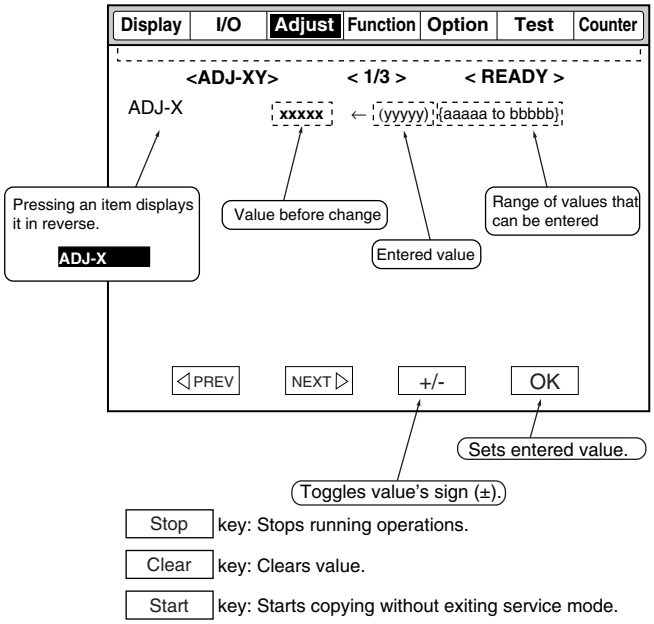
F-17-6

17.1.7 Sub- Item Screen

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880



F-17-7



F-17-8

17.2 DISPLAY (Status Display Mode)

17.2.1 COPIER

17.2.1.1 COPIER Table

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1. VERSION

T-17-1

COPIER>DISPLAY>VERSION		
Sub item	**Description**	**level.**
Use it to check the ROM version of individual PCBs (host machine and accessories). - for example, in <R-CON XX.YY>, XX indicates the version and YY indicates R&D number. - if no PCB is connected, the indication will be <--.-->.		
DC-CON	ROM version of DC controller PCB.	1
R-CON	ROM version of reader controller PCB.	1
PANEL	ROM version of control panel CPU PCB.	1
ECO	ROM version of ECO PCB.	1
FEEDER	ROM version of DADF controller PCB.	1
SORTER	ROM version of finisher controller PCB.	1
FAX	ROM version of fax board.	1
NIB	Network software version.	1
PS/PCL	UFR board (PS/PCL function) version.	1
SDL-STCH	ROM version of saddle stitcher controller PCB.	1
OP-CON	ROM version of cassette pedestal controller PCB.	1
MN-CONT	System software version of main controller PCB.	1
RUI	Remote UI version.	1
PUNCH	Punch unit version	1
LANG-EN	English language file version.	1
LANG-FR	French language file version.	1
LANG-DE	German language file version.	1
LANG-IT	Italian language file version.	1
LANG-JP	Japanese language file version.	1
GDI-UFR	UFR board (GDI-UFR function) version.	1
MEAP	Use it to indicate the version of MEAP content.	1
OCR-CN	OCR version for Chinese (simplified)	1
OCR-JP	OCR version for Japanese	1
OCR-KR	OCR version for Korean	1
OCR-TW	OCR version for Chinese (traditional)	1
BOOTROM	BOOT-ROM version	1
TTS-JA	Voice dictionary version for Japanese	1
TTS-EN	Voice dictionary version for English	1
WEB-BRWS	Web browser version	1
HELP	Simple NAVI version	1

COPIER>DISPLAY>VERSION		
Sub item	**Description**	**level.**
WEBDAV	WebDAV version	1
TIMESTMP	TIMESTMP version	1
ASR-JA	Version of the Japanese voice recognition dictionary	1
ASR-EN	Version of the English voice recognition dictionary	1
LANG-CS	Use it to check the version of the Czech language file.	2
LANG-DA	Use it to check the version of the Danish language file.	2
LANG-EL	Use it to check the version f the Greek language file.	2
LANG-ES	Use it to check the version of the Spanish language file.	2
LANG-ET	Use it to check the version of the Estonian language file.	2
LANG-FI	Use it to check the version of the Finnish language file.	2
LANG-HU	Use it to check the version of the Hungarian language file.	2
LANG-KO	Use it to check the version of the Korean language file.	2
LANG-NL	Use it to check the version of the Dutch language file.	2
LANG-NO	Use it to check the version of the Norwegian language file.	2
LANG-PL	Use it to check the version of the Polish language file.	2
LANG-PT	Use it to check the version of the Portuguese language file.	2
LANG-RU	Use it to check the version of the Russian langue file.	2
LANG-SL	Use it to check the version of the Slovenian language file.	2
LANG-SV	Use it to check the version of the Swedish language file.	2
LANG-TW	Use it to check the version of the Chinese language file (traditional text).	2
LANG-ZH	Use it to check the version of the Chinese language file (simplified text).	2
ECO-ID	Use it to check the ECO-ID number	2
LANG-BU	Use it to check the version of the Bulgarian language file.	2
LANG-CR	Use it to check the version of the Croatian language file.	2
LANG-RM	Use it to check the version of the Romanian language file.	2
LANG-SK	Use it to check the version of the Slovakian language file.	2
LANG-TK	Use it to check the version of the Turkish language file.	2
LANG-CA	Catalan language file version	2

2. ACC-STS

T-17-2

COPIER>DISPLAY>ACC-STS		
Sub item	**Description**	**level.**
FEEDER	Displays whether DADF is connected. 0: Not connected 1: Connected	1
SORTER	Displays whether finisher is connected. 0: Not connected 1: Finisher M1 or N1 connected 2: Saddle finisher N2 connected	1
DECK	Displays whether paper deck is connected. 0: Not connected 1: Connected	1
CARD	Displays whether card reader is connected. 0: Not connected 1: Connected	1
RAM	Displays memory capacity of memory mounted on main controller PCB. 512 MB, 768 MB	1
COINROBO	Displays whether coin vendor is connected. 0: Not connected 1: Connected	1
NIB	Displays whether network board is connected. 0: Not connected, 1: Ethernet board connected, 2: Token ring board connected, 3: Ethernet board and token ring board connected	1
NETWARE	Displays whether NetWare firmware is installed. 0: Not installed 1: Installed	1
SEND	Indicates whether SEND function is appended. 0: No SEND function 1: SEND function	1
PDL-FNC1	Display of Enabled PDL (1)	1
PDL-FNC2	Display of Enabled PDL (2)	1
HDD	Display of HDD model name	1
PCI1	Display of PCI1 board name	1
PCI2	Display of PCI2 board name	1
PCI3	Display of PCI3 board name	1
USBH-SPD	Display of USB device connection speed	2

3. ANALOG

T-17-3

COPIER>DISPLAY>ANALOG		
Sub item	**Description**	**level.**
TEMP	Copier's internal temperature (environment sensor) in deg C	1
HUM	Copier's internal humidity (environment sensor) in %RH	1
ABS-HUM	Amount of moisture (environment sensor) in grams	1
FIX-C	Temperature of the fixing roller surface (Detection temperature of the main thermistor)	1
FIX-E	Temperature of the fixing roller surface (Detection temperature of the sub thermistor)	1
FIX-E2	Temperature of the fixing roller surface (Detection temperature of the sub thermistor 2)	1
TEMP2	Temperature in the machine (Environment sensor)	1
HUM2	Humidity in the machine (Environment sensor)	1

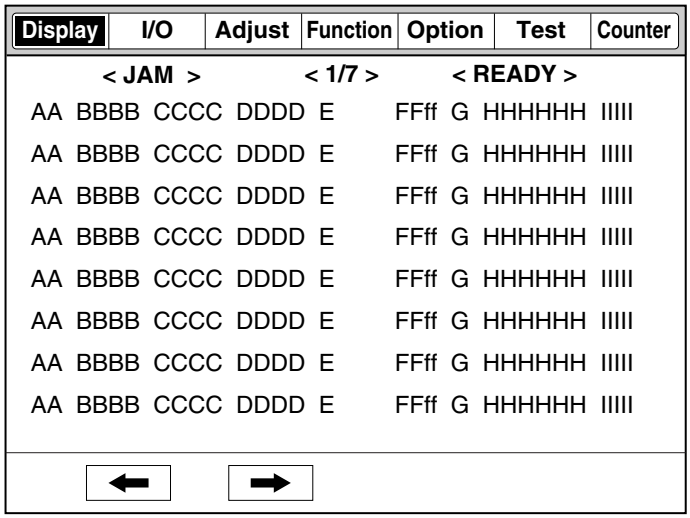
4. CST-STS

T-17-4

COPIER>DISPLAY>CST-STS		
Sub item	**Description**	**level.**
WIDTH-MF	Use it to check the width of paper in the manual feed tray (in mm).	2

5. JAM

a. Displays jam data



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b. Jam Data Display

AA	Jam sequence number 1 to 50 (the larger the number, the older the jam)
BBBB	Date of jam
CCCC	Time of jam
DDDD	Time jam was restored
EEEEE	Jam location 0: Copier, 1: DADF, 2: Finisher
FFff	Jam code FF: Jam type, ff: Jam sensor (as will hereinafter be described in detail)
GG	Paper feed position (as will hereinafter be described in detail)
HH	Paper feed level software counter value

c. Jam Code/Pickup Position

- FF: Jam type

T-17-5

Code	**Jam type**
00xx	Unused
01xx	Delay jam
02xx	Pileup jam
0Axx	Jam at power ON/jam during warmup
0Bxx	cover open jam (applies to all covers)
0Dxx	Transparency-related jam

- ff: Jam sensor (printer unit)

T-17-6

Code	**Sensor type**
xx01	Cassette 1 retry paper sensor (PS16)
xx02	Cassette 2 retry paper sensor (PS17)

Code	Sensor type
xx03	Cassette 3 retry paper sensor (PS53)
xx04	Cassette 4 retry paper sensor (PS57)
xx05	Registration sensor (PS26)
xx06	Fixing inlet sensor (PS27)
xx07	Fixing paper delivery sensor (PS25)
xx08	Face-down paper delivery sensor 1 (PS12)
xx09	Face-down paper delivery sensor 2 (PS6
xx0A	Duplex registration sensor (PS21)
xx0B	Duplex paper feed sensor (PS24)
xx0C	Deck paper feed sensor (PS6D)
xx0D	Deck conveyor sensor (PS1D)
0D90	Transparency sensor (front OHP1, inner OHP2)
0D91	Manual feed paper sensor (PS10)
0D92	Transparency sensor (front OHP1, inner OHP2)
0D93	Transparency sensor (front OHP1, inner OHP2)

- ff: Jam sensor (finisher)

T-17-7

Code	Jam Name / Sensor of Finisher-M1	Jam Name / Sensor of Finisher-W1/W2
1001	Inlet sensor delay jam (Inlet sensor)	Inlet sensor delay jam (Inlet sensor)
1002	-	Puncher path sensor delay jam (Trailing edge sensor)
1003	-	Escape path sensor delay jam (Escape tray path sensor)
1004	-	Delivery path sensor delay jam (Delivery path sensor)
1101	Inlet sensor stationary jam (Inlet sensor)	Inlet sensor stationary jam (Inlet sensor)
1102	-	Puncher path sensor stationary jam ((Trailing edge sensor)
1103	-	Escape path sensor stationary jam (Escape tray path sensor)
1104	-	Delivery path sensor stationary jam (Delivery path sensor)
1200	Timing jam	Timing jam
1300	Power-on jam (Inlet sensor)	Power-on jam (Inlet sensor / delivery path sensor / escape tray path sensor)
1400	Door open/close jam (Joint switch)	Door open/close jam (Front cover sensor / front cover closed switch)
1500	Staple jam (Staple HP sensor)	Staple jam (Staple HP sensor)
1644	-	Punch HP sensor jam (Punch HP sensor)
1645	-	Punch stationary jam (Trailing edge sensor)
1647	Punch inlet path sensor jam (Punch inlet path sensor)	
1786	-	Staple jam (Stitch HP sensor)
1787	-	Saddle power on jam (Primary paper sensor / secondary paper sensor / tertiary paper sensor / vertical path paper sensor / saddle inlet sensor / delivery sensor / paper positioning plate paper sensor)
1788	-	Saddle door open jam (Delivery cover sensor / inlet cover sensor / front cover open/close sensor)
1791	-	Saddle delivery path sensor delay jam (Primary paper sensor)
1792	-	Saddle delivery sensor delay jam (Delivery sensor)
1793	-	Saddle inlet sensor delay jam (Saddle inlet sensor)
17A1	-	Saddle delivery path sensor stationary jam (Primary paper sensor / secondary paper sensor / tertiary paper sensor)
17A2	-	Saddle delivery sensor stationary jam (Delivery sensor / vertical path paper sensor)
17A3	-	Saddle inlet sensor stationary jam (Saddle inlet)
1781	bunch putting out JAM(bunch putting out HP sensor)	-

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Code	Finisher M1 sensor/type	Finisher N1/saddle finisher N2 sensor/type
1103	Copier paper delivery delay jam	-
1104	Paper delivery pileup jam	-
1105	-	Jam due to early arrival while switching trays
1500	Staple jam in stapler	Staple jam in stapler
1300	Jam at power ON	Jam at power ON
1400	-	Front top cover OPEN jam
1011	-	Inlet path sensor delay ja
1013	-	Buffer path sensor delay jam
1014	-	Paper delivery path sensor delay jam
1121	-	Inlet path sensor pileup jam
1123	-	Buffer path sensor pileup jam
1124	-	Paper delivery path sensor pileup jam
1125	-	Staple tray sensor pileup jam
1181	Jam when pressing bun	-
1182	Jam when returning bundle	-
1186	-	Staple jam in saddle stapler

Code	Finisher M1 sensor/type	Finisher N1/saddle finisher N2 sensor/type
1187	-	Saddle power ON jam
1188	-	Front lower cover OPEN jam
1191	-	Saddle conveying path sensor delay jam
1192	-	Saddle fold path sensor delay jam
11A1	-	Saddle conveying path sensor pileup jam
11A2	-	Saddle fold path sensor pileup jam

- ff: Jam sensor (DADF)

T-17-9

Jam name	Code	Sensor	Condition
Separation delay	0002	SR3	Separation sensor (SR3) didn't turn ON within 500 msec after separation motor (M1) switched to drive (forward).
Paper feed delay	0003	U502	Registration front sensor (U502) didn't turn ON within 1 sec from separation sensor (SR3) (for small size) or near separation sensor (for large size).
Paper feed pileup	0005	U502	Registration front sensor (U502) didn't turn OFF after conveyor motor turned ON and operated for 500 msec, after formation of resist loop.
Separation early delivery	0006	SR3	Separation sensor (SR3) was ON during start of document separation.
Reverse outlet delay	0011	U505	Reverse outlet sensor (U505) didn't turn ON at specified amount of time after trailing edge of document passed right edge of belt's presser roller.
Reverse outlet pileup	0012	U505	Reverse outlet sensor (U505) didn't turn OFF when paper was conveyed by paper delivery motor for 500 msec after trailing edge of document was detected by reverse paper delivery resist sensor (SR5).
Duplex	0023	U505	Conveyor motor operated at constant speed with reverse outlet sensor (U505) still ON after a duplex copy finished reversing.
Paper delivery inlet delay	0041	SR4	Reverse paper delivery inlet sensor (SR4) didn't turn ON when conveyor motor (M2) conveyed paper for 100 mm from start of document paper feed (for small size document) or from 51 mm in front of reverse paper delivery inlet sensor (SR4) (for large size/duplex document).
Paper delivery inlet pileup	0042	SR4	Reverse inlet sensor (SR5) didn't turn OFF in specified amount of time after document's leading edge arrived at reverse registration roller nip (for small size), or after document's leading edge arrived at reverse outlet sensor (U505) (for large size/duplex document).
Reverse registration delay	0043	SR5	Reverse paper delivery registration sensor (SR5) didn't turn ON at specified amount of time after reverse inlet sensor (SR4) turned ON.
Reverse registration pileup	0044	SR5	Reverse registration sensor (SR5) didn't turn OFF at specified amount of time after reverse paper delivery inlet sensor (SR4) turned OFF.
Reverse flapper failure	0045	U505	Flapper didn't switch when flapper switching for each paper delivery was checked by reverse outlet sensor (U505).
Paper delivery sensor delay (small size)	0046	SR5	Paper delivery sensor (SR5) didn't turn OFF after specified amount of time had elapsed from start of reverse operation of reverse paper delivery motor (M3).
Paper delivery sensor pileup (small size)	0047	SR5	Paper delivery sensor (SR5) didn't turn OFF after paper was conveyed 50 mm after document trailing edge passed paper delivery sensor (SR5).
Paper delivery sensor delay (large size/ twosided document	0048	SR4	Reverse inlet sensor (SR5) didn't turn ON after specified amount of time elapsed after start of paper delivery.
Reverse paper delivery unit cover OPEN	0080	SR8	Reverse paper delivery unit cover was opened when copier was stopped due to lack of paper.
DADF OPEN	0081	SR6	DADF was opened when copier was stopped due to lack of paper.
Paper feed cover OPEN	0082	SR2	Paper feed unit cover was opened when copier was stopped due to lack of paper.
Document not removed	0088	SR4, SR5	Attempt to start paper feed was made with document left on document stand glass. Detected by reverse paper delivery inlet sensor (SR4) and reverse paper delivery registration sensor (SR5).
Timing failure 1	008A		Paper feed timing for second side of paper failed during duplex copy operation. Alternately, end of task wasn't detected by inter-task monitoring after specified amount of time.
Timing failure 2	008B		During document conveying mode, when paper delivery clock sensor (SR7) was counting conveyed volume of document to deliver, paper feed of next document completed, and reverse paper delivery motor (M3) encoder pulse could no longer be detected.
Timing failure 3	008C		When the document is sent as a mixed load even though document mixed loading hasn't been set, the document size error alarm (0014) is generated, but since the jam must be processed, this jam display appears. 008C (jam) and 0014 (alarm) are displayed together, and the jam is restored automatically 5 seconds after being processed.
User DADF OPEN	0091	SR6	DADF was opened during DADF operation.
User cover OPEN	0092	SR2, SR8	Cover was opened during DADF operation.
Separation sensor initial status	0094	SR3	Separation sensor (SR3) was ON before separation of first document sheet.
Registration front sensor initial status	0095	U502	Registration front sensor (U502) was ON before separation of first document sheet.
Reverse paper delivery inlet sensor initial status	0096	SR4	Reverse paper delivery inlet sensor (SR4) was ON before separation of first document sheet.
Reverse paper delivery registration sensor	0097	SR5	Reverse paper delivery registration sensor (SR5) was ON before separation of first document sheet.

- GG: Paper feed position

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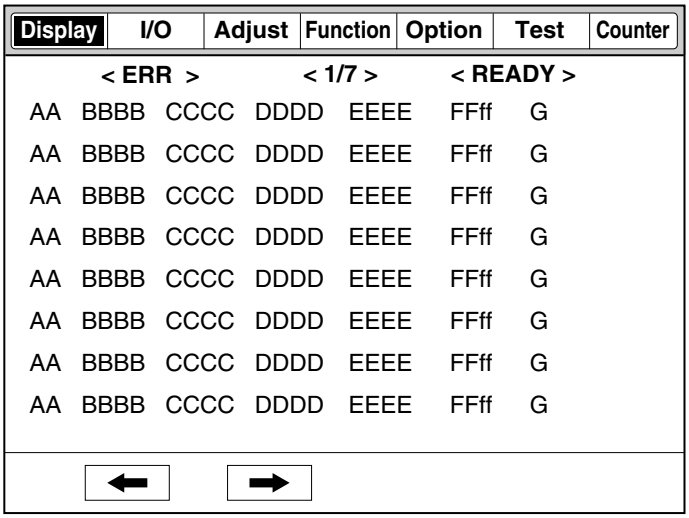
Code	Description
1	Cassette 1
2	Cassette 2

Code	Description
3	Cassette 3
4	Cassette 4
5	Side paper deck
6 to 8	not used
9	duplex unit
10	manual feed tray

6. ERR
a. Displays error data



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b. Error Data Display

AA	Error sequence number 1 to 50 (the larger the number, the older the error)
BBBB	Date of error
CCCC	Time of error
DDDD	Time error was restored
EEEE	Error code
FFff	Detail code "0000" if none.
G	Error location 0: Main controller 1: DADF 2: Finisher 3: Unused 4: Reader unit 5: Printer unit 6: PDL board (any of) 7: Fax board

7. HV-STS

T-17-11

COPY>DISPLAY>HV-STS		
Sub item	**Description**	**level.**
1ATVC-Y	Primary transfer ATVC current monitor value (Y)	2
1ATVC-M	Primary transfer ATVC current monitor value (M)	2
1ATVC-C	Primary transfer ATVC current monitor value (C)	2
1ATVC-K4	Primary transfer ATVC current monitor value (K of 4C)	2
2ATVC	Secondary transfer ATVC result	2

8. CCD

T-17-12

COPIER>DISPLAY>CCD		
Sub item	**Description**	**level.**
TARGET-B	Use it to check the shading target value for B.	2
TARGET-G	Use it to check the shading target value for G.	2
TARGET-R	Use it to check the shading target value for R.	2
OFST	CCD offset level adjustment value	2
GAIN	CCD gain level adjustment value	2
MFIL	Main scanning direction MTF correction index	2
SFIL	Sub scanning direction MTF correction index	2

9. DPOT
Displaying Photosensitive Drum Surface Potential Control Data

T-17-13

COPIER>DISPLAY>DPOT		
Sub item	**Description**	**level.**
MEMO: For items other than DPOT-K, displaying value at the time of the latest potential control.		
2TR-PPR	Use it to check the output value of the paper separation voltage of the secondary transfer DC voltage generated last.	2
2TR-BASE	Use it to check the output value of the reference voltage of the secondary transfer DC voltage generated last.	2
1TR-DC-Y	Use it to check the output value of the primary transfer DC voltage (Y) generated last.	2
1TR-DC-M	Use it to check the output value of the primary transfer DC voltage (M) generated last.	2
1TR-DC-C	Use it to check the output value of the primary transfer DC voltage (C) generated last.	2
1TR-DC-K	Use it to check the output value of the primary transfer DC voltage (K) generated last.	2
CHG-AC-Y	output value of primary charge AC voltage (Y) output last	2
CHG-AC-M	output value of primary charge AC voltage (M) output last)	2
CHG-AC-C	output value of primary charge AC voltage (C) output last)	2
CHG-AC-K	output value of primary charge AC voltage (Bk) output last)	2

10. DENS

T-17-14

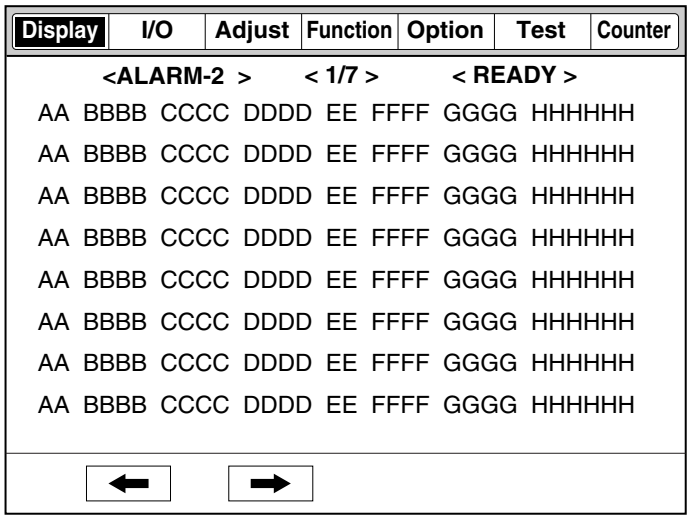
COPIER>DISPLAY>DENS		
Sub item	**Description**	**level.**
DENS-Y/M/C/K	Calculated value of developer concentration (indicated as % off target value) Appropriate values -2.0 to 2.0% Note Value is updated when toner is supplied after main power switch ON.	1
DENS-S-Y/M/C/K	Detection density value of the sample image created at ATR control (Y/M/C/Bk)	2
DEV-DC-Y/K	The latest output value of the development DC voltage (Y/Bk)	2
CHG-DC-Y/K	The latest output value of the primary charging DC voltage (Y/Bk)	2
DMX-DATA	Result of Dmax control	2

11. MISC

T-17-15

COPIER>DISPLAY>MISC		
Sub item	**Description**	**level.**
ENV-TR	printer internal environment display 1: Low humidity environment (5.8 g or less moisture) 2: Normal humidity environment (5.9 to 17.3 g moisture) 3: High humidity environment (17.3 g or more moisture)	1
Y/M/C/K-DRM-LF	Drum unit life (Y/M/C/Bk) Expresses how much of life has expired (as percentage). Appropriate values 0 to 100 (%) Note 0% when new drum unit is inserted.	1

12. ALARM-2
a. Displays alarm data



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b. Alarm Data Display

AA	Alarm sequence number 1 to 50 (the larger the number, the older the error)
BBBB	Date of alarm

CCCC	Time of alarm
DDDD	Time alarm was restored
EE	Alarm location code (as will hereinafter be described in detail)
FFFF	Alarm code (as will hereinafter be described in detail)
GGGG	Alarm detail code (as will hereinafter be described in detail)
HHHHHH	Total counter value when alarm is generated

c. Alarm Code Detail

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EE	Alarm location code	FFFF Alarm code
04	Paper feed/conveying	0008: Side deck lifter alarm
		0009: Horizontal registration detection alarm
09	Drum unit	0001: Drum life (Y)
		0002: Drum life (M)
		0003: Drum life (C)
		0004: Drum life (K)
10	Developer unit	0001: Toner out (Bk)
		0002: Toner out (C)
		0003: Toner out (M)
		0004: Toner out (Y)
11	Waste toner conveying	0001: Waste toner box full (intermediate copy belt)
33	Fan	0007: Paper delivery cooling fan (FM5) alarm
		0012: Manual feed cooling fan (FM6) alarm
		0013: Copier exhaust heat fan (FM3) alarm
34	Image position compensation control	0001: Incorrect data read (zero included in image position pattern read data)
		0002: Incorrect data read (abnormal data in at least 8 of the 10 sets of image position patterns)
		0003: Pattern read timeout alarm
		0004: Attempt was made to compensate abnormally large slant as result of image position compensation.
		0005: Attempt was made to correct large abnormally large magnification as result of image position compensation.
61	Finisher staples	0001: No staples
62	Saddle stitcher	0001: No stitch needle
70	PDL	0001: memory overflow
		0002: font memory overflow
		0003: micro font memory overflow
		0004: image font memory overflow
		0005: pattern font memory overflow
		0006: hard disk write error
72	UFR board	0001: Register access failed.
		0002: Data transfer to memory failed (or timeout).
		0003: Rendering error (ECI module)
		0004: Rendering error (EM module)
		0005: Rendering error (IE module)
		0006: Rendering error (IDM module)
		0007: Rendering error (LAM module)
		0008: Rendering error (MI module)
		0009: Rendering error (PCM module)
		0010: Rendering error (PGM module)
		0011: Rendering error (VII module)
		0012: Rendering error (VOI module)
		0013: Stores compressed image during FallBack.

EE	Alarm location code	FFFF Alarm code
73	LIPS	0001: Download overflow
		0002: Insufficient work memory needed during system data processing (mainly figure processing, text processing).
		0003: Translator was specified that was not mounted by LIPS emulation start command.
		0004: Translator work memory overflow
		0006: Configuration acquiring/management error
		0007: LIPS internal memory management error
		0008: LIPS internal file management error
		0009: Received data management error
		0010: Page control error
		0011: Macro management error
		0012: Color management error
		0013: Layout control error
		0014: Font management error
		0015: Character drawing error
		0016: Figure drawing error
		0017: Image drawing error
		0018: LCD display error
		0019: Text mode command layer error
		0020: Vector mode command layer error
		0021: Utility execution control err
		0022: LIPS internal database management
		0023: LIPS internal menu control error
		0024: LIPS internal boot error
74	GDI-UFR	0001: Incorrect Job Wrapper Format version
		0002: Incorrect command sequence
75	PS print server unit-C1	0001: Error in PS print server unit-C1
		0002: Error due to incorrect SVG analysis received from PS print server unit-C1

13. ENVRNT

Reference: Displaying Environment Logs
Use it to indicate logs of changes that may have taken place for [machine inside temperature (deg C)/humidity (%)/fixing roller surface (middle) temperature (deg C)] collected from the monitor output of the fixing thermistor (main) and the environment sensor.
Remarks
The intervals of data collection may be set in service mode: COPIER>OPTION>BODY>ENVP-IN.

a. Environment Log Screen

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b. Environment Log Display

No.	number of a data piece (higher the number, older the data piece)
DATE	date of data collection
TIME	time of data collection
D + deg C	machine inside temperature
E+%	machine inside humidity
F + deg C	fixing roller surface (middle) temperature

17.2.2 FEEDER

17.2.2.1 FEEDER Table

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

T-17-17

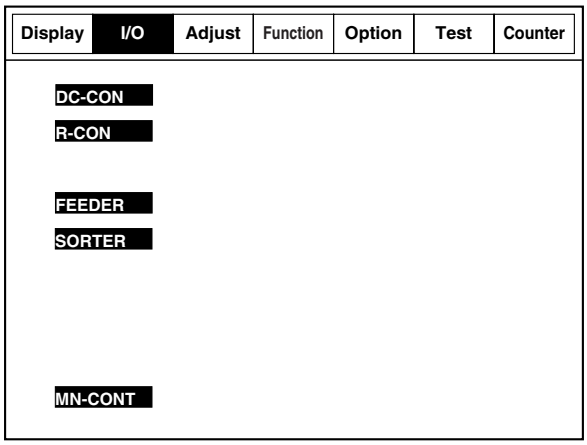
FEEDER>DISPLAY		
Sub item	**Description**	**level.**
FEEDSIZE	Displays the document size detected by the ADF. Note Displays the document size as a paper size such as A4 or LTR. For paper names, see COPIER > OPTION > CST > CST-U1, CST-U2.	1
TRY-WIDE	Indicates the length of the original width detection slide (paper width detention; 0.1 mm). Indicates the length of the slide used to detect the width of the original in the DF's original pickup tray (distance between 2 points).	1

17.3 I/O (I/O Display Mode)

17.3.1 Overview

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The following appears in response to COPIER>I/O; descriptions of the items (limited to those needed in the field) area given on the pages that follow:



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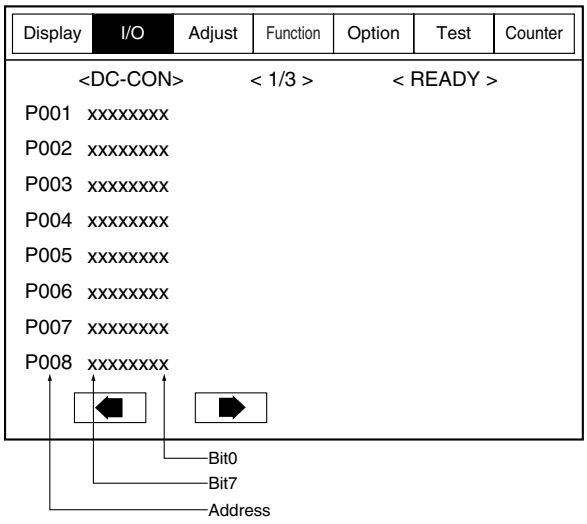
1. Guide to the Screen



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17.3.2 <DC-CON>

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

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Address	Bit	Description	Remarks
P001	0	cassette 2 retry sensor (PS26)	1: detected
	1	cassette 2 level B sensor (PS24)	1: about 50 sheets or less
	2	cassette 2 level A sensor (PS23)	1: about half or less
	3	cassette 2 paper sensor (PS20)	1: paper absent
	4	cassette 1 retry sensor (PS25)	1: detected
	5	cassette 1 level B sensor (PS22)	1: about 50 sheets or less
	6	cassette 1 level A sensor (PS21)	1: about half or less
	7	cassette 1 paper sensor (PS8)	1: paper absent
	8-15	not used	
P002	0	13 V detection (door open detection)	1: door open
	1	24 V detection (door open detection)	1: door open
	2	manual feed tray paper sensor(PS9)	0: paper present
	3	duplex feed sensor (PS10)	1: paper present
	4	No. 1 delivery full sensor (PS15)	0: paper present
	5	No. 1 delivery sensor (PS27)	1: paper present
	6	fixing delivery sensor (PS13)	1: paper present
	7	pre-registration sensor (PS7)	1: paper present
	8-15	not used	
P003	0	patch detection LED-ON	1: ON
	1	ITB fan half-speed	1: half speed
	2	exhaust fan 1 half speed (machine rear)	1: half speed
	3	for R&D	
	4	cassette 1 size detection indication	alternates 1/0
	5	cassette 2 size detection indication	alternates 1/0
	6,7	for R&D	
	8-15	not used	
P004	0	not used	
	1	not used	
	2	YMCK sleeve drive clutch (CL1-4)	1: ON
	3	not used	
	4	not used	
	5	registration clutch (CL6)	1: ON
	6	manual feed pickup clutch (CL5)	1: ON
	7	heat retention heater ON	0: ON
	8-15	not used	
P005	0	exhaust fan 1 full speed (machine rear)	1: ON
	1	ITB fan full speed	1: ON
	2	for R&D	
	3	transparency sensor ON	1: ON
	4	ITBHPLED_ON	1: ON
	5	for R&D	
	6	pickup 2 solenoid (SL3)	1: ON
	7	pickup 1 solenoid (SL2)	1: ON
	8-15	not used	
P006	0,1	for R&D	
	2	exhaust fan 2 full speed (machine front)	1: ON
	3	exhaust fan 2 half speed (machine front)	1: ON
	4	feed door sensor	0: door closed
	5	fixing inlet sensor	1: ON
	6	pickup unit door sensor	0: door closed
	7	front door sensor	0: door closed
	8-15	not used	
P007	0-7	for R&D	
	8-15	not used	
P010	0	toner fan lock detection	0: detected
	1	for R&D	
	2	reserved	
	3-7	for R&D	
P011	0-7	for R&D	
P012	0-5	for R&D	
	6,7	not used	

Address	Bit	Description	Remarks
P013	0-7	for R&D	
P014	0-3	for R&D	
	4-7	not used	

17.3.3 <R-CON>

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

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Address	Bit	Description	Remarks
P001	0	not used	
	1-4	for R&D	
	5	CIS power-on signal	1:ON
	6	for R&D	
	7	size sensor drive single	1: ON
P002	0	not used	
	1	24V power supply monitor signal	0: normal
	2	scanner motor drive single	1: forward 0: reverse
	3,4	for R&D	
	5	13V power supply monitor signal	0: normal
	6,7	not used	
P003	0-3	for R&D	
	4	LED control signal	1: ON
	5-7	for R&D	
P004	0,1	not used	
	2	original size detection 2	0: original present
	3,4	not used	
	5-6	for R&D	
	7	not used	
P005	0-7	for R&D	
P006	0	not used	
	1-3	for R&D	
	4	ADF sensor read input	0: ON
	5	copyboard open/closed sensor interrupt input 0	1: closed
	6	HP sensor interrupt input	1: HP
	7	copyboard open/closed sensor interrupt input 1	1: closed
P007	0-3	for R&D	
	4	scanner motor drive power saving	0: ON
	5	ADF pickup motor clock interrupt input	alternately 0/1
	6	ADF motor clock interrupt input	alternately 0/1
	7	not used	
P008	0	lamp ON signal	1: ON
	1	CIS drive ON signal	1: ON
	2-7	for R&D	
P009	0-7	for R&D	

17.3.4 <FEEDER>

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

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Address	Bit	Description	Remarks
P001	0	read sensor	1: detected
	1	pre-registration sensor	1: detected
P002	0-3	not used	
	4	stamp solenoid	1: ON
	5	not used	
	6	original detection LED	1: ON
	7	not used	
P003	0-7	for R&D	
P004	0	original sensor	1: detected
	1	cover sensor	1: detected
	2-7	not used	

Address	Bit	Description	Remarks
P005	0	cycle end sensor	1: detected
	1	length sensor 2	1: detected
	2	length sensor 1	1: detected
	3	A4/LTR identification sensor	1: detected
	4,5	not used	
	6	delivery sensor	0: detected
	7	DF open sensor	1: detected
P006	0-7	for R&D	
P007	0-7	for R&D	
P008	0-7	for R&D	
P009	0-7	for R&D	
P010	0-7	for R&D	
P011	0-7	for R&D	

17.3.5 <SORTER>

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

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Address	Controller	Bit	Description	Remarks
P001	SORTER	0	inlet feed motor A	
		1	inlet feed motor B	
		2	inlet feed motor A-	
		3	inlet feed motor B-	
		4	inlet feed motor switch 0	0: ON
		5	inlet feed motor switch 1	0: ON
		6	inlet feed/stack delivery motor standby signal	1: ON
		7	common solenoid ON signal	0: ON
P002	SORTER	0	punch feed motor A	
		1	punch feed motor A-	
		2	punch feed motor B	
		3	punch feed motor B-	
		4	punch feed motor current switch 0	1: ON
		5	punch feed motor current switch 1	1: ON
		6	tray 2 motor clock	
		7	tray 1 motor clock	
P003	SORTER	0-3	for R&D	
		4-7	not used	
P004	SORTER	0	saddle connection detection signal	0: ON
		1	not used	
		2	swing HP sensor	1: ON
		3	upper cover open/closed sensor	0: ON
		4	front cover open/closed sensor	0: ON
		5	front cover interlock sensor	1: ON
		6	gear change HP sensor	1: ON
		7	not used	
P005	SORTER	0,1	for R&D	
		2	punch transmission request signal	0: ON
		3	saddle 13V ON signal	1: ON
		4-7	not used	
P006	SORTER	0	punch connection detection	0: ON
		1,2	not used	
		3	punch motor standby	1: ON
		4	inlet sensor (IRQ0)	1: ON
		5	paper trailing edge sensor (IRQ1)	1: ON
		6	punch communication input (IRQ2)	0: ON
		7	not used	
P007	SORTER	0	tray approach sensor	0: ON
		1	tray 2 area sensor 1	0: ON
		2	tray 2 area sensor 2	0: ON
		3	tray 2 area sensor 3	0: ON
		4	tray 2 paper sensor	1: ON
		5	tray 2 paper surface sensor	1: ON
		6	inlet motor lock sensor	
		7	stack edging motor lock input	

Address	Controller	Bit	Description	Remarks
P008	SORTER	0	tray 3 paper sensor	1: ON
		1	tray 3 connection detection	0: ON
		2	upper paper surface sensor	1: ON
		3	tray 1 interlock sensor	1: ON
		4	tray 1 area sensor 1	0: ON
		5	tray 1 area sensor 2	0: ON
		6	tray 1 area sensor 3	0: ON
		7	tray 1 paper sensor	1: ON
P009	SORTER	0	tray 1 shift motor CW	0: ON
		1	tray 1 shift motor enable	1: ON
		2	tray 1 shift motor power supply switch 0	0: ON
		3	tray 1 shit motor current switch 1	0: ON
		4	tray 2 shift motor CW	0: ON
		5	tray 2 shit motor enable	1: ON
		6	tray 2 shift motor power supply switch 0	0: ON
		7	tray 2 shift motor power supply switch 1	0: ON
P010	SORTER	0	not used	
		1	swing lock motor power supply switch 0	0: ON
		2	swing lock motor phase A pulse output	
		3	swing lock motor phase B pulse output	
		4-7	not used	
P011	SORTER	0	input roller drive (away) solenoid	1: ON
		1,2	for R&D	
		3	buffer roller drive (away) solenoid	1: ON
		4	feed path sensor	1: ON
		5-7	not used	
P012	SORTER	0	gear change phase A	
		1	gear change phase B	
		2	gear change motor current switch 0	0: ON
		3	gear change motor current switch 1	0: ON
		4	not used	
		5-7	for R&D	
P013	SORTER	0	for R&D	
		1	front alignment HP sensor	1: ON
		2	front alignment HP sensor	1: ON
		3	handling tray paper sensor	1: ON
		4	trailing edge assist HP sensor	1: ON
		5-7	not used	
P014	SORTER	0	rear alignment motor phase A	
		2	rear alignment motor phase B	
		3	rear alignment motor current switch 0	0: ON
		4-7	not used	
P015	SORTER	0	front alignment phase A	
		1	front alignment phase B	
		2	front alignment motor current switch 0	0: ON
		3-7	not used	

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Address	Controller	Bit	Description	Remarks
P016	STACKER	0	not used	
		1	for R&D	
		2	for R&D	
		3	for R&D	
		4	for R&D	
		5	CIS power-on signal	1:ON
		6	for R&D	
		7	size sensor drive signal	1:ON
P017	STACKER	0	not used	
		1	24V power supply monitor signal	0: normal
		2	scanner motor drive signal	1: forward 0: reverse
		3	for R&D	
		4	for R&D	
		5	13V power supply monitor signal	0: normal
		6	not used	
		7	for R&D	

Address	Controller	Bit	Description	Remarks
P018	STACKER	0	for R&D	
		1	for R&D	
		2	for R&D	
		3	for R&D	
		4	LED control signal	1: ON
		5	for R&D	
		6	for R&D	
		7	for R&D	
P019	STACKER	0	not used	
		1	not used	
		2	original size detection 2	0: original present
		3	not used	
		4	not used	
		5	for R&D	
		6	for R&D	
		7	not used	
P020	STACKER	0-7	for R&D	
			not used	
			not used	
			not used	
			not used	
			not used	
			not used	
			not used	
			not used	
P021	STACKER	0	not used	
		1	for R&D	
		2	for R&D	
		3	for R&D	
		4	ADF sensor interrupt input	0: ON
		5	ADF pickup motor clock interrupt input	1: closed
		6	ADF read motor clock interrupt input	1: HP
		7	copyboard open/closed sensor interrupt input 1	1: closed
P022	STACKER	0	for R&D	
		1	for R&D	
		2	for R&D	
		3	for R&D	
		4	scanner motor driver power saving	0: ON
		5	ADF pickup motor clock interrupt input	alternates 0/1
		6	ADF read motor clock interrupt input	alternates 0/1
		7	not used	
P023	STACKER	0	lamp ON signal	1: ON
		1	CIS drive ON signal	1: ON
		2	for R&D	
		3	for R&D	
		4	for R&D	
		5	for R&D	
		6	for R&D	
		7	for R&D	
P024	SADDLE	0	for R&D	
		1-7	not used	
P025	SADDLE	0-7	not used	
P026	SADDLE	0-7	not used	
P027	SADDLE	0-7	not used	
P028	SADDLE	0-7	not used	
P029	SADDLE	0-7	not used	
P030	SADDLE	0-7	not used	

T-17-23

Address	Controller	Bit	Description	Remarks
P031	SADDLE	0	saddle tray paper sensor	0: ON
		1	paper positioning area paper sensor	0: ON
		2	crescent roller HP sensor	0: ON
		3	saddle delivery path sensor	0: ON
		4	saddle path (upstream) sensor	1: ON
		5	saddle path (middle) sensor	1: ON
		6	saddle path (downstream) sensor	1: ON
		7	saddle path sensor	1: ON
P032	SADDLE	0	butting motor enable signal	1: ON
		1	butting motor CW signal	1: ON
		2	butting motor CCW signal	1: ON
		3	folding roller HP sensor	1: ON
		4	front door open sensor	0: ON
		5	delivery cover open detection (photo sensor)	0: ON
		6	saddle alignment HP sensor	0: ON
		7	delivery cover open 24V down detection	1: ON
P033	SADDLE	0	inlet flapper solenoid	1: ON
		1	saddle path switch flapper 1	1: ON
		2	saddle path switch flapper 2	1: ON
		3	intermediate feed solenoid	1: ON
		4-5	not used	
		6	inlet path sensor	1: ON
		7	not used	
P034	SADDLE	0	rear staple motor CW	0: ON
		1	rear staple motor CCW	0: ON
		2	front stapler motor CW	0: ON
		3	not used	
		4	folding roller HP connector open detection	0: ON
		5-7	not used	
P035	SADDLE	0	DIPSW_1	0: ON
		1	DIPSW_2	0: ON
		2	DIPSW_3	0: ON
		3	DIPSW_4	0: ON
		4	DIPSW_5	0: ON
		5	DIPSW_6	0: ON
		6	DIPSW_7	0: ON
		7	DIPSW_8	0: ON
P036	SADDLE	0,1	not used	
		2	punch switch 1	0: ON
		3	5V detection signal	0: ON
		4	24V detection signal	0: ON
		5-7	not used	
P037	SADDLE	0	POWER_ON	1: ON
		1	LED1	1: ON
		2	LED2	1: ON
		3	LED3	1: ON
		4	LEDY	0: ON
		5	TRAY_MTR_CUR	0: ON
		6	TRAY_MTR_B	0: ON
		7	TRAY_MTR_A	0: ON
P038	PUNCHER	0	DIPSW1	0: ON
		1	DIPSW2	0: ON
		2	DIPSW3	0: ON
		3	not used	
		4	PCH-OUT	
		5	rear edge sensor	1: ON
		6	punch encoder clock	
		7	punch HP sensor	0: ON
P039	PUNCHER	0-2	for R&D	
		3-7	not used	
P040	PUNCHER	0-3	for R&D	
		4	horizontal registration HP sensor	1: ON
		5	horizontal registration motor STB	0: ON
		6	punch motor CCW	0: ON
		7	punch motor CW	0: ON

Address	Controller	Bit	Description	Remarks
P041	PUNCHER	0-3	not used	
		4	DIPSW4	0: ON
		5	horizontal registration motor CUR	0: ON
		6	for R&D	
		7	not used	
P042	PUNCHER	0	LED1	0: ON
		1	for R&D	
		2	for R&D	
		3	LED2	0: ON
		4	front cover sensor	0: ON
		5	for R&D	
		6	PUSHSW2	0: ON
		7	PUSHSW1	0: ON
P043	PUNCHER	0-4	not used	
		5	upper cover sensor	0: ON
		6,7	not used	

17.3.6 <MN-CONT>

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

T-17-24

Address	Bit	Sign	Remarks
P001	0	I/O port for general-purpose (O-board)	
	1	I/O port for general-purpose (S-board)	
	2	I/O port for general-purpose (R-board)	
	3	I/O port for general-purpose (P-board)	
	4	Test packet issuance request to the image processing ASIC	
	5	DDI-P POWER signal	L:ON
	6	Delivery count (Control card, Coin machine)	H:At delivery
	7	Pick-up count (Control card, Coin machine)	H:At pick-up
P002	0	CPU reset cancel signal	
	1	Image processing ASIC reset signal	
	2	DDI-P CTS signal (Printer -> Controller)	
	3	DDI-P RTS signal (Controller -> Printer)	
	4	DDI-P Power Ready signal (Controller -> Printer)	
	5	DDI-P Power Ready signal (Printer -> Controller)	
	6	Copy allowing signal (Control card)	
	7	Copy allowing signal (Coin machine)	
P003	0	Controller cooling fan ON signal	1:ON 0:OFF
	1	USB host Power (5V) control signal	1:ON 0:OFF
	2	PCI Serror interruption clear	
	3	FAX reset signal	
	4	for R&D	
	5	for R&D	
	6	for R&D	
	7	for R&D	
P004	0	for R&D	
	1	FAX board connection detection	0: Unconnected 1: Connected
	2	FAX board connection detection	0: Unconnected 1: Connected
	3	FAX board connection detection	0: Unconnected 1: Connected
	4	Control panel connection check	0: Connected 1: Unconnected
	5	DIMM judgment	
	6	DIMM judgment	
	7	DIMM judgment	
P005	0	Open Interface Power Ready signal	
	1	Watch dog function	
	2	Watch dog interruption clear	
	3	DDI-S Livewake signal	
	4	DDI-S Download signal	
	5	DDI-P Livewake signal	
	6	DDI-P Download signal	
	7	for R&D	

Address	Bit	Sign	Remarks
P006	0	Main controller PCB version	
	1	Main controller PCB version	
	2	Main controller PCB version	
	3	Main controller PCB version	
	4	Coin machine controller Power Ready signal	
	5	Coin machine Power Ready signal	
	6	Coin machine Communication Ready signal	
	7	for R&D	
P007	0	not used	
	1	not used	
	2	Power control signal	
	3-6	not used	
	7	Modem board detection signal	0: Connected 1: Unconnected
P008	0	FRAM CLK	
	1	FRAM DATA	
	2	FRAM WP	
	3-7	not used	
P009	0	SPD CLK	
	1	SPD DT	
	2-4	not used	
	5	Emergency night power source (13V) ON signal	0:OFF 1:ON
	6	Emergency night power source switching signal	0: High efficiency 1: Standard
	7	Emergency night power source (24V) ON signal	0:OFF 1:ON
P010	0	LCD Backlit switch control signal	0:ON 1:OFF
	1	USB V-bus power detection	0:OFF 1:ON
	2	SDRAM structure detection	
	3	SDRAM structure detection	
	4	Watch dog timer CLK	
	5	Emergency night power source reset signal	
	6,7	not used	
P011	0-7	not used	
P012	0-7	not used	
P013	0-7	not used	
P014	0-7	not used	
P015	0-7	not used	
P016	0-7	not used	

17.4 ADJUST (Adjustment Mode)

17.4.1 COPIER

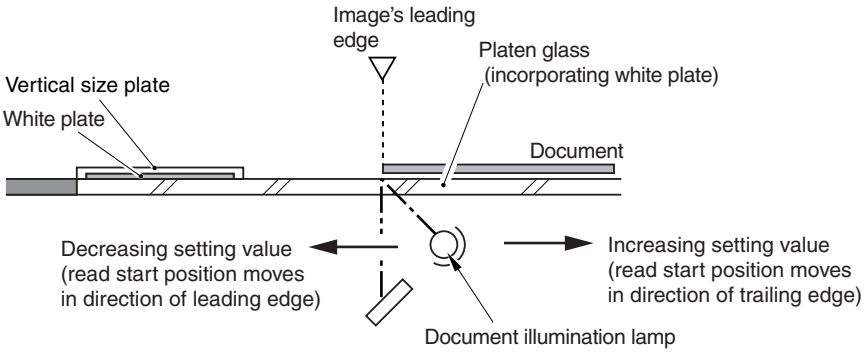
17.4.1.1 COPIER Table

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1. ADJ-XY
Adjust the scanner image leading edge position

T-17-25

COPIER>ADJUST>ADJ-XY		
Sub item	**Description**	**level.**
ADJ-X	Use it to adjust the scanner image leading edge position (i.e., image read start position in sub scanning direction). Method of adjustment - if the non-image width is larger than indicated, decrease the setting. - if an area outside the original is copied, increase the setting. - an increase by '1' will move the image read start position toward the trailing edge by 0.1 mm (i.e., move the image read area toward the trailing edge). - if you have initialized the RAM of the reader controller PCB or replaced the reader controller PCB, enter the value indicated on the service label. Range of Adjustment 1 to 100 [Factory default/After RAM clear: 20] **Attention:** If you have changed the setting, be sure to record the new setting on the service label.	1
ADJ-Y	Use it to adjust the read start cell position of the CCD (i.e., image read start position in main scanning direction). Method of Adjustment - if the non-image width is larger than indicated, decrease the setting. - if an area outside the original is copied, increase the setting. - an increase by '1' will move the image read start position toward the front by 0.1 mm (i.e., move the image read area toward the front). - if you have initialized the RAM on the reader controller PCB or replaced the reader controller PCB, enter the value indicated on the service label. Range of Adjustment 85 to 169 [Factory default/After RAM clear: 131] **Attention:** If you have changed the setting, be sure to record the new setting on the service label.	1
ADJ-Y-DF	Use it to adjust the main scanning points for DF SRAM reading mode. Method of Adjustment - an increase by '1' will move the image read start position to the front by 0.1 mm. - if you have initialized the RAM on the reader controller PCB or replaced the reader controller PCB, enter the value indicated on the service label. Range of Adjustment 50 to 250 [Factory default/After RAM clear: 158] **Attention:** If you have changed the setting, be sure to record the new setting on the service label.	1
STRD-POS	Use it to adjust the CCD read position for DF stream reading mode. Method of Adjustment - an increase by '1' will move the image read position to the left by 1 mm. - if you have initialized the RAM on the reader controller PCB or replaced the reader controller PCB, enter the value indicated on the service label. Range of Adjustment 1 to 200 [Factory default/After RAM clear: 100] **Attention:** If you have changed the setting, be sure to record the new setting on the service label.	1



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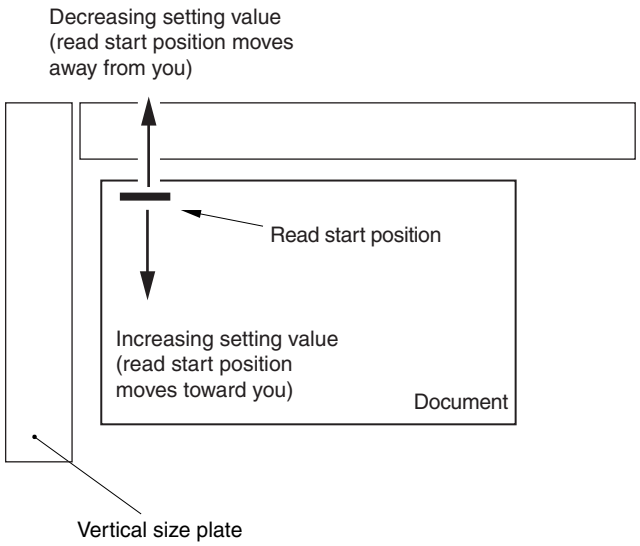


F-17-16

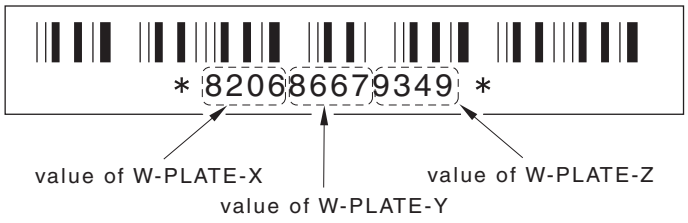
2. CCD

T-17-26

COPIER>ADJUST>CCD		
Sub item	**Description**	**level.**
W-PLT-X/Y/Z	Use it when entering the white label data indicated on the standard white plate. Method of Adjustment - if you have initialized the RAM on the reader controller PCB or replaced the reader controller PCB, enter the value indicated on the service label. - if you have replaced the copyboard glass, enter the value indicated on the copyboard glass. (See the figure below) Range of Adjustment: 1 to 9999 [Factory default/After RAM clear: W-PLT-X=8244: W-PLT-Y=8707: W-PLT-Z=9383] **Attention:** If you have changed the setting, be sure to record the new setting on the service label.	1
CCDU-RG	Use it to correct color displacement in sub scanning direction between RG associated with the CCD unit. Method of Adjustment - if you have initialized the RAM on the reader controller or replaced the reader controller PCB, enter the value indicated on the service label. Range of Adjustment: -150 to 150 [Factory default/After RAM clear: 0] **Attention:** If you have changed the setting, be sure to record the new setting on the service label.	1
MTF-MG	Enter the MTF correction value in the main scanning direction. Adjustment method: - When executing RAM clear for the reader controller PCB or replacing the reader controller PCB, enter the value indicated on the service label . - When replacing the CIS unit, enter the value indicated on the label attached to the CIS unit. Setting range: 0 to 99 [Factory setting value/Value after RAM clear: 0] **Attention:** When you changed this setting, enter the new value on the service label.	1
MTF-SG	Enter the MTF correction value in the sub scanning direction. Adjustment method: - When executing the RAM clear for the reader controller PCB or replacing the reader controller PCB, enter the value indicated on the service label. - When replacing the CIS unit, enter the value indicated on the label attached to the CIS unit. Setting range: 0 to 99 [Factory setting value/Value after RAM clear: 0] **Attention:** When you changed this setting, enter the new value on the service label.	1
BOOK-RG	Enter the offset value for color misalignment caused by the copyboard glass. Adjustment method: - When executing RAM clear for the reader controller PCB or replacing the reader controller PCB, enter the value indicated on the service label. - When replacing the copyboard glass, enter the numeric value indicated on the copyboard glass. Setting range: -150 to 150 [Factory setting value/Value after RAM clear: 0] **Attention:** When you changed this setting, enter the new value on the service label.	1
DF-RG	Enter the offset value for color misalignment caused by the stream reading glass. Adjustment method: - When executing RAM clear for the reader controller PCB or replacing the reader controller PCB, enter the value indicated on the service label. - When replacing the stream reading glass, enter the numeric value indicated on the stream reading glass. Setting range: -150 to 150 [Factory setting value/Value after RAM clear: 0] **Attention:** When you changed this setting, enter the new value on the service label.	1

COPIER>ADJUST>CCD		
Sub item	**Description**	**level.**
50-RG	Display the offset value for color misalignment (between RGs) at 50% reading in the BOOK mode. Adjustment method: When executing RAM clear for the reader controller PCB or replacing the reader controller PCB, enter the value indicated on the service label. Setting range: -150 to 150 [Factory setting value/Value after RAM clear: 0] **MEMO:** When you changed this setting, enter the new value on the service label.	1
50-GB	Use it to indicate the degree of offset (color displacement; GB) for book mode at 50% reading. Method of Adjustment - if you have initialized the RAM on the reader controller PCB or replaced the reader controller PCB, enter the value indicated on the service label. Range of Adjustment: -150 to 150 [Factory default/After RAM clear: 0] **Attention:** If you have changed the setting, be sure to record the new setting on the service label.	1
100-RG	Use it to indicate the degree of offset (color displacement; RG) for book mode at 100% reading. Method of Adjustment - if you have initialized the RAM on the reader controller PCB or replaced the reader controller PCB, enter the value indicated on the service label. Range of Adjustment: -150 to 150 [Factory default/After RAM clear: 0] **Attention:** If you have changed the setting, be sure to record the new setting on the service label.	1
100-GB	Use it to indicate the degree of offset (color displacement; GB) for book mode at 100% reading. Method of Adjustment - if you have initialized the RAM on the reader controller PCB or replaced the reader controller PCB, enter the value indicated on the service label. Range of Adjustment: -150 to 150 [Factory default/After RAM clear: 0] **Attention:** If you have changed the setting, be sure to record the new setting on the service label.	1
50DF-RG	Use it to indicate the degree of offset (color displacement RG) for ADF mode at 50% reading. Method of Adjustment - if you have initialized the RAM on the reader controller PCB or replaced the reader controller PCB, enter the value indicated on the service label. Range of Adjustment: -150 to 150 [Factory default/After RAM clear: 0] **Attention:** If you have changed the setting, be sure to record the new setting on the service label.	1
50DF-GB	Use it to indicate the degree of offset (color displacement; GB) for ADF mode at 50% reading. Method of Adjustment - if you have initialized the RAM on the reader controller PCB or replaced the reader controller PCB, enter the value indicated on the service label. Range of Adjustment: -150 to 150 [Factory default/After RAM clear: 0] **Attention:** If you have changed the setting, be sure to record the new setting on the service label.	1
100DF-RG	Use it to indicate the degree of offset (color displacement; RG) for ADF mode at 100% reading. Method of Adjustment - if you have initialized the RAM on the reader controller PCB or replaced the reader controller PCB, enter the value indicated on the service label. Range of Adjustment: -150 to 150 [Factory default/After RAM clear: 0] **Attention:** If you have changed the setting, be sure to record the new setting on the service label.	1
100DF-GB	Use it to indicate the degree of offset (color displacement; GB) for ADF mode at 100% reading. Method of Adjustment - if you have initialized the RAM on the reader controller PCB or replaced the reader controller PCB, enter the value indicated on the service label. Range of Adjustment: -150 to 150 [Factory default/After RAM clear: 0] **Attention:** If you have changed the setting, be sure to record the new setting on the service label.	1
DFTAR-R	Use it when entering the shading target value (red) for use when the DF is used (i.e., normal original read position). Method of Adjustment - COPIER>FUNCTION>CC>WLVL1/DF-WLVL2 if the image has a fault when the foregoing service mode item has been executed (e.g., as caused by soiling of the chart), enter the factory measurement using this mode item. - if you have initialize the RAM on the reader controller PCB or replaced the reader controller PCB, enter the value indicated on the service label. Range of Adjustment: 1 to 2047 [Factory default/After RAM clear: 1106] **Attention:** If you have changed the setting, be sure to record the new setting on the service label.	1
DFTAR-G	Use it when entering the shading target (green) for the DF (normal original reading position). Method of Adjustment - COPIER>FUNCTION>CD>DF-WLVL1/DF-WLVL2 if the image starts to develop a fault after executing the foregoing service mode item (e.g., as caused by soiling of the chart), enter the factory measurement using this mode. - if you have initialized the RAM on the reader controller PCB or replaced the reader controller PCB, enter the value indicated on the service label. Range of Adjustment: 1 to 2047 [Factory default/After RAM clear: 1131] **Attention:** If you have changed the setting, be sure to record the new setting on the service label.	1

COPIER>ADJUST>CCD		
Sub item	**Description**	**level.**
DFTAR-B	Use it to enter the shading target value (blue) for the DF (normal original read position). Method of Adjustment - COPIER>FUNCTION>CCD>DF-WLVL1/DF-WLVL2 if the image starts to develop a fault after executing the foregoing service mode item, enter the factory measurement using this mode item. - if you have initialized the RAM on the reader controller PCB or replaced the reader controller PCB, enter the value indicated on the service label. Range of Adjustment: 1 to 2047 [Factory default/After RAM clear: 1185] **Attention:** If you have changed the setting, be sure to record the new setting on the service label.	1
DFTAR2-R	Enter the shading target value (RED color) for the use of DF. (second document reading position) Adjustment method: - When a fault occurs in the image (due to dirt on the chart, etc.) after executing COPIER>FUNCTION>CCD>DF-WLVL2, use this mode and enter the factory measurement value. - When executing RAM clear for the reader controller PCB or replacing the reader controller PCB, enter the value indicated on the service label. Setting range: 1 to 2047 [Factory setting value/Value after RAM clear: 1138]	1
DFTAR2-G	Enter the shading target value (GREEN color) for the use of DF. (second document reading position) Adjustment method: - When a fault occurs in the image (due to dirt on the chart, etc.) after executing COPIER>FUNCTION>CCD>DF-WLVL2, use this mode and enter the factory measurement value. - When executing RAM clear for the reader controller PCB or replacing the reader controller PCB, enter the value indicated on the service label. Setting range: 1 to 2047 [Factory setting value/Value after RAM clear: 1154]	1
DFTAR2-B	Enter the shading target value (BLUE color) for the use of DF. (second document reading position) Adjustment method: When a fault occurs in the image (due to dirt on the chart, etc.) after executing COPIER>FUNCTION>CCD>DF-WLVL2, use this mode and enter the factory measurement value. Setting range: 1 to 2047 [Factory setting value/Value after RAM clear: 1201]	1



F-17-17

3. LASER

Laser Output Adjustment

T-17-27

COPIER>ADJUST>LASER		
Sub item	**Description**	**level.**
LA-PWR-A	Enter the laser power adjustment value for Laser A. This machine adjusts the laser power at DMAX for PCRG initialization. This item adjusts the laser power Y. This can be used to determine a cause of a density fault. When replacing the DCON PCB, enter the value corresponding to PCRG. Setting range: 0 to 15	1
LA-PWR-B	Enter the laser power adjustment value for Laser B. This machine adjusts the laser power at DMAX for PCRG initialization. This item adjusts the laser power Y. This can be used to determine a cause of a density fault. When replacing the DCON PCB, enter the value corresponding to PCRG. Setting range: 0 to 15	1
LA-PWR-C	Enter the laser power adjustment value for Laser C. This machine adjusts the laser power at DMAX for PCRG initialization. This item adjusts the laser power Y. This can be used to determine a cause of a density fault. When replacing the DCON PCB, enter the value corresponding to PCRG. Setting range: 0 to 15	1
LA-PWR-D	Enter the laser power adjustment value for Laser D. This machine adjusts the laser power at DMAX for PCRG initialization. This item adjusts the laser power Y. This can be used to determine a cause of a density fault. When replacing the DCON PCB, enter the value corresponding to PCRG. Setting range: 0 to 15	1
FSLUT-Y1	Partial ratio adjustment for Y-color images in the main scanning direction: 1 Correction value for the second block of partial ratio correction Y When replacing the laser scanner unit, enter the value indicated on the label attached to the unit. When no value is entered, color misalignment occurs. Setting range: 0 to 99	1
FSLUT-Y2	Partial ratio adjustment for Y-color images in the main scanning direction: 2 Correction value for the second block of partial ratio correction Y When replacing the laser scanner unit, enter the value indicated on the label attached to the unit. When no value is entered, color misalignment occurs. Setting range: 0 to 99	1
FSLUT-Y3	Partial ratio adjustment for Y-color images in the main scanning direction: 3 Correction value for the third block of partial ratio correction Y When replacing the laser scanner unit, enter the value indicated on the label attached to the unit. When no value is entered, color misalignment occurs. Setting range: 0 to 99	1

COPIER>ADJUST>LASER		
Sub item	**Description**	**level.**
FSLUT-Y4	Partial ratio adjustment for Y-color images in the main scanning direction: 4 Correction value for the fourth block of partial ratio correction Y When replacing the laser scanner unit, enter the value indicated on the label attached to the unit. When no value is entered, color misalignment occurs. Setting range: 0 to 99	1
FSLUT-Y5	Partial ratio adjustment for Y-color images in the main scanning direction: 5 Correction value for the fifth block of partial ratio correction Y When replacing the laser scanner unit, enter the value indicated on the label attached to the unit. When no value is entered, color misalignment occurs. Setting range: 0 to 99	1
FSLUT-Y6	Partial ratio adjustment for Y-color images in the main scanning direction: 6 Correction value for the sixth block of partial ratio correction Y When replacing the laser scanner unit, enter the value indicated on the label attached to the unit. When no value is entered, color misalignment occurs. Setting range: 0 to 99	1
FSLUT-Y7	Partial ratio adjustment for Y-color images in the main scanning direction: 7 Correction value for the seventh block of partial ratio correction Y When replacing the laser scanner unit, enter the value indicated on the label attached to the unit. When no value is entered, color misalignment occurs. Setting range: 0 to 99	1
FSLUT-Y8	Partial ratio adjustment for Y-color images in the main scanning direction: 8 Correction value for the eighth block of partial ratio correction Y When replacing the laser scanner unit, enter the value indicated on the label attached to the unit. When no value is entered, color misalignment occurs. Setting range: 0 to 99	1
FSLUT-M1	Partial ratio adjustment for M-color images in the main scanning direction: 1 Correction value for the first block of partial ratio correction M When replacing the laser scanner unit, enter the value indicated on the label attached to the unit. When no value is entered, color misalignment occurs. Setting range: 0 to 99	1
FSLUT-M2	Partial ratio adjustment for M-color images in the main scanning direction: 2 Correction value for the second block of partial ratio correction M When replacing the laser scanner unit, enter the value indicated on the label attached to the unit. When no value is entered, color misalignment occurs. Setting range: 0 to 99	1
FSLUT-M3	Partial ratio adjustment for M-color images in the main scanning direction: 3 Correction value for the third block of partial ratio correction M When replacing the laser scanner unit, enter the value indicated on the label attached to the unit. When no value is entered, color misalignment occurs. Setting range: 0 to 99	1
FSLUT-M4	Partial ratio adjustment for M-color images in the main scanning direction: 4 Correction value for the fourth block of partial ratio correction M When replacing the laser scanner unit, enter the value indicated on the label attached to the unit. When no value is entered, color misalignment occurs. Setting range: 0 to 99	1
FSLUT-M5	Partial ratio adjustment for M-color images in the main scanning direction: 5 Correction value for the fifth block of partial ratio correction M When replacing the laser scanner unit, enter the value indicated on the label attached to the unit. When no value is entered, color misalignment occurs. Setting range: 0 to 99	1
FSLUT-M6	Partial ratio adjustment for M-color images in the main scanning direction: 6 Correction value for the sixth block of partial ratio correction M When replacing the laser scanner unit, enter the value indicated on the label attached to the unit. When no value is entered, color misalignment occurs. Setting range: 0 to 99	1
FSLUT-M7	Partial ratio adjustment for M-color images in the main scanning direction: 7 Correction value for the seventh block of partial ratio correction M When replacing the laser scanner unit, enter the value indicated on the label attached to the unit. When no value is entered, color misalignment occurs. Setting range: 0 to 99	1
FSLUT-M8	Partial ratio adjustment for M-color images in the main scanning direction: 8 Correction value for the eighth block of partial ratio correction M When replacing the laser scanner unit, enter the value indicated on the label attached to the unit. When no value is entered, color misalignment occurs. Setting range: 0 to 99	1
FSLUT-C1	Partial ratio adjustment for C-color images in the main scanning direction: 1 Correction value for the first block of partial ratio correction C When replacing the laser scanner unit, enter the value indicated on the label attached to the unit. When no value is entered, color misalignment occurs. Setting range: 0 to 99	1
FSLUT-C2	Partial ratio adjustment for C-color images in the main scanning direction: 2 Correction value for the second block of partial ratio correction C When replacing the laser scanner unit, enter the value indicated on the label attached to the unit. When no value is entered, color misalignment occurs. Setting range: 0 to 99	1
FSLUT-C3	Partial ratio adjustment for C-color images in the main scanning direction: 3 Correction value for the third block of partial ratio correction C When replacing the laser scanner unit, enter the value indicated on the label attached to the unit. When no value is entered, color misalignment occurs. Setting range: 0 to 99	1

COPIER>ADJUST>LASER		
Sub item	**Description**	**level.**
FSLUT-C4	Partial ratio adjustment for C-color images in the main scanning direction: 4 Correction value for the fourth block of partial ratio correction C When replacing the laser scanner unit, enter the value indicated on the label attached to the unit. When no value is entered, color misalignment occurs. Setting range: 0 to 99	1
FSLUT-C5	Partial ratio adjustment for C-color images in the main scanning direction: 5 Correction value for the fifth block of partial ratio correction C When replacing the laser scanner unit, enter the value indicated on the label attached to the unit. When no value is entered, color misalignment occurs. Setting range: 0 to 99	1
FSLUT-C6	Partial ratio adjustment for C-color images in the main scanning direction: 6 Correction value for the sixth block of partial ratio correction C When replacing the laser scanner unit, enter the value indicated on the label attached to the unit. When no value is entered, color misalignment occurs. Setting range: 0 to 99	1
FSLUT-C7	Partial ratio adjustment for C-color images in the main scanning direction: 7 Correction value for the seventh block of partial ratio correction C When replacing the laser scanner unit, enter the value indicated on the label attached to the unit. When no value is entered, color misalignment occurs. Setting range: 0 to 99	1
FSLUT-C8	Partial ratio adjustment for C-color images in the main scanning direction: 8 Correction value for the eighth block of partial ratio correction C When replacing the laser scanner unit, enter the value indicated on the label attached to the unit. When no value is entered, color misalignment occurs. Setting range: 0 to 99	1
FSLUT-K1	Partial ratio adjustment for Bk-color images in the main scanning direction: 1 Correction value for the first block of partial ratio correction K When replacing the laser scanner unit, enter the value indicated on the label attached to the unit. When no value is entered, color misalignment occurs. Setting range: 0 to 99	1
FSLUT-K2	Partial ratio adjustment for Bk-color images in the main scanning direction: 2 Correction value for the second block of partial ratio correction K When replacing the laser scanner unit, enter the value indicated on the label attached to the unit. When no value is entered, color misalignment occurs. Setting range: 0 to 99	1
FSLUT-K3	Partial ratio adjustment for Bk-color images in the main scanning direction: 3 Correction value for the third block of partial ratio correction K When replacing the laser scanner unit, enter the value indicated on the label attached to the unit. When no value is entered, color misalignment occurs. Setting range: 0 to 99	1
FSLUT-K4	Partial ratio adjustment for Bk-color images in the main scanning direction: 4 Correction value for the fourth block of partial ratio correction K When replacing the laser scanner unit, enter the value indicated on the label attached to the unit. When no value is entered, color misalignment occurs. Setting range: 0 to 99	1
FSLUT-K5	Partial ratio adjustment for Bk-color images in the main scanning direction: 5 Correction value for the fifth block of partial ratio correction K When replacing the laser scanner unit, enter the value indicated on the label attached to the unit. When no value is entered, color misalignment occurs. Setting range: 0 to 99	1
FSLUT-K6	Partial ratio adjustment for Bk-color images in the main scanning direction: 6 Correction value for the sixth block of partial ratio correction K When replacing the laser scanner unit, enter the value indicated on the label attached to the unit. When no value is entered, color misalignment occurs. Setting range: 0 to 99	1
FSLUT-K7	Partial ratio adjustment for Bk-color images in the main scanning direction: 7 Correction value for the seventh block of partial ratio correction K When replacing the laser scanner unit, enter the value indicated on the label attached to the unit. When no value is entered, color misalignment occurs. Setting range: 0 to 99	1
FSLUT-K8	Partial ratio adjustment for Bk-color images in the main scanning direction: 8 Correction value for the eighth block of partial ratio correction K When replacing the laser scanner unit, enter the value indicated on the label attached to the unit. When no value is entered, color misalignment occurs. Setting range: 0 to 99	1

4. IMG-REG

Adjustment for color displacement of the color image

T-17-28

COPIER>ADJUST>IMG-REG		
Sub item	**Description**	**level.**
REG-H-Y	Coarsely adjust the writing position (in the main scanning direction) of the pattern for Y Offset the writing position of Y-color images (in the main scanning direction) in the unit of pixel. Use this item to adjust color misalignment in the main scanning direction in the unit of pixel. Setting range: -128 to 127 [Factory setting value/Value after RAM clear: 0]	1
REG-H-M	Coarsely adjust the writing position (in the main scanning direction) of the pattern for M Offset the writing position of M-color images (in the main scanning direction) in the unit of pixel. Use this item to adjust color misalignment in the main scanning direction in the unit of pixel. Setting range: -128 to 127 [Factory setting value/Value after RAM clear: 0]	1

COPIER>ADJUST>IMG-REG		
Sub item	**Description**	**level.**
REG-H-C	Coarsely adjust the writing position (in the main scanning direction) of the pattern for C Offset the writing position of C-color images (in the main scanning direction) in the unit of pixel. Use this item to adjust color misalignment in the main scanning direction in the unit of pixel. Setting range: -128 to 127 [Factory setting value/Value after RAM clear: 0]	1
REG-H-K	Coarsely adjust the writing position (in the main scanning direction) of the pattern for K Offset the writing position of K-color images (in the main scanning direction) in the unit of pixel. Use this item to adjust color misalignment in the main scanning direction in the unit of pixel. Setting range: -128 to 127 [Factory setting value/Value after RAM clear: 0]	1
REG-HS-Y	Finely adjust the writing position (in the main scanning direction) of the pattern for Y Offset the writing position of Y-color images (in the main scanning direction) in the unit of 1/16 pixel. Use this item to adjust color misalignment in the main scanning direction in the unit of 1/16 pixel. Setting range: -128 to 127 [Factory setting value/Value after RAM clear: 0]	1
REG-HS-M	Finely adjust the writing position (in the main scanning direction) of the pattern for M Offset the writing position of M-color images (in the main scanning direction) in the unit of 1/16 pixel. Use this item to adjust color misalignment in the main scanning direction in the unit of 1/16 pixel. Setting range: -128 to 127 [Factory setting value/Value after RAM clear: 0]	1
REG-HS-C	Finely adjust the writing position (in the main scanning direction) of the pattern for C Offset the writing position of C-color images (in the main scanning direction) in the unit of 1/16 pixel. Use this item to adjust color misalignment in the main scanning direction in the unit of 1/16 pixel. Setting range: -128 to 127 [Factory setting value/Value after RAM clear: 0]	1
REG-HS-K	Finely adjust the writing position (in the main scanning direction) of the pattern for K Offset the writing position of K-color images (in the main scanning direction) in the unit of 1/16 pixel. Use this item to adjust color misalignment in the main scanning direction in the unit of 1/16 pixel. Setting range: -128 to 127 [Factory setting value/Value after RAM clear: 0]	1
REG-V-Y	Coarsely adjust the writing position (in the sub scanning direction) of the pattern for Y Offset the writing position of Y-color images (in the sub scanning direction) in the unit of pixel. Use this item to adjust color misalignment in the sub scanning direction in the unit of pixel. Setting range: -128 to 127 [Factory setting value/Value after RAM clear: 0]	1
REG-V-M	Coarsely adjust the writing position (in the sub scanning direction) of the pattern for M Offset the writing position of M-color images (in the sub scanning direction) in the unit of pixel. Use this item to adjust color misalignment in the sub scanning direction in the unit of pixel. Setting range: -128 to 127 [Factory setting value/Value after RAM clear: 0]	1
REG-V-C	Coarsely adjust the writing position (in the sub scanning direction) of the pattern for C Offset the writing position of C-color images (in the sub scanning direction) in the unit of pixel. Use this item to adjust color misalignment in the sub scanning direction in the unit of pixel. Setting range: -128 to 127 [Factory setting value/Value after RAM clear: 0]	1
REG-V-K	Coarsely adjust the writing position (in the sub scanning direction) of the pattern for K Offset the writing position of K-color images (in the sub scanning direction) in the unit of pixel. Use this item to adjust color misalignment in the sub scanning direction in the unit of pixel. Setting range: -128 to 127 [Factory setting value/Value after RAM clear: 0]	1

5. DENS

Concentration of developer in developer unit.

T-17-29

COPIER>ADJUST>DENS		
Sub item	**Description**	**level.**
SGNL-Y	Display the Y-color toner density signal value when executing "INIT" for ATR control. Display the Y-color toner density signal value when executing ATR-INIT, which is implemented at PCRG initialization. Use this item to determine a cause of a density fault. When replacing the DCON PCB, enter the unique ATR-INIT value for each PCRG. Setting range: 0 to 65535 [Factory setting value/Value after RAM clear: 0]	1
SGNL-M	Display the M-color toner density signal value when executing "INIT" for ATR control. Display the M-color toner density signal value when executing ATR-INIT, which is implemented at PCRG initialization. Use this item to determine a cause of a density fault. When replacing the DCON PCB, enter the unique ATR-INIT value for each PCRG. Setting range: 0 to 65535 [Factory setting value/Value after RAM clear: 0]	1
SGNL-C	Display the C-color toner density signal value when executing "INIT" for ATR control. Display the C-color toner density signal value when executing ATR-INIT, which is implemented at PCRG initialization. Use this item to determine a cause of a density fault. When replacing the DCON PCB, enter the unique ATR-INIT value for each PCRG. Setting range: 0 to 65535 [Factory setting value/Value after RAM clear: 0]	1
SGNL-K	Display the K-color toner density signal value when executing "INIT" for ATR control. Display the K-color toner density signal value when executing ATR-INIT, which is implemented at PCRG initialization. Use this item to determine a cause of a density fault. When replacing the DCON PCB, enter the unique ATR-INIT value for each PCRG. Setting range: 0 to 65535 [Factory setting value/Value after RAM clear: 0]	1

COPIER>ADJUST>DENS		
Sub item	**Description**	**level.**
SIGG-Y	Display the gain value for the Y-color toner density standard signal for ATR control. Display the Y-color patch level when executing ATR-INIT, which is executed at PCRG initialization. Use this item to determine a cause of a density fault. When replacing the DCON PCB, enter the unique ATR-INIT value for each PCRG. Setting range: 0 to 255 [Factory setting value/Value after RAM clear: 0]	1
SIGG-M	Display the gain value for the M-color toner density standard signal for ATR control. Display the M-color patch level when executing ATR-INIT, which is executed at PCRG initialization. Use this item to determine a cause of a density fault. When replacing the DCON PCB, enter the unique ATR-INIT value for each PCRG. Setting range: 0 to 255 [Factory setting value/Value after RAM clear: 0]	1
SIGG-C	Display the gain value for the C-color toner density standard signal for ATR control. Display the C-color patch level when executing ATR-INIT, which is executed at PCRG initialization. Use this item to determine a cause of a density fault. When replacing the DCON PCB, enter the unique ATR-INIT value for each PCRG. Setting range: 0 to 255 [Factory setting value/Value after RAM clear: 0]	1
SIGG-K	Display the gain value for the K-color toner density standard signal for ATR control. Display the K-color patch level when executing ATR-INIT, which is executed at PCRG initialization. Use this item to determine a cause of a density fault. When replacing the DCON PCB, enter the unique ATR-INIT value for each PCRG. Setting range: 0 to 255 [Factory setting value/Value after RAM clear: 0]	1
T-SPLY-Y	Adjust the toner supply amount (Y-color) Adjustment method: When executing RAM clear for the DC controller PCB or replacing the DC controller PCB, enter the value indicated on the service label. Adjustment range: -3 to 3 [Factory setting value/Value after RAM clear: 0]	2
T-SPLY-M	Adjust the toner supply amount (M-color) Adjustment method: When executing RAM clear for the DC controller PCB or replacing the DC controller PCB, enter the value indicated on the service label. Adjustment range: -3 to 3 [Factory setting value/Value after RAM clear: 0]	2
T-SPLY-C	Adjust the toner supply amount (C-color) Adjustment method: When executing RAM clear for the DC controller PCB or replacing the DC controller PCB, enter the value indicated on the service label. Adjustment range: -3 to 3 [Factory setting value/Value after RAM clear: 0]	2
T-SPLY-K	Adjust the toner supply amount (K-color) Adjustment method: When executing RAM clear for the DC controller PCB or replacing the DC controller PCB, enter the value indicated on the service label. Adjustment range: -3 to 3 [Factory setting value/Value after RAM clear: 0]	2
DMAX-K	Adjust the offset for the target value of K-color density control. Adjustment method: Set the offset value for the target value of K-color density control at D-MAX control. Setting range: -8 to 8 [Factory setting value/Value after RAM clear: 0]	2
P-TG-Y	Adjust the offset for the target value (Y-color) of ATR control. Add the offset to the ATR patch TGT which was determined at initialization, and change the T/D ratio. Changing the setting value by 1 will add the offset value by 30 levels to ATR patch TGT. Use this item for low/high density or fogging images. Setting range: -4 to 4 [Factory setting value/Value after RAM clear: 0]	2
P-TG-M	Adjust the offset for the target value (M-color) of ATR control. Add the offset to the ATR patch TGT which was determined at initialization, and change the T/D ratio. Changing the setting value by 1 will add the offset value by 30 levels to ATR patch TGT. Use this item for low/high density or fogging images. Setting range: -4 to 4 [Factory setting value/Value after RAM clear: 0]	2
P-TG-C	Adjust the offset for the target value (C-color) of ATR control. Add the offset to the ATR patch TGT which was determined at initialization, and change the T/D ratio. Changing the setting value by 1 will add the offset value by 30 levels to ATR patch TGT. Use this item for low/high density or fogging images. Setting range: -4 to 4 [Factory setting value/Value after RAM clear: 0]	2
P-TG-K	Adjust the offset for the target value (Bk-color) of ATR control. Add the offset to the ATR patch TGT which was determined at initialization, and change the T/D ratio. Changing the setting value by 1 will add the offset value by 30 levels to ATR patch TGT. Use this item for low/high density or fogging images. Setting range: -4 to 4 [Factory setting value/Value after RAM clear: 0]	2

6. BLANK
Adjustment for the leading edge of image/margin of the rear end

T-17-30

COPIER>ADJUST>BLANK		
Sub item	**Description**	**level.**
BLANK-T	Used to enter adjusted value of image blank width (leading edge). Adjustment method - If you have cleared the main controller PCB's RAM or replaced the SRAM PCB, enter the value on the service label. Adjustment range 0 to 1000 [Factory default/After RAM clear: +59]	1
BLANK-L	Used to enter adjusted value of image blank width (left edge). Adjustment method - If you have cleared the main controller PCB's RAM or replaced the SRAM PCB, enter the value on the service label. Adjustment range 0 to 1000 [Factory default/After RAM clear: +47]	1
BLANK-R	Used to enter adjusted value of image blank width (right edge). Adjustment method - If you have cleared the main controller PCB's RAM or replaced the SRAM PCB, enter the value on the service label. Adjustment range 0 to 1000 [Factory default/After RAM clear: +47]	1
BLANK-B	Used to enter adjusted value of image blank width (trailing edge). Adjustment method - If you have cleared the main controller PCB's RAM or replaced the SRAM PCB, enter the value on the service label. Adjustment range 0 to 1000 [Factory default/After RAM clear: +59]	1

7. V-CONT
Potential Control System Adjustment

T-17-31

COPIER>ADJUST>V-CONT		
Sub item	**Description**	**Level.**
VCONT-Y/K	Adjust the image contract electric potential. Use this item for low/high density. Since the same high pressure is used for Y, M, and C, adjusting VCONT-Y will also adjust M and C. Adjustment range: -5 to 5 (Unit: 10V) [Factory setting value/Value after RAM clear: 0] **Attention:** Setting a larger value increases density. Note that the adjustment is made to all Y, M, and C. Be sure not to use this item in normal operation.	2
VBACK-Y/K	Adjust the image contract electric potential. Use this item for low/high density. Since the same high pressure is used for Y, M, and C, adjusting VCONT-Y will also adjust M and C. Adjustment range: -5 to 5 (Unit: 10V) [Factory setting value/Value after RAM clear: 0] **Attention:** Setting a larger value increases density. Note that the adjustment is made to all Y, M, and C. Be sure not to use this item in normal operation.	2

8. PASCAL
Adjustment for auto gradation correction control

T-17-32

COPIER>ADJUST>PASCAL		
Sub item	**Description**	**level.**
OFST-P-Y/M/C/K	Use it to apply offset adjustment on the test print reading signal (Y) for PASCAL control at time of auto gradation correction (full). Method of Adjustment - a higher setting will make the image darker after auto gradation correction (full). Range of Adjustment: -128 to +128 [Factory default/After RAM clear: 0]	1

9. COLOR
Adjustment for color balance

T-17-33

COPIER>ADJUST>COLOR		
Sub item	**Description**	**Level.**
ADJ-Y/M/C/K	Adjust the color balance of Y/M/C/K colors for users. Change the default value of the color balance when the output density varies by machine. Setting a larger value increases density. Setting a smaller value decreases density. Setting range: -8 to 8 [Factory setting value/Value after RAM clear: 0]	1
OFST-Y/M/C/K	Adjust the density and color balance of the bright part of Y/M/C/K colors. Offset the color balance of the bright part when the document base is not normally read. Setting a larger value increases the color balance. Setting a smaller value decreases the color balance. When the base is not normally eliminated and it looks like a fogging image, decrease the value until the fogging becomes invisible. Setting range: -32 to 32 [Factory setting value/Value after RAM clear: 0]	1
LD-OFS-Y/M/C/K	Adjust the color balance of low density area. Be sure not to use this item in normal operation. Setting range: -8 to 8 [Factory setting value/Value after RAM clear: 0]	2

COPIER>ADJUST>COLOR		
Sub item	**Description**	**Level.**
MD-OFS-/Y/M/C/K	Adjust the color balance of middle density area. Be sure not to use this item in normal operation. (recommended setting value: -1) Setting range: -8 to 8 [Factory setting value/Value after RAM clear: 0]	2
HD-OFS-Y/M/C/K	Adjust the color balance of high density area. Be sure not to use this item in normal operation. (recommended setting value: -2) Setting range: -8 to 8 [Factory setting value/Value after RAM clear: 0]	2

10. HV-PRI

Primary Charging Assembly Output Adjustment

T-17-34

COPIER>ADJUST>HV-PRI		
Sub item	**Description**	**Level.**
OFSTAC-Y	Offset value for the charging AC current at a constant speed (Y) When a sanded image occurs, increase the value until an appropriate image is obtained. Setting range: 0 to 5 (When incremented by 1, the value changes by 50muA.) [Factory setting value/Value after RAM clear: 0]	1
OFSTAC-M	Offset value for the charging AC current at a constant speed (M) When a sanded image occurs, increase the value until an appropriate image is obtained. Setting range: 0 to 5 (When incremented by 1, the value changes by 50muA.) [Factory setting value/Value after RAM clear: 0]	1
OFSTAC-C	Offset value for the charging AC current at a constant speed (C) When a sanded image occurs, increase the value until an appropriate image is obtained. Setting range: 0 to 5 (When incremented by 1, the value changes by 50muA.) [Factory setting value/Value after RAM clear: 0]	1
OFSTAC-K	Offset value for the charging AC current at a constant speed (K) When a sanded image occurs, increase the value until an appropriate image is obtained. Setting range: 0 to 5 (When incremented by 1, the value changes by 50muA.) [Factory setting value/Value after RAM clear: 0]	1
OFSTAC-Y2	Offset value for the charging AC current at a 1/2 speed (Y) When a sanded image occurs, increase the value until an appropriate image is obtained. Setting range: 0 to 5 (When incremented by 1, the value changes by 50muA.) [Factory setting value/Value after RAM clear: 0]	1
OFSTAC-M2	Offset value for the charging AC current at a 1/2 speed (M) When a sanded image occurs, increase the value until an appropriate image is obtained. Setting range: 0 to 5 (When incremented by 1, the value changes by 50muA.) [Factory setting value/Value after RAM clear: 0]	1
OFSTAC-C2	Offset value for the charging AC current at a 1/2 speed (C) When a sanded image occurs, increase the value until an appropriate image is obtained. Setting range: 0 to 5 (When incremented by 1, the value changes by 50muA.) [Factory setting value/Value after RAM clear: 0]	1
OFSTAC-K2	Offset value for the charging AC current at a 1/2 speed (K) When a sanded image occurs, increase the value until an appropriate image is obtained. Setting range: 0 to 5 (When incremented by 1, the value changes by 50muA.) [Factory setting value/Value after RAM clear: 0]	1
OFSTAC-Y3	Offset value for the charging AC current at a 1/4 speed (Y) When a sanded image occurs, increase the value until an appropriate image is obtained. Setting range: 0 to 5 (When incremented by 1, the value changes by 50muA.) [Factory setting value/Value after RAM clear: 0]	1
OFSTAC-M3	Offset value for the charging AC current at a 1/4 speed (M) When a sanded image occurs, increase the value until an appropriate image is obtained. Setting range: 0 to 5 (When incremented by 1, the value changes by 50muA.) [Factory setting value/Value after RAM clear: 0]	1
OFSTAC-C3	Offset value for the charging AC current at a 1/4 speed (C) When a sanded image occurs, increase the value until an appropriate image is obtained. Setting range: 0 to 5 (When incremented by 1, the value changes by 50muA.) [Factory setting value/Value after RAM clear: 0]	1
OFSTAC-K3	Offset value for the charging AC current at a 1/4 speed (K) When a sanded image occurs, increase the value until an appropriate image is obtained. Setting range: 0 to 5 (When incremented by 1, the value changes by 50muA.) [Factory setting value/Value after RAM clear: 0]	1

11. HV-TR

Transfer Charging Assembly / Pre-Transfer Charging Assembly Output Adjustment

T-17-35

COPIER>ADJUST>HV-TR		
Sub item	**Description**	**Level.**
2TR-N1	Adjust the offset for paper voltage of the secondary transfer bias on the first side of plain paper (at a constant speed at 600dpi). Offset value for the paper voltage of the secondary transfer bias, First side of plain paper, Environmental category: 1 When a transfer scattering occurs, increase/decrease the value until an appropriate image is obtained. Setting range: -128 to 127 (Unit: 20V) [Factory setting value/Value after RAM clear: 0]	1

COPIER>ADJUST>HV-TR		
Sub item	**Description**	**Level.**
2TR-N2	Adjust the offset for paper voltage of the secondary transfer bias on the second side of plain paper (at a constant speed at 600dpi). Offset value for the paper voltage of the secondary transfer bias, Second side of plain paper, Environmental category: 1 When a transfer scattering occurs, increase/decrease the value until an appropriate image is obtained. Setting range: -128 to 127 (Unit: 20V) [Factory setting value/Value after RAM clear: 0]	1
2TR-NH1	Adjust the offset for paper voltage of the secondary transfer bias on the first side of plain paper (at a half speed at 1200dpi). Offset value for the paper voltage of the secondary transfer bias, First side of plain paper (1200dpi), Environmental category: 1 When a transfer scattering occurs, increase/decrease the value until an appropriate image is obtained. Setting range: -128 to 127 (Unit: 20V) [Factory setting value/Value after RAM clear: 0]	1
2TR-NH2	Adjust the offset for paper voltage of the secondary transfer bias on the second side of plain paper (at a half speed at 1200dpi). Offset value for the paper voltage of the secondary transfer bias, Second side of plain paper (1200dpi), Environmental category: 1 When a transfer scattering occurs, increase/decrease the value until an appropriate image is obtained. Setting range: -128 to 127 (Unit: 20V) [Factory setting value/Value after RAM clear: 0]	1
2TR-P1	Adjust the offset for paper voltage of the secondary transfer bias on the first side of a postcard. Offset value for the paper voltage of the secondary transfer bias, First side of a postcard, Environmental category: 1 When a transfer scattering occurs, increase/decrease the value until an appropriate image is obtained. Setting range: -128 to 127 (Unit: 20V) [Factory setting value/Value after RAM clear: 0]	1
2TR-P2	Adjust the offset for paper voltage of the secondary transfer bias on the second side of a postcard. Offset value for the paper voltage of the secondary transfer bias, Second side of a postcard, Environmental category: 1 When a transfer scattering occurs, increase/decrease the value until an appropriate image is obtained. Setting range: -128 to 127 (Unit: 20V) [Factory setting value/Value after RAM clear: 0]	1
2TR-L1	Adjust the offset for paper voltage of the secondary transfer bias on the first side of label paper. Offset value for the paper voltage of the secondary transfer bias, Label paper, Environmental category: 1 When a transfer scattering occurs, increase/decrease the value until an appropriate image is obtained. Setting range: -128 to 127 (Unit: 20V) [Factory setting value/Value after RAM clear: 0]	1
2TR-SP1	Adjust the offset for paper voltage of the secondary transfer bias on the first side of special paper (Special Paper 1, 2). Offset value for the paper voltage of the secondary transfer bias, Special paper, Environmental category: 1 When a transfer scattering occurs, increase/decrease the value until an appropriate image is obtained. Setting range: -128 to 127 (Unit: 20V) [Factory setting value/Value after RAM clear: 0]	1
2TR-H1	Adjust the offset for paper voltage of the secondary transfer bias on the first side of thick paper. Offset value for the paper voltage of the secondary transfer bias, First side of thick paper 1 (106 to 163g/m2), Environmental category: 1 When a transfer scattering occurs, increase/decrease the value until an appropriate image is obtained. Setting range: -128 to 127 (Unit: 20V) [Factory setting value/Value after RAM clear: 0]	1
2TR-H2	Adjust the offset for paper voltage of the secondary transfer bias on the second side of thick paper. Offset value for the paper voltage of the secondary transfer bias, First side of thick paper 1 (106 to 163g/m2), Environmental category: 1 When a transfer scattering occurs, increase/decrease the value until an appropriate image is obtained. Setting range: -128 to 127 (Unit: 20V) [Factory setting value/Value after RAM clear: 0]	1
2TR-UH1	Adjust the offset for paper voltage of the secondary transfer bias on the first side of super thick paper. Offset value for the paper voltage of the secondary transfer bias, First side of thick paper 2 (164 to 220g/m2), Environmental category: 1 When a transfer scattering occurs, increase/decrease the value until an appropriate image is obtained. Setting range: -128 to 127 (Unit: 20V) [Factory setting value/Value after RAM clear: 0]	1
2TR-UH2	Adjust the offset for paper voltage of the secondary transfer bias on the second side of super thick paper. Offset value for the paper voltage of the secondary transfer bias, Second side of thick paper 2 (164 to 220g/m2), Environmental category: 1 When a transfer scattering occurs, increase/decrease the value until an appropriate image is obtained. Setting range: -128 to 127 (Unit: 20V) [Factory setting value/Value after RAM clear: 0]	1
2TR-N12	Adjust the offset for paper voltage of the secondary transfer bias on the single side or first side of plain paper (600dpi plain paper, 600dpi thin paper, 600dpi plain paper 2). (Environmental category: 2) Offset value for the paper voltage of the secondary transfer bias, First side of plain paper, Environmental category: 2 When a transfer scattering occurs, increase/decrease the value until an appropriate image is obtained. Setting range: -128 to 127 (Unit: 20V) [Factory setting value/Value after RAM clear: 0]	1
2TR-N22	Adjust the offset for paper voltage of the secondary transfer bias on the second side of plain paper (600dpi plain paper, 600dpi thin paper, 600dpi plain paper 2). (Environmental category: 2) Offset value for the paper voltage of the secondary transfer bias, Second side of plain paper, Environmental category: 2 When a transfer scattering occurs, increase/decrease the value until an appropriate image is obtained. Setting range: -128 to 127 (Unit: 20V) [Factory setting value/Value after RAM clear: 0]	1
2TR-NH12	Adjust the offset for paper voltage of the secondary transfer bias on the single side or first side of plain paper (1200dpi plain paper, 1200dpi thin paper, 1200dpi plain paper 2, Bond paper). (Environmental category: 2) Offset value for the paper voltage of the secondary transfer bias, First side of plain paper (1200dpi), Environmental category: 2 When a transfer scattering occurs, increase/decrease the value until an appropriate image is obtained. Setting range: -128 to 127 (Unit: 20V) [Factory setting value/Value after RAM clear: 0]	1

COPIER>ADJUST>HV-TR		
Sub item	**Description**	**Level.**
2TR-NH22	Adjust the offset for paper voltage of the secondary transfer bias on the second side of plain paper (1200dpi plain paper, 1200dpi thin paper, 1200dpi plain paper 2, Bond paper). (Environmental category: 2) Offset value for the paper voltage of the secondary transfer bias, Second side of plain paper (1200dpi), Environmental category: 2 When a transfer scattering occurs, increase/decrease the value until an appropriate image is obtained. Setting range: -128 to 127 (Unit: 20V) [Factory setting value/Value after RAM clear: 0]	1
2TR-H12	Adjust the offset for paper voltage of the secondary transfer bias on the single side or first side of thick paper. (Environmental category: 2) Offset value for the paper voltage of the secondary transfer bias, First side of thick paper 1 (106 to 163g/m2), Environmental category: 2 When a transfer scattering occurs, increase/decrease the value until an appropriate image is obtained. Setting range: -128 to 127 (Unit: 20V) [Factory setting value/Value after RAM clear: 0]	1
2TR-H22	Adjust the offset for paper voltage of the secondary transfer bias on the second side of thick paper. (Environmental category: 2) Offset value for the paper voltage of the secondary transfer bias, Second side of thick paper 1 (106 to 163g/m2), Environmental category: 2 When a transfer scattering occurs, increase/decrease the value until an appropriate image is obtained. Setting range: -128 to 127 (Unit: 20V) [Factory setting value/Value after RAM clear: 0]	1
2TR-UH12	Adjust the offset for paper voltage of the secondary transfer bias on the single side or first side of super thick paper. (Environmental category: 2) Offset value for the paper voltage of the secondary transfer bias, First side of thick paper 2 (164 to 220g/m2), Environmental category: 2 When a transfer scattering occurs, increase/decrease the value until an appropriate image is obtained. Setting range: -128 to 127 (Unit: 20V) [Factory setting value/Value after RAM clear: 0]	1
2TR-UH22	Adjust the offset for paper voltage of the secondary transfer bias on the second side of super thick paper. (Environmental category: 2) Offset value for the paper voltage of the secondary transfer bias, Second side of thick paper 2 (106 to 163g/m2), Environmental category: 2 When a transfer scattering occurs, increase/decrease the value until an appropriate image is obtained. Setting range: -128 to 127 (Unit: 20V) [Factory setting value/Value after RAM clear: 0]	1
2TR-P12	Adjust the offset for paper voltage of the secondary transfer bias on the single side or first side of a postcard (postcard, envelope). (Environmental category: 2) Offset value for the paper voltage of the secondary transfer bias, First side of a postcard, Environmental category: 2 When a transfer scattering occurs, increase/decrease the value until an appropriate image is obtained. Setting range: -128 to 127 (Unit: 20V) [Factory setting value/Value after RAM clear: 0]	1
2TR-P22	Adjust the offset for paper voltage of the secondary transfer bias on the second side of a postcard (postcard, envelope). (Environmental category: 2) Offset value for the paper voltage of the secondary transfer bias, Second side of a postcard, Environmental category: 2 When a transfer scattering occurs, increase/decrease the value until an appropriate image is obtained. Setting range: -128 to 127 (Unit: 20V) [Factory setting value/Value after RAM clear: 0]	1
2TR-L12	Adjust the offset for paper voltage of the secondary transfer bias of label paper. (Environmental category: 2) Offset value for the paper voltage of the secondary transfer bias, Label paper, Environmental category: 2 When a transfer scattering occurs, increase/decrease the value until an appropriate image is obtained. Setting range: -128 to 127 (Unit: 20V) [Factory setting value/Value after RAM clear: 0]	1
2TR-SP12	Adjust the offset for paper voltage of the secondary transfer bias of special paper (Special Paper 1, 2). (Environmental category: 2) Offset value for the paper voltage of the secondary transfer bias, Special paper, Environmental category: 2 When a transfer scattering occurs, increase/decrease the value until an appropriate image is obtained. Setting range: -128 to 127 (Unit: 20V) [Factory setting value/Value after RAM clear: 0]	1
2TR-N13	Adjust the offset for paper voltage of the secondary transfer bias on the single side or first side of plain paper (600dpi plain paper, 600dpi thin paper, 600dpi plain paper 2). (Environmental category: 3) Offset value for the paper voltage of the secondary transfer bias, First side of plain paper, Environmental category: 3 When a transfer scattering occurs, increase/decrease the value until an appropriate image is obtained. Setting range: -128 to 127 (Unit: 20V) [Factory setting value/Value after RAM clear: 0]	1
2TR-N23	Adjust the offset for paper voltage of the secondary transfer bias on the second side of plain paper (600dpi plain paper, 600dpi thin paper, 600dpi plain paper 2). (Environmental category: 3) Offset value for the paper voltage of the secondary transfer bias, Second side of plain paper, Environmental category: 3 When a transfer scattering occurs, increase/decrease the value until an appropriate image is obtained. Setting range: -128 to 127 (Unit: 20V) [Factory setting value/Value after RAM clear: 0]	1
2TR-NH13	Adjust the offset for paper voltage of the secondary transfer bias on the single side or first side of plain paper (1200dpi plain paper, 1200dpi thin paper, 1200dpi plain paper 2, Bond paper). (Environmental category: 3) Offset value for the paper voltage of the secondary transfer bias, First side of plain paper (1200dpi), Environmental category: 3 When a transfer scattering occurs, increase/decrease the value until an appropriate image is obtained. Setting range: -128 to 127 (Unit: 20V) [Factory setting value/Value after RAM clear: 0]	1
2TR-NH23	Adjust the offset for paper voltage of the secondary transfer bias on the second side of plain paper (1200dpi plain paper, 1200dpi thin paper, 1200dpi plain paper 2, Bond paper). (Environmental category: 3) Offset value for the paper voltage of the secondary transfer bias, Second side of plain paper (1200dpi), Environmental category: 3 When a transfer scattering occurs, increase/decrease the value until an appropriate image is obtained. Setting range: -128 to 127 (Unit: 20V) [Factory setting value/Value after RAM clear: 0]	1

COPIER>ADJUST>HV-TR		
Sub item	**Description**	**Level.**
2TR-H13	Adjust the offset for paper voltage of the secondary transfer bias on the single side or first side of thick paper. (Environmental category: 3) Offset value for the paper voltage of the secondary transfer bias, First side of thick paper 1 (106 to 163g/m2), Environmental category: 3 When a transfer scattering occurs, increase/decrease the value until an appropriate image is obtained. Setting range: -128 to 127 (Unit: 20V) [Factory setting value/Value after RAM clear: 0]	1
2TR-H23	Adjust the offset for paper voltage of the secondary transfer bias on the second side of thick paper. (Environmental category: 3) Offset value for the paper voltage of the secondary transfer bias, Second side of thick paper 1 (106 to 163g/m2), Environmental category: 3 When a transfer scattering occurs, increase/decrease the value until an appropriate image is obtained. Setting range: -128 to 127 (Unit: 20V) [Factory setting value/Value after RAM clear: 0]	1
2TR-UH13	Adjust the offset for paper voltage of the secondary transfer bias on the single side or first side of super thick paper. (Environmental category: 3) Offset value for the paper voltage of the secondary transfer bias, First side of thick paper 2 (164 to 220g/m2), Environmental category: 3 When a transfer scattering occurs, increase/decrease the value until an appropriate image is obtained. Setting range: -128 to 127 (Unit: 20V) [Factory setting value/Value after RAM clear: 0]	1
2TR-UH23	Adjust the offset for paper voltage of the secondary transfer bias on the second side of super thick paper. (Environmental category: 3) Offset value for the paper voltage of the secondary transfer bias, Second side of thick paper 2 (164 to 220g/m2), Environmental category: 3 When a transfer scattering occurs, increase/decrease the value until an appropriate image is obtained. Setting range: -128 to 127 (Unit: 20V) [Factory setting value/Value after RAM clear: 0]	1
2TR-P13	Adjust the offset for paper voltage of the secondary transfer bias on the single side or first side of a postcard (postcard, envelope). (Environmental category: 3) Offset value for the paper voltage of the secondary transfer bias, First side of a postcard, Environmental category: 3 When a transfer scattering occurs, increase/decrease the value until an appropriate image is obtained. Setting range: -128 to 127 (Unit: 20V) [Factory setting value/Value after RAM clear: 0]	1
2TR-P23	Adjust the offset for paper voltage of the secondary transfer bias on the second side of a postcard (postcard, envelope). (Environmental category: 3) Offset value for the paper voltage of the secondary transfer bias, Second side of a postcard, Environmental category: 3 When a transfer scattering occurs, increase/decrease the value until an appropriate image is obtained. Setting range: -128 to 127 (Unit: 20V) [Factory setting value/Value after RAM clear: 0]	1
2TR-L13	Adjust the offset for paper voltage of the secondary transfer bias of label paper. (Environmental category: 3) Offset value for the paper voltage of the secondary transfer bias, Label paper, Environmental category: 3 When a transfer scattering occurs, increase/decrease the value until an appropriate image is obtained. Setting range: -128 to 127 (Unit: 20V) [Factory setting value/Value after RAM clear: 0]	1
2TR-SP13	Adjust the offset for paper voltage of the secondary transfer bias of special paper (Special Paper 1, 2). (Environmental category: 3) Offset value for the paper voltage of the secondary transfer bias, Special paper, Environmental category: 3 When a transfer scattering occurs, increase/decrease the value until an appropriate image is obtained. Setting range: -128 to 127 (Unit: 20V) [Factory setting value/Value after RAM clear: 0]	1
2TR-O1	Adjust the offset for paper voltage of the secondary transfer bias of OHP paper. (Environmental category: 1) Offset value for the paper voltage of the secondary transfer bias, OHP paper, Environmental category: 1 When a transfer scattering occurs, increase/decrease the value until an appropriate image is obtained. Setting range: -128 to 127 (Unit: 20V) [Factory setting value/Value after RAM clear: 0]	1
2TR-O12	Adjust the offset for paper voltage of the secondary transfer bias of OHP paper. (Environmental category: 2) Offset value for the paper voltage of the secondary transfer bias, OHP paper, Environmental category: 2 When a transfer scattering occurs, increase/decrease the value until an appropriate image is obtained. Setting range: -128 to 127 (Unit: 20V) [Factory setting value/Value after RAM clear: 0]	1
2TR-O13	Adjust the offset for paper voltage of the secondary transfer bias of OHP paper. (Environmental category: 3) Offset value for the paper voltage of the secondary transfer bias, OHP paper, Environmental category: 3 When a transfer scattering occurs, increase/decrease the value until an appropriate image is obtained. Setting range: -128 to 127 (Unit: 20V) [Factory setting value/Value after RAM clear: 0]	1
1TR-TGY	Adjust the offset for the primary transfer ATVC target current (Y) Adjustment range: -10 to 10 (Unit: 1muA) [Factory setting value/Value after RAM clear: 0] This is valid when COPIER>OPTION>BODY>PTATVCSW=1 is set (the primary transfer ATVC control is valid).	2
	Use this item when the following faulty images occur. - A patchy trace / A trace of the auxiliary brush caused by transfer remaining toner (When the color in the brush trace has high density) / A transfer ghost: The primary transfer current is low. --> Change the setting value to in the plus direction. - A trace of the auxiliary brush caused by double transfer fogging / double transfer remaining toner (When the color in the brush trace has higher density than the one in the prior station): The primary transfer current is high. --> Change the setting value to the minus direction.	2
1TR-TGM	Adjust the offset for the primary transfer ATVC target current (M) Adjustment range: -10 to 10 (Unit: 1muA) [Factory setting value/Value after RAM clear: 0] This is valid when COPIER>OPTION>BODY>PTATVCSW=1 is set (the primary transfer ATVC control is valid).	2

COPIER>ADJUST>HV-TR		
Sub item	**Description**	**Level.**
	Use this item when the following faulty images occur. - A patchy trace / A trace of the auxiliary brush caused by transfer remaining toner (When the color in the brush trace has high density) / A transfer ghost: The primary transfer current is low. --> Change the setting value to in the plus direction. - A trace of the auxiliary brush caused by double transfer fogging / double transfer remaining toner (When the color in the brush trace has higher density than the one in the prior station): The primary transfer current is high. --> Change the setting value to the minus direction.	2
1TR-TGM	Adjust the offset for the primary transfer ATVC target current (M) Adjustment range: -10 to 10 (Unit: 1muA) [Factory setting value/Value after RAM clear: 0] This is valid when COPIER>OPTION>BODY>PTATVCSW=1 is set (the primary transfer ATVC control is valid).	2
	Use this item when the following faulty images occur. - A patchy trace / A trace of the auxiliary brush caused by transfer remaining toner (When the color in the brush trace has high density) / A transfer ghost: The primary transfer current is low. --> Change the setting value to in the plus direction. - A trace of the auxiliary brush caused by double transfer fogging / double transfer remaining toner (When the color in the brush trace has higher density than the one in the prior station): The primary transfer current is high. --> Change the setting value to the minus direction.	2
1TR-TGK1	Adjust the offset for the primary transfer ATVC target current (Bk: Black single mode) Adjustment range: -10 to 10 (Unit: 1muA) [Factory setting value/Value after RAM clear: 0] This is valid when COPIER>OPTION>BODY>PTATVCSW=1 is set (the primary transfer ATVC control is valid).	2
	Use this item when the following faulty images occur. - A patchy trace / A trace of the auxiliary brush caused by transfer remaining toner (When the color in the brush trace has high density) / A transfer ghost: The primary transfer current is low. --> Change the setting value to in the plus direction. - A trace of the auxiliary brush caused by double transfer fogging / double transfer remaining toner (When the color in the brush trace has higher density than the one in the prior station): The primary transfer current is high. --> Change the setting value to the minus direction.	2

12. FEED-ADJ

T-17-36

COPIER>ADJUST>FEED-ADJ		
Sub item	**Description**	**level.**
REGIST	Used to adjust the registration roller clutch ON timing. Adjustment method - Increasing the value by 1 moves the image by 0.1 mm in the direction of the leading edge of the paper. - If you have cleared the DC controller PCB's RAM or replaced the DC controller PCB, enter the value on the service label. Adjustment range - 50 to 50 (0.1 mm units) [Factory default/After RAM clear: -20]	1
REG-THCK	Registration clutch ON timing (thick paper) Adjusts the margin on the leading edge (0.1mm scale) by adjusting the timing to turn ON the registration clutch for thick paper. Setting Range: 50 ~ -50 [Factory default value / post-RAM clear value: 0]	1
REG-OHT	Registration clutch ON timing (OHT) Adjustment of the OHT registration clutch ON timing allows adjustment of the leading edge margin (unit: 0.1mm). Setting range: -50 to 50 [Factory settings and after RAM clear: 0]	1
REG-DUP1	Second page registration clutch ON timing (plain paper) Adjustment of the plain paper second page registration clutch ON timing allows adjustment of the second page leading edge margin (unit: 0.1mm). Setting range: -50 to 50 [Factory settings and after RAM clear: 0]	1
REG-DUP2	Second page registration clutch ON timing (thick paper) Adjustment of the thick paper second page registration clutch ON timing allows adjustment of the second page leading edge margin (unit: 0.1mm). Setting range: -50 to 50 [Factory settings and after RAM clear: 0]	1
ADJ-C1	Image write position adjustment in main scanning direction when sheets are fed from cassette 1 Adjustment method - When the value is incremented by 1, the image moves by 0.1 mm to the right. - Input the value given on the service label when the RAM on the DC controller circuit board has been cleared or when the DC controller circuit board has been replaced. Adjustment range: -100 to 100 (in 0.1 mm increments) [Factory setting/value after clearing RAM: 0]	1
ADJ-C2	Image write position adjustment in main scanning direction when sheets are fed from cassette 2 Adjustment method - When the value is incremented by 1, the image moves by 0.1 mm to the right. - Input the value given on the service label when the RAM on the DC controller circuit board has been cleared or when the DC controller circuit board has been replaced. Adjustment range: -100 to 100 (in 0.1 mm increments) [Factory setting/value after clearing RAM: 0]	1
ADJ-C3	Image write position adjustment in main scanning direction when sheets are fed from cassette 3 Adjustment method - When the value is incremented by 1, the image moves by 0.1 mm to the right. - Input the value given on the service label when the RAM on the DC controller circuit board has been cleared or when the DC controller circuit board has been replaced. Adjustment range: -100 to 100 (in 0.1 mm increments) [Factory setting/value after clearing RAM: 0]	1

COPIER>ADJUST>FEED-ADJ		
Sub item	**Description**	**level.**
ADJ-C4	Image write position adjustment in main scanning direction when sheets are fed from cassette 4 Adjustment method - When the value is incremented by 1, the image moves by 0.1 mm to the right. - Input the value given on the service label when the RAM on the DC controller circuit board has been cleared or when the DC controller circuit board has been replaced. Adjustment range: -100 to 100 (in 0.1 mm increments) [Factory setting/value after clearing RAM: 0]	1
ADJ-MF	Image write position adjustment in main scanning direction when the multi-feeder sheets are fed Adjustment method - When the value is incremented by 1, the image moves by 0.1 mm to the right. - Input the value given on the service label when the RAM on the DC controller circuit board has been cleared or when the DC controller circuit board has been replaced. Adjustment range: -100 to 100 (in 0.1 mm increments) [Factory setting/value after clearing RAM: 0]	1
ADJ-DK	Image write position adjustment in main scanning direction when the paper deck sheets are fed Adjustment method - When the value is incremented by 1, the image moves by 0.1 mm to the right. - Input the value given on the service label when the RAM on the DC controller circuit board has been cleared or when the DC controller circuit board has been replaced. Adjustment range: -100 to 100 (in 0.1 mm increments) [Factory setting/value after clearing RAM: 0]	1
ADJ-C1RE	Image write position adjustment in main scanning direction of second side of the sheets when first side of sheets for two-sided copying in cassette 1 is fed (side registration adjustment) Adjustment method - When the value is incremented by 1, the image moves by 0.1 mm to the right. - Input the value given on the service label when the RAM on the DC controller circuit board has been cleared or when the DC controller circuit board has been replaced. Adjustment range: -100 to 100 (in 0.1 mm increments) [Factory setting/value after clearing RAM: 0]	1
ADJ-C2RE	Image write position adjustment in main scanning direction of second side of the sheets when first side of sheets for two-sided copying in cassette 2 is fed (side registration adjustment) Adjustment method - When the value is incremented by 1, the image moves by 0.1 mm to the right. - Input the value given on the service label when the RAM on the DC controller circuit board has been cleared or when the DC controller circuit board has been replaced. Adjustment range: -100 to 100 (in 0.1 mm increments) [Factory setting/value after clearing RAM: 0]	1
ADJ-C3RE	Image write position adjustment in main scanning direction of second side of the sheets when first side of sheets for two-sided copying in cassette 3 is fed (side registration adjustment) Adjustment method - When the value is incremented by 1, the image moves by 0.1 mm to the right. - Input the value given on the service label when the RAM on the DC controller circuit board has been cleared or when the DC controller circuit board has been replaced. Adjustment range: -100 to 100 (in 0.1 mm increments) [Factory setting/value after clearing RAM: 0]	1
ADJ-C4RE	Image write position adjustment in main scanning direction of second side of the sheets when first side of sheets for two-sided copying in cassette 4 is fed (side registration adjustment) Adjustment method - When the value is incremented by 1, the image moves by 0.1 mm to the right. - Input the value given on the service label when the RAM on the DC controller circuit board has been cleared or when the DC controller circuit board has been replaced. Adjustment range: -100 to 100 (in 0.1 mm increments) [Factory setting/value after clearing RAM: 0]	1
ADJ-DKRE	Image write position adjustment in main scanning direction of second side of the sheets when first side of sheets for two-sided copying in the paper deck is fed (side registration adjustment) Adjustment method - When the value is incremented by 1, the image moves by 0.1 mm to the right. - Input the value given on the service label when the RAM on the DC controller circuit board has been cleared or when the DC controller circuit board has been replaced. Adjustment range: -100 to 100 (in 0.1 mm increments) [Factory setting/value after clearing RAM: 0]	1
ADJ-MFRE	Image write position adjustment in main scanning direction of second side of the sheets when first side of sheets for two-sided copying in the multi-feeder is fed (side registration adjustment) Adjustment method - When the value is incremented by 1, the image moves by 0.1 mm to the right. - Input the value given on the service label when the RAM on the DC controller circuit board has been cleared or when the DC controller circuit board has been replaced. Adjustment range: -100 to 100 (in 0.1 mm increments) [Factory setting/value after clearing RAM: 0]	1

13. CST-ADJ

T-17-37

COPIER>ADJUST>CST-ADJ		
Sub item	**Description**	**level.**
MF-A4R	Used to enter the basic value for the manual feed tray's paper width (A4R). Adjustment method - If you have cleared the DC controller PCB's RAM or replaced the DC controller PCB, enter the value on the service label. - When replacing the paper width detection VR or registering a new value, perform the following service mode: FUNCTION>CST. Adjustment range 0 to 255 [Factory default/After RAM clear: 141]	1

COPIER>ADJUST>CST-ADJ		
Sub item	**Description**	**level.**
MF-A6R	Used to enter the basic value for the manual feed tray's paper width (A6R). Adjustment method - If you have cleared the DC controller PCB's RAM or replaced the DC controller PCB, enter the value on the service label. - When replacing the paper width detection VR or registering a new value, perform the following service mode: FUNCTION>CST. Adjustment range 0 to 255 [Factory default/After RAM clear: 235]	1
MF-A4	Used to enter the basic value for the manual feed tray's paper width (A4). Adjustment method - If you have cleared the DC controller PCB'sRAM or replaced the DC controller PCB, enter the value on the service label. - When replacing the paper width detection VR or registering a new value, perform the following service mode: FUNCTION>CST. Adjustment range 0 to 255 [Factory default/After RAM clear: 26]	1

14. MISC

T-17-38

COPIER>ADJUST>MISC		
Sub item	**Description**	**level.**
SEG-ADJ	Used to adjust the text and photo separation level for text/photo/map mode. Adjustment method - To make documents more easily recognized as photo documents, increase the setting value. - To make documents more easily recognized as text documents, decrease the setting value. Adjustment range -4to 4 (Value at time of factory shipment/value after RAM clear: 0)	1
K-ADJ	Used to adjust the black recognition level during black text processing. Adjustment method - To make text more easily recognized as black, increase the setting value. Adjustment range -3to 3 (Value at time of factory shipment/value after RAM clear: 0)	1
ACS-ADJ	Used to adjust the color recognition level during ACS mode. Adjustment method To make documents more easily recognized as black and white documents, increase the setting value. - To make documents more easily recognized as color documents, decrease the setting value. Adjustment range -3to 3 (Value at time of factory shipment/value after RAM clear: 0)	1
ACS-EN	- ACS-EN (Used to adjust ACS recognition zone.) Increasing the setting value expands the recognition zone.	2
ACS-CNT	- ACS-CNT (Used to adjust color recognition pixel count zone during ACS recognition.) Increasing the setting value expands the recognition zone.	2
ACS-EN2	ACS judgement area adjustment (with DF stream reading) Adjustment method Increasing the setting value increases the judgement range. Setting range: -2 to 2 [Factory settings and after RAM clear: 1]	2
ACS-CNT2	Colour judgement pixel count area adjustment in ACS judgement (with DF stream reading) Adjustment method Increasing the setting value increases the judgement range. Setting range: -2 to 2 [Factory settings and after RAM clear: 0]	2
REOS-PG	REOS processing coefficient selection in 1200 dpi Setting range: 0 to 4 [Factory settings and after RAM clear: 0]	2

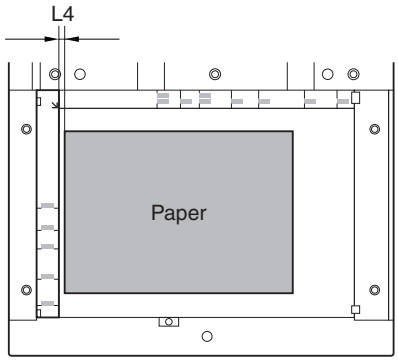
17.4.2 FEEDER

17.4.2.1 FEEDER Table

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

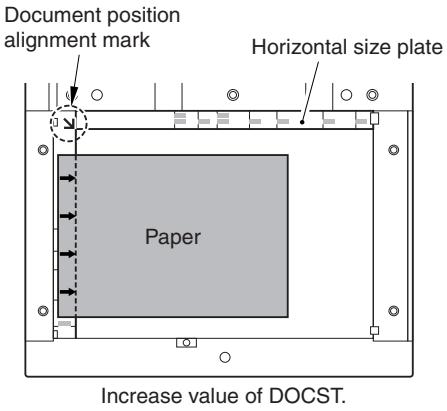
T-17-39

FEEDER>ADJUST		
Sub item	**Description**	**level.**
DOCST	Adjusting the Original Image Leading Edge Method of adjustment A higher setting will delay the image leading edge timing. Range of adjustment -50 to 50 (unit: 0.1mm) [Factory default/After RAM clear:0]	1
LA-SPEED	Adjusting the document feeding speed at the time of stream reading from the feeder The speed becomes faster (image is reduced) by increasing setting value. Range of adjustment: -30 to 30 (unit: 0.1%) [Factory default/After RAM clear:0]	1



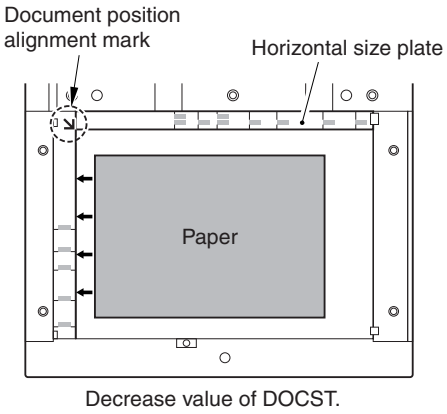
F-17-18

- If the document is farther left than the arrow in the figure below: Increase the value (the leading edge blank is made smaller).



F-17-19

- If the document is farther right than the arrow in the figure below: Decrease the value (the leading edge blank is made larger).



F-17-20

17.4.3 SORTER

17.4.3.1 SORTER Table

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

T-17-40

SORTER>ADJUST		
Sub item	**Description**	**level.**
PNCH-HLE	Adjustment of distance from sheet edges to punch hole positions This adjusts the hole positions to meet the conditions of the individual user. Setting range: -4 to 2 (in mm increments) [Factory setting/value after clearing RAM: 0]	1

17.5 FUNCTION (Operation/Inspection Mode)

17.5.1 COPIER

17.5.1.1 COPIER Table

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1. INSTALL

T-17-41

COPIER>FUNCTION>INSTALL		
Sub item	**Description**	**level.**
STIR-4	This mixes the developing solutions inside the developers of all the colors. The Y, M, C and Bk developers are raced for two minutes to ensure that the developing solutions are mixed.	1
STRD-POS	Automatic detection of CCD scanning position in DF stream reading	1
CARD	Used to make card reader installation settings. Setting values 1 to 2001 [Factory default/After RAM clear: 1] Operation method Enter the number of cards to use. (You can use up to 1,000 cards from the entered number.) Initialize the card management information. - Initialize the card name (department ID) (from the entered number). - Initialize the card's password.	1
KEY	Used to set management key function recognition. Setting values 0: Don't recognize management key function (value at time of factory shipment). 1: Recognize management key function. Operation method 1) Select COPIER > INSTALL > KEY, then enter '1' 2) Turn the main power switch OFF/ON (the management key function is now recognized).	1
AINR-OFF	Walm-up-rotation disable setting at initial installation This disables the initialization of the P-CRG which is performed when a new P-CRG has been inserted. It prevents the fuse from blowing when the P-CRG initialization has been completed. It is used when replacing the P-CRG and checking the images in situations when, for instance, the causes of trouble are identified. When it is set to "1," the initialization is canceled and the fuse is not blown even when a new P-CRG has been inserted. Settings 0: Initialization is performed when a new unit is inserted. The fuse is blown. 1: Initialization is not performed when a new unit is inserted. [Factory setting/value after clearing RAM: 0]	1
E-RDS	E-RDS settings Setting values 0: Not in use 1: In use [Factory settings and after RAM clear: 0]	1
RGW-PORT	Specify port number of sales company server used in E-RDS Setting range: 1 to 65535 [Factory settings and after RAM clear:]	1
COM-TEST	Check connection with sales company server used in E-RDS Checks sales company server connection. Judges whether connection can be made and displays the results as OK or FAIL.	1
COM-LOG	Display detailed results of communication test with sales company server used in E-RDS Displays information on any errors that have occurred in connection with sales company server.	1
RGW-ADR	Specify URL of sales company server used in E-RDS Sets sales company server URL.	1
CNT-DATE	Set timing of counter transmission to server Sets time and date for start of transmission of counter information to server, via E-RDS third party extension function. Setting range: YYYYMMDDHHMM (YYYY: year, MM: month, DD: date, HH: hours, MM: minutes) [Factory settings and after RAM clear::000000000000] Note This item is only displayed when the E-RDS third party extension function is enabled.Set timing of counter transmission to server Sets time and date for start of transmission of counter information to server, via E-RDS third party extension function. Setting range: YYYYMMDDHHMM (YYYY: year, MM: month, DD: date, HH: hours, MM: minutes) [Factory settings and after RAM clear:: 000000000000] Note This item is only displayed when the E-RDS third party extension function is enabled.	1
CNT-INTV	Set interval of counter transmission to server Sets transmission intervals for transmission of counter information to server, via E-RDS third party extension function.	1
INIT-Y	Y color toner density signal (SGNL, REF) initial value reading This is used when more than 100 sheets have passed through in error with a new CRG used in investigating image defects, etc.	2
INIT-M	M color toner density signal (SGNL, REF) initial value reading This is used when more than 100 sheets have passed through in error with a new CRG used in investigating image defects, etc.	2
INIT-C	C color toner density signal (SGNL, REF) initial value reading This is used when more than 100 sheets have passed through in error with a new CRG used in investigating image defects, etc.	2
INIT-K	K color toner density signal (SGNL, REF) initial value reading This is used when more than 100 sheets have passed through in error with a new CRG used in investigating image defects, etc.	2

2. CCD

T-17-42

COPIER>FUNCTION>CCD		
Sub item	**Description**	**level.**
DF-WLVL1/2	Use it to adjust the ADF white level. Method of Operation 1) Place the type of original most often used by the user on the copyboard glass, and perform the following service mode item: COPIER>FUNCTION>CCD>DF-WLVL1. (In response, the machine will read the white level for book mode, checking the transmission quality of the glass for book mode). 2) Place the type of original most often used by the user in the DF, and perform the following service mode item: COPIER>FUNCTION>CCD>DF-WLVL2. (In response, the machine will read the white level for DF mode (stream reading mode), checking the transmission quality of the reading glass by reading both sides of the original.) face reading: computes DFTAR-R/G/B back reading: computes DFTAR2-R/G/B Be sure to execute this item in combination with item 2.	1
LUT-ADJ2	CCD gain detailed compensation Operation procedure 1) Place the 10-gradation chart (D-10 test sheet: FY9-9129) on the document glass surface, as shown in the figure below. 2) Select the item, and press the OK key. Automatic adjustment now commences. 3) Upon completion of the adjustments, operation automatically stops. 4) Set the COPIER>OPTION>BODY>CCD-LUT value to "1." 5) The service mode (COPIER>ADJUST>CCD) item is updated so print out the service sheet and keep it.	2

3. CST

T-17-43

COPIER>FUNCTION>CST		
Sub item	**Description**	**level.**
MF-A4R, MF-A6R, MF-A4	Registers basic value of manual feeder's (DADF's) paper width. A4R width: 210mm, A6R width: 105mm, A4 width: 297mm - Once registered, the basic value can be fine-tuned by performing COPIER> ADJUST > CST-ADJ > MF-A4R, MF-A6R or MF-A4. Operation method 1) Place A4R size paper in the manual feeder, and set the size guide to the A4R width. 2) In this service mode, select 'MF-A4R' to display the item in reverse. Press the OK key to perform automatic adjustment and register the value. 3) Repeat Steps 1) and 2) to register the basic values for the A6R and A4 sizes.	1

4. CLEANING

T-17-44

COPIER>FUNCTION>CLEANING		
Sub item	**Descripti**	**level.**
2TR-CLN	Secondary transfer roller cleaning This is for the bias cleaning of the secondary transfer roller. It is used when the sheets are stained or smudged by dirt in the secondary transfer roller toner.	1
TNR-COAT	Secondary transfer outer roller toner application mode When the right door is closed while the secondary transfer roller is not dirty (when a new roller is used), the substance on the secondary transfer roller surfaces rubs against the ITB and becomes adhered to it, leaving areas of the images white where the substance was rubbed onto the ITB. In order to remove this adhered substance, toner is transferred once to the secondary transfer outer roller, and then the secondary transfer outer roller is cleaned. This is used when the secondary transfer roller has been replaced with a new one.	1

5. FIXING

T-17-45

COPIER>FUNCTION>FIXING		
Sub item	**Description**	**level.**
NIP-CHK	Output for automatically measuring fixing nip width The fixing nip width automatic measurement is started, and the measurement sheet is printed. The two-sided printing operation is performed with solid magenta printed on the first side and nothing printed on the second side, and nipping is performed when the second side is fixed. This is used in order to check the nip width when the fixing unit, fixing film unit or pressure roller is replaced. Operating procedure 1) Place A4 (LTR) size sheets in the stack bypass tray. 2) Press the OK key. (The paper in the stack bypass tray is fed.) 3) The sheets which have been fed stop temporarily at the fixing nip unit, and are delivered 15 seconds later. 4) Check that the nip width of the delivered sheets corresponds to the rating. Nip width rating Center area [b in figure below]: 8 mm or more Left and right edges [a, c in figure below]: 1 mm or less	1

6. PANEL

T-17-46

COPIER>FUNCTION>PANEL		
Sub item	**Description**	**level.**
LCD-CHK	Used to check missing dots in LCD. Operation method 1) Select this item, then press the OK key to start the operation. The touch panel's front surface should light repeatedly in the sequence: white, black, red, green and blue. (Check that it does.) 2) Press the stop key (the clear key on printer models) to end the operation.	1

COPIER>FUNCTION>PANEL		
Sub item	**Description**	**level.**
LED-CHK	Used to check that operation panel's LEDs light. Operation method 1) Select this item, then press the OK key to start the operation. The LEDs light sequentially. 2) Press LED-OFF to end the operation.	1
LED-OFF	Used in checking that operation panel's LEDs light. Operation method 1) Selecting this item stops the LED-CHK operation.	1
KEY-CHK	Used to check key input. Operation method 1) Select "KEY-CHK" to display the number/name of the entered key. 2) Press the key to check. If the key is normal, the text for it appears in the touch panel (see separate table) . 3) Select "KEY-CHK" again to exit the key input check operation.	1
TOUCHCHK	Used to adjust coordinate positions of analog touch panel. Operation method - Used to align the touch panel touch position with the LCD coordinate position. - Perform this service mode item if you have replaced the LCD unit. 1) Select "TOUCHCHK" to display the item in reverse, then press the OK key. 2) "+" appears on the touch panel at 9 positions sequentially. After you press each position, adjustment is complete.	1

T-17-47

Input key numbers, names

Ke	Screen display
0 to 9, #, *	0 to 9, #, *
Reset	RESET
Stop	STOP
User mode	USER
Start	START
Power save	STAND BY
Clear	CLEAR
Secret code	ID
Help	?
Counter check	BILL

7. PART-CHK

T-17-48

COPIER>FUNCTION>PART-CHK		
Sub item	**Description**	**level.**
CL	Used to specify clutch for operation check. (Range: 1 to 10, 5 and above are reserved.) Operation method 1) Select this item. 2) Enter the desired clutch code on the numeric keypad. 1: Two-sided registration clutch CL1 2: Two-sided paper feed clutch CL2 3: Conveyor clutch CL1 (paper deck) 4: Paper feed clutch CL2 (paper deck) 3) Press the OK key. 4) Press CL-ON, and check the operation.	1
CL-ON	Used to start clutch operation check. Operation method 1) Select this item, and press the OK key. The clutch turns ON/OFF in the pattern below. 0.5 second ON -> 10 seconds OFF -> 0.5 second ON -> 10 seconds OFF -> 0.5 second ON -> OFF	1
FAN	Specify fan checking the operation. Setting range: 1 to 10 (7 or above are reserves) Operation method 1)Select the item. 2)Enter the fan code with the numeric keypad. 1: Power supply exhaust fan 1 (FM1), Power supply exhaust fan 2 (FM10) 2: Fixing exhaust fan (FM2) 3: Machine exhaust fan (FM3) 4: Cleaner fan (FM4) 5: Delivery cooling fan (FM5) 6: Manual feed cooling fan (FM6) 7: Delivery vertical path cooling fan (FM8) 8: ITB cooling power supply fan (FM11) 9: Vertical path delivery exhaust fan (FM13) 10: Face-down tray cooling fan (FM12) 3)Press [OK]. 4)Check the operation by pressing [FAN-ON].	1

COPIER>FUNCTION>PART-CHK		
Sub item	**Description**	**level.**
FAN-ON	Start the fan operation. Operations of the power supply fan, fixing fan, and cleaner fan 1)Select the item, and press [OK] so the next operation is executed. ON for 10 sec with normal speed > ON for 10 sec with half speed > Standby state Operations of the machine exhaust fan, delivery cooling fan, manual feed cooling fan, delivery vertical path cooling fan, ITB cooling power supply fan, vertical path delivery exhaust fan, and face-down tray cooling fan 1) Select the item, and press [OK] so the next operation is executed. ON for 10 sec with normal speed > Standby state Operation of controller fan 1)Select the item, and press [OK] so the next operation is executed. Check the operation.	1
MTR	Specify motor checking the operation. Setting range: 1 to 25 (22 or above are reserves) Operation method 1)Select the item. 2)Enter the motor code with the numeric keypad. 1: Drum ITB motor (M1) 2: Toner container motor (Y) (M20) 3: Toner container motor (M) (M21) 4: Toner container motor (C) (M22) 5: Toner container motor (Bk) (M23) 6: Cassette 1 pickup motor (M6) 7: Cassette 2 pickup motor (M7) 8: Cassette 3 pickup motor (M51) 9: Cassette 4 pickup motor (M52) 10: Paper deck main motor (M1D) (Paper deck) 11: Pre-registration motor (M8) 12: Registration motor (M9) 13: Delivery vertical path motor (M10) 14: Face-down delivery motor (M11) 15: Reserve 16: Horizontal registration motor (M25) 17: Duplexing feed motor (M26) 18: Developing motor (Y) (M12) 19: Developing motor (M) (M13) 20: Developing motor (C) (M14) 21: Developing motor (Bk) (M15) 3)Press [OK]. 4)Check the operation by pressing [MTR-ON].	1
MTR-ON	Start the motor operation. Operation method Toner container motor (Y/M/C/K): 1)Remove the toner container, and close the front cover. 2)Select the item, and press [OK]. ON for 10 sec > OFF Horizontal registration motor: 1)Select the item, and press [OK]. Start the HP search operation > After the completion of operation, automatically terminated Motors other than toner container motor (Y/M/C/K) and horizontal registration motor: 1)Select the item, and press [OK]. ON for 10 sec > OFF	1
SL	Used to specify solenoid for operation check. (Range: 1 to 15; 10 and above are reserved.) Operation method 1) Select this item. 2) Enter the desired solenoid code on the numeric keypad. 1: Manual paper feed solenoid SL1 2: Paper delivery path switching solenoid 1 SL2 3: Cassette 1 paper feed solenoid SL3 4: Cassette 2 paper feed solenoid SL4 5: Cassette 3 paper feed solenoid SL51 6: Cassette 4 paper feed solenoid SL52 7: Paper delivery path switching solenoid 2 SL5 8: Paper deck paper feed solenoid SL1D 9: Paper container OPEN solenoid SL2D 3) Press the OK key. 4) Press SL-ON, and check the operation.	1
SL-ON	Starts solenoid operation. Operation method 1) Select this item, and press the OK key. The solenoid turns ON/OFF in the pattern below. 0.5 second ON -> 10 seconds OFF -> 0.5 second ON -> 10 seconds OFF -> 0.5 second ON -> OFF	1

8. CLEAR

T-17-49

COPIER>FUNCTION>CLEAR		
Sub item	**Description**	**level.**
ERR	Clears error codes. (Cleared error codes: E000, E001, E002, E003) Operation method 1) Select this item, and press the OK key. 2) Turn the main power OFF/ON.	1

COPIER>FUNCTION>CLEAR		
Sub item	**Description**	**level.**
DC-CON	Clears DC controller PCB's RAM. **MEMO:** The RAM is cleared after the main power switch is turned OFF/ON. Operation method 1) Select COPIER > FUNCTION > MISC-P > P-PRINT to print out the service mode setting values. 2) Select this item, then press the OK key. 3) Turn the main power OFF/ON. 4) Enter the data printed by the P-PRINT operation as needed.	1
R-CON	Use it to reset the RAM on the reader controller PCB. Method of Operation The RAM will not be cleared until the main power switch has been turned off and then on again. 2) Select the item, and press the OK key. 3) Turn off and then on the main power. 4) As necessary, enter the settings printed out using 'PRINT'.	1
JAM-HIST	Clears reader controller PCB's RAM. **MEMO:** The RAM is cleared after the main power switch is turned OFF/ON. Operation method 1) Select COPIER > FUNCTION > MISC-P > P-PRINT to print out the service mode setting values. 2) Select this item, then press the OK key. 3) Turn the main power OFF/ON. 4) Enter the data printed by the P-PRINT operation as needed.	1
ERR-HIST	Clears error code history. **MEMO:** The error code history is cleared after the main power switch is turned OFF/ON. Operation method 1) Select this item, then press the OK key. 2) Turn the main power OFF/ON.	1
PWD-CLR	Clears "System administrator" password set in user mode. **MEMO:** The password value is cleared after the main power switch is turned OFF/ON. Operation method 1) Select this item, then press the OK key. 2) Turn the main power OFF/ON.	1
ADRS-BK	Clears address book data. **MEMO:** The address book data is cleared after the main power switch is turned OFF/ON. Operation method 1) Select this item, then press the OK key. 2) Turn the main power OFF/ON.	1
CNT-MCON	Clears service counters maintained by main controller PCB (main). (See the COUNTER mode items for the counters cleared.) **MEMO:** The counter values are cleared after the main power switch is turned OFF/ON. Operation method 1) Select this item, then press the OK key. 2) Turn the main power OFF/ON.	1
CNT-DCON	Clears following service counters maintained by DC controller PCB: - COPIER>COUNTER>DRBL-2>SORT - COPIER>COUNTER>DRBL-2>FIN-STPR - COPIER>COUNTER>DRBL-2>FIN-PDDL - COPIER>COUNTER>DRBL-2>SADDLE - COPIER>COUNTER>DRBL-2>SDL-STPL **Attention:** The counter values are cleared after the main power switch is turned OFF/ON. Operation method 1) Select this item, then press the OK key. 2) Turn the main power OFF/ON.	1
OPTION	Restores OPTION service mode setting values to default values (RAM clear values). **Attention:** The setting values are cleared after the main power switch is turned OFF/ON. Note The cleared data is the data in the main controller, DC controller and reader controller. Operation method 1) Select COPIER > FUNCTION > MISC-P > P-PRINT to print out the service mode setting values. 2) Select this item, then press the OK key. 3) Turn the main power OFF/ON.	1
MMI	Clears following user mode setting values: - Backup data for copy operation panel (user-set values) - Common settings backup data (user-set values) - Backup data (except fax data) (user-set values) **Attention:** The setting values are cleared after the main power switch is turned OFF/ON. Operation method 1) Select this item, then press the OK key. 2) Turn the main power OFF/ON.	1
MN-CON	Clears RAM on main controller PCB's SRAM board. **Attention:** - The RAM is cleared after the OK key is pressed. - Performing this item initializes all the data on the SRAM board. In other words, file management information for the hard disk is initialized, and image data on the hard disk can no longer be read. Before performing this item, explain to the user that all images in the BOX will be lost, and receive permission to perform. Operation method 1) Select COPIER > FUNCTION > MISC-P > P-PRINT to print out the service mode setting values. 2) Select this item, then press the OK key.	1

COPIER>FUNCTION>CLEAR		
Sub item	**Description**	**level.**
CARD	Clears card ID (department) data. **Attention:** The card ID data is cleared after the main power switch is turned OFF/ON. Operation method 1) Select this item, then press the OK key. 2) Turn the main power OFF/ON.	1
LANG-ERR	Clear language related error. This item enables recovery when a language related error code is generated after switching from the default language. (Returns to default language after recovery.)	1
ERDS-DAT	Embedded-RDS SRAM data clear SCM data in the embedded-RDS SRAM are restored to the factory settings.	1
Y-TN-CLR	Y color toner counter clear This clears the Y color toner counter. Clear the counter when the toner cartridge has been replaced before the toner runs out after the low remaining Y color toner warning has been given. To specify the counter to be cleared, execute COUNTER>MISC>T-SPLY-Y.	1
M-TN-CLR	M color toner counter clear This clears the M color toner counter. Clear the counter when the toner cartridge has been replaced before the toner runs out after the low remaining M color toner warning has been given. To specify the counter to be cleared, execute COUNTER>MISC>T-SPLY-M.	1
C-TN-CLR	C color toner counter clear This clears the C color toner counter. Clear the counter when the toner cartridge has been replaced before the toner runs out after the low remaining C color toner warning has been given. To specify the counter to be cleared, execute COUNTER>MISC>T-SPLY-C.	1
K-TN-CLR	K color toner counter clear This clears the K color toner counter. Clear the counter when the toner cartridge has been replaced before the toner runs out after the low remaining K color toner warning has been given. To specify the counter to be cleared, execute COUNTER>MISC>T-SPLY-K.	1
SND-STUP	- use it to initialize the transmission read settings After changing service mode settings (pressing the OK key), turn off and then on the power to initialize the backup data of the transmission read settings. Otherwise, after you have changed the display language, the language used before the change would remain. Be sure to perform this mode item if you have switched the language.	2
CA-KEY	CA authentication and key deleted together. When the serviceman needs to replace or dispose of the device, the CA authentication and key can be deleted together.	2
KEY-CLR	HDD encoding board code key clear The HDD encoding board (security kit) code key is cleared to allow replacement. When this item is selected and OK pressed, the code key is cleared. Then, when the main power supply is turned OFF/ON, the encoding board installation processing activates. If installation processing is carried out, a new code key is generated. Caution! If this operation is carried out, all data on the HDD will be rendered useless. The main power supply is switched OFF/ON after this operation in order to format the HDD.	2

9. MISC-R

T-17-50

COPIER>FUNCTION>MISC-R		
Sub item	**Description**	**level.**
SCANLAMP	Use it to check the activation of the scanning lamp. Method of Operation 1) Select the item. 2) Press the OK key so that the scanning lamp will go on and remain on for 3 sec.	1

10. MISC-P

T-17-51

COPIER>FUNCTION>MISC-P		
Sub item	**Description**	**level.**
P-PRINT	Prints service mode setting values. Operation method 1) Select this item. 2) Press the OK key to print the setting values. **Reference:** Printing takes about 15 seconds to start.	1
KEY-HIST	- KEY-HIST (Prints the operation panel's key input history.) 1) Select this item. 2) Press the OK key to start printing.	1
HIST-PRT	- HIST-PRT (Prints the jam history and error history.) 1) Select this item. 2) Press the OK key to start printing.	1
USER-PRT	Prints user mode list. Operation method 1) Select this item. 2) Press the OK key to print the list. **Reference:** Printing takes about 3 seconds to start.	1

COPIER>FUNCTION>MISC-P		
Sub item	**Description**	**level.**
LBL-PRNT	Prints service label. Operation method 1) Place A4/LTR paper in the manual feed tray. 2) Select this item. 3) Press the OK key to print the label. **Reference:** Printing takes about 15 seconds to start.	1
D-PRINT	Printing out service mode (DISPLAY) Procedure 1) Select this mode. 2) Press OK to print out. **Reference:** Only DISPLAY items are printed out. (Items of P-PRINT/LBL-PRINT/HIST-PRINT and ALARM are excluded.)	1
ENV-PRT	Outputting logs of inside machine temperature and humidity/fixing roller surface temperature Procedure 1) Select this mode. 2) Press OK to output logs of inside machine temperature and humidity/fixing roller surface temperature. **Reference:** This mode is to output logs of [inside temperature(deg C)/humidity(%)/fixing roller surface (center) temperature (deg C)] variations using signals of the attached temperature/humidity (environmental) sensor and fixing thermistor (main). (Max. 100 records)	1
PJH-P-1	Prints print job history with detailed information (for 100 jobs). Prints print job history with detailed information for last 100 jobs stored in copier main unit.	1
PJH-P-2	Prints print job history with detailed information (for all jobs). Prints print job history with detailed information for all jobs stored in copier main unit.	1
TRS-DATA	- TRS-DATA (Moves the data received in memory to the BOX.) 1) Select this item. 2) Press the OK key to start printing.	1

11. SYSTEM

T-17-52

COPIER>FUNCTION>SYSTEM		
Sub item	**Description**	**level.**
DOWNLOAD	Switches to download mode. Operation method 1) Select this item. 2) Press OK to enter download mode and have the copier wait for commands (wait for connection). ("STNDBY" is now displayed, next to the DOWNLOAD sub-items.) 3) Use the service support tool to start downloading. ("CONNECTED"is displayed during communication with the PC.) 4) When communication ends, "HOLD"is displayed. (The power can be turned off when "HOLD"is displayed.)	1
CHK-TYPE	Used to specify partition number when performing HD-CHECK or HD-CLEAR. Operation method 1) Select this item. 2) Use the numeric keypad to select the desired partition number. 0: Check and restore all bad sectors on hard disk 1: Image storage area 2: General-purpose file storage area 3: PDL file storage area 4: Firmware storage area - General-purpose files include user-set data, log data, PDL spool data, and management information for image data. 3) Press the OK key.	1
HD-CHECK	Use it to check the entire HD and perform recovery. Operation method set '0' to the following: COPIER>FUNCTION>SYSTEM>CHK-TYPE 1) Select this item. 2) Press the OK key.	1
HD-CLEAR	Initializes partition specified by CHK-TYPE item. **Attention:** - The following must be kept in mind and the user must be properly informed of the fact when using CHECK-TYPE: 0: entire HDD -> no operation occurs (to initialize, use the SST) 1: image storage area -> removes image data 2: general-purpose file area (user settings data, various log data, PDL spool data, image data control information) -> initializes files 3: PDL-related file storage area -> removes font data, requiring re-installation 4: firmware, address book, filter storage area -> no operation occurs (to initialize, use the SST) Operation method 1) Select this item. 2) Press the OK key. **Attention:** If you perform <HD-CLEAR> after selecting 1 (image storage area) or 3 (PDL file storage area) for the <CHK-TYPE> item, the initialization process is performed after the power is turned OFF/ON. The initialization process takes about 5 minutes. A progress bar slowly advances to indicate the progress during this time. Never turn the power OFF during this time.	1

COPIER>FUNCTION>SYSTEM		
Sub item	**Description**	**level.**
DEBUG-1	Setting of types of logs to be saved and timing at which they are to be saved on hard disk This specifies the types of logs to be saved and the timing at which they are to be saved on the hard disk. Setting range 0: For saving PLOGs. They are saved when Reboot/Exception has been detected. 1: For saving PLOGs. They are saved when Reboot/Exception/Ecode has been detected. 2: For saving SUBLOGs. They are saved when Reboot/Exception/Ecode has been detected. 3: For saving SUBLOGs in the overwrite mode. They are saved when Reboot/Exception/Ecode has been detected. [Factory setting/value after clearing RAM: 0] Remarks Logs of the PLOG type to be saved when "0" or "1" is set can be printed out by selecting COPIER>FUNCTION>SYSTEM>DEBUG-2. SUBLOGs to be saved when "2" or "3" is set cannot be printed out (they are uploaded from SST). **MEMO:** - This is not used with normal servicing. (It is used for analyzing trouble causes.) - To use it, the instructions given by the quality support division must be followed.	2
DEBUG-2	Printout of logs saved on hard disk This prints out the PLOGs to be saved when "0" or "1" has been set for COPIER>FUNCTION>SYSTEM>DEBUG-1. Remarks The SUBLOGs to be saved when "2" or "3" has been set for COPIER>FUNCTION>SYSTEM>DEBUG-1 are not printed out. The number of printout sheet is about 20 in the A4 size. **MEMO:** - This is not used with normal servicing. (t is used for analyzing trouble causes.) - To use it, the instructions given by the quality support division must be followed.	2

17.5.2 FEEDER

17.5.2.1 FEEDER Table

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

T-17-53

FEEDER>FUNCTION		
Sub item	**Description**	**level.**
MTR-CHK	Use it to check the motor and the like of the ADF on its own. Operation 1) Press [MOTOR-CHK] to highlight. 2) Enter the number of the component using the keypad. 3) Press the OK key. 4) Press [MOTOR-ON[to start checking the operation. Settings 0: pickup motor 1: feed motor 2: delivery reversal motor 3: lock motor [Factory default/After RAM clear: 0]	1
TRY-A4	Use it to execute automatic adjustment (A4 Width) for DF original paper width detection.	1
TRY-A5R	Use it to execute automatic adjustment (A5R width) for DF original paper width detection.	1
TRY-LTR	Use it to execute automatic adjustment (LTR width) for DF original paper width detection.	1
TRY-LTRR	Use it to execute automatic adjustment (LTR-R width) for DF original paper width detention.	1
FEED-CHK	Use it to check paper movement in the ADF on its own. Operation 1) Press [FEED-CHK] to highlight. 2) Enter the number of the component using the keypad. 3) Press the OK key. 4) Press [FEED-ON] to start checking the operation. Feed Mode 0: single-sided operation 1: double-side operation 2: single-sided operation w/ stamp 3: double-sided operation w/ stamp [Factory default/After RAM clear: 0]	1
SL-CHK	Use it to check the ADF solenoid on its own. Operation 1) Press [SL-CHK] to highlight 2) Enter the number of the component using the keypad. 3) Press the OK key. 4) Press [SL-ON] to start checking the operation. Number of Component 0: lock solenoid 1: stamp solenoid [Factory default/After RAM clear: 0]	1

FEEDER>FUNCTION		
Sub item	**Description**	**level.**
SL-ON	Use it to start the operation of the selected solenoid. Operation The operation varies from model to model. 1) Press [SL] to highlight; then, press the OK key to start motor operation. 2) Press the OK key once again to stop the ongoing operation. (The operation will stop automatically in 5 sec; however, the indication will not change to [STOP] unless the OK key is pressed once again.)	1
MTR-ON	Use it to start motor operation. Operation The operation varies from model to model. 1) Press [MTR-ON] to highlight; then, press the OK key to start motor operation. 2) Press the OK key once again to stop the motor. (The operation will stop automatically in 5 sec; however, the indication will not change to [STOP] unless the OK key is pressed once again.)	1
ROLL-CLN	Use it to clean the ADF roller. In this mode item, the roller is rotated by the work of its motor; it is cleaned by lint-free paper (moistened with alcohol) forced against it while it rotates. Operation 1) Press [ROLL-CLN] to highlight. 2) While the roller is rotating, clean it by forcing lint-free paper (moistened with alcohol) against it. 3) Press [ROLL-CLN] to highlight, and press the OK key to stop the rotation of the roller.	1
FEED-ON	Use it to check the movement of paper in the ADF on its own. Operation 1) Press [FEED-ON], and then press the OK key so that the ADF starts to move paper according to the operation mode selected using [FEED-CHK].	1

17.6 OPTION (Machine Settings Mode)

17.6.1 COPIER

17.6.1.1 COPIER Table

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1. BODY

T-17-54

COPIER>OPTION>BODY		
Sub item	**Description**	**level.**
MODEL-SZ	Used to select standard variable magnification display and ADF document size detection. Caution! The setting value takes effect after the main power switch is turned OFF/ON. Setting values 0: AB (6R5E) 1: INCH (5R4E) 2: A (3R3E) 3: AB/INCH (6R5E)	1
PASCAL	Used to select whether to use the contrast electric potential calculated by automatic gradation compensation (full compensation) control, and the gradation compensation data. Caution! - For printer models, you must always make this setting value 0 at time of installation. - The setting value takes effect after the power switch is turned OFF/ON. Setting values 0: Don't use 1: Use [Factory default/After RAM clear: 1]	1
CONFIG	This selects the multiple firmware programs held on the hard disk, and selects the unit's country, language, destination and sheet size series. **Attention:** The settings take effect after the main power switch has been set to OFF and then back to ON. Operating procedure 1) Set the unit to the service mode, and select COPIER>OPTION>BODY>CONFIG. 2) Select the items to be selected, and press the "+" and "-" keys. 3) Each time the "+" and "-" key is pressed, the content changes. 4) Display the desired contents, and press the OK key. 5) Set the main power switch to OFF and then back to ON. Settings: XXYYZZAA XX: Country (example: JP -> Japan) YY (*): Language (example: ja -> Japanese) ZZ (*): Destination (example: 00 -> Canon) AA: Sheet size series (example: 00 -> AB series) *: This setting cannot be changed.	1

COPIER>OPTION>BODY		
TEMP-TBL	Fixing temperature regulation temperature table change This is used to adjust the temperature of the temperature regulation for the regular paper (64 to 105g paper) uniform speed. It improves the hot offset or fixability at the regular paper uniform speed. Settings -2:-10 deg C -1:-5 deg C 0:0 deg C +1:5 deg C +2:+10 deg C [Factory setting/value after clearing RAM: 0]	1
W/SCNR	For copy models, sets whether scanner is present. Caution! The setting value takes effect after the main power switch is turned OFF/ON. Setting values 0: Printer model 1: Model with scanner **Reference:** The setting will automatically change to '1' upon detection of the presence of a scanner (printer model).	1
RUI-DSP	Used to select copy function in remote UI. 0: Display copy the screen in remote UI [Factory default/After RAM clear] 1: Don't display copy screen in remote UI	1
ADJ-LVL	Sets execution mode for image stabilization control performed after preset number of sheets. Sets execution mode (adjustment set data) for forward/reverse operation of copy or print jobs and image stabilization control done between sheets. **Reference:** Automatic adjustment control execution mode setting This makes it possible to reduce the wait time of the users by reducing the menu items to be executed by automatic adjustment. The automatic adjustment control is executed for Dmax control, Dhalf and ARCDAT. However, the fluctuations in the image density increase unless the process automatic adjustment is executed from the user mode. 0: BkDmax control + Dhalf and ARCDAT are executed. 1: BkDmax control + Dhalf are executed. ARCDAT is not executed. 2: ARCDAT is executed. BkDmax control + Dhalf are not executed. 3: Neither BkDmax control + Dhalf nor ARCDAT are executed. [Factory setting/value after clearing RAM: 0]	1
DFDST-L1	A higher setting will increase the level of dust detection (i.e., the machine will be more sensitive in detecting dust, which if left behind will cause thin lines in the images). settings range 0 to 255 (0: off) [Factory default/After RAM clear: 205]	1
DFDST-L2	A higher setting will increase the level of dust detection (i.e., the machine will be more sensitive in detecting dust, which if left behind will cause thin lines in the images). settings range 0 to 255 (0: off) [Factory default/After RAM clear: 155]	1
ENVP-INT	Setting log correction interval of inner machine temperature/humidity/fixing temperature Setting log collection interval to COPIER>FUNCTION>MISC-P>ENV-PRT and COPIER>DISPLAY>ENVRNT Settings 0 to 480 <min> [Factory default/After RAM clear: 60] Reference Log is not collected when '0' is set.	1
CNTR-DSP	Selecting screen in response to the external controller Settings 0: The external controllericon is displayed on the control panel of the copier[Factory default/After RAM clear] (When the color image server is connected.) 1: The control panel of the copier becomes nondisplay mode (When the control panel-mounted external controller is connected.)	1
BASE-SW	Switching from MEAP-Full model to MEAP-Base model This is used when trouble originating in the MEAP application has occurred. The MEAP application operation can be restricted by setting it to "0." Settings 0: Base model 1: Full model [Factory setting/value after clearing RAM: 1] **MEMO:** The model can be switched from "1" to "0" only.	1
SC-L-CNT	Switching of sheet size large/small threshold value in scan counter This sets the https server port when SSL is used by HTTP of MEAP. 0: B4 size sheets are counted as the small size. 1: Letter size sheets are counted as the small size. [Factory setting/value after clearing RAM: 0]	1
REPORT-Z	Report print attribute flag function control Switches attribute flags added to report prints. Setting values 0: PDL text mode 1: PDL photograph mode 2: SCAN text mode 3: SCAN photograph mode [Factory settings and after RAM clear: 0]	1

COPIER>OPTION>BODY		
IFXEML-Z	Colour iFAX, E-Mail Rx print attribute flag function control Switches attribute flags added to colour iFAX, E-Mail Rx prints. Setting values 0: PDL text mode 1: PDL photograph mode 2: SCAN text mode 4: SCAN photograph mode [Factory settings and after RAM clear: 0]	1
BMLNKS-Z	BMLinks Rx print attribute flag function control Switches attribute flags added to colour BMLinks Rx prints. Setting values 0: SCAN photograph mode 1: PDL photograph mode 2: SCAN text mode 3: PDL text mode [Factory settings and after RAM clear: 0]	1
DST-POS	Setting the switching position for document scanning in DF mode (repeat reading) Setting the document scanning position compensation when the glass surface is dirty 0: Position #1 + position #2 1: Position #1 2: Position #2 [Factory setting/value after clearing RAM: 0] **Reference:** Position #2 is an open space so floating dirt tends to be reflected on the images.	1
CCD-LUT	Whether data is to be used for CCD gain compensation This is used to compensate for the deterioration in the images (density differences in the center joins of the images) which develops over time. Set whether or not to use the values adjusted by selecting COPIER>FUNCTION>CCD>LUT-ADJ2. Settings 0: Not used 1: Used [Factory setting/value after clearing RAM: 0]	1
ITBB-TMG	ITB cleaning band frequency setting This changes the band image frequency. Lengthening the intervals enables the down time and toner consumption to be reduced. Settings 0 to 10 (in increments of 1: One banding per 100 sheets) No banding at the "0" setting [Factory setting/value after clearing RAM: 1]	1
FX-D-TMP	Setting of threshold value for starting throughput reduction sequence when small size sheets are passed through This sets the productivity reduction start temperature for sheets with widths less than A4R and sheets of an undefined format. It improves the hot offset and productivity of sheets with widths less than A4R and sheets of an undefined format. Settings -4 to 4 [Factory setting/value after clearing RAM: 0]	1
FIX-ROT	Threshold value setting of sub-thermistor temperature at which to end the racing after small size sheets have passed through This sets the large size job start temperature following the small size supporting fan-cooling. It improves the hot offset or down time. Settings -2 to 2 [Factory setting/value after clearing RAM: 0]	1
FX-S-TMP	ITOP temperature regulation offset adjustment Adjustment of ITOP temperature for regular paper (64 to 105g paper) uniform speed This reduces the unevenness in the gloss that appears for 94 mm at the leading edges of the sheets at the regular paper uniform speed. Settings [Factory setting/value after clearing RAM: 0]	1
PAP-W-EN	Density unevenness reduction mode during solid image output This deals with cases where the left edges of solid images are darker or screw marks appear. Uneven density is reduced by providing more space between the sheets so that the time during which the screw is rotated increases. Increase the value when uneven density in the solid images becomes problematic. The time between sheets is increased by an amount equivalent to the number of seconds set. Setting 0 to 10 seconds [Factory setting/value after clearing RAM: 0]	1
TMP-TBL2	Fixing temperature regulation temperature offset (thick paper) Temperature adjustment of the temperature regulation for thick paper (106 to 163g paper) This improves the hot offset or fixability of the thick paper (106 to 163g paper). Settings -2: -10 deg C -1: -5 deg C 0: 0 deg C +1: 5 deg C +2: +10 deg C [Factory setting/value after clearing RAM: 0]	1
TMP-TBL3	Fixing temperature regulation temperature offset (super-thick paper) Temperature adjustment of the temperature regulation for super-thick paper (164 to 220g paper) This improves the hot offset or fixability of the super-thick paper (164 to 220g paper). Settings -2: -10 deg C -1: -5 deg C 0: 0 deg C +1: 5 deg C +2: +10 deg C [Factory setting/value after clearing RAM: 0]	1

COPIER>OPTION>BODY		
TMP-TBL5	Fixing temperature regulation temperature offset (4C thin paper) Temperature adjustment of the temperature regulation for color thin paper This improves the hot offset or fixability of color thin paper. Settings -2: -10 deg C -1: -5 deg C 0: 0 deg C +1: 5 deg C +2: +10 deg C [Factory setting/value after clearing RAM: 0]	1
TMP-TBL6	Fixing temperature regulation temperature offset (envelopes) Temperature adjustment of the temperature regulation for envelopes This improves the hot offset or fixability at the envelopes Settings -2: -10 deg C -1: -5 deg C 0: 0 deg C +1: 5 deg C +2: +10 deg C [Factory setting/value after clearing RAM: 0]	1
TMP-TBL7	Fixing temperature regulation temperature offset (special fixing mode) Temperature adjustment of the temperature regulation for special fixing mode This improves the hot offset or fixability in case of the special fixing mode Settings -2: -10 deg C -1: -5 deg C 0: 0 deg C +1: 5 deg C +2: +10 deg C [Factory setting/value after clearing RAM: 0]	1
FXS-TMP2	ITOP temperature offset (thick paper) Temperature adjustment of ITOP for thick paper (106 to 163g paper) This reduces the unevenness of the gloss that appears for 94 mm at the leading edges of the thick sheets (106 to 163g paper). Settings -2: -10 deg C -1: -5 deg C 0: 0 deg C +1: 5 deg C +2: +10 deg C [Factory setting/value after clearing RAM: 0]	1
FXS-TMP3	ITOP temperature offset (super-thick paper) Temperature adjustment of ITOP for super-thick paper (164 to 220g paper) This reduces the unevenness of the gloss that appears for 94 mm at the leading edges of the super-thick sheets (164 to 220g paper). Settings -2: -10 deg C -1: -5 deg C 0: 0 deg C +1: 5 deg C +2: +10 deg C [Factory setting/value after clearing RAM: 0]	1
FXS-TMP4	ITOP temperature offset (Bk OHT) Temperature adjustment of ITOP for Bk OHT This reduces the unevenness of the gloss that appears for 94 mm at the leading edges of Bk OHT paper. Settings -2: -10 deg C -1: -5 deg C 0: 0 deg C +1: 5 deg C +2: +10 deg C [Factory setting/value after clearing RAM: 0]	1
FXS-TMP5	ITOP temperature offset (4C OHT) Temperature adjustment of ITOP for color OHT This reduces the unevenness of the gloss that appears for 94 mm at the leading edges of color OHT paper. Settings -2: -10 deg C -1: -5 deg C 0: 0 deg C +1: 5 deg C +2: +10 deg C [Factory setting/value after clearing RAM: 0]	1
FXS-TMP6	ITOP temperature offset (regular, thin, regular 2 1/2) Temperature adjustment of ITOP for regular paper (64 to 105g paper) half speed This reduces the unevenness of the gloss that appears for 94 mm at the leading edges of regular paper and half-speed paper. Settings -2: -10 deg C -1: -5 deg C 0: 0 deg C +1: 5 deg C +2: +10 deg C [Factory setting/value after clearing RAM: 0]	1
FXST2-N2	L/L regular 2 ITOP wait time Pre-rotation extension for regular 2 at an outside air temperature of 18 deg C or below. This improves the fixability of regular 2 at an outside air temperature of 18 deg C or below. Setting range: 0 to 20 [Factory setting/value after clearing RAM: 0]	1

COPIER>OPTION>BODY		
FXST2-UH	L/L super-thick paper ITOP wait time Pre-rotation extension for super-thick paper at an outside air temperature of 18 deg C or below. This improves the fixability of super-thick paper at an outside air temperature of 18 deg C or below. Setting range: 0 to 30 [Factory setting/value after clearing RAM: 0]	1
FN-ENTMP	Fixing edge area cooling fan ON/OFF temperature Fixing edge area cooling fan ON/OFF temperature This improves the hot offset or fixability of the edge areas of standard small size paper (A4R width, LTRR width, B4 width, EXE width, K8 width, LDR width). Settings -4: -20 deg C -3: -15 deg C -2: -10 deg C -1: -5 deg C 0: 0 deg C +1: 5 deg C +2: +10 deg C +3: +15 deg C +4: +20 deg C [Factory setting/value after clearing RAM: 0]	1
FX-ASTBY	Not used	1
FX-UP-UH	SRA3 super-thick paper fixability improvement mode Pre-rotation extension for SRA3 size (320 x 450 mm) super-thick paper This is used to improve the fixability particularly at the image edges on SRA3 size super-thick paper. Settings 0: 0 sec. 1: 2 sec. [Factory setting/value after clearing RAM: 0]	1
PTN-LVL	Half-tone image edge lateral streaks countermeasure mode This changes the amount of toner which is discharged. Lateral streaks sometimes appear when printing half tones on the edges of images in an L/L environment. Increment the setting by 1 when these streaks appear. The disadvantage of doing this is the increase in the toner consumption. The setting can be decremented by 1 when half tones are not going to be printed on the edges of images and/or when users who are not bothered by the streaks want to reduce the toner consumption. Setting range: -1 to 1 [Factory setting/value after clearing RAM: 0]	1
TNR-WARN	Low remaining toner warning display ON/OFF This switches the low remaining toner warning between ON and OFF. Set it to "1" if the toners are to be replaced after they have all been used up. Settings 0: The warning is displayed. 1: The warning is not displayed. [Factory setting/value after clearing RAM: 0]	1
IFX-CHIG	Setting of character count for ignoring IFAX received mail text When the text of a mail during IFAX reception is shorter than the number of characters set, it is ignored, and the text is neither printed nor sent. If the mail text has been lost as a result of setting the value to a number other than "0", and there is no attached TIFF file, a blank page (except the header and footer) will be printed and sent. * Kanji are treated as 2-byte characters, and the carriage return and other control codes are also included in the character count. Settings 0 to 999 (unit: number of characters) 0: The mail text is not ignored. [Factory setting/value after clearing RAM: 0]	1
SCANSLCT	ON/OFF of function which obtains the scanning area from the selected sheet size Settings 0: OFF (scanning area is determined by detection of document) 1: ON (scanning area is determined by sheet size) [Factory setting/value after clearing RAM: 0] If the sheets are larger than the document size, productivity will drop at the "1" setting since the scanning area increases.	2
SENS-CNF	Document detection sensor layout setting Settings 0: AB system 1: Inch system [Factory setting/value after clearing RAM: 0] **Attention:** The value is cleared to "0" by the clearing of the RAM on the reader controller circuit board. In machines destined for inch system areas (such as North America), it must be set to "1."	2
RAW-DATA	Sets whether to print out raw received data. 0: Normal operation [Factory default/After RAM clear] 1: Print out raw received data	2
RMT-LANG	Used to select language of remote UI used from Web. Select language code with + and - keys.	2
IFAX-LIM	Used to select whether number of output lines will be restricted when largevolume data is received by IFAX. 0: No restriction 1 to 999 [Factory default/After RAM clear: 500]	2
SMTPTXPN	Used to change SMTP send port number. 0 to 65535 (increments of 1) [Factory default/After RAM clear: 25]	2
SMTPRXPN	Used to change SMTP receive port number. 0 to 65535 (increments of 1) [Factory default/After RAM clear: 25]	2
POP3PN	Used to change POP receive port number. 0 to 65535 (increments of 1) [Factory default/After RAM clear: 110]	2

COPIER>OPTION>BODY		
ORG-LGL	Use it to set a special paper size not recognized by the DF size detection mechanism. settings 0: LEGAL 1: FOOLSCAP 2: A-FOOLSCAP 3: FORIO 4: G-LEGAL 5: OFFICIO 6: E-OFFICIO 7: A-OFFICIO 8: B-OFFICIO 9: A-LEAGAL 10: M-OFFICIO [Factory default/After RAM clear: 0]	2
ORG-LTR	Used to set special paper size not compatible with DF size recognition. Setting values 0: LTR 1: G-LTR 2: A-LTR 3: EXECTIVE [Factory settings and after RAM clear: 0]	2
ORG-B5	Sets special paper sizes that cannot be detected in ADF. Setting values 0: B5 1: K-LEGAL [Factory settings and after RAM clear: 0]	2
UI-COPY	Use it to select whether to display the copy screen in the control panel. Setting values 0: Do not display the copy screen. 1: Display the copy screen. [Factory default/After RAM clear: 1]	2
UI-BOX	Used to select whether to display operation panel box screen. Setting values 0: Don't display 1: Display [Factory default/After RAM clear: 1]	2
UI-SEND	Used to select whether to display operation panel send screen. Setting values 0: Don't display 1: Display [Factory default/After RAM clear: 1]	2
UI-FAX	Used to select whether to display operation panel fax screen. Setting values 0: Don't display 1: Display [Factory default/After RAM clear: 1]	2
SCR-SLCT	Used to select half-tone process for photographic printing paper/photo mode. Setting values 0: Use error diffusion method 1: Use low-line-count screen 2: Use high-line-count screen [Factory default/After RAM clear: 1]	2
TMC-SLCT	Used to select coefficient used in error diffusion process. Setting values 0: Low granularity/low dot stability for Y/M/C/Bk 1: Y/M/C -> Low granularity, low dot stability, Bk -> high granularity, low dot stability 2: High granularity/low dot stability for Y/M/C/Bk [Factory default/After RAM clear: 1]	2
DEVL-VTH	Sets threshold value (video count) for starting toner forcible consumption sequence. Whenever possible, avoid using this setting during normal operation.	2
FTPTXPN	Used to specify port (FTP) number to send to. 0 to 65535 (16-bit value) [Factory default/After RAM clear: 21]	2
PRNT-ORD	Used to switch order of output to side tray. Whenever possible, avoid using this setting during normal operation.	2
PRN-FLG	Used to select area flag for PDL images. Whenever possible, avoid using this setting during normal operation.	2
SCN-FLG	Used to select area flag for copy images. Whenever possible, avoid using this setting during normal operation.	2
T-LW-LVL	Low remaining toner warning message display timing selection This selects the threshold (%) of the remaining amount of toner at which "Low toner message" is displayed on the control unit. It is used when selecting the percentage of the toner left at which to display the supply toner warning. Settings 0: Normal level (5% remaining) 1: 10% remaining 2: 15% remaining 3: 20% remaining [Factory setting/value after clearing RAM: 0] **Attention:** Every effort must be made to avoid using this when the machine is operating normally.	2
NWERR-SW	Used to select whether to display network error messages. Setting values 0: Don't display 1: Display [Factory default/After RAM clear: 1]	2

COPIER>OPTION>BODY		
STS-PORT	ON/OFF of T.O.T (TUIF over TCP/IP) synchronized status communication port This sets the port used for communicating the Inquiry/Response (synchronized) statuses in T.O.T to ON or OFF. Settings 0: OFF 1: ON [Factory setting/value after clearing RAM: 0] Set this to "1" when using a crossover cable to connect the PC and machine while using service NAVI. **MEMO:** T.O.T (TUIF over TCP) A communication protocol (unique to Canon) for the presentation of built-in applications (UI) and for communicating between applications inside the machine such as COPY, SEND and BOX.	2
CMD-PORT	ON/OFF of T.O.T (TUIF over TCP/IP) non-synchronized command communication port This sets the port used for communicating non-synchronized commands in T.O.T to ON or OFF. Settings 0: OFF 1: ON [Factory setting/value after clearing RAM: 0] Set this to "1" when using a crossover cable to connect the PC and machine while using service NAVI. **MEMO:** T.O.T (TUIF over TCP) A communication protocol (unique to Canon) for the presentation of built-in applications (UI) and for communicating between applications inside the machine such as COPY, SEND and BOX.	2
MODELSZ2	Global support with pressure plate document size detection (both AB and inch detection) When this item is set to "1," the AB/inch (global) support mode is established regardless of the AB/inch switching flag MODEL-SZ setting. Settings 0: Normal (no global detection: size detected by AB or inch depending on destination) 1: Both AB and inch series detection (global detection) [Factory setting/value after clearing RAM: 0] **Attention:** - This is used to support individual users, and it must not be used under normal circumstances. - In order to detect both the AB and inch series, document size detection sensors are required separately.	2
OHP-PTH	Setting of sheet count for executing ITB cleaning sequence after OHP film has passed through This changes the frequency of the cleaning band inserted into the post rotation and between sheets when OHP film has passed through. With some types of OHP film, the substances in the film's conductive layer adhere to the ITB (OHT memory), leaving areas of the images white. For this reason, the ITB cleaning sequence is executed by the default setting between sheets or in the post-rotation. Reduce the value if white spots caused by the OHT memory data occurs. If no OHT memory data is generated, the down time and toner consumption can be reduced by increasing the value. Setting range: - Between sheets: Intervals of 0 to 30 sheets - Post rotation: Intervals of 0 to 22 sheets [Factory setting/value after clearing RAM: 0]	2
UISW-DSP	Switch appearing on the User screen use it to enable/disable the indication of the switch used to switch between Standard Setup screen and Simplified setup screen (e.g., for self-copy shop) Setting values 0: disable indication of switch 1: enable indication of switch [Factory default/After RAM clear: 1] **Reference:** a model supporting a coin vendor mechanism may come equipped with functions equivalent to those of a limited function model /standard model	2
NS-CMD5	Use it to set CRAM-MD5 authentication under SMTP authentication. setting 0: dependent on SMTP server 1: disable	2
NS-GSAPI	Use it to set GSSAPI authentication under SMTP authentication. setting 0: dependent on SMTP server 1: disable	2
NS-NTLM	Use it to set NTLM authentication under SMTP authentication. setting 0: dependent on SMTP server 1: disable it	2
NS-PLNWS	Use it to set PLAIN LOGIN authentication under SMTP authentication. <environment in which communication packets are subjected to coding> setting 0: dependent on SMTP server 1: disable	2
NS-PLN	Use it to set PLAIN LOGIN under SMTP authentication. <environment in which communication packages are not subjected to coding> setting 0: dependent on SMTP server 1: disable	2
NS-LGN	Use it to set LOGIN authentication under SMTP authentication. setting 0: dependent on SMTP server 1: disable	2
MEAP-PN	Setting the port No. of HTTP server used for MEAP application Settings 0 to 65535 [Factory default/After RAM clear: 8000] **Reference:** Do not use 1 to 1023 excepting 80 (HTTP) if specifying the port No. of HTTP server as MEAP port. (Because standard servers use numbers in this range.)	2

COPIER>OPTION>BODY		
TMIC-BK	Use it to set the correction along the trailing edge for BkLUT and BkLUT for PDL (Tmic). Settings 0: PDL BK_LUT end correction ON; copy Bk_LUT end correction OFF 1: PDL BK_LUT end correction OFF; copy Bk_LUT end correction OFF 2: PDL BK_LUT end correction ON; copy Bk_LUT end correction ON (default) 3: PDL BK_LUT end correction OFF; copy Bk_LUT end correction ON [Factory default/After RAM clear: 2]	2
SVMD-ENT	Switching the method of entering the Service Mode. Setting Values 0: [User Mode key] -> Press [2] and [8] simultaneously -> [User Mode key] 1: [User Mode key] -> Press [4] and [9] simultaneously -> [User Mode key] [Factory default/After RAM clear: 0] Reference Information Support for Siemens	2
DH-MODE	Patch Data (high density side) Used in D-half Except in Full Correction Change the default setting so that the readout collected from D-half at time of full correction will be substituted for the patch on the high density side at time of D-half (other than in full correction). Settings 0: use patch image read data of full correction (at time of shipment/upon RAM initialization) 1: do not use patch image read data of full correction [Factory default/After RAM clear: 0]	2
SSH-SW	SSH server ON/OFF Settings 0: Sever is not started up [Factory default/After RAM clear: 0] 1: Server is started up Caution! The following modes also become ON when COPIER>OPTION>BODY>DA-CNCT is set to '1'. COPIER>OPTION>BODY>CMD-PORT COPIER>OPTION>BODY>SSH-SW COPIER>OPTION>BODY>DA-PORT	2
RMT-LGIN	ON/OFF setting of remote login operation to SSH server Settings 0: Remote login operation to SSH server is disabled [Factory default/After RAM clear] 1: Remote login operation to SSH server is enabled	2
RE-PKEY	ON/OFF setting of SSH server key reproduction Settings 0: SSH server key is not reproduced. [Factory default/After RAM clear] 1: SSH server key is reproduced. Caution! This mode is enabled only when COPIER>OPTION>BODY>SSH-SW is set to '1'.	2
U-NAME	Use it to set a user name required to connect to the SSH server. Sets a login user name required to connect to the SSH server. Only one user can login the server. Setting range 8 characters maximum (English one byte characters) [Factory default/After RAM clear: gN3Fp2A]	2
U-PASWD	Use it to set a password of the user required to connect to the SSH server. Sets a password of the login user required to connect to the SSH server. Setting range 8 characters maximum (English one byte characters) [Factory default/After RAM clear: Vs8DuwJ] The password is left hidden on the screen.	2
DA-PORT	Setting port for communication with DA Settings 0: Close 1: Open [Factory default/After RAM clear:0] Caution! The following modes also become ON when COPIER>OPTION>BODY>DA-CNCT is set to '1'. COPIER>OPTION>BODY>STS-PORT COPIER>OPTION>BODY>CMD-PORT COPIER>OPTION>BODY>SSH-SW COPIER>OPTION>BODY>DA-PORT	2
DA-CNCT	Setting for connection with DA Settings 1: DA is used. 0: DA is not used. [Factory setting/value after clearing RAM: 0] Note: The items listed below are also set to ON when this item COPIER>OPTION>BODY>DA-CNCT is set to "1." - COPIER>OPTION>BODY>STS-PORT - COPIER>OPTION>BODY>CMD-PORT - COPIER>OPTION>BODY>SSH-SW - COPIER>OPTION>BODY>DA-PORT **MEMO:** This is used on machines marketed in Japan only. It is not used on overseas machines. Fixer replacement message ON/OFF This sets to ON or OFF the "Get ready to replace the fixer" message that appears on the user operation screen after the fixed counter has reached the count which represents the end of the fixer's service life. Settings 0: The message is not displayed. 1: The message is displayed. [Factory setting/value after clearing RAM: 1]	2

COPIER>OPTION>BODY		
FXMSG-SW	Fixing unit replacement message ON/OFF This sets to ON or OFF the "Get ready to replace the fixing unit" message that appears on the user operation screen after the fixing unit counter has reached the count which represents the end of the fixing unit's service life. Settings 0: The message is not displayed. 1: The message is displayed. [Factory setting/value after clearing RAM: 1]	2
CHNG-STS	Setting of T.O.T (TUIF over TCP/IP) status connection port number This sets the number of the port used for the status connection in T.O.T. It is used when changing the port number with service NAVI. Setting range: 1 to 65535 [Factory setting/value after clearing RAM: 20010] **MEMO:** T.O.T (TUIF over TCP) A communication protocol (unique to Canon) for the presentation of built-in applications (UI) and for communicating between applications inside the machine such as COPY, SEND and BOX.	2
CHNG-CMD	Setting of T.O.T (TUIF over TCP/IP) command connection port number This sets the number of the port used for the command connection in T.O.T. It is used when changing the port number with service NAVI. Setting range: 1 to 65535 [Factory setting/value after clearing RAM: 20000] **MEMO:** T.O.T (TUIF over TCP) A communication protocol (unique to Canon) for the presentation of built-in applications (UI) and for communicating between applications inside the machine such as COPY, SEND and BOX.	2
MEAP-DSP	Prohibition against switching from MEAP screen to standard screen (copy, send or box screen, etc.) Settings 0: Transfer to standard screen enabled. 1: Transfer to standard screen disabled. [Factory setting/value after clearing RAM: 0] **MEMO:** Even when this item is set to "1," the display is transferred to the standard screen when an error, jam or alarm has occurred.	2
ANIM-SW	Prohibition against switching error or jam screen display during operation of MEAP application Even when COPIER>OPTION>BODY>MEAP-DSP has been set to "1," the display is transferred to the standard screen in order to display a warning when an error, jam or alarm has occurred. When this item has been set to "1," the transfer of the screen to the standard screen when an error, jam or alarm has occurred is prohibited, and a warning urging the user to contact a service technician appears on the MEAP screen. Settings 0: The warning screen is displayed. 1: The warning screen is not displayed. [Factory setting/value after clearing RAM: 0]	2
HDD-TMP	Use it to set a level of temperature to serve as a reference for detecting a low temperature error. Caution! The new setting will not be valid until the power switch has been turned off and then on again. Settings: 0 to 30 deg C [Factory default/After RAM clear: 2]	2
HDD-TIM	Use it to set the time interval allowed before a low temperature error is identified Caution! The new setting will not be valid until the power switch has been turned off and then on again. Settings: 0 to 200 min [Factory default/After RAM clear: 10]	2
HDD-SW	Use it to enable/disable E code indication of a low temperature error Caution! The new setting will not be valid until the power switch has been turned off and then on again Settings 0: do not indicate 1: indicate [Factory default/After RAM clear: 0]	2
MEAP-SSL	Use it to set an HTTPS port for MEAP. Sets a port for the HTTPS server to use SSL in the MEAP HTTP. Setting range: 1 to 65535 [Factory default/After RAM clear: 8443]	2
DH-TMG	Setting up a threshold for the accumulated number of outputs for the Dhalf control sequence operation trigger. Control If the fixing unit is lower than a specified temperature when the machine is turned on or recovered from the sleep mode, use this mode to make automatic full adjustments during initial multiple rotations. At this time, the Dhalf control is performed only if the number of outputs accumulated since the last Dhalf control exceeds the value specified in this Service Mode. Changing the timing of or canceling the Dhalf control (according to the number of accumulated outputs) by using this mode can reduce the downtime in the morning. (A measure for a complaint about the downtime in the morning) Meanwhile, there is a possibility that gray scale (half-tone image) might be degraded when the Dhalf control is cancelled. With regard to the accumulated number of outputs, a small-size copy is regarded as 1 count, and a large-size copy is regarded as 2 counts. When the Dhalf control is performed first thi	2
MIX-FLG	Use it to select an image field flag (for image synthesis). Selects the image processing method which is performed when a combined image cannot be compressed at a certain compression ratio on the main controller side. Setting value 0: Image processing equivalent to the PDL character mode 1: Image processing equivalent to the PDL photo mode 2: Image processing equivalent to the SCAN character mode 3: Image processing equivalent to the SCAN photo mode [Factory default/After RAM clear: 0]	2

COPIER>OPTION>BODY		
KSIZE-SW	Paper size (K size) switch for China This switch allows iR series scanner controllers to support K size paper detection and display. When the switch is set to ON = 1 for MODEL-SZ = (AB type) destinations, the operation switches to allow K size paper recognition and detection to be performed with document detection, paper selection screen and APS type, etc. The following types of K size paper are available. - 8K: 270mm x 390 mm - 16K: 270mm x 195 mm Setting values 0: OFF (K size paper not handled) 1: ON (K size paper handled) [Factory settings and after RAM clear: 0]	2
LPD-PORT	LPD port number setting **Reference:** LPD port: Port number of the network for TCP/IP communication when initiating network printing. Setting range: 1 to 65535 [Factory setting/value after clearing RAM: 515]	2
ORG-A4R	Setting of special sheet sizes which cannot be recognized when ADF is used This enables images to be formed properly by setting from the service mode the special sheet sizes which cannot be recognized when documents are fed from ADF. When ADF has detected A4-R in a machine for an inch/AB series market, A4-R is converted into a document size which has been set in the service mode, and the images are formed using the post-conversion document size. Settings 0: The document size is converted into A4-R. 1: The document size is converted into FOLIO-R. [Factory setting/value after clearing RAM: 0]	2
PDF-RDCT	Switches to reduction transmission for reception transfer (PDF transmission). Images received in FAX, IFAX modes are converted to PDF and then reduced for transmission as email or for file transmission. Setting values 0: Image not converted to PDF and reduced for reception transfer. 1: Image converted to PDF and reduced for reception transfer. [Factory settings and after RAM clear: 0]	2
REDU-CNT	Density adjustment method switching control This controls whether to perform the kind of density adjustment in which restrictions on the amount of toner are factored. Settings 0: The kind of density adjustment is not performed. 1: The kind of density adjustment is performed. [Factory setting/value after clearing RAM: 0]	2
REBOOTSW	Restart switch when the E240 error occurs Normally, when the E240 error (an error in communication between the main controller and DC controller) occurs, the drive system may continue operating so the specifications calls for an automatic restart. However, restart causes the spooled print jobs to be cleared (and this could lead to complaints from our users). This item, therefore, makes it possible to set whether automatic restart is to be initiated when the E240 error occurs. Settings 0: Operation is restarted automatically when the E240 error occurs. 1: Operation is not restarted automatically when the E240 error occurs. [Factory setting/value after clearing RAM: 0] **Attention:** - This must not be used under normal circumstances. - When users wish to use this item, they must be given a thorough explanation.	2
VP-ART	Mode to enable the line art processing to be changed This changes the outlining process of the line art in scalable PDF files. Setting range: 0 to 99 [Factory setting/value after clearing RAM: 1]	2
VP-TXT	Mode to enable the vector-generating process for characters to be changed This changes the vector-generating process for characters in scalable PDF files. Setting range: 0 to 99 [Factory setting/value after clearing RAM: 1]	2
UI-PRINT	Control area printing job screen display restriction Switch for selecting whether to display the printing job screen in the control area. This specification is for users who are customizing the control area so that they have the option of not displaying the screen. Settings 0: The printing job screen is not displayed. 1: The printing job screen is displayed. [Factory setting/value after clearing RAM: 1]	2
WUEV-SW	Sleep notification selector switch This sets whether to post the sleep notification to the DS application on the network when the copier unit has been transferred or reset to the sleep mode. Settings 0: Sleep notification is posted. 1: Sleep notification is not posted. [Factory setting/value after clearing RAM: 0]	2
WUEV-INT	Sleep notification interval setting This sets the sleep notification interval when sleep notification is to be posted. Setting range: 60 to 65536 (in 1-second increments) [Factory setting/value after clearing RAM: 600]	2
WUEV-POT	Sleep notification destination port number setting This sets the PC port number of the sleep notification destination when sleep notification is to be posted. Setting range: 1 to 65535 [Factory setting/value after clearing RAM: 11427]	2
WUEV-RTR	Sleep notification range setting This sets the number of routers through which the sleep notification can pass until its destination when sleep notification is to be posted. Setting range: 0 to 254 [Factory setting/value after clearing RAM: 3]	2

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SJB-UNW	Selector switch for number of secure print jobs on hold (number of reserved jobs) This selects 50 or 90 as the upper limit for the number of secure print jobs on hold (number of reserved jobs). Setting 0: 50 1: 90 [Factory setting/value after clearing RAM: 0]	2
UI-RSCAN	Control unit remote scan screen display restriction This switch is used to select whether to display the remote scan screen on the control unit. This specification is for users who are customizing the control area so that they have the option of not displaying the screen. Settings 0: The remote scan screen is not displayed. 1: The remote scan screen is displayed. [Factory setting/value after clearing RAM: 1]	2
UI-EPRNT	Control unit expansion print screen display restriction This switch is used to select whether to display the expansion print screen (EFI print screen) on the control unit. This specification is for users who are customizing the control area so that they have the option of not displaying the screen. Additional note The conventional UI-EXT has been separated into UI-RSCAN and UI-EPRNT to enable them to be controlled independently. Settings 0: The expansion print screen is not displayed. 1: The expansion print screen is displayed. [Factory setting/value after clearing RAM: 1]	2
UI-WEB	Control unit web browser screen display restriction This switch is used to select whether to display the web browser screen on the control unit. This specification is for users who are customizing the control area so that they have the option of not displaying the screen. Settings 0: The web browser screen is not displayed. 1: The web browser screen is displayed. [Factory setting/value after clearing RAM: 1]	2
WEBV-SW	Switch to prohibit use of WEBDAV function By setting this switch to 1 (ON), the WEBDAV function can no longer be used. (The WEBDAV-related displays in the following are cleared.) - User mode -> destination table specification settings -> registration of destination -> file -> "WEBDAV" in protocol - User mode -> "Use chunk division transmission during WEBDAV transmission" among the transmission specification settings Reference WEBDAV is a standard function of the copier, but it is sometimes not used in order to reduce the amount of MEMOry used. Settings 0: The WEBDAV function is used. 1: The WEBDAV function is not used. [Factory setting/value after clearing RAM: 0]	2
CARD-RNG	Setting of number of usable card divisions (number of cards) This sets the number of divisions (number of cards) for the cards which can be used when the card reader is utilized. Setting range: 1 to 1000 [Factory setting/value after clearing RAM: 1000]	2
WUEN-LIV	Start time setting after sleep notification from network This sets the time in 1-second increments (from 10 seconds to 10 minutes) which is to elapse until the sleep mode is next established when sleep start has been initiated from the network for the copier with no accompanying introduction of jobs. Setting range: 10 to 600 (in 1-second increments) [Factory setting/value after clearing RAM: 15]	2
COMP-PRT	Composite print operation control (image processing memory allocation control) When a count of 2 or more prints are to be made in page print/ set print/ stamp/ date print/ book binding/ watermark print (composite print), depending on the memory model (optional configuration) and document size, the memory allocation method is set to 'print priority' for image processing purposes. This means there is not enough memory for image processing for Scan, Send Tx (excluding FAX) and PDL entry, and these operations must wait until printing is finished. In this case, all memory is allocated equally to all jobs so that the operations can be carried out (each a little at a time) without waiting until printing is finished. Setting values 0: Print priority 1: Equal allocation [Factory settings and after RAM clear: 0]	2
AST-SEL	Change advanced smoothing range Used when adjustments to advanced smoothing effect are felt necessary. If the smoothing effect is felt to be too strong, even though 'Soft' is selected in the advanced smoothing UI, set this item to '0'. If the smoothing effect is felt to be too weak, even though 'Strong' is selected in the advanced smoothing UI, set this item to '3'. Setting range: 0 to 3 [Factory settings and after RAM clear: 2]	2
REGM-SEL	Change fine line density correction range Used when adjustments to fine line density for lines and characters in 1200 dpi printing are felt necessary. If lines and characters are felt to be too faint, even though '+2' is set in the fine line density UI, increase the plus setting of this item. If lines and characters are felt to be too dark, even though '-2' is set in the fine line density UI, increase the minus setting of this item. Setting range: 0 to 4 [Factory settings and after RAM clear: 2]	2

COPIER>OPTION>BODY		
ORG-LTRR	Setting of special sheet sizes which cannot be recognized when ADF is used This enables images to be formed properly by setting from the service mode the special sheet sizes which cannot be recognized when documents are fed from ADF. When ADF has detected LTR-R in a machine for an inch/AB series market, LTR-R is converted into a document size which has been set in the service mode, and the images are formed using the post-conversion document size. Settings 0: The document size is converted into LTR-R. 1: The document size is converted into G-LTR-R. 2: The document size is converted into A-LTR-R. 3: The document size is converted into EXECUTIVE-R. [Factory setting/value after clearing RAM: 0]	2
ORG-LDR	Setting of special sheet sizes which cannot be recognized when ADF is used (when the size is mistakenly recognized as LDR) This enables images to be formed properly by setting from the service mode the special sheet sizes which cannot be recognized when documents are fed from ADF. When ADF has detected LDR in a machine for an inch/AB series market, LDR is converted into a document size which has been set in the service mode, and the images are formed using the post-conversion document size. Settings 0: The document size is converted into LDR. 1: The document size is converted into A-LTR. [Factory setting/value after clearing RAM: 0]	2
P-INTVL	ATR batch interval setting This is used when the E020 error occurs frequently. The trackability can be improved by increasing the ATR frequency. ATR execution timing at "0" setting: Once every 25 sheets when sheets of A4 size paper are printed with a density of less than 25% Setting range -2 to 2 (in 25% increments) [Factory setting/value after clearing RAM: 0]	2
FXWRNLVL	Fixing film unit warning level change mode This changes the warning level of the fixing film unit service life. This is used to select whether the fixing film unit service life is to be displayed. Settings 0: Warning is not displayed. 1: Warning is displayed when the default counter value is reached. 2: Warning is displayed when a counter value lower than the default counter value is reached. 3: Warning is displayed when a counter value higher than the default counter value is reached. [Factory setting/value after clearing RAM: 0]	2
DRM-RTIM	Drum streak prevention sequence start offset time setting This changes the frequency with which the drum is to be rotated for 300ms when the standby and sleep modes are established in order to prevent drum streaks from once every 15 minutes. Settings 0 to 12 (in 5-minute increments) 0: The drum streak sequence is not implemented. [Factory setting/value after clearing RAM: 3]	2
ORG-B4	Setting of special sheet sizes which cannot be recognized when ADF is used This enables images to be formed properly by setting from the service mode the special sheet sizes which cannot be recognized when documents are fed from ADF. When ADF has detected B4 in a machine for an inch/AB series market, B4 is converted into a document size which has been set in the service mode, and the images are formed using the post-conversion document size. Settings 0: The document size is converted into B4. 1: The document size is converted into FOLIO-R. [Factory setting/value after clearing RAM: 0]	2
SHT-DCSW	Skipping DCON completion processing when shutdown is executed This skips the DCON completion processing when shutdown (hard disk protection mode) is executed. The time taken for shutdown to be completed is reduced by setting this to "1" for those users who complain that shutdown takes too long to complete. [11-139] It takes about 60 minutes to control the DCON fan when shutdown is executed. Since there is no function to turn the power OFF automatically when shutdown is completed, users must monitor the copier until shutdown is completed. By enabling this item, shutdown is completed without waiting for the DCON fan control to be completed. Settings 0: The completion of DCON fan control is awaited, and then shutdown is completed. 1: Shutdown is completed without waiting for the completion of DCON fan control. [Factory setting/value after clearing RAM: 0]	2
DHCP-12	DHCP-Option 12 request ON/OFF selector switch This uses DHCP option 55 to enable host name (option 12) inquiries when the DHCP-12 switch is set to ON. It is used to prevent option 12 and option 81 from being included in DHCP packets in conditions where the packets passing over the network are being monitored. (Supported through separate business negotiations, etc.) * DHCP = Dynamic Host Configuration Protocol Settings 0: OFF 1: ON [Factory setting/value after clearing RAM: 1]	2
DHCP-81	DHCP-option 81 request ON/OFF selector switch When the DHCP-81 switch is set to ON and the user mode dynamic DNS setting is ON, this enables dynamic changes in the IP address using DHCP option 81. It is used to prevent option 12 and option 81 from being included in DHCP packets in conditions where the packets passing over the network are being monitored. (Supported through separate business negotiations, etc.) Settings 0: OFF 1: ON [Factory setting/value after clearing RAM: 1]	2
PT-W-SET	Change of pre-rotation band image width when color OHT paper passes through This increases the band amount when rattling noises are heard from the ITB cleaner blade when color OHT paper passes through in order to minimize these noises. Setting range: 0 to 10 (in 10 mm increments) [Factory setting/value after clearing RAM: 5]	2

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FLYING	Setting whether to initiate a flying start This is set to "1" when a flying start is not to be initiated in consideration of the service life of the fixing unit. Normally, after a job is completed, operation is controlled so that the fixing is performed and the takes of the polygons are made longer in preparation for the next job, but this control is not performed when the item is set to "1." Settings 0: A flying start is initiated. 1: A flying start is not initiated. [Factory setting/value after clearing RAM: 0]	2
PP-LWRT	Not used	2
USB-RCNT	Setting for automatic connection when USB device is disconnected This sets whether automatic re-connection is to be initiated when the USB device is disconnected (USB reconnect). Settings 0: No automatic connection 1: Automatic connection is initiated. [Factory setting/value after clearing RAM: 0]	2

2. USER

T-17-55

COPIER>OPTION>USER		
Specification selection related to user mode		
Sub item	**Description**	**level.**
COPY-LIM	Used to change upper limit value setting for number of sheets to copy. Setting values 1 to 999 sheets [Factory default/After RAM clear: 999]	1
SLEEP	Used to turn sleep function ON/OFF. Setting values 0: OFF 1: ON [Factory default/After RAM clear] **Reference:** The sleep function is set by the timer setting in the "User mode"	1
COUNTER 1	Counter status verification screen soft counter 1 setting This makes it possible to change the type display of soft counter 1 on the control unit to suit the demand from users and dealers. Setting 101: Total 1 [Factory setting/value after clearing RAM: Fixed at 1 -> Cannot be changed]	1
COUNTER 2	Counter status verification screen soft counter 2 setting This makes it possible to change the type display of soft counter 2 on the control unit to suit the demand from users and dealers. Setting range: 0 to 999 [Factory setting/value after clearing RAM: 108]	1
COUNTER 3	Counter status verification screen soft counter 3 setting This makes it possible to change the type display of soft counter 3 on the control unit to suit the demand from users and dealers. Setting range: 0 to 999 [Factory setting/value after clearing RAM: 232]	1
COUNTER 4	Counter status verification screen soft counter 4 setting This makes it possible to change the type display of soft counter 4 on the control unit to suit the demand from users and dealers. Setting range: 0 to 999 [Factory setting/value after clearing RAM: 324]	1
COUNTER 5	Counter status verification screen soft counter 5 setting This makes it possible to change the type display of soft counter 5 on the control unit to suit the demand from users and dealers. Setting range: 0 to 999 [Factory setting/value after clearing RAM: 000]	1
COUNTER 6	Counter status verification screen soft counter 6 setting This makes it possible to change the type display of soft counter 6 on the control unit to suit the demand from users and dealers. Setting range: 0 to 999 [Factory setting/value after clearing RAM: 000]	1
CONTROL	Switch for selecting whether to charge fees for PDL jobs This selects whether to output count pulses to the charge management system (coin vendor or control card made by another company) when such a system is connected. Settings 0: Fees are not charged. 1: Fees are charged. [Factory setting/value after clearing RAM: 0] This item is set to "1" when fees are charged for PDL prints.	1
B4-L-CNT	Used to select whether to count B4 size paper as large size or small size for software counters 1 to 6. Setting values 0: Small size [Factory default/After RAM clear] 1: Large size	1
COPY-JOB	Prohibits copy job reservations when card reader and coin vendor are in use. Setting values 0: Copy job reservations [Factory default/After RAM clear] 1: No copy job reservations	1

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Specification selection related to user mode		
Sub item	**Description**	**level.**
TAB-ROT	Rotates landscape images on PDL tab paper 180 degrees. Setting values 0: Don't rotate [Factory default/After RAM clear] 1: Rotate	1
PR-PSESW	Print pause function switch display selection Sets whether to display the print pause switch on the user screen. Setting values 0: No display 1: Display [Factory settings and after RAM clear: 0]	1
IDPRN-SW	Used to switch type of count-up job for department management counter. Setting values 0: BoxPrint, ReportPrint, SendLocalPrint and PDLPrint are counted as PRINT categories [Factory default/After RAM clear] 1: Only PDLPrint is counted as a PRINT category	1
CPRT-DSP	Used to select whether to display count print button in sales counter check screen. Setting values 0: Don't display (This setting is only for stores that request it.) 1: Display (Count print function can be used.) [Factory default/After RAM clear]	1
CNT-SW	Used it to select charge counters and default display items (100-V model only) Settings 0:counter 1-101 total 1 counter2-total(black-and-white1):108. counter3-copy(full color + mono color/1):232. counter4-print(full color + mono color/1):324 1:counter1-total2:102. counter2-copy(full color + mono color/2):231. counter3-totalA(full color + mono color/2):148. counter4-copy(black-and-white2):222. counter5-totalA(black-and-white2):133 2:(setting0 and mono color Version) counter1-total1:101. counter2-total(black-and-white1):108. counter3-copy(full color + mono color/1):232. counter4-print(full color + mono color/1):324. counter5-total(mono color/1):118 3:counter1-total1:101. counter2-total(full color + mono color/small):123. counter3-total(full color + mono color/large):122. counter4-total(black-and-white/small):113. counter5-total(black-and-white/large):112. counter6-scan(total1):501 4:(setting3 and mono color Version) counter1-total1:101. counter2-total(full color + mono co	1
BCNT-AST	Used to select a job type with which to count BOX print from ASSIST. Setting values 0: Count as PDL print [Factory default/After RAM clear] 1: Count as Copy print	1
DFLT-CPY	Sets default COPY colour mode. Setting values 0: AUTO/ACS/Driver setting 1: Full colour 2: Black and white JPN [Factory settings and after RAM clear: 0] USA [Factory settings and after RAM clear: 0] EUR [Factory settings and after RAM clear: 0] Other than the above: [Factory settings and after RAM clear:0]	1
DFLT-BOX	Sets BOX default mode Setting range 0: AUTO/ACS/Driver settings 1: Full colour 2: Black and white JPN [Factory settings and after RAM clear:: 0] USA [Factory settings and after RAM clear:: 0] EUR [Factory settings and after RAM clear:: 0] Other than the above: [Factory settings and after RAM clear: 0]	1
DOC-REM	Sets document removal message. Setting range 0: No display 1: Display [Factory settings and after RAM clear: 0]	1
COUNTER7	Selects type of counter to be displayed in user mode counter 7. Enter values to make setting. The setting will be for the seventh counter displayed in the user mode counter confirmation. [Factory settings and after RAM clear: 0 (No setting)]	1
COUNTER8	Selects type of counter to be displayed in user mode counter 8. Enter values to make setting. The setting will be for the eighth counter displayed in the user mode counter confirmation. [Factory settings and after RAM clear: 0 (No setting)]	1

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Specification selection related to user mode		
Sub item	**Description**	**level.**
LDAP-SW	Sets LDAP search conditions. Sets conditions to be matched when searching from email addresses and fax numbers from the LDAP server. Setting values 0: 'includes' 1: 'does not include' 2: 'is equal to' 3: 'is not equal to' 4: 'begins with' 5: 'ends with' [Factory settings and after RAM clear: 4]	1
FROM-OF	Sets whether to delete 'from' address when sending mail. Setting values 0: Do not delete 'from' address. 1: Delete 'from'. [Factory settings and after RAM clear: 0]	1
SPEAKER	Sets text-to-speech (user mode) 'Speaker/ Headphones' button display. Setting values 0: Do not display 'Speaker/ Headphones' button. 1: Display 'Speaker/ Headphones' button. [Factory settings and after RAM clear:: 0]	1
FILE-OF	Sets file address transmission prohibition. This setting prohibits transmission to a file address by prohibiting file address entry into the address book. Setting values 0: Do not prohibit transmission to file address. 1: Prohibit transmission to file address. [Factory settings and after RAM clear: 0]	1
MAIL-OF	Sets email address transmission prohibition. This setting prohibits transmission to an email address by prohibiting email address entry into the address book. Setting values 0: Do not prohibit transmission to email address. 1: Prohibit transmission to email address. [Factory settings and after RAM clear: 0]	1
IFAX-OF	Sets IFAX address transmission prohibition. This setting prohibits transmission to an IFAX address by prohibiting IFAX address entry into the address book. Setting values 0: Do not prohibit transmission to IFAX address. 1: Prohibit transmission to IFAX address. [Factory settings and after RAM clear: 0]	1
LDAP-DEF	Switches LDAP search condition defaults. Sets default search attributes when LDAP detailed search is selected. Setting values 0: 'Name' 1: 'Email' 2: 'Fax' 3: 'Organisation' 4: 'Unit' 5: User setting 1 6: User setting 2 [Factory settings and after RAM clear: 0]	1
ACS-DSP	ACS ON/OFF screen display switching This selects whether to display the switches to be used for selecting or not selecting automatic color with initial settings/ registration. When a CL series machine is installed, the service technician ensures that the screen, on which to select whether to use ACS, is displayed in initial settings/registration if this is requested by the user. **Reference:** Initial settings/registration has been created to meet user demand to prevent fees from being charged for color because ACS is set when the charging system is installed even in cases where such fees do not apply. This item also selects whether the above screen is to be displayed. Settings 0: Not displayed. 1: Displayed. [Factory setting/value after clearing RAM: 0]	2
SIZE-DET	Sets document size detection function ON/ OFF. When the pressure plate opens and closes, there is no light flashing, so extraneous light can be cut out. Setting values 0: OFF 1: ON [Factory settings and after RAM clear: 1] 2	2
DATE-DSP	Used to switch date display. 0: 'YYMM/DD 1: DD/MM'YY 2: MM/DD/YY	2
MB-CCV	Used to select whether to restrict mailbox control card users. 0: Don't restrict 1: Restrict	2
TRY-STP	Used to set mode in which output stops when tray is full. 0: Normal mode (Interrupted when finisher tray is full.) 1: Interrupted only by height detection	2
MF-LG-ST	Sets long length mode key. Setting values 0: Normal setting 1: Display long length key in mode screen. [Factory settings and after RAM clear: 0]	2

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Specification selection related to user mode		
Sub item	**Description**	**level.**
CNT-DISP	Used to select whether to display serial number when counter check key is pressed. 0: Display serial number. 1: Don't display serial number.	2
NW-SCAN	Used to select whether to permit network scan function 0: Don't permit 1: Permit (Invalid when UFR board or open interface board isn't connected.)	2
HDCR-DSP	Selection of clear method in hard disk all data erasure mode This selects the method clearing the data in the hard disk all data erasure mode. Settings 1: Cleared once using 0 (null) data. 2: Cleared once using random data. 3: Cleared 3 times using random data. [Factory setting/value after clearing RAM: 1] **MEMO:** Hard disk all data erasure function This function overwrites the 0 (null) data and random data in the file data area on the hard disk at the logical timing of erasing the files (the timing at which the control information data is erased), and it thereby erases all the data on the hard disk.	2
JOB-INVL	Used to set job interval during interrupt. 0: Standard setting (Output next job continuously during interrupt copy job.) 1: Start output of next job after last sheet of interrupt copy job has been delivered. 2: Start output of next job after last sheet of any job has been delivered.	2
P-CRG-LF	Used to select operation performed when drum unit has reached end of service life. 0: Don't stop 1: Stop	2
PCL-COPY	PCL COPIES command binder control mode The PCL COPIES command control method differs between the PCLs made in-house and the PCLs made by sources outside the company, and it is for the purpose of standardizing the operations of both kinds of PCLs that this mode has been provided. Settings 0: Control is exercised on a page by page basis as per the COPIES command value specified on the page concerned. 1: The COPIES command value specified on page 1 is treated as the binding number, and the COPIES command values on the next and subsequent pages are canceled. (This is set only when the sort mode is established. In a non-sorting mode, the same control is exercised as when "0" is set.) 2 to 65535: Spare [Factory setting/value after clearing RAM: 0] "0" is the control method applicable to in-house PCLs, and by setting the item to "1", the same control method as used with PCLs made by sources outside the company is exercised.	2
PRJOB-CP	Setting for selecting whether to output the count pulses during reception printing and report printing This selects whether to output the count pulse notice for each page during reception printing and report printing to the charge management system when a charge management system (coin vendor or control card made by another company) is used. Settings 0: The count pulses are not output. 1: The count pulses are output. [Factory setting/value after clearing RAM: 0]	2
DPT-ID-7	Registering a department ID and inputting a 7-digit code for authentication. Setting Values 0: As before [Factory default/After RAM clear] 1: Inputting a 7-digit code Reference Infomation Support for Siemens	2
RUI-RJT	Disconnecting the HTTP port when three authentication failures from RUI are recognized. Setting Values 0: Invalid [Factory default/After RAM clear] 1: Valid Reference Information Support for Siemens	2
SND-RATE	Sets compression rate when compression rate in SEND is selected 'High'. Setting values 0: Compression rate 1/16 1: Compression rate 1/20 2: Compression rate 1/24 [Factory settings and after RAM clear: 0]	2
CTM-S06	Setting for deleting password from export file of file transmission address Settings 0: The password is not deleted. 1: The password is deleted. [Factory setting/value after clearing RAM: 0] When this item is set to "1," the password of the file transmission destination is deleted from the export file when the address book data has been exported from the remote UI. (This is to prevent information leaks.)	2
FREG-SW	Selection of whether to display the free register area of the MEAP counter (for SEND) Settings 0: The free register area is not displayed. 1: The free register area is displayed. [Factory setting/value after clearing RAM: 0] Memo: - This is not used with normal servicing. (It is used for analyzing trouble causes). - To use it, the instructions given by the quality support division must be followed.	2

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Specification selection related to user mode		
Sub item	**Description**	**level.**
IFAX-SZL	Selection of whether to restrict the transmission data size during IFAX transmission This selects whether to restrict the transmission data size during IFAX transmission (but only when the transmissions do not go through the server). Settings 0: The transmission data size is restricted (whether or not the transmissions go through the server). 1: The transmission data size is not restricted (only when the transmissions do not go through the server). [Factory setting/value after clearing RAM: 1] Memo: When the item has been set to "0" - The upper limit is set by user mode > system control settings > communication control settings > email/I-FAX settings > upper limit of transmission data size. - The #830 error results when an attempt is made to send data whose size exceeds the upper limit.	2
IFAX-PGD	Permitting the divided transmission per page (only when the upper limit of the transmission data size is exceeded). Settings 0: Not permit the divided transmission per page upon transmission in the IFAX Simple mode. [Factory default/After RAM clear] 1: Permits the divided transmission per page upon transmission in the IFAX Simple mode. When setting '1', in the case of exporting the address book data from remote UI, the password of file server is hidden from the exported file (to avoid leakage of information).	2
MEAPSAFE	Switching to MEAP safe mode Settings 0: Normal mode 1: Safe mode [Factory setting/value after clearing RAM: 0] The safe mode refers to the mode in which the system is started up safely by stopping the added MEAP applications and starting only the system application which is to be started in the initial status. Set the item to "1" to start the system in the safe mode when system recovery is to be initiated in cases where the MEAP platform does not start up normally due to contention for resources between MEAP applications or to service registration/utilization sequence, for example. When the safe mode is established, "MPS" is displayed on the control unit screen.	2
TRAY-FLL	Setting the timing to issue an output-tray-full warning. Settings 0: Issues an output-tray-full warning when all the delivery trays become full. [Factory default/After RAM clear] 1: Issues an output-tray-full warning when all the specified trays become full.	2
PRNT-POS	Switch for selecting whether to temporarily stop the printing of all subsequent jobs when a job is canceled because an error has occurred This temporarily stops the PDL printing of all the jobs when job cancel (such as #037) has occurred due to an error inside the equipment at any time other than a service call. Settings 0: The printing of all jobs is not temporarily stopped. 1: The printing of all jobs is temporarily stopped. [Factory setting/value after clearing RAM: 0]	2
AFN-PSWD	Limiting access to the User Mode. Settings 0: Normal mode (Enters the User Mode without asking a password) [Factory default/After RAM clear] 1: Enters the User Mode after a password matches.	2
PTJAM-RC	PDL jam recovery switch Sets whether to perform recovery print when there is a jam in a PDL job. Setting values 0: OFF (No recovery) 1: ON (Recovery) [Factory settings and after RAM clear: 1]	2
SLP-SLCT	Switch for selecting use of network-based application The machine must receive a specific packet in order for it to recover from sleep mode 3 via the network. The existing network-based application (NetSpot Accountant or imageWARE) that supports BW2/CL1 does not send this packet so if the machine has been transferred to sleep mode 3 (2w sleep), it cannot recover via the network. When this item is set to "1," the machine is not transferred to sleep mode 3 (2w sleep), and recovery from the sleep mode via the network is enabled, but there is a tradeoff in that the power consumption is increased. Settings 0: The network-based application is not used (the machine is set to the 2w sleep mode). 1: The network-based application is used (the machine is not set to the 2w sleep mode). [Factory setting/value after clearing RAM: 0] Memo This is not used with normal servicing.	2
PS-MODE	Selection of compatible mode when PS is used (image processing, print specifications) This selects the machine control when backward compatibility is required by PS. It is a mode which maintains compatibility in the image processing and print specifications in the face of possible replacement. Settings 0: The PS-compatible mode is not used. 1: Backward compatibility with PS Type3 Halftone command (dithering increase sequence reversed) [Factory setting/value after clearing RAM: 0]	2

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Specification selection related to user mode		
Sub item	**Description**	**level.**
CNCT-RLZ	Connection serializing function ON/OFF This selects whether to use the connection serializing function. Settings 0: Connection serializing function OFF 1: Connection serializing function ON [Factory setting/value after clearing RAM: 0] **Reference:** - Connection serializing function This function serves to guarantee the job grouping function of imageWARE Output Manager Select Edition V1.0. Since iR machines and other MFP machines support multiple connections, the job grouping function is guaranteed by establishing in the machine a setting which will not accept multiple connections. When this item is set to "1," until the reception of the job data of a particular connection is completed, the job data of another connection will not be received, thereby preventing the rearranging of jobs. - Connection This refers to a connection which is established through the network between a multiple number of hosts (such as PCs). - Job grouping function This is a function of imageWARE Output Manager Select Edition V1.0. It	2
2C-CT-SW	Colour counter (restricted to two colour mode) switch In 2 colour mode, switches the incremental counter between full colour and mono-colour. Setting values 0: Mono-colour counter 1: Full colour counter [Factory settings and after RAM clear: 1]	2
JA-FUNC	Job archive function ON/OFF 0: OFF 1: ON [Factory setting/value after clearing RAM: 0]	2
JA-JOB	Specification of jobs targeted for job archive 0: None 3: Limited to FAX/IFAX 0xFFFFFFFF: All jobs [Factory setting/value after clearing RAM: 0]	2
JA-RESTR	Job archive restriction item setting Bit 0: Image file capture function (0: OFF, 1: ON) Bit 1: Form registration combination function (0: OFF, 1: ON) Bit 2: Document editing function (0: OFF, 1: ON) [Factory setting/value after clearing RAM: 0]	2
DOM-ADD	Sets domain complement for transmission destination when sending email. Sets whether to complement the domain (e.g. @canon.co.jp) programmed in the user mode to the entered account when transmitting email. Setting values 0: Do not complement Tx destination domain. 1: Complement Tx destination domain. [Factory settings and after RAM clear: 0]	2
JA-DPI	Specifies job archive record resolution. For jobs other than PC-FAX, FAX Rx, IFAX Rx, etc., the resolution is converted to the programmed resolution and an archive image is recorded. *The settings cannot be changed in service mode, but only referenced. Settings can only be made from a job archive-enabled MEAP programme. Setting values 0 : No not convert resolution. 1: 100 x 100 dpi 2: 200 x 200 dpi 3: 300 x 300 dpi [Factory settings and after RAM clear: 3]	2
JA-COMPR	Specifies job archive record compression rate. For jobs other than PC-FAX, FAX Rx, IFAX Rx, etc., the compression rate is converted to the programmed compression rate and an archive image is recorded. Setting values 0: Do not convert compression rate (use same compression table as original image). 1: 1/4 compression 2: 1/8 compression 3: 1/16 compression 4: 1/32 compression 5: 1/64 compression [Factory settings and after RAM clear: 3]	2
PDL-NCSW	Print job card control mode setting This targets the PDL print jobs to be controlled using NewCard. Settings 0: PDL print jobs are accepted and output by the machine regardless of whether NewCard has been inserted. 1: PDL jobs are not printed if NewCard is not inserted and the division ID does not match. PDL jobs are printed if NewCard is inserted and the division ID of the jobs matches the card ID. [Factory setting/value after clearing RAM: 0]	2

COPIER>OPTION>USER		
Specification selection related to user mode		
Sub item	**Description**	**level.**
FREE-DSP	Charge cancel screen display switching If the unit is operated using a charging system, a mode (store manager mode) is provided for releasing the charging status temporarily and enabling all the services to be used free of charge. This mode can be switched under a hardware switch of the vendor. However, since some vendors do not have a hardware switch, this service mode makes it possible to display a switching screen at initial settings/registration. **Reference:** The service technician uses this item to display the charged/not charged mode switching screen in the user mode if a vendor without a hardware switch for selecting the charged/not charged mode has been connected when the charging system is installed. Settings 0: Screen is not displayed. 1: Screen is displayed. [Factory setting/value after clearing RAM: 0]	2
CLR-TM	All processing data erase timing This selects the timing at which all the data is to be erased in the security kit. When erasing all the data, the job processing performance may deteriorate depending on the data erased. The reason for this is as follows: since the already processed page data is erased in parallel while jobs are being processed, an extra burden is placed on the CPU and hard disk access process. The job processing capability can be improved by delaying this process until after the job has been completed. Settings 0: The data is erased while the job is being processed. 1: The data is erased after the job has been completed. [Factory setting/value after clearing RAM: 0]	2
JA-FORMT	Image format during job archive recording This selects the image format during job archive recording. More specifically, it selects whether the images handled as PacketJPEG are to be recorded as PacketJPEG or converted into RasterJPEG and recorded. **MEMO:** This item can be set only from a MEAP application which supports job archives. Its setting cannot be changed from the service mode. It can only be referenced. It is used when checking the unit settings. Settings 0: PacketJPEG for a unit that supports PacketJPEG 1: RasterJPEG [Factory setting/value after clearing RAM: 0]	2

The numbers entered for software counters are classified as follows:

100 to 199: Total	500 to 599: Scans
200 to 299: Copies	600 to 699: Box prints
300 to 399: Prints	700 to 799: Received prints
400 to 499: Copies + prints	800 to 899: Report prints

- Meanings of symbols in tables -
- yes: Valid counter for copier
- 4C: Full-color
- Mono: Monocolor (Y, M, C/R, G, B/retro-style monochrome)
- Bk: Black only
- L: Large size (paper larger than B4 size)
- S: Small size (B4 size and smaller paper)
- 1, 2 in "Counter description" Numbers of large size paper counts
  You can have B4 and larger paper sizes counted as large sizes by selecting the COPIER > OPTION > USER > B4_L_CNT service mode item.
- Copies: Local copies + remote copies
- Copies A: Local copies + remote copies + box prints
- Prints: PDL prints + report prints + box prints
- Prints A: PDL prints + report prints
- Scans: Black and white scans + color scans

T-17-56

Compatibility	**No.**	**Counter description**
	000	No display
yes	101	Total 1
yes	102	Total 2
yes	103	Total (large)
yes	104	Total (small)
yes	105	Total (full-color 1)
yes	106	Total (full-color 2)
yes	108	Total (black and white 1)
yes	109	Total (black and white 2)
yes	110	Total (monocolor/large)
yes	111	Total (monocolor/small)
yes	112	Total (black and white/large)
yes	113	Total (black and white/small)
yes	114	Total 1 (two-sided)
yes	115	Total 2 (two-sided)
yes	116	Large (two-sided)
yes	117	Small (two-sided)
yes	118	Total (monocolor 1)
yes	119	Total (monocolor 2)

Compatibility	No.	Counter description
yes	120	Total (full-color/large)
yes	121	Total (full-color/small)
yes	122	Total (full-color + monocolor/large)
yes	123	Total (full-color + monocolor/small)
yes	124	Total (full-color + monocolor 2)
yes	125	Total (full-color + monocolor 1)
yes	201	Copies (total 1)
yes	202	Copies (total 2)
yes	203	Copies (large)
yes	204	Copies (small)
yes	205	Copies A (total 1)
yes	206	Copies A (total 2)
yes	207	Copies A (large)
yes	208	Copies A (small)
yes	209	Local copies (total 1)
yes	210	Local copies (total 2)
yes	211	Local copies (large)
yes	212	Local copies (small)
yes	213	Remote copies (total 1)
yes	214	Remote copies (total 2)
yes	215	Remote copies (large)
yes	216	Remote copies (small)
yes	217	Copies (full-color 1)
yes	218	Copies (full-color 2)
yes	219	Copies (monocolor 1)
yes	220	Copies (monocolor 2)
yes	221	Copies (black and white 1)
yes	222	Copies (black and white 2)
yes	223	Copies (full-color/large)
yes	224	Copies (full-color/small)
yes	225	Copies (monocolor/large)
yes	226	Copies (monocolor/small)
yes	227	Copies (black and white/large)
yes	228	Copies (black and white/small)
yes	229	Copies (full-color + monocolor/large)
yes	230	Copies (full-color + monocolor/small)
yes	231	Copies (full-color + monocolor/2)
yes	232	Copies (full-color + monocolor/1)
yes	233	Copies (full-color/large/two-sided)
yes	234	Copies (full-color/small/two-sided)
yes	235	Copies (monocolor/large/two-sided)
yes	236	Copies (monocolor/small/two-sided)
yes	237	Copies (black and white/large/two-sided)
yes	238	Copies (black and white/small/two-sided)
yes	245	Copies A (full-color 1)
yes	246	Copies A (full-color 2)
yes	247	Copies A (monocolor 1)
yes	248	Copies A (monocolor 2)
yes	249	Copies A (black and white 1)
yes	250	Copies A (black and white 2)
yes	251	Copies A (full-color/large)
yes	252	Copies A (full-color/small)
yes	253	Copies A (monocolor/large)
yes	254	Copies A (monocolor/small)
yes	255	Copies A (black and white/large)
yes	256	Copies A (black and white/small)
yes	257	Copies A (full-color + mono-color/large)
yes	258	Copies A (full-color + mono-color/small)
yes	259	Copies A (full-color + mono-color 2)
yes	260	Copies A (full-color + mono-color 1)
yes	261	Copies A (full-color/large/two-sided)
yes	262	Copies A (full-color/small/two-sided)
yes	263	Copies A (monocolor/large/two-sided)
yes	264	Copies A (monocolor/small/two-sided)
yes	265	Copies A (black and white/large/two-sided)
yes	266	Copies A (black and white/small/two-sided)

Compatibility	No.	Counter description
yes	273	Local copies (full-color 1)
yes	274	Local copies (full-color 2)
yes	275	Local copies (monocolor 1)
yes	276	Local copies (monocolor 2)
yes	277	Local copies (black and white 1)
yes	278	Local copies (black and white 2)
yes	279	Local copies (full-color/large)
yes	280	Local copies (full-color/small)
yes	281	Local copies (monocolor/large)
yes	282	Local copies (monocolor/small)
yes	283	Local copies (black and white/large)
yes	284	Local copies (black and white/small)
yes	285	Local copies (full-color + mono-color/large)
yes	286	Local copies (full-color + mono-color/large)
yes	287	Local copies (full-color + mono-color 2)
yes	288	Local copies (full-color + mono-color 1)
yes	289	Local copies (full-color/large/two-sided)
yes	290	Local copies (full-color/small/two-sided)
yes	291	Local copies (monocolor/large/two-sided)
yes	292	Local copies (monocolor/small/two-sided)
yes	293	Local copies (black and white/large/two-sided)
yes	294	Local copies (black and white/small/two-sided)
yes	002	Remote copies (full-color 1)
yes	003	Remote copies (full-color 2)
yes	004	Remote copies (monocolor 1)
yes	005	Remote copies (monocolor 2)
yes	006	Remote copies (black and white 1)
yes	007	Remote copies (black and white 2)
yes	008	Remote copies (full-color/large)
yes	009	Remote copies (full-color/small)
yes	010	Remote copies (monocolor/large)
yes	011	Remote copies (monocolor/small)
yes	012	Remote copies (black and white/large)
yes	013	Remote copies (black and white/small)
yes	014	Remote copies (full-color + monocolor/large)
yes	015	Remote copies (full-color + monocolor/small)
yes	016	Remote copies (full-color + monocolor 2)
yes	017	Remote copies (full-color + monocolor 1)
yes	018	Remote copies (full-color/large/two-sided)
yes	019	Remote copies (full-color/small/two-sided)
yes	020	Remote copies (monocolor/large/two-sided)
yes	021	Remote copies (monocolor/small/two-sided)
yes	022	Remote copies (black and white/large/two-sided)
yes	023	Remote copies (black and white/small/two-sided)
yes	301	Prints (total 1)
yes	302	Prints (total 2)
yes	303	Prints (large)
yes	304	Prints (small)
yes	305	Prints A (total 1)
yes	306	Prints A (total 2)
yes	307	Prints A (large)
yes	308	Prints A (small)
yes	309	Prints (full-color 1)
yes	310	Prints (full-color 2)
yes	311	Prints (monocolor 1)
yes	312	Prints (monocolor 2)
yes	313	Prints (black and white 1)
yes	314	Prints (black and white 2)
yes	315	Prints (full-color/large)
yes	316	Prints (full-color/small)
yes	317	Prints (monocolor/large)
yes	318	Prints (monocolor/small)
yes	319	Prints (black and white/large)
yes	320	Prints (black and white/small)
yes	321	Prints (full-color + monocolor/large)
yes	322	Prints (full-color + monocolor/small)

Compatibility	No.	Counter description
yes	323	Prints (full-color + monocolor/2)
yes	324	Prints (full-color + monocolor/1)
yes	325	Prints (full-color/large/two-sided)
yes	326	Prints (full-color/small/two-sided)
yes	327	Prints (monocolor/large/two-sided)
yes	328	Prints (monocolor/small/two-sided)
yes	329	Prints (black and white/large/two-sided)
yes	330	Prints (black and white/small/two-sided)
yes	331	PDL prints (total 1)
yes	332	PDL prints (total 2)
yes	333	PDL prints (large)
yes	334	PDL prints (small)
yes	335	PDL prints (full-color 1)
yes	336	PDL prints (full-color 2)
yes	339	PDL prints (black and white 1)
yes	340	PDL prints (black and white 2)
yes	341	PDL prints (full-color/large)
yes	342	PDL prints (full-color/small)
yes	345	PDL prints (black and white/large)
yes	346	PDL prints (black and white/small)
yes	351	PDL prints (full-color/large/two-sided)
yes	352	PDL prints (full-color/small/two-sided)
yes	355	PDL prints (black and white/large/two-sided)
yes	356	PDL prints (black and white/small/two-sided)
yes	401	Copies + prints (full-color/large)
yes	402	Copies + prints (full-color/small)
yes	403	Copies + prints (black and white/large)
yes	404	Copies + prints (black and white/small)
yes	405	Copies + prints (black and white 2)
yes	406	Copies + prints (black and white 1)
yes	407	Copies + prints (full-color + monocolor/large)
yes	408	Copies + prints (full-color + monocolor/small)
yes	409	Copies + prints (full-color + monocolor/2)
yes	410	Copies + prints (full-color + monocolor/1)
yes	411	Copies + prints (large)
yes	412	Copies + prints (small)
yes	413	Copies + prints (2)
yes	414	Copies + prints (1)
yes	415	Copies + prints (monocolor/large)
yes	416	Copies + prints (monocolor/small)
yes	417	Copies + prints (full-color/large/two-sided)
yes	418	Copies + prints (full-color/small/two-sided)
yes	419	Copies + prints (monocolor/large/two-sided)
yes	420	Copies + prints (monocolor/small/two-sided)
yes	421	Copies + prints (black and white/large/two-sided)
yes	422	Copies + prints (black and white/small/two-sided)
yes	501	Scans (total 1)
-	502	Scans (total 2)
-	503	Scans (large)
-	504	Scans (small)
yes	505	Black and white scans (total 1)
-	506	Black and white scans (total 2)
-	507	Black and white scans (large)
-	508	Black and white scans (small)
yes	509	Color scans (total 1)
-	510	Color scans (total 2)
-	511	Color scans (large)
-	512	Color scans (small)
yes	601	Box prints (total 1)
yes	602	Box prints (total 2)
yes	603	Box prints (large)
yes	604	Box prints (small)
yes	605	Box prints (full-color 1)
yes	606	Box prints (full-color 2)
yes	607	Box prints (monocolor 1)
yes	608	Box prints (monocolor 2)

Compatibility	No.	Counter description
yes	609	Box prints (black and white 1)
yes	610	Box prints (black and white 2)
yes	611	Box prints (full-color/large)
yes	612	Box prints (full-color/small)
yes	613	Box prints (monocolor/large)
yes	614	Box prints (monocolor/small)
yes	615	Box prints (black and white/large)
yes	616	Box prints (black and white/small)
yes	617	Box prints (full-color + monocolor/large)
yes	618	Box prints (full-color + monocolor/small)
yes	619	Box prints (full-color + monocolor 2)
yes	620	Box prints (full-color + monocolor 1)
yes	621	Box prints (full-color/large/two-sided)
yes	622	Box prints (full-color/small/two-sided)
yes	623	Box prints (monocolor/large/two-sided)
yes	624	Box prints (monocolor/small/two-sided)
yes	625	Box prints (black and white/large/two-sided)
yes	626	Box prints (black and white/small/two-sided)
yes	701	Received prints (total 1)
yes	702	Received prints (total 2)
yes	703	Received prints (large)
yes	704	Received prints (small)
-	705	Received prints (full-color 1)
-	706	Received prints (full-color 2)
-	707	Received prints (gray scale 1)
-	708	Received prints (gray scale 2)
yes	709	eceived prints (black and white 1)
yes	710	Received prints (black and white 2)
-	711	Received prints (full-color/large)
-	712	Received prints (full-color/small)
-	713	Received prints (gray scale/large)
-	714	Received prints (gray scale/small)
yes	715	Received prints (black and white/large)
yes	716	Received prints (black and white/small)
-	717	Received prints (full-color + gray scale/large)
-	718	Received prints (full-color + gray scale/small)
-	719	Received prints (full-color + gray scale 2)
-	720	Received prints (full-color + gray scale 1)
-	721	Received prints (full-color/large/two-sided)
-	722	Received prints (full-color/small/two-sided)
-	723	Received prints (gray scale/large/two-sided)
-	724	Received prints (gray scale/small/two-sided)
yes	725	Received prints (black and white/large/two-sided)
yes	726	Received prints (black and white/small/two-sided)
yes	801	Report prints (total 1)
yes	802	Report prints (total 2)
yes	803	Report prints (large)
yes	804	Report prints (small)
-	805	Report prints (full-color 1)
-	806	Report prints (full-color 2)
-	807	Report prints (gray scale 1)
-	808	Report prints (gray scale 2)
yes	809	Report prints (black and white 1)
yes	810	Report prints (black and white 2)
-	811	Report prints (full-color/large)
-	812	Report prints (full-color/small)
-	813	Report prints (gray scale/large)
-	814	Report prints (gray scale/small)
yes	815	Report prints (black and white/large)
yes	816	Report prints (black and white/small)
-	817	Report prints (full-color + gray scale/large)
-	818	Report prints (full-color + gray scale/small)
-	819	Report prints (full-color + gray scale 2)
-	820	Report prints (full-color + gray scale 1)
-	821	Report prints (full-color/large/two-sided)
-	822	Report prints (full-color/small/two-sided)

Compatibility	No.	Counter description
-	823	Report prints (gray scale/large/two-sided)
-	824	Report prints (gray scale/small/two-sided)
yes	825	Report prints (black and white/large/two-sided)
yes	826	Report prints (black and white/small/two-sided)
-	901	Copy scan total 1 (color)
-	902	Copy scan total 1 (black and white)
-	903	Copy scan total 2 (color)
-	904	Copy scan total 2 (black and white)
-	905	Copy scan total 3 (color)
-	906	Copy scan total 3 (black and white)
-	907	Copy scan total 4 (color)
-	908	Copy scan total 4 (black and white)
-	909	Local copy scans (color)
-	910	Local copy scans (black and white)
-	911	Remote copy scans (color)
-	912	Remote copy scans (black and white)
-	913	Sent scan total 1 (color)
-	914	Sent scan total 1 (black and white)
yes	915	Sent scan total 2 (color)
yes	916	Sent scan total 2 (black and white)
yes	917	Sent scan total 3 (color)
yes	918	Sent scan total 3 (black and white)
-	919	Sent scan total 4 (color)
-	920	Sent scan total 4 (black and white)
yes	921	Sent scan total 5 (color)
yes	922	Sent scan total 5 (black and white)
yes	929	Sent scan total 6 (color)
yes	930	Sent scan total 6 (black and white)
-	931	Sent scan total 7 (color)
-	932	Sent scan total 7 (black and white)
-	933	Sent scan total 8 (color)
-	934	Sent scan total 8 (black and white)
-	935	Universal sent scan total (color)
-	936	Universal sent scan total (black and white)
yes	937	Box scans (color)
yes	938	Box scans (black and white)
yes	939	Remote scans (color)
yes	940	Remote scans (black and white)
-	941	Sent scans/faxes (color)
-	942	Sent scans/faxes (black and white)
-	943	Sent scans/I faxes (color)
-	944	Sent scans/I faxes (black and white)
yes	945	Sent scans/e-mails (color)
yes	946	Sent scans/e-mails (black and white)
-	947	Sent scans/FTP (color)
-	948	Sent scans/FTP (black and white)
-	949	Sent scans/SMB (color)
-	950	Sent scans/SMB (black and white)
-	951	Sent scans/IPX (color)
-	952	Sent scans/IPX (black and white)
-	953	Sent scans/databases (color)
-	954	Sent scans/databases (black and white)
-	955	Sent scans/local prints (color)
-	956	Sent scans/local prints (black and white)
-	957	Sent scans/box (color)
-	958	Sent scans/box (black and white)

3. CST

T-17-57

COPIER>OPTION>CST		
Sub item	**Description**	**level.**
ENV1	Envelope cassette ENV1 registration This specifies the size of the envelope cassette. Settings 21: ISO-C5 22: COM10 23: MONARCH 24: DL 25: ISO-B5 26: Western standard No.4 [Factory setting/value after clearing RAM: 21]	
ENV2	Envelope cassette ENV2 registration This specifies the size of the envelope cassette. Settings 21: ISO-C5 22: COM10 23: MONARCH 24: DL 25: ISO-B5 26: Western standard No.4 [Factory setting/value after clearing RAM: 21]	
U1-NAME	Used to turn paper name display when U1 paper size group is detected ON/OFF. 0: Display "U1" on touch panel (default). 1: Display paper name set by "CST-U1" service mode item.	2
U2-NAME	Used to turn paper name display when U2 paper size group is detected ON/OFF. 0: Display "U2" on touch panel (default). 1: Display paper name set by "CST-U2" service mode item.	2
CST-U1/U2	Used to specify paper name used by U1/U2 paper size group. 24: FOOLSCAP 25: Australian FOOLSCAP 26: OFFICIO 27: Ecuador OFFICIO 28: Bolivia OFFICIO 29: Argentine LETTER 30: Argentine LETTER-R 31: Government LETTER 32: Government LETTER-R 34: Government LEGAL 35: FOLIO 36: Argentine OFFICIO 37: Mexico OFFICIO 38: EXECTIVE [CST-U1 Factory default/After RAM clear: 31] [CST-U2 Factory default/After RAM clear: 24]	
U3-NAME	ON/OFF of paper name display when paper size group (U3) has been detected This selects whether to display the paper name of the U3 size cassette on the LCD control unit. Settings 0: "U3" is displayed on the touch panel (default setting). 1: The name of the paper set by service mode "CST-U3" is displayed. [Factory setting/value after clearing RAM: 0]	
U4-NAME	ON/OFF of paper name display when paper size group (U4) has been detected This selects whether to display the paper name of the U4 size cassette on the LCD control unit. Settings 0: "U4" is displayed on the touch panel (default setting). 1: The name of the paper set by service mode "CST-U4" is displayed. [Factory setting/value after clearing RAM: 0]	
CST-U3/U4	Specification of paper name used by paper size group By setting the following special sheet sizes in U1 and U2, the U1 and U2 sheet sizes can be handled as special sheet sizes by the universal cassettes. Settings 24: Foolscap 25: Australian foolscap 26: Officio 27: Ecuador officio 28: Bolivia officio 29: Argentina letter 30: Argentina letter-R 31: Government letter 32: Government letter-R 34: Government legal 35: Folio 36: Argentina officio 37: Mexico officio 38: Executive [U3 factory setting/value after clearing RAM: 34] [U4 factory setting/value after clearing RAM: 29]	2

4. ACC

T-17-58

COPIER>OPTION>ACC		
Sub item	**Description**	**level.**
COIN	Coin vendor switching This selects whether to establish the coin vendor control mode. Settings 0: Coin vendor not used (control cards can be used; not charged) 1: Coin vendor (charged) 2: Remote area counter (charged) 3: Charged by DA 4: Charged by iR [Factory setting/value after clearing RAM: 0] Note: When the setting has been changed to "3" (DA charges), the values of the following items will also be changed. [Service mode] - COPIER>OPTION>USER>CONTROL:1 - COPIER>OPTION>USER>AFN-PSWD:1 - COPIER>OPTION>BODY>UI-BOX:0 - COPIER>OPTION>BODY>UI-SEND:0 - COPIER>OPTION>BODY>UI-FAX:0 - COPIER>OPTION>BODY>UI-EXT:0 - COPIER>OPTION>BODY>DA-CNCT:1 [User mode > system control settings] - Expansion unit settings > expansion unit function priority: ON - Network settings > email > I fax > SMTP reception: OFF - Network settings > email > I fax > POP3 reception: OFF - Network settings > SMB settings > use of SMB printing: 0 - Network settings > TCP/IP settings > use of IPP printing: 0 - Network settings > TCP/IP settings > IP address range setting > printing enable address ON/OFF: ON Network settings > TCP/IP settings > use of FTP printing: OFF	1
DK-P	Used to set paper size used by paper deck (option). Setting values 0: A4 [Factory default/After RAM clear] 1: B5 2: LTR	1
CARD-SW	Used to select UI screen when coin vendor is supported. Setting values 0: Coin [Factory default/After RAM clear] 1: Card 2: Coin + card	1
USB-MSK	Limiting the number of USB-HOST channels on the models with the USB-HOST installed. Setting values 0 to 2 The relevant channels of the USB-HOST are masked (deactivated). (e.g.) When there are two channels of CH0 and CH1, 0: Not mask any channel. 1: Masks CH1. 2: Reserved	1
OUT-TRAY	No.3 delivery tray availability This is mainly used when the No.2 or No.3 delivery unit is installed. It is set to "1" when the No.3 delivery unit is installed. Settings 0: Not available 1: Available [Factory setting/value after clearing RAM: 0]	1
IN-TRAY	Inner delivery tray availability This sets the availability of the No.2 delivery tray. It is set to "1" when the No.2 delivery tray is available. Settings 0: Not available 1: Available [Factory setting/value after clearing RAM: 0]	1
MIN-PRC	Coin manager minimum value setting This determines the minimum value handled by the coin manager which is connected. For instance, the service technician inputs "10" if the minimum value supported by the Japanese yen coin manager is 10 yen. This item takes effect only when 4 is set for ACC>COIN. Additional note When a number from 1 to 4 (Euros, pounds, Swiss francs, dollars) is set for COPIER>OPTION>ACC>UNIT-PRC, a fractional monetary unit can be input. For instance, an input of "50" signifies 50 cents ($0.50). Setting range: 0 to 9999 [Factory setting/value after clearing RAM: 10]	1
MAX-PRC	Coin manager maximum value setting This determines the maximum value handled by the coin manager which is connected. An error screen is displayed if a value lower than the smallest unit is input when inputting the charge amount using initial settings/registration. For instance, the service technician inputs "8900" if the maximum value supported by the Japanese yen coin manager is 8900 yen. This item takes effect only when 4 is set for ACC>COIN. Additional note When a number from 1 to 4 (Euros, pounds, Swiss francs, dollars) is set for COPIER>OPTION>ACC>UNIT-PRC, a fractional monetary unit can be input. For instance, an input of "50" signifies 50 cents ($0.50). Setting range: 0 to 9999 [Factory setting/value after clearing RAM: 0]	1

COPIER>OPTION>ACC		
Sub item	**Description**	**level.**
MIC-TUN	Manual tuning of microphone used for voice recognition This allows the audio intake level sensitivity to be adjusted manually for the input device connected by the user. This item is operated and the adjustment made if the sensitivity of the microphone is not increased enough with automatic tuning. **Reference:** See below for automatic tuning. Initial settings/registration > system control > voice control settings > microphone tuning Setting range: 0 to 255 [Factory setting/value after clearing RAM: 128]	1
STPL-LMT *1	Used to restrict number of sheets for saddle binding. 0: 5 sheets (no white band) 1: 10 sheets (no white band) 2: 10 sheets (white band) 3: 15 sheets (no white band) [Factory default/After RAM clear]	2
SC-TYPE	Used to switch type of coin vendor-compatible model Whenever possible, avoid using this setting during normal operation.	2
CC-SPSW	use it to enable/disable support of the switch in relation to the support level of the control guard I/F 0: do not support [Factory default/After RAM clear] 1: support (priority on speed) 2: support (priority on upper limit on number of prints) **Reference:** negative effects of '1' - the machine may fail to use an accurate stop based on the upper limit negative effects of '2' - some source of power (pickup assembly) may suffer a drop in productivity	2
UNIT-PRC	Setting of unit prices handled by coin vendor Settings 0: Japanese yen 1: Euros 2: Pounds 3: Swiss francs 4: Dollars 5: No unit, no fractional monetary unit provided 6: No unit, fractional monetary unit provided [Factory setting/value after clearing RAM: 0]	2
DA-PUCT	Sheet feed/delivery communication setting with DA charges This mode prevents the kind of trouble where iR continues to output the sheet feed notification and prints continue to be made free of charge even when there is something wrong with the sheet feed/delivery notification because of trouble in the network. No sheets are fed if the difference between the number of times iR has given sheet feed notification and the number of sheets for which sheet feed acknowledge is returned from DA during sheet feed/delivery communication between iR and DA is higher than this item's setting. If this item is set too low, a poor engine performance results which is a disadvantage. Setting range: 2 to 10 [Factory setting/value after clearing RAM: 6]	2

5. INT-FACE

T-17-59

COPIER>OPTION>INT-FACE		
Sub item	**Description**	**level.**
IMG-CONT	Used to set connection to PS print server unit. Setting values 0: Normal mode (no PS print server unit) [Factory default] 1: Not used 2: Not used 3: PS print server unit 4: Not used 5: Not used **Attention:** When 1 is selected as the setting value, the following user mode items are restored to their initial values: - System management settings > Network settings > TCP/IP settings > IP address settings > IP address - System management settings > Network settings > TCP/IP settings > IP address settings > Sub-net mask - System management settings > Network settings > TCP/IP settings > IP address settings > Gateway address - System management settings > Network settings > Ethernet driver settings > Communication method - System management settings > Network settings > Ethernet driver settings > Ethernet type - System management settings > Network settings > Startup time - Common specifications settings The following user mode settings are turned OFF: - System management settings > Network settings > TCP/IP settings > IP address setting > DHCP use - System management settings > Network settings > TCP/IP settings > IP address settings > RARP use - System management settings > Network settings > TCP/IP settings > IP address settings > BOOTP use - System management settings > Network settings > Ethernet driver settings > Automatic detection - System management settings > Network settings > Spool function use When 3 or 4 is selected as the setting value, the following settings are turned OFF in addition to the items above. - System management settings > Network settings > TCP/IP settings > RAW setting - System management settings > Network settings > TCP/IP settings > LPD setting - System management settings > Network settings > TCP/IP settings > IPP printing - System management settings > Network settings > SMB setting The items above are not restored when the setting value is returned to "0: Normal mode", so must be set again as needed.	1
AP-OPT	Used to set whether printing from application PrintMe in PS print server unit is possible. 0: Printing permitted for all department IDs [Factory default/After RAM clear] 1: Printing refused (printing is only possible for specified department ID).	2
AP-ACCNT	Used to set (CPCA) department ID for printing (print jobs) from application PrintMe in PS print server unit. 0 to 9999999 [Factory default/After RAM clear: 0]	2
AP-CODE	Use it to set a path for printing from an external controller (CPCA). Setting: 0 [Factory default/After RAM clear] Setting range: 0 to 9999	2
NWCT-TM	Sets the time limit for maintaining the network connection ('KeepAlive' setting). Sets the length of time that the PC application and the iR device can be kept connected (KeepAlive) via the network. Main PC applications (envisaged): network printing application, email function, remote copy printer function, MEAP network applications, etc. Setting range: 1 to 5 (min.) [Factory settings and after RAM clear: 5]	2

6. LCNS-TR

T-17-60

COPIER>OPTION>LCNS-TR		
Sub item	**Description**	**level.**
ST-SEND	Use it to select whether to display the installation status of the SEND function when the transfer function is set invalid. Setting value 0: SEND function not available (not installed) 1: SEND function available (installed) [Factory default/After RAM clear]	2
TR-SEND	Use it to obtain the transfer license key for the SEND function when the transfer function is set invalid. Obtains the transfer license key to use the SEND function in other MFP machine.	2
OF-SEND	Use it to select whether to use the SEND function when the transfer function is set invalid. Setting value 0: Do not use SEND function. 1: Use SEND function. [Factory default/After RAM clear]	2
ST-ENPDF	Use it to display the installation status of the SEND encryption PDF transmission function when the transfer function is set invalid. Setting value 0: SEND encryption PDF transmission function not available (not installed) 1: SEND encryption PDF transmission function available (installed) [Factory default/After RAM clear: 0]	2

COPIER>OPTION>LCNS-TR		
Sub item	**Description**	**level.**
TR-ENPDF	Use it to obtain the transfer license key for the SEND encryption PDF transmission function when the transfer function is set invalid. Obtains the transfer license key to use the SEND encryption PDF transmission function in other MFP machine.	2
OF-ENPDF	Use it to select whether to use the SEND encryption PDF transmission function when the transfer function is set invalid. Setting value 0: Do not use SEND encryption PDF transmission function. 1: Use SEND encryption PDF transmission function. [Factory default/After RAM clear: 0]	2
ST-SPDF	Use it to select whether to display the installation status of the SEND searchable PDF transmission function when the transfer function is set invalid. Setting value 0: SEND searchable PDF transmission function not available (not installed) 1: SEND searchable PDF transmission function available (installed) [Factory default/After RAM clear: 0]	2
TR-SPDF	Use it to obtain the transfer license key for the SEND searchable PDF transmission function when the transfer function is set invalid. Obtains the transfer license key to use the SEND searchable PDF transmission function in other MFP machine.	2
OF-SPDF	Use it to select whether to use the SEND searchable PDF transmission function when the transfer function is set invalid. Setting value 0: Do not use SEND searchable PDF transmission function. 1: Use SEND searchable PDF transmission function. [Factory default/After RAM clear: 0]	2
ST-EXPDF	Use it to display the installation status of the PDF expansion kit (encryption PDF + searchable PDF) when the transfer function is set invalid. Setting value 0: PDF expansion kit not available (not installed) 1: PDF expansion kit available (installed) [Factory default/After RAM clear: 0]	2
TR-EXPDF	Use it to obtain the transfer license key for the PDF expansion kit (encryption PDF + searchable PDF) when the transfer function is set invalid. Obtains the transfer license key to use the PDF expansion kit (encryption PDF + searchable PDF) in other MFP machine.	2
OF-EXPDF	Use it to select whether to use the PDF expansion kit (encryption PDF + searchable PDF) when the transfer function is set invalid. Setting value 0: Do not use PDF expansion kit. 1: Use PDF expansion kit. [Factory default/After RAM clear: 0]	2
ST-PDFDR	Use it to display the installation status of the PDF Direct when the transfer function is set invalid. Setting value 0: PDF Direct not available (not installed) 1: PDF Direct available (installed) [Factory default/After RAM clear: 0]	2
TR-PDFDR	Use it to obtain the transfer license key for the PDF Direct when the transfer function is set invalid. Obtains the transfer license key to use the PDF Direct in other MFP machine.	2
OF-PDFDR	Use it to select whether to use the PDF Direct when the transfer function is set invalid. Setting value 0: Do not use PDF Direct. 1: Use PDF Direct. [Factory default/After RAM clear: 0]	2
ST-SCR	Use it to display the installation status of the encryption secure print when the transfer function is set invalid. Setting value 0: Encryption secure print not available (not installed) 1: Encryption secure print available (installed) [Factory default/After RAM clear: 0]	2
TR-SCR	Use it to obtain the transfer license key for the encryption secure print when the transfer function is set invalid. Obtains the transfer license key to use the encryption secure print in other MFP machine.	2
OF-SCR	Use it to select whether to use the encryption secure print when the transfer function is set invalid. Setting value 0: Do not use encryption secure print. 1: Use encryption secure print. [Factory default/After RAM clear: 0]	2
ST-HDCLR	Use it to display the installation status of the HDD encryption / HDD complete deletion when the transfer function is set invalid. Setting value 0: HDD encryption / HDD complete deletion not available (not installed) 1: HDD encryption / HDD complete deletion available (installed) [Factory default/After RAM clear: 0]	2
TR-HDCLR	Use it to obtain the transfer license key for the HDD encryption / HDD complete deletion when the transfer function is set invalid. Obtains the transfer license key to use the HDD encryption / HDD complete deletion in other MFP machine.	2
OF-HDCLR	Use it to select whether to use the HDD encryption / HDD complete deletion when the transfer function is set invalid. Setting value 0: Do not use HDD encryption / HDD complete deletion. 1: Use HDD encryption / HDD complete deletion. [Factory default/After RAM clear: 0]	2
ST-BRDIM	[Factory default/After RAM clear: Setting value 0: BarDIMM not available (not installed) 1: BarDIMM available (installed) [Factory default/After RAM clear: 0]	2
TR-BRDIM	Use it to obtain the transfer license key for BarDIMM when the transfer function is set invalid. Obtains the transfer license key to use BarDIMM in other MFP machine.	2

COPIER>OPTION>LCNS-TR		
Sub item	**Description**	**level.**
OF-BRDIM	Use it to select whether to use BarDIMM when the transfer function is set invalid. Setting value 0: Do not use BarDIMM. 1: Use BarDIMM. [Factory default/After RAM clear: 0]	2
ST-VNC	Use it to display the VNC installation status when the transfer function is set invalid. Setting value 0: VNC not available (not installed) 1: VNC available (installed) [Factory default/After RAM clear: 0]	2
TR-VNC	Use it to obtain the transfer license key for VNC when the transfer function is set invalid. Obtains the transfer license key to use VNC in other MFP machine.	2
OF-VNC	Use it to select whether to use VNC when the transfer function is set invalid. Setting value 0: Do not use VNC. 1: Use VNC. [Factory default/After RAM clear: 0]	2
ST-WEB	Use it to display the installation status of the WEB browser when the transfer function is set invalid. Setting value 0: WEB browser not available (not installed) 1: WEB browser available (installed) [Factory default/After RAM clear: 0]	2
TR-WEB	Use it to obtain the transfer license key for the WEB browser when the transfer function is set invalid. Obtains the transfer license key to use the WEB browser in other MFP machine.	2
OF-WEB	Use it to select whether to use the WEB browser when the transfer function is set invalid. Setting value 0: Do not use WEB browser. 1: Use WEB browser. [Factory default/After RAM clear: 0]	2
ST-HRPDF	Use it to display the installation status of the high-compression PDF when the transfer function is set invalid. Setting value 0: High-compression PDF not available (not installed) 1: High-compression PDF available (installed) [Factory default/After RAM clear: 0]	2
TR-HRPDF	Use it to obtain the transfer license key for the high-compression PDF when the transfer function is set invalid. Obtains the transfer license key to use the high-compression PDF in other MFP machine.	2
OF-HRPDF	Use it to select whether to use the high-compression PDF when the transfer function is set invalid. Setting value 0: Do not use high-compression PDF. 1: Use high-compression PDF. [Factory default/After RAM clear: 0]	2
ST-TRSND	Display of installation status of test SEND function in transfer invalidation Displays installation status of test SEND function. Setting values 0: No (not installed) 1: Yes (installed) [Factory settings and after RAM clear: 0]	2
TR-TRSND	Test SEND function transfer licence key acquisition in transfer invalidation Acquires transfer licence key to allow test SEND function to be used with another MFP.	2
OF-TRSND	Test SEND function ON/ OFF in transfer invalidation. Switches test SEND function ON/ OFF. Setting values 0: OFF 1: ON [Factory settings and after RAM clear: 0]	2
ST-WTMRK	Display of installation status of main unit watermark function in transfer invalidation. Displays installation status of main unit watermark function. Setting values 0: No (not installed) 1: Yes (installed) [Factory settings and after RAM clear: 0]	2
TR-WTMRK	Main unit watermark function transfer licence key acquisition in transfer invalidation Acquires transfer licence key to allow main unit watermark function to be used with another MFP.	2
OF-WTMRK	Main unit watermark function ON/ OFF in transfer invalidation. Switches main unit watermark function ON/ OFF. Setting values 0: OFF 1: ON [Factory settings and after RAM clear: 0]	2
ST-TSPDF	Display of installation status of time stamped PDF transmission function in transfer invalidation. Displays installation status of time stamped PDF transmission function. Setting values 0: No (not installed) 1: Yes (installed) [Factory settings and after RAM clear: 0]	2
TR-TSPDF	Time stamped PDF transmission function transfer licence key acquisition in transfer invalidation Acquires transfer licence key to allow time stamped PDF transmission function to be used with another MFP.	2

COPIER>OPTION>LCNS-TR		
Sub item	**Description**	**level.**
OF-TSPDF	Time stamped PDF transmission function ON/ OFF in transfer invalidation. Switches time stamped PDF transmission function ON/ OFF. Setting values 0: OFF 1: ON [Factory settings and after RAM clear: 0]	2
ST-USPDF	Display of installation status of user signature attached PDF transmission function in transfer invalidation. Displays installation status of user signature attached PDF transmission function. Setting values 0: No (not installed) 1: Yes (installed) [Factory settings and after RAM clear: 0]	2
TR-USPDF	User signature attached PDF transmission function transfer licence key acquisition in transfer invalidation Acquires transfer licence key to allow user signature attached PDF transmission function to be used with another MFP.	2
OF-USPDF	User signature attached PDF transmission function ON/ OFF in transfer invalidation. Switches user signature attached PDF transmission function ON/ OFF. Setting values 0: OFF 1: ON [Factory settings and after RAM clear: 0]	2
ST-DVPDF	Display of installation status of device signature attached PDF transmission function in transfer invalidation. Displays installation status of device signature attached PDF transmission function. Setting values 0: No (not installed) 1: Yes (installed) [Factory settings and after RAM clear: 0]	2
TR-DVPDF	Device signature attached PDF transmission function transfer licence key acquisition in transfer invalidation Acquires transfer licence key to allow device signature attached PDF transmission function to be used with another MFP.	2
OF-DVPDF	Device signature attached PDF transmission function ON/ OFF in transfer invalidation. Switches device signature attached PDF transmission function ON/ OFF. Setting values 0: OFF 1: ON [Factory settings and after RAM clear: 0]	2
ST-SCPDF	Display of installation status of scalable PDF transmission function in transfer invalidation. Displays installation status of scalable PDF transmission function. Setting values 0: No (not installed) 1: Yes (installed) [Factory settings and after RAM clear: 0]	2
TR-SCPDF	Scalable PDF transmission function transfer licence key acquisition in transfer invalidation Acquires transfer licence key to allow scalable PDF transmission function to be used with another MFP.	2
OF-SCPDF	Scalable PDF transmission function ON/ OFF in transfer invalidation. Switches scalable PDF transmission function ON/ OFF. Setting values 0: OFF 1: ON [Factory settings and after RAM clear: 0]	2
ST-AMS	Display of installation status of ACQ in transfer invalidation. Displays installation status of ACQ. Setting values 0: No (not installed) 1: Yes (installed) [Factory settings and after RAM clear: 0]	2
TR-AMS	ACQ transfer licence key acquisition in transfer invalidation Acquires transfer licence key to allow ACQ to be used with another MFP.	2
OF-AMS	ACQ ON/ OFF in transfer invalidation. Switches ACQ ON/ OFF. Setting values 0: OFF 1: ON [Factory settings and after RAM clear: 0]	2
ST-ERDS	Display of installation status of 3rd party expansion functions for ERDS subsequent to disabling transmission This displays whether any the 3rd party expansion functions (functions for sending the charge counters to the 3rd party charge server) have been installed for ERDS. Settings 0: OFF (functions not installed) 1: ON (functions installed) [Factory setting/value after clearing RAM: 0]	2
TR-ERDS	Acquisition of license key for transmitting 3rd party expansion functions for ERDS subsequent to disabling transmission This acquires the transmission license key in order for the 3rd party expansion functions (functions for sending the charge counters to the 3rd party charge server) for ERDS to be used by another MFP.	2
OF-ERDS	ON/OFF of 3rd party expansion functions for ERDS subsequent to disabling transmission This selects ON or OFF for the 3rd party expansion functions (functions for sending the charge counters to the 3rd party charge server) for ERDS. Settings 0: OFF 1: ON [Factory setting/value after clearing RAM: 0]	2

COPIER>OPTION>LCNS-TR		
Sub item	**Description**	**level.**
ST-PS	Display of installation status of PS in transfer invalidation. Displays installation status of PS. Setting values 0: No (not installed) 1: Yes (installed) Reference value 0	2
TR-PS	PS transfer licence key acquisition in transfer invalidation Acquires transfer licence key to allow PS to be used with another MFP.	2
OF-PS	PS ON/ OFF in transfer invalidation. Switches PS ON/ OFF. Setting values 0: OFF 1: ON Reference value 0	2
ST-PCL	Display of PCL installation status subsequent to disabling transmission This displays the PCL installation status. Settings 0: OFF (PCL not installed) 1: ON (PCL installed) [Factory setting/value after clearing RAM: 0]	2
TR-PCL	Acquisition of PCL transmission license key subsequent to disabling transmission This acquires the transmission license key in order for PCL to be used by another MFP.	2
OF-PCL	ON/OFF of PCL subsequent to disabling transmission This selects ON or OFF for PCL. Settings 0: OFF 1: ON [Factory setting/value after clearing RAM: 0]	
ST-PSLI5	Display of installation status of PS, LIPS4 and LIPS LX subsequent to disabling transmission This displays the installation status of the combined options consisting of PS, LIPS4 and LIPS LX (known as "UFR II" overseas). Settings 0: OFF (options not installed) 1: ON (options installed) [Factory setting/value after clearing RAM: 0]	2
TR-PSLI5	Acquisition of PS, LIPS4 and LIPS LX transmission license key subsequent to disabling transmission This acquires the transmission license key in order for PS, LIPS4 and LIPS LX to be used by another MFP.	2
OF-PSLI5	ON/OFF of PS, LIPS4 and LIPS LX subsequent to disabling transmission This selects ON or OFF for PS, LIPS4 and LIPS LX. Settings 0: OFF 1: ON [Factory setting/value after clearing RAM: 0]	
ST-LIPS5	Display of installation status of LIPS4 and LIPS LX subsequent to disabling transmission This displays the installation status of the combined options consisting of LIPS4 and LIPS LX (known as "UFR II" overseas). Settings 0: OFF (options not installed) 1: ON (options installed) [Factory setting/value after clearing RAM: 0]	2
TR-LIPS5	Acquisition of LIPS4 and LIPS LX transmission license key subsequent to disabling transmission This acquires the transmission license key in order for LIPS4 and LIPS LX to be used by another MFP.	2
OF-LIPS5	ON/OFF of LIPS4 and LIPS LX subsequent to disabling transmission This selects ON or OFF for LIPS4 and LIPS LX. Settings 0: OFF 1: ON [Factory setting/value after clearing RAM: 0]	
ST-LIPS4	Display of installation status of LIPS4 subsequent to disabling transmission This displays the installation status of the combined options consisting of LIPS4. Settings 0: OFF (options not installed) 1: ON (options installed) [Factory setting/value after clearing RAM: 0]	2
TR-LIPS4	Acquisition of LIPS4 transmission license key subsequent to disabling transmission This acquires the transmission license key in order for LIPS4 to be used by another MFP.	2
OF-LIPS4	ON/OFF of LIPS4 subsequent to disabling transmission This selects ON or OFF for LIPS4. Settings 0: OFF 1: ON [Factory setting/value after clearing RAM: 0]	
ST-PSPCL	Display of installation status of PS and PCL subsequent to disabling transmission This displays the installation status of the combined options consisting of PS and PCL. Settings 0: OFF (options not installed) 1: ON (options installed) [Factory setting/value after clearing RAM: 0]	2
TR-PSPCL	Acquisition of PS and PCL transmission license key subsequent to disabling transmission This acquires the transmission license key in order for PS and PCL to be used by another MFP.	2

COPIER>OPTION>LCNS-TR		
Sub item	**Description**	**level.**
OF-PSPCL	ON/OFF of PS and PCL subsequent to disabling transmission This selects ON or OFF for PS and PCL. Settings 0: OFF 1: ON [Factory setting/value after clearing RAM: 0]	
ST-PCLUF	Display of installation status of PCL and UFR subsequent to disabling transmission This displays the installation status of the combined options consisting of PCL and UFR. Settings 0: OFF (options not installed) 1: ON (options installed) [Factory setting/value after clearing RAM: 0]	2
TR-PCLUF	Acquisition of PCL and UFR transmission license key subsequent to disabling transmission This acquires the transmission license key in order for PCL and UFR to be used by another MFP.	2
OF-PCLUF	ON/OFF of PCL and UFR subsequent to disabling transmission This selects ON or OFF for PCL and UFR. Settings 0: OFF 1: ON [Factory setting/value after clearing RAM: 0]	
ST-PSLIP	Display of installation status of PS and LIPS subsequent to disabling transmission This displays the installation status of the combined options consisting of PS and LIPS. Settings 0: OFF (options not installed) 1: ON (options installed) [Factory setting/value after clearing RAM: 0]	2
TR-PSLIP	Acquisition of PS and LIPS transmission license key subsequent to disabling transmission This acquires the transmission license key in order for PS and LIPS to be used by another MFP.	2
OF-PSLIP	ON/OFF of PS and LIPS subsequent to disabling transmission This selects ON or OFF for PS and LIPS. Settings 0: OFF 1: ON [Factory setting/value after clearing RAM: 0]	
ST-PSPCU	Display of installation status of PS, PCL and UFR subsequent to disabling transmission This displays the installation status of the combined options consisting of PS, PCL and UFR. Settings 0: OFF (options not installed) 1: ON (options installed) [Factory setting/value after clearing RAM: 0]	2
TR-PSPCU	Acquisition of PS, PCL and UFR transmission license key subsequent to disabling transmission This acquires the transmission license key in order for PS, PCL and UFR to be used by another MFP.	2
OF-PSPCU	ON/OFF of PS, PCL and UFR subsequent to disabling transmission This selects ON or OFF for PS, PCL and UFR. Settings 0: OFF 1: ON [Factory setting/value after clearing RAM: 0]	
ST-LXUFR	Display of installation status of LIPS LX (known as "UFR II" overseas) subsequent to disabling transmission This displays the installation status of the combined options consisting of LIPS LX (known as "UFR II" overseas). Settings 0: OFF (options not installed) 1: ON (options installed) [Factory setting/value after clearing RAM: 0]	2
TR-LXUFR	Acquisition of LIPS LX (known as "UFR II" overseas) transmission license key subsequent to disabling transmission This acquires the transmission license key in order for LIPS LX (known as "UFR II" overseas) to be used by another MFP.	
OF-LXUFR	ON/OFF of LIPS LX (known as "UFR II" overseas) subsequent to disabling transmission This selects ON or OFF for LIPS LX (known as "UFR II" overseas). Settings 0: OFF 1: ON [Factory setting/value after clearing RAM: 0]	
ST-HDCR2	Display of installation status of all hard disk data erasure subsequent to disabling transmission This displays the installation status of all hard disk data erasure. Settings 0: OFF (not installed) 1: ON (installed) [Factory setting/value after clearing RAM: 0]	
TR-HDCR2	Acquisition of all hard disk data erasure transmission license key subsequent to disabling transmission This acquires the transmission license key in order for all hard disk data erasure to be used by another MFP.	
OF-HDCR2	ON/OFF of all hard disk data erasure subsequent to disabling transmission This selects ON or OFF for all hard disk data erasure. Settings 0: OFF 1: ON [Factory setting/value after clearing RAM: 0]	2

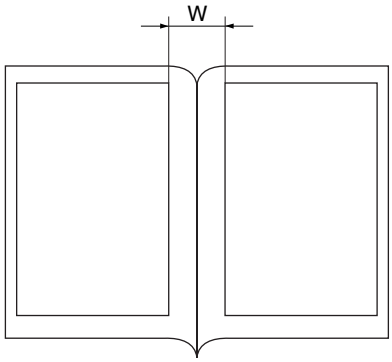
17.6.2 SORTER

17.6.2.1 SORTER Table

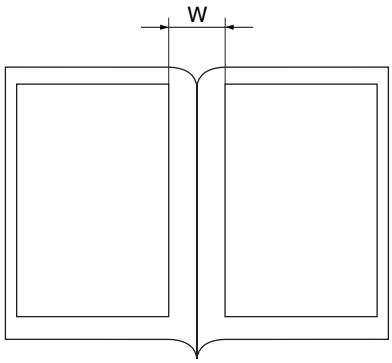
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

T-17-61

SORTER>OPTION		
Sub item	**Description**	**level.**
BLNK-SW	Fold position margin width (W) settings when saddle stitcher is used Setting values 0: Normal width (5 mm) 1: Extra width (10 mm) [Factory settings and after RAM clear: 0]	1
MD-SPRTN	Finisher function restriction setting Setting values 0: Normal 1: Reduced operation [Factory settings and after RAM clear: 0]	1



F-17-21



F-17-22

17.6.3 BOARD

17.6.3.1 BOARD Table

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

T-17-62

BOARD>OPTION		
Sub item	**Description**	**level.**
SURF-OFF	UFR Board function release Setting values 0: Even with no UFR board, device operates as copy model, without E code display. 1: UFR board identification check performed. With no UFR board, E code is displayed.	1
MENU-1 to 4	Displays printer setting menu levels 1 to 4. Setting values 0: No display 1: Display [Factory settings and after RAM clear: 0]	2
TR-DSP	Toggles between display/ non display of toner reduction function switch. Should be avoided where possible during normal operation.	2

17.7 TEST (Test Print Mode)

17.7.1 COPIER

17.7.1.1 COPIER Table

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1. PG

T-17-63

COPIER>TEST>PG		
Sub item	**Description**	**level.**
TYPE	Performs test print when test print type number is entered and start key is turned ON. (This setting must always be restored to 0 after making test print.) Setting values 0: Normal print, 0 to 100 [Factory default/After RAM clear: 0]	1
TXPH	Used to set image mode during test print output. Setting value 0: Error diffusion 1: Screen with small line number [133 to 190 lines] 2: Screen with large line number [200 to 268 lines] 3: Screen for COPY [around 220 lines] 4: Screen for REOS [no screen structure] 5:Error diffusion[w/ end correction] 6:Screen with large line number[w/ end correction] [Factory default/After RAM clear: 0]	1
THRU	Used to select whether to use image compensation table during test print output. Setting values 0: ON (Use) 1: OFF (Don't use) [Factory default/After RAM clear: 0]	1
DENS-Y/M/C/K	Used to adjust density of each color for test prints (TYPE = 5). Setting values 0 to 255: Increasing the value increases the density. [Factory default/After RAM clear: 128]	1
COLOR-Y/M/C/K	Used to set output of each color for each TYPE. For example, to set single-color M output, set "COLOR-M = 1", and make the other settings 0 (only single colors can be output). Setting values 0: Don't output 1: Output [Factory default/After RAM clear: 1]	1
F/M-SW	Set it to switch over full color and mono color during PG output. Settings 0: full color output 1: mono color output [Factory default/After RAM clear: 0]	1
PG-PICK	Used to select output level during test print output. Setting values 1: Cassette 1 2: Cassette 2 3: Cassette 3 4: Cassette 4 5 to 6: Not used 7: Side deck 8: Manual feed [Factory default/After RAM clear: 1]	1
2-SIDE	Use it to set the output mode for test printing. Settings 0: single-sided (at time of shipment/upon RAM initialization) 1: double-sided [Factory default/After RAM clear: 0]	1
PG-QTY	Use it to set the output mode for test printing. Use it to set the copy count of test printing. 1 to 999 [Factory default/After RAM clear: 1]	1

Type of test print for each number entered for PG > TYPE

T-17-64

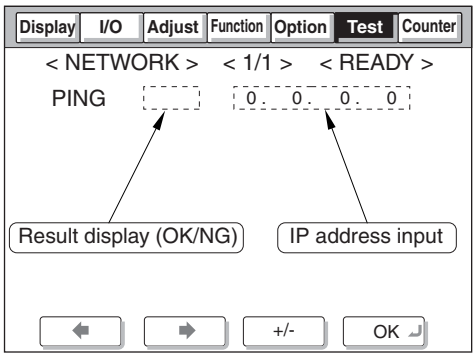
Entered number	Description
0	Image from CCD (normal print)
1	For development
2	For development
3	For development
4	16 gradations
5	Full-sheet half tones
6	Grid
7	For development

Entered number	Description
8	For development
9	For development
10	MCYBk horizontal stripes
11	For development
12	YMCBk 64 gradations
13	For development
14	Full-color 16 gradations
15 to 100	For development

2. NETWORK

T-17-65

COPIER>TEST>NETWORK		
Sub item	**Description**	**level.**
PING	Checks connection between copier and network (during TCP/IP connection only). Use this item when checking the connection to the network at time of installation or when there is a network connection problem.	1
BML-DISP	Switching display of the screen in response to support for BMlinks Settings 0: Normal system status screen [Factory default/After RAM clear] 1: Screen of device display only	2



F-17-23

Operation method 1) Turn the main power switch OFF.

2) Connect the network cable to the copier and turn the main power switch ON.

3) Tell the user's system administrator that copier installation is complete, and have them him/her the network settings.

4) Ask the system administrator to allow you to perform a network connection check, and check the address of the remote host (IP address of the PC terminal in the user network) to send the PING.

5) Select the COPIER > TEST > NETWORK > PING service mode item, enter the IP address checked in Step 4 on the operation panel's numeric keypad, and press the OK key.

- If the copier is connected to the network normally, "OK" is displayed (and the procedure is finished).

- If "NG" is displayed, first check the connection of the network cable. If the connection is normal, go to Step 6. If there is a problem with the network cable's connection, redo the connection and redo Step 5.

6) Select the COPIER > TEST > NETWORK > PING service mode item, enter the loop back address* (127.0.0.1), and press the OK key followed by the start key.

- If "NG" is displayed, there is a problem with the local TCP/IP settings. Go back to Step 3 and check the settings again.

- If "OK" is displayed, there is no problem with the local TCP/IP settings. However, there could be a problem with the network interface board (NIC) connection or the NIC itself. Go to Step 7 to check the NIC.

*The loop back address returns the signal in front of the NIC, enabling checking of the local TCP/IP settings.

7) Select the COPIER > TEST > NETWORK > PING service mode item, enter the local host address (local IP address), then press the OK key.

- If "OG" is displayed, there could be a problem with the NIC connection or the NIC itself. In this case, check the NIC connection or replace the NIC.

- If "OK" is displayed, there is no problem with the local network settings or NIC.

In this case, the problem may be with the user's network environment. Explain the situation to the system administrator, and ask them to deal with it.

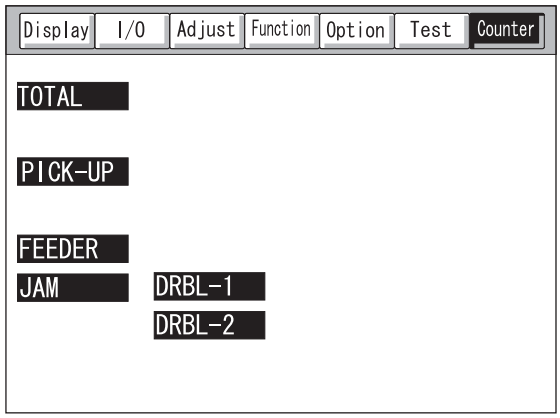
17.8 COUNTER (Counter Mode)

17.8.1 COPIER

17.8.1.1 COPIER Table

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The COPIER/COUNTER screen is shown below. The items are described starting on the next page.



F-17-24

Clearing counter values
1) Select the item to clear, displaying it in reverse.
2) Press the clear key on the operation panel.
- The counter is cleared, resetting it to "00000000".

Small size and large size in this mode
- TOTAL/PICKUP/FEEDER/JAM
Large (L) size: Paper larger than A4, LTR size
Small (S) size: A4, LTR size and smaller paper

- DRBL-1/DRBL-2 (PD-PU-RL)
Large (L) size: Paper longer than 324 mm in the feed direction
Small (S) size: Paper 324 mm or shorter in the feed direction

- DRBL-2 (DF-PU-RL, DF-SP-PD)
Large (L) size: Paper longer than the LTR length (216 mm) in the feed direction
Small (S) size: Paper of the LTR length (216 mm) or shorter in the feed direction

Reading counters for consumable parts/parts needing periodic replacement
The copier has special counters (DRBL-1/DRBL-2) that can be used to provide a guideline for when to replace consumable parts or parts needing periodic replacement.
Small size sheets are counted in increments of 1, large size sheets are counted in increments of 2.

<Example>

TR-BELT	/	**00000201**	/	**00240000**	/	**0%**	**!!**	**000082**
[1]		[2]		[3]		[4]	[5]	[6]

[1]: Displays the part name. In this example, the intermediate transfer belt unit.
[2]: Displays the counter value (actual number of sheets used). The value is cleared by pressing the clear key when the part is replaced.
[3]: Displays the limit value (number of sheets as guideline for replacement). You can select the item and change the value with the numeric keypad. After changing the value, press the OK key.
[4]: Displays the ratio of the counter value to the limit value.
[5]: When the ratio is between 90% and 100%, a single exclamation mark (!) is displayed.
When the ratio is over 100%, two exclamation marks (!!) appear. In the example above, no exclamation marks would appear.
[6]: Displays the predicted number of days until replacement. The example above shows 82 days.

1. TOTAL

T-17-66

COPIER>COUNTER>TOTAL		
Sub item	**Description**	**level.**
SERVICE1	Service total counter 1 Incremented when paper is delivered outside the printer. (Incremented for both large and small size sheets.) Returns to "00000000" after reaching "99999999".	1
SERVICE2	Service total counter 2 Incremented when paper is delivered outside the printer. (Incremented by 2 for large size sheets, and by 1 for small size sheets.) Returns to "00000000" after reaching "99999999".	1
COPY	Total copies counter Incremented when a copy operation is performed and paper is delivered outside the printer. Returns to "00000000" after reaching "99999999".	1

COPIER>COUNTER>TOTAL		
Sub item	**Description**	**level.**
PDL-PRT	PDL print counter Incremented along with the billing counter during PDL printing, when paper is delivered outside the copier and two-sided paper is loaded. Blank sheets are not counted. Incremented by 1 for both large and small size sheets. Returns to "00000000" after reaching "99999999".	1
FAX-PRT	Fax received print counter Incremented along with the billing counter when a fax is received, when a print is delivered outside the copier and two-sided paper is loaded. Blank sheets are not counted. Incremented by 1 for both large and small size sheets. Can be cleared. Returns to "00000000" after reaching "99999999".	1
BOX-PRT	Box print counter Incremented along with the billing counter when a box print is made, when paper is delivered outside the copier and two-sided paper is loaded. Blank sheets are not counted. Incremented by 1 for both large and small size sheets. Can be cleared. Returns to "00000000" after reaching "99999999".	1
RPT-PRT	Report print counter Incremented along with the billing counter when a report print is made, when paper is delivered outside the copier and two-sided paper is loaded. Blank sheets are not counted. Incremented by 1 for both large and small size sheets. Can be cleared. Returns to "00000000" after reaching "99999999".	1
2-SIDE	Two-sided copy/print counter Incremented along with the billing counter when a two-sided copy/print is made, when paper is delivered outside the copier and two-sided paper is loaded. Blank sheets are not counted. Incremented by 1 for both large and small size sheets. Can be cleared. Returns to "00000000" after reaching "99999999".	1
SCAN	Scan counter Incremented along with the billing counter when a scan is made, when reading finishes. Incremented by 1 for both large and small size sheets. Can be cleared. Returns to "00000000" after reaching "99999999".	1

2. PICK-UP

T-17-67

COPIER>COUNTER>PICK-UP		
Sub item	**Description**	**level.**
C1	Cassette 1 paper feed total counter Displays number of sheets fed from cassette 1. Returns to "00000000" after reaching "99999999".	1
C2	Cassette 2 paper feed total counter Displays number of sheets fed from cassette 2. Returns to "00000000" after reaching "99999999".	1
C3	Cassette 3 paper feed total counter Displays number of sheets fed from cassette 3 (top level of cassette pedestal). Returns to "00000000" after reaching "99999999".	1
C4	Cassette 4 paper feed total counter Displays number of sheets fed from cassette 4 (bottom level of cassette pedestal). Returns to "00000000" after reaching "99999999".	1
MF	Manual paper feed total counter Displays number of sheets fed from manual paper feed unit. Returns to "00000000" after reaching "99999999".	1
DK	Deck paper feed total counter Displays number of sheets fed from deck paper feed unit. Returns to "00000000" after reaching "99999999".	1
2-SIDE	Two-sided paper feed total counter Displays number of two-sided sheets fed. Returns to "00000000" after reaching "99999999".	1

3. FEEDER

T-17-68

COPIER>COUNTER>FEEDER		
Sub item	**Description**	**level.**
FEED	ADF document feed total counter	1
DFOP-CNT	ADF hinge open/close count display Counts how many times ADF is opened/closed.	1

4. JAM

T-17-69

COPIER>COUNTER>JAM		
Sub item	**Description**	**level.**
TOTAL	Total jam counter for copier	1
FEEDER	Total jam counter for feeder	1
SORTER	Total jam counter for finisher	1
2-SIDE	Jam counter for two-sided unit	1
MF	Jam counter for multi-feeder	1
C1	Jam counter for cassette 1	1
C2	Jam counter for cassette 2	1

COPIER>COUNTER>JAM		
Sub item	**Description**	**level.**
C3	Jam counter for cassette 3	1
C4	Jam counter for cassette 4	1
DK	Jam counter for side paper deck	1

5. MISC

T-17-70

COPIER>COUNTER>MISC		
Sub item	**Description**	**level.**
T-SPLY-Y	Toner supply counter (Y) This indicates the number of times the toner in the Y color developer has been supplied. The counter is cleared by executing CLEAR>Y-TN-CLR when the toner cartridge has been replaced before the toner runs out after the low remaining Y color toner warning has been given.	1
T-SPLY-M	Toner supply counter (M) This indicates the number of times the toner in the M color developer has been supplied. The counter is cleared by executing CLEAR>M-TN-CLR when the toner cartridge has been replaced before the toner runs out after the low remaining M color toner warning has been given.	1
T-SPLY-C	Toner supply counter (C) This indicates the number of times the toner in the C color developer has been supplied. The counter is cleared by executing CLEAR>C-TN-CLR when the toner cartridge has been replaced before the toner runs out after the low remaining C color toner warning has been given.	1
T-SPLY-K	Toner supply counter (K) This indicates the number of times the toner in the K color developer has been supplied. The counter is cleared by executing CLEAR>K-TN-CLR when the toner cartridge has been replaced before the toner runs out after the low remaining K color toner warning has been given.	1

6. DRBL-1

T-17-71

COPIER>COUNTER>DRBL-1		
Sub item	**Description**	**level.**
LSR-DRV	Laser drive sheet count	1
T/S-UNIT	Transfer/detach charger high voltage ON sheet count	1
T-CLN-BD	Number of sheets that have passed through transfer cleaning unit (count value is stored in controller).	1
TR-BLT	Number of sheets that have passed through intermediate transfer belt unit (count value is stored in controller).	1
TR-ROLL	Number of sheets that have passed through secondary transfer roller (count value is stored in controller).	1
PT-DRM	Bk photosensitive drum rotation sheet count This indicates the cumulative total number of sheets which have passed over the drum. It is cleared when the Bk photosensitive drum has been replaced.	1
PT-DR-Y	Y photosensitive drum rotation sheet count This indicates the cumulative total number of sheets which have passed over the drum. It is cleared when the Y photosensitive drum has been replaced.	1
PT-DR-M	M photosensitive drum rotation sheet count This indicates the cumulative total number of sheets which have passed over the drum. It is cleared when the M photosensitive drum has been replaced.	1
PT-DR-C	C photosensitive drum rotation sheet count This indicates the cumulative total number of sheets which have passed over the drum. It is cleared when the C photosensitive drum has been replaced.	1
C1-PU-RL	Cassette 1 sheet feed roller pass-over sheet count (count held at controller side)	1
C1-SP-RL	Cassette 1 separation roller no. of sheets fed	1
C1-FD-RL	Cassette 1 separation roller no. of sheets fedCassette 1 separation roller no. of sheets fed	1
C2-PU-RL	Cassette 2 sheet feed roller pass-over sheet count (count held at controller side)	1
C2-SP-RL	Cassette 1 separation roller no. of sheets fedCassette 2 separation roller no. of sheets fedCassette 1 separation roller no. of sheets fed	1
C2-FD-RL	Cassette 1 separation roller no. of sheets fedCassette 2 separation roller no. of sheets fedCassette 2 separation roller no. of sheets fedCassette 1 separation roller no. of sheets fed	1
M-PU-RL	Manual feed roller pass-over sheet count (count held at controller side)	1
M-SP-RL	Manual feed tray separation roller no. of sheets fed	1
FX-LW-RL	Pressure roller pass-over sheet count (count held at controller side)	1
FX-UNIT	Fixing unit pass-through sheet count (count held at controller side)	1
FX-UP-FR	Fixing unit upper frame unit pass-through sheet count (count held at controller side)	1
FX-LW-BR	Pressure roller bearing counter	1
WST-TNR	2 Waste toner counter When waste toner is removed, this counter is cleared.	1
TN-FIL1	Toner filter (FM1) fan drive sheet count	1

7. DRBL-2

T-17-72

COPIER>COUNTER>DRBL-2		
Sub item	**Description**	**level.**
DF-PU-RL	Number of sheets that have passed through ADF paper feed roller. (count retained by controller PCB)	1

COPIER>COUNTER>DRBL-2		
Sub item	**Description**	**level.**
DF-SP-PD	Number of sheets that have passed through ADF separation pad. (count retained by controller PCB)	1
LNT-TAPE	ADF lint tape pass-through sheet count	1
STAMP	Stamp operation count	1
PD-PU-RL	for the paper deck pickup roller, indicates the number of sheets that have passed. (count retained by controller PCB)	1
PD-SP-RL	for the paper deck separation roller, indicates the number of sets that have passed. (count retained by controller PCB)	1
PD-FD-RL	for the paper deck feed roller, indicates the number of sheets that have passed. (count retained by controller PCB)	1
C3-SP-RL	Count 3 separation roller no. of sheets fed	1
C3-FD-RL	Count 3 separation roller no. of sheets fed	1
C4-SP-RL	Count 4 separation roller no. of sheets fed	1
C4-FD-RL	Count 4 separation roller no. of sheets fed	1
SORT	Sort path pass-through sheet count Each L size sheet is also counted as one sheet.	1
FIN-STPR	Number of staple operations.	1
SADDLE	Saddle operation sheet count Each L size sheet is also counted as one sheet.	1
SDL-STPL	Number of saddle staple operations. Incremented by 1 even for L-size sheets.	1

Chapter 18 Upgrading

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18.1 Outline

18.1.1 System Software Type

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

T-18-1

System Software Type	System Software Name	Overview
Main Controller	SYSTEM	The system software comes in 2 types (one for use inside Japan and the other, outside Japan). The main controller is also used to control the G3 fax board (1-line).
Language Module	LANGUAGE	Checking the versions of the system and language. 1) When the versions are complied: User Mode > Common Settings > Language Switch, language switching is enabled. 2) When the versions are not complied: E744 is displayed. System Language is used with turning the main power OFF/ON.
Remote UI Contents	RUI	Controlling the copier via network. Select language (de/en/fr/it/ja) on the Remote UI.
Boot Program	BOOT	BootROM (C/P/N) use the same system software for boot. BootROM type cannot be changed by download. In case of changing the type, change DIMM.
MEAP Library	MEAPCONT	MEAPCONT is the standard library using MEAP.
Voice Dictionary	TTS	Indicating the voice dictionary data used when mounting the Voice Board. Using the Voice Dictionary when expanding the Voice Guidance Kit (accessory).
Voice Recognition Dictionary	ASR	Indicating the voice recognition dictionary data used when mounting the Voice Operation Board. Using the Voice Recognition Dictionary when expanding the Voice Operation Kit (accessory).
Web Browser	BROWSER	BROWSER is the data used for the Web browser screen display that is an optional function. Using the Web browser when expanding the Web Browser Expansion Kit (accessory).
DC Controller	DCON	Download of DCON is executed via the Main Controller Unit. Download to the DC Controller PCB can be retried in case of the failure because the BootROM is mounted separately.
Reader Controlle	RCON	The Reader Controller also performs the control at ADF side. Download of RCON is executed via the Main Controller Unit. Download to the Reader Controller PCB can be retried in case of the failure because the BootROM is mounted separately. (If the DC Controller is not activated normally, download of RCON cannot be executed.)
Time Stamp Module *	TSTAMP	Indicating the function performing the transmission of PDF with digital signature. (Security) Using the Time Stamp Module when expanding the Time Stamp PDF Expansion Kit (accessory *).
Help Function	HELP	Displaying the Help Function (operation support function.)
WebDAV Contents	WebDAV	Function for sending the input image to Internet or WevDAV Server on Internet using the WebDAV protocol.
G3FAX	G3FAX	Executing via the Main Controller Unit. Using the G3 FAX when expanding the Super G3 Multi-Line Fax Board-J1 (accessory).
G4FAX *	G4FAX	Executing via the Main Controller Unit. Using the G4 FAX when expanding the G4 Fax Board-E1 (accessory *).
OCR Dictionary	SDICT	The dictionary used when transforming the image data read from the Reader Unit to the character code (OCR processing). Using the OCR Dictionary when expanding the Universal Send Searchable PDF Kit (accessory).
Key/Certificate/CA Certificate for Encrypted Communication	KEY	Using them at SSL communication and e-RDS communication. KEY is the key and certificate used at the encrypted communication on the network.
Finisher Controller	FIN_CON	Using the Finisher Controller when expanding the Finisher-Z1, Finisher-Y1 and the Saddle Finisher-Y2 (accessories). A special service tool (Downloader PCB: FY9-2034) is needed.

* only 100V machine

18.1.2 Upgrading Overview

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The software for the copier and the accessories can be upgraded by the following procedures.
- By download from the personal computer (hereafter PC) in which the service support tool (hereafter SST) is installed.
- By download from the USB memory.
- By changing ROM-DIMM (Boot, G3FAX, G4FAX* only).

T-18-2

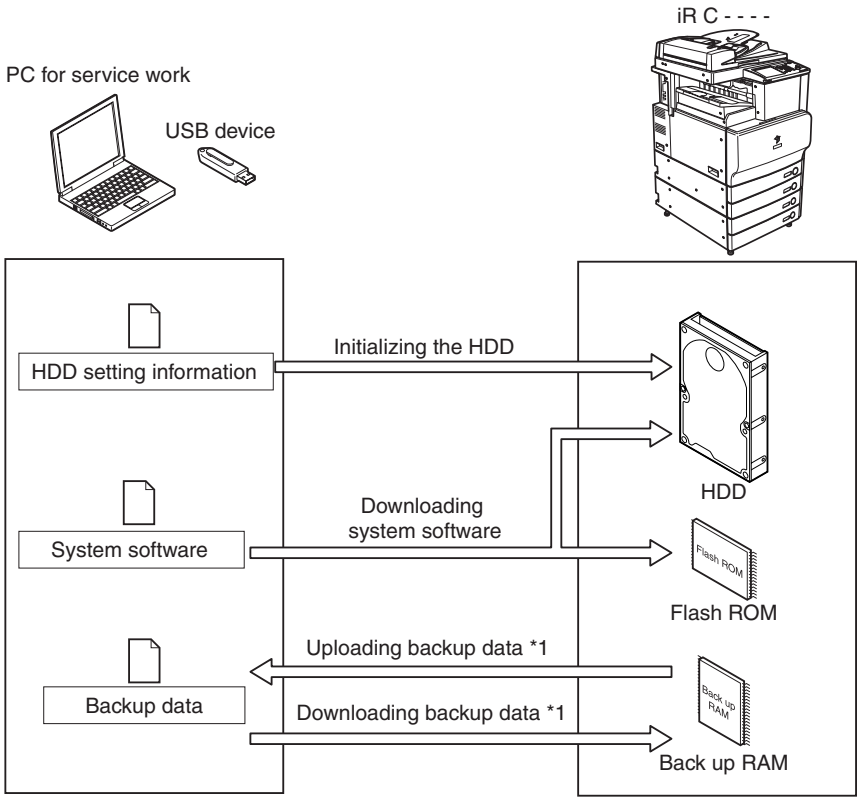
Machine	SST display		Upgrading tool			Remarks
	Product name	System software name	SST	USB Memory	ROM-DIMM Change	
Host Machine	iRC3380	SYSTEM	yes	yes	-	
		LANGUAGE	yes	yes	-	
		RUI	yes	yes	-	
		BOOT	yes	yes	yes	
		MEAPCONT	yes	yes	-	
		TTS	yes	yes	-	Using at the expansion of the Voice Guidance Kit (accessory)
		ASR	yes	yes	-	Using at the expansion of the Voice Operation Kit (accessory)
		BROWSER	yes	yes	-	Using at the expansion of the Web Browser Expansion Kit (accessory)
		DCON	yes	yes	-	
		RCON	yes	yes	-	
		TSTAMP *	yes	yes	-	Using at the expansion of the Time Stamp PDF Expansion Kit (accessory*)
		HELP	yes	yes	-	
		WebDAV	yes	yes	-	
		G3FAX	yes	yes	yes	Using at the expansion of the Super G3 Multi-Line Fax Board-J1 (accessory).
		G4FAX *	yes	yes	yes	Using at the expansion of the G4 FAX Board-E1 (accessory*)
	iRCXXXX	SDICT	yes	yes	-	Using at the expansion of the Searchable PDF Kit (accessory)
		KEY	yes	yes	-	
Accessory	FIN_Z3C	FIN_CON	yes	-	-	Using at the expansion of the Finisher-Z1 (accessory). A special service tool (Downloader PCB: FY9-2034) is needed.
	FIN_Y	FIN_CON	yes	-	-	Using at the expansion of the Finisher-Y1 and the Saddle Finisher-Y2 (accessories). A special service tool (Downloader PCB: FY9-2034) is needed.

* only 100V machine

18.1.3 Function/Operation Overview

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

When connected to a PC (to which the SST and system software have been installed) and USB device (to which system software has been copied), the machine provides the following functions:

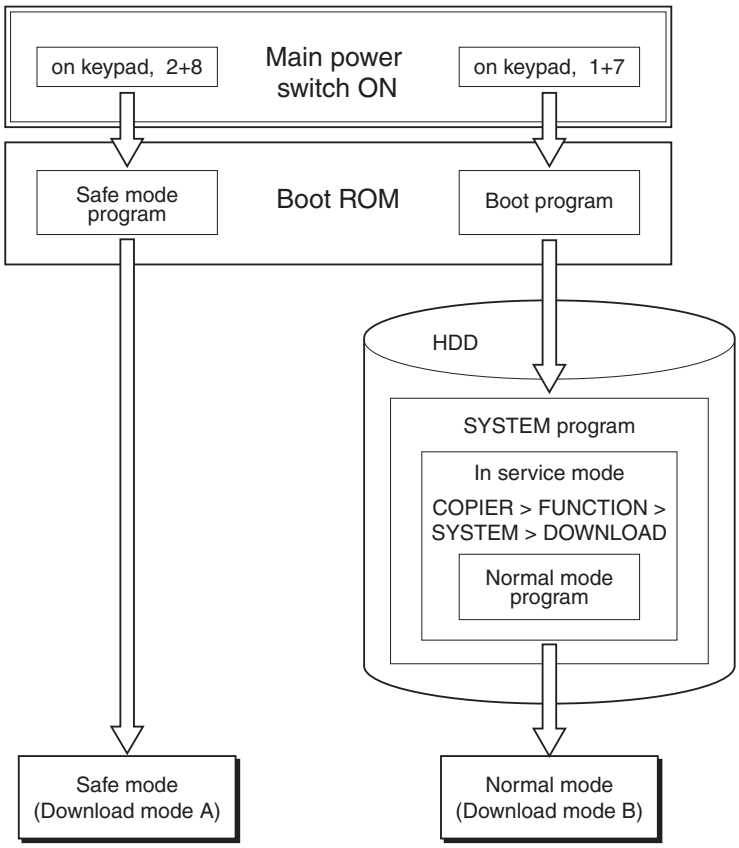


F-18-1

*1: *1: Not when USB is in use.

In case of using these functions, it is necessary to set the copier in the download mode.
There are two types of download:

- Safe Mode (Download Mode A)
(By pressing 2+8, turning on the main power.)
- Normal Mode (Download Mode B)
(By pressing 1+7, turning on the main power; then, in the service mode, select COPIER > FUNCTION > SYSTEM > DOWNLOAD.)



F-18-2

⚠

Use safe mode for the following:
- after replacing the HDD
- when the system fails to start up normally

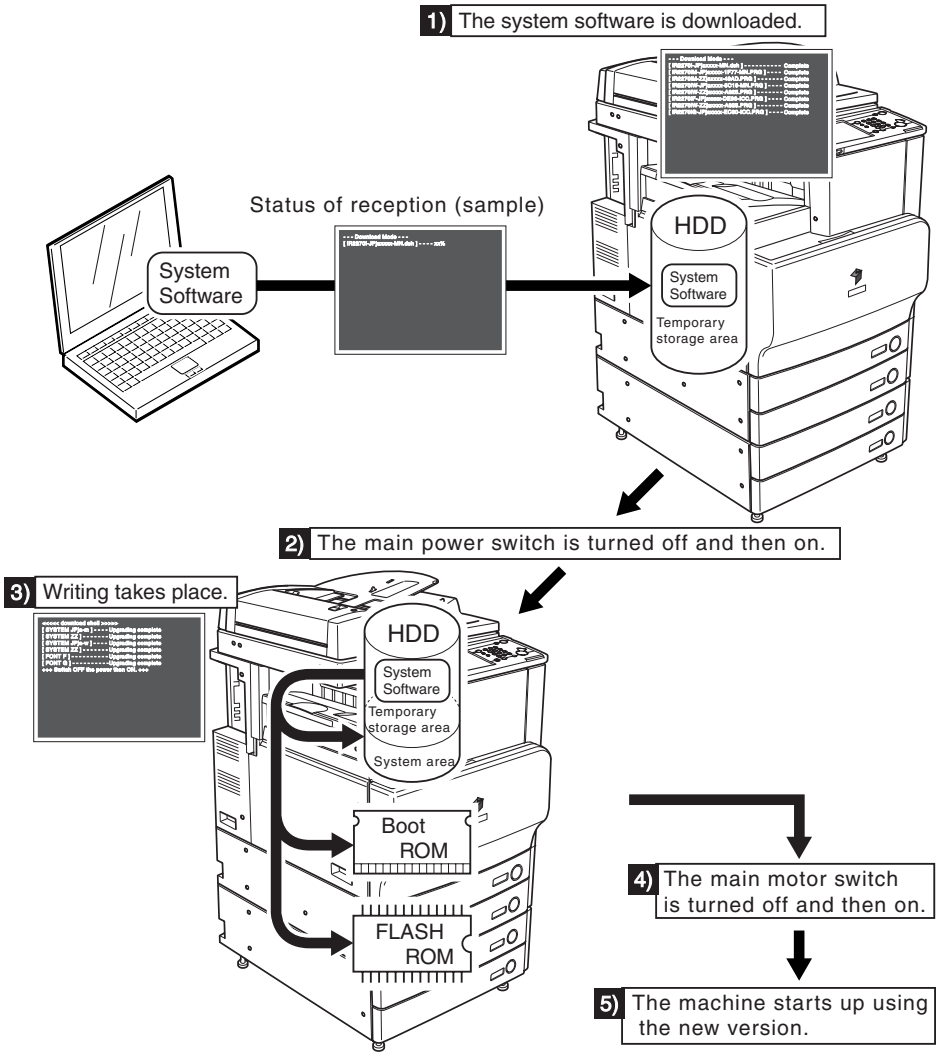
The following shows combinations of download modes and functions:

T-18-3

Function	Download Mode	
	Normal Mode (Download Mode B)	Safe Mode (Download Mode A)
HDD Format	- -	ALL BOOTDEV
Download of the system software *1	System Language RUI Boot Dcon Rcon SDICT MEAPCONT KEY TTS ASR BROWSER TSTAMP * HELP WebDAV G3FAX G4FAX *	System Language RUI Boot Dcon Rcon SDICT MEAPCONT KEY TTS ASR BROWSER TSATMP * HELP WebDAV - -
Upload/download of the backup data *2	- SramRCON SramDCON	Meapback - -

* only 100V machine
*1 Not all software to download may be selected for downloading while USB is in use.
*2 Not when USB device is in use.

Installing the System Software
When downloaded, the system software is stored in the temporary storage area of the HDD. At the end of downloading, the main power switch must be turned off and then back on, thus restarting the machine and writing the system software to both system area and flash ROM from the temporary storage area. When the main power switch is turned off and then back on once again, the machine will start up using the new system software.



F-18-3

18.1.4 Points to Note at Time of Downloading

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Do Not Turn Off the Power During Download/Write Operation
Do not turn off the power while the system software is being downloaded/written. Otherwise, the machine may fail to start up when its power is turned back on. (If such is the case, execute HDD formatting, and download the system software. In the case of a boot ROM, replace the DIMM-ROM.)

Points to Note About Upgrading the DC Controller/Reader Controller
The DC controller/reader controller may be downloaded in either in normal mode or in safe mode. If done in safe mode, however, the controller version information cannot be obtained, causing the data retained by the SST to be written over. It is a good idea, therefore, to use normal mode (so that the software will not be replaced with software of a previous version).

18.2 Making Preparations

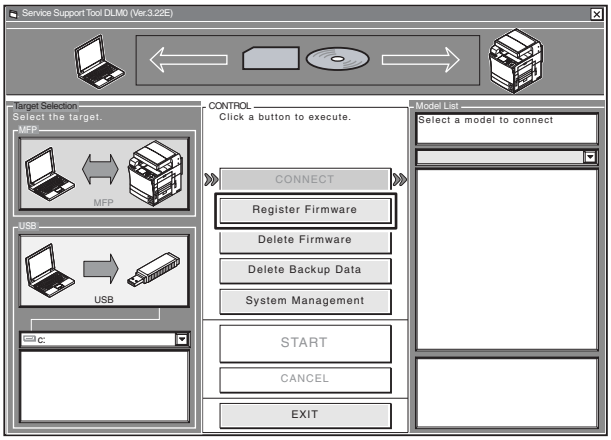
18.2.1 Installing the System Software (System CD -> SST)

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Here, you will be copying the system software found on the System CD to the SST.

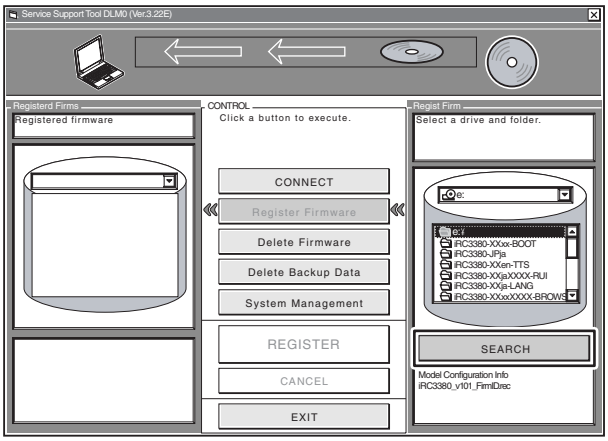
[Preparatory Work]
Requirements
- PC installed with SST version 3.22 or later
- System CD for this machine

[Installing the System Software]
1) Turn on the PC.
2) Set the System CD in the PC.
3) Start up the SST.
4) Click [Register Firmware].



F-18-4

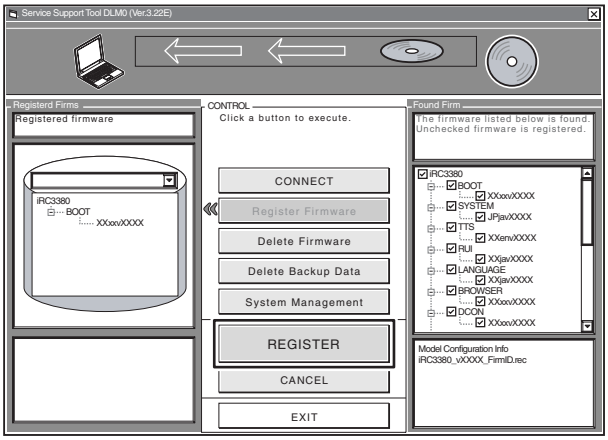
5) Select the drive in which the System CD has been set, and click [SEARCH].



F-18-5

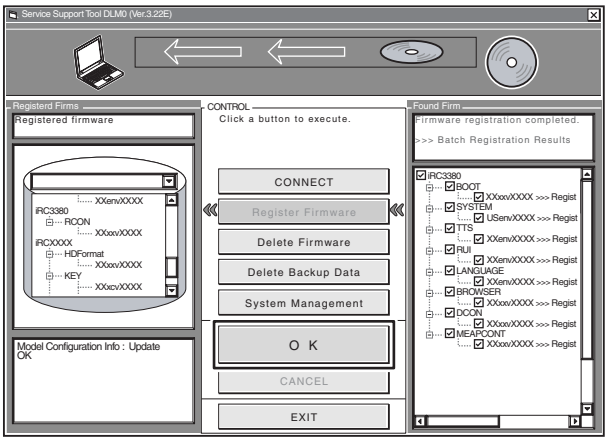
MEMO:
'XXXX' on the screen indicates the system software version (Same in the subsequent figures).

6) A list of system software found on the System CD appears. Remove the check marks from the folders and software files you do not need, and click [REGISTER].



F-18-6

7) When a message has appeared to indicate that the system software has been installed, click [OK].



F-18-7

18.2.2 Installing the System Software (SST -> USB)

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Here, you will be copying the system software from the SST to a USB device.

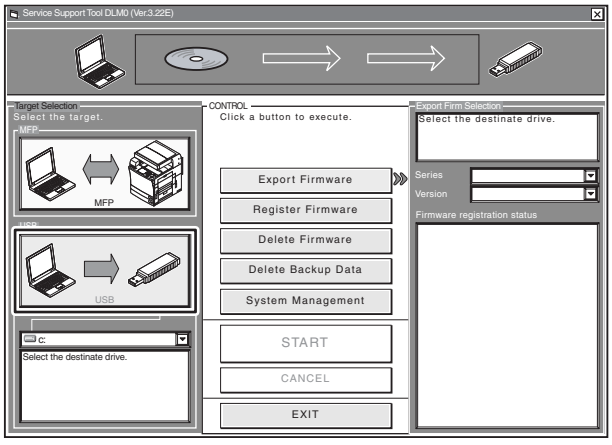
[Preparatory Work]
Requirements
- PC installed with SST version 3.22 or later
- USB device (*)

*: USB Requirements

Interface	USB 1.1 or higher (USB 2.0 or recommended)
Capacity	1 GB or more recommended (A set of system software is in excess of 512 MB.)
Format	FAT (FAT16), FAT32 (It must not be NTFS or HFS.) single partition (There must not be multiple partitions.)

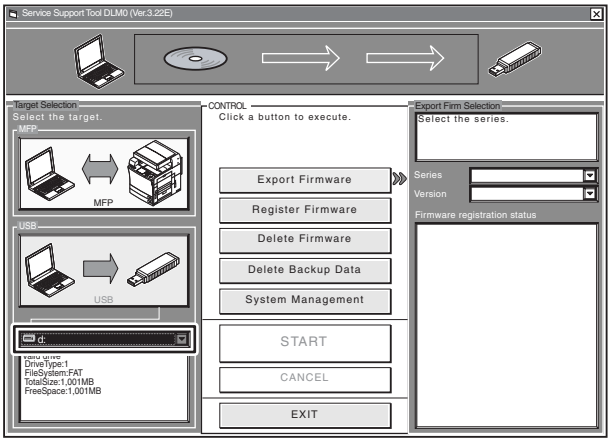
You will not be able to use a security-protected USB device. Be sure to remove the protection before use.

[Copying the System Software]
1) Start up the PC.
2) Connect the USB device to the USB port of the PC.
3) Start up the SST.
4) Click the USB icon on the Target Selection screen.



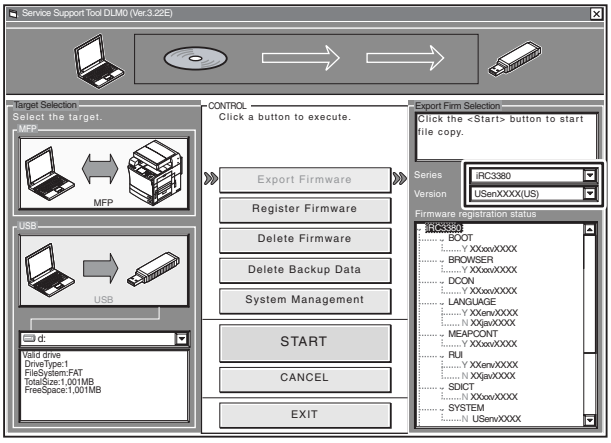
F-18-8

5) Select the drive to which the USB device has been connected.



F-18-9

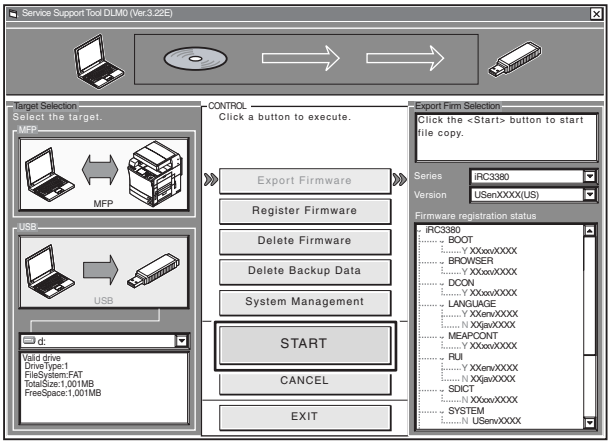
6) Select the appropriate 'Series' and 'Version' of the system software you want to copy.



F-18-10

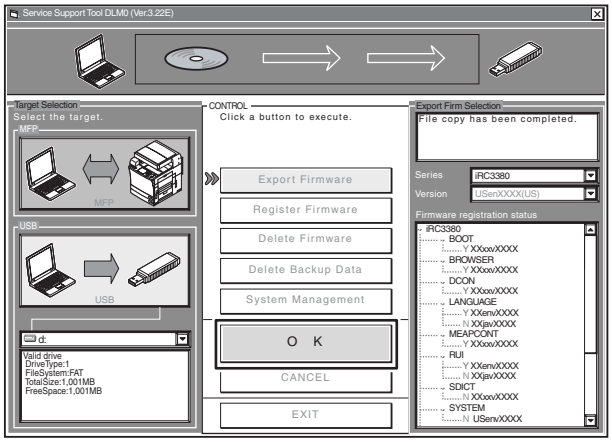
MEMO:
The notations that appear in the column under "Firmware registration status" mean the following:
Y: exists in the SST.
N: does not exist in the SST.

7) Click [START] so that copying to the USB device starts.



F-18-11

8) When done, click [OK].



F-18-12

18.2.3 Making Connections (SST in use)

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

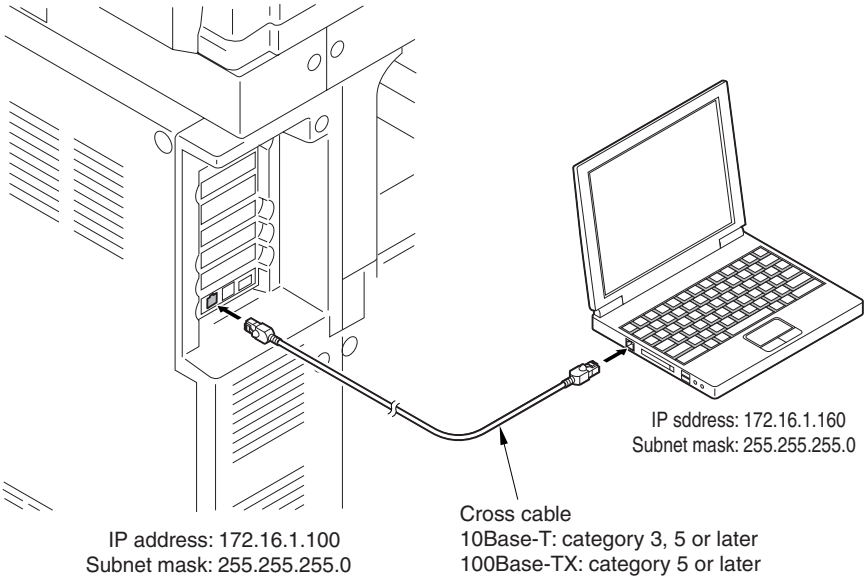
[Requirements]
- PC to which the SST (version 3.22 or later) has been installed and the system software has been copied
- twisted-pair cross cable
  10Base-T: Category 3 or 5
  100Base-TX: Category 5

[Procedure]
1) Start up the PC.
2) Connect the PC to the machine with a cross cable.
3) Check the network settings of the PC.
   3-1) Start the command prompt, and type in "**IPCONFIG**," and press the Return key.
   3-2) Check to be sure that the network settings appearing on the screen are as follows; if not, change the PC network settings:
   IP address: 172.16.1.160
   Subnet mask: 255.255.255.0
   Default gateway: any

⚠
Do not use the following IP addresses:
- 172.16.1.0
- 172.16.1.100
- 172.16.1.255

---

4) Check to make sure that the Execute/Memory lamp on the control panel is off; then, turn off the main power switch.
   4-1) Hold down the power switch on the control panel for 3 sec or more.
   4-2) Go through the shut-down instructions appearing on the control panel screen so that the main power switch may be turned off.
   4-3) Turn off the main power switch.



F-18-13

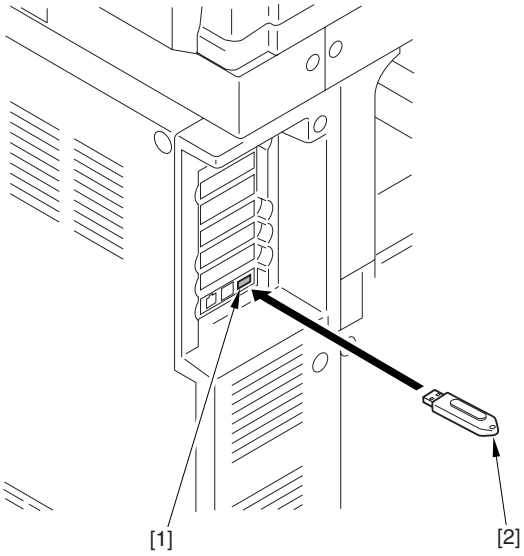
5) Set the machine to the appropriate mode:
   - Normal Mode
   Turn on the main power switch while holding down the keys 1 and 7.
   When the machine has started, make the following selections in service mode:
   COPIER > FUNCTION > SYSTEM > DOWNLOAD; then, click [OK].
   - Safe Mode
   Turn on the main power switch while holding down the keys 2 and 8. In response, the machine will start up in safe mode.

18.2.4 Making Connections (USB device in use)

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

[Requirements]
- USB device to which the system software has been copied.

[Procedure]
1) Check to make sure that the Execute/Memory on the control panel is off; then, turn off the main power switch as follows:
   1-1) Hold down the control panel power switch for 3 sec or more.
   1-2) Go through the shut-down instructions.
   1-3) Turn off the main power switch.
2) Connect the USB device [2] to the USB port [1].



F-18-14

3) If a network cable is connected to the machine, disconnect it.
4) Set the machine to the appropriate download mode:
   - Normal Mode
      Turn on the main power switch while holding down the keys 1 and 7.
      When the machine has started up, make the following selections in service mode, and press [OK]:
      COPIER > FUNCTION > SYSTEM > DOWNLOAD.
   - Safe Mode
      Turn on the main power switch while holding down the keys 2 and 8 so that the machine will start up in safe mode.
5) See the following menu appearing on the control panel screen, indicating that the machine has recognized the presence of a USB device.

```
[[[[[ download Menu (USB) ]]]]]]]]]]
-----------------------------------
 [1]: Upgrade (Auto)
 [2]: Upgrade (w Confirmation)
 [3]: Upgrade (Overwrite all)
 [4]: Format HDD
 [5]: Backup
 [6]: Restore former version
 [7]: Clear downloaded files

 [Stop]:Shutdown
```

F-18-15

⚠ The machine may not recognize certain types of USB device or USB device from certain manufacturers. The machine looks for a USB deivce for a maximum of 60 sec after its main power is turned on, not indicating the menu if it fails to detect one. (If such is the case, obtain an appropriate USB device.)

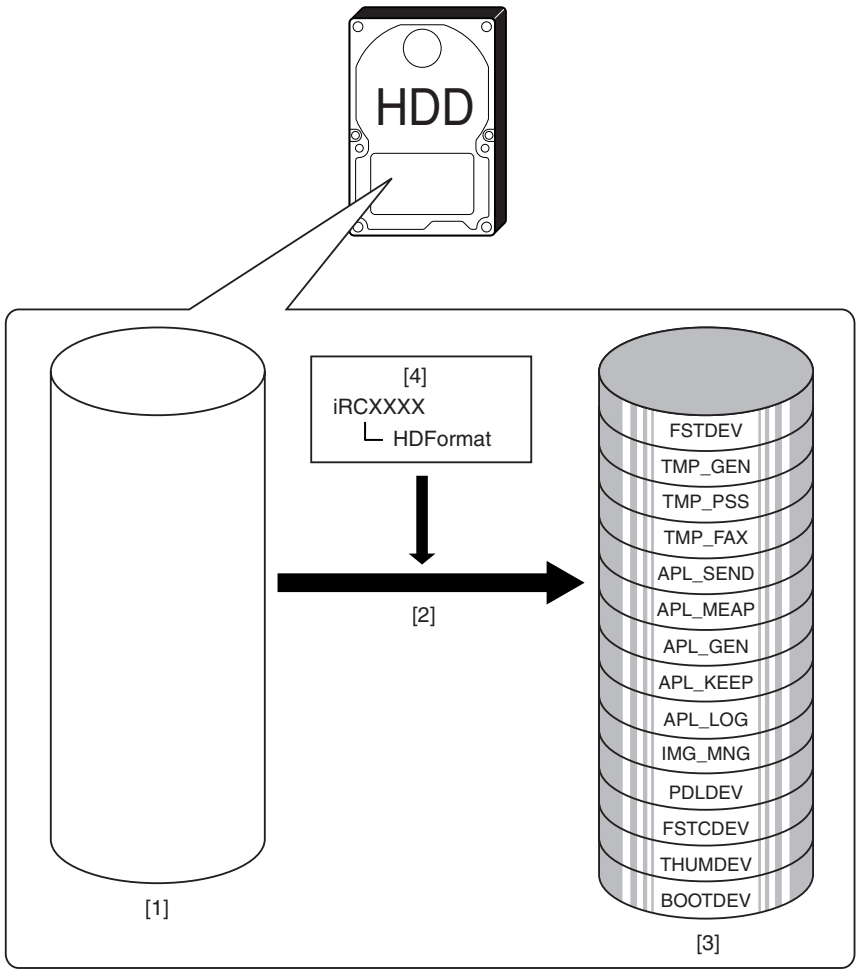
⚠ The SST cannot be run while the USB device is in use. (The machine will not communicate with the SST when it detects the presence of a USB device.)

18.3 Formatting the HDD

18.3.1 Formatting All Partitions

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

When formatting the HDD for all partition, there will be partitions on the HDD and all these partitions will be formatted (initialized) and the main controller will be made ready for use.
All the information needed to set up the partition is found in the partition settings file (on the SST, 'HDFormat' in the folder 'iRCXXXX').



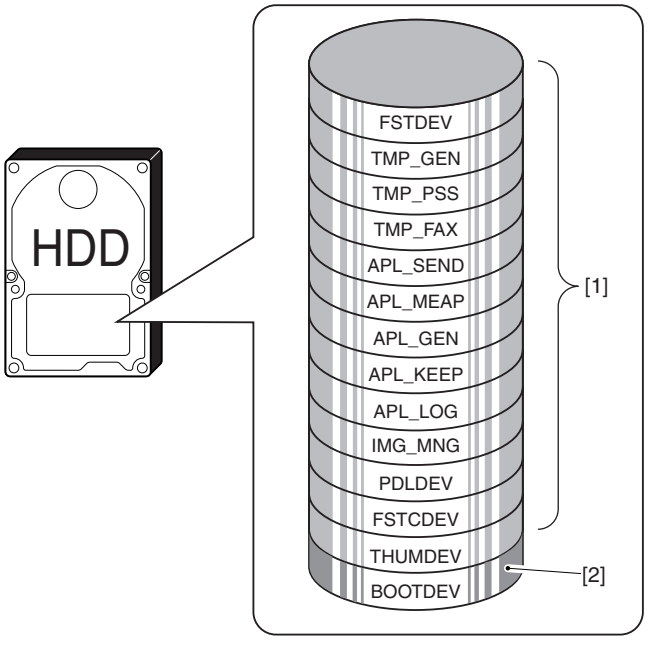
F-18-16

[1] HDD (service part; without partitions)
[2] Formatting for full partition (only in safe mode)
[3] HDD after formatting
[4] Partition settings information file

18.3.2 Formatting Selected Partitions

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

When formatting the HDD for selected partitions, only those selected partitions will be initialized.



F-18-17

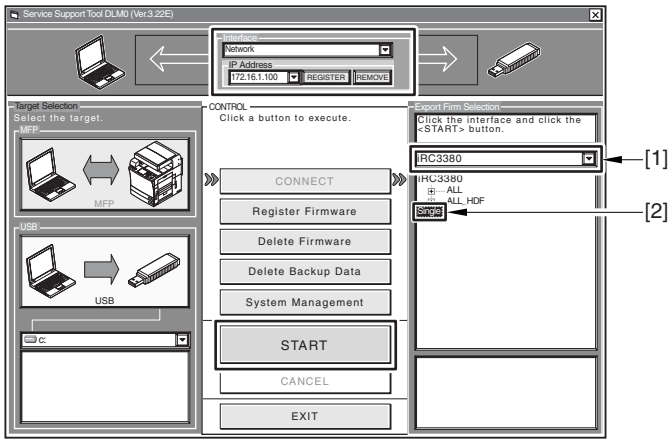
[1] Formatting not possible
[2] Formatting possible in safe mode

MEMO:
Partition-based formatting is possible in service mode (COPIER > FUNCTION > SYSTEM > HD-CLEAR), with the exception of BOOTDEV.

18.3.3 Formatting the Partitions

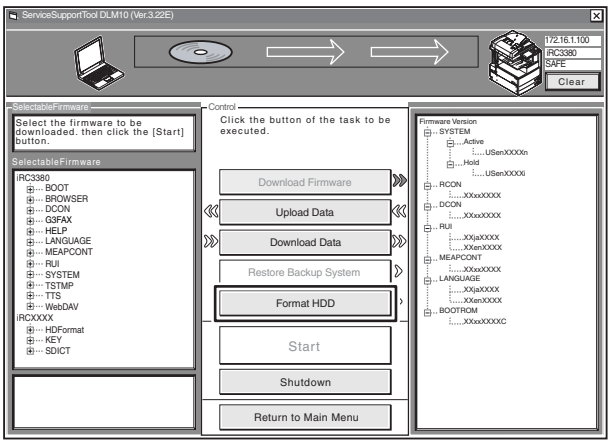
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

1) Start up the SST.
2) Select the model [1] and the type of system software [2] ('Single'); then, check the network settings, and click [START].



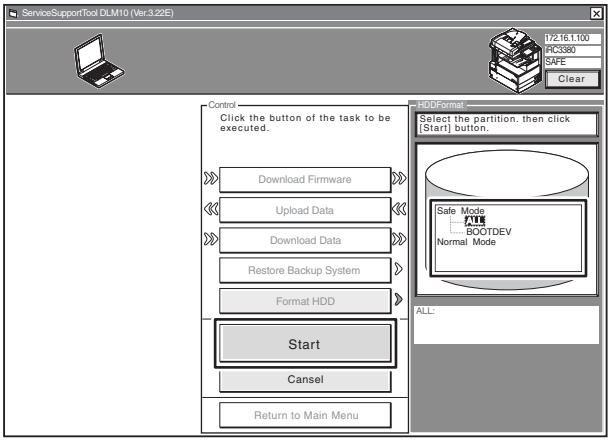
F-18-18

3) Click [Format HDD].



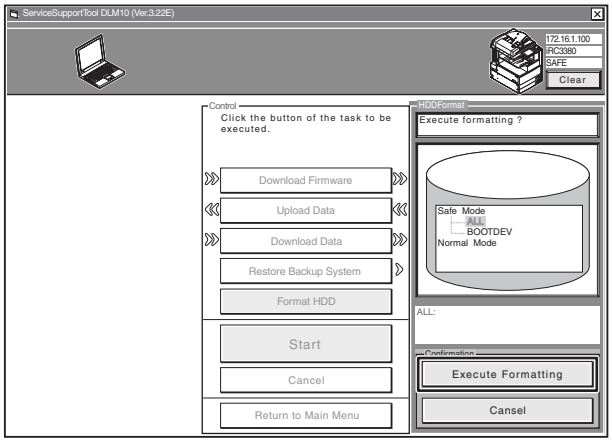
F-18-19

4) Specify BOOTDEV partition or full partition (ALL), and click [Start].



F-18-20

5) Click [Execute Formatting].



F-18-21

6) When formatting has ended, click [OK] to return to the Menu screen.
7) Move on to download the system software.

Whenever you have executed HDD formatting, be sure to download the system software; otherwise, an error (E602) will occur when the main power is turned on.

18.4 Downloading System Software

18.4.1 Batch Downloading

18.4.1.1 Outline

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

You can collectively download various system software files at one time. The groups of system software files that may be downloaded in a batch are identified in the batch download information file, which is found on the System CD. Copy the file to the SST to enable the batch downloading mechanism.

<Batch Download Information File>

ALL: for downloading in normal mode
Use it to collectively download all system software files that are found.
Use it as when upgrading the system software.

ALL_HDF: for downloading in safe mode
Use it to collectively download system software files other than the following:
- BOOT
- DCON
- RCON

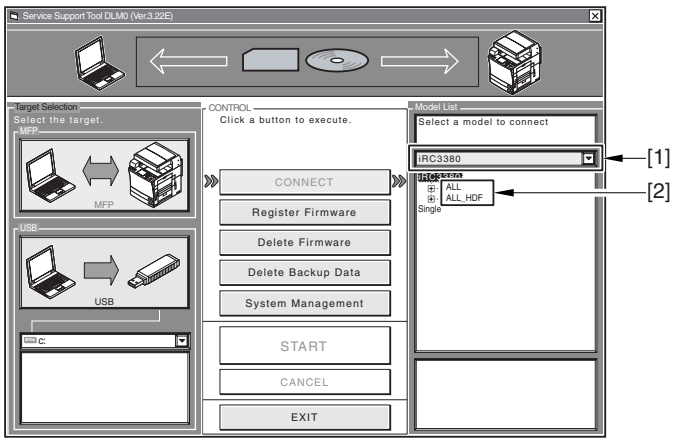
Use it when reinstalling the system software as after formatting the HDD.
The foregoing 3 system software files may be downloaded using different steps.

18.4.1.2 Downloading Procedure

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

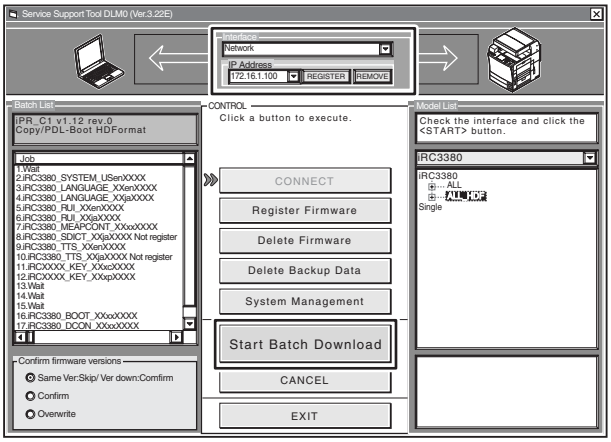
Here, the discussions are in reference to batch downloading in safe mode.

1) Start up the SST.
2) Select the model [1] and the batch download information file [2] ('ALL_HDF').



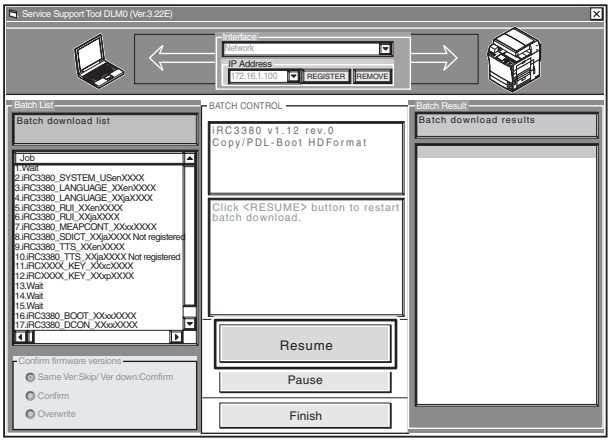
F-18-22

3) Make sure of the network settings, and click [Start Batch Download].



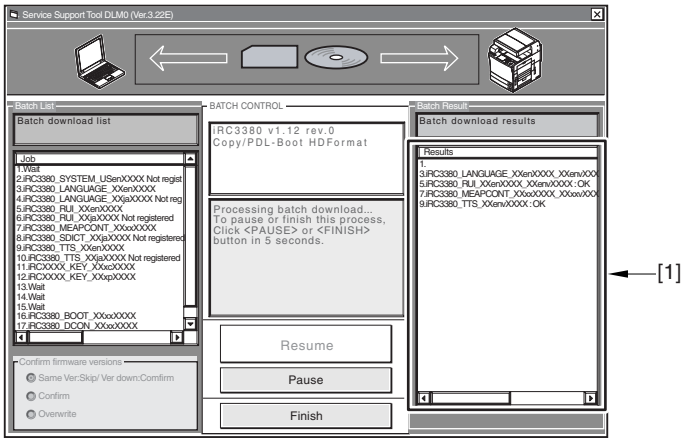
F-18-23

4) Click [Resume].



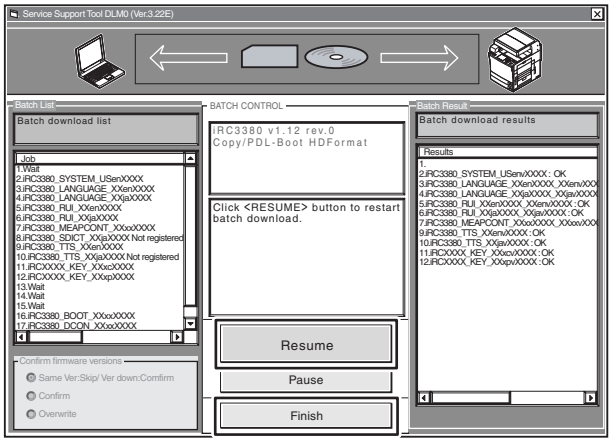
F-18-24

MEMO:
Refer to the Batch download results screen [1] for the progress of downloading.



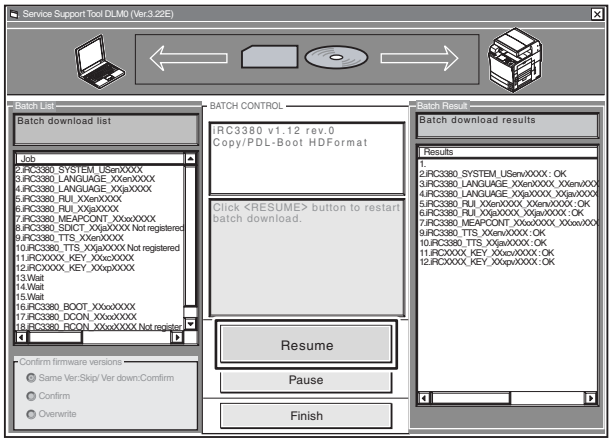
F-18-25

5) The Download End screen appears for the system software files to be stored on the HDD. To stop downloading, click [Finish]; if you want to download BOOT, DCON, and RCON, on the other hand, click [Resume], and go to the next step.



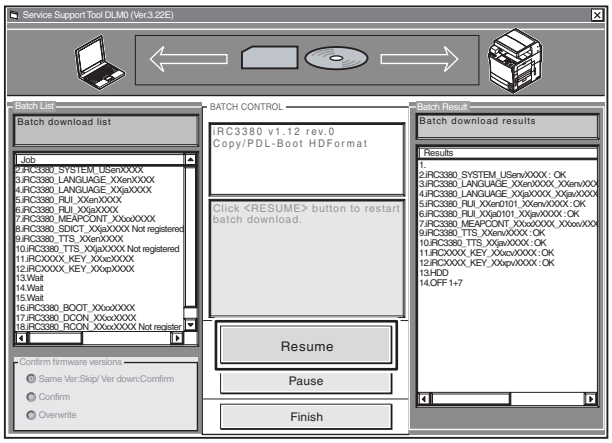
F-18-26

6) Turn off the machine's main power switch, and start it up in normal mode (turn on the main power switch while holding down the 1 and 7 keys; then, start download mode in service mode).
Click [Resume].



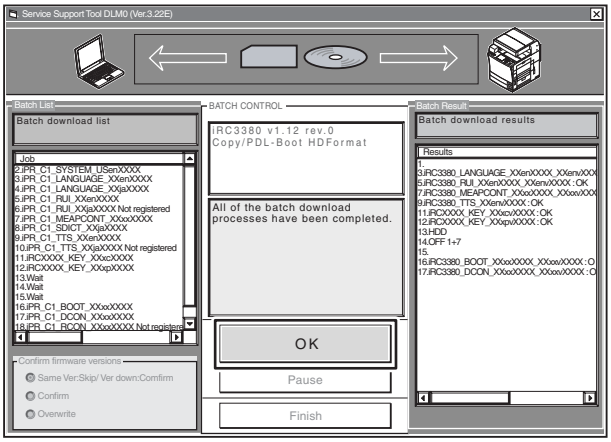
F-18-27

7) Click [Resume] to start downloading BOOT, DCON, and RCON.



F-18-28

8) Click [OK].



F-18-29

Turning Off the Power
Do not turn off the power while downloading or writing is under way; otherwise, the machine may fail to start up. If such is the case, execute HDD formatting, and download the system software once again.

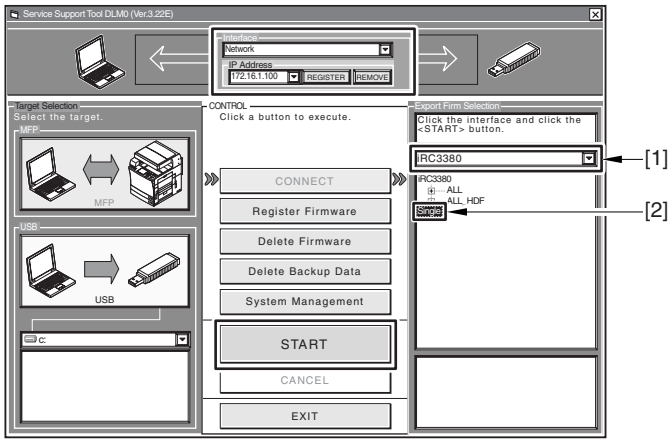
18.4.2 Downloading the System Software (Single)

18.4.2.1 Downloading Procedure

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

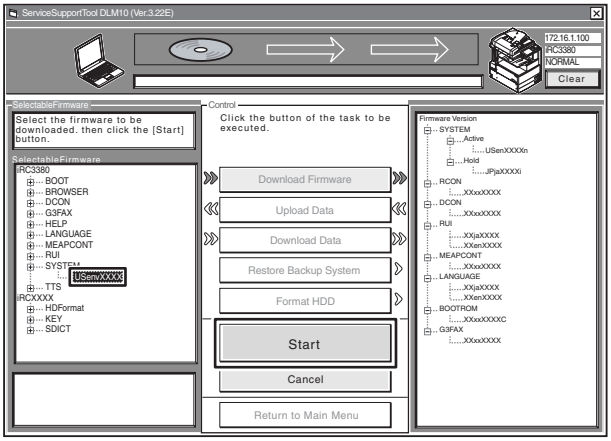
Here is the downloading procedure of the SYSTEM as a sample. (Same for other system software)

1) Start up the SST.
2) Select the model [1] and the type of system software [2] ('Single'); then, check the network settings, and click [START].



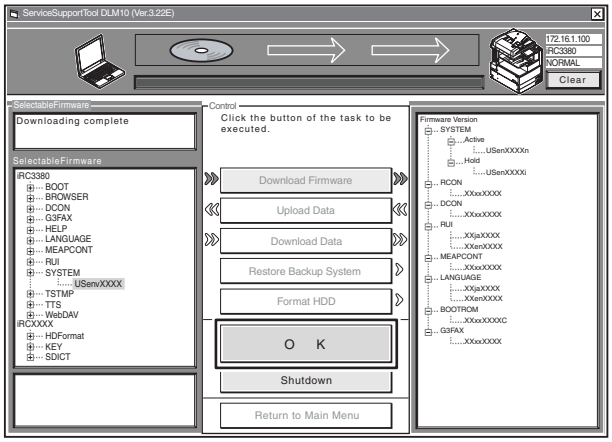
F-18-30

3) Select the version of the System software you want to download, and click [Start].



F-18-31

4) When downloading has ended, click [OK] to go back to the previous screen.

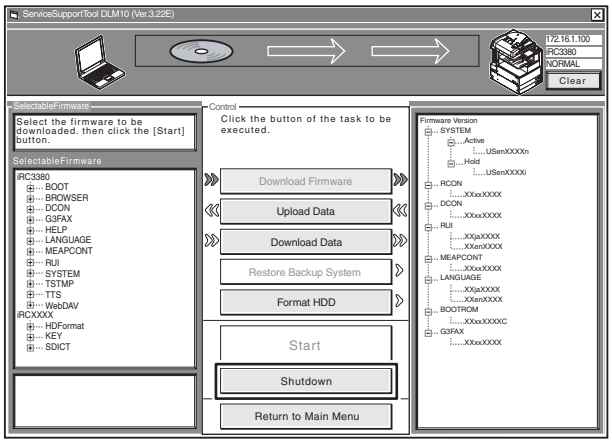


F-18-32

5) Start up the machine. The subsequent procedure differs depending on the download mode.

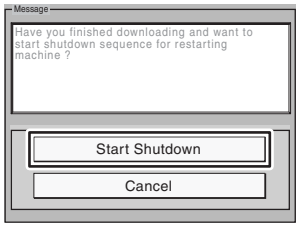
If the machine is in normal mode,

5-1) Click [Shutdown].



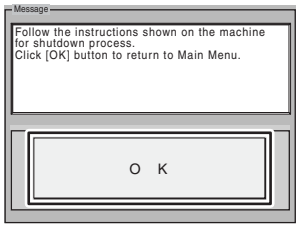
F-18-33

5-2) Click [Start Shutdown] so that the machine starts the shut-down sequence.



F-18-34

5-3) Click [OK], and turn off and then back on the machine's main power switch.



F-18-35

If the machine is in safe mode,

5-1) Turn off and then back on the machine's main power switch.

6) When the machine starts up, it will write the system software to its HDD and flash ROM while showing the progress of writing on the control panel screen. When done, it will indicate a message asking you to turn off and then back on the power. In response, turn off and then back on the main power.

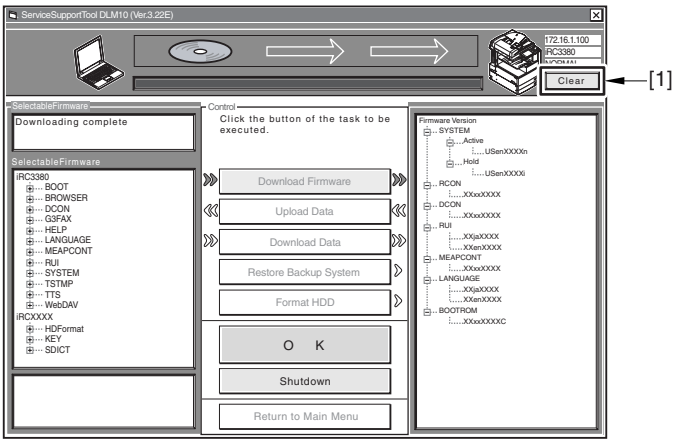
⚠ Turning Off the Power

Do not turn off the machine's power while downloading or writing is under way; otherwise, the machine may fail to start up. If such is the case, execute HDD formatting, and download the system software once again.

MEMO:

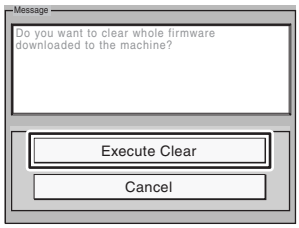
You can remove the downloaded system software before it is written to the HDD or flash ROM. To do so, go through the following before restarting the machine:

1) Click [Clear] [1].



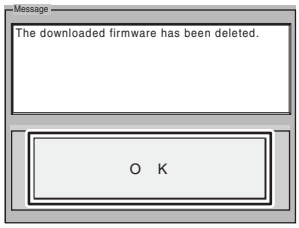
F-18-36

2) Click [Execute Clear] so that the system software that has been stored in the temporary storage area of the HDD will be removed.



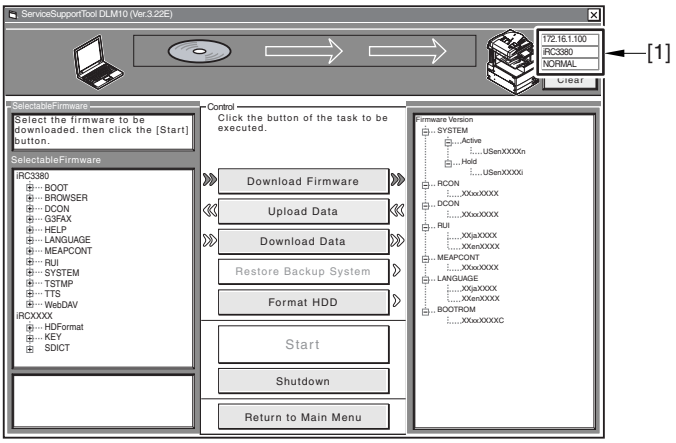
F-18-37

3) Click [OK]. Return to the previous page.



F-18-38

MEMO:
After connecting, the following device information [1] is displayed on the right upper area of the SST screen.
- IP address
- Product name
- Download mode



F-18-39

18.5 Uploading and Downloading Backup Data

18.5.1 Outline

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

The file MeapBack is a MEAP application and its data stored on the HDD.
The file SramDCON is data stored in the SRAM of the DC controller PCB.
The file SramRCON is data stored in the EEPROM of the reader controller PCB.

T-18-4

Backup data	File to select for downloading
For R&D	~~SramImg.bin~~ (do not select this file)
MEAP application	MeapBack.bin (may be uploaded/downloaded in safe mode)
For R&D	~~Sublog.txt~~ (do not select this file)
Reader controller PCB backup	SramRCON (may be uploaded/downloaded in normal mode)
DC controller PCB backup	SramDCON (may be uploaded/downloaded in normal mode)

Points to Note When Uploading/Downloading MeapBack
If you need to re-install the system software to correct a fault, you may upload MeapBack and then download it back after formatting the HDD (by temporarily putting aside the MEAP application).
1) Upload MeapBack.
2) Execute HDD all format.
3) Re-install the system software.
At this time, be sure that the system software is the same as that existed before formatting the HDD. Otherwise, you will not be able to download MeapBack you have uploaded.
4) Download MeapBack.
You will not be able to download MeapBack you have uploaded unless you are downloading it to the machine you have uploaded it from.

MEMO:
- If you are planning to replace the HDD or execute ALL or APL_MEAP formatting, it will be a good idea to upload the MeapBack file in advance and then download after the work by way of temporarily keeping away the MEAP application.
- If you are planning to replace the Reader controller PCB, you can upload the SramRCON file in advance, and download it after replacement so that the service mode and other settings may be inherited.
- If you are planning to replace the DC controller PCB, you can upload the SramDCON file in advance, and download it after replacement so that the service mode and other settings may be inherited.

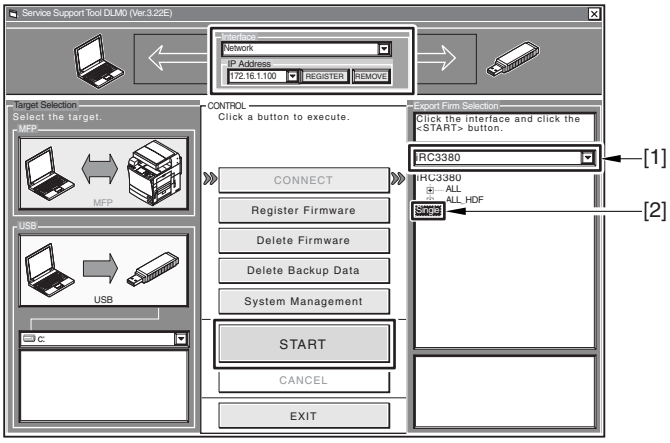
18.5.2 Uploading Procedure

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

- When uploading the data, do not select 'SramImg.bin' or 'Sublog.txt'.
- The machine must be in normal mode for uploading/downloading SramDCON or SramRCON.
- The machine must be in safe mode when uploading/downloading MeapBack.

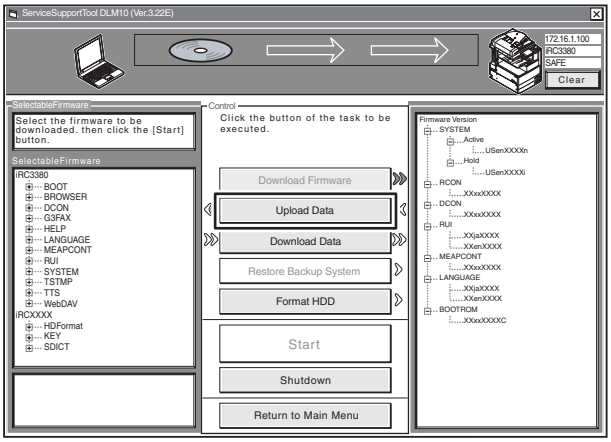
[In the Case of MeapBack]

1) Start up the SST.
2) Select the model [1] and the type of system software [2] ('Single'); then, check the network settings, and click [START].



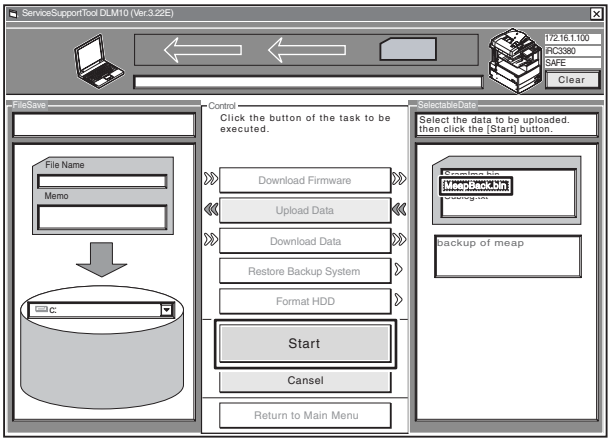
F-18-40

3) Click [Upload Data].



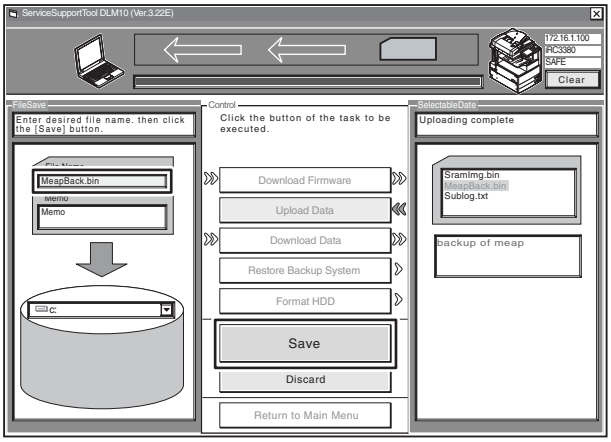
F-18-41

4) Select 'MeapBack.bin', and click [Start].



F-18-42

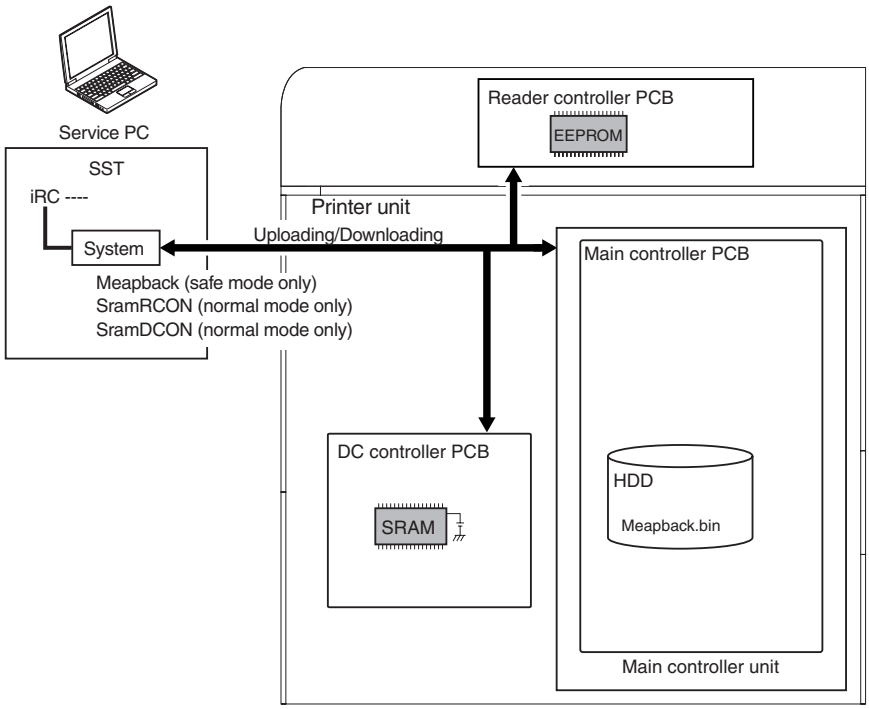
5) Type in the name of the file to store and, as necessary, a brief description; then, click [Save].



F-18-43

6) Click [OK].

⚠
The file SramRCON, SramDCON, or MeapBack may only be downloaded to their source machine.



F-18-44

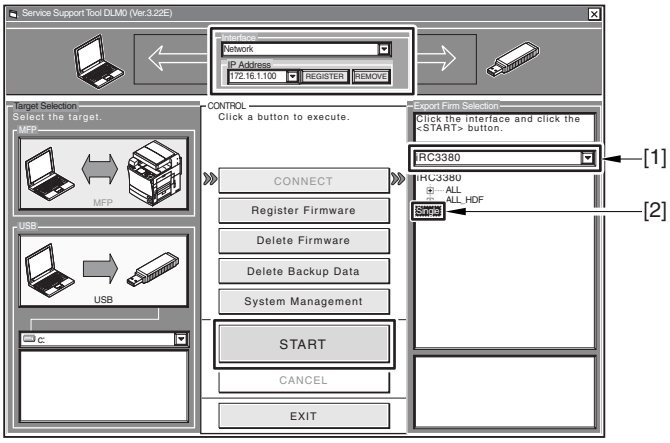
18.5.3 Downloading Procedure

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

- The machine must be in normal mode for uploading/downloading the file SramDCON or SramRCON.
- The machine must be in safe mode for uploading/downloading the file MeapBack.

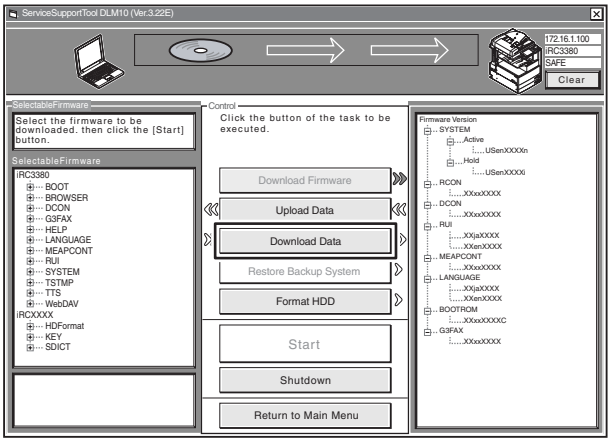
[In the Case of MeapBack]

1) Start up the SST.
2) Select the model [1] and the type of system software [2] ('Single'); then, check the network settings, and click [START].



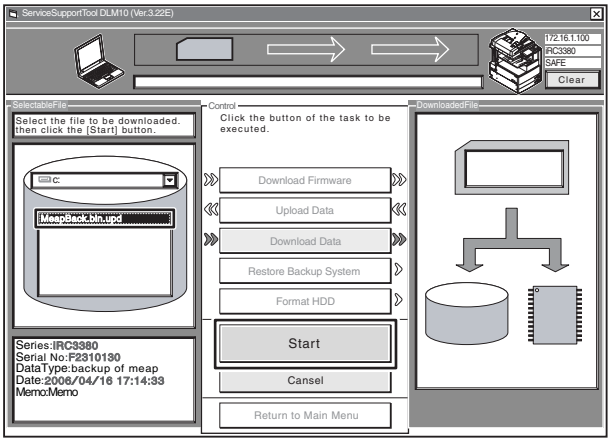
F-18-45

3) Click [Download Data].



F-18-46

4) Select the data to download, and click [Start].



F-18-47

5) When downloading has ended, click [OK] to return to the previous screen.

18.6 Version Upgrade using USB

18.6.1 Overview of Menus and Functions

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

```
[[[[[ download Menu (USB) ]]]]]]]]]]
-------------------------------------

 [1]: Upgrade (Auto)
 [2]: Upgrade (w Confirmation)
 [3]: Upgrade (Overwrite all)
 [4]: Format HDD
 [5]: Backup
 [6]: Restore former version
 [7]: Clear downloaded files

 [Stop]:Shutdown
```

F-18-48

Downloading the System Software

[1]: Upgrade (AUTO)
Use it to download/write the system software. (auto)

[2]: Upgrade (w Confirmation)
Use it to download the system software. (Confirmation execution when version is downed the same version)

[3]: Upgrade (Overwrite all)
Use it to download the system software. (all overwrite)

Formatting the HDD (only in safe mode)

[4]: Format HDD (in the presence of BOOTDEV)
Use it to format the HDD for BOOTDEV partition.

[4]: Format HDD (ALL) (in the absence of BOOTDEV)
Use it to format the HDD for full partition.

Other Functions

[5]: Backup

Do not use it. (for use by R&D only)
[6]: Restore former version (in the presence of a backup of the system software)
Use it to restore the backup of the system software.
[7]: Clear downloaded files
Use it to remove the system software immediately before downloading (before writing).
[Stop]: Shutdown (in normal mode)
Use it to execute shut-down instructions.

To select/execute a function, use the keys on the control panel.

18.6.2 Points to Note

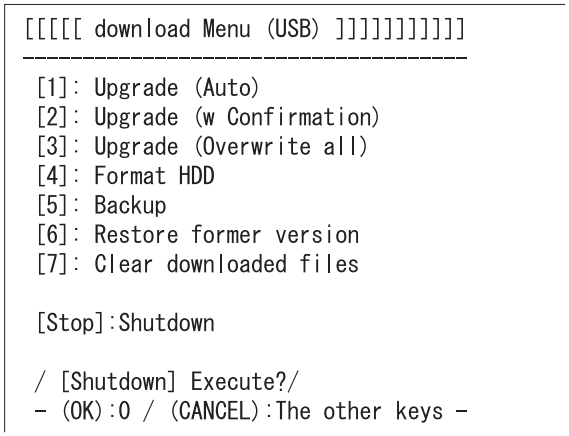
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

Turning Off the Power
Do not turn off the machine while downloading or writing is under way. Doing so could prevent the machine from starting up. If this is the case, execute HDD formatting (menu [4]), and download the system software. If the machine fails to start up because of failed downloading of BOOT the DIMM ROM must be replaced.

Downgrading
Be sure that the system software in the USB device is of the latest version.
The following files of the system software do not permit collection of version information. As such, they necessarily overwrite the system software on the HDD:
- **KEY** (in both normal and safe mode)
- **TTS** (in both normal and safe mode)
- **BROWSER** (in both normal and safe mode)
- **WebDAV** (in both normal and safe mode)
- **TSTAMP** (in both normal and safe mode)
- **HELP** (in both normal and safe mode)
- **DCON** (in safe mode only)
- **RCON** (in safe mode only)
- **G3FAX** (in safe mode only)

The following is recommended for normal downloading (i.e., downloading of the system software, not after HDD replacement or formatting):
download mode: normal
download menu: [1]: Upgrade (Auto)

Turning Off the Power After Normal Mode
When ending download mode, be sure to execute the HDD shut-down instructions. On the Initial Menu screen, press [stop] > [0]; then, go through the shut-down instructions, and turn off the main power switch.



F-18-49

18.6.3 Downloading/Writing the System Software (auto)

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

[1]: Upgrade (AUTO)
The system software on the HDD and that in the USB device are compared. If the latter is new, it will be downloaded to the temporary storage area of the HDD. At the end of the downloading, the machine restarts on its own to write the downloaded system software to the system area of the HDD and the flash ROM.

<Procedure>

1) If the machine is on, go through the HDD shut-down instructions, and turn off the main power.
2) Connect the USB device to the sub port.
3) Put the machine in download mode (normal or safe).
4) Go through the instructions on the control panel, and press the appropriate key.
[1] -> [0]: execute download / other than [0]: go back to Menu screen

```
[[[[[ download Menu (USB) ]]]]]]]]]]
------------------------------------
 [1]: Upgrade (Auto)
 [2]: Upgrade (w Confirmation)
 [3]: Upgrade (Overwrite all)
 [4]: Format HDD
 [5]: Backup
 [6]: Restore former version
 [7]: Clear downloaded files

 [Stop]:Shutdown
```

F-18-50

5) While downloading is under way, the control panel screen shows its progress. At the end of the downloading, the machine restarts on its own to start writing to the system area of the HDD or the flash ROM.

- Screen Showing the Progress of Downloading

```
////Copying files from USB-dev.///
[iRC3380-XXenXXXX-5822-TTS.lst] OK.
[iRCXXXX-XXxcXXXX-1776-KEY.dsh] OK.
[iRCXXXX-XXxcXXXX-F4D1-KEY.dat] OK.
[iRCXXXX-XXxcXXXX-405C-KEY.lst] OK.
[iRCXXXX-XXxpXXXX-17AC-KEY.dsh] OK.
[iRCXXXX-XXxpXXXX-96D0-KEY.dat] OK.
[iRCXXXX-XXxpXXXX-0564-KEY.lst] OK.
[iRC3380-XXxxXXXX-5C64-DCON.ird] OK.
[iRC3380-XXxxXXXX-B1B1-DCON.prg] OK.
[iRC3380-XXxxXXXX-DCON.ift] OK.
File transfer has been completed.
```

- Screen Showing the Progress of Writing to the HDD

```
<<<<<<<<<< download-shell >>>>>>>>>>
[KEY xp]      ...Upgrading complete
[KEY xc]      ...Upgrading complete
[TTS en]      ...Writing to HDD XX%
```

F-18-51

6) At the end of writing to the HDD, a message will appear asking you to turn off and then back on the power. Turn off the power, remove the USB device, and turn the power back on.

```
<<<<<<<<<< download-shell >>>>>>>>>>
[KEY xp]      ...Upgrading complete
[KEY xc]      ...Upgrading complete
[TTS en]      ...Upgrading complete
+++ Switch OFF the power then ON. +++
```

F-18-52

18.6.4 Downloading the System Software (Confirmation execution when version is downed the same version)

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

[2]: Upgrade (w Confirmation)
The system software on the HDD is compared against that in the USB device. Those system files that are newer will then be downloaded to the temporary storage area of the HDD. If the system software in the USB is of the same or older version, a message will appear on the screen, offering a choice. Unlike menu item [1], the machine will not restart on its own. When you turn it off and then back on manually, it will start to write the system software when it starts up.

<Procedure>

1) If the machine is on, go through the HDD shut-down instructions, and turn off the main power.
2) Connect the USB device to the USB port.
3) Put the machine in download mode (normal or safe).
4) Go through the instructions indicated on the control panel, and press the appropriate key.
[2] -> [0]: execute download / other than [0]: go back to Menu screen

```
[[[[[  download Menu (USB) ]]]]]]]]]]
----------------------------------------
 [1]: Upgrade (Auto)
 [2]: Upgrade (w Confirmation)
 [3]: Upgrade (Overwrite all)
 [4]: Format HDD
 [5]: Backup
 [6]: Restore former version
 [7]: Clear downloaded files

 /[2] has been selected. Execute?/
 - (OK):0 / (CANCEL):The other keys -
```

F-18-53

MEMO:
If the system software in the USB device is found to be of the same or older version, a message will appear asking you if you want to overwrite. Go though the instructions on the control panel, and press the appropriate key.
[0]: overwrite / other than [0]: do not overwrite

```
////Copying files from USB-dev.///
[Warning] Same version or old version.
----------------------------------------
[BOOT XXxx]...Same. OVERWRITE?
   -- (YES):0 /(NO):The other keys--
```

F-18-54

5) While downloading is under way, the control panel screen shows its progress. At the end of downloading, a message will appear asking you to press a key. Press the appropriate key. If the machine is in normal mode, it starts the shut-down instructions.

```
////Copying files from USB-dev.///
[iRC3380-XXenXXXX-5822-TTS.lst] OK.
[iRCXXXX-XXxcXXXX-1776-KEY.dsh] OK.
[iRCXXXX-XXxcXXXX-F4D1-KEY.dat] OK.
[iRCXXXX-XXxcXXXX-405C-KEY.lst] OK.
[iRCXXXX-XXxpXXXX-17AC-KEY.dsh] OK.
[iRCXXXX-XXxpXXXX-96D0-KEY.dat] OK.
[iRCXXXX-XXxpXXXX-0564-KEY.lst] OK.
[iRC3380-XXxxXXXX-5C64-DCON.ird] OK.
[iRC3380-XXxxXXXX-B1B1-DCON.prg] OK.
[iRC3380-XXxxXXXX-DCON.ift] OK.
File transfer has been completed.

---Please hit any key---
```

F-18-55

6) When a message appears asking you to turn off the power, turn off the main power switch, remove the USB device, and turn on the main power switch.
7) Upon start-up, the machine starts to write the system software to the system area of the HDD or the flash ROM. At the end of writing to the HDD, a message will appear asking you to turn off and then back on the power. Turn off and then back on the main power switch.

```
<<<<<<<<<< download-shell >>>>>>>>>>
[KEY xp]      ...Upgrading complete
[KEY xc]      ...Upgrading complete
[TTS en]      ...Upgrading complete
+++ Switch OFF the power then ON. +++
```

F-18-56

18.6.5 Downloading the System Software (all overwriting)

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

[3]: Upgrade (Overwrite all)
The system software in the USB device will overwrite the software on the HDD regardless of the version of the latter. Unlike menu item [1], however, the machine will not restart on its own at the end of downloading. When the power is turned off and then back on manually, the machine starts writing the system software.

<Procedure>

1) If the machine is on, go through the HDD shut-down instructions, and turn off the main power.
2) Connect the USB device to the USB port.
3) Put the machine in download mode (normal or safe).
4) Go through the instructions on the control panel, and press the appropriate key.
   [3] -> [0]: execute download / other that [0]: go back to Menu screen

```
[[[[[  download Menu (USB) ]]]]]]]]]]
------------------------------------
 [1]: Upgrade (Auto)
 [2]: Upgrade (w Confirmation)
 [3]: Upgrade (Overwrite all)
 [4]: Format HDD
 [5]: Backup
 [6]: Restore former version
 [7]: Clear downloaded files

 /[3] has been selected. Execute?/
 - (OK):O / (CANCEL):The other keys -
```

F-18-57

5) While downloading is under way, the control panel screen shows its progress. At the end of downloading, a message will appear asking you to press a key. Press the appropriate key. If the machine is in normal mode, the shut-down sequence will start.

```
////Copying files from USB-dev.///
[iRC3380-XXenXXXX-5822-TTS.lst] OK.
[iRCXXXX-XXxcXXXX-1776-KEY.dsh] OK.
[iRCXXXX-XXxcXXXX-F4D1-KEY.dat] OK.
[iRCXXXX-XXxcXXXX-405C-KEY.lst] OK.
[iRCXXXX-XXxpXXXX-17AC-KEY.dsh] OK.
[iRCXXXX-XXxpXXXX-96DO-KEY.dat] OK.
[iRCXXXX-XXxpXXXX-0564-KEY.lst] OK.
[iRC3380-XXxxXXXX-5C64-DCON.ird] OK.
[iRC3380-XXxxXXXX-B1B1-DCON.prg] OK.
[iRC3380-XXxxXXXX-DCON.ift] OK.
File transfer has been completed.

---Please hit any key---
```

F-18-58

6) When a message appears asking you to turn off the power, turn off the main power, remove the USB device, and turn the main power switch back on.
7) Upon start-up, the machine starts writing the system software to the system area of the HDD or the flash ROM. At the end of writing, a message will appear asking you to turn off and then back on the power. Turn off and then on the main switch.

```
<<<<<<<<<< download-shell >>>>>>>>>>
[KEY xp]      ...Upgrading complete
[KEY xc]      ...Upgrading complete
[TTS en]      ...Upgrading complete
+++ Switch OFF the power then ON. +++
```

F-18-59

18.6.6 Formatting the HDD

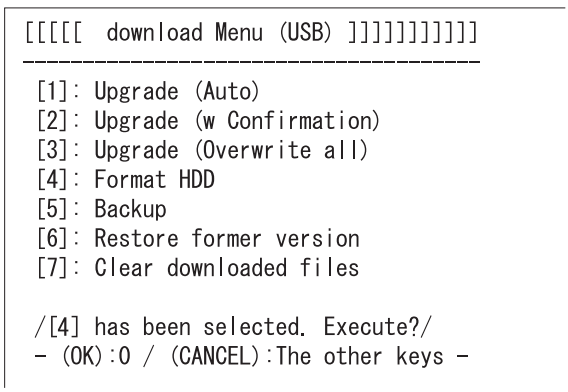
/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

⚠
This function is available only when the machine is in safe mode.

[4]: Format HDD (in the presence of BOOTDEV)
Use it to format the HDD for BOOTDEV partition.
[4]: Format HDD (ALL) (in the absence of BOOTDEV, as when replacing with new HDD)
Use it to format the HDD for full partition.

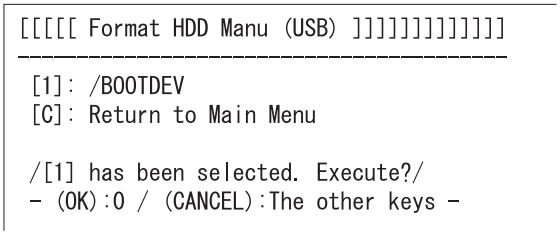
<Procedure>
Go through the following to format the HDD for BOOTDEV partition:

1) If the machine is on, go through the HDD shut-down instructions, and turn off the main power.
2) Connect the USB device to the USB port.
3) Start up the machine in safe mode.
4) Follow the instructions on the control panel, and press the appropriate key.
   [4] -> [0]: go to Partition Selection screen / other that [0]: go back to Menu screen



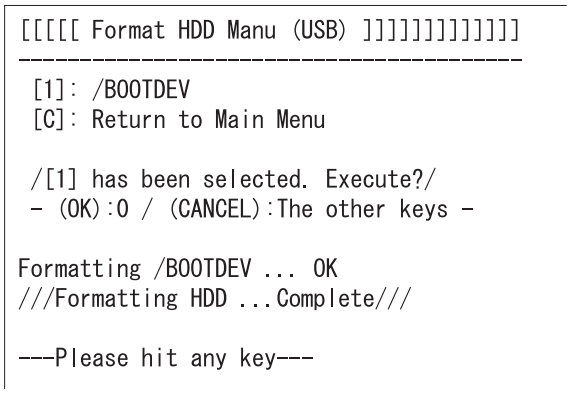
F-18-60

5) Go through the instructions on the control panel, and press the appropriate key.
[1] -> [0]: execute BOOTDEV formatting / other than [0]: go back to Menu screen
[C]: go back to Menu screen



F-18-61

6) At the end of formatting, a message will appear asking you to press a key. Press any key to go back to the Men screen.



F-18-62

7) Start downloading the system software. For instructions, see "Downloading the System Software."

18.6.7 Other Functions

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

[5]: Backup

⚠
This function is for R&D purposes only. Do not use it.

---

[6]: Restore former version (in the presence of backup of system software)
Use it to restore the backup of the system software while saving the system software that is current as a backup.

<Procedure>

1) If the machine is on, go through the HDD shut-down instructions, and turn off the main power.
2) Connect the USB device to the USB port.
3) Put the machine in download mode (normal or safe).
4) Go through the instructions on the control panel, and press the appropriate key.
[6] -> [0]: initialize / other than [0]: go back to Menu screen
After execution, a message will appear asking you to turn off and then on the power.

```
[[[[[ download Menu (USB) ]]]]]]]]]]
------------------------------------
 [1]: Upgrade (Auto)
 [2]: Upgrade (w Confirmation)
 [3]: Upgrade (Overwrite all)
 [4]: Format HDD
 [5]: Backup
 [6]: Restore former version
 [7]: Clear downloaded files

 /[6] has been selected. Execute?/
 - (OK):0 / (CANCEL):The other keys -
Restore former version...Complete.
+++ Switch OFF the power then ON. +++
```

F-18-63

5) Turn off the main power switch, remove the USB memory, and turn on the main power switch.

[7]: Clear downloaded files
Use it to remove the system software files that have been saved in the temporary storage area of the HDD. Use it if you want to remove the files without writing them to the HDD after downloading (menu [2] and [3]).

<Procedure>

1) The power supply is turned off after the download of the system software by menu [2] or [3] is completed, and it starts in a safe mode with the USB memory connected.
2) Go through the instructions on the control panel, and press an appropriate key.
[7] -> [0]: execute / other than [0]: go back to Menu screen
Upon execution, the Menu screen will return.

```
[[[[[  download Menu (USB) ]]]]]]]]]]
--------------------------------------
 [1]: Upgrade (Auto)
 [2]: Upgrade (w Confirmation)
 [3]: Upgrade (Overwrite all)
 [4]: Format HDD
 [5]: Backup
 [6]: Restore former version
 [7]: Clear downloaded files

 /[7] has been selected. Execute?/
 - (OK):0 / (CANCEL):The other keys -
```

F-18-64

[Stop]: Shutdown (in normal mode only)
Use it to start up the shut-down sequence.
<Procedure>

1) Go through the instructions on the control panel, and press an appropriate key.
[Stop] -> [0]: execute / other than [0]: go to Menu screen
The shut-down sequence will be executed, and a message will appear asking you to turn off the power.

```
[[[[[ download Menu (USB) ]]]]]]]]]]
------------------------------------
 [1]: Upgrade (Auto)
 [2]: Upgrade (w Confirmation)
 [3]: Upgrade (Overwrite all)
 [4]: Format HDD
 [5]: Backup
 [6]: Restore former version
 [7]: Clear downloaded files

 [Stop]:Shutdown

 / [Shutdown] Execute?/
 - (OK):0 / (CANCEL):The other keys -
```

F-18-65

2) Turn off the main power switch, and remove the USB device.

Chapter 19 Service Tools

Contents

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19.1.1 Special Tools....19-1
19.1.2 Solvents and Oils....19-2

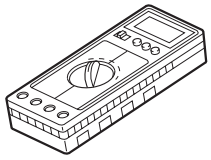
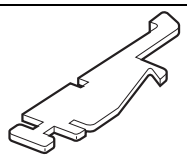
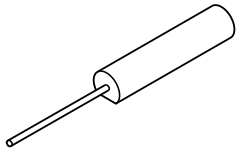
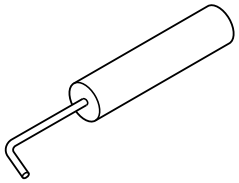
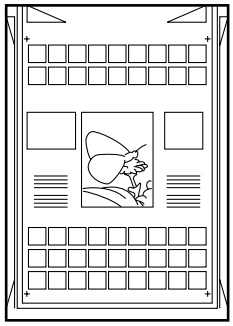
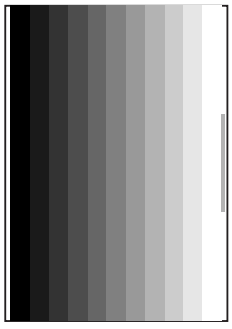
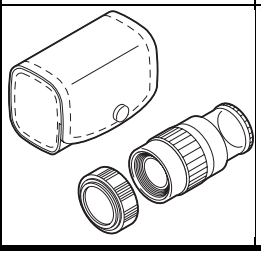
19.1 Service Tools

19.1.1 Special Tools

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

In addition to the standard tooles set, the following special tools are required when servicing the machine:

T-19-1

Tool name	Tool No.	Ctgr	Appearance	Remarks
Digital multimeter	FY9-2002	A		Use for electrical checks; for adjustment of laser power in combination with the laser power checker.
Cover switch	TKN-0093	A		
Tester extension pin	FY9-3038	A		Used as a probe extension when making electrical checks.
Tester extension pin (L-shaped)	FY9-3039	A		Used as a probe extension when making electrical checks.
CA1 test Sheet	FY9-9030	A		Used for adjusting/checking images.
D-10 test sheet	FY9-9129	B		Used for adjusting images.
Loupe	CK-0056	B		Used for checking images.

[Ctgr]
A: Must be kept by each service engineer.
B: Must be kept by each group of about five engineers.
C: Must be kept by each warkshop.

19.1.2 Solvents and Oils

/ / / / iR C3380i / iR C3380 / iR C2880i / iR C2880

T-19-2

Item	Uses	Composition	Remarks
Alcohol	Cleaning; e.g., glass, plastic, ruber; external covers.	-Fluoride-family hydrocarbon -Alcohol -Surface activating -Water	-Do not bring ner fire. -Procure locally. -Substitute: IPA(isopropy alcohol)
Solvent	Cleaning; e.g., metal; oil or toner stain.	-Fluoride-family hydrocarbon -Chlorine-family hydrocarbon -Alcohol	-Do not bring ner fire. -Procure locally. -Substitute: MEK
Heat-resisting grease	Lubrication; e.g., fixing drive areas.	-Mineral oil-family lithium soap -Molybdenum disulfide	-MO-138S -Tool No: CK-0427 (500 g/can)
Lubricating oil		-Mineral oil (paraffin-family)	-Tool No: CK-0524 (100 cc)
Lubricating oil	Lubrication; e.g., drive areas, friction areas.	-Silicone oil	-Tool No: CK-0551 (20 g)
Lubricating oil (EM-50L)	Lubrication; e.g., gears.	-Special oil -Special solid lubricating agent -Lithium soap	-Tool No: HY9-0007
Libricating oil	Lubrication; e.g., scanner rail.	-Silicone oil	-Tool No: 9-6011 (50 cc)
Lubricant	Lubrication; e.g., ITB Cleaning Brade	Fluorine graphite	-Tool No: TKN-0480

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