

Service Manual

Finisher, Sorter, DeliveryTray Finisher-P1

Canon

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.

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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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1.1 Product Specifications

1.1.1 Specifications

0001-6202

T-1-1

Item		Description	
Stacking method		stack tray (descent)	
Stack orientation		face-down	
Stack paper size	feed direction	139.7 to 457.2 mm	
	cross-feed direction	98.4 to 320 mm	
Paper weight		64 to 163 g/m2 (postcards may be used)	
Bin		delivery tray (1 pc.)	
Mode	staple	A3, A4, A4R, B4, B5, LDR, LGL, LTR, LTRR	
	non-staple	A3, A4, A4R, A5, A5R, B4, B5, B5R, postcard, LDR, LGL, LTR, LTRR, STMT, STMTR, envelope, Transparency, extra size*1	
	stack offset (30-mm shift)	A3, A4, A4R, B4, B5, LDR, LGL, LTR, LTRR	
Stack (number of sheets/stacks)	Non-bound	small-size*2	71 mm or less in height (81.4 g/m2 paper)
		large-size*3	35.5 mm in height (81.4 g/m2 paper)
	staple sort	all sizes 30 sets; or, height indicated above; of 81.4 g/m2	
Alignment width range	staple stack	210.0 to 297.0 mm in width	
	non-staple stack	139.7 to 305 mm in width	
	stack offset	210.0 to 297.0 mm in width	
Paper detection	intermediate processing tray	yes	
	stack tray	yes	
Size mix	size mix	71 mm or less in height (proper stacking not guaranteed)	
	staple mix	30 stacks or 71 mm or less in height (proper stacking not guaranteed)	
Control panel		no	
Display		no	

Item		Description
Installation		built-in type (fixed in place inside host machine, to delivery assembly)
External dimensions		409 (W) x 534 (D) x 201 (H) mm
Weight		11.5 kg
Power supply		from host machine (24/13 V)
Maximum power consumption	standby	7 W or less
	in operation	40 W or less
Operating noise	machine + DF + finisher	requirement for machine + 3 dB (74 dB or less)

T-1-2

Item		Description	
Bind		by rotating cam, punch type	
Bind size		1-point angle	A3, A4, A4R, B4, B5, LDR, LGL, LTR, LTRR
		2-point	A3, A4, B4, B5, LDR, LTR
Stack	small-size	plain paper (64 to 81.4 g/m2)	50 sheets*4
		plain paper (81.4 to 105 g/m2)	30 sheets*4
		heavy paper (105 to 163 g/m2)	2 sheets*5
	large-size	plain paper (64 to 81.4 g/m2)	30 sheets*4
		plain paper (81.4 to 105 g/m2)	20 sheets*4
		heavy paper (105 to 163 g/m2)	2 sheets*5
Staple addition			special cartridge (5000 staples)
Staple type			special
Staple detection			keys
Manual stapling			no

*1: 305 x 457 mm; 330 x 450 mm.

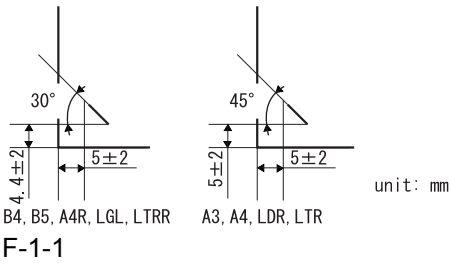
*2: A4, B5, A5, A5R, LTR, STMT, STMTR (feed length of 216 mm or less).

*3: A3, B4, A4R, B5R, 12x18, LGL, LTRR (feed length of 216.1 to 432 mm or less)

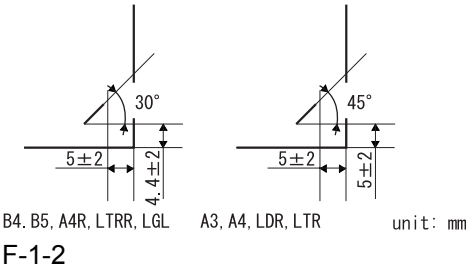
*4: in cover mode, includes 163 g/m2 paper (2 sheets).

*5: if heavy paper, 5.5 mm or less.

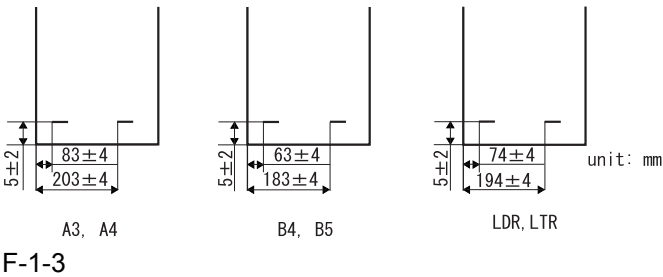
- Stapling Position (1-point, front)



- Stapling Position (1-point, rear)



- Stapling Position (2-point)

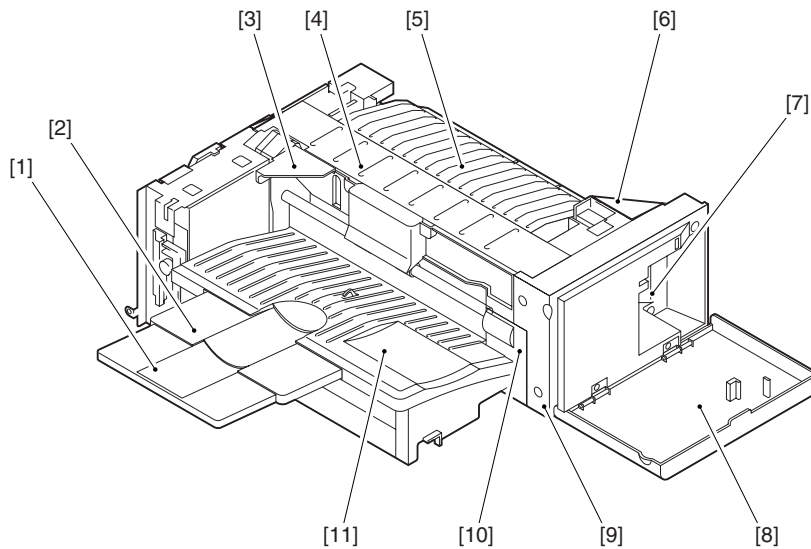


1.2 Names of Parts

1.2.1 External View

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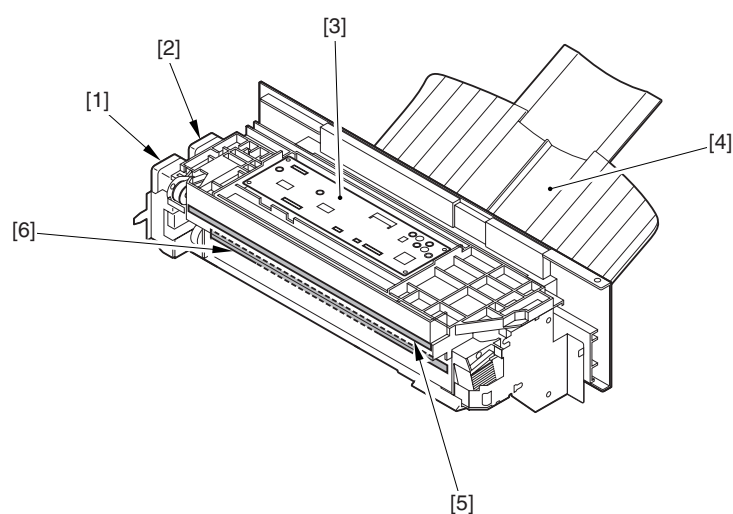
External View of the Finisher



F-1-4

- [1] Stack extension tray 2
- [2] Stack extension tray 1
- [3] Grip (left)
- [4] Upper guide assembly
- [5] Reversing guide
- [6] Grip (right)
- [7] Stapler cartridge access opening
- [8] Finisher front cover
- [9] Lattice guide
- [10] Stack roller cover
- [11] Stack tray

External View of the Relay Delivery Assembly



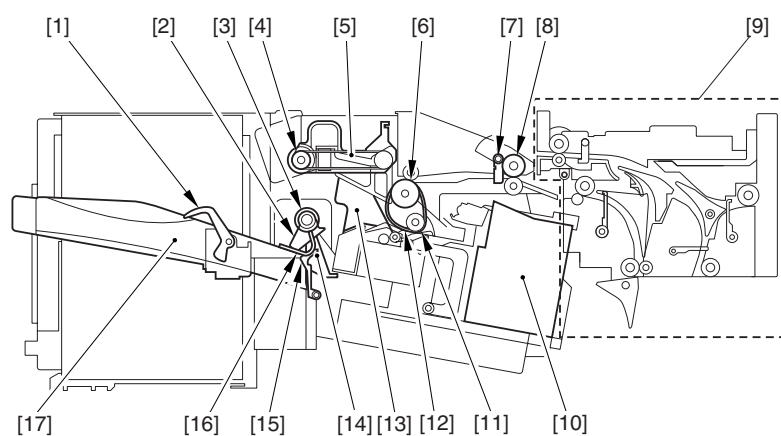
F-1-5

- [1] No. 2 delivery motor
- [2] No. 3 delivery motor
- [3] Relay delivery driver PCB
- [4] Copy Tray-J1 (optional)
- [5] Reversal slot
- [6] No. 2 delivery slot

1.2.2 Cross Section

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General View

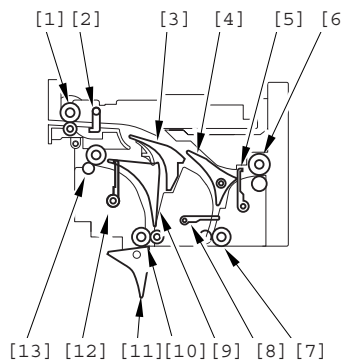


F-1-6

- [1] Stack tray power sensor flag
- [2] Paper surface upper sensor flag
- [3] Stack delivery roll
- [4] Stack delivery roller

- [5] Swing arm
- [6] Delivery roller
- [7] Delivery sensor
- [8] Inlet roller
- [9] Relay delivery assembly (for Finisher-P1)
- [10] Stapler
- [11] Stack retaining roll
- [12] Return belt
- [13] Aligning plate
- [14] Stacking wall
- [15] Paper surface lower sensor arm
- [16] Paddle
- [17] Stack tray

Relay Delivery Assembly Cross Section



F-1-7

- [1] Reversing roller
- [2] Reversal sensor
- [3] Duplexing flapper
- [4] No. 3 delivery flapper
- [5] No. 3 delivery sensor
- [6] No. 3 delivery roller
- [7] Duplexing inlet roller
- [8] duplexing inlet sensor
- [9] No. 2 delivery flapper
- [10] No. 2 delivery inlet roller
- [11] No. 1 delivery sensor
- [12] No. 2 delivery sensor
- [13] No. 2 delivery roller

Chapter 2 Functions

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2.1 Basic Construction

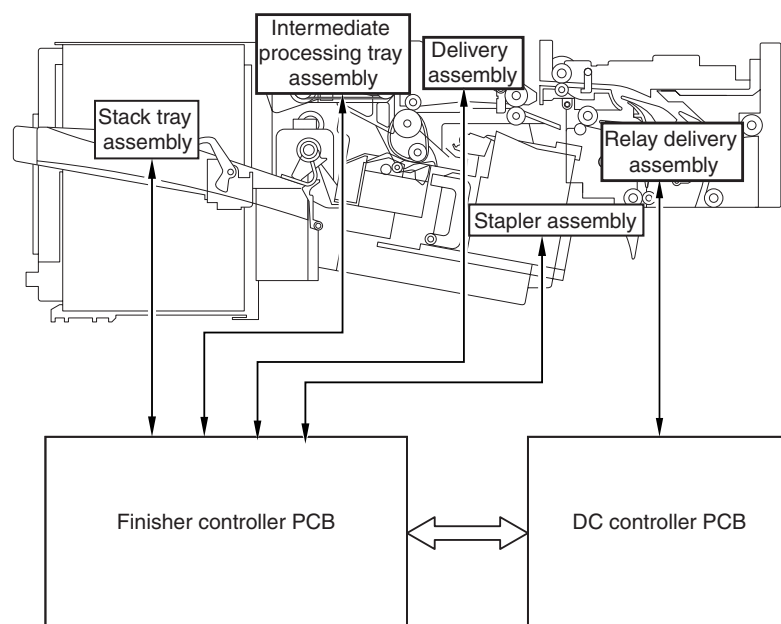
2.1.1 Overview

0001-2403

The finisher consists of the following 4 blocks: delivery assembly, intermediate processing tray assembly, stapler assembly, stack tray assembly.

It is also equipped with a relay delivery assembly used to move paper from its host machine.

The following is a functional diagram of the finisher.



F-2-1

2.1.2 Overview of the Electrical Circuitry

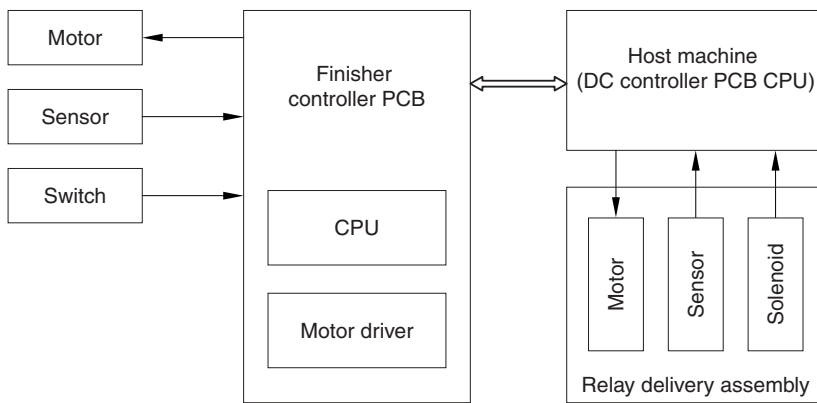
0001-2405

The various operational sequences of the finisher are controlled by the finisher control PCB, which is a 16-bit CPU. The CPU handles serial communications with the host machine in addition to executing sequential control of machine operation.

The CPU on the finisher controller PCB is equipped with a ROM containing an operation sequence program.

The finisher controller PCB drives the motors in response to various commands coming from the host machine through the serial communication line.

Moreover, the finisher controller PCB communicates the states of the sensors and switches to the host machine through the serial communication line.



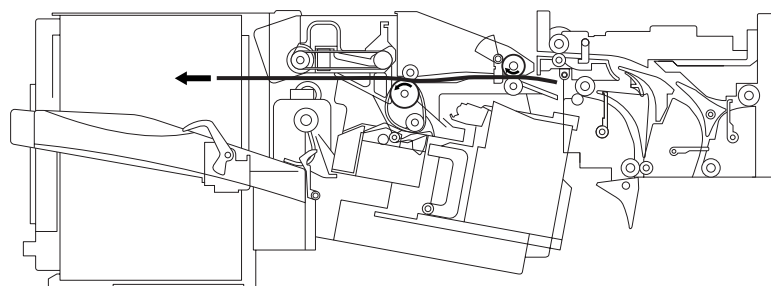
F-2-2

2.2 Basic Operation

2.2.1 Sequence of Basic Operations

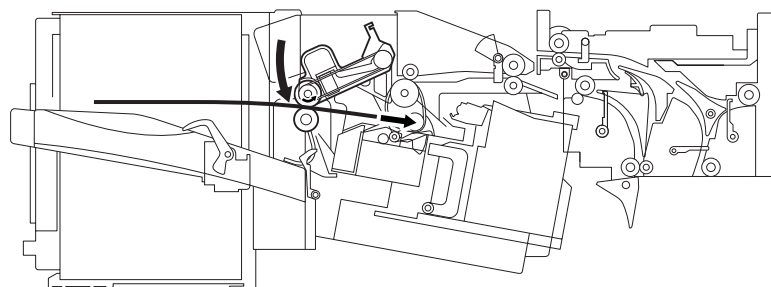
0001-2407

- 1) The front/rear aligning plate moves to a specific point to suit the size of the paper coming from the host machine.
- 2) The inlet roller and the delivery roller serve to move forward the paper coming from the host machine.



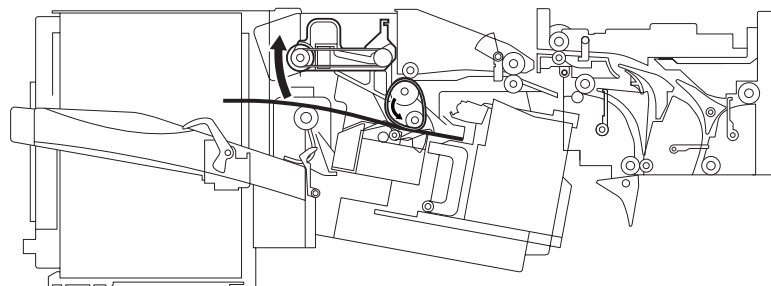
F-2-3

- 3) When the trailing edge of paper moves past the delivery roller, the stack delivery roller moves down to catch the trailing edge of paper; thereafter, the stack delivery roller rotates to pull in the paper until it comes into contact with the return belt.



F-2-4

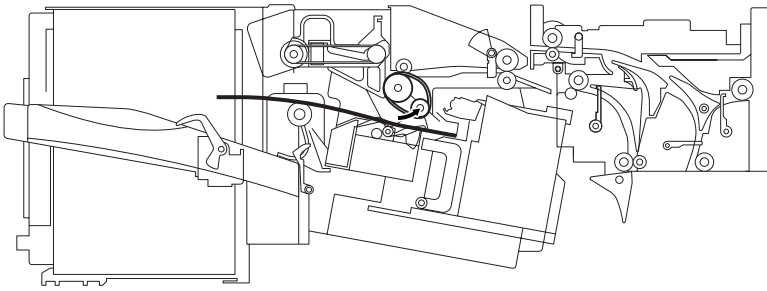
- 4) The return belt forces the trailing edge of paper against the trailing edge guide plate to put the paper in order. The stack delivery roller moves up to make space.



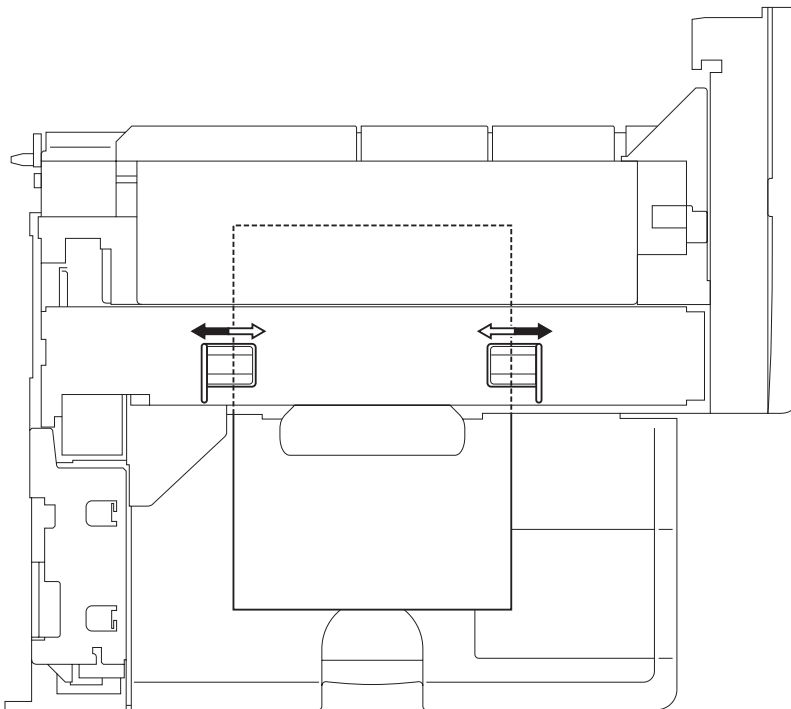
F-2-5

- 5) When the return belt has moved up to make space, the aligning plate (front, rear) moves to put the paper in order

in cross-feed direction.

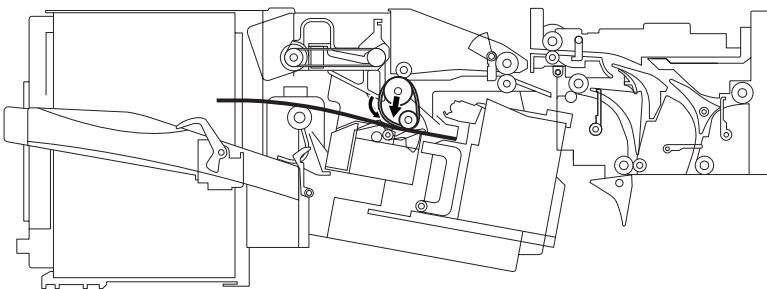


F-2-6



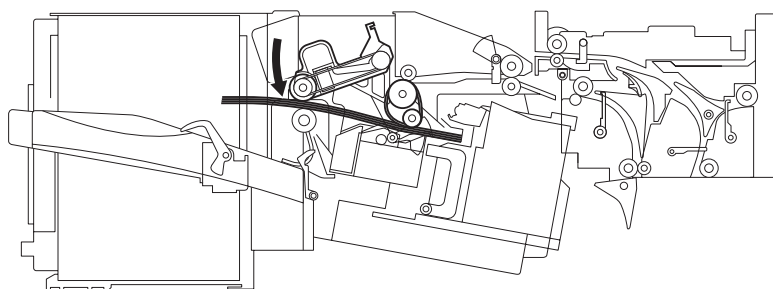
F-2-7

- 6) When the paper has been put into order in cross-feed direction, the return belt comes into contact to remove the skew (that may have occurred during alignment in cross-feed direction).



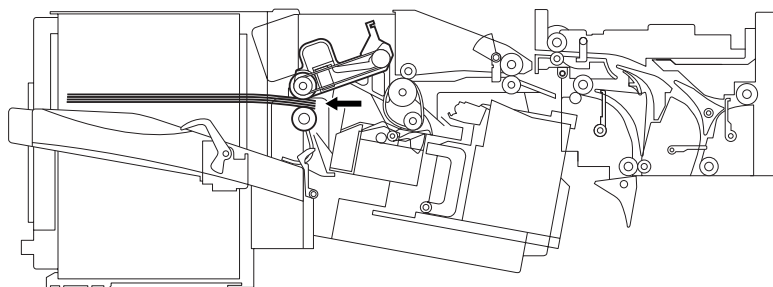
F-2-8

- 7) The machine repeats steps 1 through 6 above to put the sheets together into a stack.
- 8) The stack delivery roller moves down to force down the stack of sheets.



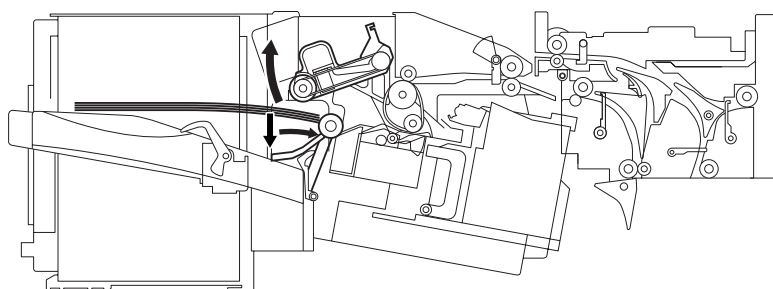
F-2-9

- 9) The stack delivery roller stops where the trailing edge of paper is 5 mm in front of the stack roller nip point.



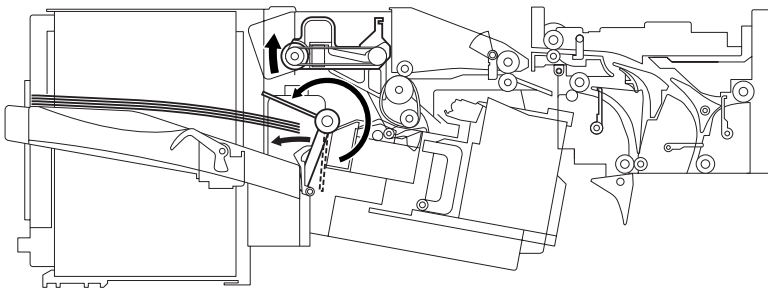
F-2-10

- 10) When the stack delivery roller has moved up to make space, the paddle rotates in keeping with the movement of the stacking wall, thereby permitting the stack of sheets to slide down the stacking wall.



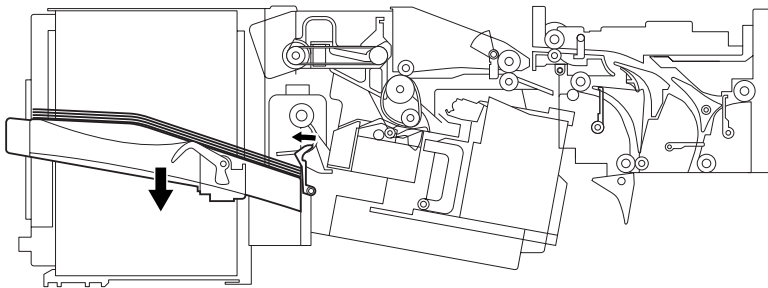
F-2-11

- 11) The stacking wall moves to home position to put the edges of sheets in the stack flush. At this time, the paddle forces the stack of sheets in place from above.



F-2-12

12) If the paper surface sensor goes on, the stack tray moves down until the sensor goes off.



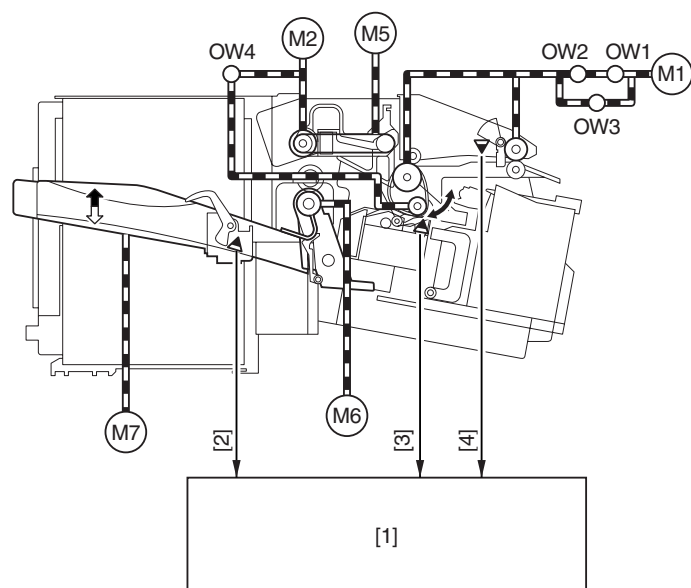
F-2-13

2.3 Feed Drive System

2.3.1 Overview

0001-2424

The paper coming from the host machine is stacked in the processing tray assembly. Thereafter, it is put into order, offset, and stapled for delivery to the stack tray. The following shows the major drive mechanisms of the feed drive system that are involved in the foregoing series of operations:



F-2-14

M1: delivery motor

M2: stack delivery motor

M5: swing cam motor

M6: paddle motor

M7: stack tray shift motor

OW: one-way clutch

[1]: Finisher controller PCB

[2]: Stack tray paper sensor signal

[3]: Processing tray paper sensor detection signal

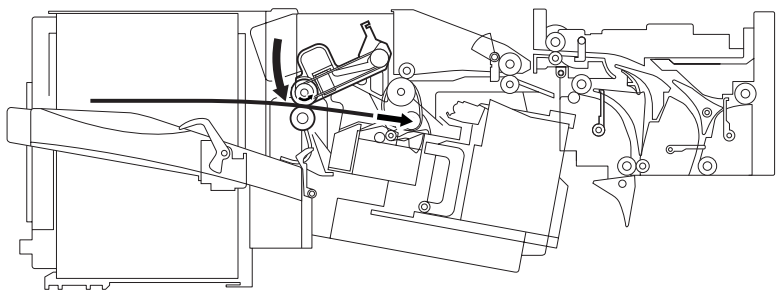
[4]: Delivery sensor signal

2.3.2 Moving the Paper to the Intermediate Processing Tray

0001-2430

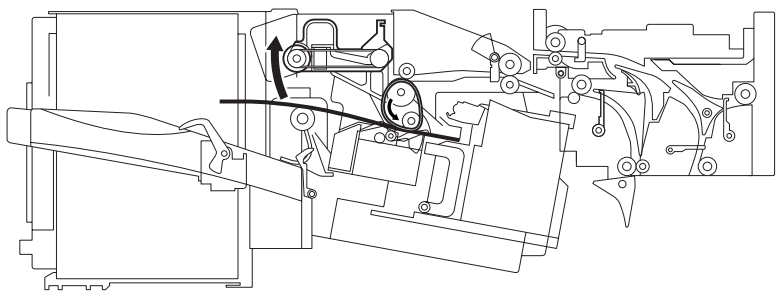
The paper from the host machine is moved to the intermediate processing tray by the work of the delivery roller, stack delivery roller, and return belt. The movement of paper is monitored by the delivery sensor.

- 1) When the paper moves past the delivery sensor, the delivery paper roller moves down to move the trailing edge of paper as far as the return belt assembly.



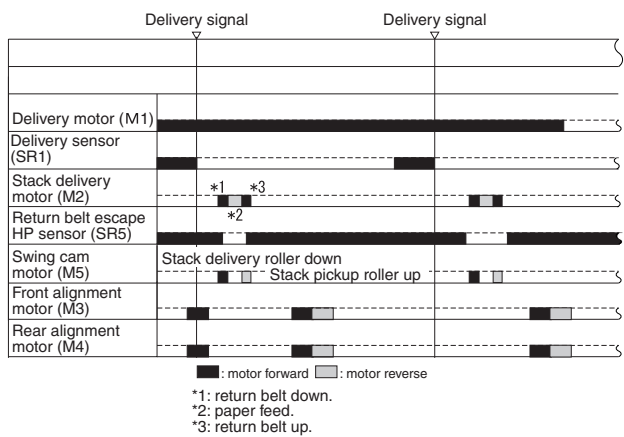
F-2-15

2) The return belt forces the trailing edge of paper against the trailing edge guide plate for alignment.



F-2-16

The following shows the sequence of operations taking place with 2 sheets of paper being moved to the processing tray:



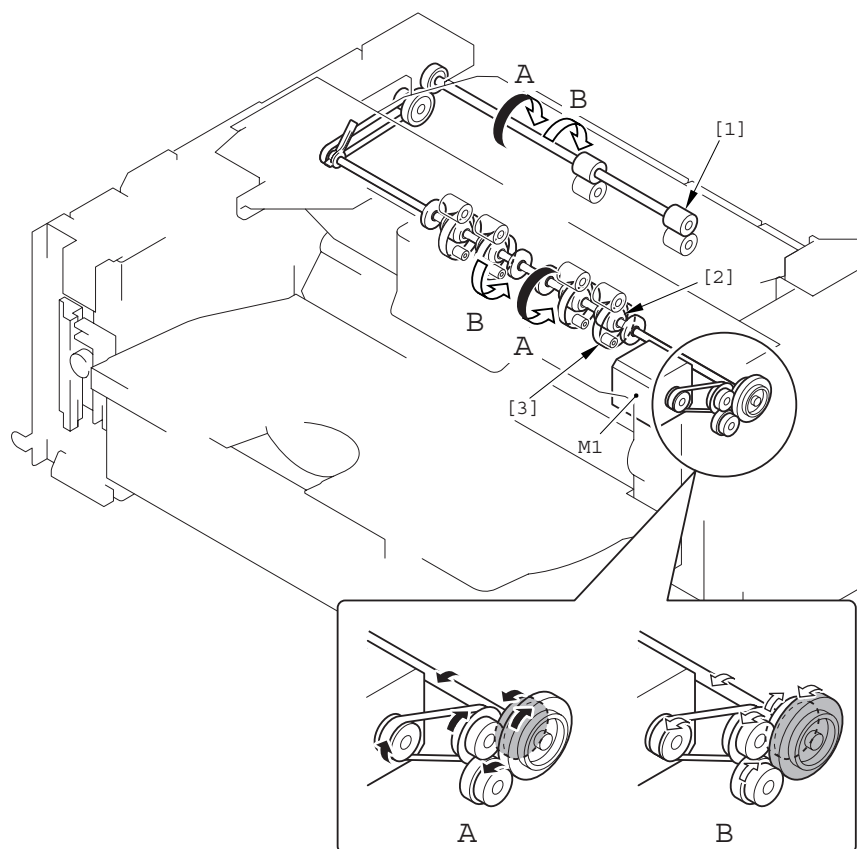
F-2-17

2.3.3 Controlling the Delivery Roller

0002-4229

The delivery roller and the inlet roller are driven by the delivery motor (M1). There are 3 one-way clutches between the motor and the delivery roller, offering 2 pairs of drive systems. When the motor rotates forward, the drive system on the side of the one-way clutch A will go on to rotate the delivery roller at full speed. When the motor rotates in reverse, the side of the one-way clutch B goes on to rotate the delivery roller at half speed.

The delivery roller is rotated at full speed or at half speed in keeping with the full and 1/2 speeds of the process speed of the host machine.



F-2-18

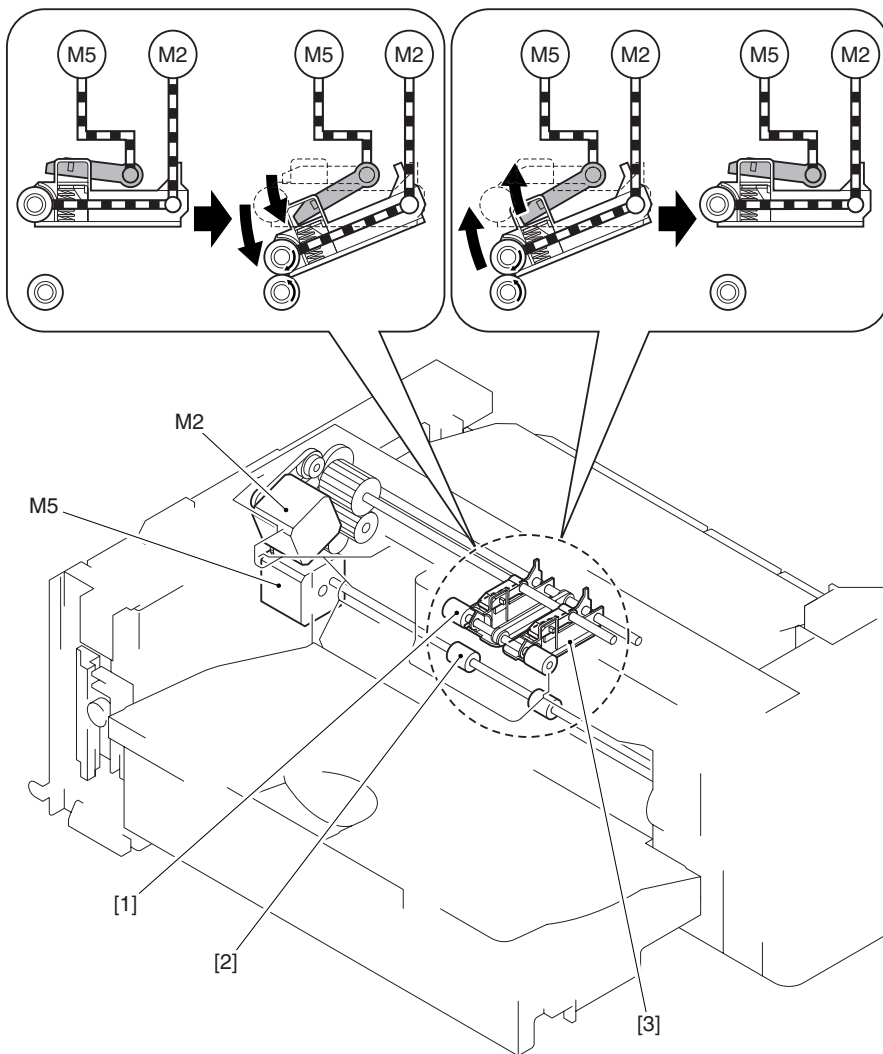
- [1] Inlet roller
- [2] Delivery roller
- [3] Return belt
- M1 Delivery roller

2.3.4 Movement of the Stack Delivery Roller

0002-4171

The stack delivery roller is driven to rotate forward and in reverse by the stack delivery motor (M2). When the motor rotates forward, the stack delivery roller rotates in the direction in which paper is pulled into the processing tray. When the motor rotates in reverse, the stack delivery roller rotates in the direction in which paper is discharged to the stack tray.

The stack delivery roller is moved up and down by the swing cam motor (M5). When the swing cam motor rotates forward, the stack delivery roller moves down; when the cam rotates in reverse, the stack delivery roller moves up. The position of the stack delivery roller (swing cam) is checked by the swing cam HP sensor (SR7).



F-2-19

[1] Stack delivery roller

[2] Stack delivery roll

[3] Drive cam

M2 Stack delivery motor

M5 Swing cam motor

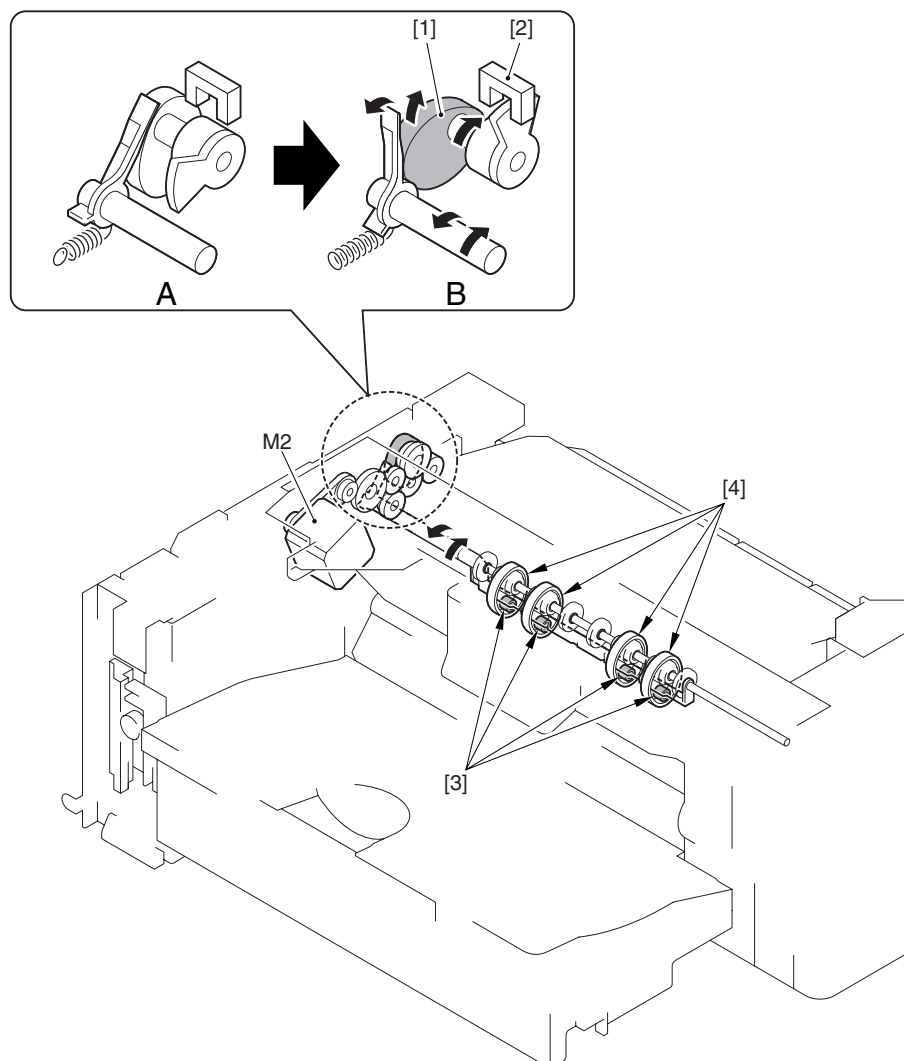
2.3.5 Moving Up and Down the Return Belt

0002-5130

The return belt is moved up and down by the work of the stack retaining roll. The stack retaining roll, on the other hand, is moved up and down by the stack delivery motor (M2) while it rotates forward. The position of the return belt is checked by the return belt escape HP sensor (SR5).

The return belt is moved down to pull paper in the direction of the processing tray; it is moved up in advance of paper alignment so that its presence will not interfere with the operation.

At the end of alignment operation, it moves down to remove any skew (of the paper).



F-2-20

M2: Stack delivery motor

[1] Drive cam

[2] Return belt escape HP sensor (SR5)

[3] Stack retaining roll

[4] Return belt

2.3.6 Controlling the Delivery Motor

0001-2434

The delivery motor (M1) is a 4-phase stepping motor.

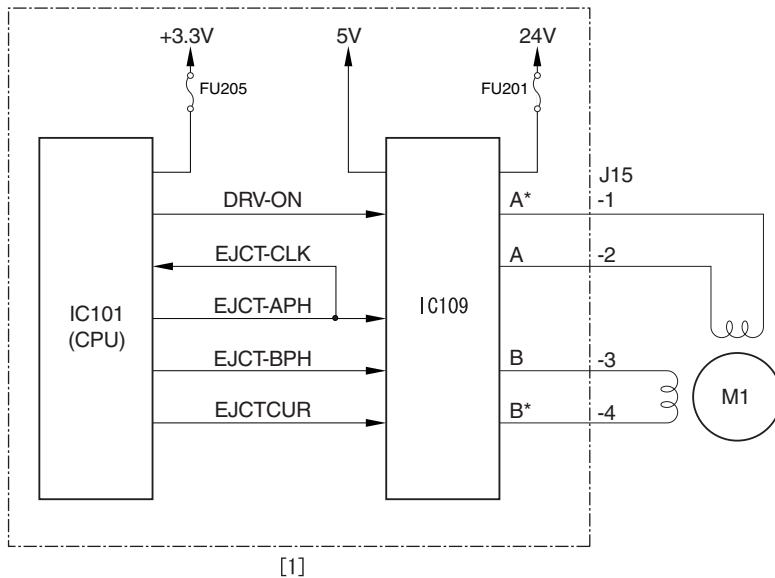
There are 3 one-way clutches between the motor and the delivery roller, offering 2 pairs of drive system.

When the motor rotates forward, the drive system on the side of the one-way clutch A goes on, and the delivery roller rotates at full speed.

When the motor rotates in reverse, the drive system on the side of the one-way clutch B goes on, and the delivery roller rotates at half speed.

The delivery roller is rotated at full speed or half speed in keeping with the process speed (full or 1/2 speed) of the host machine.

The motor drive changes the order and frequency of pulse signals (A, A*, B, B*) generated according to the signals from the CPU, thereby controlling the direction and speed of rotation of the delivery motor (M1).



F-2-21

[1]: Finisher controller PCB

M1: Delivery motor

IC109: Motor driver

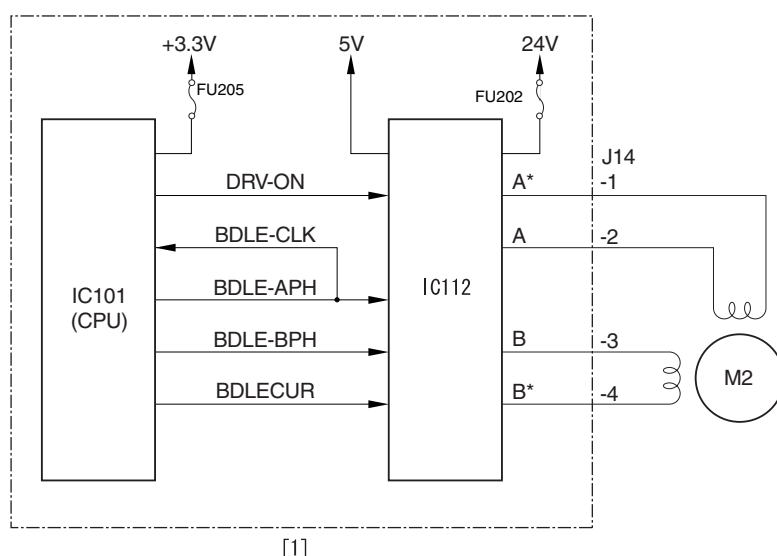
2.3.7 Controlling the Stack Delivery Motor

0001-4380

The stack delivery motor (M2) is a 4-phase stepping motor, and it changes its direction of rotation to control the drive of the stack delivery roller.

The motor driver changes the order and the frequency of pulse signals (A, A*, B, B*) generated according to the signals from the CPU, thereby changing the direction and the speed of rotation of the stack delivery motor (M2).

When the motor is rotating forward (when moving paper to the processing tray), the stack delivery roller is driven. When the motor is rotating in reverse (when discharging a stack), the stack delivery roller and the return belt cam are driven.



F-2-22

[1]: Finisher control PCB

M2: Stack delivery motor

IC112: Motor driver

2.3.8 Controlling the Swing Cam Motor

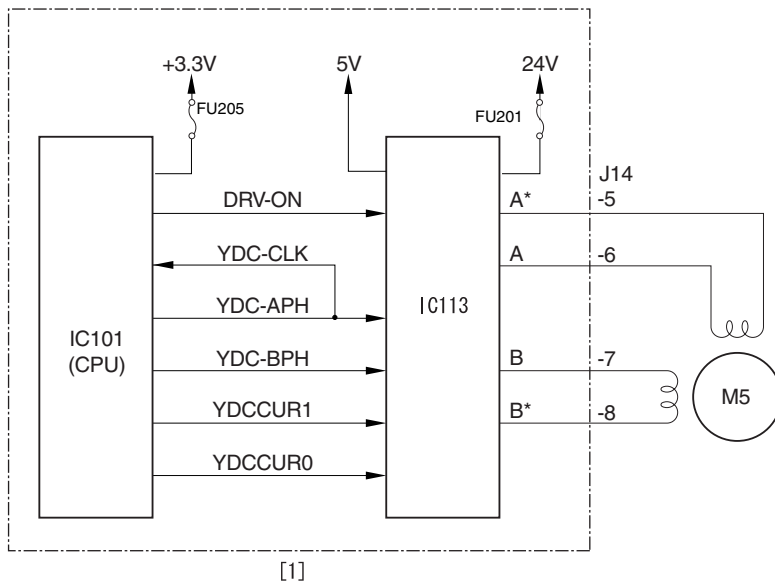
0001-2450

The swing cam motor (M5) is a 4-phase stepping motor, and its direction of rotation is changed to control the drive of the swing motor.

The motor drive changes the order and the frequency of the pulse signals (A, A*, B, B*) generated according to the signals from the CPU.

When the motor rotates forward, the stack delivery roller moves down.

When the motor rotates in reverse, the stack delivery motor moves up.



F-2-23

[1]: Finisher controller PCB

M5: Swing cam motor

IC113: Motor driver

2.4 Intermediate Process Tray Assembly

2.4.1 Movement of the Processing Tray

0001-2446

The processing tray serves to align, offset, and staple a stack of paper discharged by the host machine.

Paper is moved to the processing tray assembly by the work of the stack delivery roller and the return roller.

The stack delivery roller is driven by the stack delivery motor.

The swing assembly is moved up and down by the swing motor.

As many as 4 return belts are used in the machine, and they are driven by the delivery motor.

A specific period of time after the paper leaves the delivery sensor, the stack delivery roller is moved down and rotated forward to move the paper ahead to the processing tray. The arrival of the paper is detected by the processing tray paper sensor (SR2).

2.4.2 Processing Tray Capacity

0001-2453

The processing tray can hold as many as the following number of sheets:

T-2-1

Mode	Maximum number of sheets	
in bind mode	large-size*1	30 sheets
	small-size	50 sheets
non-bind mode		3 sheets

*1: A3, B4, A4R, 11X17, LGL, LTRR (in feed direction, 216.1 to 432 mm or less).

2.4.3 Overview of Aligning Movement

0001-3815

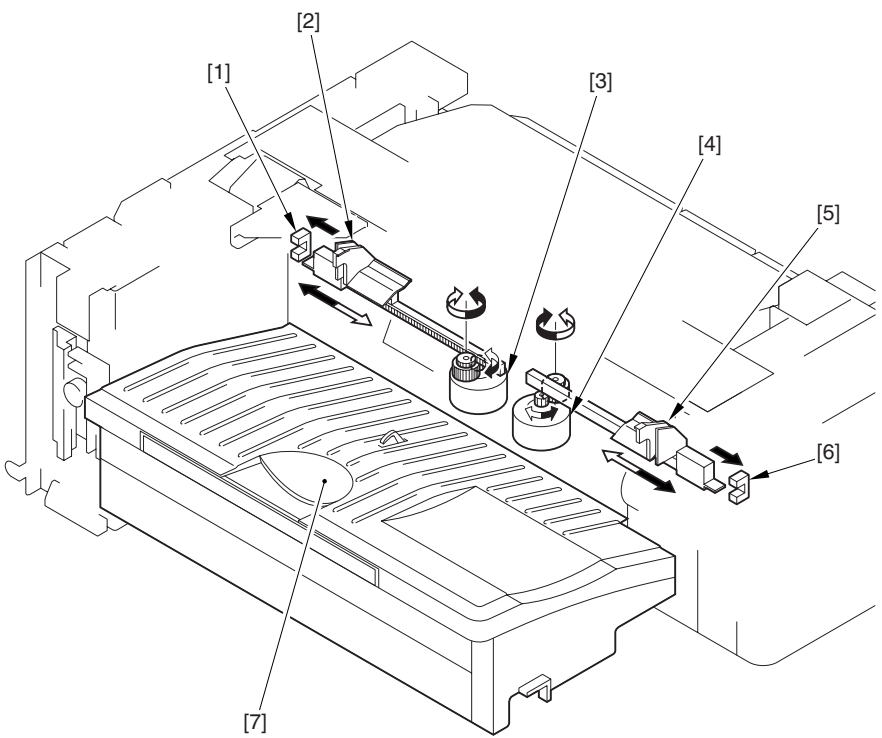
The machine uses its front/rear aligning plate to put paper in order on the processing tray.

The front aligning plate is driven by the front plate alignment motor (M3), while the rear alignment plate is driven by the rear alignment motor (M4).

The front aligning plate HP sensor (SR3) and the rear aligning plate HP sensor (SR4) are used to detect the home position of the respective plates.

The return belt is held away from the paper while alignment is taking place.

Paper must be of a specific size to be aligned; for details, see "Specifications."

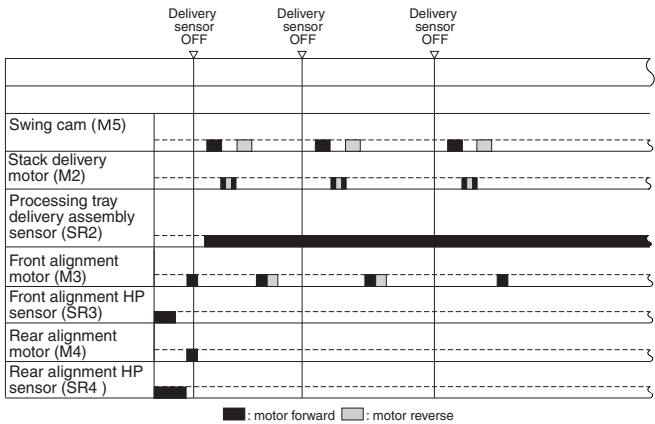


F-2-24

- [1] Rear aligning plate HP sensor
- [2] Rear aligning plate
- [3] Rear aligning motor
- [4] Front alignment motor
- [5] Front aligning plate
- [6] front alignment HP sensor (SR3)
- [7] Stack tray

The machine performs alignment as follow:

- When Delivering 3 Sheets



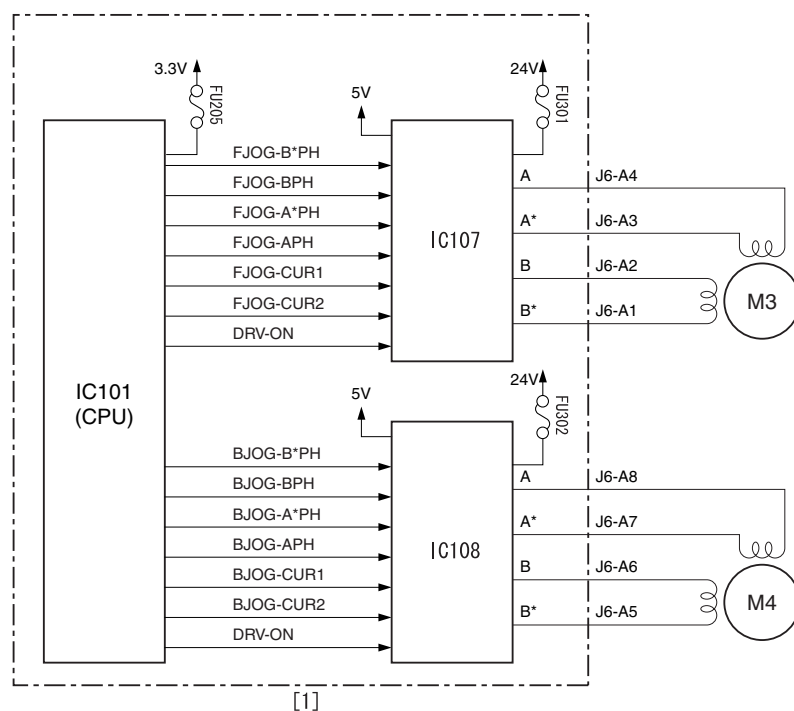
F-2-25

2.4.4 Controlling the Alignment Motor

0001-2454

The front alignment motor (M3) and the rear alignment motor (M4) are 4-phase stepping motors, and serve to control the drive of the alignment plates by changing the direction of rotation.

The motor driver controls the rotation and the speed of the alignment motor (front, rear) by changing the order and the frequency of the pulse signals (A, A*, B, B*) generated based on the signals from the CPU.



F-2-26

[1]: Finisher controller PCB

M3: Front alignment motor

M4: Rear alignment motor

IC107: Motor driver

IC108: Motor driver

2.5 Staple Operation

2.5.1 Functional Construction

0001-2458

The machine's stapler unit is a mobile type; when staple mode is selected on its control panel, it staples the stack according to the selected paper size and mode.

The machine's staple mode may be any of the following:

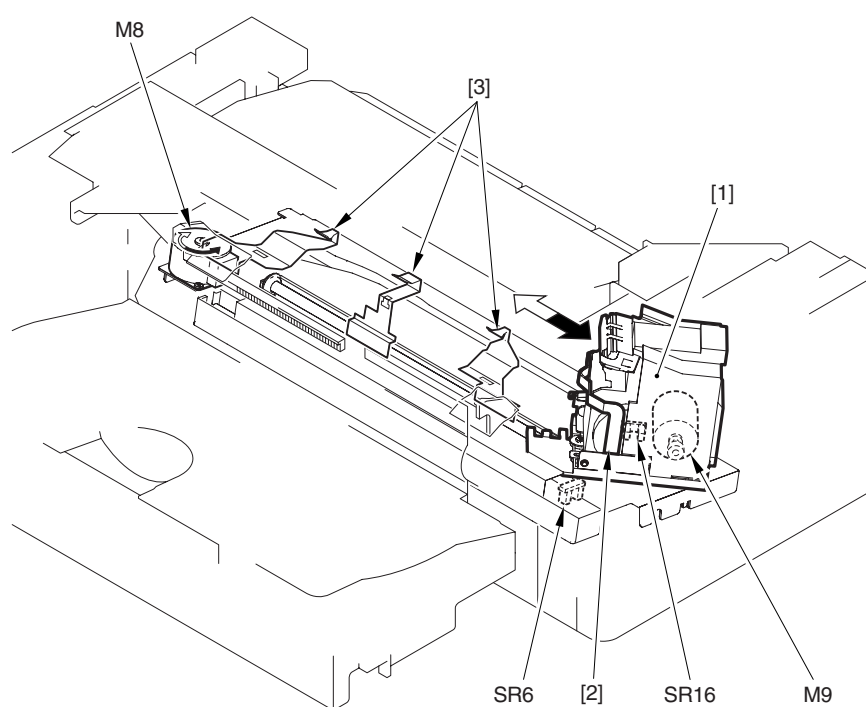
- front, 1-point stapling
- rear, 1-point stapling
- 2-point stapling

The machine punches in a staple from below the stack.

The following motors, sensors, and components are associated with the stapler:

T-2-2

Notation	Name	Description
M9	stapler motor	drives the punch to punch in a staple.
M8	stapler slide motor	drives the stapler unit for slide movement.
SR6	stapler slide home position sensor	detects slide home position of the stapler unit.
SR16	rear edge guide plate sensor	detects the presence/absence of the stapler at the rear end guide plate.
SR17	stapler staple sensor	checks the presence/absence of staples inside the stapler (built in the stapler).
SR18	stapling home position sensor	detects home position of stapling operation (built into the stapler).
SR19	stapler edging sensor	checks if a staple has been edged as far as punching position (built into the stapler).
[1]	stapler	performs stapling operation.
[2]	rear edge guide plate detecting arm	goes on if the stapler is at the rear edge guide plate.
[3]	rear edge guide plate	- (not for sale)



F-2-27

2.5.2 Basic Sequence of Operations

0001-2457

The machine's stapler unit is a mobile type. When staple mode is selected on the control panel, it staples the sheets according to the selected staple mode and paper size.

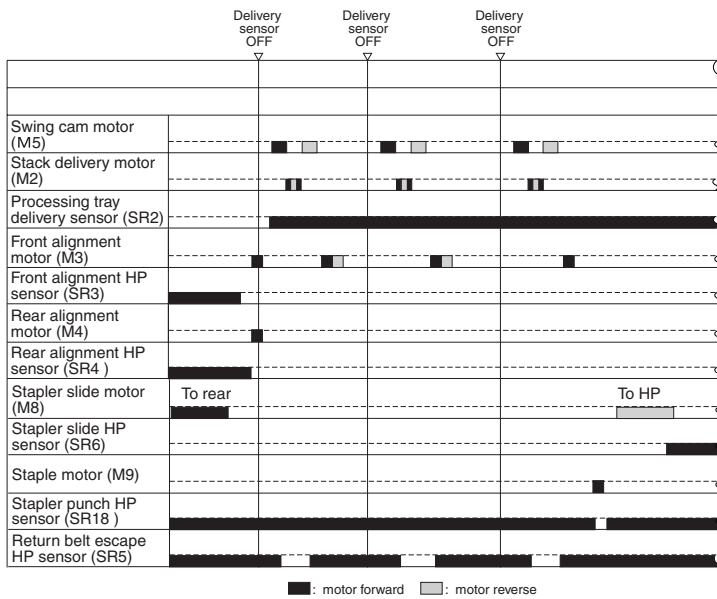
The machine's staple mode may be any of the following:

- front, 1-point stapling
- rear, 1-point stapling
- 2-point stapling

The machine drives a staple from under a stack of sheets.

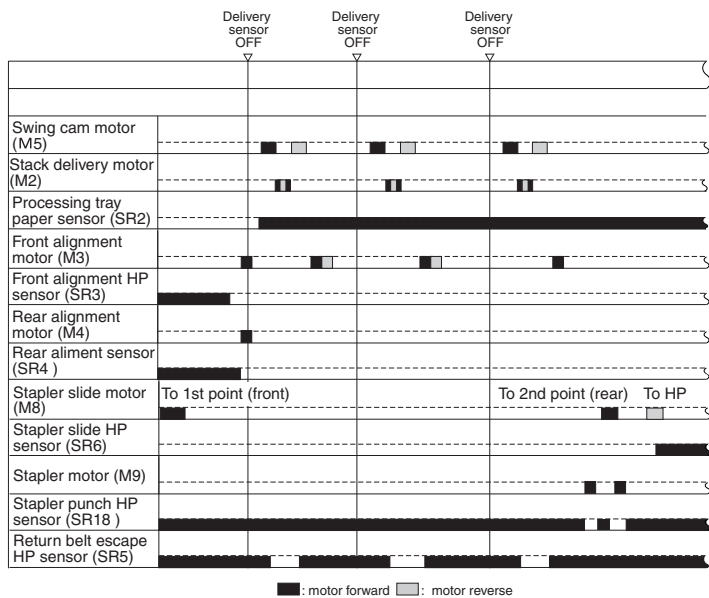
The following shows how stapling is executed:

- 3 Sheets, Rear Stapling



F-2-28

- 3 Sheets, 2-Point



F-2-29

2.5.3 Controlling the Stapler Motor

0002-2369

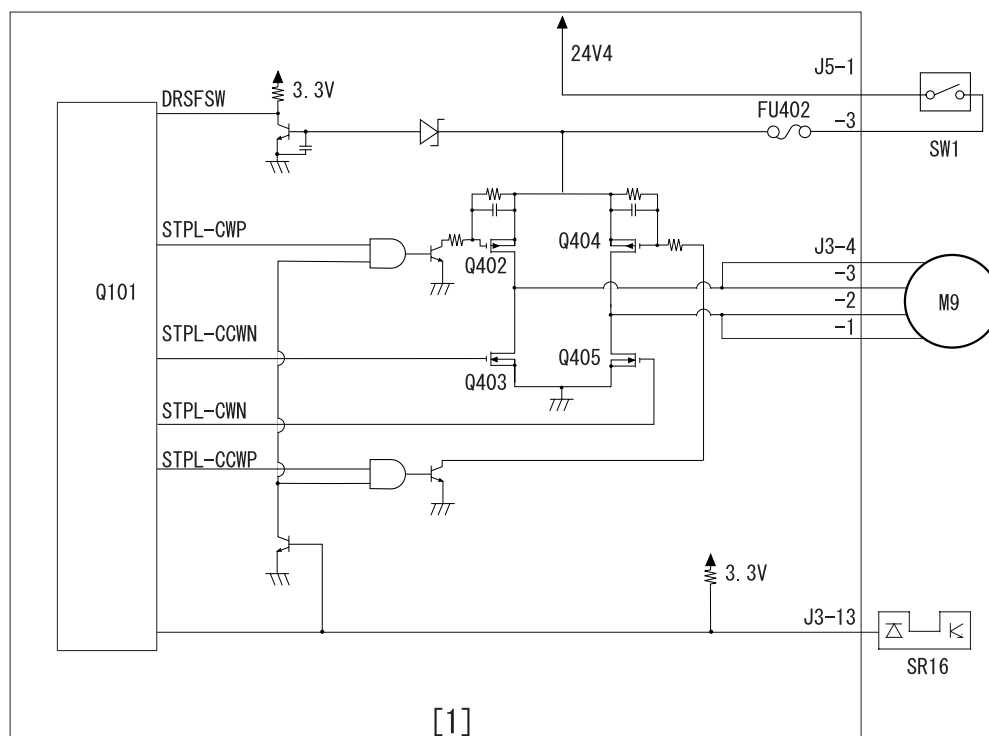
The following diagram shows an overview of the stapler motor (M9) drive circuit.

The stapler motor is a DC motor.

If the finisher front cover or the right door of the host machine is open, the front cover safety switch (SW1) cuts off the stapler motor drive power (24 V4). The state of the front cover safety switch is monitored by Q101.

If a staple was punched while the stapler is at the rear guide plate, the impact could damage the plate; to prevent such

damage, the stapler is equipped with a rear edge guide panel sensor (SR6). The machine will not execute stapling as long as the sensor is on; also, the signal from the sensor is used to cut off the motor drive signal from Q101. The direction of rotation of the motor changes according to the combination of motor drive signals from Q101 of the finisher controller PCB to the motor drive circuit.



F-2-30

[1]: Finisher controller PCB

M6: Stapler motor

SW1: Front cover safety switch

SR16: Rear edge guide plate sensor

2.6 Stack Tray Operation

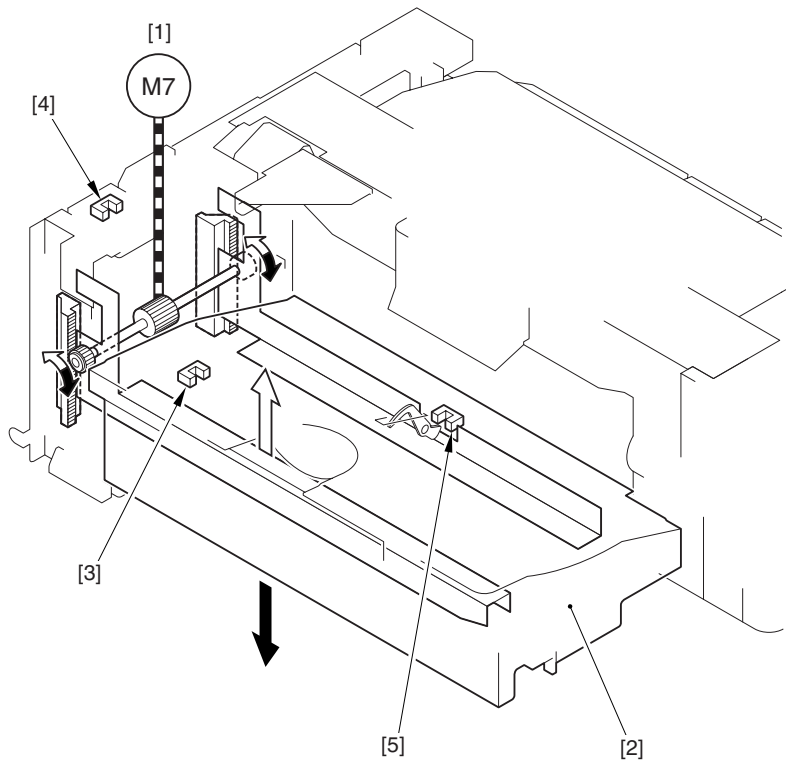
2.6.1 Overview

0001-2463

The machine has a single stack tray designed to receive stacks of sheets that have been aligned, offset, and stapled in the intermediate processing tray.

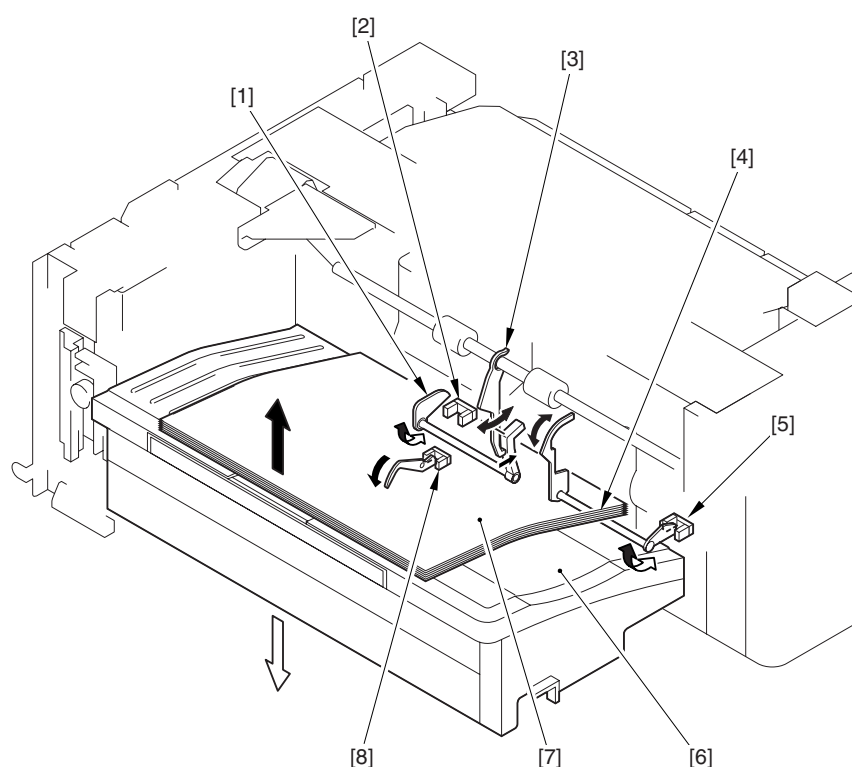
The stack tray paper sensor (SR11) goes on when a stack of sheets is newly deposited on the tray. The stack tray is moved up and down by the stack tray shift motor (M7). The stack tray home position is where the stack tray upper paper surface sensor (SR9) is off and the stack tray lower paper surface sensor (SR10) is on. If the stack tray is not in home position at the start of a copy/print job, the stack tray ascent/descent motor is driven to move the tray to home position.

The upper limit of the stack tray is monitored by the stack tray upper limit sensor (SR13), while its lower limit is monitored by the stack tray lower limit sensor (SR14). If any of these sensors is on, the stack tray shift motor may be driven in such a way so that the stack tray will move in the direction opposite the sensor that is on.



F-2-31

- [1] Stack tray shift motor (M7)
- [2] Stack tray
- [3] Stack tray lower limit sensor (SR12)
- [4] Stack tray upper limit sensor (SR13)
- [5] Stack tray upper limit paper sensor (SR9)



F-2-32

- [1] Stack tray upper paper surface sensor flag 2
- [2] Stack tray upper paper surface sensor (SR9)
- [3] Stack tray paper surface sensor flag 1
- [4] Stack tray lower paper surface sensor flag
- [5] Stack tray lower paper surface sensor (SR10)
- [6] Stack tray
- [7] Stack of sheets
- [8] Stack tray power sensor (SR11)

2.6.2 Checking Stack Tray Home Position

0002-5705

The home position of the stack tray is identified with reference to the states of the following 2 sensors:

- a. stack tray upper paper sensor (SR9)
- b. stack tray lower paper sensor (SR10)

When the amount of paper on the stack tray changes and, thus, the state of these 2 sensors changes, the tray is operated as follows:

T-2-3

Stack tray upper paper sensor (SR9)	Stack tray lower paper sensor (SR10)	Stack tray movement
on	off	The stack tray is moved down until the stack tray upper paper sensor (SR9) goes off.*2
off	on	The stack tray is put on hold (home position).
off	off	The stack tray is moved up until the stack tray lower paper sensor (SR10) goes on.*1
on	on	The stack tray is moved down until the stack tray upper paper surface sensor (SR9) goes off.*2

*1: no operation takes place while the stack tray upper limit sensor (SR13) remains on (stack tray error).

*2: no operation takes place while the stack tray lower limit sensor (SR10) remains on (stack tray full).

2.6.3 Paddle/Stacking Wall Movement

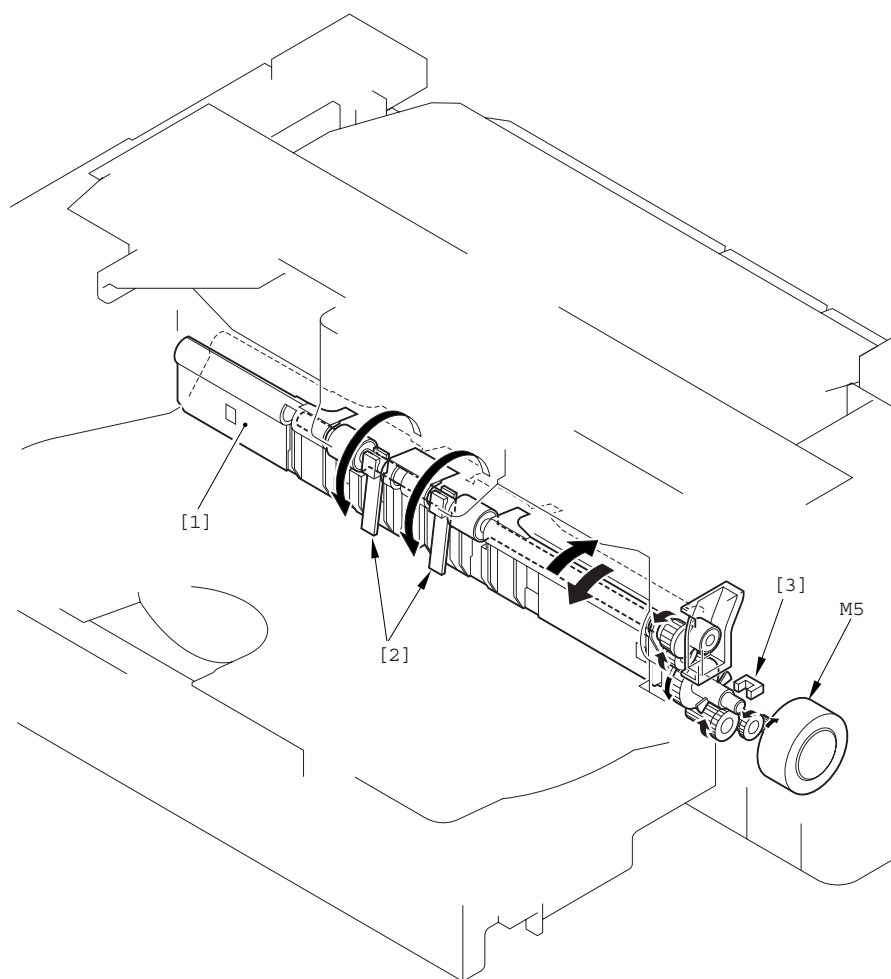
0002-5224

The paddle and the stacking wall are driven by the paddle motor (M5).

The home position of each is checked by the paddle HP sensor (SR8).

The stacking wall is driven so that the rear edges of the sheets of stacks deposited on the stack tray are made flush.

The paddle is driven, on the other hand, so that the stacks are forced against the stacking wall while at the same time are held down in position.



F-2-33

M5: Paddle motor

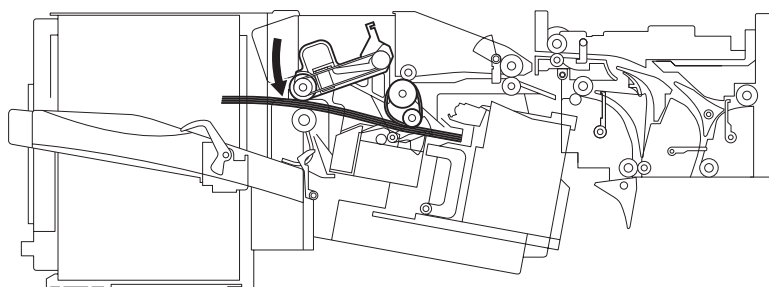
[1] Stacking wall

[2] Paddle

[3] Paddle HP sensor (SR8)

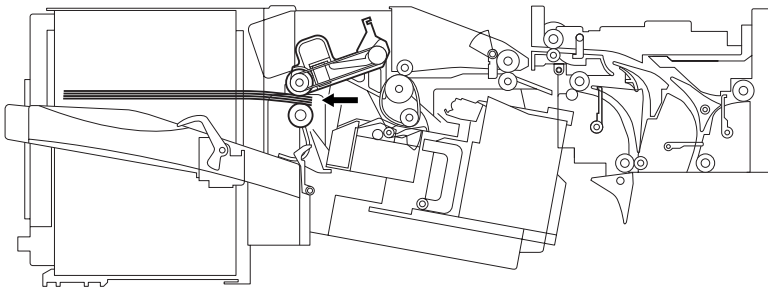
The paddle and the stacking wall move as follows when a stack of sheets has been deposited:

1) When the stack has been aligned and stapled, the machine starts delivery of the stack.



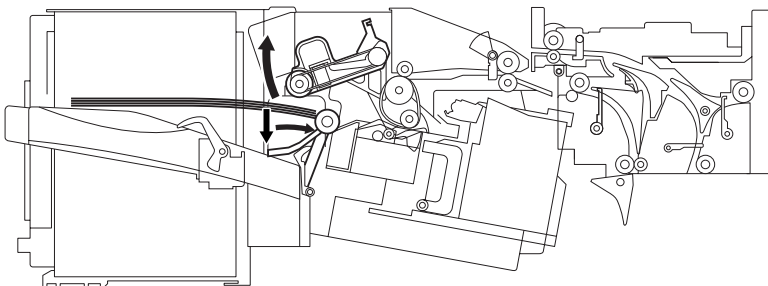
F-2-34

- 2) The stack delivery roller stops when the trailing edge of the stack is 5 mm in front of the nip of the stack delivery roller.



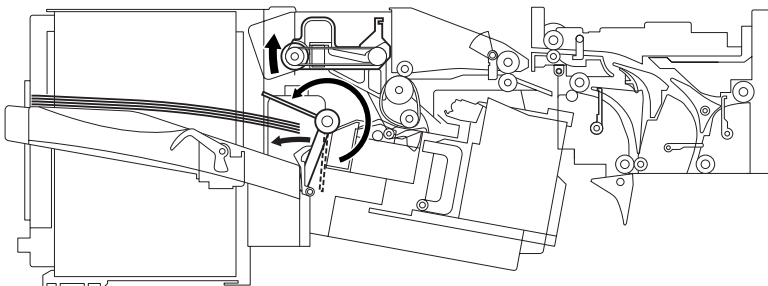
F-2-35

- 3) When the stacking delivery roller has moved up to be out of the way, the paddle rotates as the stacking wall moves to be out of the way, allowing the stack to slide down the surface of the stacking wall.



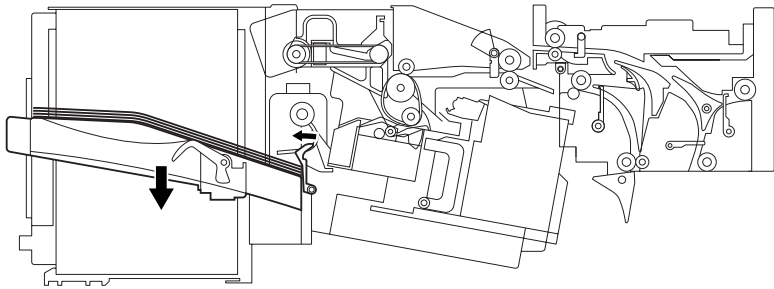
F-2-36

- 4) The stacking wall moves to home position to put the edges of the sheets in order; in conjunction with this operation, the paddle holds down on the top of the stack to keep it in place.



F-2-37

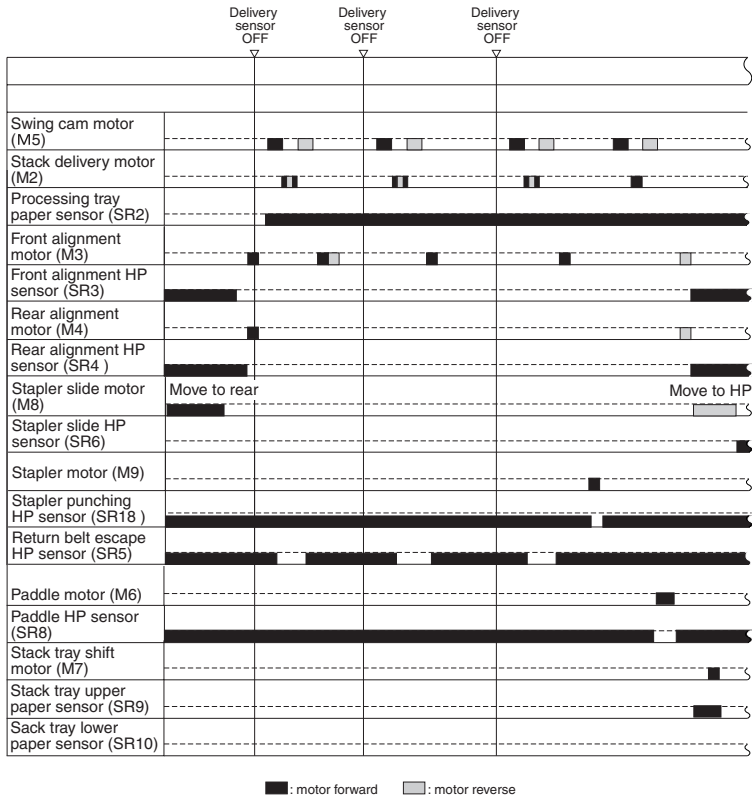
- 5) The stack tray moves down. It stops when the stack tray upper paper surface sensor flag stops detecting the paper surface.



F-2-38

The following is a timing chart (stack delivery operation) showing the movement of the paddle, stacking wall, and stack tray:

- Stack Delivery (1-point stapling)



F-2-39

2.6.4 Controlling the Stack Tray Shift Motor

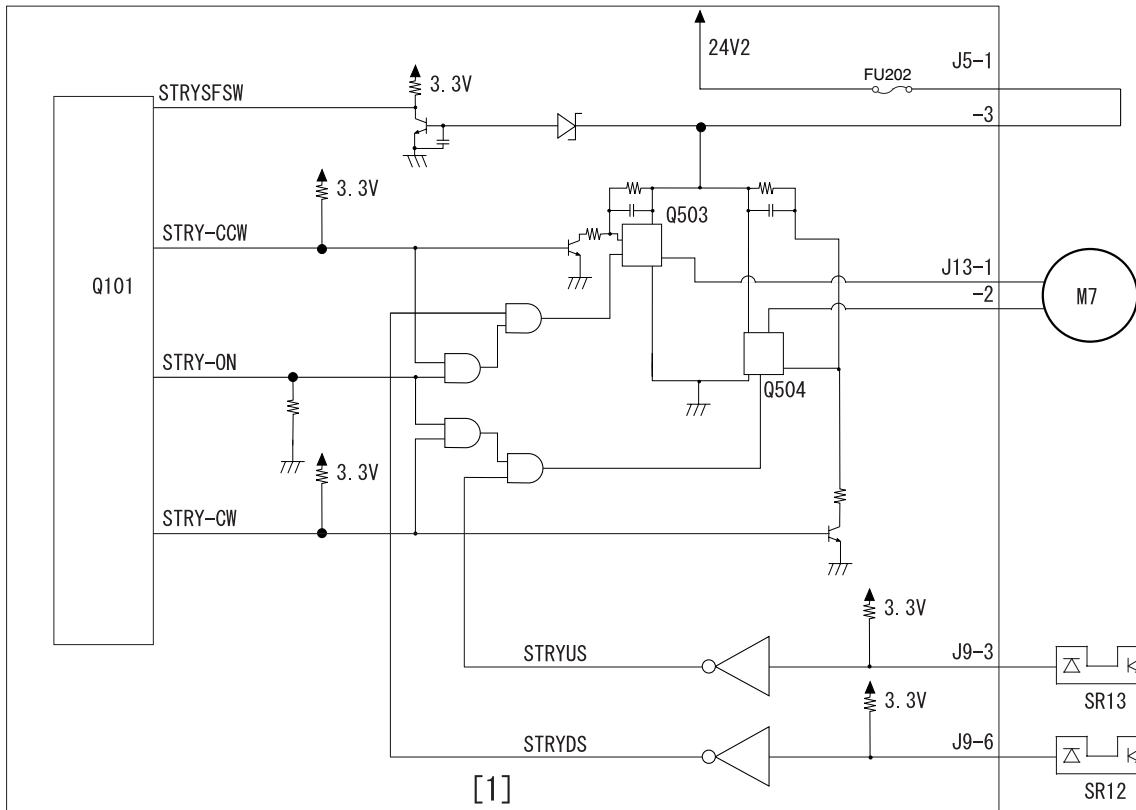
0002-6152

The following diagram shows an outline of the drive circuit used for the stack tray shift motor (M7). The stack tray shift motor is a DC motor. Q503 and Q504 are FET arrays.

The direction of rotation of the motor is changed based on the combination of motor drive signals coming from Q101

found on the finisher controller PCB.

A hardware mechanism is built to the machine so that the motor cannot be driven in a specific direction identified by the stack tray upper limit sensor (SR13) or the stack tray lower limit sensor (SR12).



F-2-40

[1]: Finisher controller PCB

M7: Stack tray shift motor

SR12: Stack tray lower limit sensor

SR13: Stack tray upper limit sensor

2.7 Detecting Jams

2.7.1 Overview

0001-2464

The machine uses the following sensors to detect jams:

- inlet sensor
- front cover open/closed sensor
- stapler punching HP sensor
- pickup door sensor (host machine)

The machine runs a check at such times as programmed in the CPU of the finisher controller; upon detection, the machine stops operation, and indicates the fact on the control panel of the host machine.

T-2-4

Jam type	Sensor	Description	Remarks
Power-on jam (1300)	Delivery sensor (SR1)	At time of power-on, paper is detected in the delivery path.	At time of power-on, the delivery sensor checks for the presence of paper.
Door open jam (1400)	- Front cover open/closed sensor (SR15) - Pickup door sensor (PS12)	During operation, the front cover of the machine or the right door of the host machine is opened.	While a copy is being made, any of the following is opened: - finisher front cover - host machine right door
Delivery jam (1011)	Delivery sensor (SR1)	The host machine has delivered paper, but the paper does not reach the finisher within a specific period of time.	The finisher receives the delivery signal from the host machine, but the delivery sensor does not go on within a specific period of time.
Stationary jam (1101)		Paper remained inside the delivery path of the finisher longer than a specific period of time.	Paper has arrived from the host machine; however, the delivery sensor does not go off even after the paper is moved over a specific distance after its leading edge has moved past the delivery sensor.

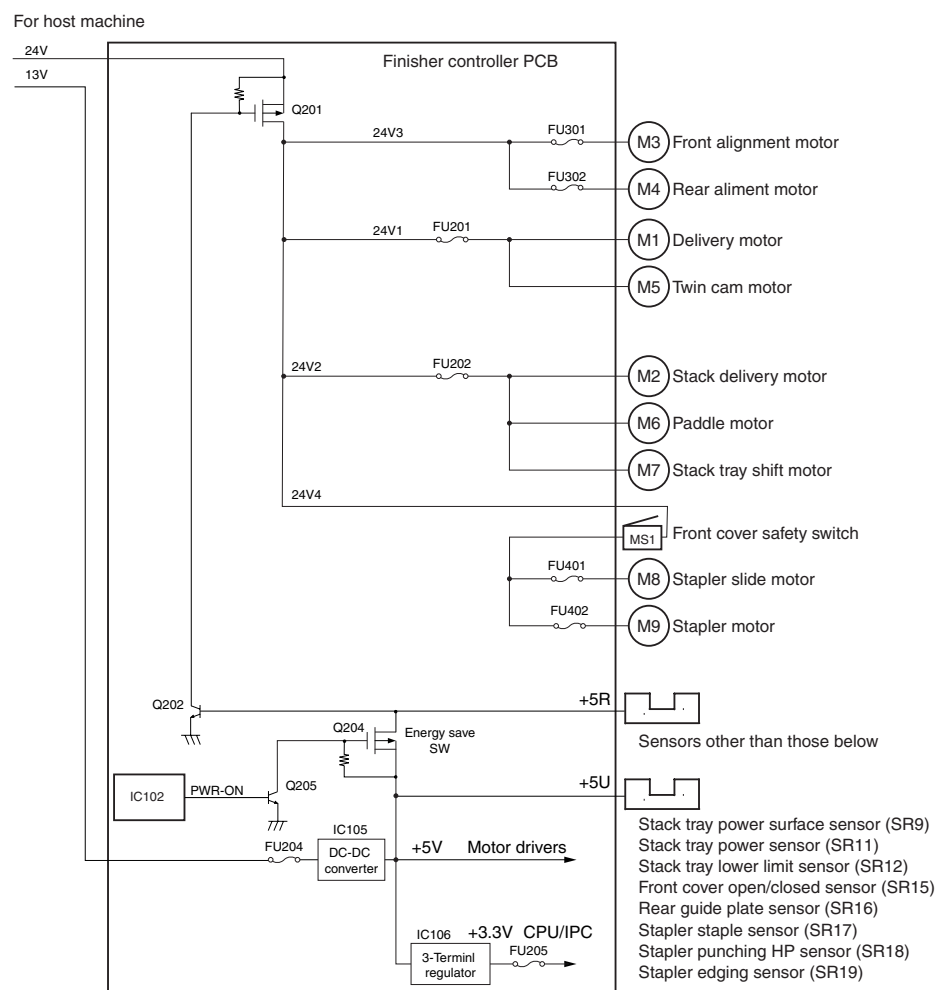
Jam type	Sensor	Description	Remarks
Staple jam (1500)	Stapler punching HP sensor (SR18)	Stapling operation does not end within a specific period of time.	The stapler punching HP sensor (SR18) goes off; but it does not go on within a specific period of time and, in addition, the sensor goes on after a period of time during which the stapler motor (M9) is rotated in reverses.

2.8 Power Supply

2.8.1 Overview

0001-2468

When the host machine is turned on, it supplies 24 VDC and 13 VDC to the finisher controller PCB. The 24-VDC power is used to drive motors, while the 13-VDC power is converted into 5 V by the DC converter mounted on the finisher controller PCB for use by sensors and ICs.



F-2-41

2.8.2 Protective Mechanism

0001-4386

The 24-VDC power supply used to drive individual motors is equipped with a fuse to protect against over-current. The 13-VDC line used for logic circuits is equipped with a fuse (FU204) to protect against over-current.

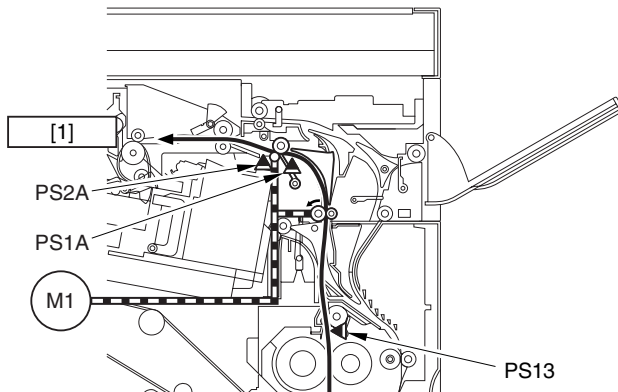
2.9 Relay Delivery Assembly

2.9.1 Delivery to the No. 2 Delivery Slot

0001-4395

The machine delivers paper to the No. 2 delivery slot as follows:

- 1) Paper arrives from the host machine. A specific period of time after its leading edge reaches the fixing inside delivery sensor (PS13), the No. 2 delivery motor (M1) starts to rotate to move the paper to the No. 2 delivery tray.



F-2-42

[1] No. 2 delivery slot

M1: No. 2 delivery motor

PS1A: No. 2 delivery sensor

PS2A: Duplexing inlet sensor

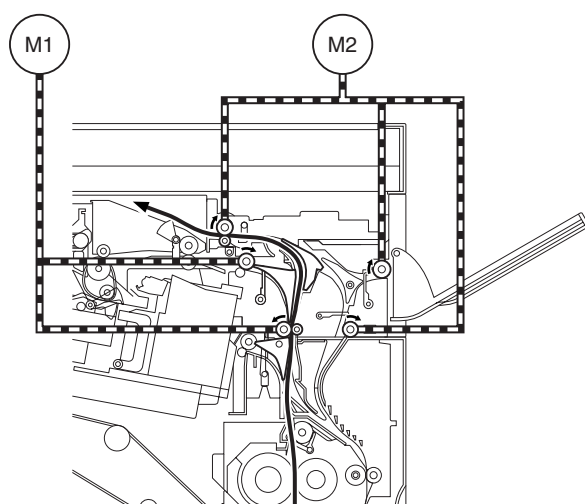
PS13: Fixing outlet sensor (host machine)

2.9.2 Delivery to the No. 3 Delivery Slot

0001-4396

The machine delivers paper to the No. 3 delivery slot as follows.

- 1) Paper arrives from the host machine. A specific period of time after its leading edge reaches the fixing delivery sensor (PS13), the No. 2 delivery motor (M1) and the No. 3 delivery motor (M2) start to rotate.

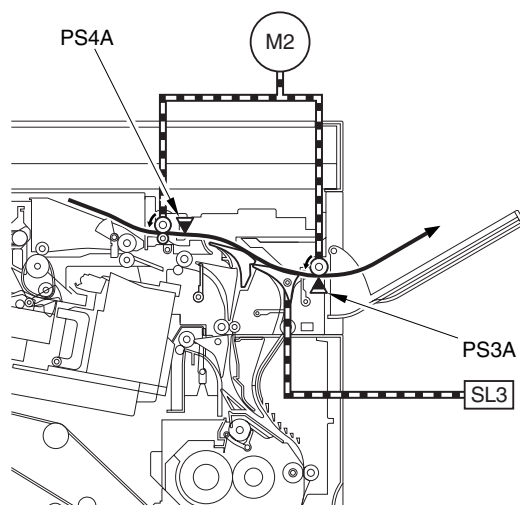


F-2-43

M1: No. 2 delivery motor

M2: No. 3 delivery motor

- 2) When the trailing edge of paper reaches a specific point in front of the reversing roller, the No. 3 delivery motor stops rotation to start to rotate in reverse after a specific period of time. At the same time, the No. 3 delivery solenoid goes on to move the paper to the No. 3 delivery slot.



F-2-44

M1: No. 2 delivery motor

M2: No. 3 delivery motor

PS3A: Duplexing inlet sensor

PS4A: Reversal sensor

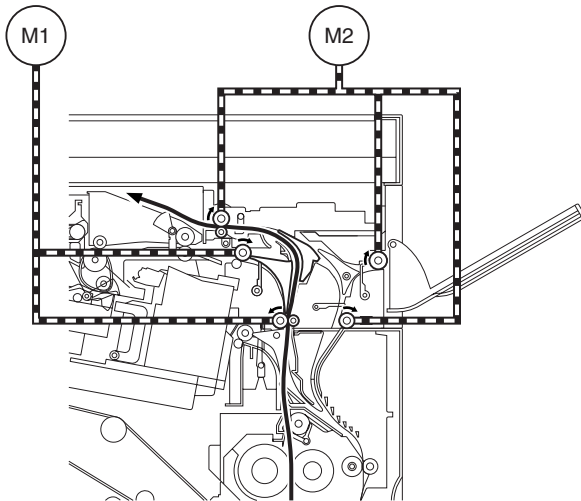
SL3: No. 3 delivery solenoid

2.9.3 Moving Paper for a Double-Sided Copy

0001-4397

The machine moves paper as follows when making double-sided copies (prints):

- 1) Paper arrives from the host machine. A specific period of time after its leading edge reaches the fixing delivery sensor (PS13), the No. 2 delivery motor (M1) and the No. 3 delivery motor (M2) start to rotate.

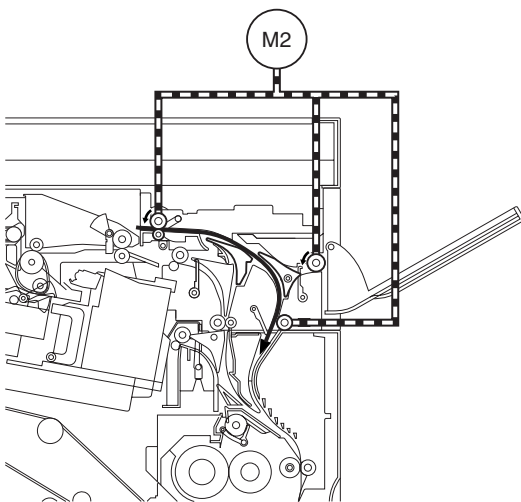


F-2-45

M1: No. 2 delivery motor

M2: No. 3 delivery motor

- 2) When the trailing edge of the paper reaches a specific point in front of the reversing roller, the No. 3 delivery motor stops to start to rotate in reverse after a specific period of time. The paper is then moved to the duplex inlet assembly as it is.



F-2-46

M2: No. 3 delivery motor

Chapter 3 Installation

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3.1.3 Checking the Operation.....	3-14
3.1.3.1 Checking the Operation.....	3-14

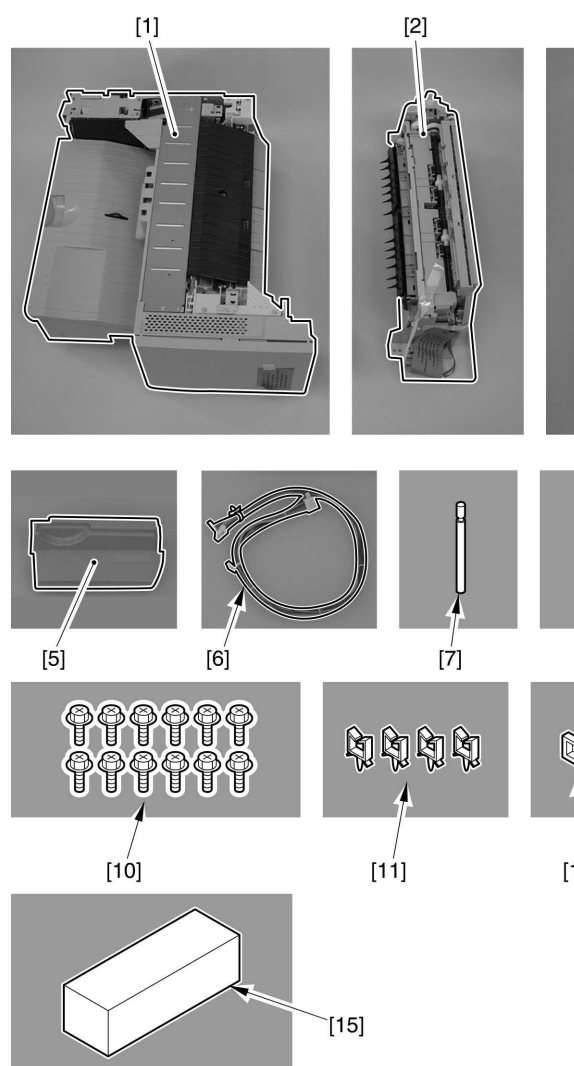
3.1 Unpacking and Installation

3.1.1 Unpacking and Checking the Components

3.1.1.1 Unpacking and Checking the Contents 0004-3642

⚠If you are also installing a side paper deck, install the finisher first whenever possible.

Open the shipping box, and check to make sure that none of the following is missing:



F-3-1

T-3-1

[1]	Finisher-P1	1 unit
[2]	Relay delivery unit	1 pc.
[3]	Finisher left cover	1 pc.
[4]	Rail	1 pc.
[5]	Finisher tray front cover	1 pc.
[6]	Communications cable	1 pc.
[7]	Joint pin	1 pc.
[8]	Self-tapping screw	1 pc.
[9]	Stepped screw	1 pc.

[10]	RS tightening screw	12 pc.
[11]	Wire saddle	4 pc.
[12]	Edge saddle	1 pc.
[13]	Slider	1 pc.
[14]	Connecting Sheet Metal	1 pc.
[15]	Staple	1 box

3.1.2 Installation Procedure

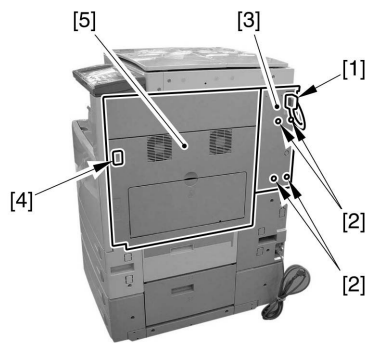
3.1.2.1 Remove the inside cover and the right door.

0004-3776

1) Disconnect the reader power cable [1], and remove the 4 screws [2]; then, detach the right rear cover [3].

2) Push the button [4] to open the right door [5].

⚠ The right door is opened in preparation for step 9) and its subsequent steps.



F-3-2

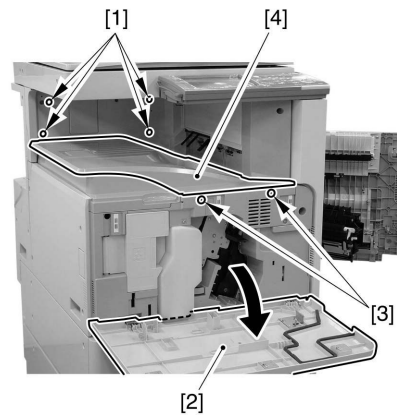
3) Remove the 4 screws [1] of the rear cover. These 4 screws will not be used.

⚠ The reason to remove these 4 screws at this time is that the delivery tray receives the screws if they are dropped by accident at the time of removing.

4) Open the front over [2].

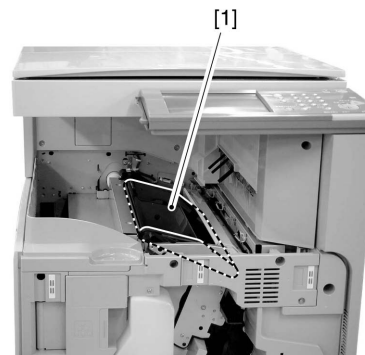
5) Loosen the 2 screws [3], and detach the delivery tray [4].

The removed delivery tray will no longer be used.



F-3-3

⚠ When detaching the delivery tray, be sure to take care so as not to damage the intermediate transfer belt [1].



F-3-4

6) So that the intermediate transfer belt is covered, place paper [1] (1 sheet of A3, or 2 to 3 sheets of A4) on the belt.

7) Detach the rear cover [2].

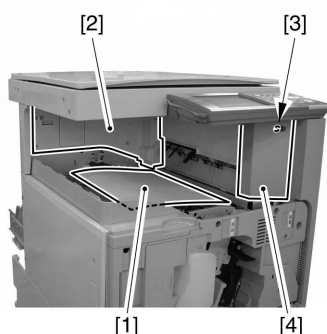
The removed rear cover will no longer be used.

8) Remove the screw [3], and detach the support cover [4].

Remove the blanking sheet if it is placed on the screw hole.

The removed screw and the support cover will no

longer be used.



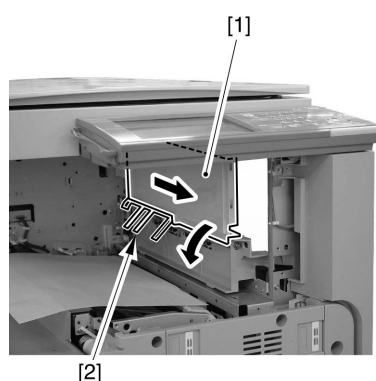
F-3-5

- 9) Pull the right inside cover [1] toward the front, and shift it to the left to detach.

The removed right inside cover will not be used.

- 10) Remove the delivery sensor flag [2] of the machine.

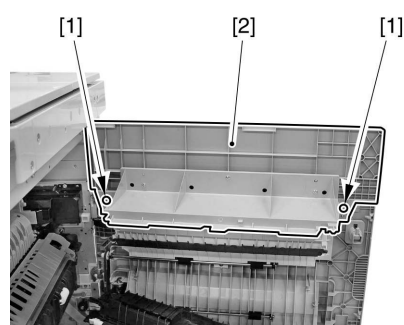
The removed delivery sensor flag will no longer be used.



F-3-6

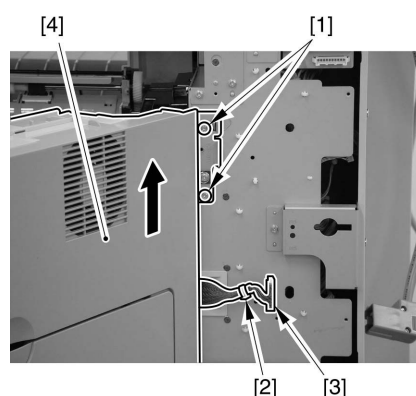
- 11) Remove the 2 self-tapping screws [1], and detach the right cover [2].

The 2 removed self-tapping screws and the right cover will no longer be used.



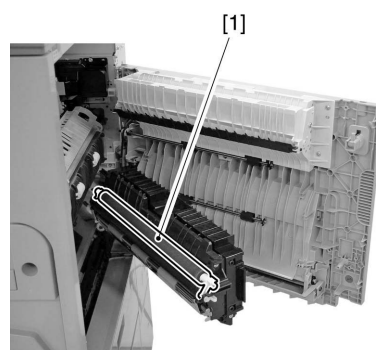
F-3-7

- 12) Remove the 2 screws [1] and the reusable band [2], and disconnect the connector [3]; then, lift the right door [4] to detach.



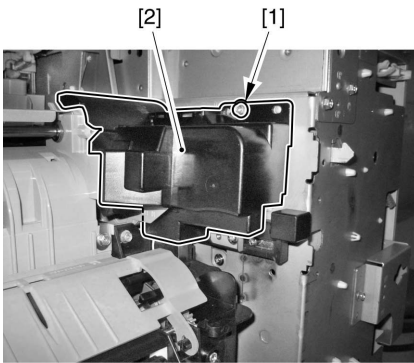
F-3-8

⚠ When detaching the right door, be sure to take care not to touch the secondary transfer external roller [1].



F-3-9

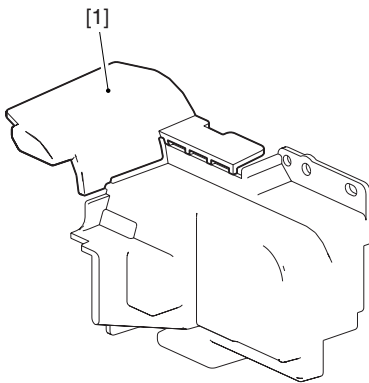
- 13) Remove the screw [1], and detach the fixing connector cover [2].



F-3-10

- 14) Cut the dressing piece [1] of the fixing connector cover using nippers [2].

The removed dressing piece will no longer be used.



F-3-11

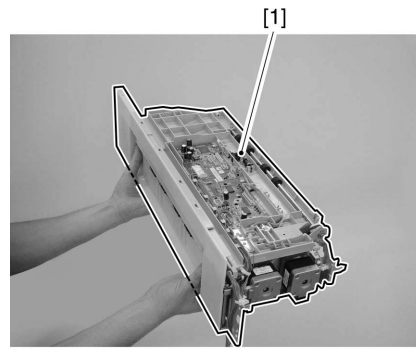
- ⚠ Be sure no portion of the dressing piece is left behind on the fixing connector cover.

- 15) Fit the fixing connector cover.

3.1.2.2 Fitting the Relay Delivery Unit

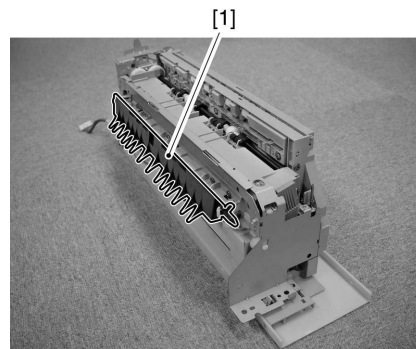
0004-3802

- 1) Take out the relay delivery unit from the plastic bag. Be sure to hold the relay delivery unit [1] as shown in the figure.



F-3-12

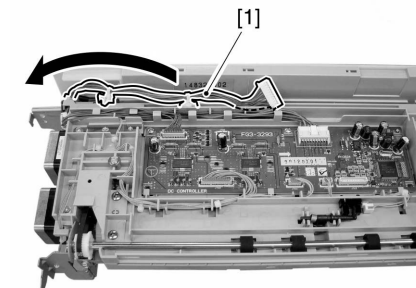
- ⚠ Care should be taken not to break the delivery flapper 1 [1] found at the bottom when holding the relay delivery unit.



F-3-13

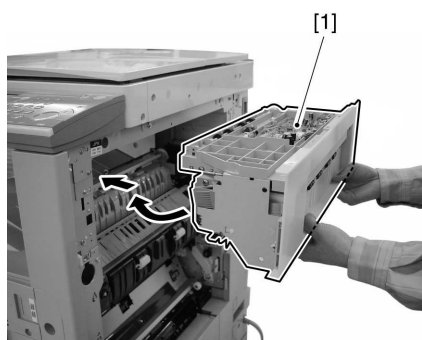
- 2) Remove all packing tape from the relay delivery unit.

- 3) Move the harness [1] to the right side of the relay delivery unit.



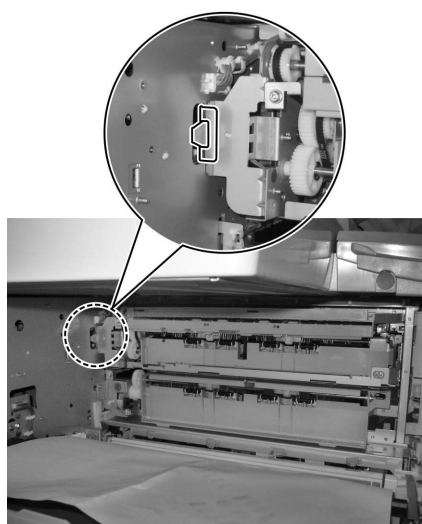
F-3-14

4) Fit the relay delivery unit [1] inside the machine.



F-3-15

⚠ When fitting it into the machine, be sure that the machine inside will look as shown.

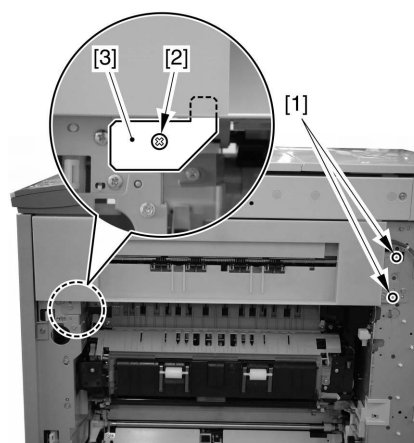


F-3-16

5) Temporary fix the 2 screws included in the package.

6) Remove the screw [2], and detach the sheet metal [3].

The removed screw and sheet metal will not be used.

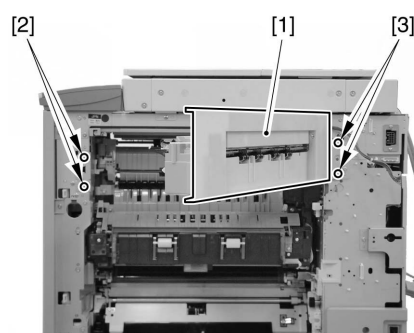


F-3-17

7) Open the relay delivery unit [1], and fix it with the 2 screws [2] included in the package.

8) Tighten the 2 screws [3] temporarily tightened in step 20).

9) Close the relay delivery unit [1].



F-3-18

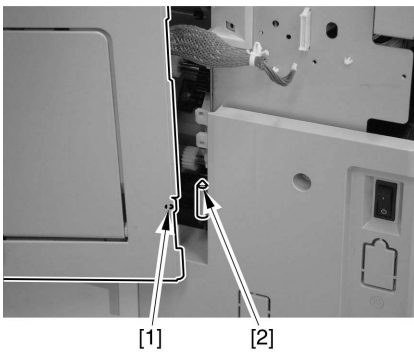
10) Connect the connector [1] to its corresponding connector of the machine.

11) Route the harness [2] through the cable clamp [3], and put the 2 reusable bands [4] through the hole.

3.1.2.3 Mounting the Covers and the Right Door

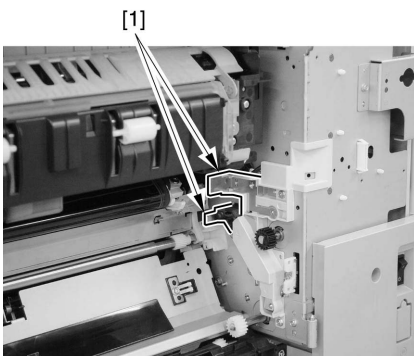
0004-3909

1) Match the hole [1] in the bottom of the right door and the pin [2], and fit the bottom of the right door.



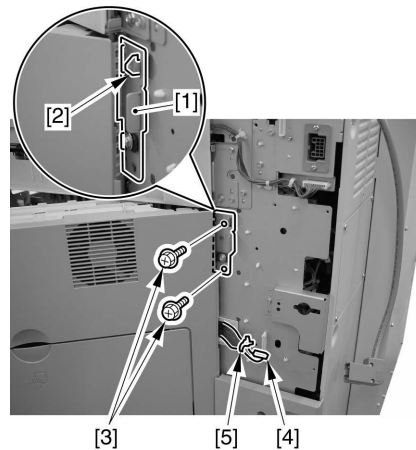
F-3-19

⚠ When fitting it, be sure to take care so as not to break the high-voltage contact [1] of the secondary transfer external roller.



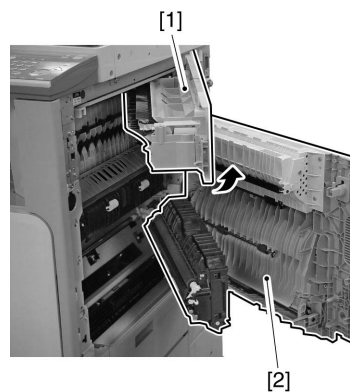
F-3-20

- 2) Match the mounting plate [1] on the top of the right door and the hook [2] of the machine, and fit it in place.
- 3) Using 2 screws [3], secure the mounting plate [1] in place.
- 4) Connect the connector [4], and fit the reusable band [5].



F-3-21

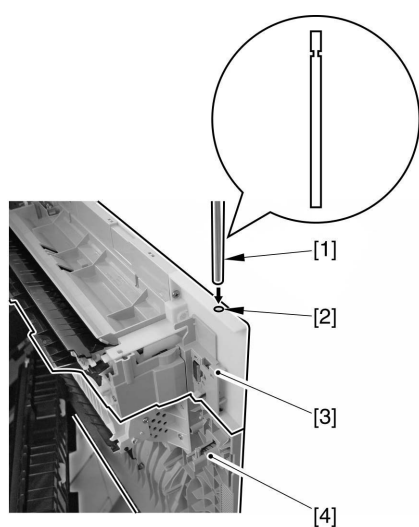
- 5) Open the relay delivery unit [1].
- 6) Lift the relay delivery unit [1], and match it against the right door [2].



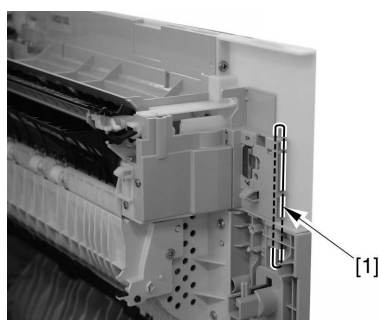
F-3-22

⚠ When matching the position, be sure to take care so that the relay delivery unit will not be displaced higher than its correct position.

- 7) Fit the pin [1] through the hole [2] until it stops; then, connect the right door [4] and the relay delivery unit [3].

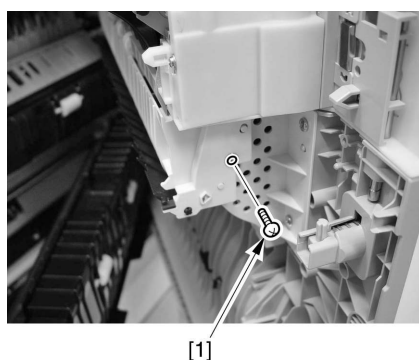


F-3-23



F-3-24

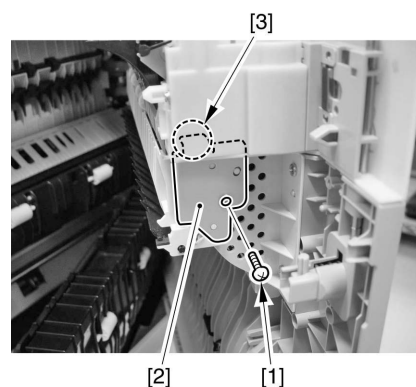
8) Remove the screw [1].



F-3-25

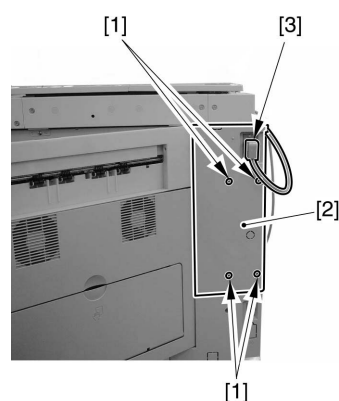
9) Attach the connecting sheet metal [2] with the screw [1] removed at step 8.

⚠ Check to make sure that the projection [3] of the connecting sheet metal is attached to the hole.



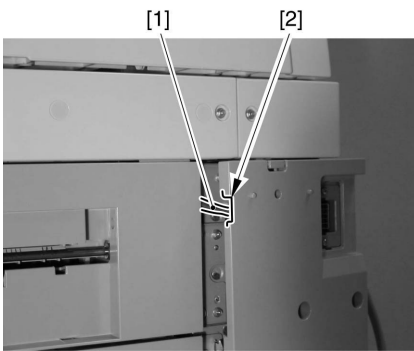
F-3-26

10) Using the 4 screws [1], fit the right rear cover [2]; then, connect the reader power cable [3].

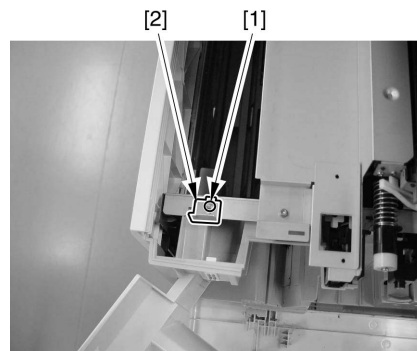


F-3-27

⚠ Take full care not to trap the harness [1] by the cut-off [2] of the right cover (upper right).



F-3-28

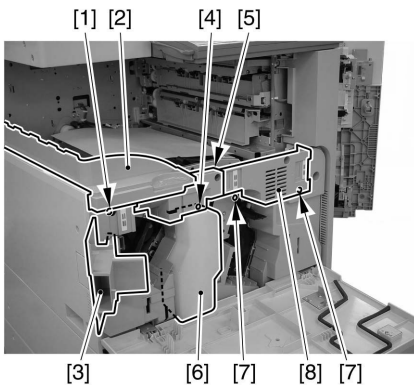


F-3-30

3.1.2.4 Mounting the Rail and the Guides

0004-3913

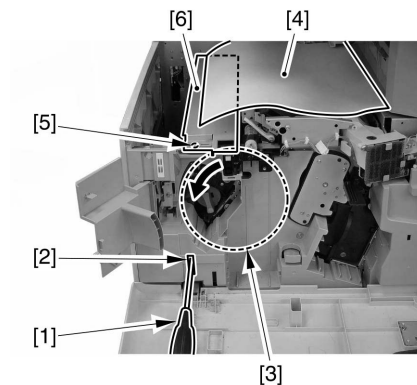
- 1) Remove the screw [1], and detach the delivery tray lower cover [2].
- 2) Open the toner supply cover [3].
- 3) Remove the TP tightening screw [4], and detach the waste toner box cover [5].
- 4) Remove the waste toner box [6].
- 5) Remove the 2 screws [7], and detach the inside cover [8].



F-3-29

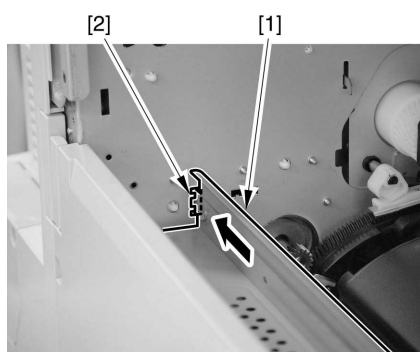
- 6) Remove the screw [1], and detach the fixing [2].
The removed screw and the fixing will no longer be used.

- 7) Insert a screwdriver [1] into the hole [2], and rotate the developing rotary [3] to counterclockwise so that the rotary moves to a replacing position of the cyan toner container.
- 8) Remove the paper [4] from the intermediate transfer belt.
- 9) Remove the screw [5], and detach the guide plate [6].



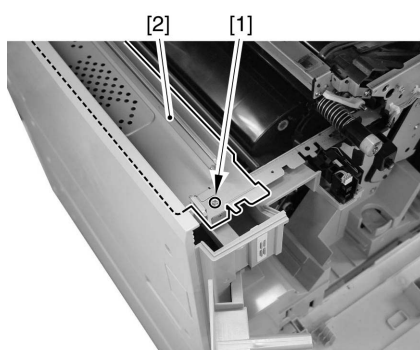
F-3-31

- 10) Fit the included rail [1] into the hole [2] at the rear of the machine.



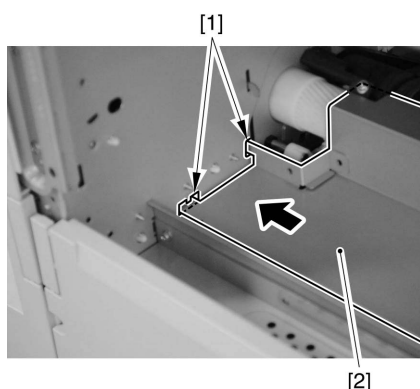
F-3-32

11) Attach the rail [2] with the screw [1] included in the package.



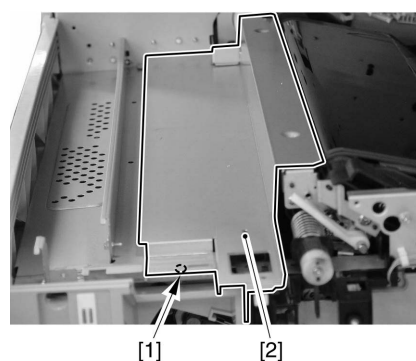
F-3-33

12) Mount the guide plate [1] removed in step 9) into the hole [2] of the machine.



F-3-34

13) Using a screw [1], mount the guide plate [2].

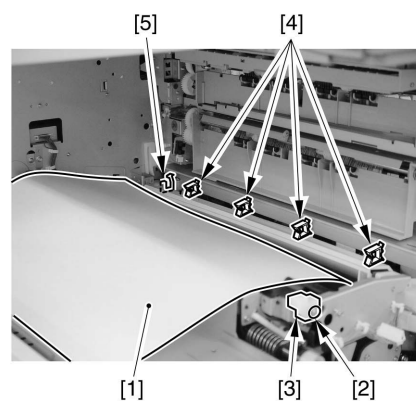


F-3-35

⚠ Take care not to damage the intermediate transfer belt.

3.1.2.5 Mounting the Communication Harness [0004-3916](#)

- 1) So that the intermediate transfer belt is covered, place paper [1] (1 sheet of A3, or 2 to 3 sheets of A4) on the belt.
- 2) Using a screw [2] included in the package, mount the included slider [3] to the machine.
- 3) Fit the 4 wire saddles [4] and the edge saddle [5].

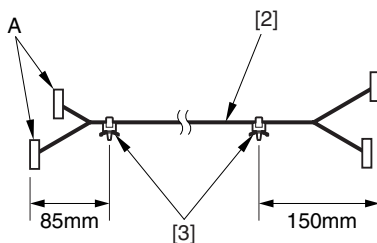


F-3-36

- 4) Connect the 2 connectors [1] of the communications harness to their corresponding connectors on the side plate of the machine.
- 5) Fix the reusable band [3] of the communications

harness [2] in place, and route the communications harness [2] through the edge saddle [4] and the 4 wire saddles [5].

⚠ Attaching direction of the communication cable
The communication harness [2] has the 2 reuse bands [3]. Compare the length from the connectors on the sides to the reuse bands [3], and insert the connectors [A] of the shorter harness to the connecting area on the side plate of the host machine.

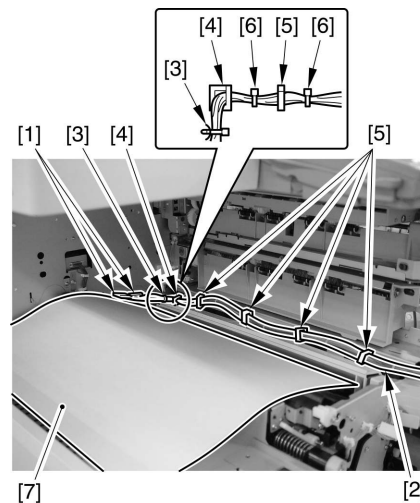


F-3-37

⚠ Points to Note When Fitting the Communications Harness

1. Once you have fixed the reuse band [3] in place, be sure that the following items are in the order indicated in the expanded view of the diagram that follows:
tie-wrap [6], edge saddle [4], and wire saddle [5].
2. Be sure that the foot of the re-use band is firmly in the mounting hole.
3. Be sure that the communications harness is fully away from the gear assembly.

- 6) Remove the paper [7] from the intermediate transfer belt.

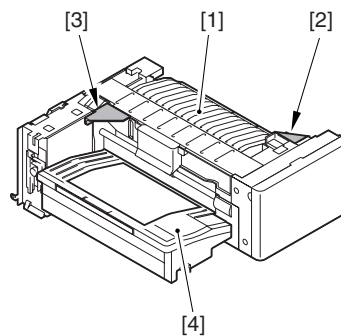


F-3-38

3.1.2.6 Installing the Finisher 0004-3917

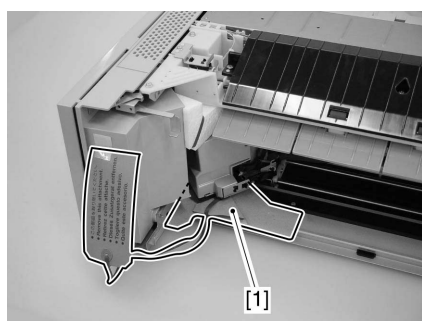
- 1) Take the finisher [1] out of its shipping box.
Grips are found as follows: for the right hand, [2]; for the left hand [3].

⚠ Do not hold it by its tray area [4].



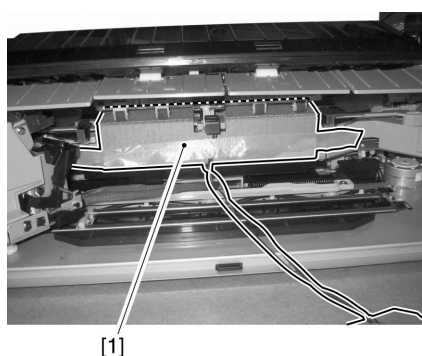
F-3-39

- 2) Remove the packing material [1].



F-3-40

3) Remove the packing material [1].

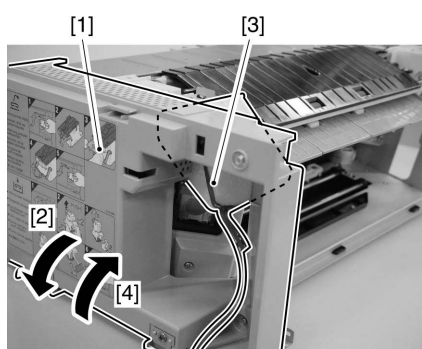


F-3-41

4) Open [2] the finisher front cover [1].

5) Remove the packing material [3].

6) Close [4] the finisher front cover [1].



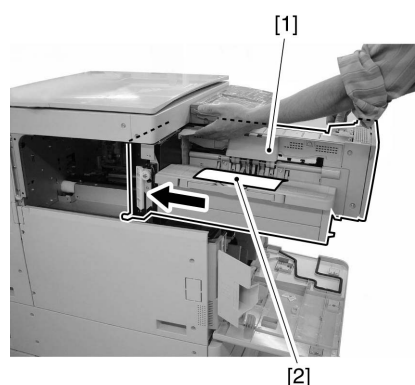
F-3-42

7) Slide in the finisher [1] into the machine while keeping it level.

Thereafter, be sure to remove the instructions sheet [2].

⚠ Be sure to keep the right door of the machine open when sliding in the finisher.

Otherwise, you will not be able to fit in the finisher.



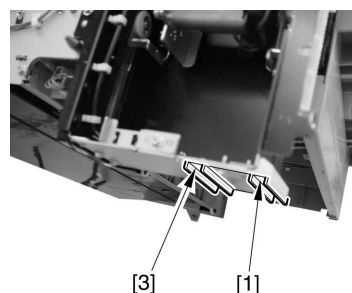
F-3-43

Take note of the following when fitting the finisher:

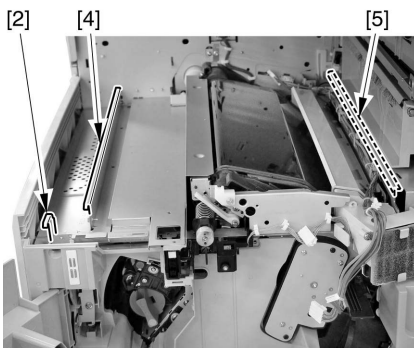
-Be sure to match the lower left [1] of the finisher and the rail assembly [2].

-Be sure to match the lower left [3] of the finisher and the rail assembly [4] of the machine.

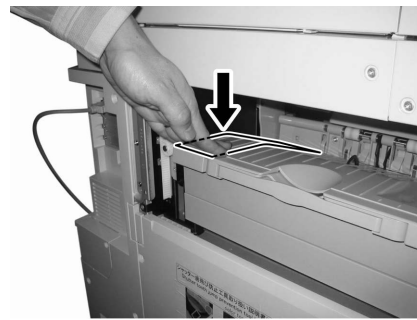
-Be sure to match the lower right [5] of the finisher as if to place it on top of the machine inside edge [6].



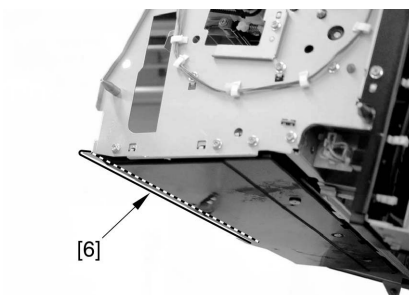
F-3-44



F-3-45

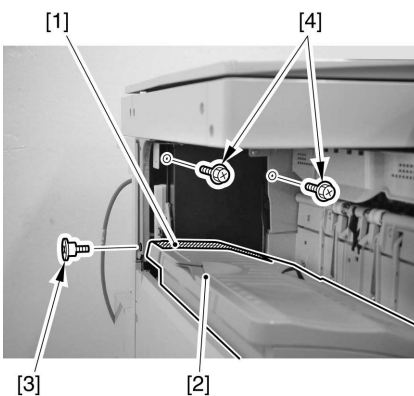


F-3-48



F-3-46

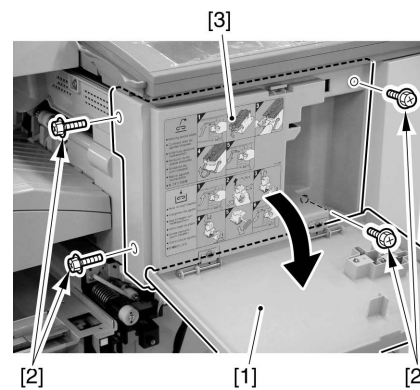
- 8) Push the area [1] indicated in Figure to lower the tray [2].
- 9) Then, tighten the stepped screws [3] (using a long screwdriver if possible) and the 2 screws [4].



F-3-47

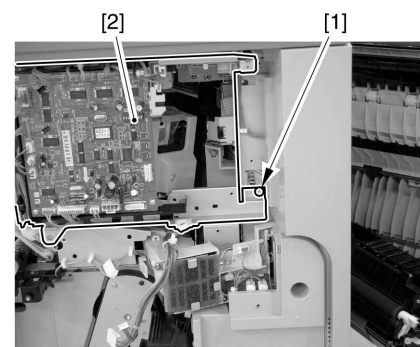
3.1.2.7 Connecting the Communication Harness 0004-3922

- 1) Open the finisher front cover [1].
- 2) Remove the 4 screws [2], and detach the finisher front cover [3].



F-3-49

- 3) Using a screw [1], secure the finisher [2] in place of the machine.



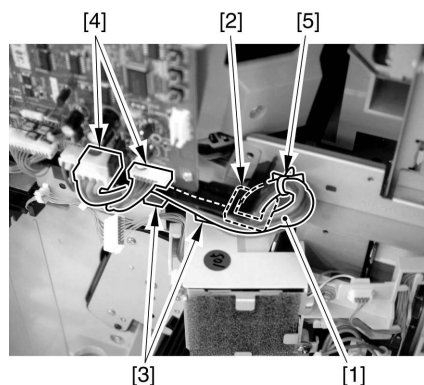
F-3-50

- 4) Fix the communication harness [1] with the wire

saddle [2] of the finisher, and pass the cable through the wire saddle [3].

5) Connect the 2 connectors [4] of the communications harness.

6) Fix the reusable band [5] in place.

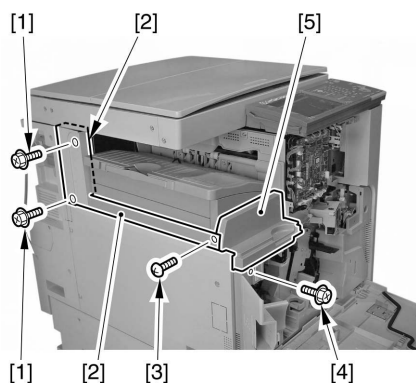


F-3-51

3.1.2.8 Mounting the Covers 0004-3923

1) Using 2 screws [1], mount the finisher left cover [2].

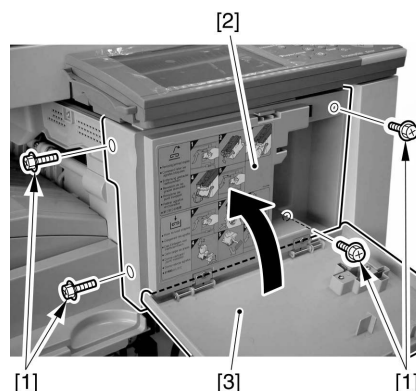
2) Attach the front cover [5] of the finisher tray with the self-tapping screw [3] included in the package and the screw [4].



F-3-52

3) Using 4 screws [1], mount the finisher front cover [2].

4) Close the finisher front cover [3].



F-3-53

5) Using 2 screws [1], mount the inside cover [2].

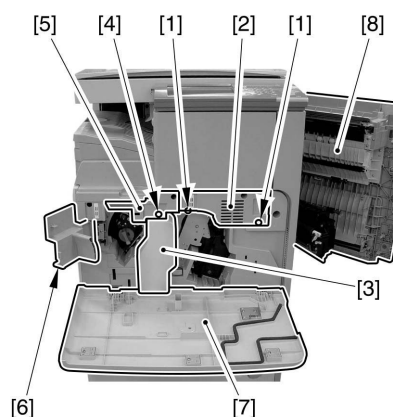
6) Fit the waste toner box [3].

7) Using a TP tightening screw [4], mount the waste toner box cover [5].

8) Close the toner supply cover [6].

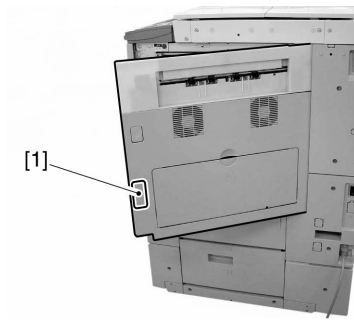
9) Close the front cover [7].

10) Close the right door [8].



F-3-54

⚠ When closing the right door, be sure to push the area [1] indicated in the figure.



F-3-55

service mode can be set to 1.

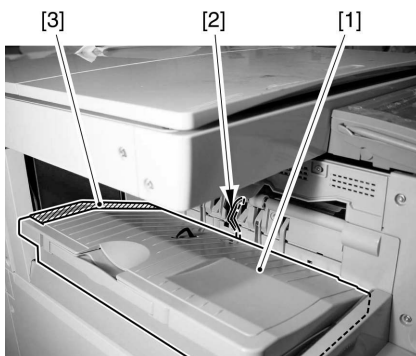
COPIER>OPTION>ACC>OUT-TRAY

3.1.3 Checking the Operation

3.1.3.1 Checking the Operation 0004-3924

⚠ Be sure to check the following before turning on the host machine.

- The delivery tray [1] does not touch the sensor flag [2]. E540 may occur if they come into contact.
 - Push the diagonally shaded area [3] when holding down the delivery tray.
-



F-3-56

- 1) Connect the power supply cable to the power outlet.
- 2) Turn on the main power switch.
- 3) Check to see that the control panel menu shows the addition of the menu for the finisher.

This is the end of the work of installing the Finisher-P1.

⚠ If you install the Copy Tray-J1 now, the following

Chapter 4 Parts

Replacement Procedure

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4.1 Removing from the Host Machine

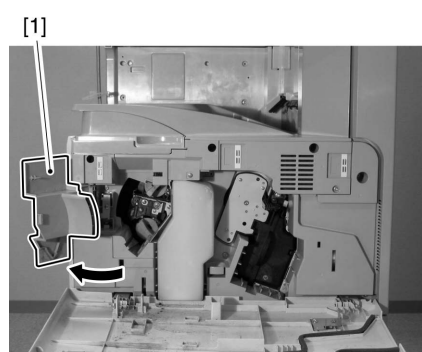
4.1.1 Finisher Assembly

4.1.1.1 Removing the Toner

Bottle Retainer

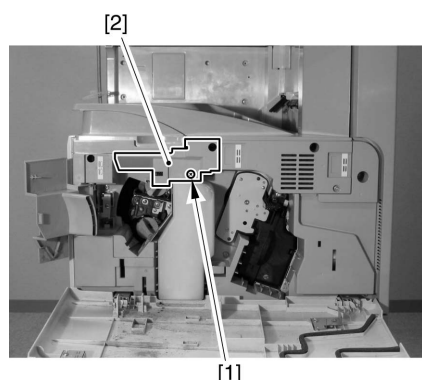
0002-7825

- 1) Open the front cover.
- 2) Open the toner container access cover [1].



F-4-1

- 3) Remove the TP screw [1], and detach the waste toner bottle retainer [2].



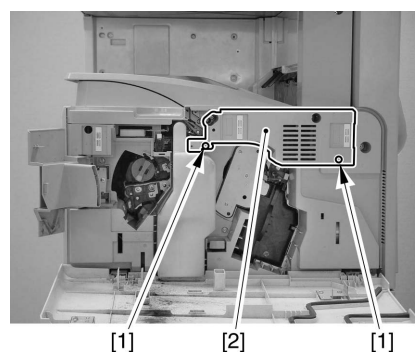
F-4-2

4.1.1.2 Removing the Front

Inside Cover (middle)

0002-7922

- 1) Remove the 2 screws [1], and detach the front inside cover (middle) [2].



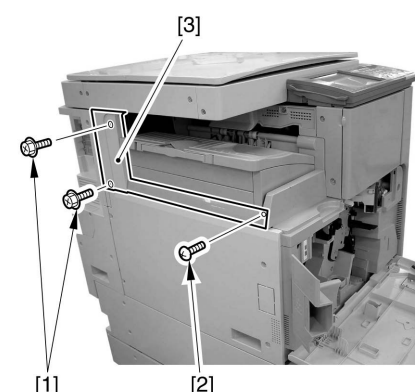
F-4-3

4.1.1.3 Removing the Finisher

Left Cover

0002-8103

- 1) Remove the 2 screws [1] and the self-tapping screw (small) [2]; then, detach the finisher left cover [3].



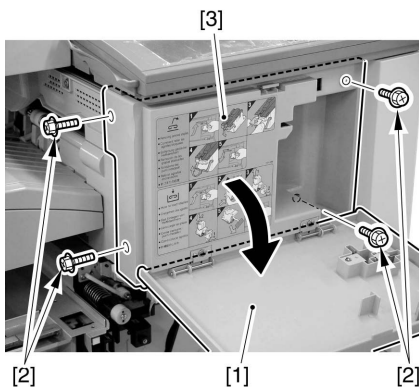
F-4-4

4.1.1.4 Removing the Finisher

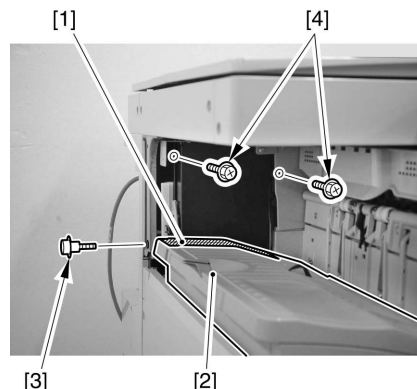
Front Cover

0003-0252

- 1) Open the finisher front cover [1].
- 2) Remove the 4 screws [2], and detach the finisher front cover [3].



F-4-5

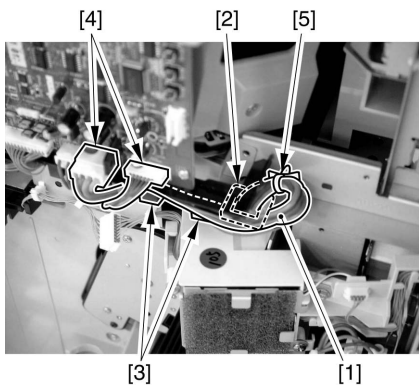


F-4-7

4.1.1.5 Detaching from the Host Machine

0002-7212

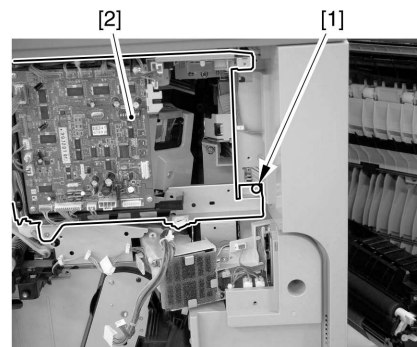
- 1) Remove the reuse band [5].
- 2) Disconnect the 2 connectors [4] of the communication harness.
- 3) Free the communication harness [1] from the wire saddle [2] of the finisher and the cable guide [3].



F-4-6

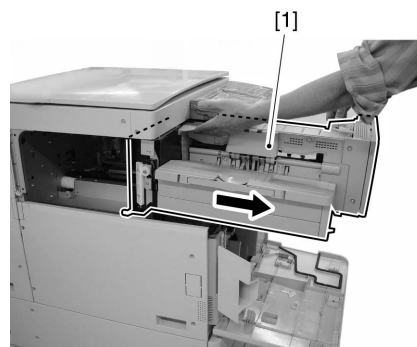
- 4) Press the area of the tray indicated by shading [1] to move down the tray (if it is in up position).
- 5) Remove the stepped screw [3] and the 2 other screws [4]. (The use of a long screwdriver is recommended.)

- 6) Remove the screw (M3x8) [1], and release the finisher assembly [2].



F-4-8

- 7) Pull the finisher [1] to detach it from the machine while holding it level.

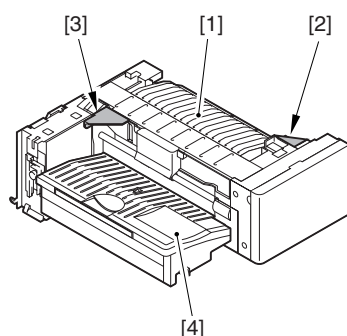


F-4-9

4.1.1.6 Points to Note When Attaching to the Host Machine

0002-7225

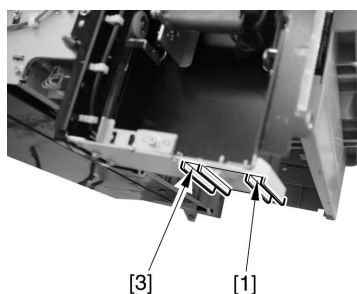
⚠ When attaching the finisher [1] to the host machine, be sure to hold it by its grips: grip (right) [2], grip (left) [3]. Do not hold it by the tray area [4].



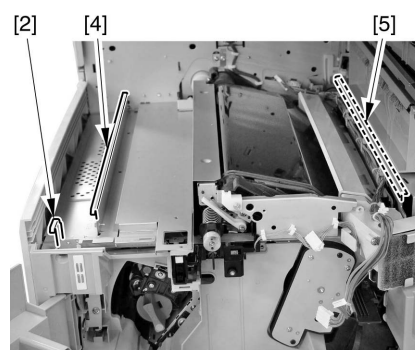
F-4-10

⚠ Points to Note When Attaching to the Host Machine

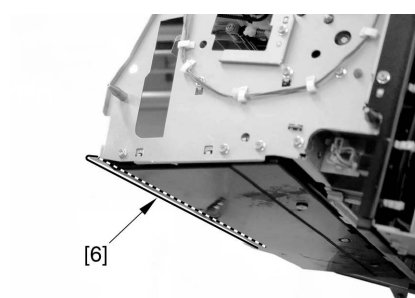
- Match the finisher lower left plate [3] against the rail assembly [4].
- Match the finisher lower left plate [3] against the rail assembly [4].
- Match both as if to place the lower right [5] of the finisher on the inside [6] of the machine.



F-4-11



F-4-12



F-4-13

⚠ Before turning on the host machine, be sure of the following:

- The delivery tray [1] must not be in contact with the sensor flag [2]; otherwise, a fault associated with E540 may occur when the power is turned on.
- To move down the delivery tray, press the area indicated by shading [3].



F-4-14

4.1.2 Relay Delivery Assembly

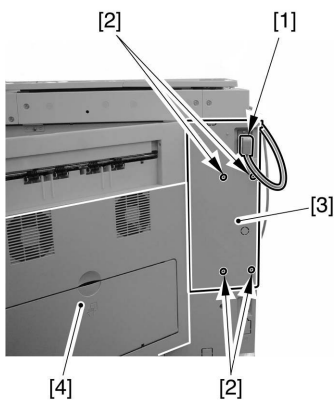
4.1.2.1 Removing the Reader

Unit Power Cable/Rear Right

Cover

0002-9146

- 1) Disconnect the reader unit power cable [1].
- 2) Remove the 4 screws [2], and detach the rear right cover [3].
- 3) Open the right cover [4].

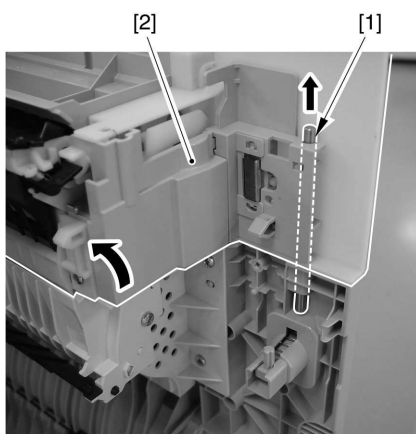


F-4-15

4.1.2.2 Removing the Relay Delivery Assembly

0002-9147

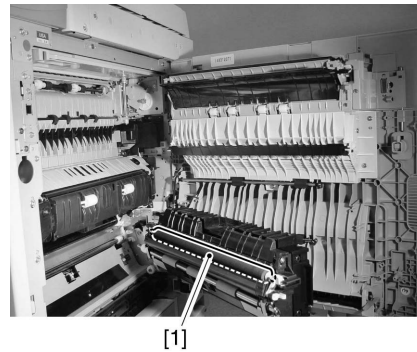
- 1) Remove the joint pin [1], and lift the relay delivery assembly [2] to separate it from the right door.



F-4-16

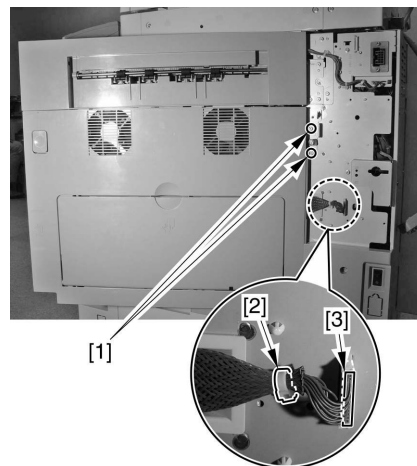
2)

⚠ When detaching the right door, be sure not to touch the secondary transfer outside roller [1].



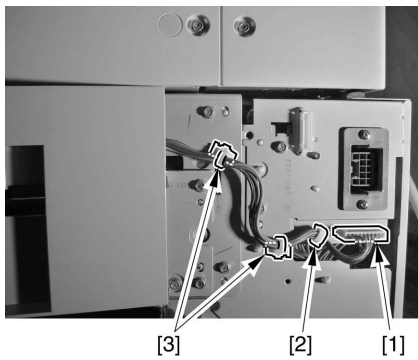
F-4-17

Remove the 2 screws [1], remove the reuse band [2], and disconnect the connector [3]; then, lift the right door to detach.



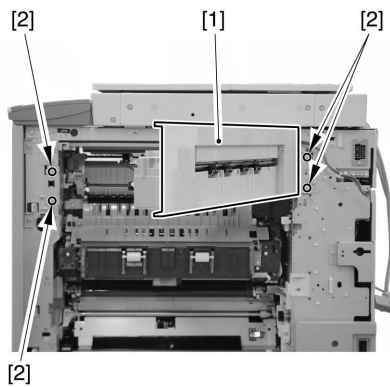
F-4-18

- 3) Disconnect the controller [1], and free the harness from the cable clamp [2].
- 4) Remove the 2 reuse bands [3].



F-4-19

- 5) Open the relay delivery assembly [1], and remove the 4 screws [2]; then, close the relay delivery assembly.



F-4-20

- 6) Detach the relay delivery assembly.

4.2 External Covers

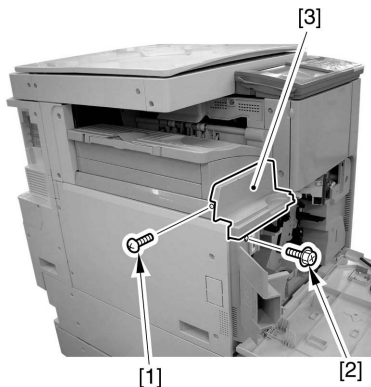
4.2.1 Finisher Tray Front Cover

4.2.1.1 Removing the Finisher

Tray Front Cover

0002-7220

- 1) Remove the self-tapping screw (small) [1] and the other screw [2]; then, detach the finisher tray front cover [3].



F-4-21

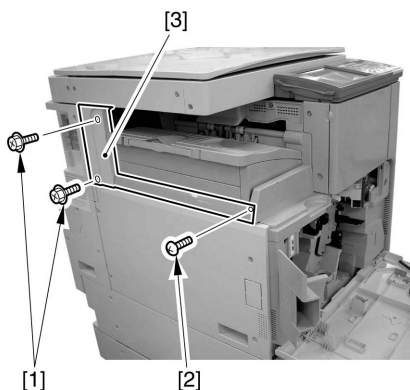
4.2.2 Finisher Left Cover

4.2.2.1 Removing the Finisher

Left Cover

0002-7224

- 1) Remove the 2 screws [1] and the self-tapping screw (small) [2]; then, detach the finisher left cover [3].



F-4-22

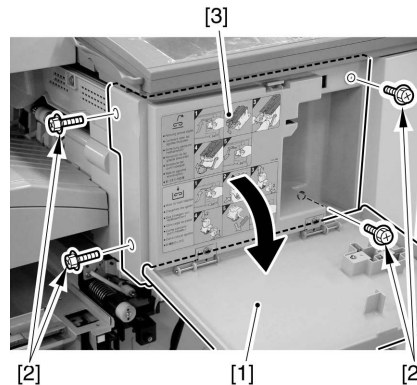
4.2.3 Finisher Front Cover

4.2.3.1 Removing the Finisher

Front Cover

0002-7179

- 1) Open the finisher front cover [1].
- 2) Remove the 4 screws [2], and detach the finisher front cover [3].



F-4-23

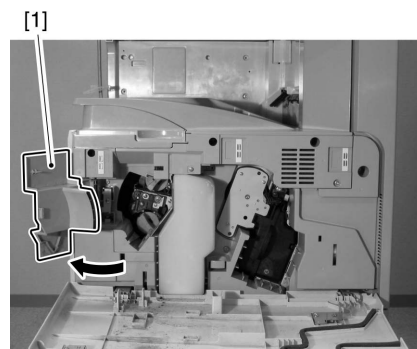
4.2.4 Stapler Assembly Cover

4.2.4.1 Removing the Toner

Bottle Retainer

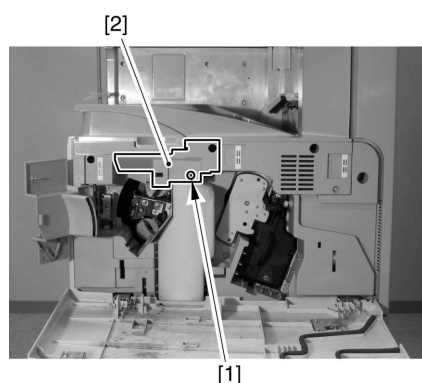
0002-7846

- 1) Open the front cover.
- 2) Open the toner container access cover [1].



F-4-24

- 3) Remove the TP screw [1], and detach the waste toner bottle retainer [2].

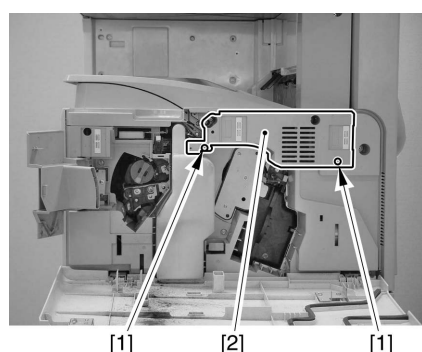


F-4-25

4.2.4.2 Removing the Front Inside Cover (middle)

0002-7923

- 1) Remove the 2 screws [1], and detach the front inside cover (middle) [2].

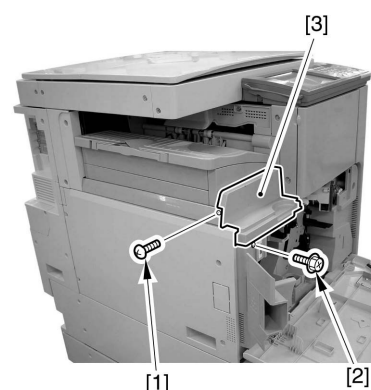


F-4-26

4.2.4.3 Removing the Finisher Tray Front Cover

0002-8054

- 1) Remove the self-tapping screw (small) [1] and the other screw [2]; then, detach the finisher tray front cover [3].

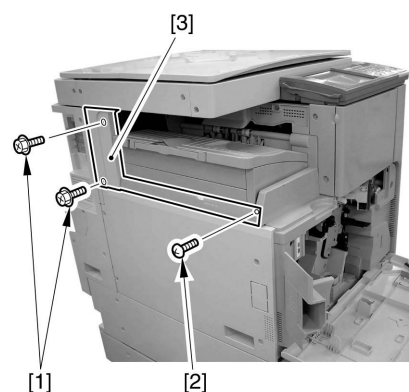


F-4-27

4.2.4.4 Removing the Finisher Left Cover

0002-8104

- 1) Remove the 2 screws [1] and the self-tapping screw (small) [2]; then, detach the finisher left cover [3].

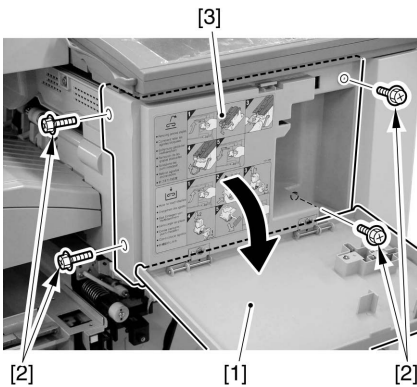


F-4-28

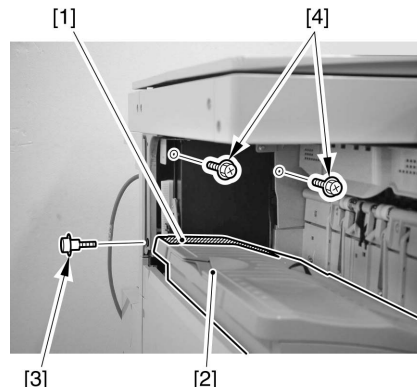
4.2.4.5 Removing the Finisher Front Cover

0003-0253

- 1) Open the finisher front cover [1].
- 2) Remove the 4 screws [2], and detach the finisher front cover [3].



F-4-29

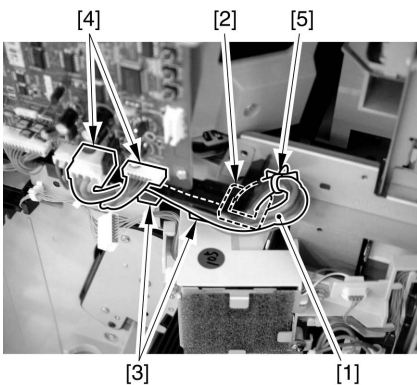


F-4-31

4.2.4.6 Detaching from the Host Machine

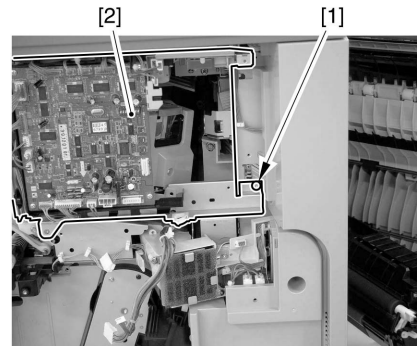
0002-8143

- 1) Remove the reuse band [5].
- 2) Disconnect the 2 connectors [4] of the communication harness.
- 3) Free the communication harness [1] from the wire saddle [2] of the finisher and the cable guide [3].



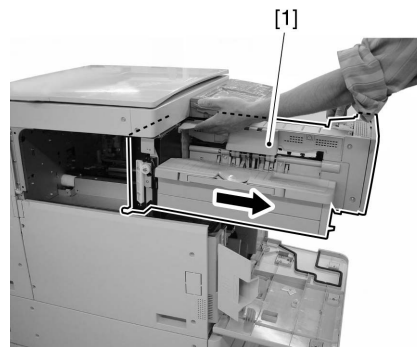
F-4-30

- 6) Remove the screw (M3x8) [1], and release the finisher assembly [2].



F-4-32

- 7) Pull the finisher [1] to detach it from the machine while holding it level.



F-4-33

- 4) Press the area of the tray indicated by shading [1] to move down the tray (if it is in up position).
- 5) Remove the stepped screw [3] and the 2 other screws [4]. (The use of a long screwdriver is recommended.)

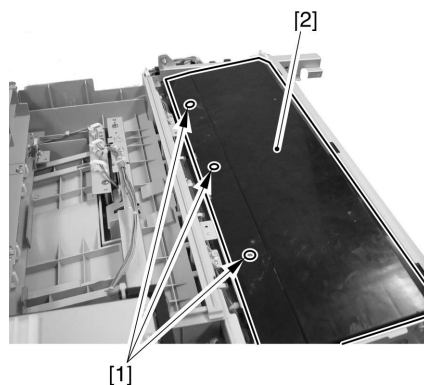
4.2.4.7 Removing the Stapler Drive Assembly Cover

0002-7186

- 1) Turn over the finisher.

2) Remove the 3 screws [1], and detach the cover [2].

⚠ The screw in the figure is an M4x4 binding screw; the others are stepped screws.



F-4-34

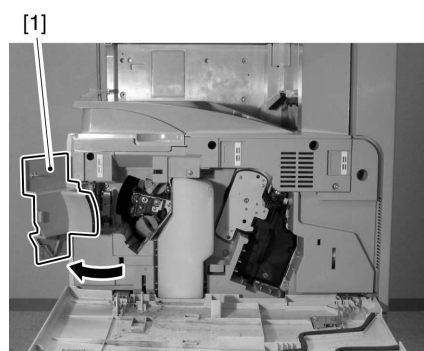
4.2.5 Delivery Cover

4.2.5.1 Removing the Toner

Bottle Retainer

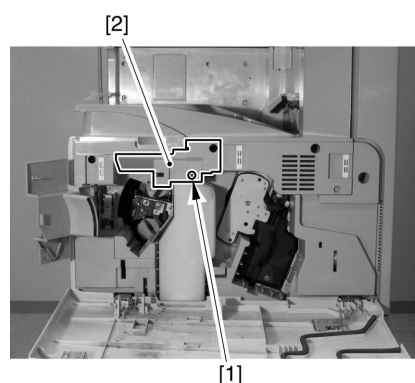
0002-7853

- 1) Open the front cover.
- 2) Open the toner container access cover [1].



F-4-35

- 3) Remove the TP screw [1], and detach the waste toner bottle retainer [2].

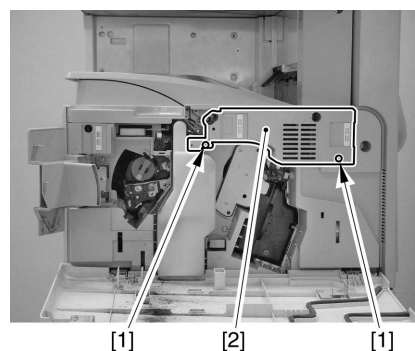


F-4-36

4.2.5.2 Removing the Front Inside Cover (middle)

0002-7925

- 1) Remove the 2 screws [1], and detach the front inside cover (middle) [2].



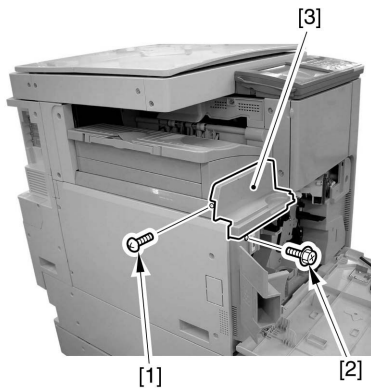
F-4-37

4.2.5.3 Removing the Finisher

Tray Front Cover

0002-8055

- 1) Remove the self-tapping screw (small) [1] and the other screw [2]; then, detach the finisher tray front cover [3].

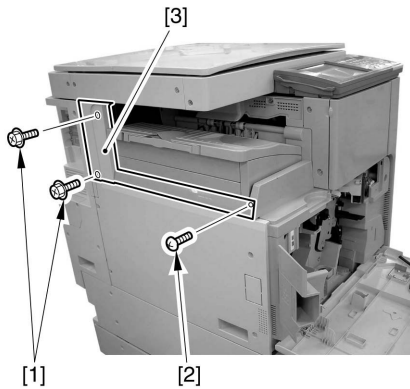


F-4-38

4.2.5.4 Removing the Finisher Left Cover

0002-8105

- 1) Remove the 2 screws [1] and the self-tapping screw (small) [2]; then, detach the finisher left cover [3].

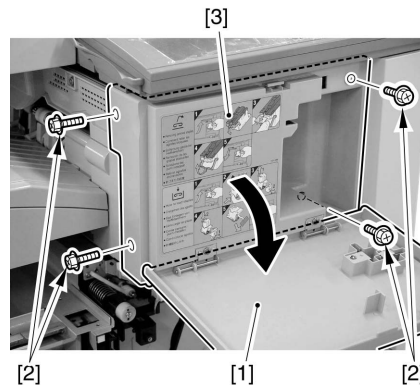


F-4-39

4.2.5.5 Removing the Finisher Front Cover

0003-0256

- 1) Open the finisher front cover [1].
- 2) Remove the 4 screws [2], and detach the finisher front cover [3].

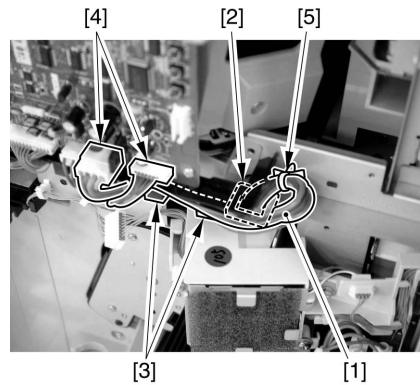


F-4-40

4.2.5.6 Detaching from the Host Machine

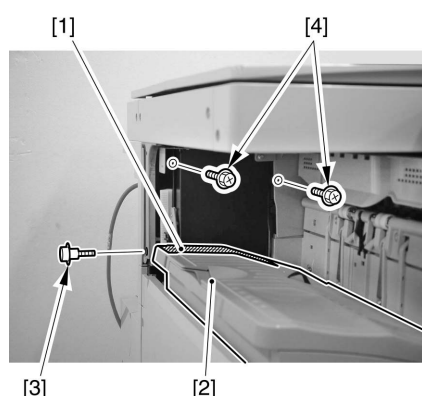
0002-8144

- 1) Remove the reuse band [5].
- 2) Disconnect the 2 connectors [4] of the communication harness.
- 3) Free the communication harness [1] from the wire saddle [2] of the finisher and the cable guide [3].



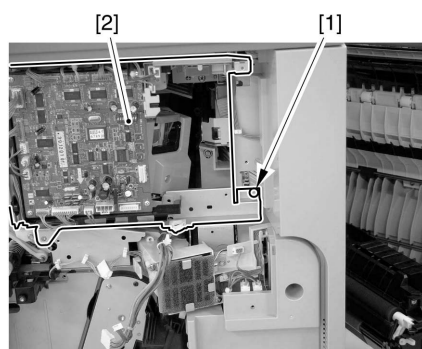
F-4-41

- 4) Press the area of the tray indicated by shading [1] to move down the tray (if it is in up position).
- 5) Remove the stepped screw [3] and the 2 other screws [4]. (The use of a long screwdriver is recommended.)



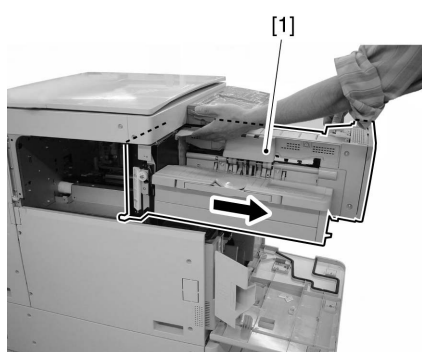
F-4-42

- 6) Remove the screw (M3x8) [1], and release the finisher assembly [2].



F-4-43

- 7) Pull the finisher [1] to detach it from the machine while holding it level.



F-4-44

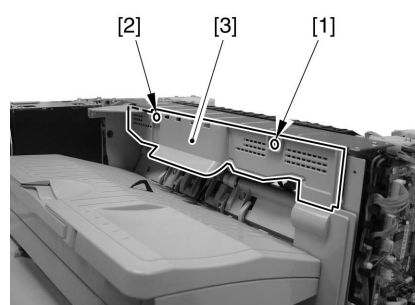
4.2.5.7 Removing the Stack

Delivery Cover

0002-7184

- 1) Remove the stepped screw [1] and the other screw

[2]; then, detach the cover [3].



F-4-45

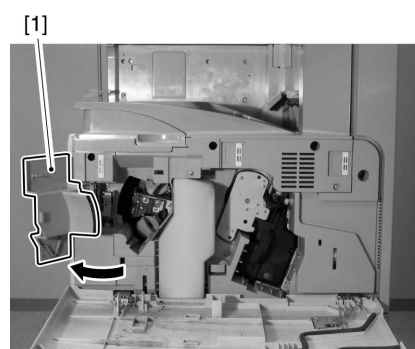
4.2.6 Grip (Left)

4.2.6.1 Removing the Toner

Bottle Retainer

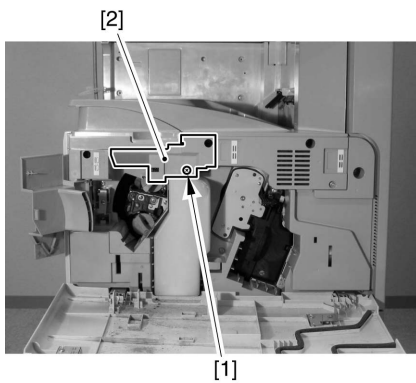
0002-7855

- 1) Open the front cover.
- 2) Open the toner container access cover [1].



F-4-46

- 3) Remove the TP screw [1], and detach the waste toner bottle retainer [2].

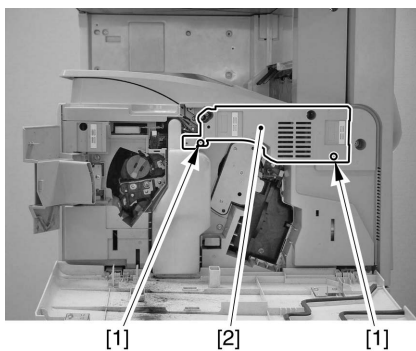


F-4-47

4.2.6.2 Removing the Front Inside Cover (middle)

0002-7927

- 1) Remove the 2 screws [1], and detach the front inside cover (middle) [2].

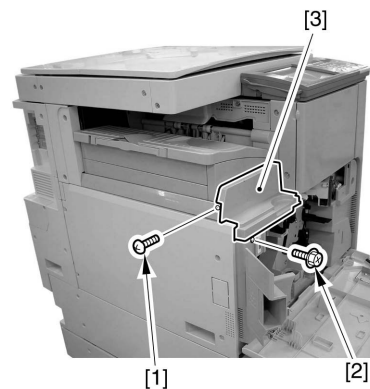


F-4-48

4.2.6.3 Removing the Finisher Tray Front Cover

0002-8056

- 1) Remove the self-tapping screw (small) [1] and the other screw [2]; then, detach the finisher tray front cover [3].

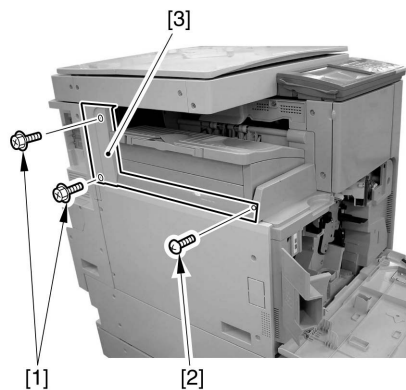


F-4-49

4.2.6.4 Removing the Finisher Left Cover

0002-8106

- 1) Remove the 2 screws [1] and the self-tapping screw (small) [2]; then, detach the finisher left cover [3].

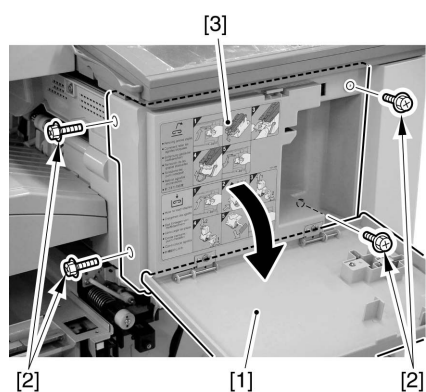


F-4-50

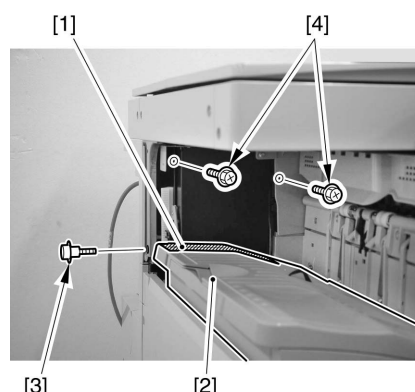
4.2.6.5 Removing the Finisher Front Cover

0003-0257

- 1) Open the finisher front cover [1].
- 2) Remove the 4 screws [2], and detach the finisher front cover [3].



F-4-51

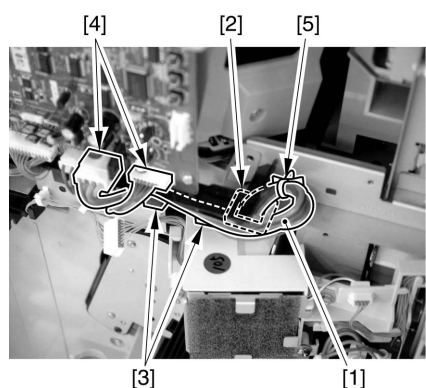


F-4-53

4.2.6.6 Detaching from the Host Machine

0002-8145

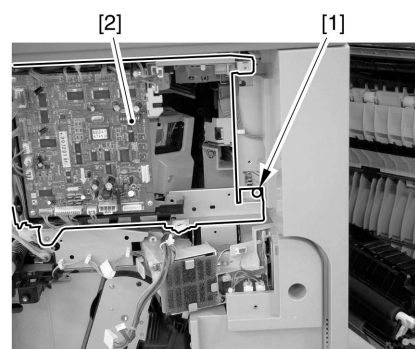
- 1) Remove the reuse band [5].
- 2) Disconnect the 2 connectors [4] of the communication harness.
- 3) Free the communication harness [1] from the wire saddle [2] of the finisher and the cable guide [3].



F-4-52

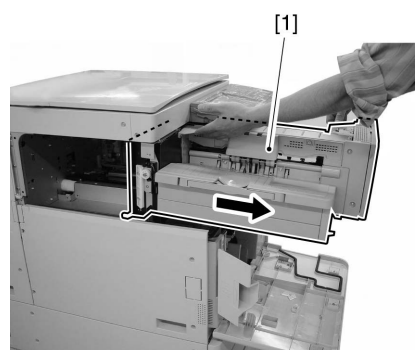
- 4) Press the area of the tray indicated by shading [1] to move down the tray (if it is in up position).
- 5) Remove the stepped screw [3] and the 2 other screws [4]. (The use of a long screwdriver is recommended.)

- 6) Remove the screw (M3x8) [1], and release the finisher assembly [2].



F-4-54

- 7) Pull the finisher [1] to detach it from the machine while holding it level.



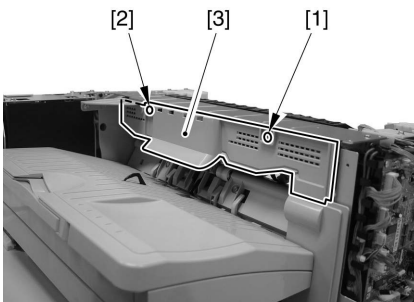
F-4-55

4.2.6.7 Removing the Stack Delivery Cover

0002-8541

- 1) Remove the stepped screw [1] and the other screw

[2]; then, detach the cover [3].

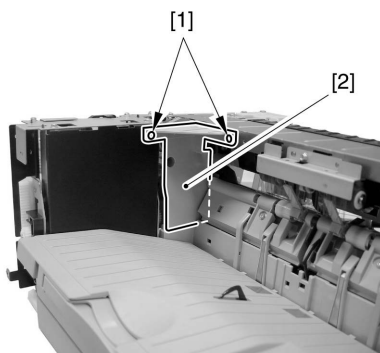


F-4-56

4.2.6.8 Removing the Grip (left)

0002-7207

- 1) Remove the 2 screws [1], and detach the grip (left) [2].



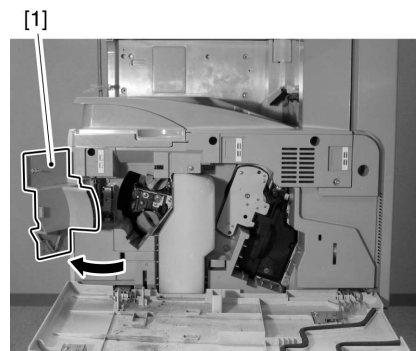
F-4-57

4.2.7 Reversal Guide

4.2.7.1 Removing the Toner Bottle Retainer

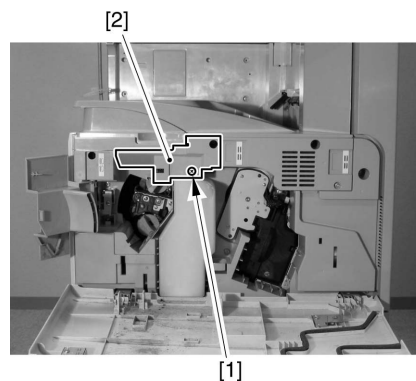
0002-7856

- 1) Open the front cover.
- 2) Open the toner container access cover [1].



F-4-58

- 3) Remove the TP screw [1], and detach the waste toner bottle retainer [2].

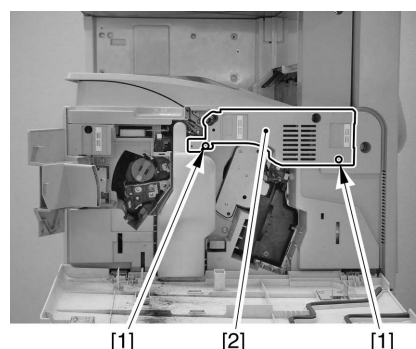


F-4-59

4.2.7.2 Removing the Front Inside Cover (middle)

0002-7928

- 1) Remove the 2 screws [1], and detach the front inside cover (middle) [2].



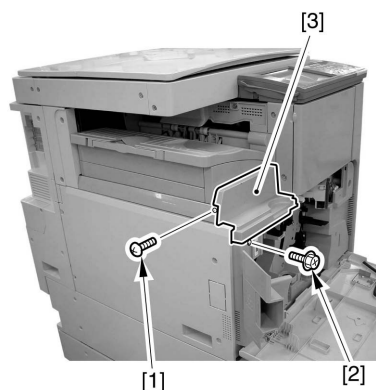
F-4-60

4.2.7.3 Removing the Finisher

Tray Front Cover

0002-8057

- 1) Remove the self-tapping screw (small) [1] and the other screw [2]; then, detach the finisher tray front cover [3].



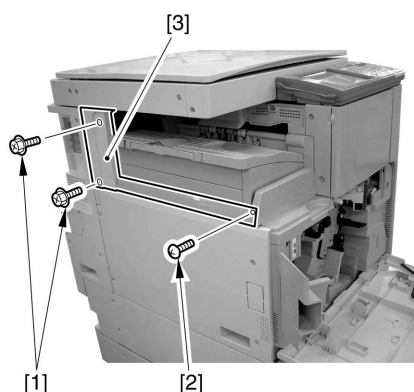
F-4-61

4.2.7.4 Removing the Finisher

Left Cover

0002-8108

- 1) Remove the 2 screws [1] and the self-tapping screw (small) [2]; then, detach the finisher left cover [3].



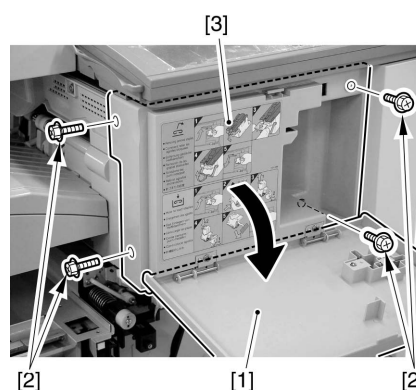
F-4-62

4.2.7.5 Removing the Finisher

Front Cover

0003-0259

- 1) Open the finisher front cover [1].
- 2) Remove the 4 screws [2], and detach the finisher front cover [3].

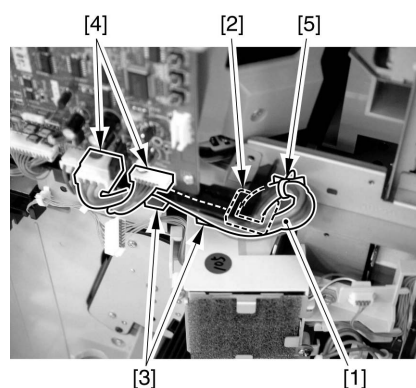


F-4-63

4.2.7.6 Detaching from the Host Machine

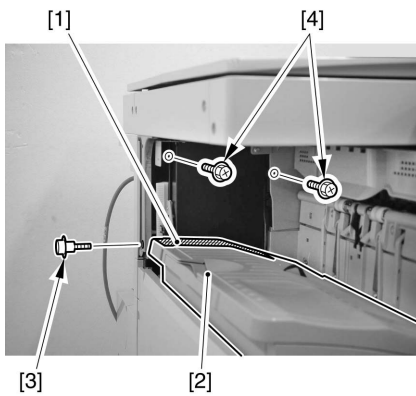
0002-8146

- 1) Remove the reuse band [5].
- 2) Disconnect the 2 connectors [4] of the communication harness.
- 3) Free the communication harness [1] from the wire saddle [2] of the finisher and the cable guide [3].



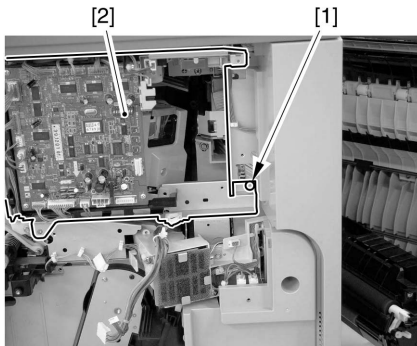
F-4-64

- 4) Press the area of the tray indicated by shading [1] to move down the tray (if it is in up position).
- 5) Remove the stepped screw [3] and the 2 other screws [4]. (The use of a long screwdriver is recommended.)



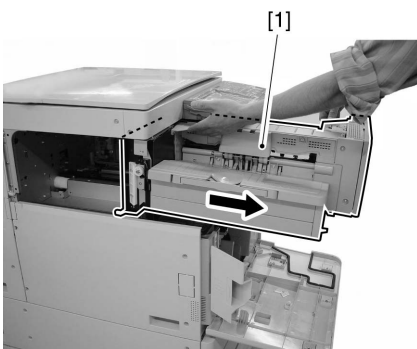
F-4-65

- 6) Remove the screw (M3x8) [1], and release the finisher assembly [2].



F-4-66

- 7) Pull the finisher [1] to detach it from the machine while holding it level.

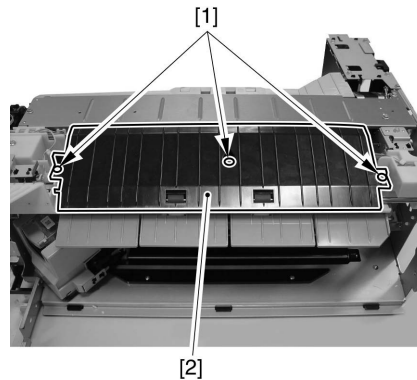


F-4-67

4.2.7.7 Removing the Reversing Guide 0002-7182

- 1) Remove the 3 self-tapping screws, and detach the

reversing guide [2].



F-4-68

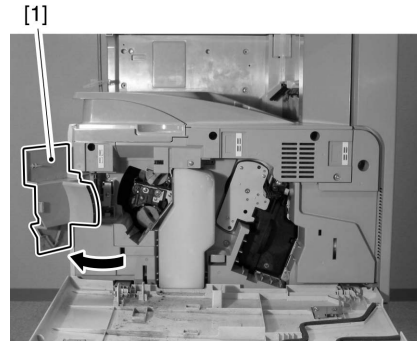
4.2.8 Lattice Guide

4.2.8.1 Removing the Toner

Bottle Retainer

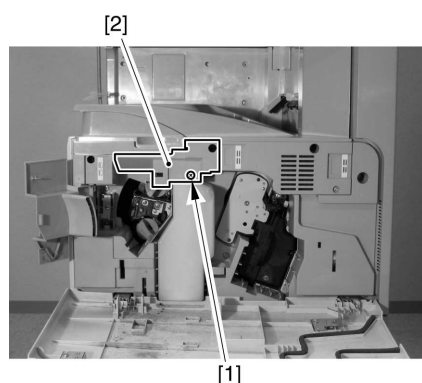
0002-7857

- 1) Open the front cover.
- 2) Open the toner container access cover [1].



F-4-69

- 3) Remove the TP screw [1], and detach the waste toner bottle retainer [2].

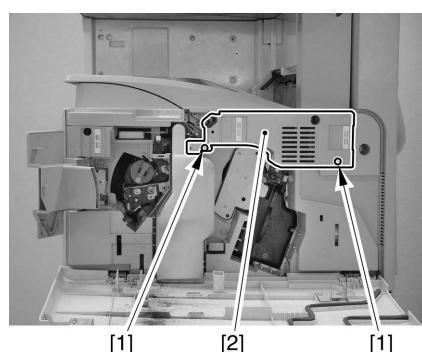


F-4-70

4.2.8.2 Removing the Front Inside Cover (middle)

0002-7931

- 1) Remove the 2 screws [1], and detach the front inside cover (middle) [2].

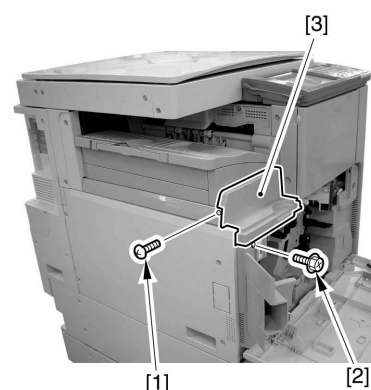


F-4-71

4.2.8.3 Removing the Finisher Tray Front Cover

0002-8058

- 1) Remove the self-tapping screw (small) [1] and the other screw [2]; then, detach the finisher tray front cover [3].

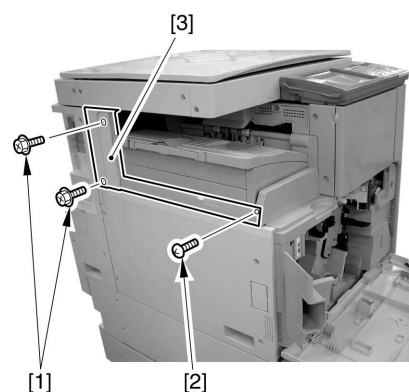


F-4-72

4.2.8.4 Removing the Finisher Left Cover

0002-8109

- 1) Remove the 2 screws [1] and the self-tapping screw (small) [2]; then, detach the finisher left cover [3].

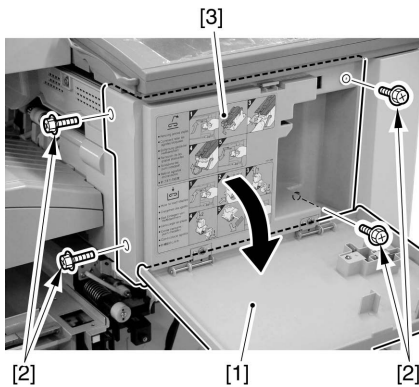


F-4-73

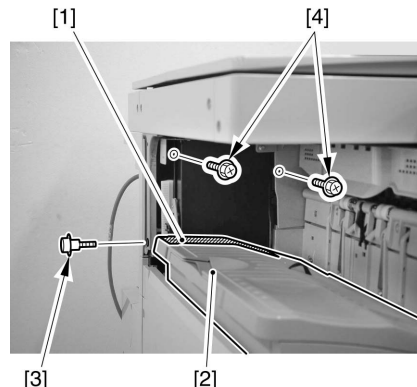
4.2.8.5 Removing the Finisher Front Cover

0003-0260

- 1) Open the finisher front cover [1].
- 2) Remove the 4 screws [2], and detach the finisher front cover [3].



F-4-74

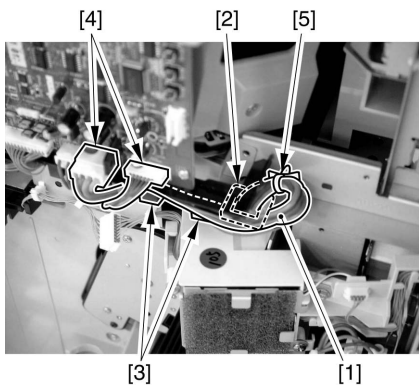


F-4-76

4.2.8.6 Detaching from the Host Machine

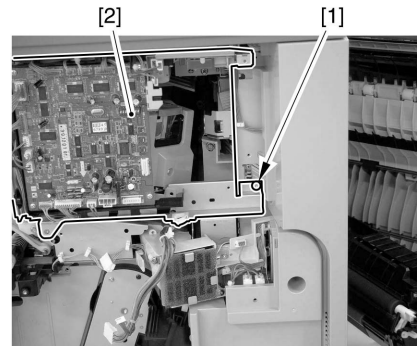
0002-8147

- 1) Remove the reuse band [5].
- 2) Disconnect the 2 connectors [4] of the communication harness.
- 3) Free the communication harness [1] from the wire saddle [2] of the finisher and the cable guide [3].



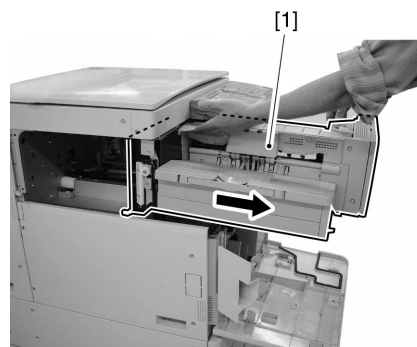
F-4-75

- 4) Press the area of the tray indicated by shading [1] to move down the tray (if it is in up position).
- 5) Remove the stepped screw [3] and the 2 other screws [4]. (The use of a long screwdriver is recommended.)



F-4-77

- 7) Pull the finisher [1] to detach it from the machine while holding it level.



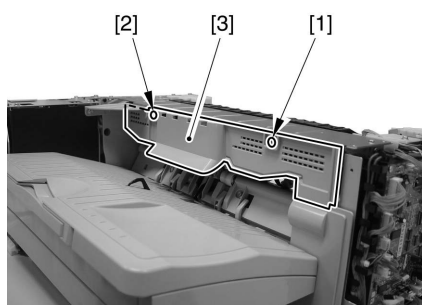
F-4-78

4.2.8.7 Removing the Stack Delivery Cover

0002-8542

- 1) Remove the stepped screw [1] and the other screw

[2]; then, detach the cover [3].

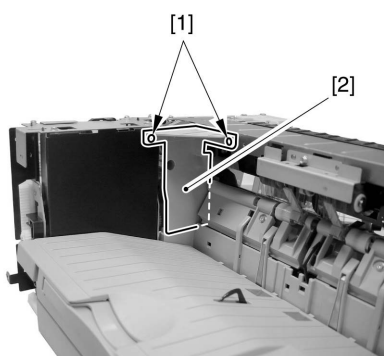


F-4-79

4.2.8.8 Removing the Grip (left)

0002-8185

- 1) Remove the 2 screws [1], and detach the grip (left) [2].

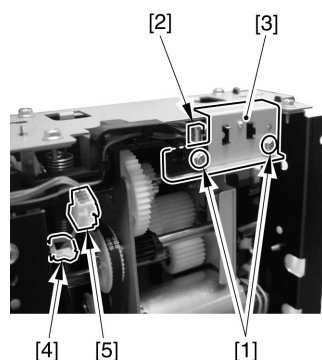


F-4-80

4.2.8.9 Removing the Stack Tray Assembly

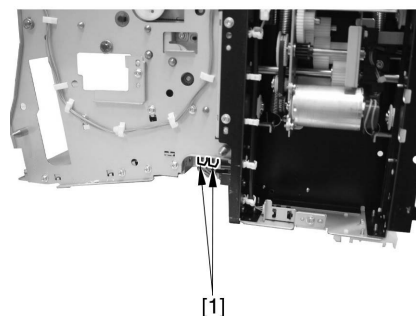
0002-8186

- 1) Remove the 2 screws [1], and disconnect the connector [2]; then, detach the stack tray upper limit sensor assembly [3].
- 2) Open the wire saddle [4], and disconnect the connector [5].



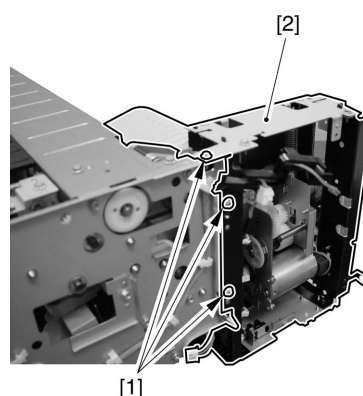
F-4-81

- 3) Disconnect the 2 connectors [1].



F-4-82

- 4) Remove the 3 screws [1], and detach the stack tray assembly [2].



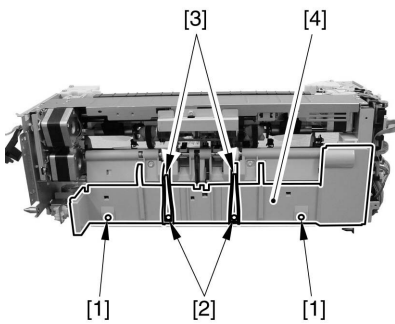
F-4-83

4.2.8.10 Removing the Lattice

Guide

0002-7185

- 1) Remove the 2 stepped screws [1], the 2 other screws, and the 2 grounding plates [3]; then, detach the lattice guide [4].



F-4-84

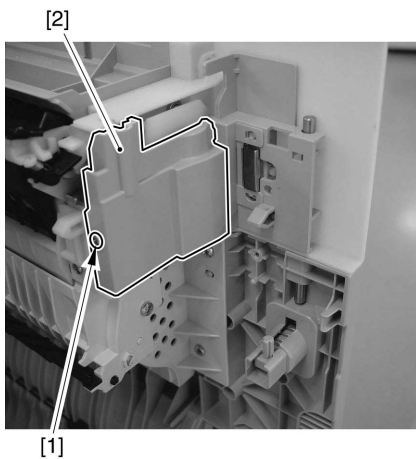
4.2.9 Solenoid Cover

4.2.9.1 Removing the Toner

Bottle Retainer

0002-7210

- 1) Open the front cover.
- 2) Open the cartridge access cover [1].



F-4-85

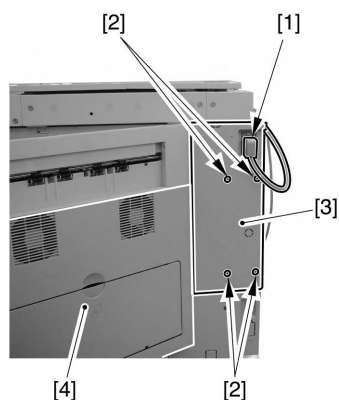
4.3 Drive System

4.3.1 Delivery Motor 2

4.3.1.1 Removing the Reader Unit Power Cable/Rear Right Cover

0002-9745

- 1) Disconnect the reader unit power cable [1].
- 2) Remove the 4 screws [2], and detach the rear right cover [3].
- 3) Open the right cover [4].

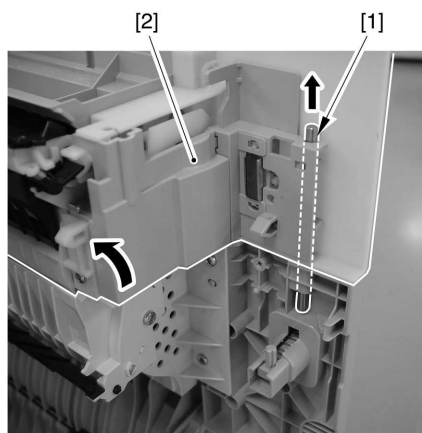


F-4-86

4.3.1.2 Removing the Relay Delivery Assembly

0002-9760

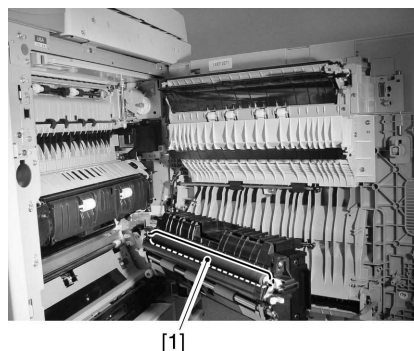
- 1) Remove the joint pin [1], and lift the relay delivery assembly [2] to separate it from the right door.



F-4-87

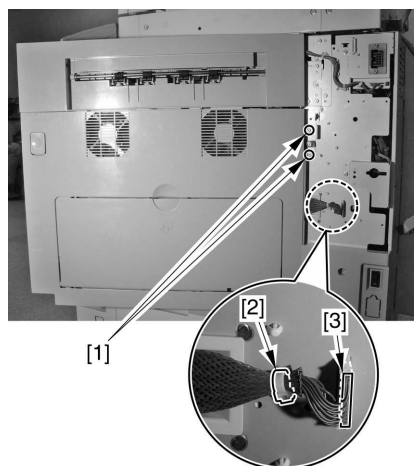
2)

⚠ When detaching the right door, be sure not to touch the secondary transfer outside roller [1].



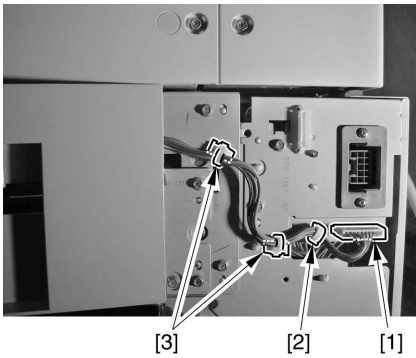
F-4-88

Remove the 2 screws [1], remove the reuse band [2], and disconnect the connector [3]; then, lift the right door to detach.



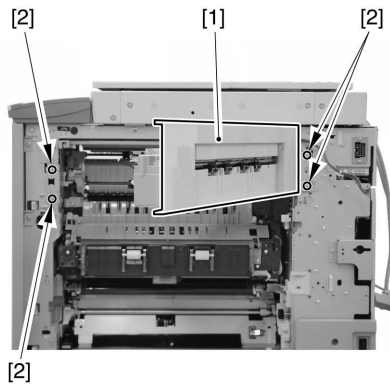
F-4-89

- 3) Disconnect the controller [1], and free the harness from the cable clamp [2].
- 4) Remove the 2 reuse bands [3].



F-4-90

- 5) Open the relay delivery assembly [1], and remove the 4 screws [2]; then, close the relay delivery assembly.



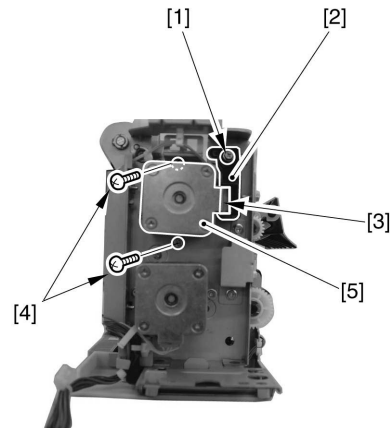
F-4-91

- 6) Detach the relay delivery assembly.

4.3.1.3 Removing the No. 2 Delivery Motor

0002-9790

- 1) Remove the screw [1], and detach the cover [2].
- 2) Disconnect the connector [3], and remove the 2 screws [4]; then, detach the No. 2 delivery motor [5].



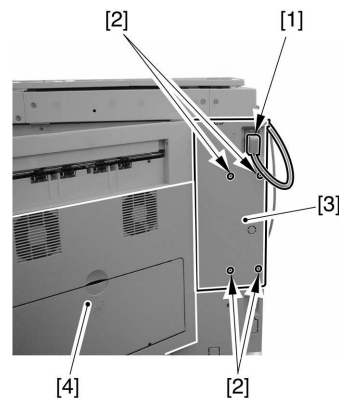
F-4-92

4.3.2 Delivery Motor 3

4.3.2.1 Removing the Reader Unit Power Cable/Rear Right Cover

0002-9746

- 1) Disconnect the reader unit power cable [1].
- 2) Remove the 4 screws [2], and detach the rear right cover [3].
- 3) Open the right cover [4].

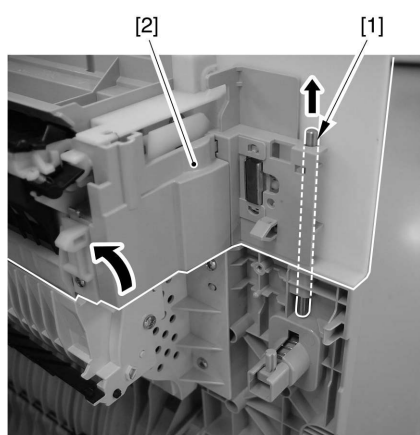


F-4-93

4.3.2.2 Removing the Relay Delivery Assembly

0002-9761

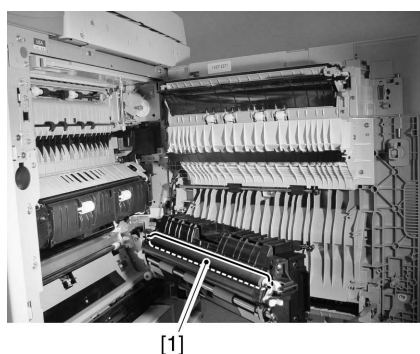
- 1) Remove the joint pin [1], and lift the relay delivery assembly [2] to separate it from the right door.



F-4-94

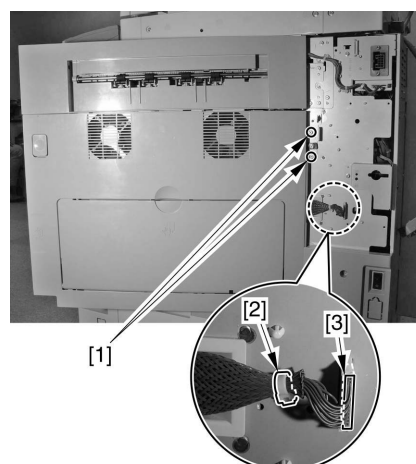
2)

⚠ When detaching the right door, be sure not to touch the secondary transfer outside roller [1].



F-4-95

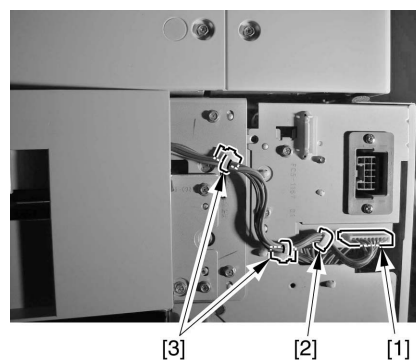
Remove the 2 screws [1], remove the reuse band [2], and disconnect the connector [3]; then, lift the right door to detach.



F-4-96

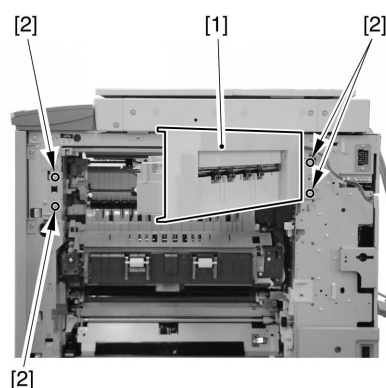
3) Disconnect the controller [1], and free the harness from the cable clamp [2].

4) Remove the 2 reuse bands [3].



F-4-97

5) Open the relay delivery assembly [1], and remove the 4 screws [2]; then, close the relay delivery assembly.



F-4-98

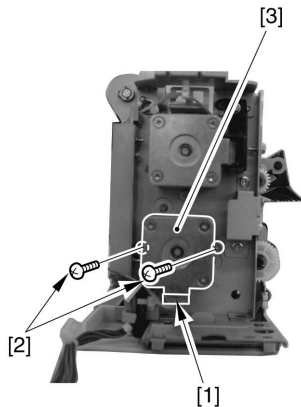
6) Detach the relay delivery assembly.

4.3.2.3 Removing the No. 3

Delivery Motor

0002-9793

- 1) Disconnect the connector [1], and remove the 2 screws [2]; then, detach the No. 3 delivery motor [3].



F-4-99

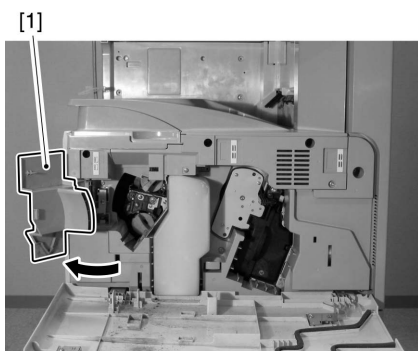
4.3.3 Stack Tray Shift Motor

4.3.3.1 Removing the Toner

Bottle Retainer

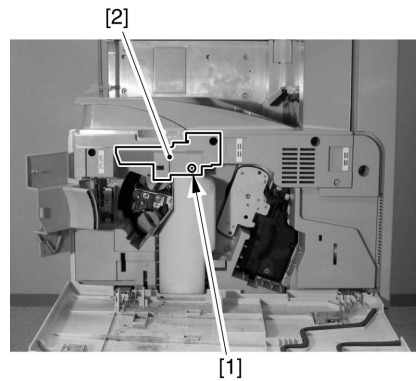
0002-7859

- 1) Open the front cover.
- 2) Open the toner container access cover [1].



F-4-100

- 3) Remove the TP screw [1], and detach the waste toner bottle retainer [2].



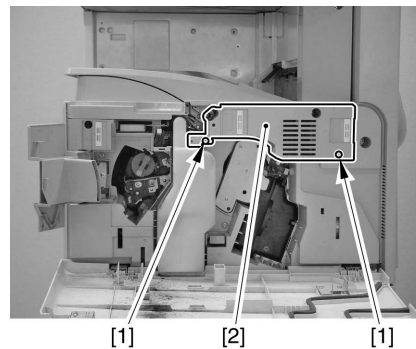
F-4-101

4.3.3.2 Removing the Front

Inside Cover (middle)

0002-7932

- 1) Remove the 2 screws [1], and detach the front inside cover (middle) [2].



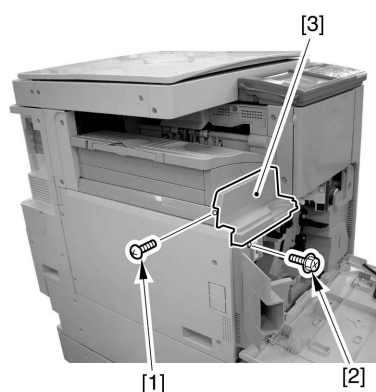
F-4-102

4.3.3.3 Removing the Finisher

Tray Front Cover

0002-8059

- 1) Remove the self-tapping screw (small) [1] and the other screw [2]; then, detach the finisher tray front cover [3].

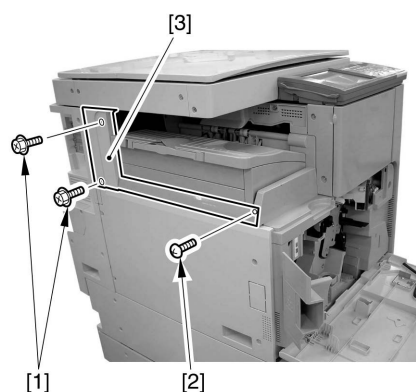


F-4-103

4.3.3.4 Removing the Finisher Left Cover

0002-8110

- 1) Remove the 2 screws [1] and the self-tapping screw (small) [2]; then, detach the finisher left cover [3].

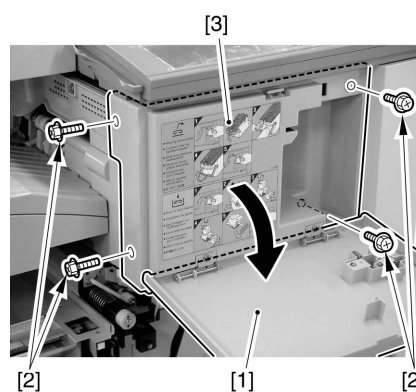


F-4-104

4.3.3.5 Removing the Finisher Front Cover

0003-0262

- 1) Open the finisher front cover [1].
- 2) Remove the 4 screws [2], and detach the finisher front cover [3].

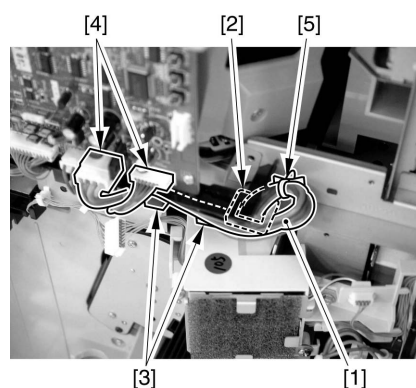


F-4-105

4.3.3.6 Detaching from the Host Machine

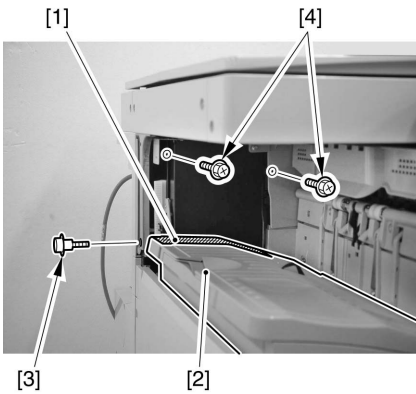
0002-8148

- 1) Remove the reuse band [5].
- 2) Disconnect the 2 connectors [4] of the communication harness.
- 3) Free the communication harness [1] from the wire saddle [2] of the finisher and the cable guide [3].



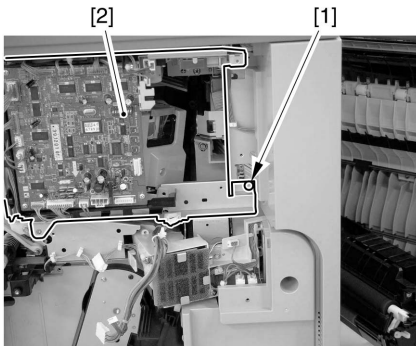
F-4-106

- 4) Press the area of the tray indicated by shading [1] to move down the tray (if it is in up position).
- 5) Remove the stepped screw [3] and the 2 other screws [4]. (The use of a long screwdriver is recommended.)



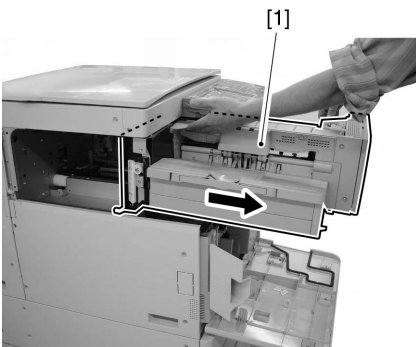
F-4-107

- 6) Remove the screw (M3x8) [1], and release the finisher assembly [2].



F-4-108

- 7) Pull the finisher [1] to detach it from the machine while holding it level.



F-4-109

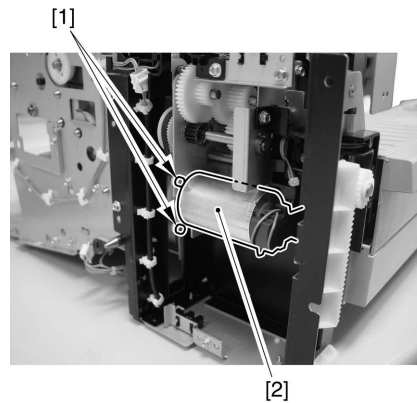
4.3.3.7 Removing the Stack

Tray Motor

0001-1399

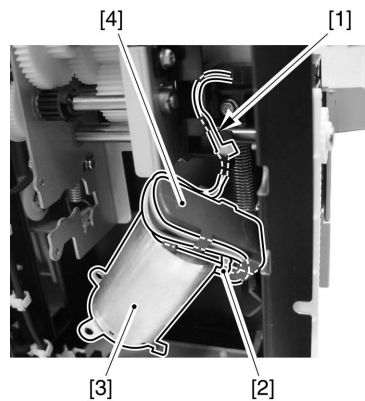
- 1) Remove the 2 screws [1], and detach the motor

assembly [2].



F-4-110

- 2) Free the harness [1] from the cable guide.
- 3) Remove the cable guide [4], and disconnect the connector [2]; then, detach the motor [3].



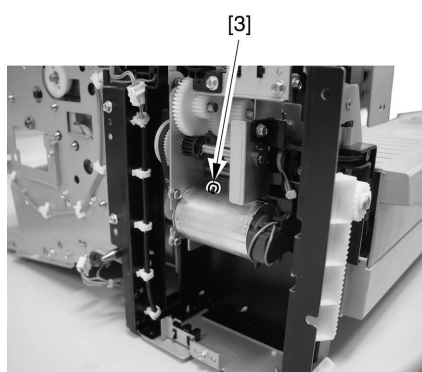
F-4-111

4.3.3.8 Mounting the Stack

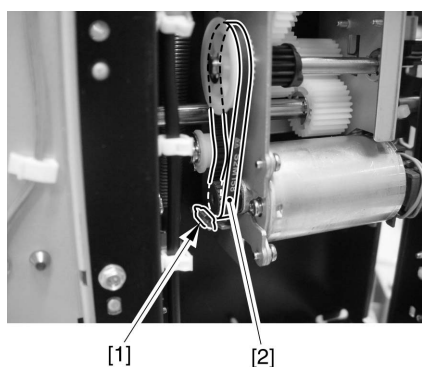
Tray Shift Motor

0001-1403

- ⚠ After mounting the motor, loosen the screw [3] once, and tighten it back again so the work of a spring [1] will automatically adjust the tension of the belt [2].



F-4-112



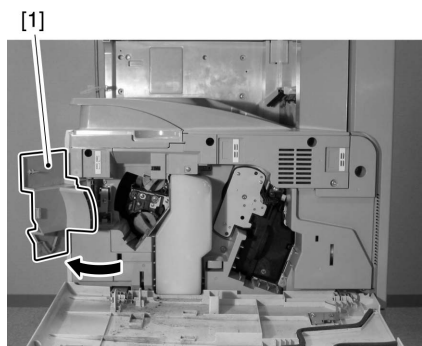
F-4-113

4.3.4 Oscillating Cam Motor

4.3.4.1 Removing the Toner Bottle Retainer

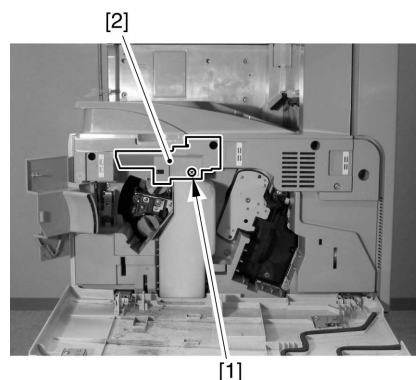
0002-7861

- 1) Open the front cover.
- 2) Open the toner container access cover [1].



F-4-114

- 3) Remove the TP screw [1], and detach the waste toner bottle retainer [2].

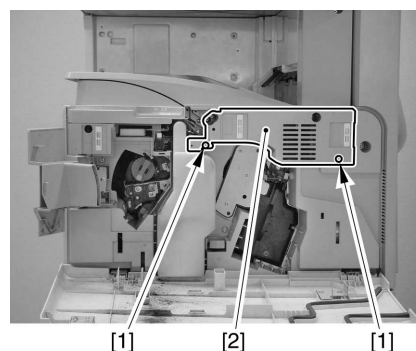


F-4-115

4.3.4.2 Removing the Front Inside Cover (middle)

0002-7934

- 1) Remove the 2 screws [1], and detach the front inside cover (middle) [2].

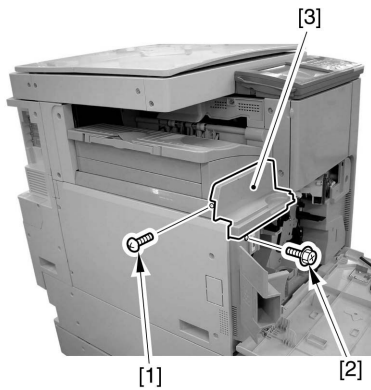


F-4-116

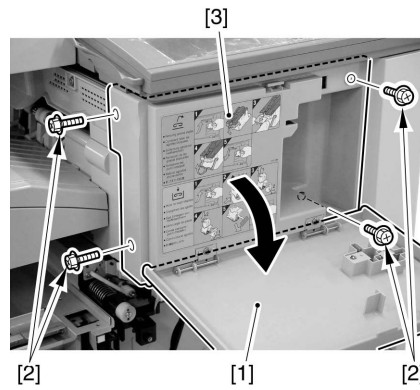
4.3.4.3 Removing the Finisher Tray Front Cover

0002-8060

- 1) Remove the self-tapping screw (small) [1] and the other screw [2]; then, detach the finisher tray front cover [3].



F-4-117

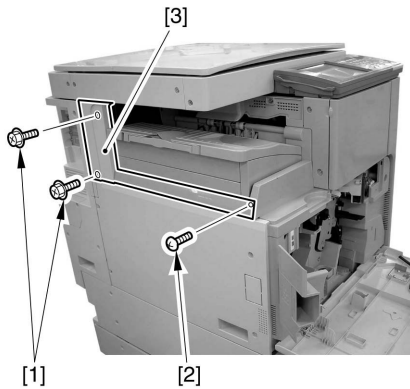


F-4-119

4.3.4.4 Removing the Finisher Left Cover

0002-8111

- 1) Remove the 2 screws [1] and the self-tapping screw (small) [2]; then, detach the finisher left cover [3].

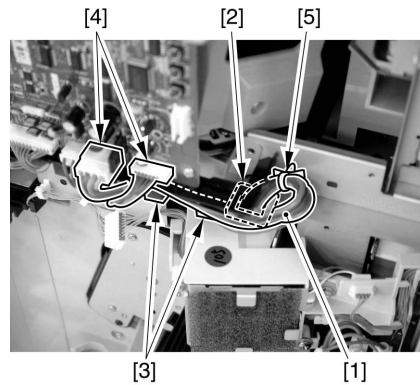


F-4-118

4.3.4.6 Detaching from the Host Machine

0002-8149

- 1) Remove the reuse band [5].
- 2) Disconnect the 2 connectors [4] of the communication harness.
- 3) Free the communication harness [1] from the wire saddle [2] of the finisher and the cable guide [3].



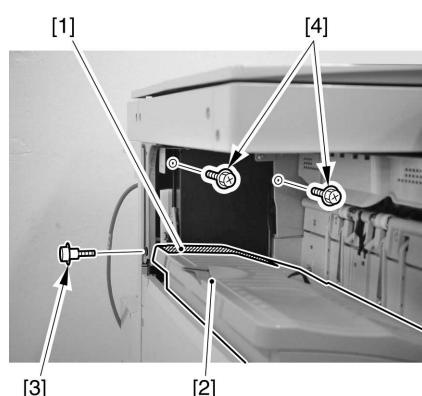
F-4-120

4.3.4.5 Removing the Finisher Front Cover

0003-0263

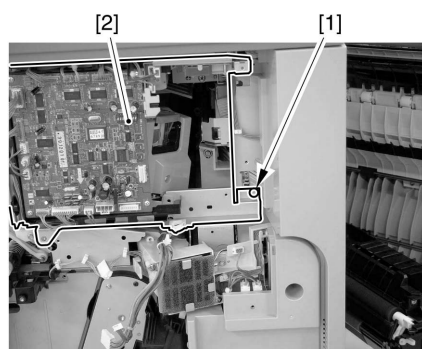
- 1) Open the finisher front cover [1].
- 2) Remove the 4 screws [2], and detach the finisher front cover [3].

- 4) Press the area of the tray indicated by shading [1] to move down the tray (if it is in up position).
- 5) Remove the stepped screw [3] and the 2 other screws [4]. (The use of a long screwdriver is recommended.)



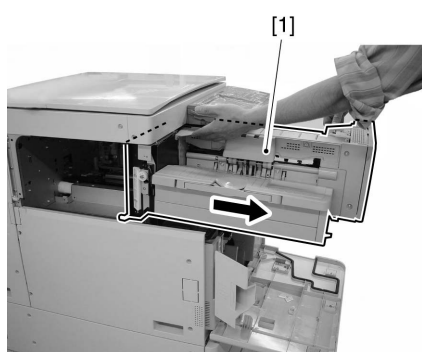
F-4-121

- 6) Remove the screw (M3x8) [1], and release the finisher assembly [2].



F-4-122

- 7) Pull the finisher [1] to detach it from the machine while holding it level.

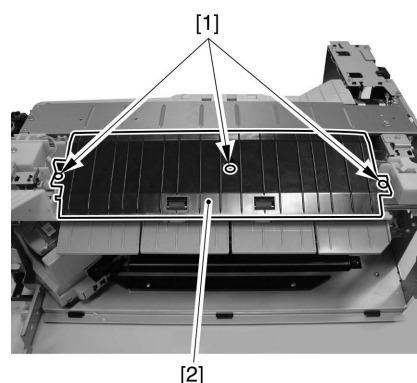


F-4-123

4.3.4.7 Removing the Reversing Guide 0002-8187

- 1) Remove the 3 self-tapping screws, and detach the

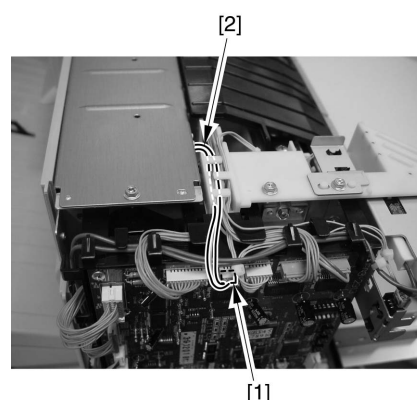
reversing guide [2].



F-4-124

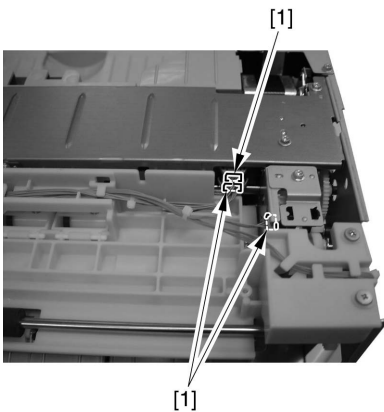
4.3.4.8 Removing the Upper Guide Assembly 0002-8188

- 1) Disconnect the connector [1], and free the cable [2] from the cable guide.



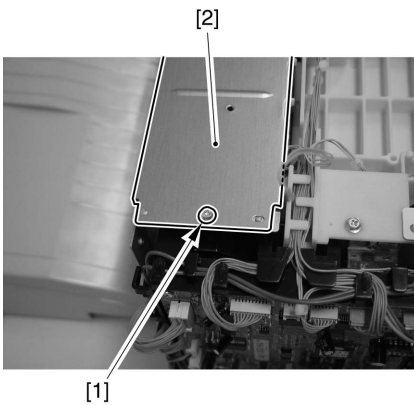
F-4-125

- 2) Disconnect the 3 connectors [1].

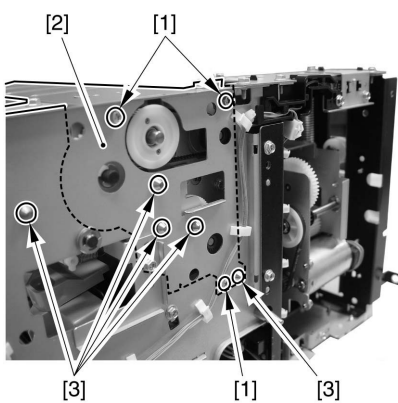


F-4-126

3) Remove the 4 screws [1], and detach the upper guide assembly [2].



F-4-127

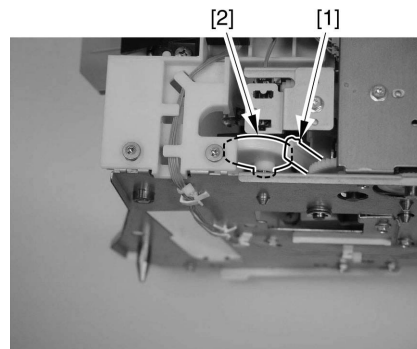


F-4-128

⚠ To facilitate detachment of the upper guide

assembly, do so while freeing the 5 bosses [3].

⚠ When mounting the upper guide assembly, be sure that the drive cam [2] is found under the return belt arm [1].



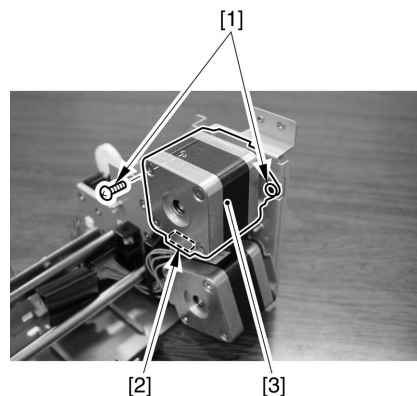
F-4-129

4.3.4.9 Removing the Swing

Cam Motor

0001-1377

- 1) Remove the 2 screws [1], and detach the motor [3].
- 2) Disconnect the connector [2] from the motor.



F-4-130

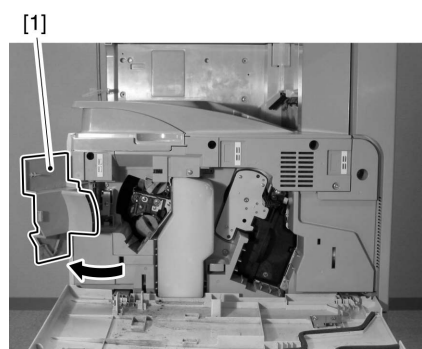
4.3.5 Stack Delivery Motor

4.3.5.1 Removing the Toner

Bottle Retainer

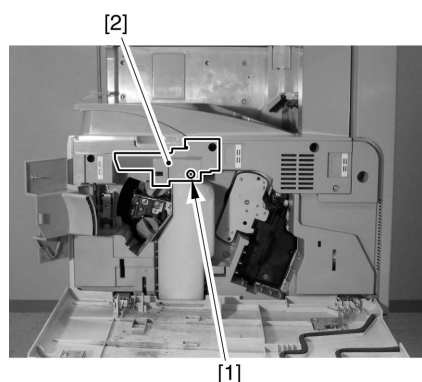
0002-7862

- 1) Open the front cover.
- 2) Open the toner container access cover [1].



F-4-131

- 3) Remove the TP screw [1], and detach the waste toner bottle retainer [2].



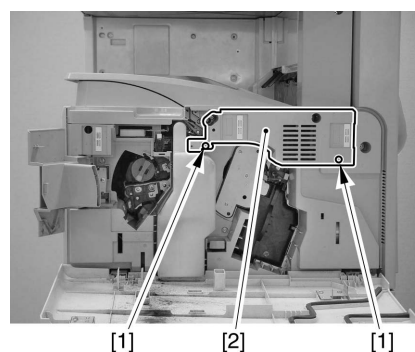
F-4-132

4.3.5.2 Removing the Front

Inside Cover (middle)

0002-7936

- 1) Remove the 2 screws [1], and detach the front inside cover (middle) [2].



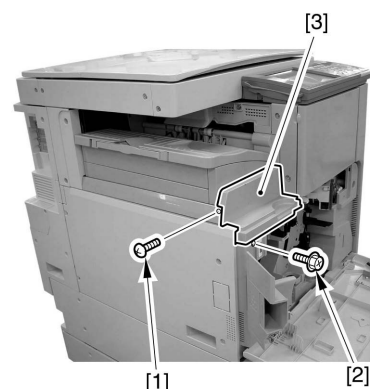
F-4-133

4.3.5.3 Removing the Finisher

Tray Front Cover

0002-8062

- 1) Remove the self-tapping screw (small) [1] and the other screw [2]; then, detach the finisher tray front cover [3].



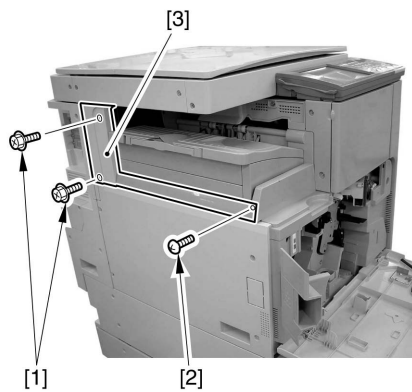
F-4-134

4.3.5.4 Removing the Finisher

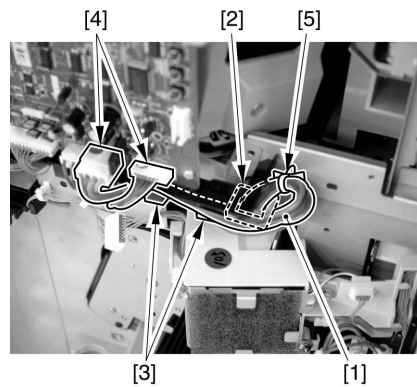
Left Cover

0002-8112

- 1) Remove the 2 screws [1] and the self-tapping screw (small) [2]; then, detach the finisher left cover [3].



F-4-135



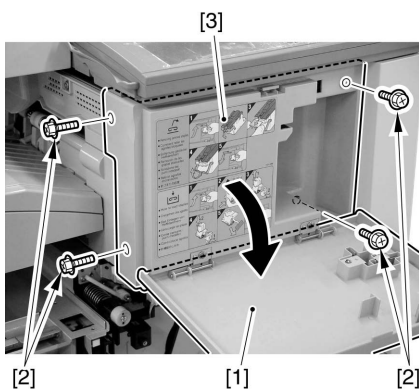
F-4-137

4.3.5.5 Removing the Finisher

Front Cover

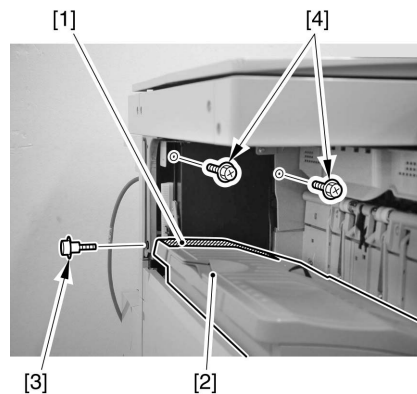
0003-0265

- 1) Open the finisher front cover [1].
- 2) Remove the 4 screws [2], and detach the finisher front cover [3].



F-4-136

- 4) Press the area of the tray indicated by shading [1] to move down the tray (if it is in up position).
- 5) Remove the stepped screw [3] and the 2 other screws [4]. (The use of a long screwdriver is recommended.)



F-4-138

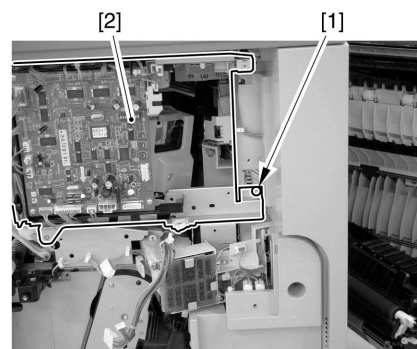
4.3.5.6 Detaching from the

Host Machine

0002-8150

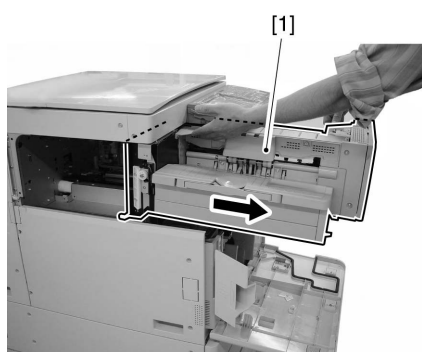
- 1) Remove the reuse band [5].
- 2) Disconnect the 2 connectors [4] of the communication harness.
- 3) Free the communication harness [1] from the wire saddle [2] of the finisher and the cable guide [3].

- 6) Remove the screw (M3x8) [1], and release the finisher assembly [2].



F-4-139

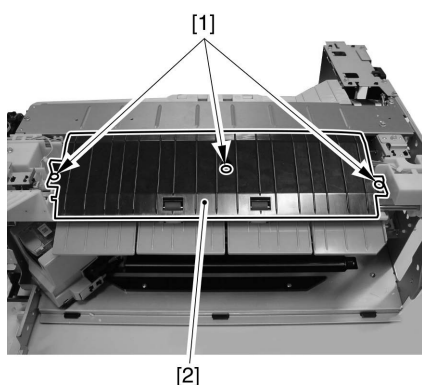
- 7) Pull the finisher [1] to detach it from the machine while holding it level.



F-4-140

4.3.5.7 Removing the Reversing Guide 0002-8190

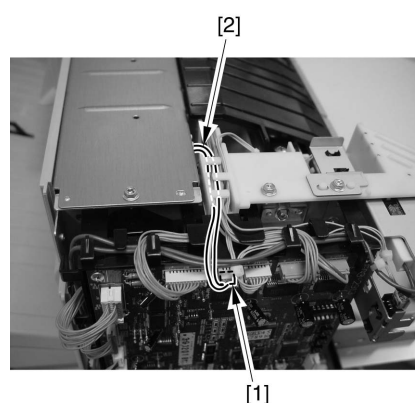
- 1) Remove the 3 self-tapping screws, and detach the reversing guide [2].



F-4-141

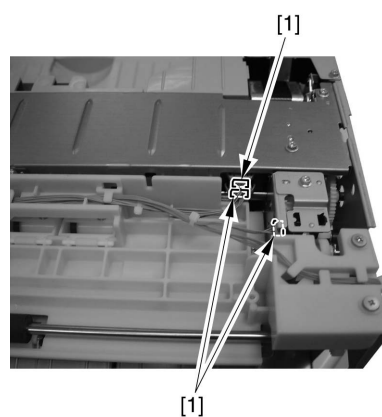
4.3.5.8 Removing the Upper Guide Assembly 0002-8189

- 1) Disconnect the connector [1], and free the cable [2] from the cable guide.



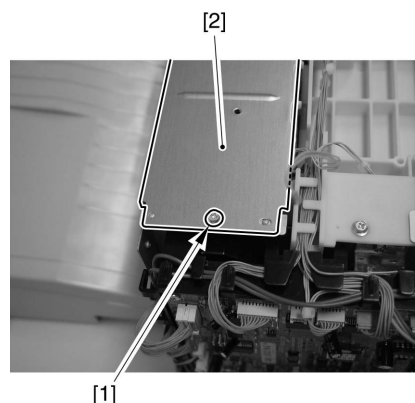
F-4-142

- 2) Disconnect the 3 connectors [1].

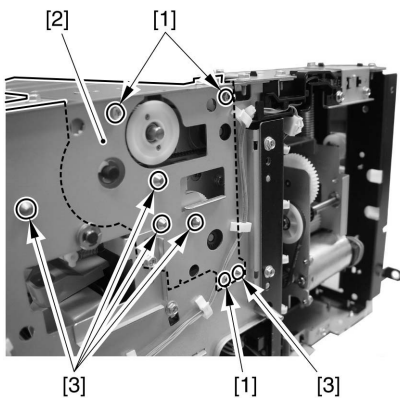


F-4-143

- 3) Remove the 4 screws [1], and detach the upper guide assembly [2].



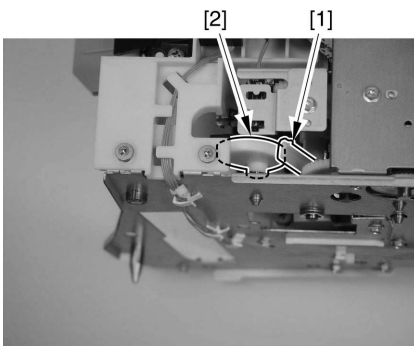
F-4-144



F-4-145

⚠ To facilitate detachment of the upper guide assembly, do so while freeing the 5 bosses [3].

⚠ When mounting the upper guide assembly, be sure that the drive cam [2] is found under the return belt arm [1].



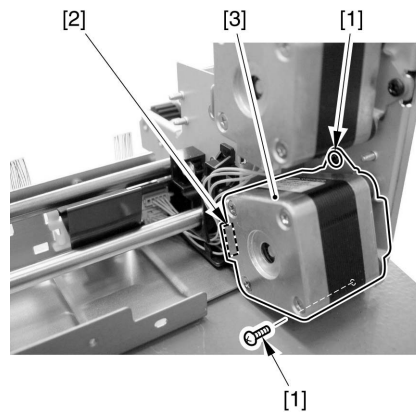
F-4-146

4.3.5.9 Removing the Stack

Delivery Motor

0001-1378

- 1) Remove the 2 screws [1], and detach the motor [3].
- 2) Disconnect the connector [2] from the motor.



F-4-147

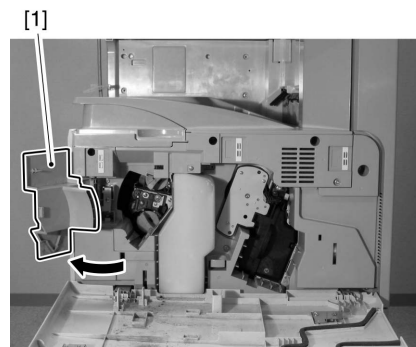
4.3.6 Delivery Motor

4.3.6.1 Removing the Toner

Bottle Retainer

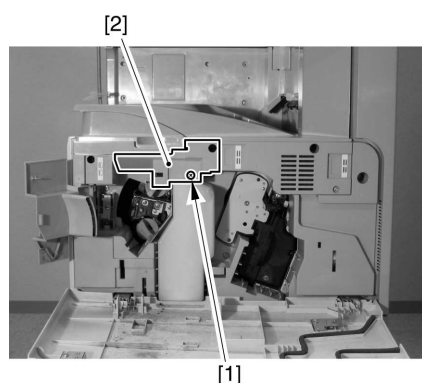
0002-7864

- 1) Open the front cover.
- 2) Open the toner container access cover [1].



F-4-148

- 3) Remove the TP screw [1], and detach the waste toner bottle retainer [2].

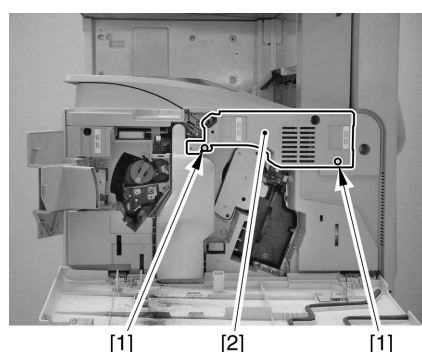


F-4-149

4.3.6.2 Removing the Front Inside Cover (middle)

0002-7941

- 1) Remove the 2 screws [1], and detach the front inside cover (middle) [2].

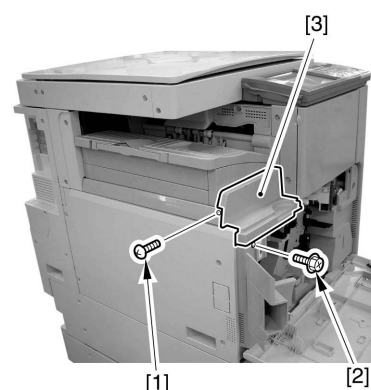


F-4-150

4.3.6.3 Removing the Finisher Tray Front Cover

0002-8063

- 1) Remove the self-tapping screw (small) [1] and the other screw [2]; then, detach the finisher tray front cover [3].

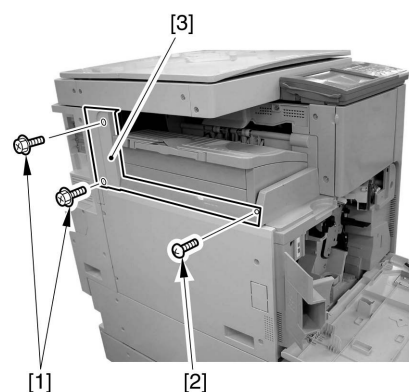


F-4-151

4.3.6.4 Removing the Finisher Left Cover

0002-8113

- 1) Remove the 2 screws [1] and the self-tapping screw (small) [2]; then, detach the finisher left cover [3].

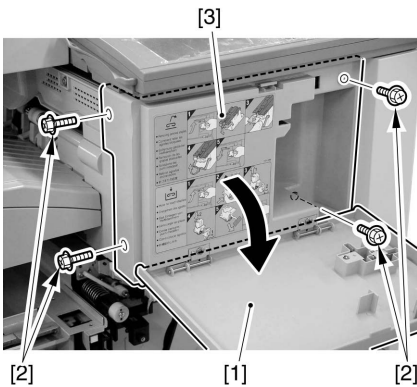


F-4-152

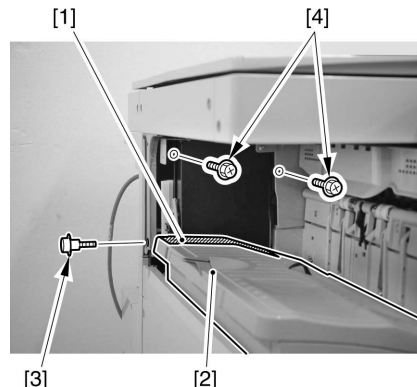
4.3.6.5 Removing the Finisher Front Cover

0003-0266

- 1) Open the finisher front cover [1].
- 2) Remove the 4 screws [2], and detach the finisher front cover [3].



F-4-153

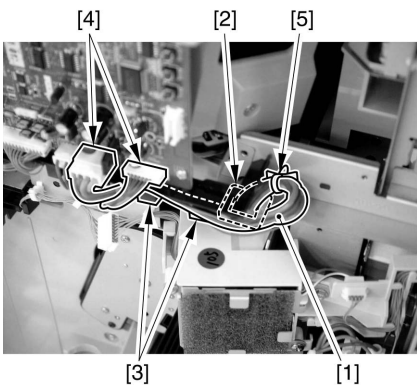


F-4-155

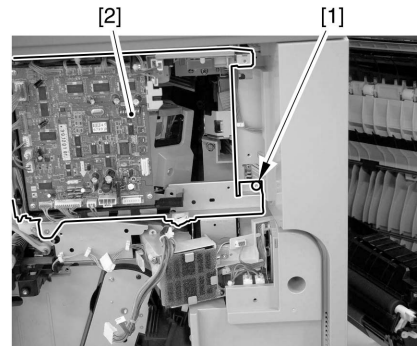
4.3.6.6 Detaching from the Host Machine

0002-8151

- 1) Remove the reuse band [5].
- 2) Disconnect the 2 connectors [4] of the communication harness.
- 3) Free the communication harness [1] from the wire saddle [2] of the finisher and the cable guide [3].

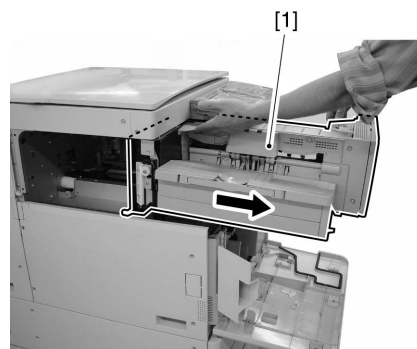


F-4-154



F-4-156

- 7) Pull the finisher [1] to detach it from the machine while holding it level.



F-4-157

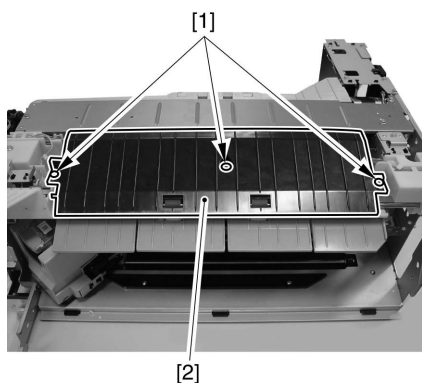
- 4) Press the area of the tray indicated by shading [1] to move down the tray (if it is in up position).
- 5) Remove the stepped screw [3] and the 2 other screws [4]. (The use of a long screwdriver is recommended.)

4.3.6.7 Removing the Reversing Guide

0002-8191

- 1) Remove the 3 self-tapping screws, and detach the

reversing guide [2].

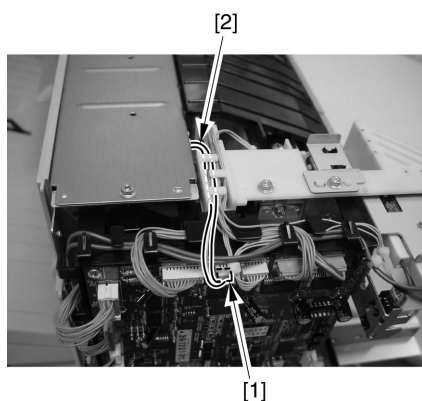


F-4-158

4.3.6.8 Removing the Upper Guide Assembly

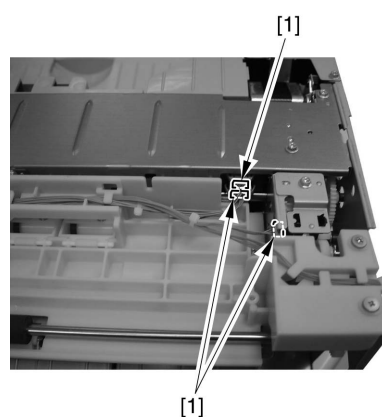
0002-8192

- 1) Disconnect the connector [1], and free the cable [2] from the cable guide.



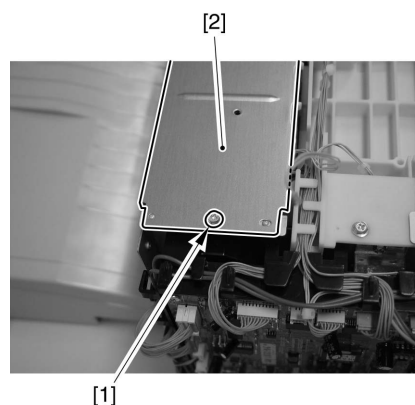
F-4-159

- 2) Disconnect the 3 connectors [1].

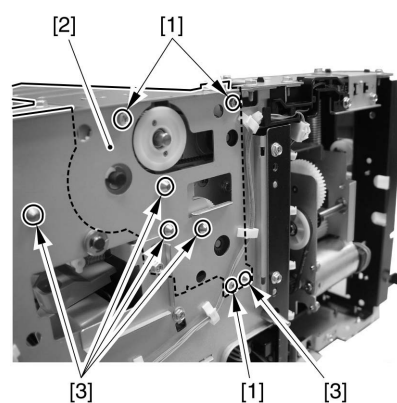


F-4-160

- 3) Remove the 4 screws [1], and detach the upper guide assembly [2].



F-4-161

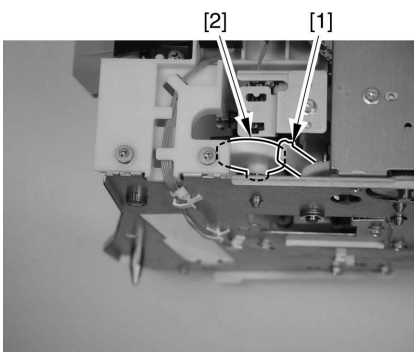


F-4-162

! To facilitate detachment of the upper guide

assembly, do so while freeing the 5 bosses [3].

⚠ When mounting the upper guide assembly, be sure that the drive cam [2] is found under the return belt arm [1].



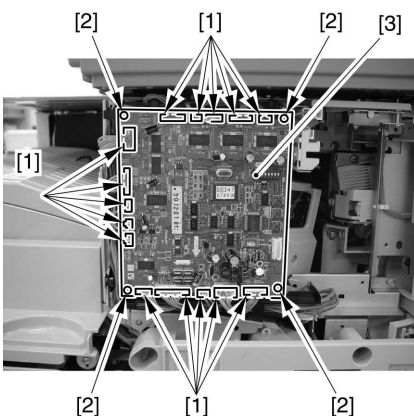
F-4-163

4.3.6.9 Removing the Finisher

Controller PCB

0002-8194

1) Disconnect the 5 connectors [1], and remove the 4 screws [2]; then, detach the finisher controller PCB [3].



F-4-164

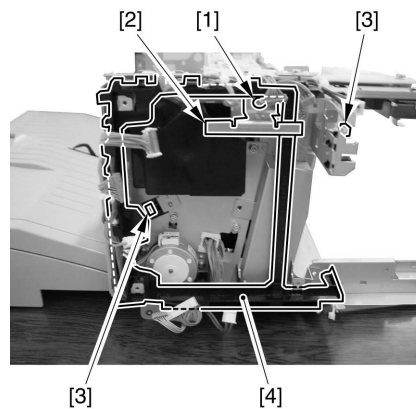
4.3.6.10 Removing the

Delivery Motor

0001-1436

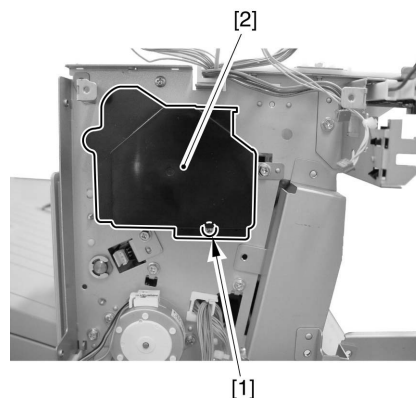
1) Remove the screw [1], and detach the plate [2].

2) Disconnect the 2 connectors [3], and free the cable from the cable guide [4]; then, detach the cable guide [4].



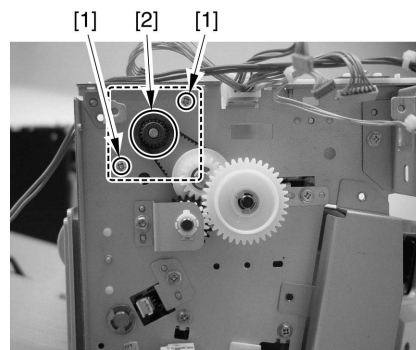
F-4-165

3) Remove the screw [1], and detach the cover [2].



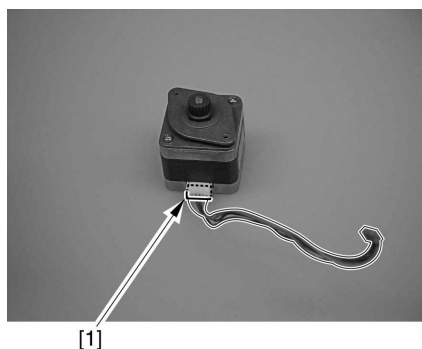
F-4-166

4) Remove the screw [1], and detach the motor [2].

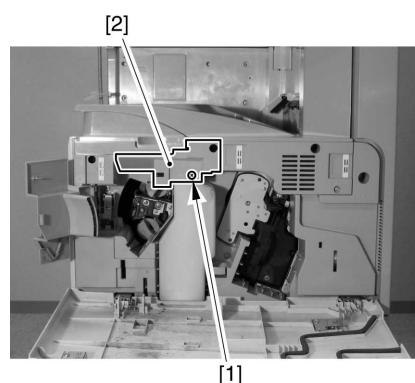


F-4-167

5) Disconnect the connector [1] from the motor.



F-4-168



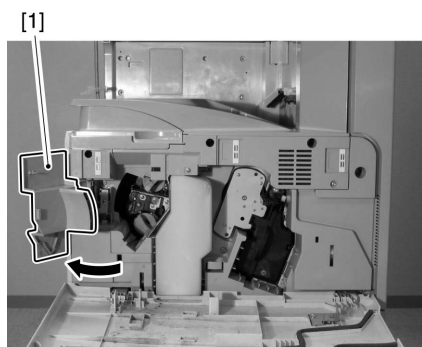
F-4-170

4.3.7 Stapler

4.3.7.1 Removing the Toner Bottle Retainer

0002-7866

- 1) Open the front cover.
- 2) Open the toner container access cover [1].



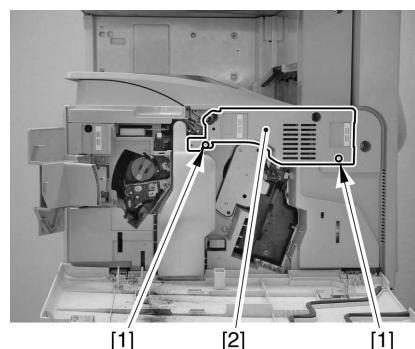
F-4-169

- 3) Remove the TP screw [1], and detach the waste toner bottle retainer [2].

4.3.7.2 Removing the Front Inside Cover (middle)

0002-7943

- 1) Remove the 2 screws [1], and detach the front inside cover (middle) [2].

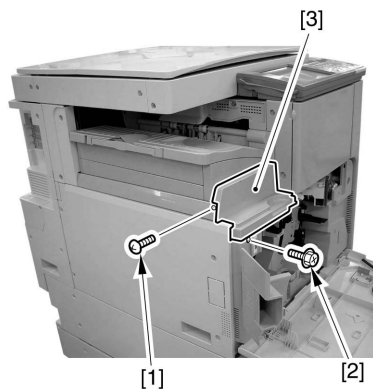


F-4-171

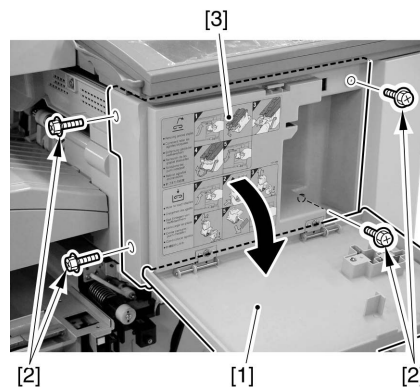
4.3.7.3 Removing the Finisher Tray Front Cover

0002-8064

- 1) Remove the self-tapping screw (small) [1] and the other screw [2]; then, detach the finisher tray front cover [3].



F-4-172

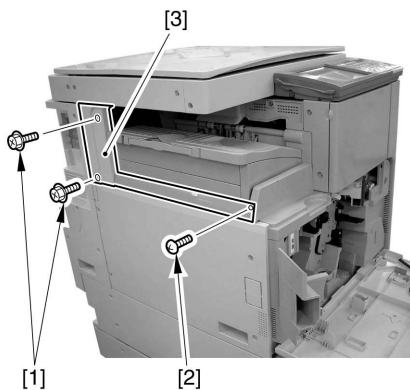


F-4-174

4.3.7.4 Removing the Finisher Left Cover

0002-8114

- 1) Remove the 2 screws [1] and the self-tapping screw (small) [2]; then, detach the finisher left cover [3].



F-4-173

4.3.7.5 Removing the Finisher Front Cover

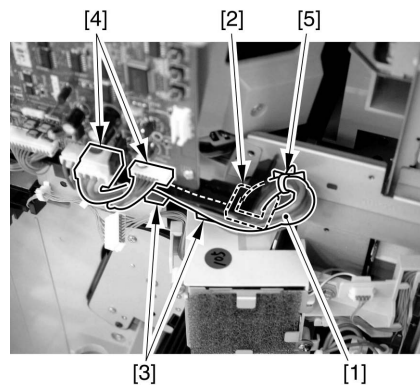
0003-0267

- 1) Open the finisher front cover [1].
- 2) Remove the 4 screws [2], and detach the finisher front cover [3].

4.3.7.6 Detaching from the Host Machine

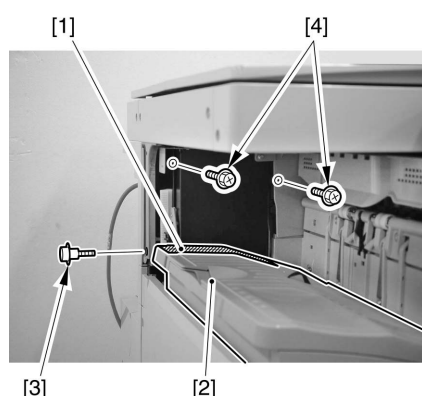
0002-8152

- 1) Remove the reuse band [5].
- 2) Disconnect the 2 connectors [4] of the communication harness.
- 3) Free the communication harness [1] from the wire saddle [2] of the finisher and the cable guide [3].



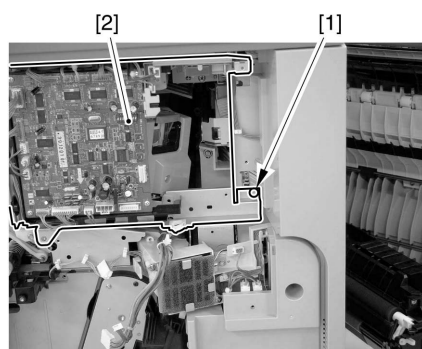
F-4-175

- 4) Press the area of the tray indicated by shading [1] to move down the tray (if it is in up position).
- 5) Remove the stepped screw [3] and the 2 other screws [4]. (The use of a long screwdriver is recommended.)



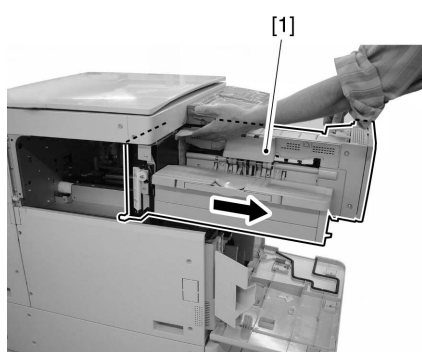
F-4-176

- 6) Remove the screw (M3x8) [1], and release the finisher assembly [2].



F-4-177

- 7) Pull the finisher [1] to detach it from the machine while holding it level.



F-4-178

4.3.7.7 Removing the Stapler

Assembly

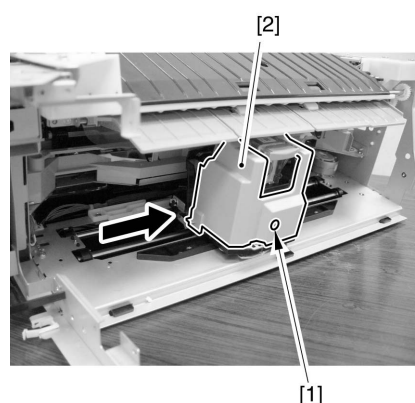
0001-1456

- 1) Move the stapler unit to the middle of the stapler

rail.

- ⚠ When relocating the stapler unit, be sure to hold it by the center of its rotation.

- 2) Remove the screw [1], and detach the cover [2].

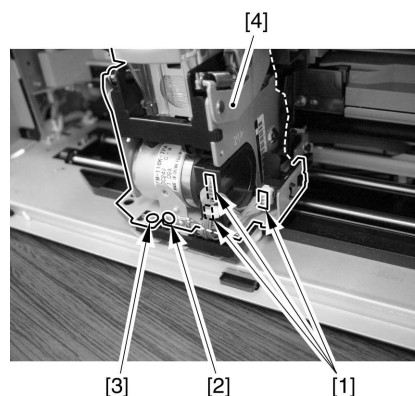


F-4-179

- 3) Disconnect the 3 connectors [1].

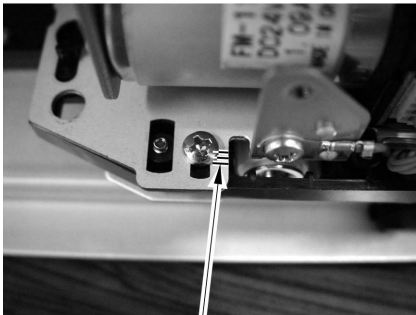
- 4) Remove the screw (M3x6) [3], and detach the grounding wire.

- 5) Remove the screw (M3x12) [3], and detach the stapler [4] together with the stapler base.



F-4-180

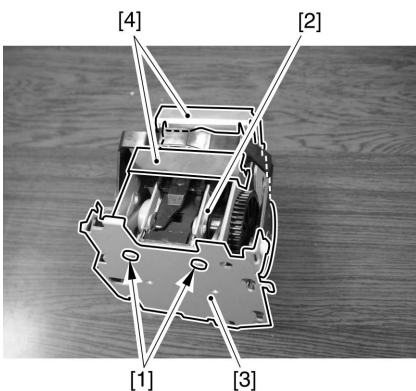
- ⚠ Before detaching the stapler base, take note of the line marking. Be sure to put it back on where indicated by the marking.



[1]

F-4-181

- 6) Remove the 2 screws [1], and detach the stapler [2] from the stapler base [3].
- 7) Detach the guide plate (upper, lower) [4] from the jaw of the stapler.



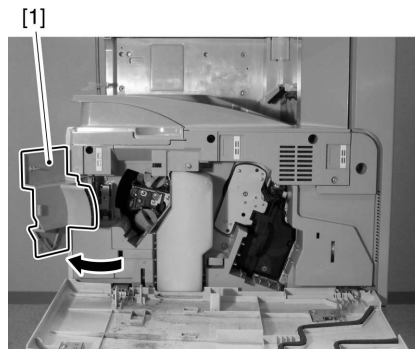
F-4-182

4.3.8 Stapler Drive Unit

4.3.8.1 Removing the Toner Bottle Retainer

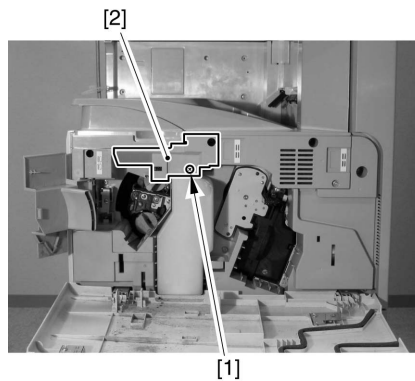
0002-7867

- 1) Open the front cover.
- 2) Open the toner container access cover [1].



F-4-183

- 3) Remove the TP screw [1], and detach the waste toner bottle retainer [2].

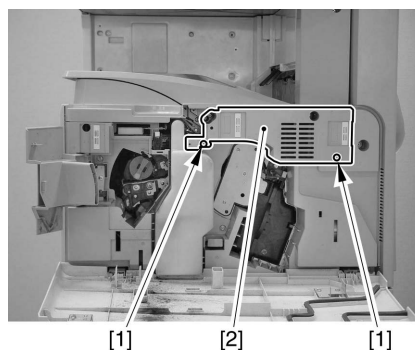


F-4-184

4.3.8.2 Removing the Front Inside Cover (middle)

0002-7945

- 1) Remove the 2 screws [1], and detach the front inside cover (middle) [2].



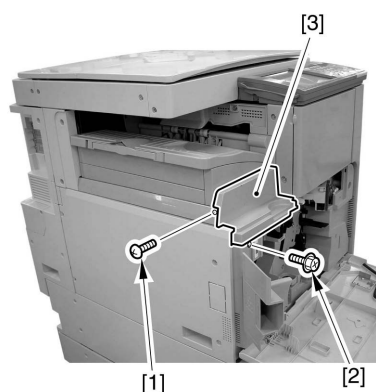
F-4-185

4.3.8.3 Removing the Finisher

Tray Front Cover

0002-8065

- 1) Remove the self-tapping screw (small) [1] and the other screw [2]; then, detach the finisher tray front cover [3].



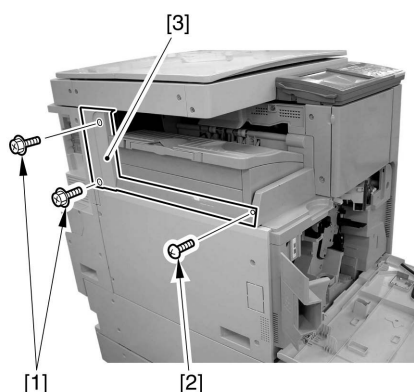
F-4-186

4.3.8.4 Removing the Finisher

Left Cover

0002-8115

- 1) Remove the 2 screws [1] and the self-tapping screw (small) [2]; then, detach the finisher left cover [3].



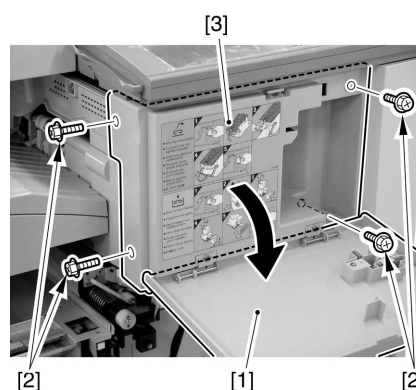
F-4-187

4.3.8.5 Removing the Finisher

Front Cover

0003-0269

- 1) Open the finisher front cover [1].
- 2) Remove the 4 screws [2], and detach the finisher front cover [3].

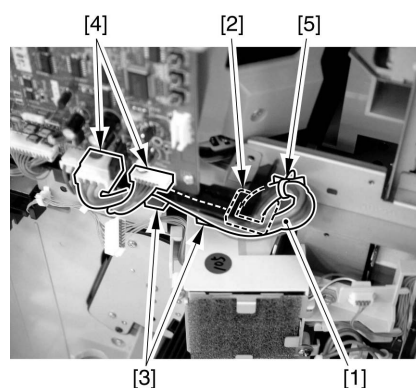


F-4-188

4.3.8.6 Detaching from the Host Machine

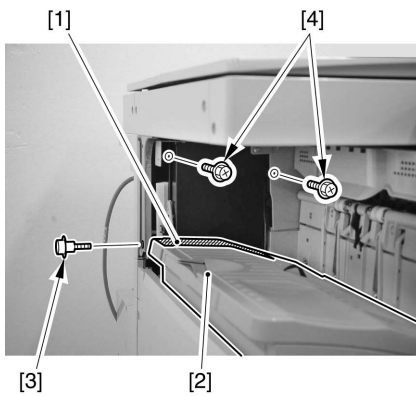
0002-8153

- 1) Remove the reuse band [5].
- 2) Disconnect the 2 connectors [4] of the communication harness.
- 3) Free the communication harness [1] from the wire saddle [2] of the finisher and the cable guide [3].



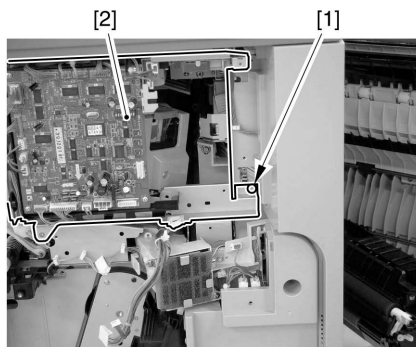
F-4-189

- 4) Press the area of the tray indicated by shading [1] to move down the tray (if it is in up position).
- 5) Remove the stepped screw [3] and the 2 other screws [4]. (The use of a long screwdriver is recommended.)



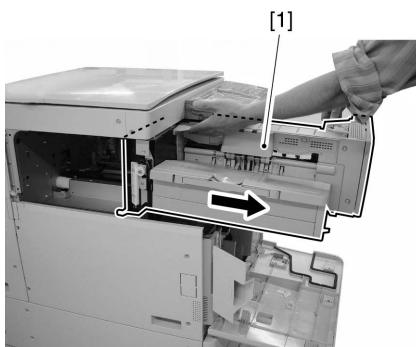
F-4-190

- 6) Remove the screw (M3x8) [1], and release the finisher assembly [2].



F-4-191

- 7) Pull the finisher [1] to detach it from the machine while holding it level.



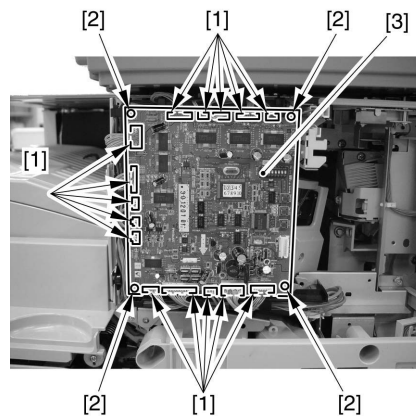
F-4-192

4.3.8.7 Removing the Finisher Controller PCB

0002-8195

- 1) Disconnect the 5 connectors [1], and remove the 4

screws [2]; then, detach the finisher controller PCB [3].



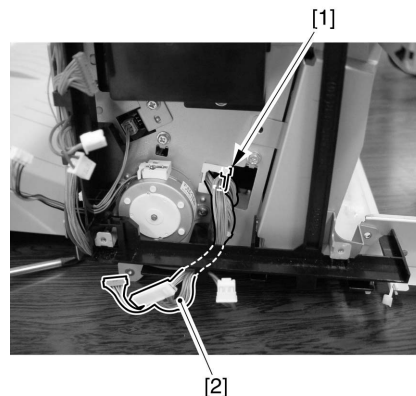
F-4-193

4.3.8.8 Removing the Stapler

Drive Assembly

0001-1582

- 1) Open the wire saddle [1], and put the cable [2] inside of the finisher.



F-4-194

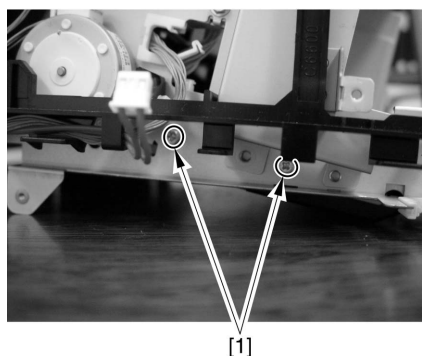
- 2) Open the wire saddle [1], and free the cable from the wire saddle.

4.3.9 Staple Slide Motor



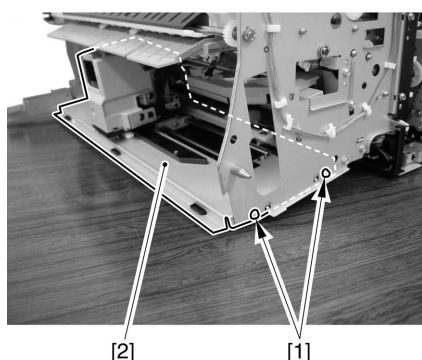
F-4-195

3) Remove the 2 screws [1].



F-4-196

4) Remove the 2 screws [1], and detach the stapler drive assembly [2].



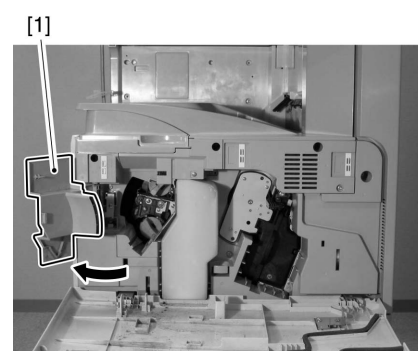
F-4-197

4.3.9.1 Removing the Toner

Bottle Retainer

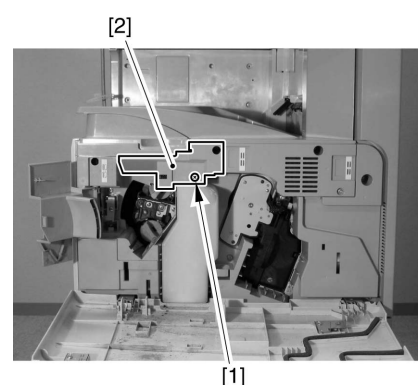
0002-7868

- 1) Open the front cover.
- 2) Open the toner container access cover [1].



F-4-198

- 3) Remove the TP screw [1], and detach the waste toner bottle retainer [2].



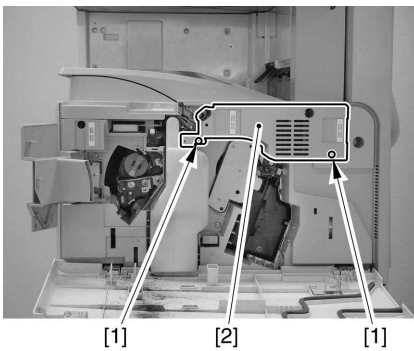
F-4-199

4.3.9.2 Removing the Front

Inside Cover (middle)

0002-7947

- 1) Remove the 2 screws [1], and detach the front inside cover (middle) [2].



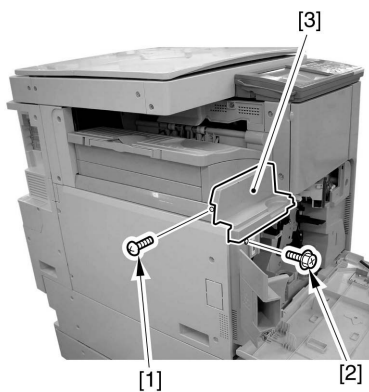
F-4-200

4.3.9.3 Removing the Finisher

Tray Front Cover

0002-8066

- 1) Remove the self-tapping screw (small) [1] and the other screw [2]; then, detach the finisher tray front cover [3].



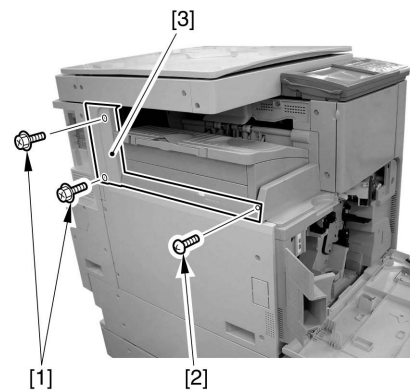
F-4-201

4.3.9.4 Removing the Finisher

Left Cover

0002-8116

- 1) Remove the 2 screws [1] and the self-tapping screw (small) [2]; then, detach the finisher left cover [3].



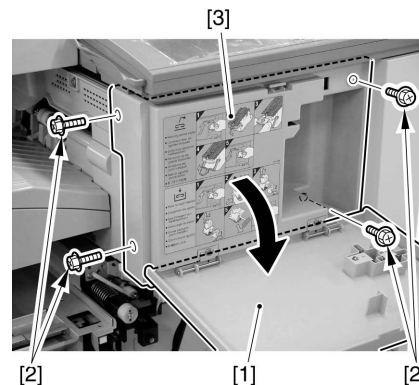
F-4-202

4.3.9.5 Removing the Finisher

Front Cover

0003-0270

- 1) Open the finisher front cover [1].
- 2) Remove the 4 screws [2], and detach the finisher front cover [3].



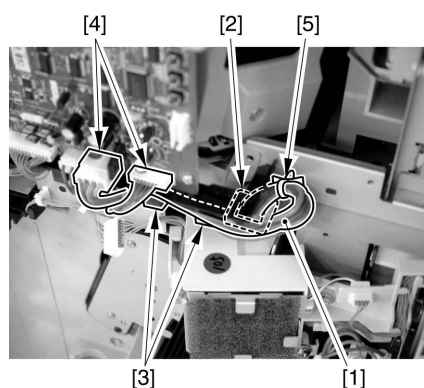
F-4-203

4.3.9.6 Detaching from the

Host Machine

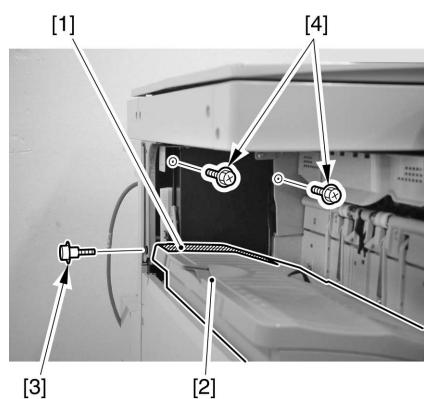
0002-8154

- 1) Remove the reuse band [5].
- 2) Disconnect the 2 connectors [4] of the communication harness.
- 3) Free the communication harness [1] from the wire saddle [2] of the finisher and the cable guide [3].



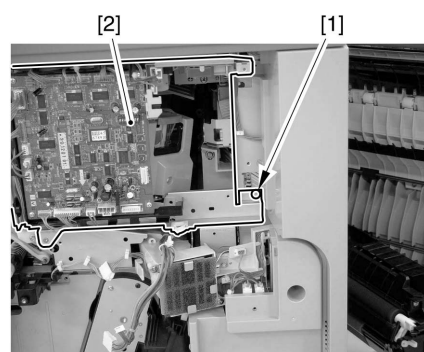
F-4-204

- 4) Press the area of the tray indicated by shading [1] to move down the tray (if it is in up position).
- 5) Remove the stepped screw [3] and the 2 other screws [4]. (The use of a long screwdriver is recommended.)



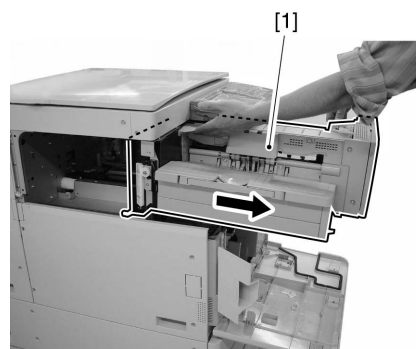
F-4-205

- 6) Remove the screw (M3x8) [1], and release the finisher assembly [2].



F-4-206

- 7) Pull the finisher [1] to detach it from the machine while holding it level.



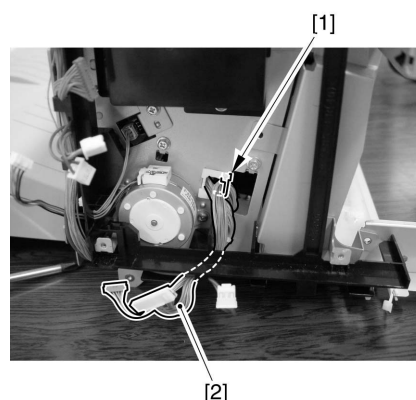
F-4-207

4.3.9.7 Removing the Stapler

Drive Assembly

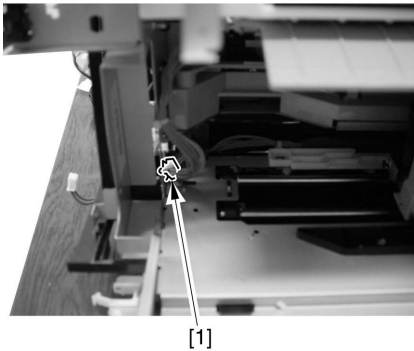
0002-8209

- 1) Open the wire saddle [1], and put the cable [2] inside of the finisher.



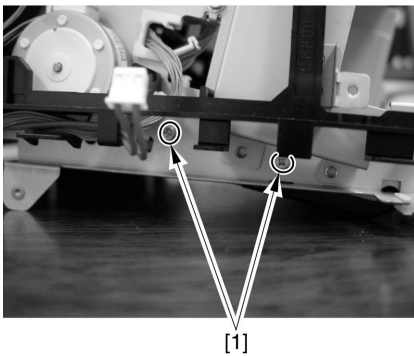
F-4-208

- 2) Open the wire saddle [1], and free the cable from the wire saddle.



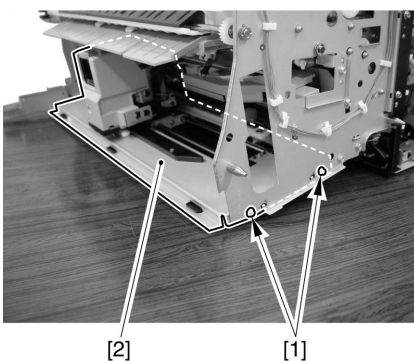
F-4-209

3) Remove the 2 screws [1].



F-4-210

4) Remove the 2 screws [1], and detach the stapler drive assembly [2].



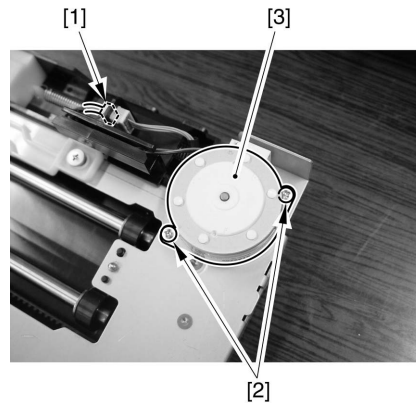
F-4-211

4.3.9.8 Removing the Stapler

Slide Motor

0001-1609

1) Disconnect the connector [1] and remove the 2 screws [2]; then, detach the stapler slide motor [3].



F-4-212

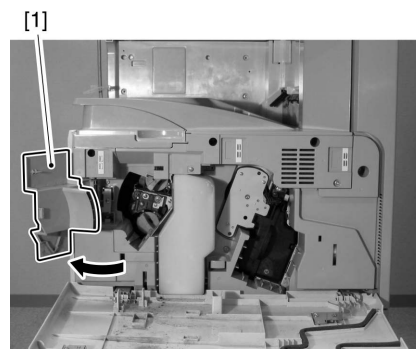
4.3.10 Front Alignment Motor

4.3.10.1 Removing the Toner

Bottle Retainer

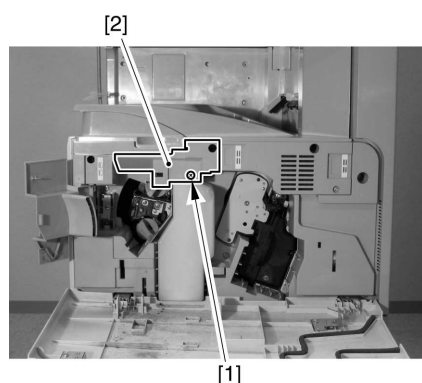
0002-7871

1) Open the front cover.
2) Open the toner container access cover [1].



F-4-213

3) Remove the TP screw [1], and detach the waste toner bottle retainer [2].

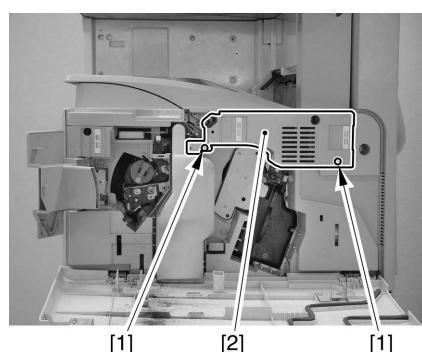


F-4-214

4.3.10.2 Removing the Front Inside Cover (middle)

0002-7949

- 1) Remove the 2 screws [1], and detach the front inside cover (middle) [2].

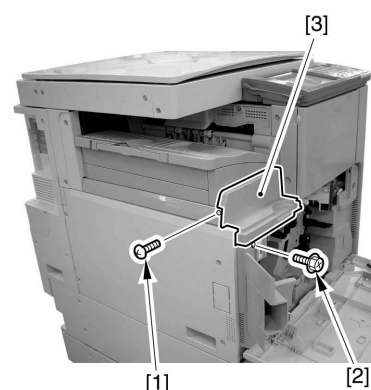


F-4-215

4.3.10.3 Removing the Finisher Tray Front Cover

0002-8067

- 1) Remove the self-tapping screw (small) [1] and the other screw [2]; then, detach the finisher tray front cover [3].

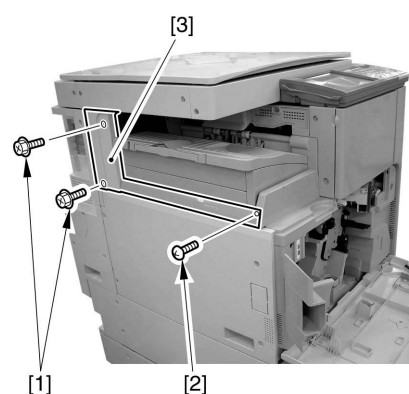


F-4-216

4.3.10.4 Removing the Finisher Left Cover

0002-8117

- 1) Remove the 2 screws [1] and the self-tapping screw (small) [2]; then, detach the finisher left cover [3].

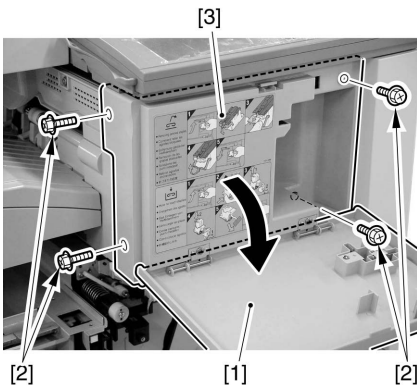


F-4-217

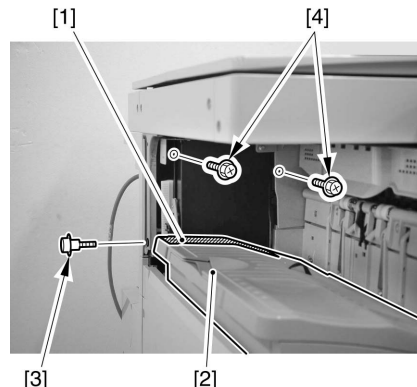
4.3.10.5 Removing the Finisher Front Cover

0003-0272

- 1) Open the finisher front cover [1].
- 2) Remove the 4 screws [2], and detach the finisher front cover [3].



F-4-218

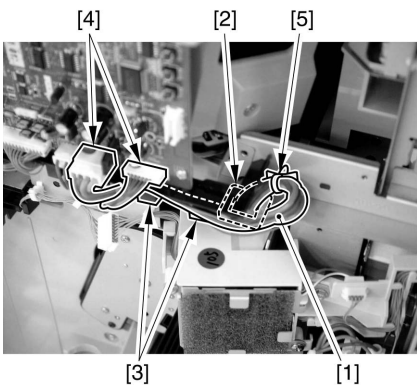


F-4-220

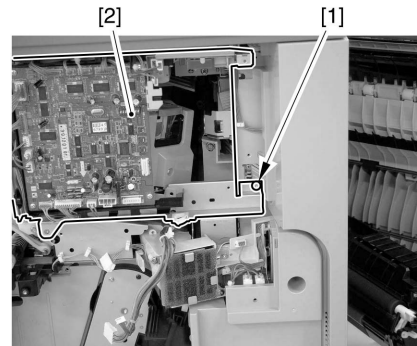
4.3.10.6 Detaching from the Host Machine

0002-8155

- 1) Remove the reuse band [5].
- 2) Disconnect the 2 connectors [4] of the communication harness.
- 3) Free the communication harness [1] from the wire saddle [2] of the finisher and the cable guide [3].

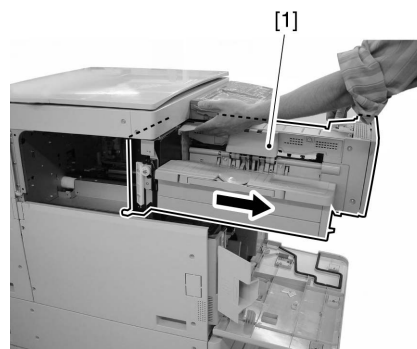


F-4-219



F-4-221

- 7) Pull the finisher [1] to detach it from the machine while holding it level.



F-4-222

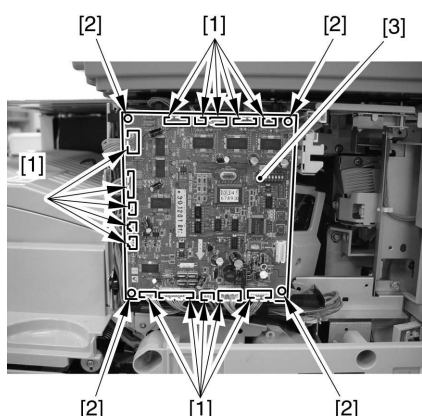
- 4) Press the area of the tray indicated by shading [1] to move down the tray (if it is in up position).
- 5) Remove the stepped screw [3] and the 2 other screws [4]. (The use of a long screwdriver is recommended.)

4.3.10.7 Removing the Finisher Controller PCB

0002-8196

- 1) Disconnect the 5 connectors [1], and remove the 4

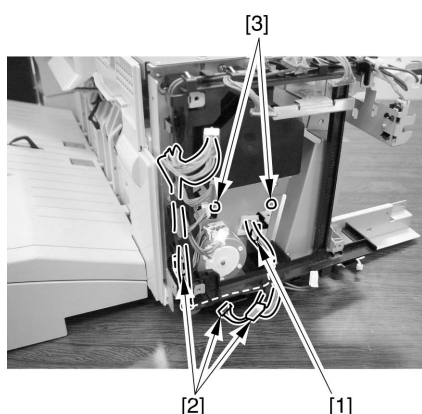
screws [2]; then, detach the finisher controller PCB [3].



F-4-223

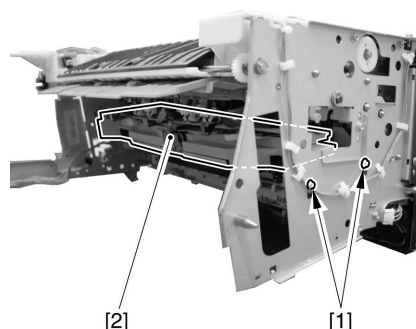
4.3.10.8 Removing the Processing Tray Assembly 0002-8211

- 1) Open the wire saddle [1], and put the cable [2] inside of the finisher; then, remove the 2 screws [3].



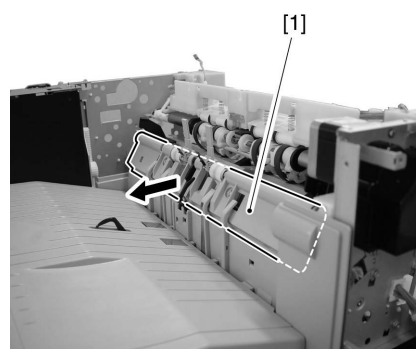
F-4-224

- 2) Remove the 2 screws [2], and detach the processing tray unit.



F-4-225

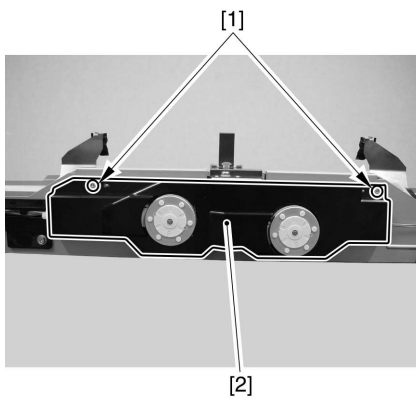
⚠ When mounting the processing tray, be sure to slide the lattice guide unit [1] to the left before doing so. This is to prevent the plastic sheet of the guide unit from interfering with the processing tray assembly.



F-4-226

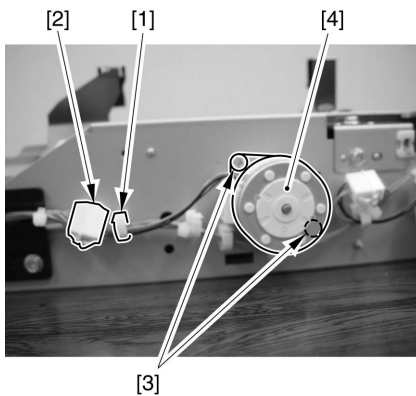
4.3.10.9 Removing the Front Alignment Motor 0001-1634

- 1) Remove the 2 screws [1], and detach the motor cover [2].



F-4-227

- 2) Remove the wire saddle [1], disconnect the connector [2], and remove the screw [3]; then, detach the front alignment motor [4].



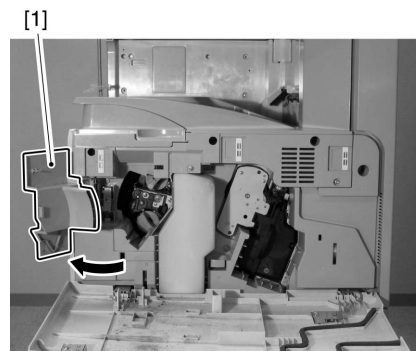
F-4-228

4.3.11 Rear Alignment Motor

4.3.11.1 Removing the Toner Bottle Retainer

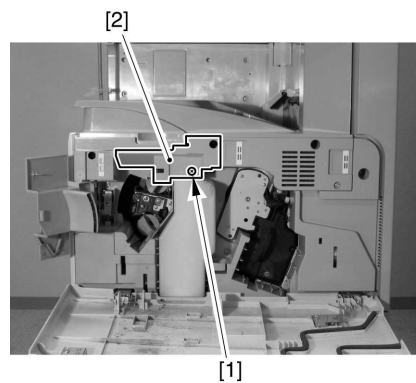
0002-7874

- 1) Open the front cover.
- 2) Open the toner container access cover [1].



F-4-229

- 3) Remove the TP screw [1], and detach the waste toner bottle retainer [2].

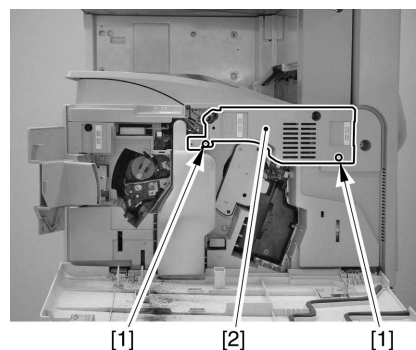


F-4-230

4.3.11.2 Removing the Front Inside Cover (middle)

0002-7952

- 1) Remove the 2 screws [1], and detach the front inside cover (middle) [2].



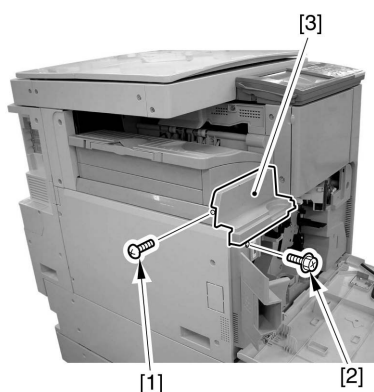
F-4-231

4.3.11.3 Removing the Finisher

Tray Front Cover

0002-8068

- 1) Remove the self-tapping screw (small) [1] and the other screw [2]; then, detach the finisher tray front cover [3].



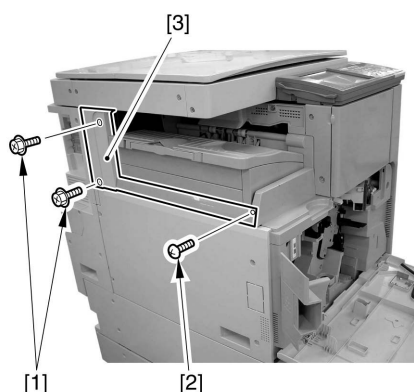
F-4-232

4.3.11.4 Removing the Finisher

Left Cover

0002-8118

- 1) Remove the 2 screws [1] and the self-tapping screw (small) [2]; then, detach the finisher left cover [3].



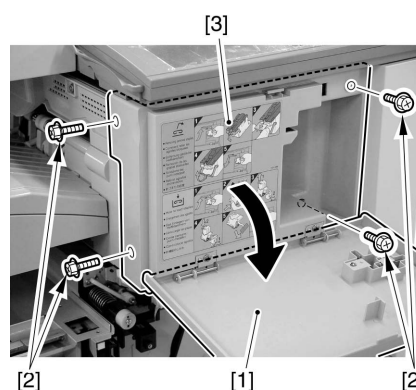
F-4-233

4.3.11.5 Removing the Finisher

Front Cover

0003-0273

- 1) Open the finisher front cover [1].
- 2) Remove the 4 screws [2], and detach the finisher front cover [3].

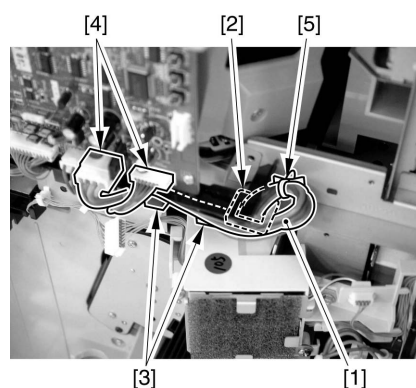


F-4-234

4.3.11.6 Detaching from the Host Machine

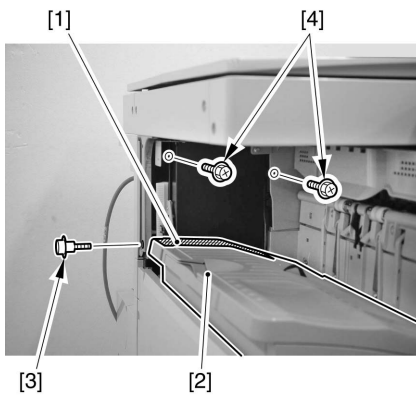
0002-8156

- 1) Remove the reuse band [5].
- 2) Disconnect the 2 connectors [4] of the communication harness.
- 3) Free the communication harness [1] from the wire saddle [2] of the finisher and the cable guide [3].



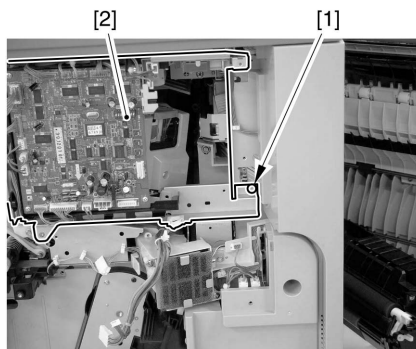
F-4-235

- 4) Press the area of the tray indicated by shading [1] to move down the tray (if it is in up position).
- 5) Remove the stepped screw [3] and the 2 other screws [4]. (The use of a long screwdriver is recommended.)



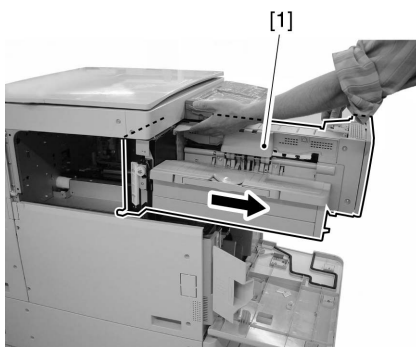
F-4-236

- 6) Remove the screw (M3x8) [1], and release the finisher assembly [2].



F-4-237

- 7) Pull the finisher [1] to detach it from the machine while holding it level.



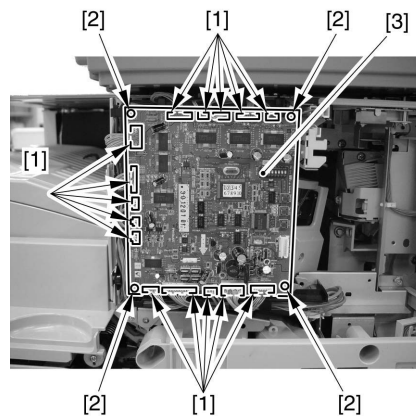
F-4-238

4.3.11.7 Removing the Finisher Controller PCB

0002-8197

- 1) Disconnect the 5 connectors [1], and remove the 4

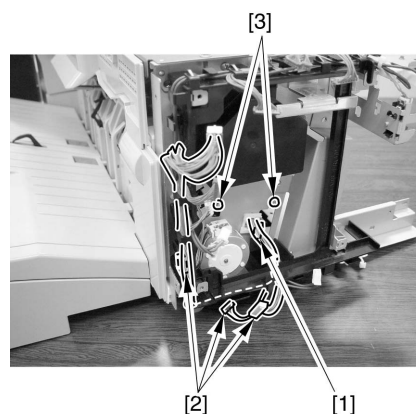
screws [2]; then, detach the finisher controller PCB [3].



F-4-239

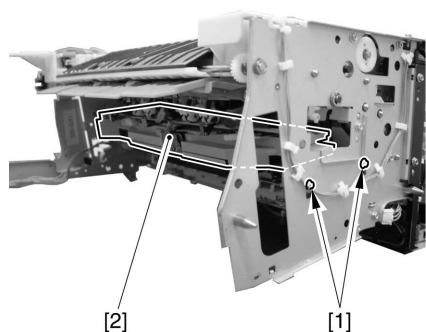
4.3.11.8 Removing the Processing Tray Assembly 0002-8212

- 1) Open the wire saddle [1], and put the cable [2] inside of the finisher; then, remove the 2 screws [3].



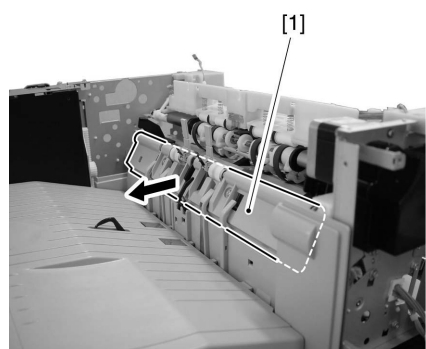
F-4-240

- 2) Remove the 2 screws [2], and detach the processing tray unit.



F-4-241

⚠ When mounting the processing tray, be sure to slide the lattice guide unit [1] to the left before doing so. This is to prevent the plastic sheet of the guide unit from interfering with the processing tray assembly.

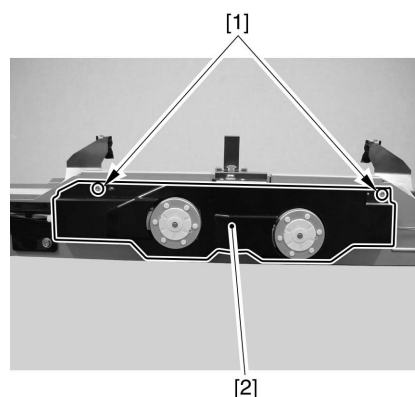


F-4-242

4.3.11.9 Removing the Rear Alignment Motor

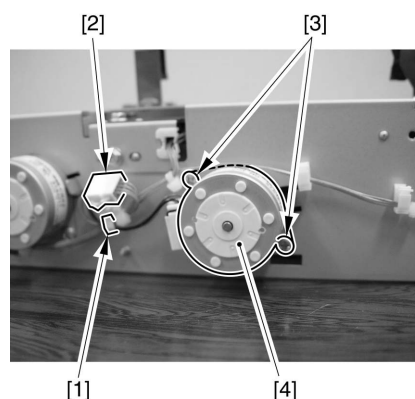
0001-1641

- 1) Remove the 2 screws [1], and detach the motor cover [2].



F-4-243

- 2) Remove the wire saddle [1], disconnect the connector [2], and remove the screw [3]; then, detach the rear alignment motor [4].



F-4-244

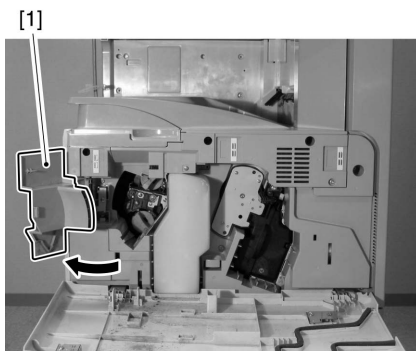
4.3.12 Paddle Motor

4.3.12.1 Removing the Toner

Bottle Retainer

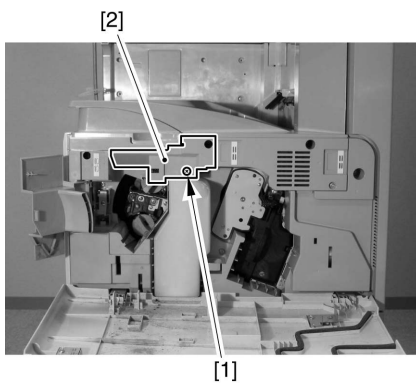
0002-7875

- 1) Open the front cover.
- 2) Open the toner container access cover [1].



F-4-245

- 3) Remove the TP screw [1], and detach the waste toner bottle retainer [2].

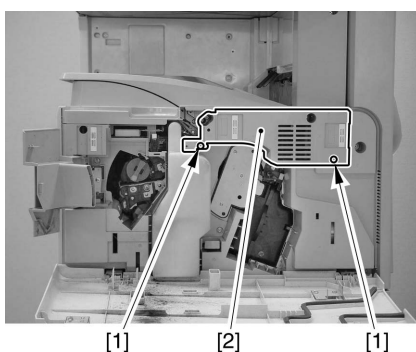


F-4-246

4.3.12.2 Removing the Front Inside Cover (middle)

0002-7955

- 1) Remove the 2 screws [1], and detach the front inside cover (middle) [2].



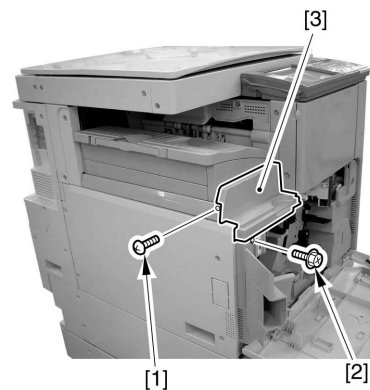
F-4-247

4.3.12.3 Removing the Finisher

Tray Front Cover

0002-8069

- 1) Remove the self-tapping screw (small) [1] and the other screw [2]; then, detach the finisher tray front cover [3].



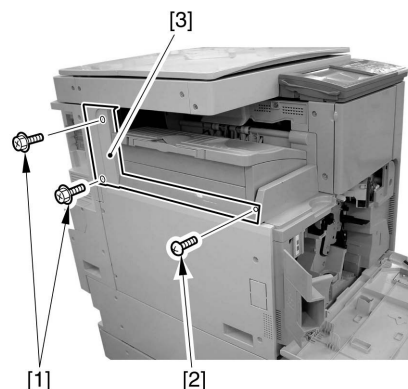
F-4-248

4.3.12.4 Removing the Finisher

Left Cover

0002-8119

- 1) Remove the 2 screws [1] and the self-tapping screw (small) [2]; then, detach the finisher left cover [3].



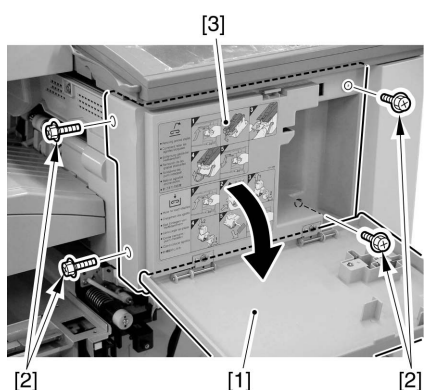
F-4-249

4.3.12.5 Removing the Finisher

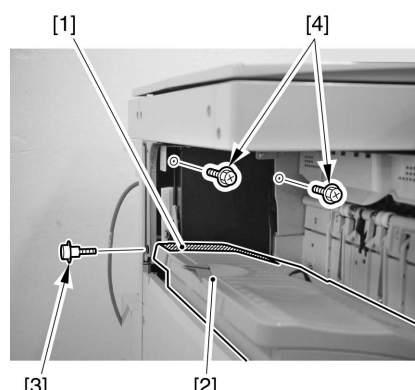
Front Cover

0003-0276

- 1) Open the finisher front cover [1].
- 2) Remove the 4 screws [2], and detach the finisher front cover [3].



F-4-250

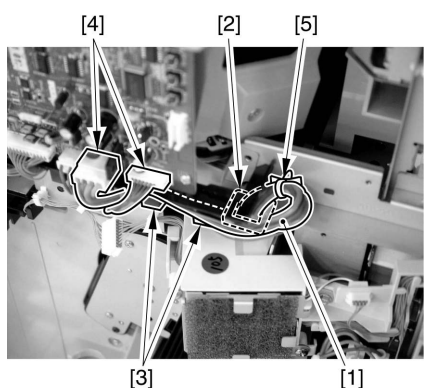


F-4-252

4.3.12.6 Detaching from the Host Machine

0002-8157

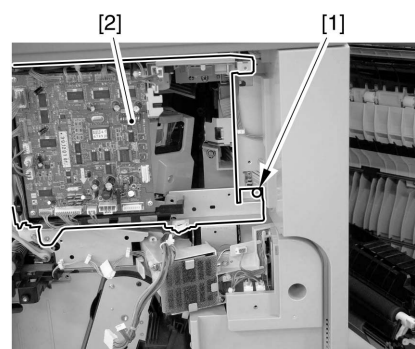
- 1) Remove the reuse band [5].
- 2) Disconnect the 2 connectors [4] of the communication harness.
- 3) Free the communication harness [1] from the wire saddle [2] of the finisher and the cable guide [3].



F-4-251

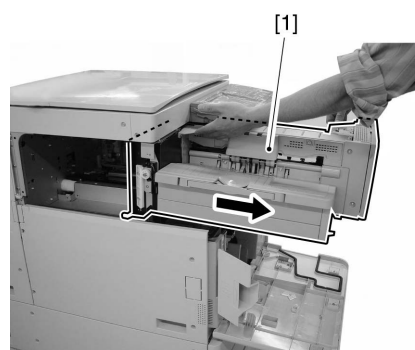
- 4) Press the area of the tray indicated by shading [1] to move down the tray (if it is in up position).
- 5) Remove the stepped screw [3] and the 2 other screws [4]. (The use of a long screwdriver is recommended.)

- 6) Remove the screw (M3x8) [1], and release the finisher assembly [2].



F-4-253

- 7) Pull the finisher [1] to detach it from the machine while holding it level.



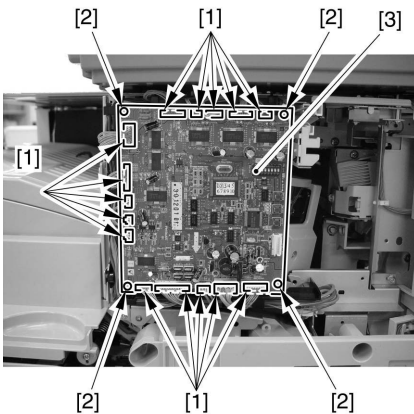
F-4-254

4.3.12.7 Removing the Finisher Controller PCB

0002-8198

- 1) Disconnect the 5 connectors [1], and remove the 4

screws [2]; then, detach the finisher controller PCB [3].

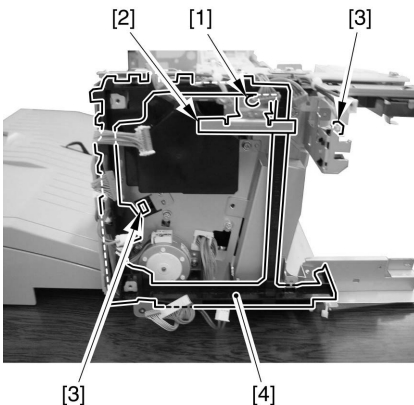


F-4-255

4.3.12.8 Removing the Paddle Motor

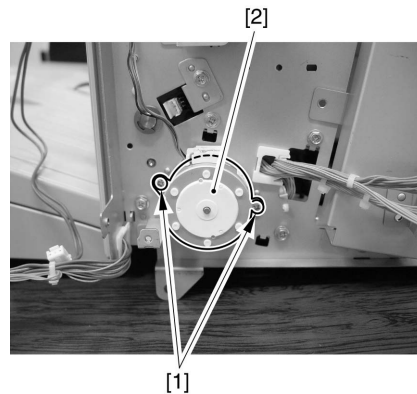
0001-1674

- 1) Remove the screw [1], and detach the plate [2].
- 2) Disconnect the 2 connectors [3] (lower left, upper right), and free the cable from the cable guide [4]; then, detach the cable guide [4].



F-4-256

- 3) Remove the 2 screws [1], and detach the motor [2].

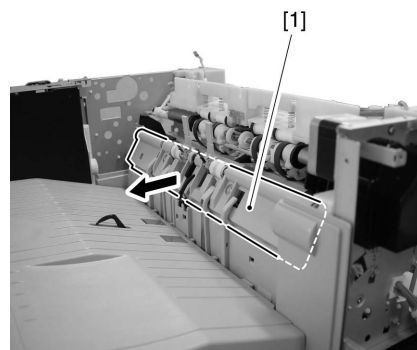


F-4-257

4.3.12.9 Points to Note When

Mounting the Paddle Motor 0001-1685

When mounting the paddle motor, be sure to slide the lattice guide unit [1] to the left before doing so.



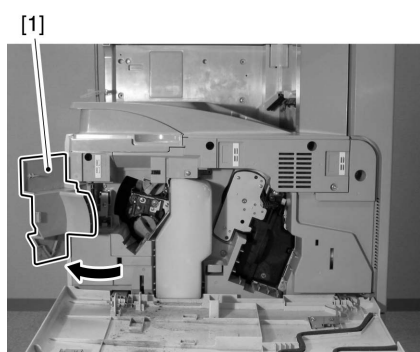
F-4-258

4.3.13 Stack Wall

4.3.13.1 Removing the Toner

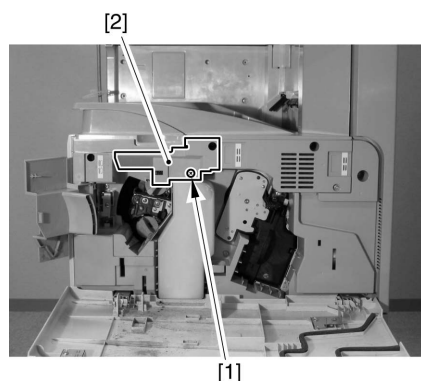
Bottle Retainer 0002-7883

- 1) Open the front cover.
- 2) Open the toner container access cover [1].



F-4-259

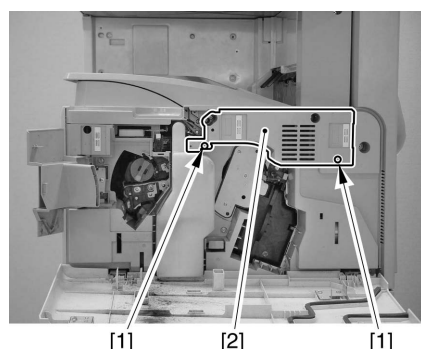
- 3) Remove the TP screw [1], and detach the waste toner bottle retainer [2].



F-4-260

4.3.13.2 Removing the Front Inside Cover (middle) 0002-7956

- 1) Remove the 2 screws [1], and detach the front inside cover (middle) [2].



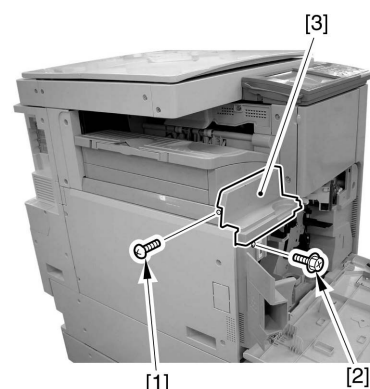
F-4-261

4.3.13.3 Removing the Finisher

Tray Front Cover

0002-8070

- 1) Remove the self-tapping screw (small) [1] and the other screw [2]; then, detach the finisher tray front cover [3].



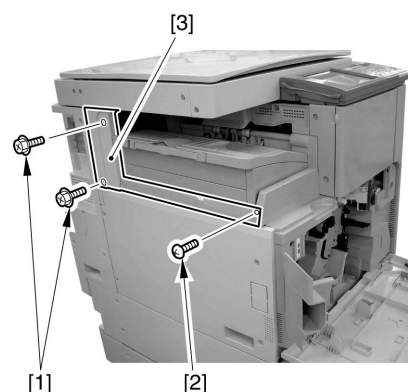
F-4-262

4.3.13.4 Removing the Finisher

Left Cover

0002-8120

- 1) Remove the 2 screws [1] and the self-tapping screw (small) [2]; then, detach the finisher left cover [3].



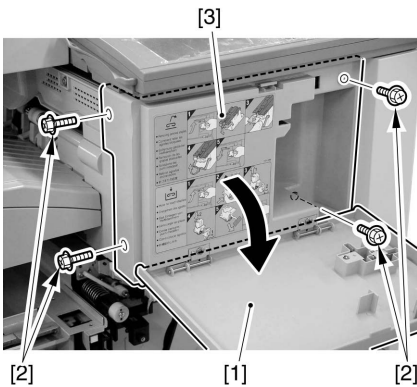
F-4-263

4.3.13.5 Removing the Finisher

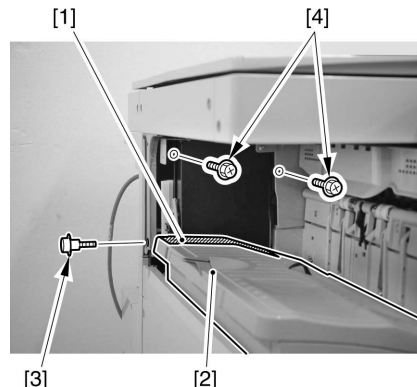
Front Cover

0003-0277

- 1) Open the finisher front cover [1].
2) Remove the 4 screws [2], and detach the finisher front cover [3].



F-4-264

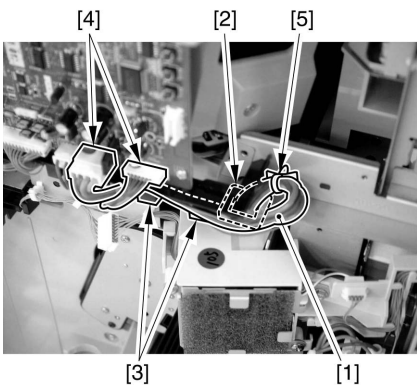


F-4-266

4.3.13.6 Detaching from the Host Machine

0002-8158

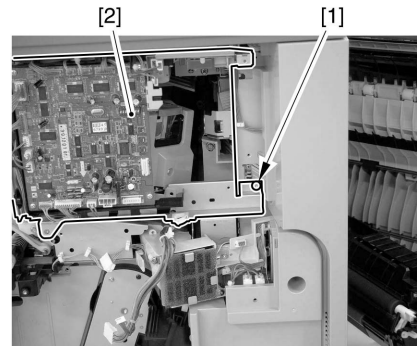
- 1) Remove the reuse band [5].
- 2) Disconnect the 2 connectors [4] of the communication harness.
- 3) Free the communication harness [1] from the wire saddle [2] of the finisher and the cable guide [3].



F-4-265

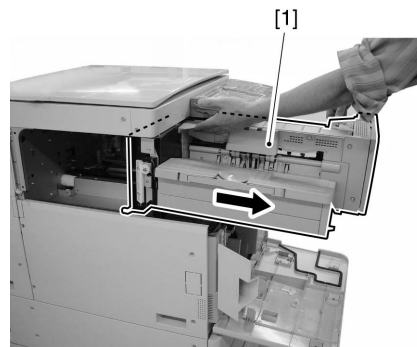
- 4) Press the area of the tray indicated by shading [1] to move down the tray (if it is in up position).
- 5) Remove the stepped screw [3] and the 2 other screws [4]. (The use of a long screwdriver is recommended.)

- 6) Remove the screw (M3x8) [1], and release the finisher assembly [2].



F-4-267

- 7) Pull the finisher [1] to detach it from the machine while holding it level.



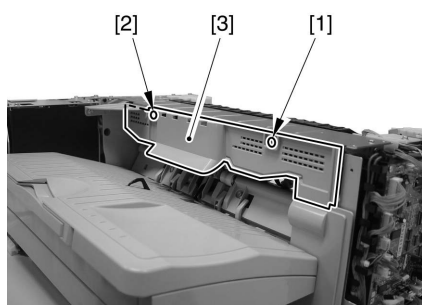
F-4-268

4.3.13.7 Removing the Stack Delivery Cover

0002-8394

- 1) Remove the stepped screw [1] and the other screw

[2]; then, detach the cover [3].

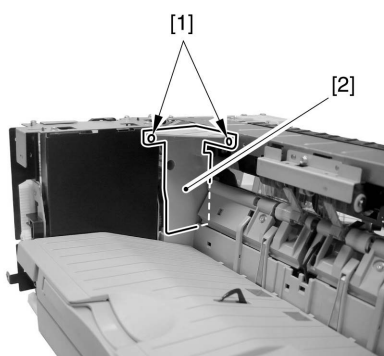


F-4-269

4.3.13.8 Removing the Grip (left)

0002-8395

- 1) Remove the 2 screws [1], and detach the grip (left) [2].

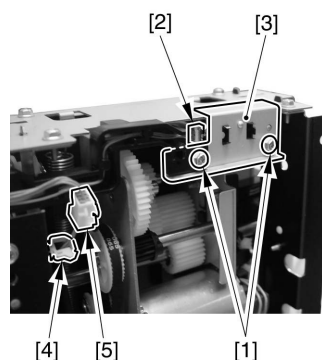


F-4-270

4.3.13.9 Removing the Stack Tray Assembly

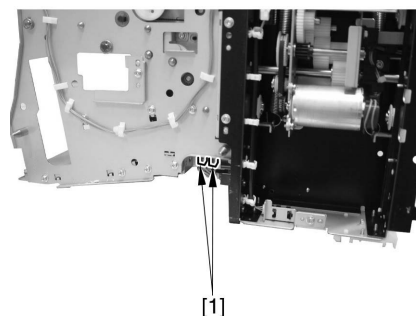
0002-8397

- 1) Remove the 2 screws [1], and disconnect the connector [2]; then, detach the stack tray upper limit sensor assembly [3].
- 2) Open the wire saddle [4], and disconnect the connector [5].



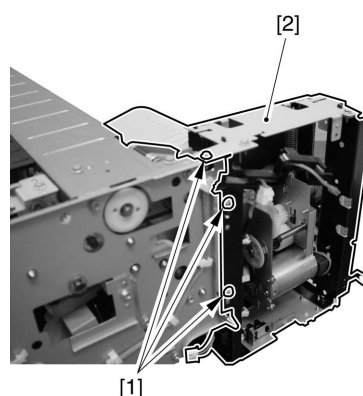
F-4-271

- 3) Disconnect the 2 connectors [1].



F-4-272

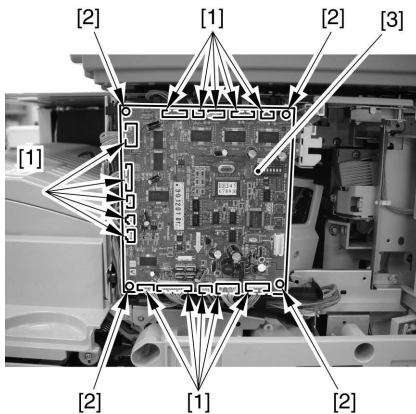
- 4) Remove the 3 screws [1], and detach the stack tray assembly [2].



F-4-273

4.3.13.10 Removing the Finisher Controller PCB 0002-8199

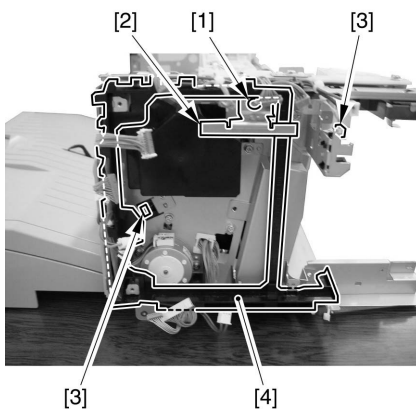
- 1) Disconnect the 5 connectors [1], and remove the 4 screws [2]; then, detach the finisher controller PCB [3].



F-4-274

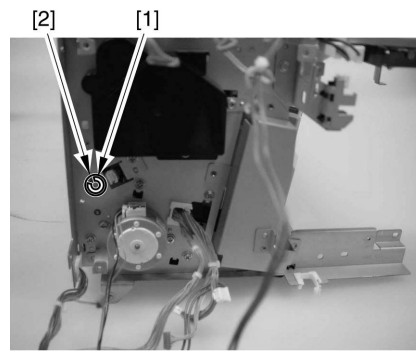
4.3.13.11 Removing the Stacking Wall 0002-7189

- 1) Remove the screw [1], and detach the plate [2].
- 2) Disconnect the 2 connectors [3], and free the case from the cable guide [4]; then, detach the cable guide [4].



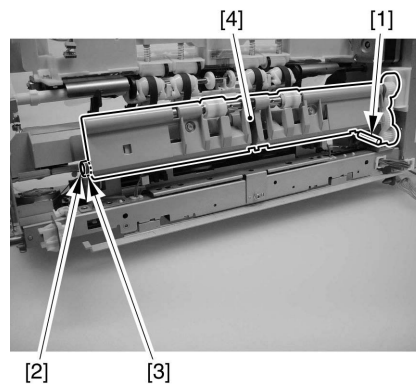
F-4-275

- 3) Remove the E-ring [1] and the bushing [2].



F-4-276

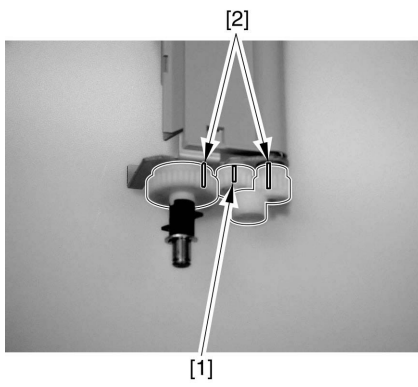
- 4) Remove the spring [1].
- 5) Remove the E-ring [1] and the bushing [2]; then, detach the stacking wall [4].



F-4-277

4.3.13.12 Matching the Phase of the Stacking Wall Drive Gear 0002-7197

- ⚠ Be sure to mount the 3 gears so that the groove [1] of gear B fully engages with the extension [2] of the teeth of gear A and gear B.



F-4-278

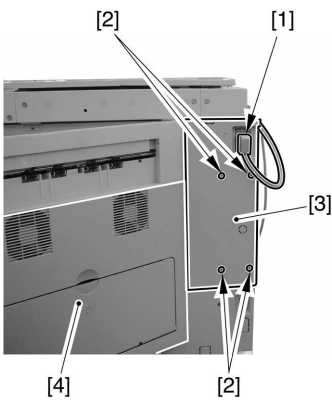
4.4 Document Feeding System

4.4.1 Delivery Roller 2

4.4.1.1 Removing the Reader Unit Power Cable/Rear Right Cover

0002-9747

- 1) Disconnect the reader unit power cable [1].
- 2) Remove the 4 screws [2], and detach the rear right cover [3].
- 3) Open the right cover [4].

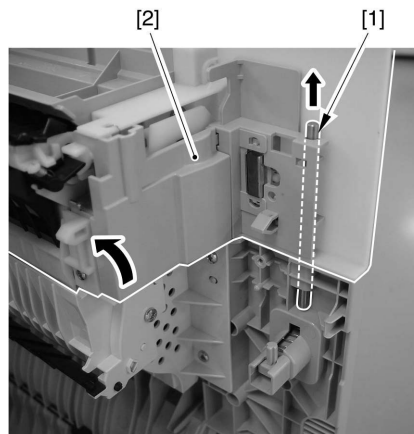


F-4-279

4.4.1.2 Removing the Relay Delivery Assembly

0002-9762

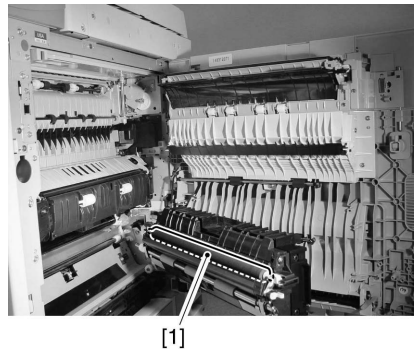
- 1) Remove the joint pin [1], and lift the relay delivery assembly [2] to separate it from the right door.



F-4-280

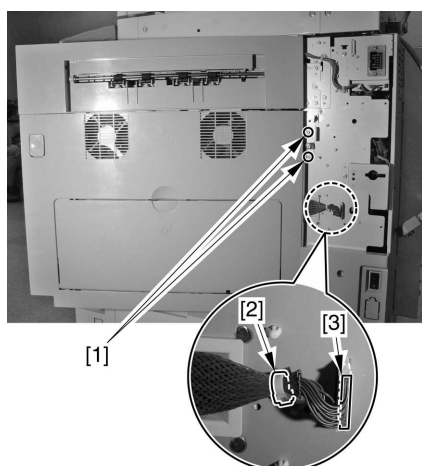
2)

⚠ When detaching the right door, be sure not to touch the secondary transfer outside roller [1].



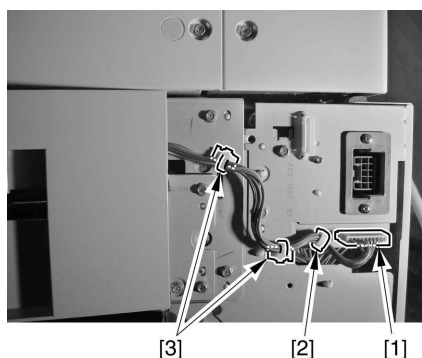
F-4-281

Remove the 2 screws [1], remove the reuse band [2], and disconnect the connector [3]; then, lift the right door to detach.



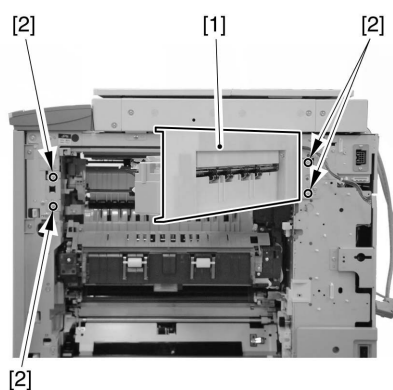
F-4-282

- 3) Disconnect the controller [1], and free the harness from the cable clamp [2].
- 4) Remove the 2 reuse bands [3].



F-4-283

- 5) Open the relay delivery assembly [1], and remove the 4 screws [2]; then, close the relay delivery assembly.



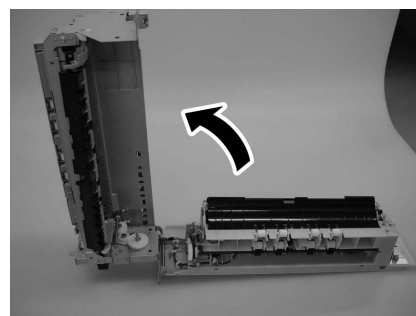
F-4-284

- 6) Detach the relay delivery assembly.

4.4.1.3 Removing the No. 2 Delivery Roller

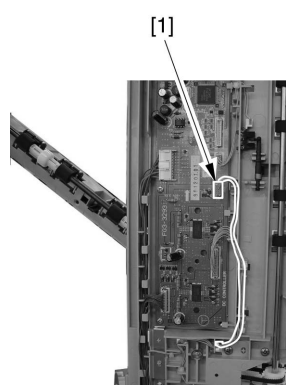
0002-9794

- 1) Open the relay delivery assembly.



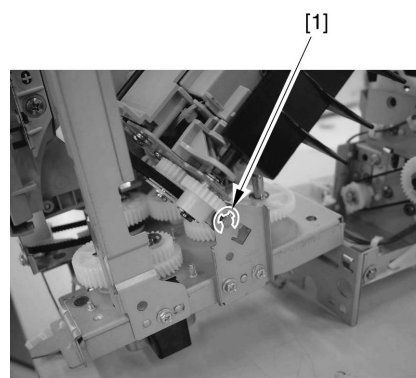
F-4-285

- 2) Disconnect the connector [1], and free the harness from the cable guide.



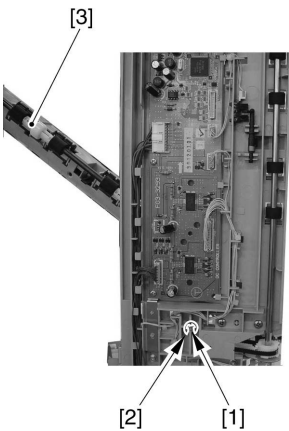
F-4-286

- 3) Remove the E-ring [1].



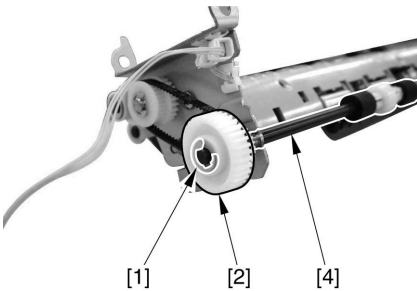
F-4-287

- 4) Remove the E-ring [1], and pull out the joint pin [2]; then, detach the No 2 delivery unit [3].

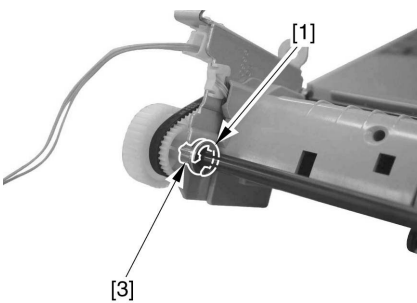


F-4-288

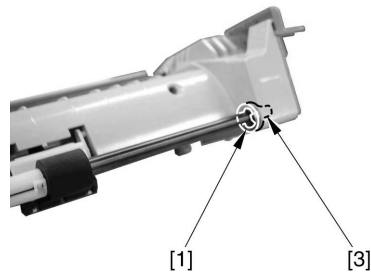
- 5) Remove the 3 E-rings [1], gear [2], and 2 bushings [3]; then, detach the No. 2 delivery roller [4].



F-4-289



F-4-290



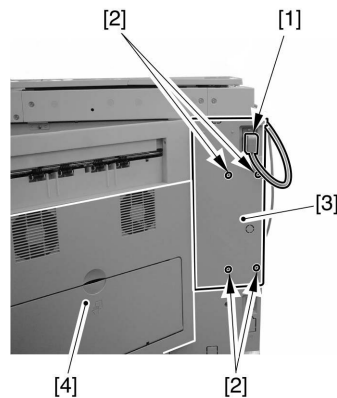
F-4-291

4.4.2 Reversing Roller

4.4.2.1 Removing the Reader Unit Power Cable/Rear Right Cover

0002-9748

- 1) Disconnect the reader unit power cable [1].
- 2) Remove the 4 screws [2], and detach the rear right cover [3].
- 3) Open the right cover [4].

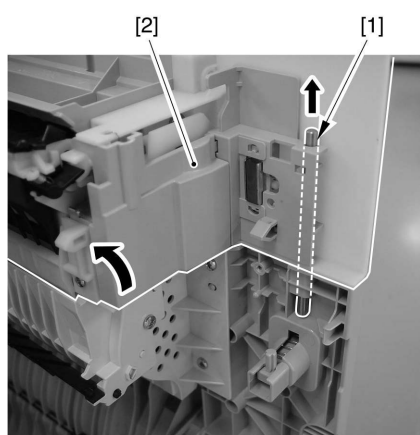


F-4-292

4.4.2.2 Removing the Relay Delivery Assembly

0002-9763

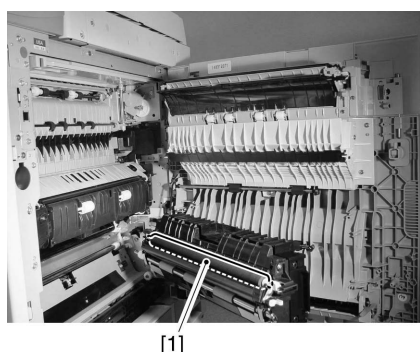
- 1) Remove the joint pin [1], and lift the relay delivery assembly [2] to separate it from the right door.



F-4-293

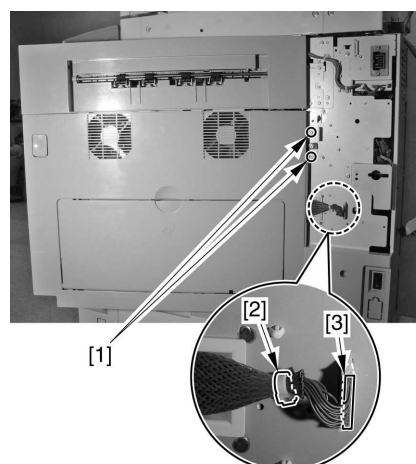
2)

⚠ When detaching the right door, be sure not to touch the secondary transfer outside roller [1].



F-4-294

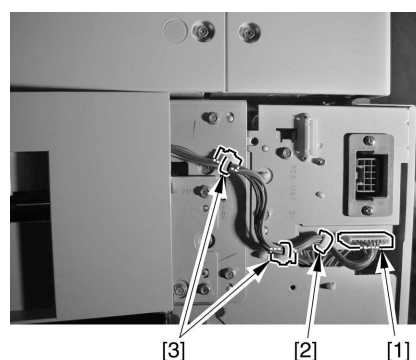
Remove the 2 screws [1], remove the reuse band [2], and disconnect the connector [3]; then, lift the right door to detach.



F-4-295

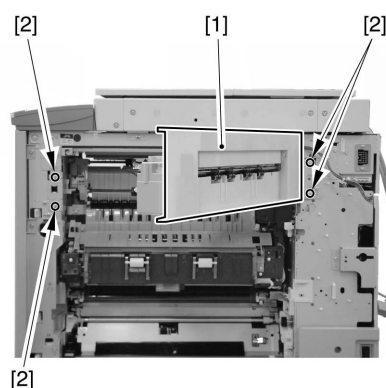
3) Disconnect the controller [1], and free the harness from the cable clamp [2].

4) Remove the 2 reuse bands [3].



F-4-296

5) Open the relay delivery assembly [1], and remove the 4 screws [2]; then, close the relay delivery assembly.

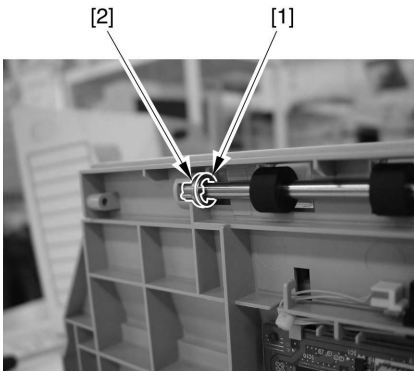


F-4-297

6) Detach the relay delivery assembly.

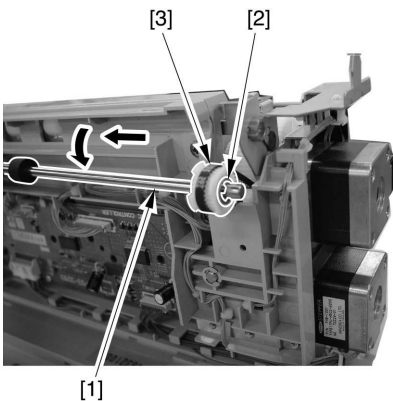
4.4.2.3 Removing the Reversing Roller 0002-9797

1) Remove the E-ring [1], and detach the bushing [2].



F-4-298

2) Slide the reversing roller [1] to the left, and move it down to the front. Then, remove the E-ring [2], and detach the reversing roller [1].



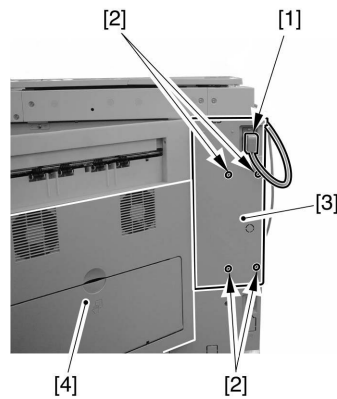
F-4-299

4.4.3 Delivery Roller 3

4.4.3.1 Removing the Reader Unit Power Cable/Rear Right Cover 0002-9749

- 1) Disconnect the reader unit power cable [1].
- 2) Remove the 4 screws [2], and detach the rear right cover [3].

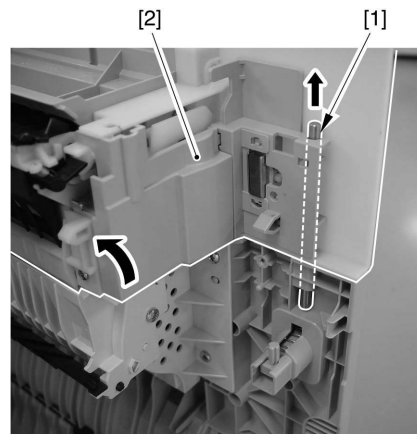
3) Open the right cover [4].



F-4-300

4.4.3.2 Removing the Relay Delivery Assembly 0002-9764

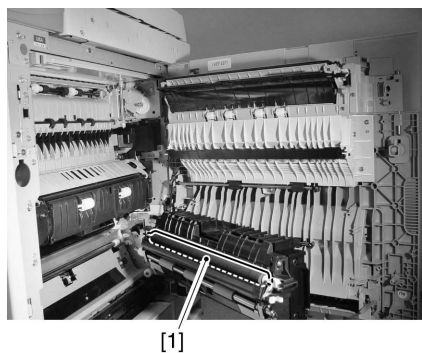
1) Remove the joint pin [1], and lift the relay delivery assembly [2] to separate it from the right door.



F-4-301

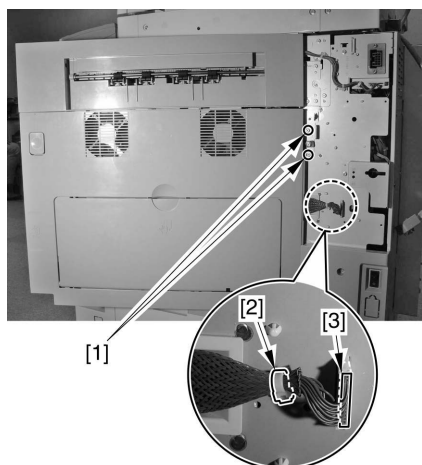
2)

⚠ When detaching the right door, be sure not to touch the secondary transfer outside roller [1].



F-4-302

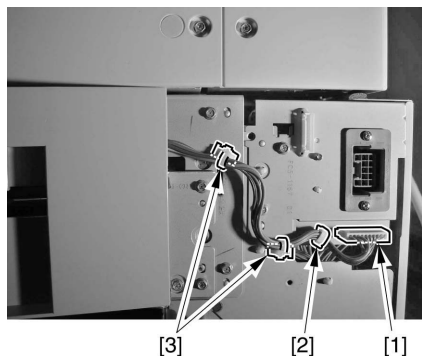
Remove the 2 screws [1], remove the reuse band [2], and disconnect the connector [3]; then, lift the right door to detach.



F-4-303

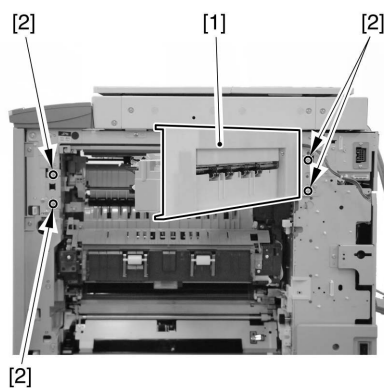
3) Disconnect the controller [1], and free the harness from the cable clamp [2].

4) Remove the 2 reuse bands [3].



F-4-304

5) Open the relay delivery assembly [1], and remove the 4 screws [2]; then, close the relay delivery assembly.



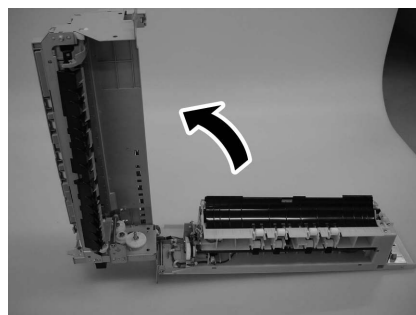
F-4-305

6) Detach the relay delivery assembly.

4.4.3.3 Removing the No. 3 Delivery Roller

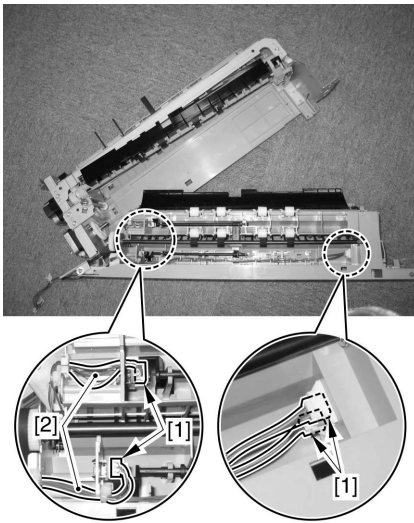
0002-9799

1) Open the relay delivery assembly.



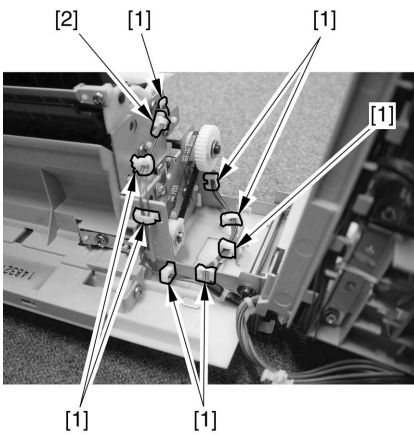
F-4-306

2) Disconnect the 4 connectors [1], and free the cable [2] from the cable guide.



F-4-307

- 3) Free the cable from the 8 wire saddles [1], and remove the reuse band [2].

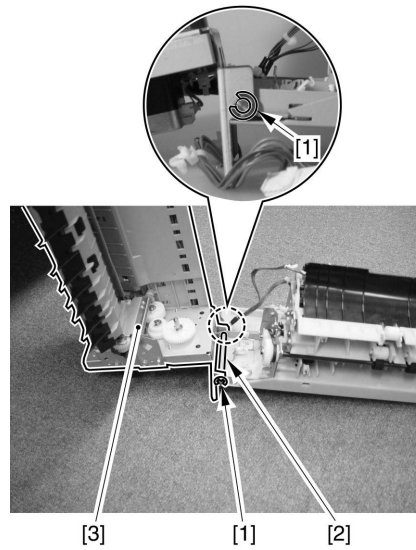


F-4-308



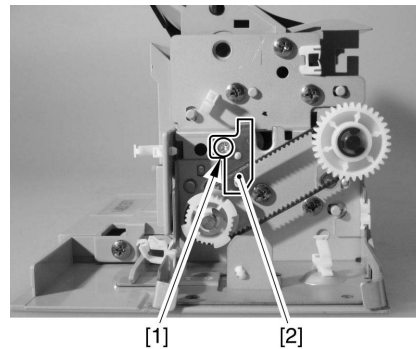
When removing the joint pin, be sure to hold the secondary delivery assembly in place so as not to shift down the assembly.

- 4) Remove the 2 E-rings [1], and detach the No. 2 delivery assembly [3].



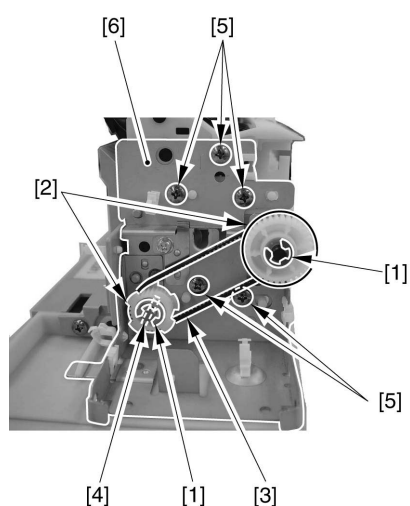
F-4-309

- 5) Remove the screw [1], and detach the plate [2].



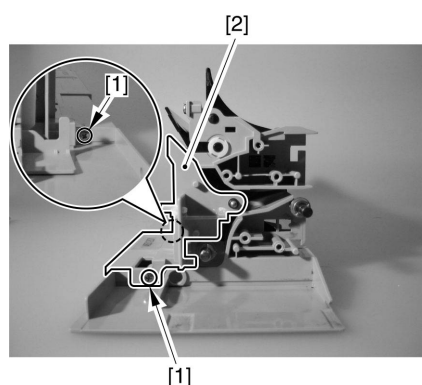
F-4-310

- 6) Remove the 2 E-rings [1], 2 gears [2], belt [3], pin [4], and 5 screws [5]; then, detach the plate [6].



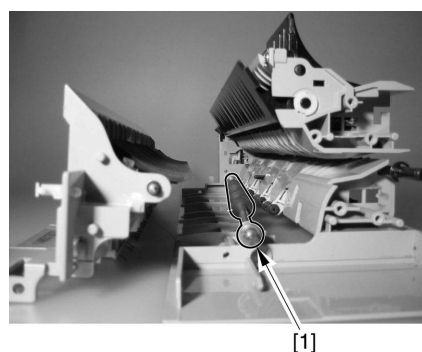
F-4-311

- 7) Remove the 2 screws [1], and detach the No. 3 delivery frame [2].



F-4-312

- 8) Remove the No. 3 delivery roller [1].



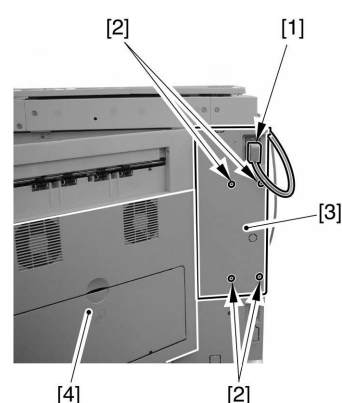
F-4-313

4.4.4 Duplexing Inlet Roller

4.4.4.1 Removing the Reader Unit Power Cable/Rear Right Cover

0002-9750

- 1) Disconnect the reader unit power cable [1].
- 2) Remove the 4 screws [2], and detach the rear right cover [3].
- 3) Open the right cover [4].

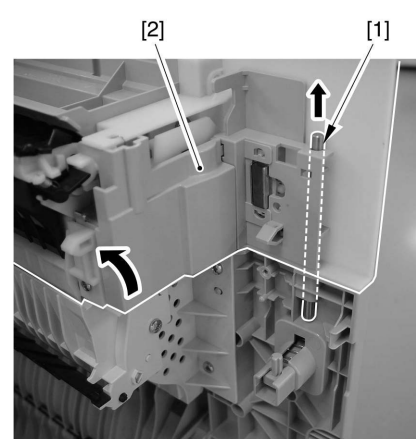


F-4-314

4.4.4.2 Removing the Relay Delivery Assembly

0002-9765

- 1) Remove the joint pin [1], and lift the relay delivery assembly [2] to separate it from the right door.



F-4-315

- 2)

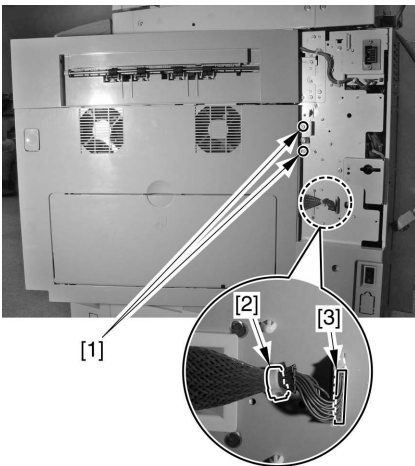
⚠ When detaching the right door, be sure not to touch the secondary transfer outside roller [1].



[1]

F-4-316

Remove the 2 screws [1], remove the reuse band [2], and disconnect the connector [3]; then, lift the right door to detach.



[1]

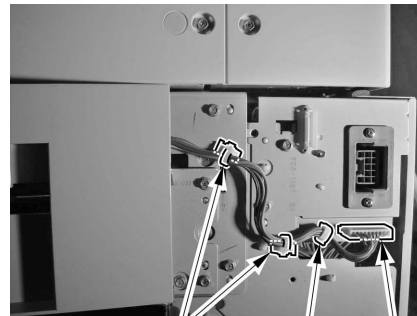
[2]

[3]

F-4-317

3) Disconnect the controller [1], and free the harness from the cable clamp [2].

4) Remove the 2 reuse bands [3].



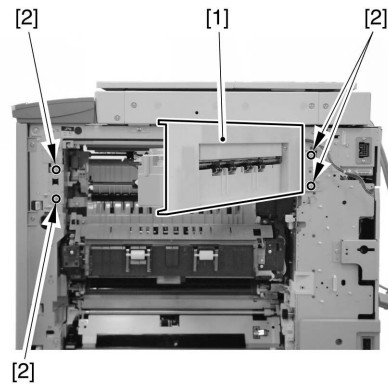
[3]

[2]

[1]

F-4-318

5) Open the relay delivery assembly [1], and remove the 4 screws [2]; then, close the relay delivery assembly.



[2]

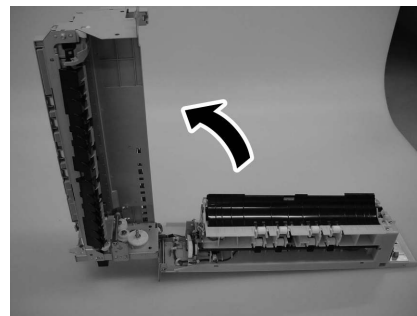
F-4-319

6) Detach the relay delivery assembly.

4.4.4.3 Removing the Duplex Inlet Roller

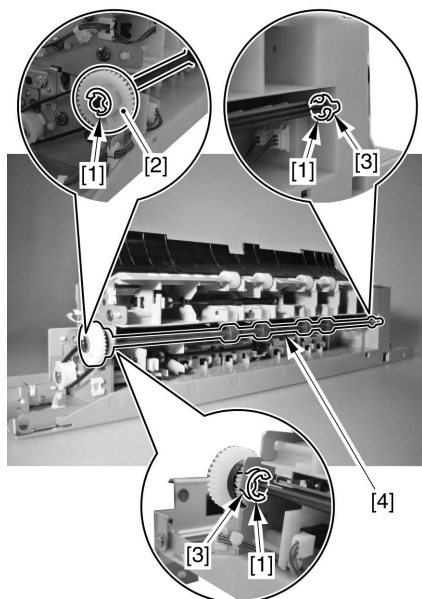
0002-9803

1) Open the relay delivery assembly.



F-4-320

- 2) Remove the 3 E-rings [1], gear [2], and 2 bushings [3]; then, detach the developing inlet roller [4].



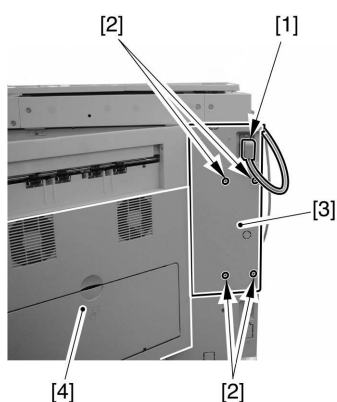
F-4-321

4.4.5 Inlet Roller

4.4.5.1 Removing the Reader Unit Power Cable/Rear Right Cover

0002-9752

- 1) Disconnect the reader unit power cable [1].
- 2) Remove the 4 screws [2], and detach the rear right cover [3].
- 3) Open the right cover [4].

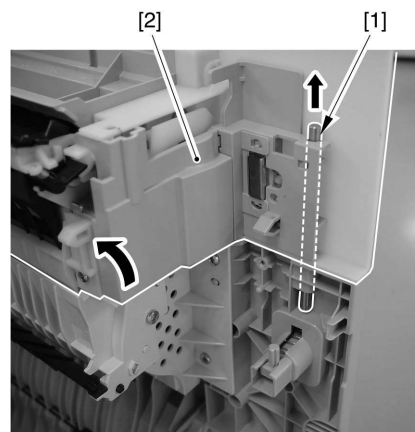


F-4-322

4.4.5.2 Removing the Relay Delivery Assembly

0002-9767

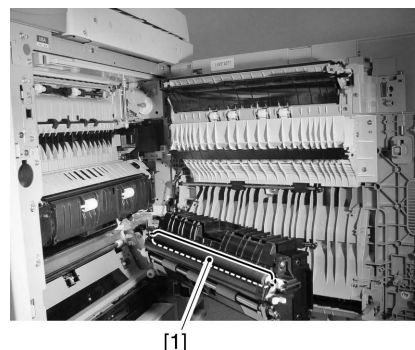
- 1) Remove the joint pin [1], and lift the relay delivery assembly [2] to separate it from the right door.



F-4-323

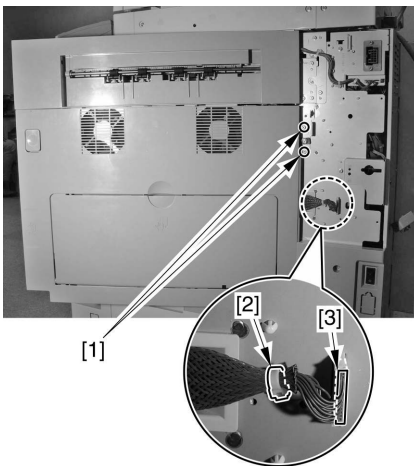
- 2)

⚠ When detaching the right door, be sure not to touch the secondary transfer outside roller [1].



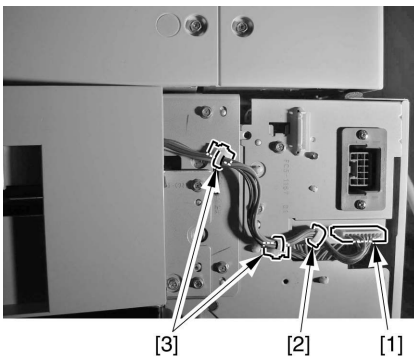
F-4-324

Remove the 2 screws [1], remove the reuse band [2], and disconnect the connector [3]; then, lift the right door to detach.



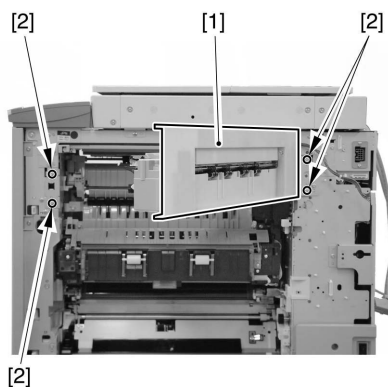
F-4-325

- 3) Disconnect the controller [1], and free the harness from the cable clamp [2].
- 4) Remove the 2 reuse bands [3].



F-4-326

- 5) Open the relay delivery assembly [1], and remove the 4 screws [2]; then, close the relay delivery assembly.



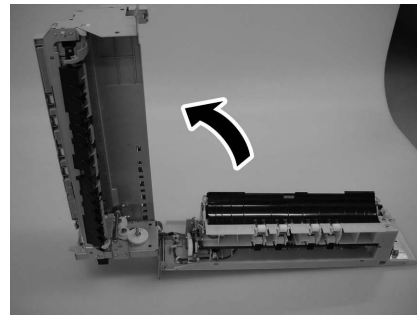
F-4-327

- 6) Detach the relay delivery assembly.

4.4.5.3 Removing the Inlet Roller

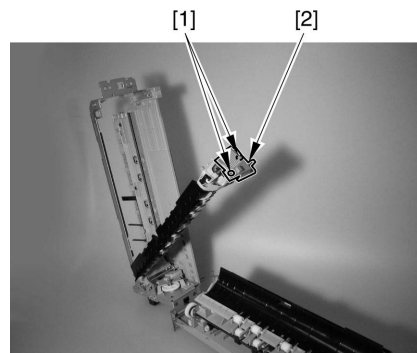
0002-9806

- 1) Open the relay delivery assembly.



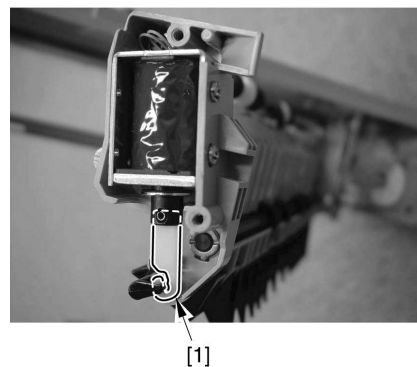
F-4-328

- 2) Remove the 2 screws [1], and detach the cover [2].



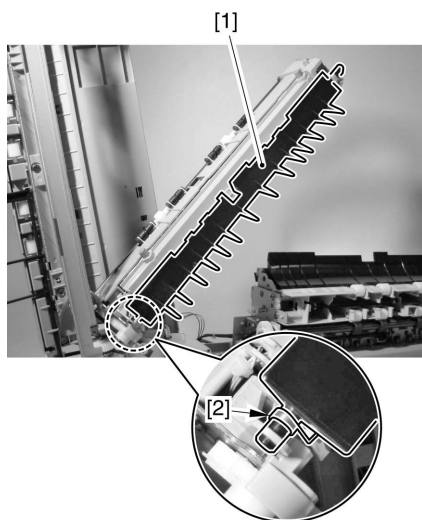
F-4-329

- 3) Remove the solenoid lever [1].



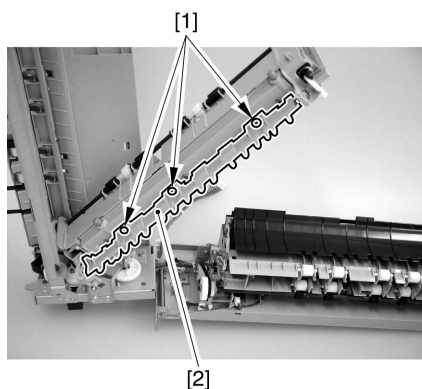
F-4-330

- 4) Remove the No. 1 delivery flapper [1] and the spring [2].



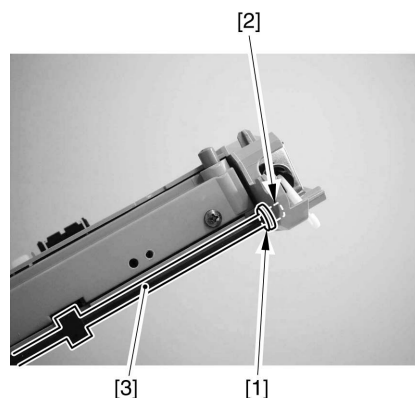
F-4-331

- 5) Remove the 3 screws [1], and detach the cover [2].

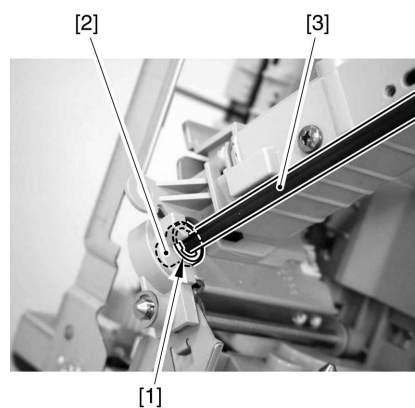


F-4-332

- 6) Remove the 2 E-rings [1] and the 2 bushings [2]; then, detach the inlet roller [3].



F-4-333



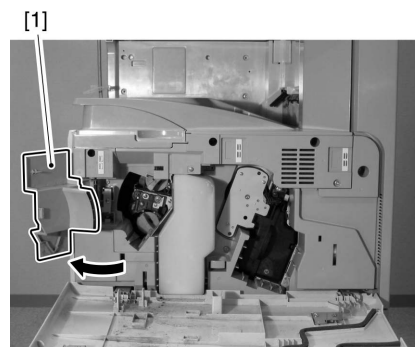
F-4-334

4.4.6 Stack Tray Assembly

4.4.6.1 Removing the Toner Bottle Retainer

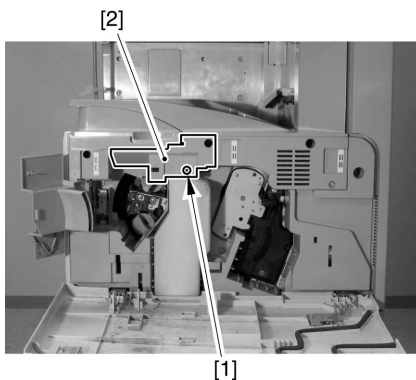
0002-7879

- 1) Open the front cover.
- 2) Open the toner container access cover [1].



F-4-335

- 3) Remove the TP screw [1], and detach the waste toner bottle retainer [2].

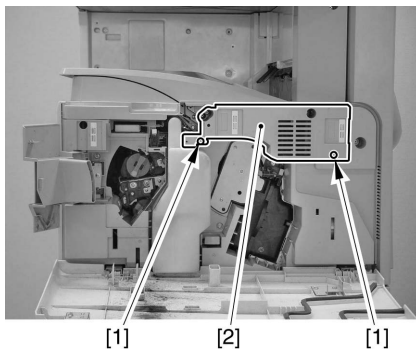


F-4-336

4.4.6.2 Removing the Front Inside Cover (middle)

0002-7957

- 1) Remove the 2 screws [1], and detach the front inside cover (middle) [2].

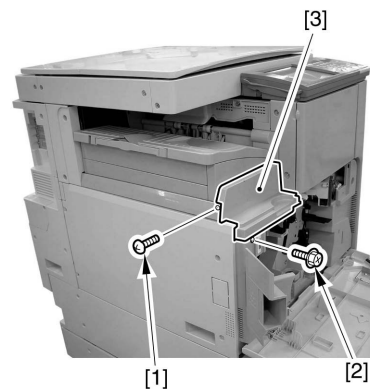


F-4-337

4.4.6.3 Removing the Finisher Tray Front Cover

0002-8071

- 1) Remove the self-tapping screw (small) [1] and the other screw [2]; then, detach the finisher tray front cover [3].

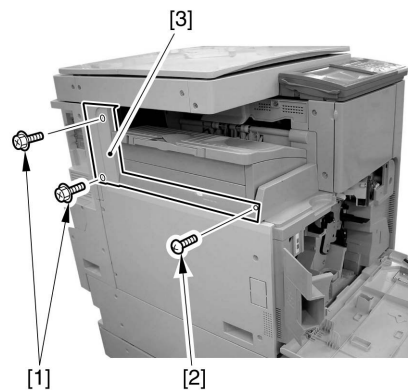


F-4-338

4.4.6.4 Removing the Finisher Left Cover

0002-8121

- 1) Remove the 2 screws [1] and the self-tapping screw (small) [2]; then, detach the finisher left cover [3].

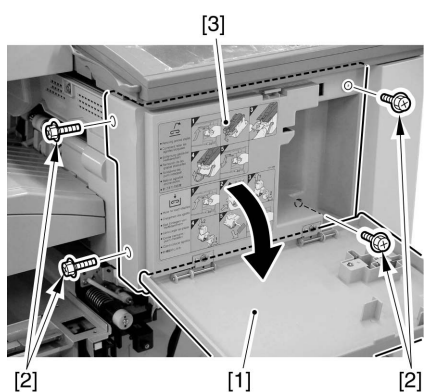


F-4-339

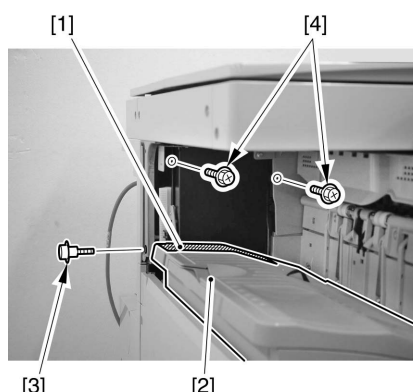
4.4.6.5 Removing the Finisher Front Cover

0003-0279

- 1) Open the finisher front cover [1].
- 2) Remove the 4 screws [2], and detach the finisher front cover [3].



F-4-340

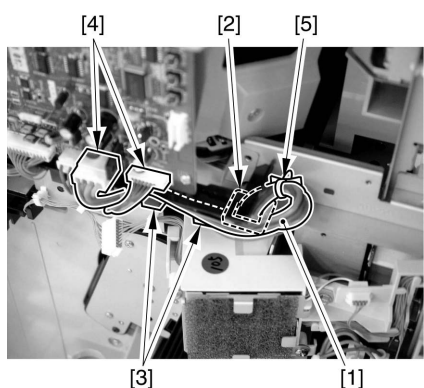


F-4-342

4.4.6.6 Detaching from the Host Machine

0002-8159

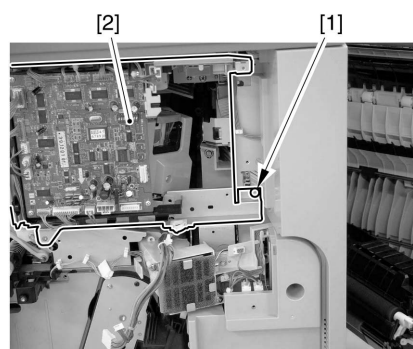
- 1) Remove the reuse band [5].
- 2) Disconnect the 2 connectors [4] of the communication harness.
- 3) Free the communication harness [1] from the wire saddle [2] of the finisher and the cable guide [3].



F-4-341

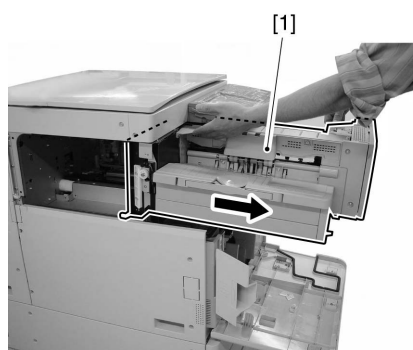
- 4) Press the area of the tray indicated by shading [1] to move down the tray (if it is in up position).
- 5) Remove the stepped screw [3] and the 2 other screws [4]. (The use of a long screwdriver is recommended.)

- 6) Remove the screw (M3x8) [1], and release the finisher assembly [2].



F-4-343

- 7) Pull the finisher [1] to detach it from the machine while holding it level.



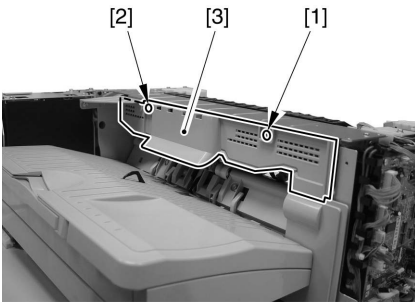
F-4-344

4.4.6.7 Removing the Stack Delivery Cover

0002-8392

- 1) Remove the stepped screw [1] and the other screw

[2]; then, detach the cover [3].

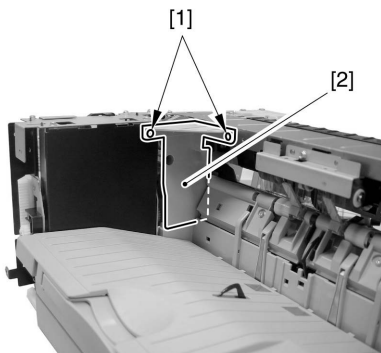


F-4-345

4.4.6.8 Removing the Grip (left)

0002-8393

- 1) Remove the 2 screws [1], and detach the grip (left) [2].

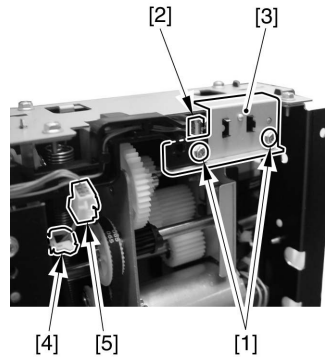


F-4-346

4.4.6.9 Removing the Stack Tray Assembly

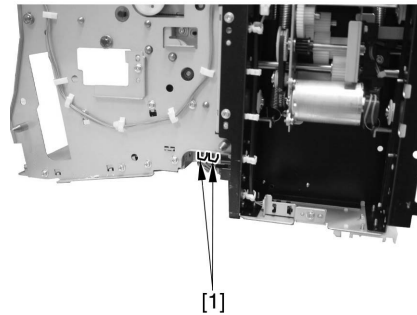
0001-1369

- 1) Remove the 2 screws [1], and disconnect the connector [2]; then, detach the stack tray upper limit sensor assembly [3].
- 2) Open the wire saddle [4], and disconnect the connector [5].



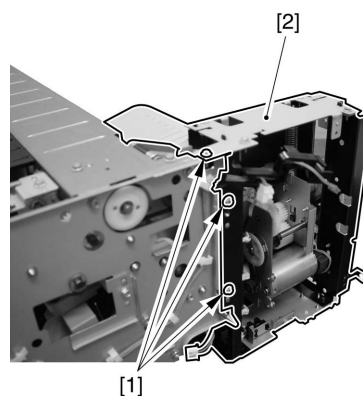
F-4-347

- 3) Disconnect the 2 connectors [1].



F-4-348

- 4) Remove the 3 screws [1], and detach the stack tray assembly [2].



F-4-349

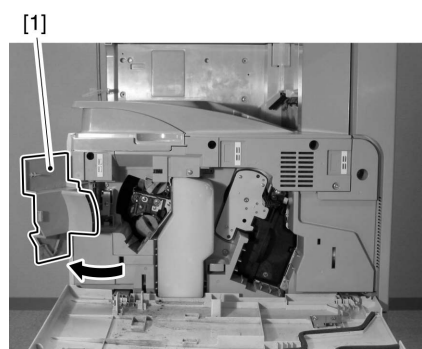
4.4.7 Upper Guide Assembly

4.4.7.1 Removing the Toner

Bottle Retainer

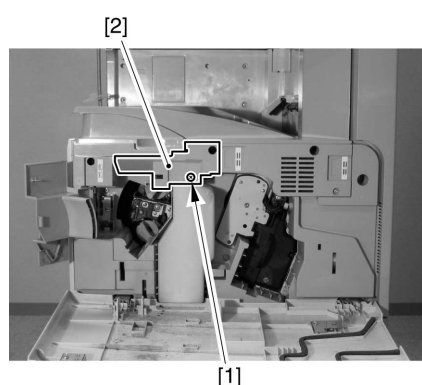
0002-7884

- 1) Open the front cover.
- 2) Open the toner container access cover [1].



F-4-350

- 3) Remove the TP screw [1], and detach the waste toner bottle retainer [2].



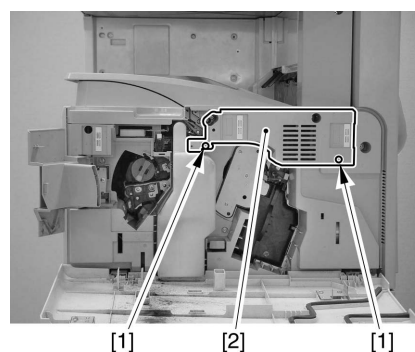
F-4-351

4.4.7.2 Removing the Front

Inside Cover (middle)

0002-7958

- 1) Remove the 2 screws [1], and detach the front inside cover (middle) [2].



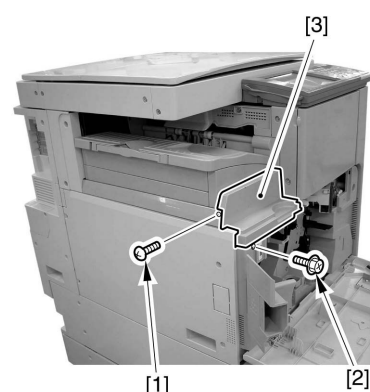
F-4-352

4.4.7.3 Removing the Finisher

Tray Front Cover

0002-8072

- 1) Remove the self-tapping screw (small) [1] and the other screw [2]; then, detach the finisher tray front cover [3].



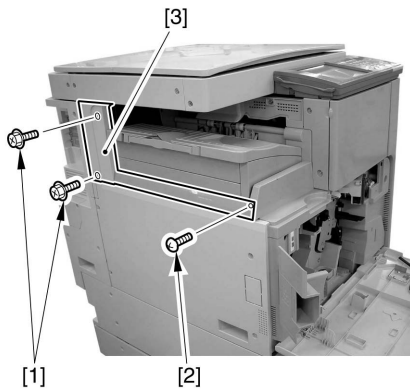
F-4-353

4.4.7.4 Removing the Finisher

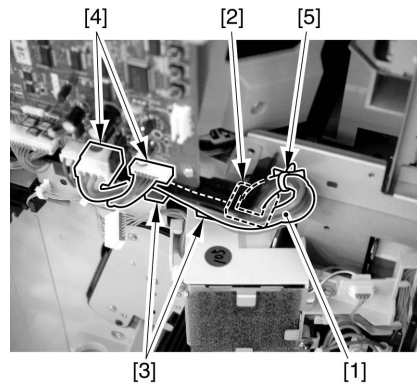
Left Cover

0002-8122

- 1) Remove the 2 screws [1] and the self-tapping screw (small) [2]; then, detach the finisher left cover [3].



F-4-354



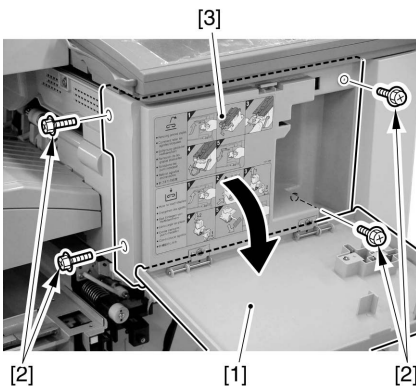
F-4-356

4.4.7.5 Removing the Finisher

Front Cover

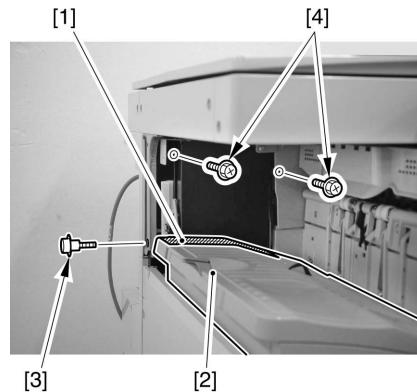
0003-0280

- 1) Open the finisher front cover [1].
- 2) Remove the 4 screws [2], and detach the finisher front cover [3].



F-4-355

- 4) Press the area of the tray indicated by shading [1] to move down the tray (if it is in up position).
- 5) Remove the stepped screw [3] and the 2 other screws [4]. (The use of a long screwdriver is recommended.)



F-4-357

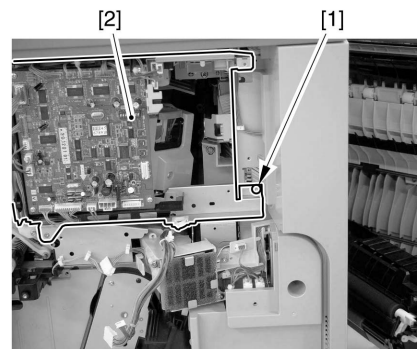
4.4.7.6 Detaching from the

Host Machine

0002-8160

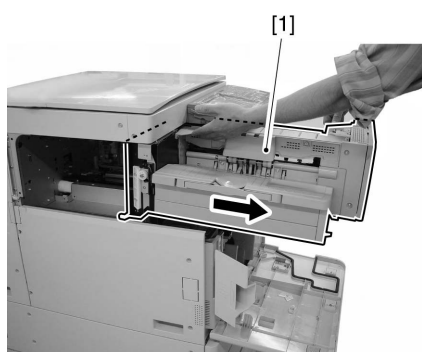
- 1) Remove the reuse band [5].
- 2) Disconnect the 2 connectors [4] of the communication harness.
- 3) Free the communication harness [1] from the wire saddle [2] of the finisher and the cable guide [3].

- 6) Remove the screw (M3x8) [1], and release the finisher assembly [2].



F-4-358

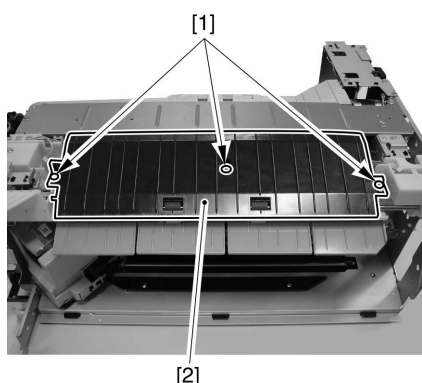
- 7) Pull the finisher [1] to detach it from the machine while holding it level.



F-4-359

4.4.7.7 Removing the Reversing Guide 0002-8398

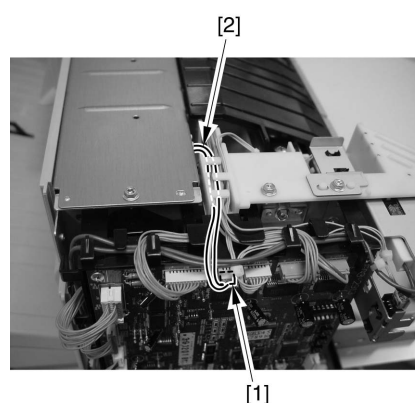
- 1) Remove the 3 self-tapping screws, and detach the reversing guide [2].



F-4-360

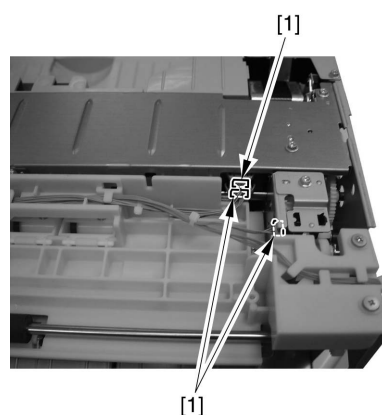
4.4.7.8 Removing the Upper Guide Assembly 0001-1374

- 1) Disconnect the connector [1], and free the cable [2] from the cable guide.



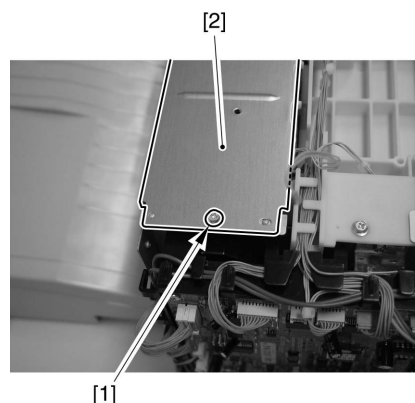
F-4-361

- 2) Disconnect the 3 connectors [1].

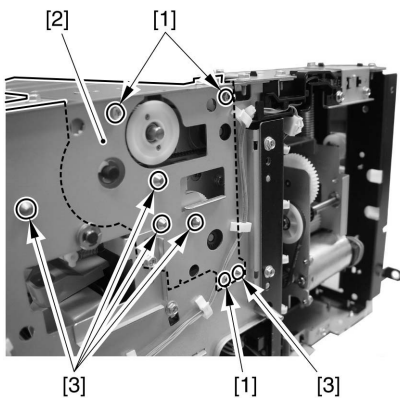


F-4-362

- 3) Remove the 4 screws [1], and detach the upper guide assembly [2].



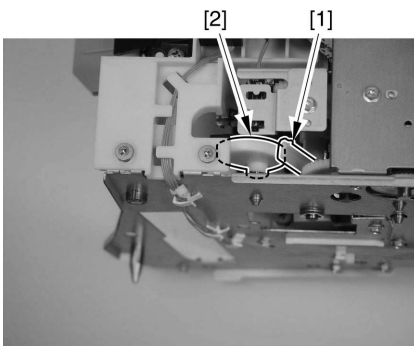
F-4-363



F-4-364

⚠ To facilitate detachment of the upper guide assembly, do so while freeing the 5 bosses [3].

⚠ When mounting the upper guide assembly, be sure that the drive cam [2] is found under the return belt arm [1].



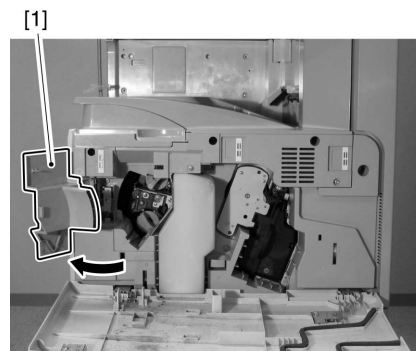
F-4-365

4.4.8 Stack Delivery Roller

4.4.8.1 Removing the Toner Bottle Retainer

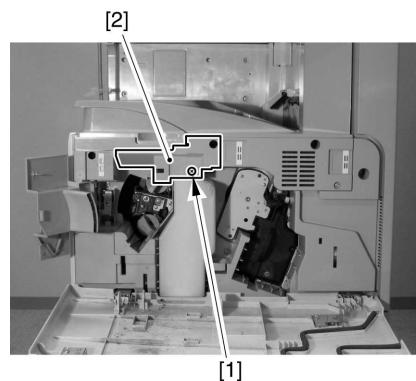
0002-7918

- 1) Open the front cover.
- 2) Open the toner container access cover [1].



F-4-366

- 3) Remove the TP screw [1], and detach the waste toner bottle retainer [2].

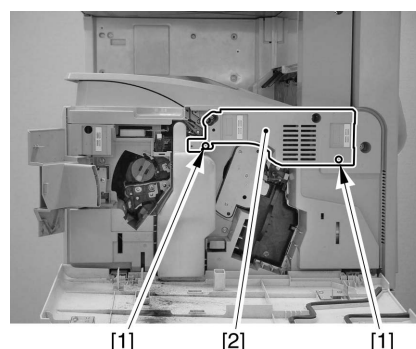


F-4-367

4.4.8.2 Removing the Front Inside Cover (middle)

0002-7959

- 1) Remove the 2 screws [1], and detach the front inside cover (middle) [2].



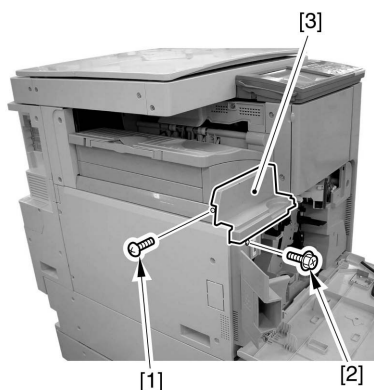
F-4-368

4.4.8.3 Removing the Finisher

Tray Front Cover

0002-8073

- 1) Remove the self-tapping screw (small) [1] and the other screw [2]; then, detach the finisher tray front cover [3].



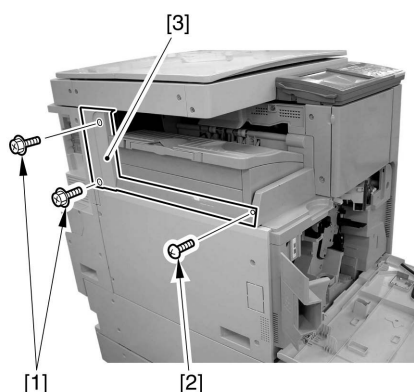
F-4-369

4.4.8.4 Removing the Finisher

Left Cover

0002-8123

- 1) Remove the 2 screws [1] and the self-tapping screw (small) [2]; then, detach the finisher left cover [3].



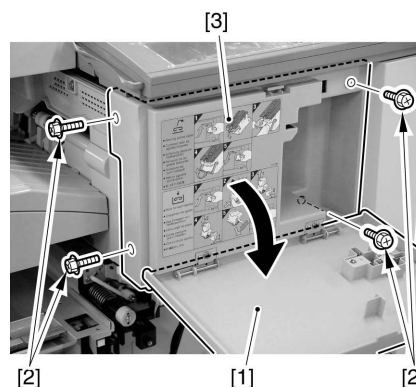
F-4-370

4.4.8.5 Removing the Finisher

Front Cover

0003-0281

- 1) Open the finisher front cover [1].
- 2) Remove the 4 screws [2], and detach the finisher front cover [3].

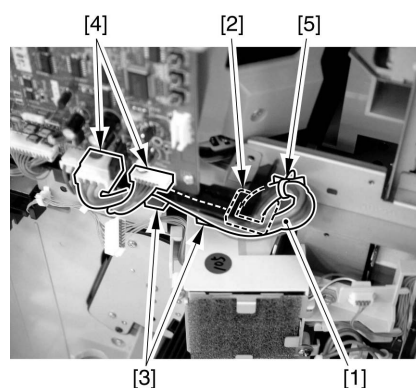


F-4-371

4.4.8.6 Detaching from the Host Machine

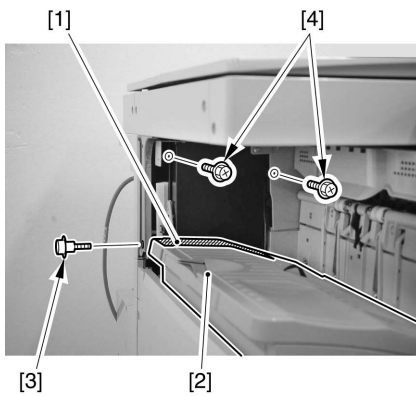
0002-8161

- 1) Remove the reuse band [5].
- 2) Disconnect the 2 connectors [4] of the communication harness.
- 3) Free the communication harness [1] from the wire saddle [2] of the finisher and the cable guide [3].



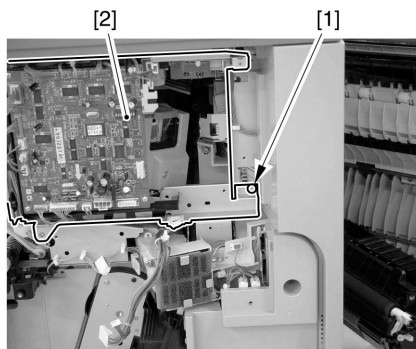
F-4-372

- 4) Press the area of the tray indicated by shading [1] to move down the tray (if it is in up position).
- 5) Remove the stepped screw [3] and the 2 other screws [4]. (The use of a long screwdriver is recommended.)



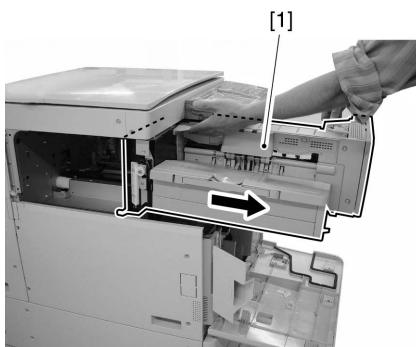
F-4-373

- 6) Remove the screw (M3x8) [1], and release the finisher assembly [2].



F-4-374

- 7) Pull the finisher [1] to detach it from the machine while holding it level.



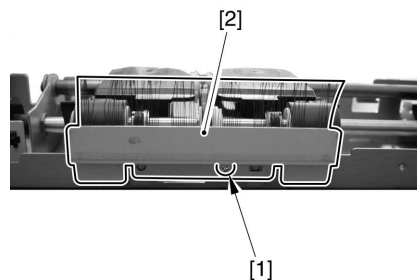
F-4-375

4.4.8.7 Removing the Stack Delivery Roller

0001-1397

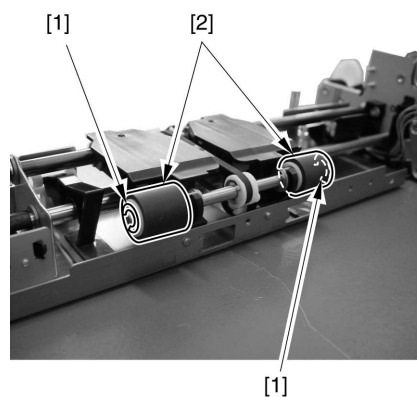
- 1) Remove the screw [1], and detach the static

eliminator assembly [2].



F-4-376

- 2) Remove the 2 E-rings [1], and detach the 2 stack delivery rollers [2].



F-4-377

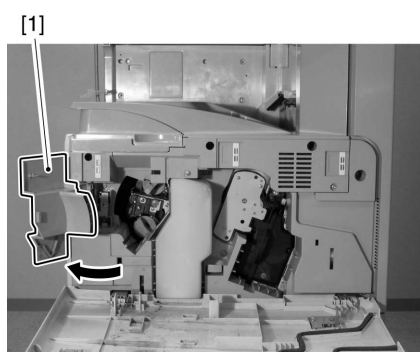
4.4.9 Process Tray Assembly

4.4.9.1 Removing the Toner

Bottle Retainer

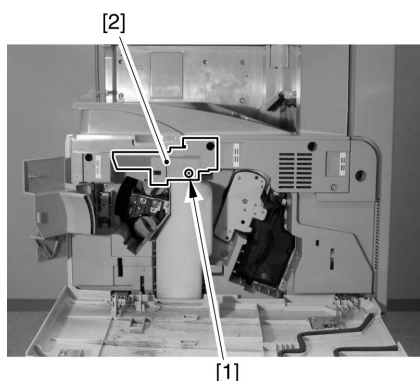
0002-7892

- 1) Open the front cover.
- 2) Open the toner container access cover [1].



F-4-378

- 3) Remove the TP screw [1], and detach the waste toner bottle retainer [2].



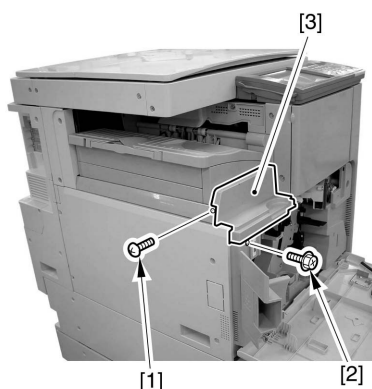
F-4-379

4.4.9.2 Removing the Finisher

Tray Front Cover

0002-8074

- 1) Remove the self-tapping screw (small) [1] and the other screw [2]; then, detach the finisher tray front cover [3].



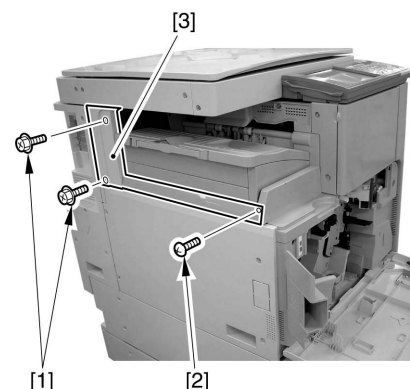
F-4-380

4.4.9.3 Removing the Finisher

Left Cover

0002-8124

- 1) Remove the 2 screws [1] and the self-tapping screw (small) [2]; then, detach the finisher left cover [3].



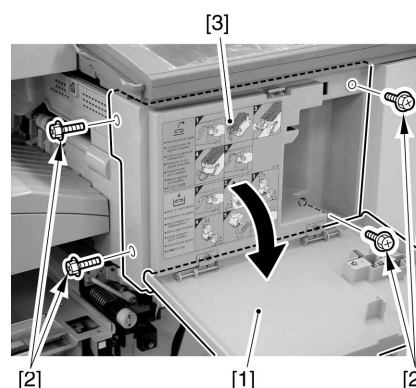
F-4-381

4.4.9.4 Removing the Finisher

Front Cover

0003-0283

- 1) Open the finisher front cover [1].
2) Remove the 4 screws [2], and detach the finisher front cover [3].



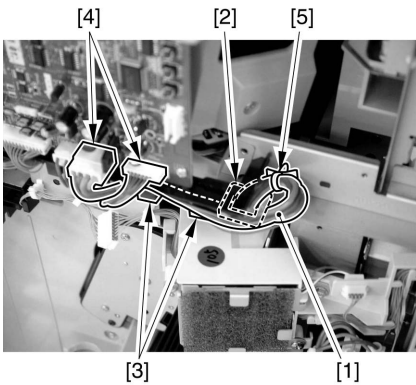
F-4-382

4.4.9.5 Detaching from the

Host Machine

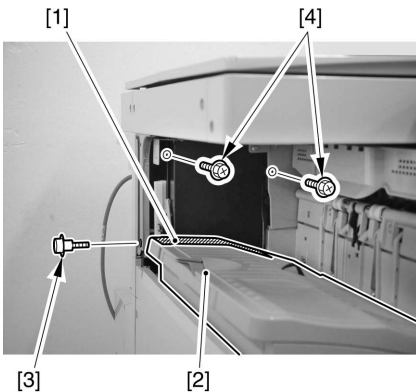
0002-8162

- 1) Remove the reuse band [5].
2) Disconnect the 2 connectors [4] of the communication harness.
3) Free the communication harness [1] from the wire saddle [2] of the finisher and the cable guide [3].



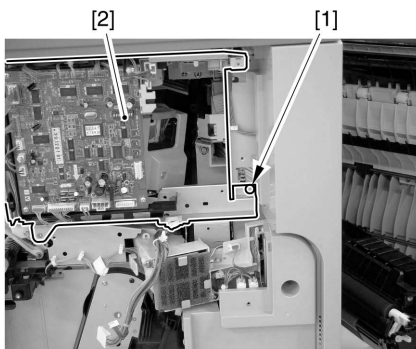
F-4-383

- 4) Press the area of the tray indicated by shading [1] to move down the tray (if it is in position).
- 5) Remove the stepped screw [3] and the 2 other screws [4]. (The use of a long screwdriver is recommended.)



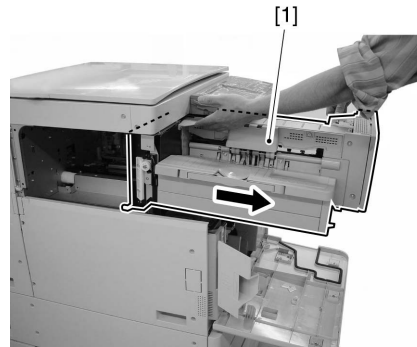
F-4-384

- 6) Remove the screw (M3x8) [1], and release the finisher assembly [2].



F-4-385

- 7) Pull the finisher [1] to detach it from the machine while holding it level.



F-4-386

4.4.9.6 Removing the Stapler

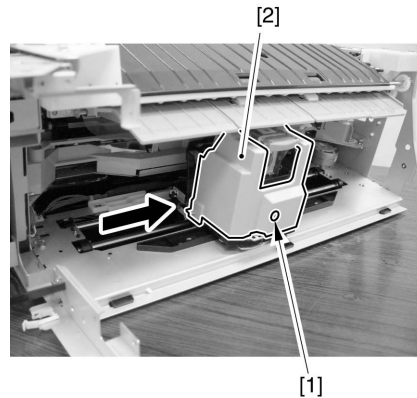
Assembly

0002-8401

- 1) Move the stapler unit to the middle of the stapler rail.

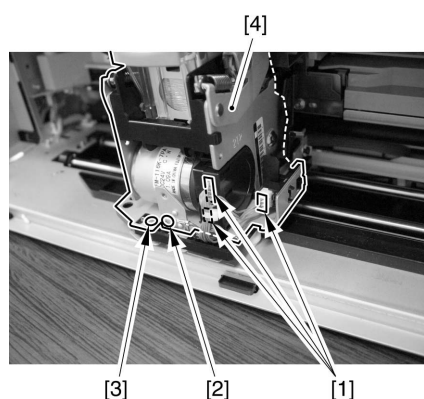
⚠ When relocating the stapler unit, be sure to hold it by the center of its rotation.

- 2) Remove the screw [1], and detach the cover [2].



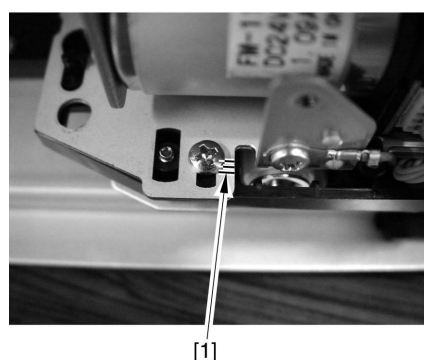
F-4-387

- 3) Disconnect the 3 connectors [1].
- 4) Remove the screw (M3x6) [3], and detach the grounding wire.
- 5) Remove the screw (M3x12) [3], and detach the stapler [4] together with the stapler base.



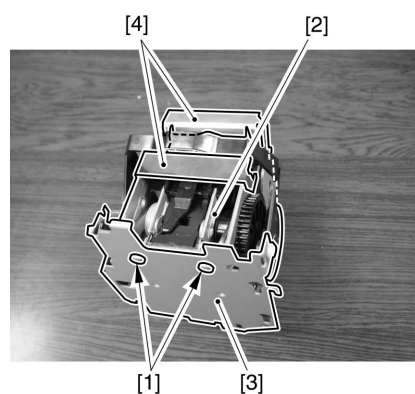
F-4-388

⚠ Before detaching the stapler base, take note of the line marking. Be sure to put it back on where indicated by the marking.



F-4-389

- 6) Remove the 2 screws [1], and detach the stapler [2] from the stapler base [3].
- 7) Detach the guide plate (upper, lower) [4] from the jaw of the stapler.

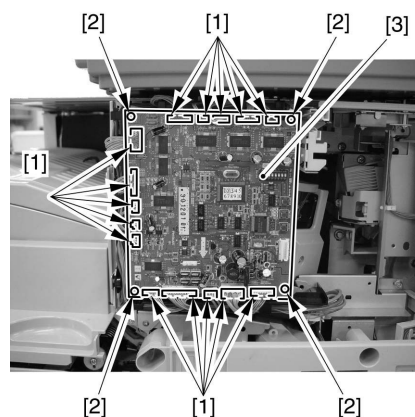


F-4-390

4.4.9.7 Removing the Finisher Controller PCB

0002-8200

- 1) Disconnect the 5 connectors [1], and remove the 4 screws [2]; then, detach the finisher controller PCB [3].

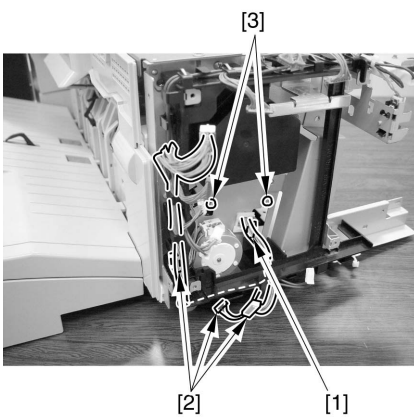


F-4-391

4.4.9.8 Removing the Processing Tray Assembly

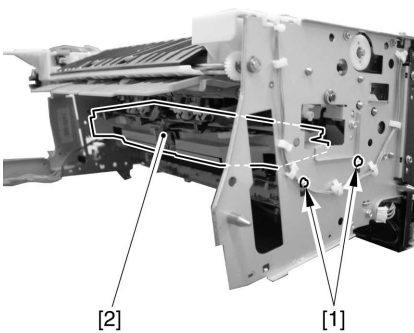
0001-1401

- 1) Open the wire saddle [1], and put the cable [2] inside of the finisher; then, remove the 2 screws [3].



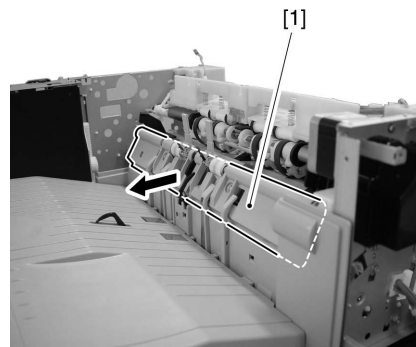
F-4-392

- 2) Remove the 2 screws [2], and detach the processing tray unit.



F-4-393

⚠ When mounting the processing tray, be sure to slide the lattice guide unit [1] to the left before doing so. This is to prevent the plastic sheet of the guide unit from interfering with the processing tray assembly.



F-4-394

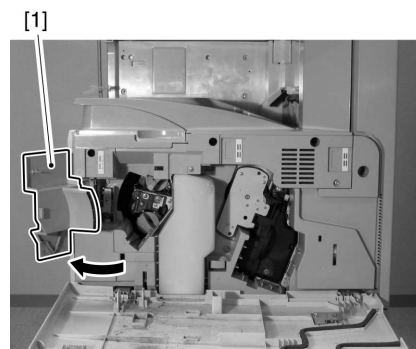
4.4.10 Return Belt Unit

4.4.10.1 Removing the Toner

Bottle Retainer

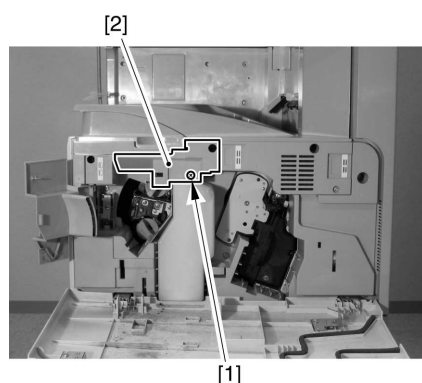
0002-7890

- 1) Open the front cover.
- 2) Open the toner container access cover [1].



F-4-395

- 3) Remove the TP screw [1], and detach the waste toner bottle retainer [2].

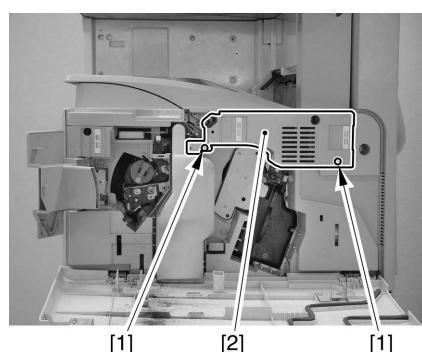


F-4-396

4.4.10.2 Removing the Front Inside Cover (middle)

0002-7961

- 1) Remove the 2 screws [1], and detach the front inside cover (middle) [2].

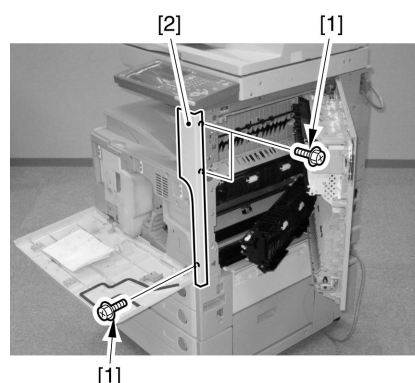


F-4-397

4.4.10.3 Remove the Support Cover (right)

0002-8890

- 1) Open the right door.
- 2) Open the front cover.
- 3) Remove the 3 screws [1], and detach the support cover (right) [2].

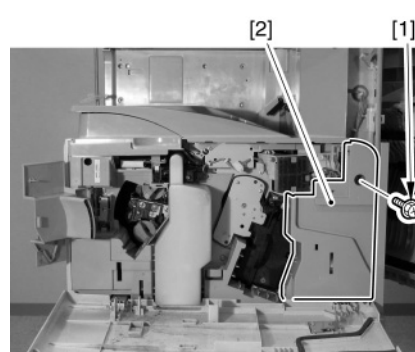


F-4-398

4.4.10.4 Removing the Front Inside Cover (right)

0002-8026

- 1) Remove the screw [1], and detach the inside front cover (right) [2].

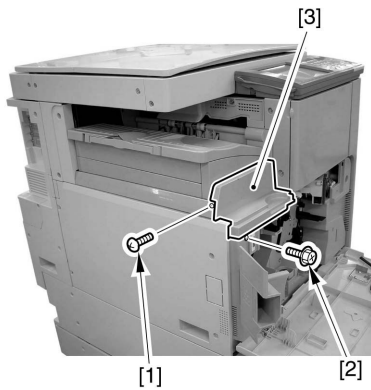


F-4-399

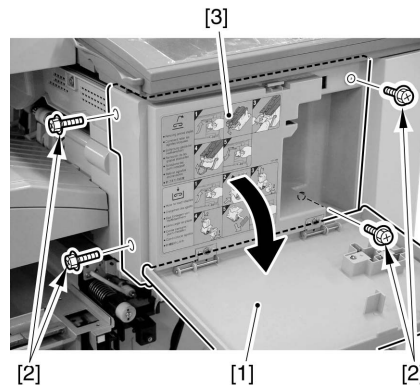
4.4.10.5 Removing the Finisher Tray Front Cover

0002-8077

- 1) Remove the self-tapping screw (small) [1] and the other screw [2]; then, detach the finisher tray front cover [3].



F-4-400

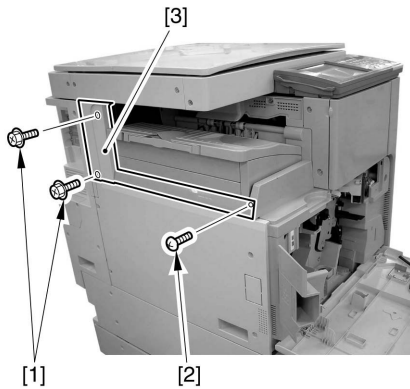


F-4-402

4.4.10.6 Removing the Finisher Left Cover

0002-8125

- 1) Remove the 2 screws [1] and the self-tapping screw (small) [2]; then, detach the finisher left cover [3].



F-4-401

4.4.10.7 Removing the Finisher Front Cover

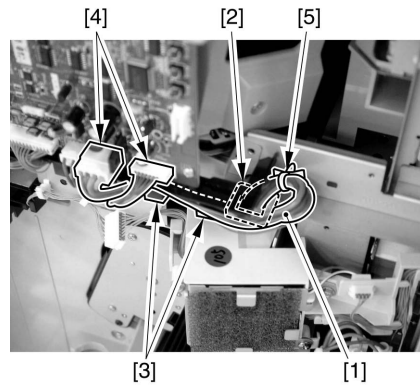
0003-0285

- 1) Open the finisher front cover [1].
- 2) Remove the 4 screws [2], and detach the finisher front cover [3].

4.4.10.8 Detaching from the Host Machine

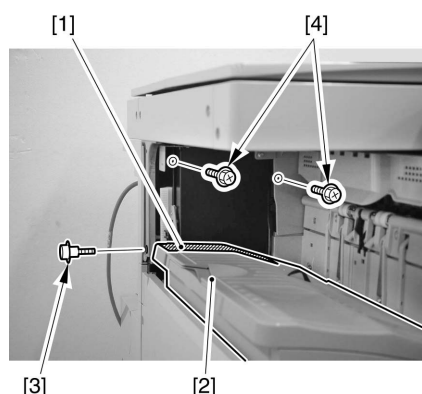
0002-8163

- 1) Remove the reuse band [5].
- 2) Disconnect the 2 connectors [4] of the communication harness.
- 3) Free the communication harness [1] from the wire saddle [2] of the finisher and the cable guide [3].



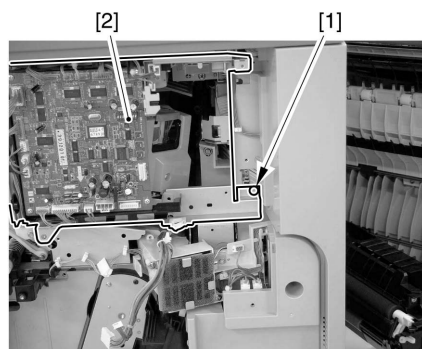
F-4-403

- 4) Press the area of the tray indicated by shading [1] to move down the tray (if it is in up position).
- 5) Remove the stepped screw [3] and the 2 other screws [4]. (The use of a long screwdriver is recommended.)



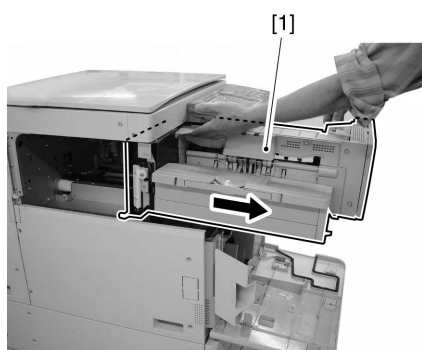
F-4-404

- 6) Remove the screw (M3x8) [1], and release the finisher assembly [2].



F-4-405

- 7) Pull the finisher [1] to detach it from the machine while holding it level.



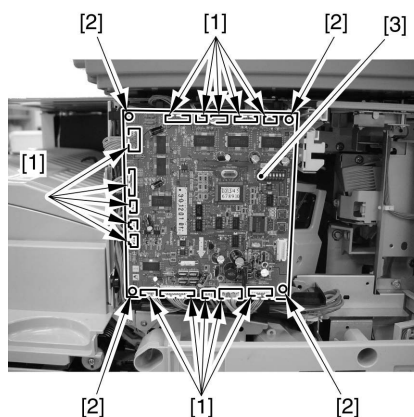
F-4-406

4.4.10.9 Removing the Finisher Controller PCB

0002-8201

- 1) Disconnect the 5 connectors [1], and remove the 4

screws [2]; then, detach the finisher controller PCB [3].

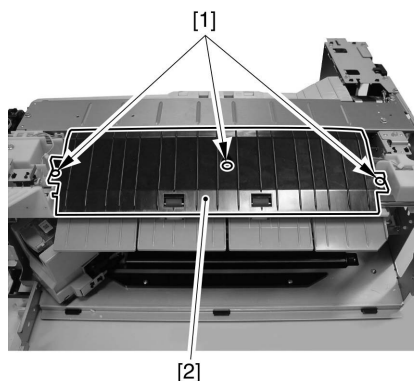


F-4-407

4.4.10.10 Removing the Reversing Guide

0002-8402

- 1) Remove the 3 self-tapping screws, and detach the reversing guide [2].

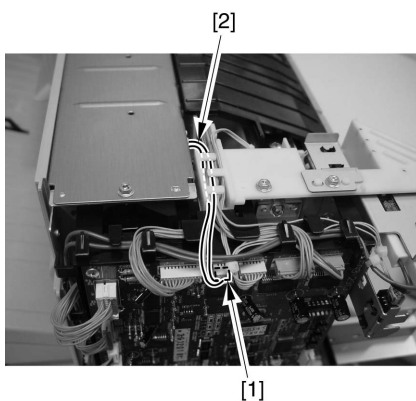


F-4-408

4.4.10.11 Removing the Upper Guide Assembly

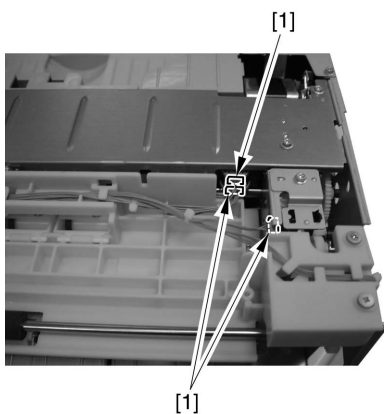
0002-8403

- 1) Disconnect the connector [1], and free the cable [2] from the cable guide.



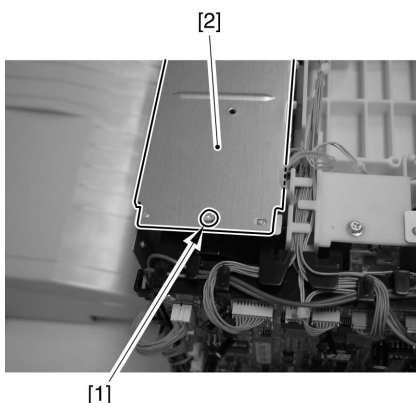
F-4-409

2) Disconnect the 3 connectors [1].

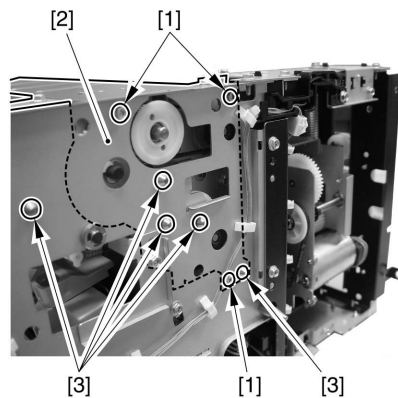


F-4-410

3) Remove the 4 screws [1], and detach the upper guide assembly [2].



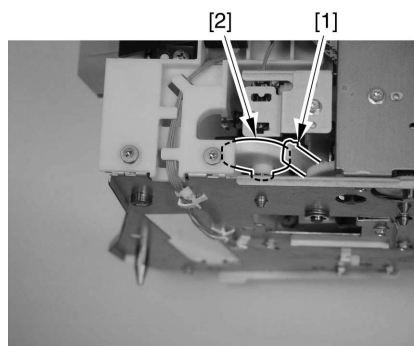
F-4-411



F-4-412

⚠ To facilitate detachment of the upper guide assembly, do so while freeing the 5 bosses [3].

⚠ When mounting the upper guide assembly, be sure that the drive cam [2] is found under the return belt arm [1].

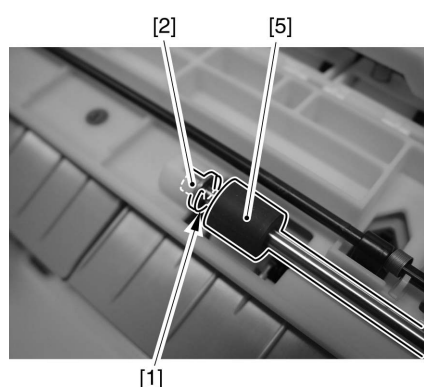


F-4-413

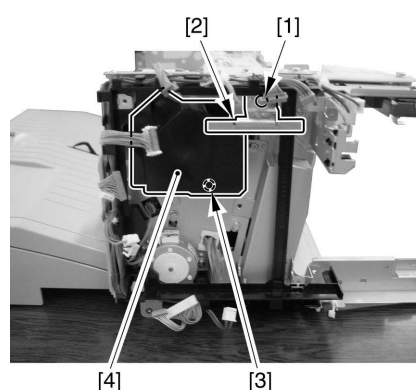
4.4.10.12 Removing the Delivery Roller

0002-8405

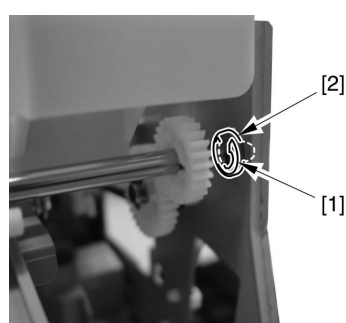
1) Remove the 2 E-rings [1] and the 2 bushings [2]; then, detach the delivery roller assembly [5].



F-4-414

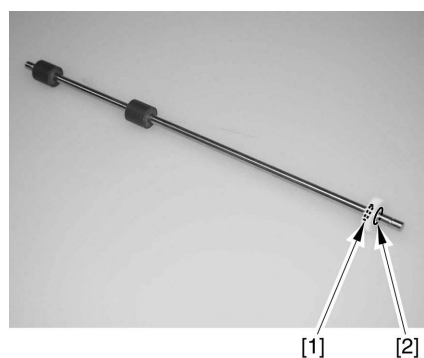


F-4-417



F-4-415

- 2) Remove the E-ring [1] from the delivery roller assembly; then, detach the gear and the pin [2].



F-4-416

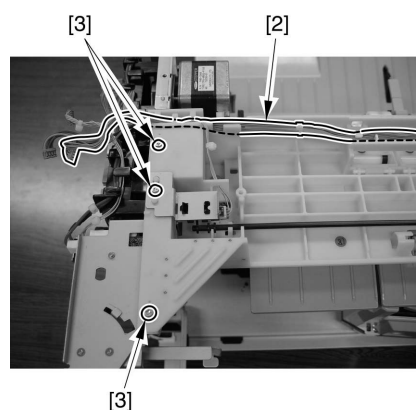
4.4.10.13 Removing the Return

Belt

0001-1413

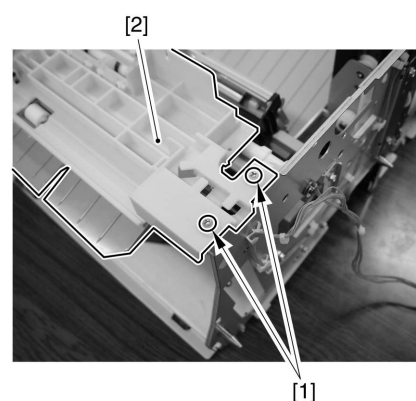
- 1) Remove the screw [1], and detach the plate [2].
- 2) Remove the screw [2], and detach the motor cover [4].

- 3) Remove the 3 screws [3].
- 4) Disconnect the connector [1], and free the cable [2] from the cable guide.



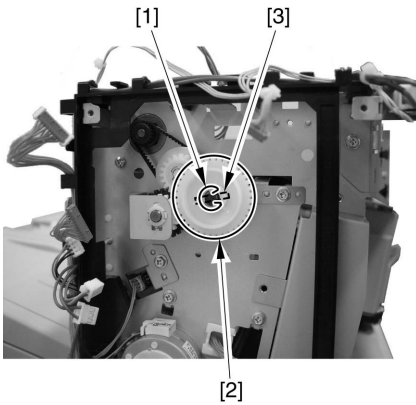
F-4-418

- 5) Remove the 2 screws [1], and detach the cover [2].



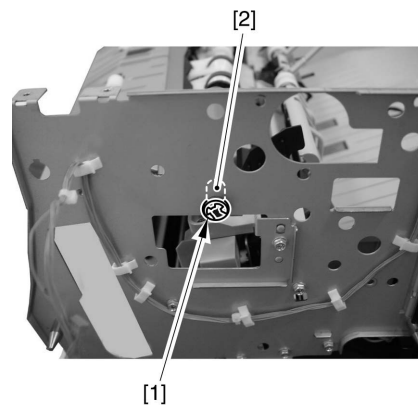
F-4-419

6) Remove the E-ring [1], and detach the gear [2].



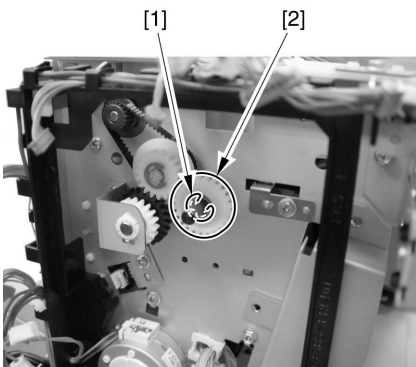
F-4-420

9) Remove the E-ring [1], and detach the bushing [2].



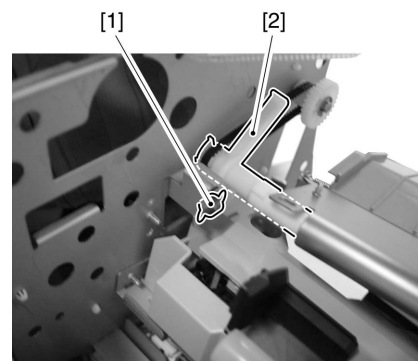
F-4-423

7) Remove the E-ring [1], and detach the gear [2].



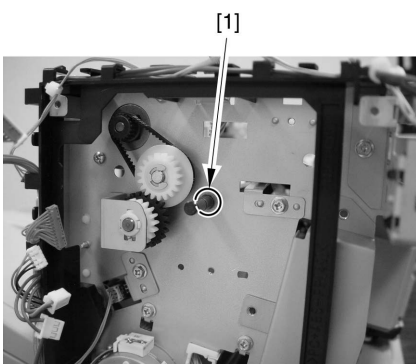
F-4-421

10) Remove the spring [1], and detach the return belt unit.



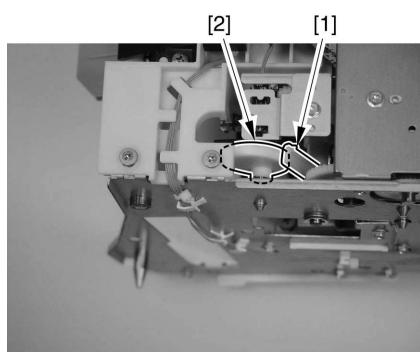
F-4-424

8) Remove the bushing [1].

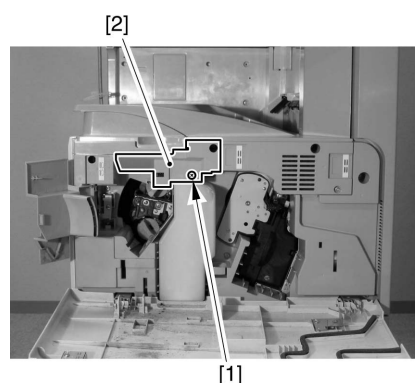


F-4-422

⚠ When mounting the upper guide assembly, be sure that the drive cam [2] is found under the return belt arm [1].



F-4-425



F-4-427

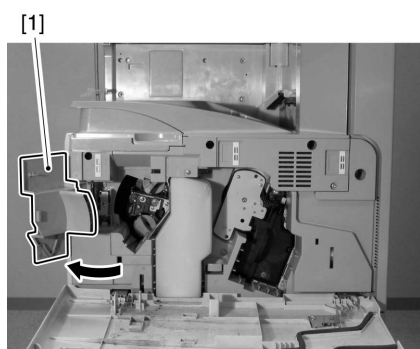
4.4.11 Delivery Roller

4.4.11.1 Removing the Toner

Bottle Retainer

0002-7894

- 1) Open the front cover.
- 2) Open the toner container access cover [1].



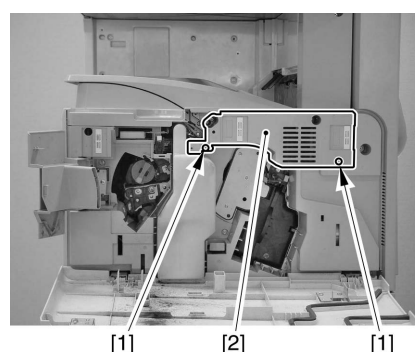
F-4-426

- 3) Remove the TP screw [1], and detach the waste toner bottle retainer [2].

4.4.11.2 Removing the Front Inside Cover (middle)

0002-7963

- 1) Remove the 2 screws [1], and detach the front inside cover (middle) [2].



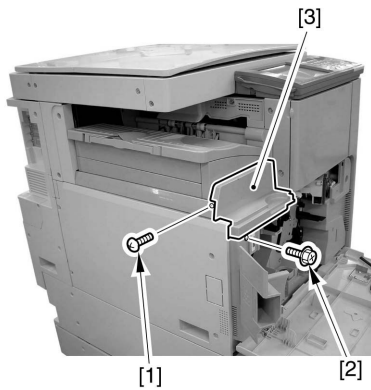
F-4-428

4.4.11.3 Removing the Finisher

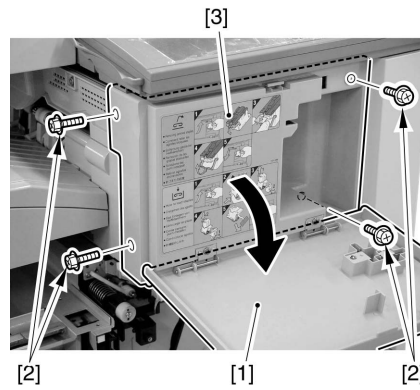
Tray Front Cover

0002-8078

- 1) Remove the self-tapping screw (small) [1] and the other screw [2]; then, detach the finisher tray front cover [3].



F-4-429



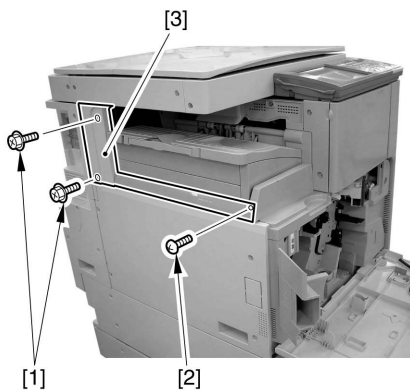
F-4-431

4.4.11.4 Removing the Finisher

Left Cover

0002-8126

- 1) Remove the 2 screws [1] and the self-tapping screw (small) [2]; then, detach the finisher left cover [3].



F-4-430

4.4.11.5 Removing the Finisher

Front Cover

0003-0286

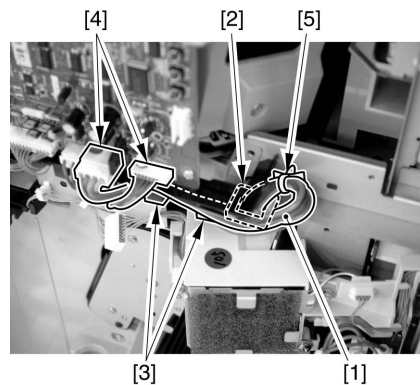
- 1) Open the finisher front cover [1].
- 2) Remove the 4 screws [2], and detach the finisher front cover [3].

4.4.11.6 Detaching from the

Host Machine

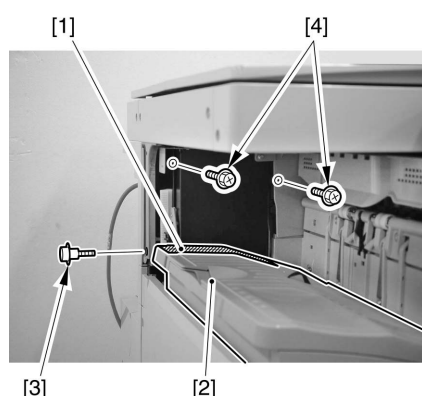
0002-8164

- 1) Remove the reuse band [5].
- 2) Disconnect the 2 connectors [4] of the communication harness.
- 3) Free the communication harness [1] from the wire saddle [2] of the finisher and the cable guide [3].



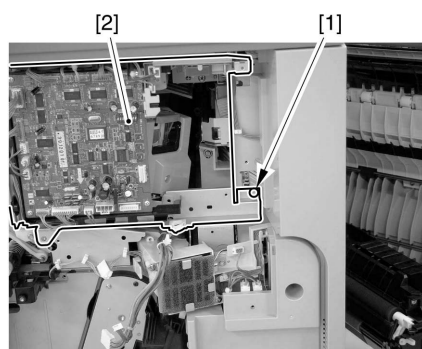
F-4-432

- 4) Press the area of the tray indicated by shading [1] to move down the tray (if it is in up position).
- 5) Remove the stepped screw [3] and the 2 other screws [4]. (The use of a long screwdriver is recommended.)



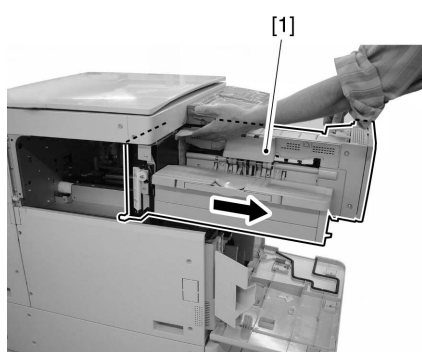
F-4-433

- 6) Remove the screw (M3x8) [1], and release the finisher assembly [2].



F-4-434

- 7) Pull the finisher [1] to detach it from the machine while holding it level.

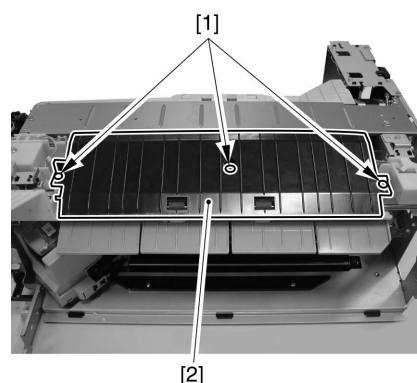


F-4-435

4.4.11.7 Removing the Reversing Guide 0002-8407

- 1) Remove the 3 self-tapping screws, and detach the

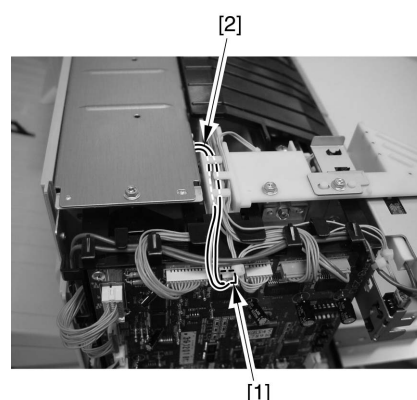
reversing guide [2].



F-4-436

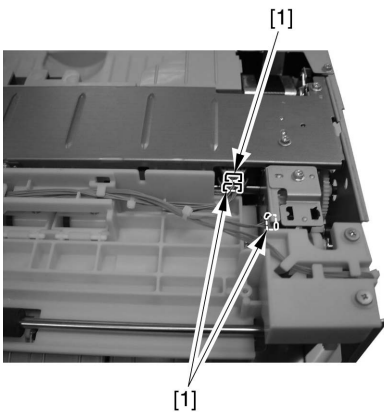
4.4.11.8 Removing the Upper Guide Assembly 0002-8406

- 1) Disconnect the connector [1], and free the cable [2] from the cable guide.



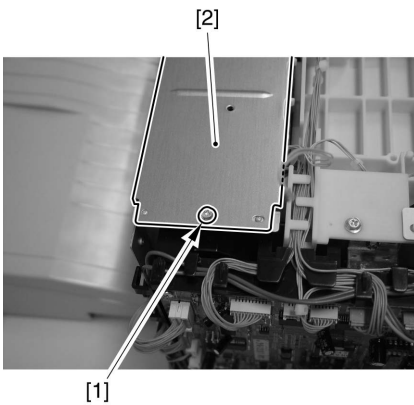
F-4-437

- 2) Disconnect the 3 connectors [1].

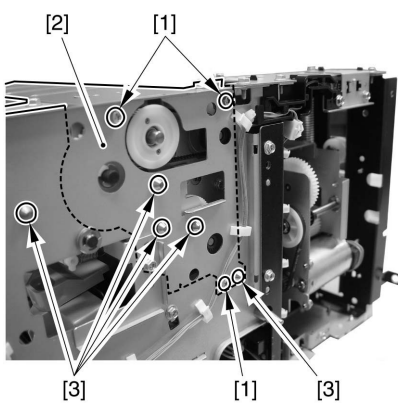


F-4-438

3) Remove the 4 screws [1], and detach the upper guide assembly [2].



F-4-439

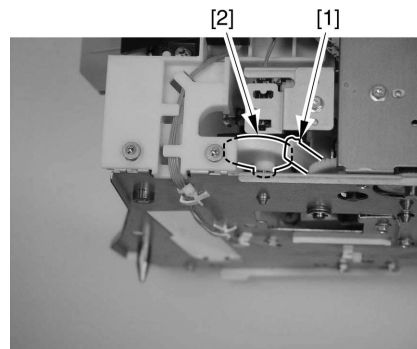


F-4-440

⚠ To facilitate detachment of the upper guide

assembly, do so while freeing the 5 bosses [3].

⚠ When mounting the upper guide assembly, be sure that the drive cam [2] is found under the return belt arm [1].

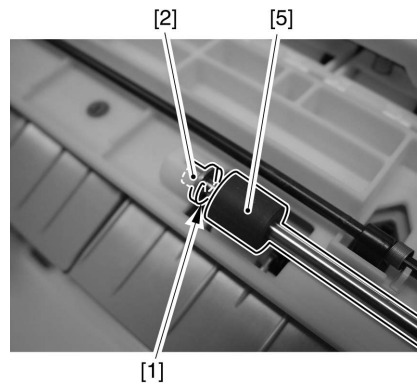


F-4-441

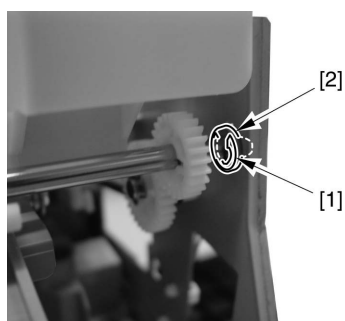
4.4.11.9 Removing the Delivery Roller

0001-1446

1) Remove the 2 E-rings [1] and the 2 bushings [2]; then, detach the delivery roller assembly [5].

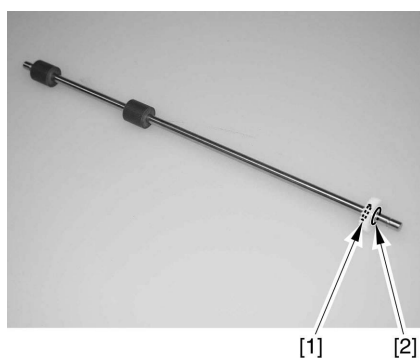


F-4-442



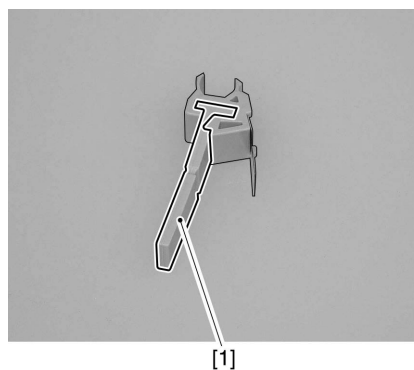
F-4-443

- 2) Remove the E-ring [1] from the delivery roller assembly; then, detach the gear and the pin [2].



F-4-444

- 2) Remove the paddle [1] from the paddle assembly.

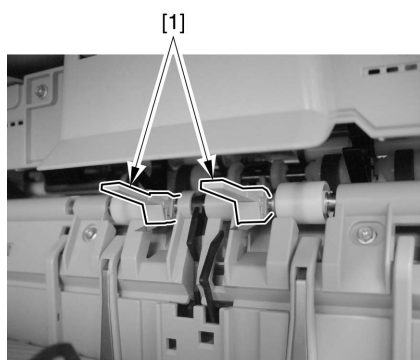


F-4-446

4.4.12 Paddle

4.4.12.1 Removing the Paddle 0001-1692

- 1) Rotate the paddle assembly, and detach the paddle [1].



F-4-445

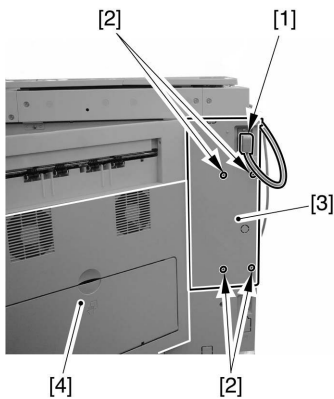
4.5 Electrical System

4.5.1 Delivery Sensor 2

4.5.1.1 Removing the Reader Unit Power Cable/Rear Right Cover

0002-9754

- 1) Disconnect the reader unit power cable [1].
- 2) Remove the 4 screws [2], and detach the rear right cover [3].
- 3) Open the right cover [4].

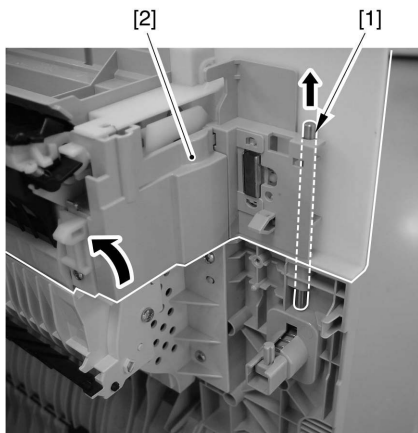


F-4-447

4.5.1.2 Removing the Relay Delivery Assembly

0002-9768

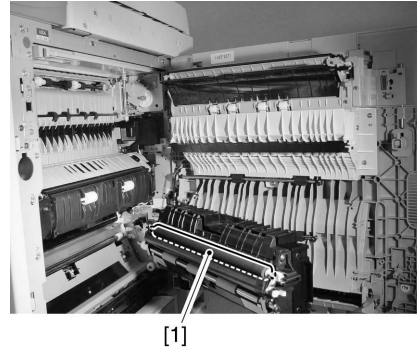
- 1) Remove the joint pin [1], and lift the relay delivery assembly [2] to separate it from the right door.



F-4-448

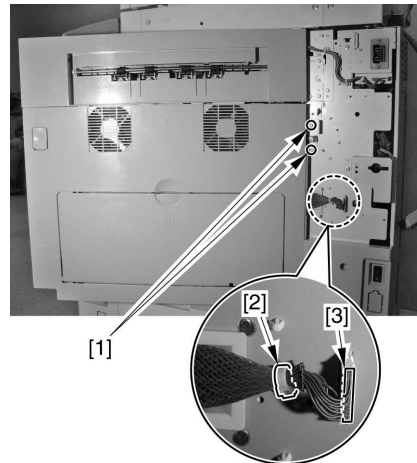
2)

⚠ When detaching the right door, be sure not to touch the secondary transfer outside roller [1].



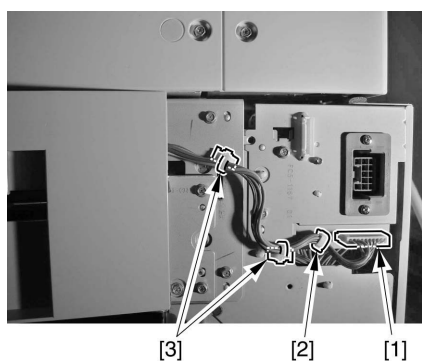
F-4-449

Remove the 2 screws [1], remove the reuse band [2], and disconnect the connector [3]; then, lift the right door to detach.



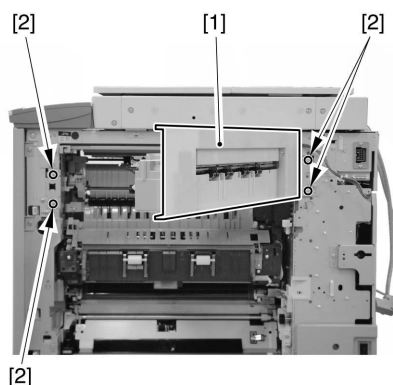
F-4-450

- 3) Disconnect the controller [1], and free the harness from the cable clamp [2].
- 4) Remove the 2 reuse bands [3].



F-4-451

- 5) Open the relay delivery assembly [1], and remove the 4 screws [2]; then, close the relay delivery assembly.



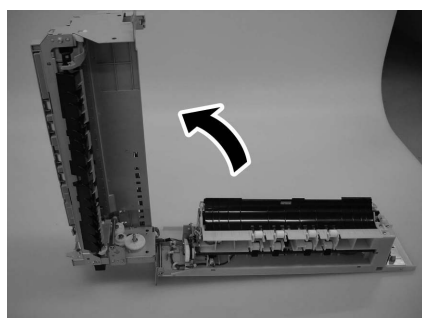
F-4-452

- 6) Detach the relay delivery assembly.

4.5.1.3 Removing the No. 2 Delivery Sensor

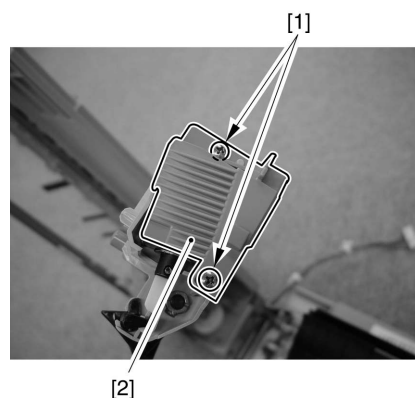
0002-9811

- 1) Open the relay delivery assembly.



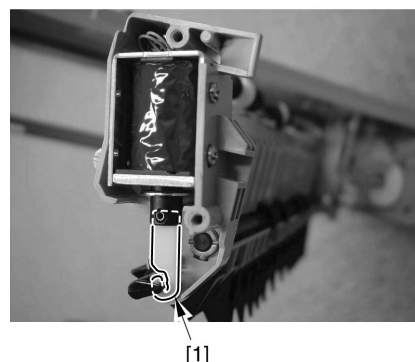
F-4-453

- 2) Remove the 2 screws [1], and detach the cover [2].



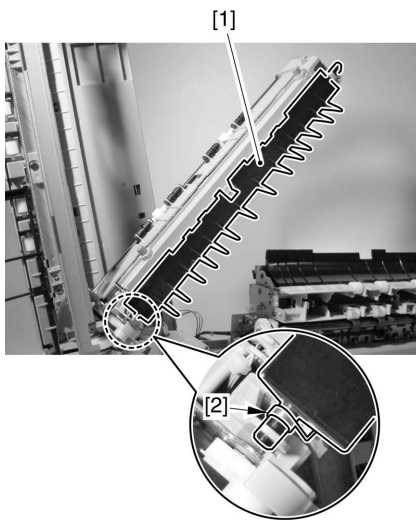
F-4-454

- 3) Remove the solenoid lever [1].



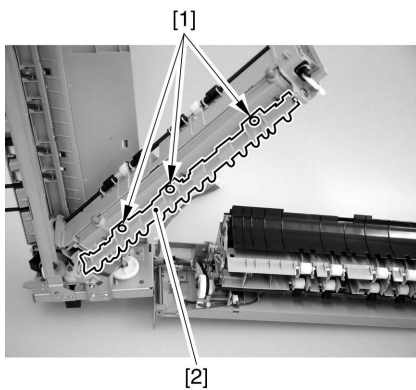
F-4-455

- 4) Remove the No. 1 delivery flapper [1] and the spring [2].



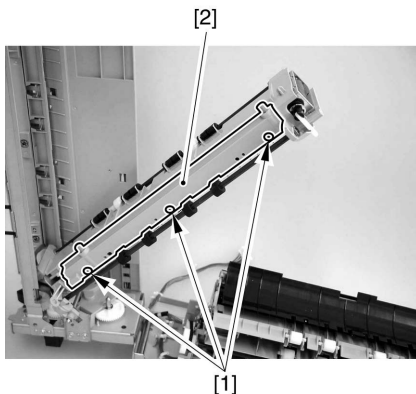
F-4-456

5) Remove the 3 screws [1], and detach the cover [2].



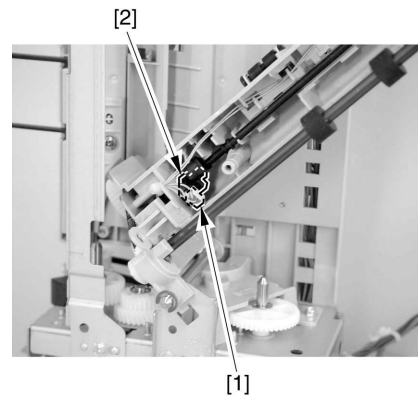
F-4-457

6) Remove the 3 screws [1], and detach the cover [2].



F-4-458

7) Disconnect the connector [1], and detach the No. 2 delivery sensor [2].



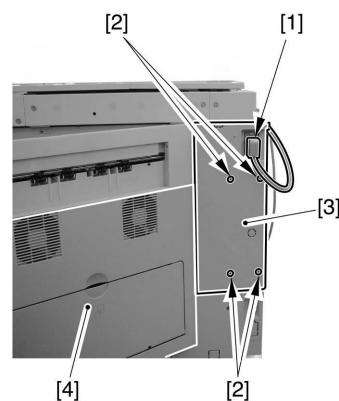
F-4-459

4.5.2 Reversal Sensor

4.5.2.1 Removing the Reader Unit Power Cable/Rear Right Cover

0002-9755

- 1) Disconnect the reader unit power cable [1].
- 2) Remove the 4 screws [2], and detach the rear right cover [3].
- 3) Open the right cover [4].

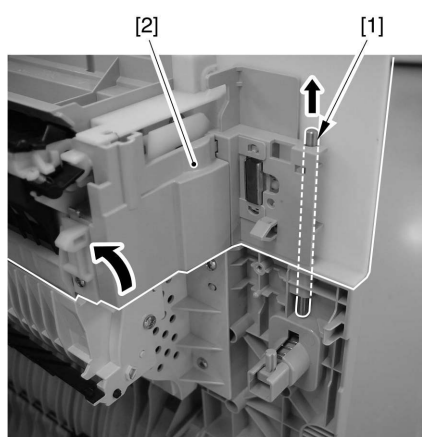


F-4-460

4.5.2.2 Removing the Relay Delivery Assembly

0002-9769

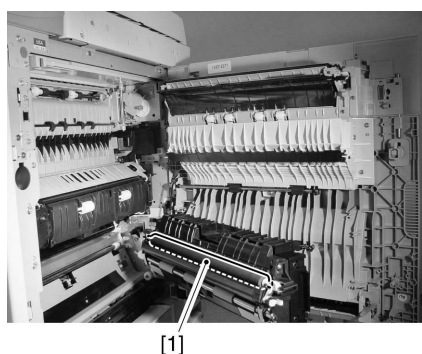
- 1) Remove the joint pin [1], and lift the relay delivery assembly [2] to separate it from the right door.



F-4-461

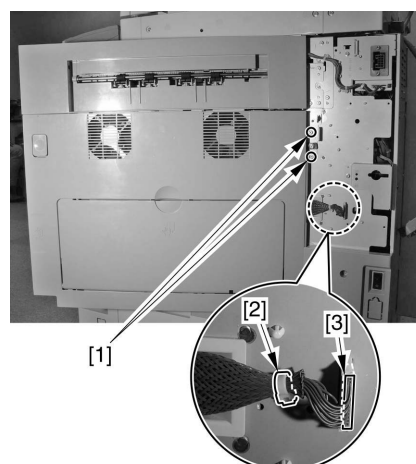
2)

⚠ When detaching the right door, be sure not to touch the secondary transfer outside roller [1].



F-4-462

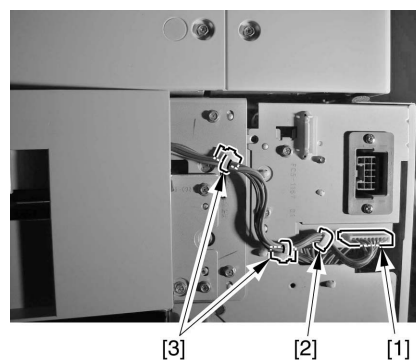
Remove the 2 screws [1], remove the reuse band [2], and disconnect the connector [3]; then, lift the right door to detach.



F-4-463

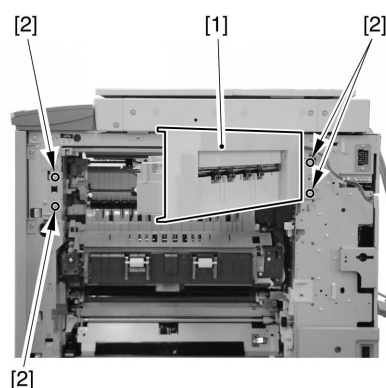
3) Disconnect the controller [1], and free the harness from the cable clamp [2].

4) Remove the 2 reuse bands [3].



F-4-464

5) Open the relay delivery assembly [1], and remove the 4 screws [2]; then, close the relay delivery assembly.



F-4-465

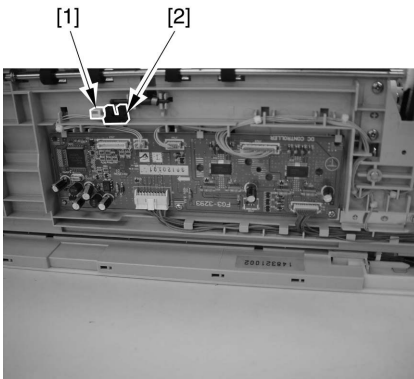
6) Detach the relay delivery assembly.

4.5.2.3 Removing the Reversal

Sensor

0002-9814

- 1) Disconnect the connector [1], and detach the reversal sensor [2].



F-4-466

4.5.3 Duplexing Inlet Sensor

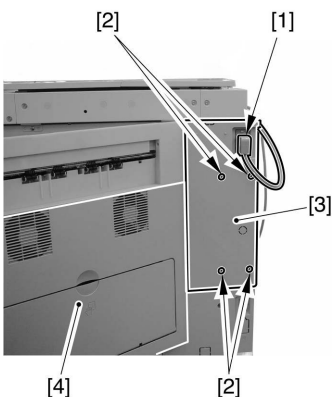
4.5.3.1 Removing the Reader

Unit Power Cable/Rear Right

Cover

0002-9756

- 1) Disconnect the reader unit power cable [1].
- 2) Remove the 4 screws [2], and detach the rear right cover [3].
- 3) Open the right cover [4].



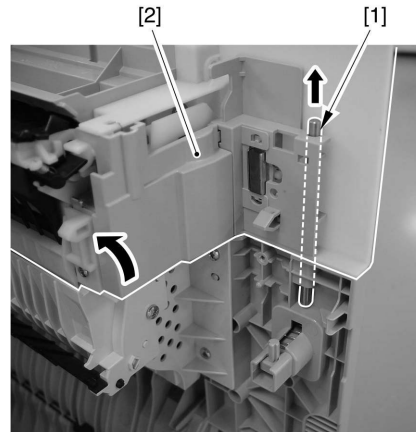
F-4-467

4.5.3.2 Removing the Relay

Delivery Assembly

0002-9770

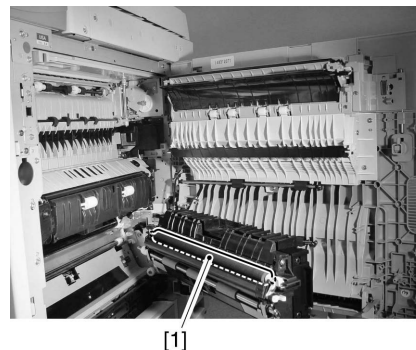
- 1) Remove the joint pin [1], and lift the relay delivery assembly [2] to separate it from the right door.



F-4-468

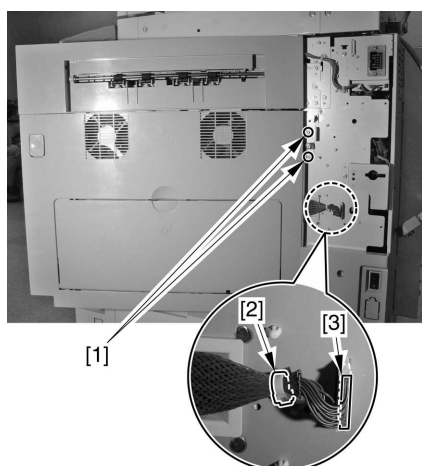
2)

⚠ When detaching the right door, be sure not to touch the secondary transfer outside roller [1].



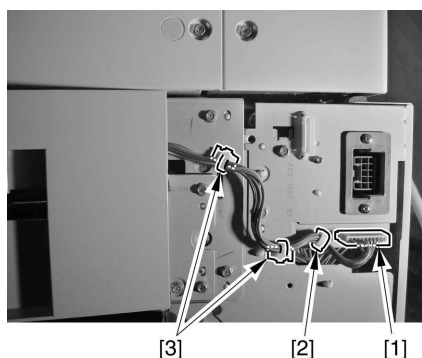
F-4-469

Remove the 2 screws [1], remove the reuse band [2], and disconnect the connector [3]; then, lift the right door to detach.



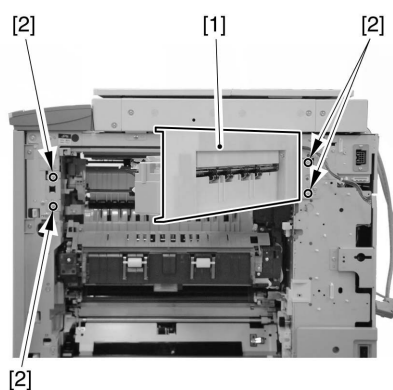
F-4-470

- 3) Disconnect the controller [1], and free the harness from the cable clamp [2].
- 4) Remove the 2 reuse bands [3].



F-4-471

- 5) Open the relay delivery assembly [1], and remove the 4 screws [2]; then, close the relay delivery assembly.



F-4-472

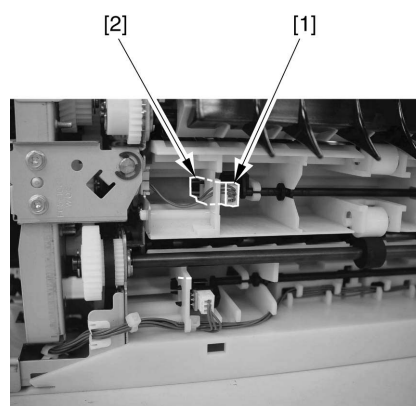
- 6) Detach the relay delivery assembly.

4.5.3.3 Removing the Duplex

Inlet Sensor

0002-9816

- 1) Disconnect the connect [1], and detach the duplex inlet sensor [2].



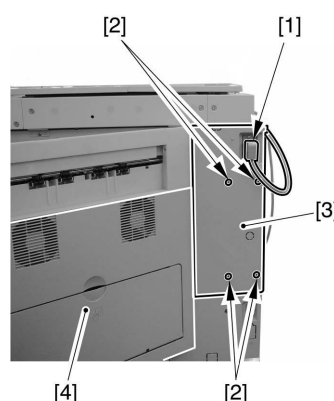
F-4-473

4.5.4 Delivery Sensor 3

4.5.4.1 Removing the Reader Unit Power Cable/Rear Right Cover

0002-9757

- 1) Disconnect the reader unit power cable [1].
- 2) Remove the 4 screws [2], and detach the rear right cover [3].
- 3) Open the right cover [4].



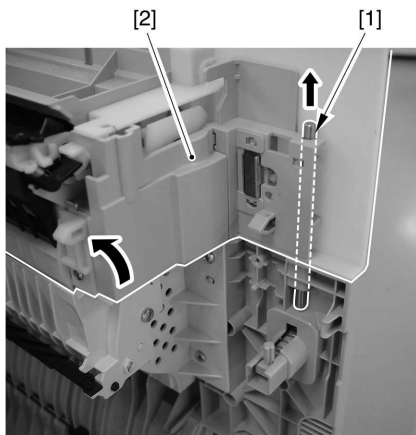
F-4-474

4.5.4.2 Removing the Relay

Delivery Assembly

0002-9771

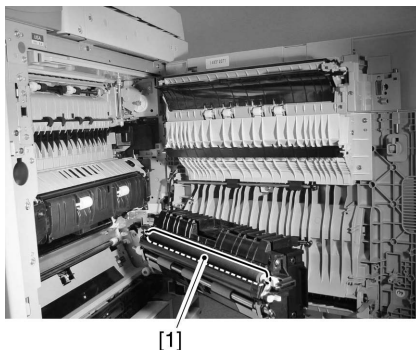
- 1) Remove the joint pin [1], and lift the relay delivery assembly [2] to separate it from the right door.



F-4-475

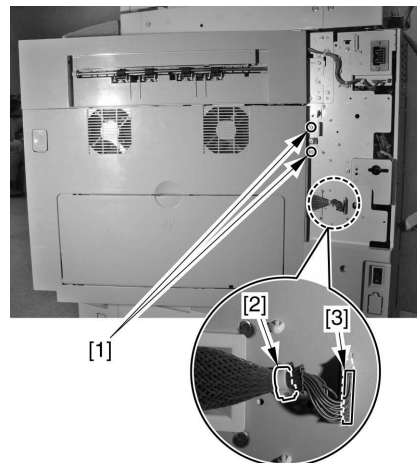
2)

⚠ When detaching the right door, be sure not to touch the secondary transfer outside roller [1].



F-4-476

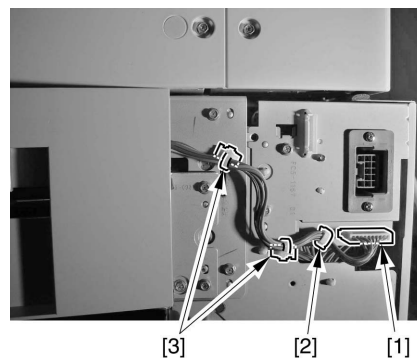
Remove the 2 screws [1], remove the reuse band [2], and disconnect the connector [3]; then, lift the right door to detach.



F-4-477

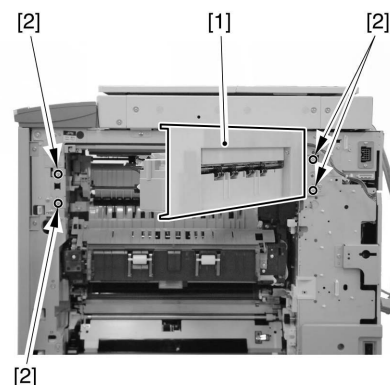
- 3) Disconnect the controller [1], and free the harness from the cable clamp [2].

- 4) Remove the 2 reuse bands [3].



F-4-478

- 5) Open the relay delivery assembly [1], and remove the 4 screws [2]; then, close the relay delivery assembly.



F-4-479

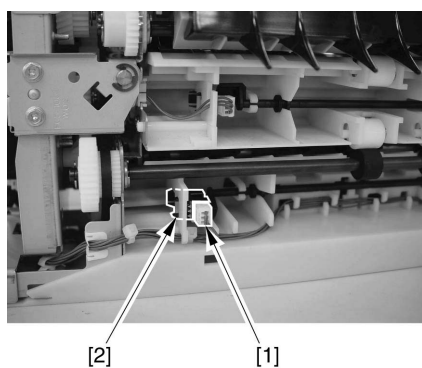
6) Detach the relay delivery assembly.

4.5.4.3 Removing the No. 3

Delivery Sensor

0002-9818

- 1) Disconnect the connector [1], and detach the No. 3 delivery sensor [2].



F-4-480

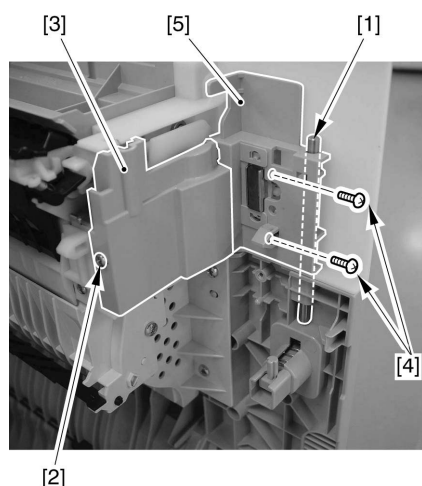
4.5.5 Delivery Solenoid 2

4.5.5.1 Removing the No. 2

Delivery Solenoid

0002-7208

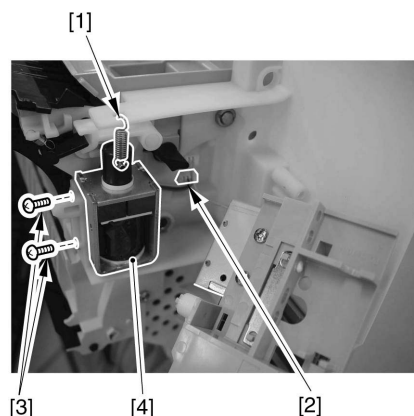
- 1) Open the right door, and remove the joint pin [1].
- 2) Loosen the screw [2]; and detach the cover [3].
Remove the 2 screws [4], and detach the cover [5].



F-4-481

- 3) Remove the spring [1], disconnect the connector [2], and remove the 2 screws [3]; then, detach the

No. 2 delivery solenoid [4].



F-4-482

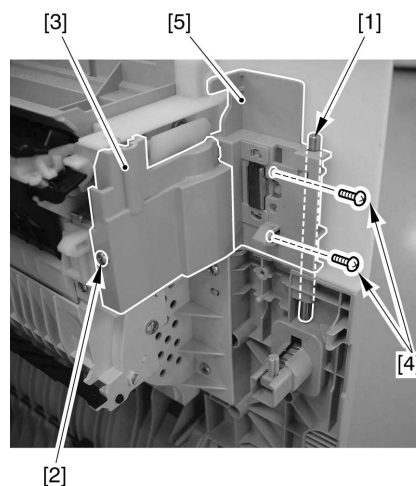
4.5.6 Delivery Solenoid 3

4.5.6.1 Remove the No. 3

Delivery Solenoid

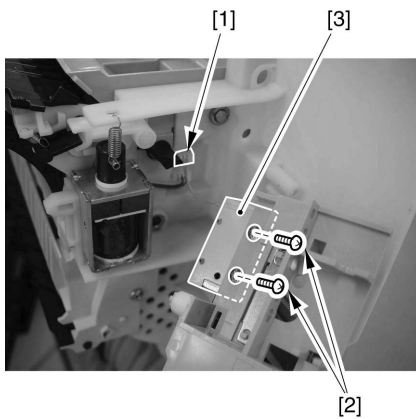
0002-7209

- 1) Open the right door, and remove the joint pin [1].
- 2) Loosen the screw [2], and detach the cover [3].
Remove the 2 screws [4], and detach the cover [5].



F-4-483

- 3) Disconnect the connector [1], and remove the 2 screws [2]; then, detach the No. 3 delivery solenoid [3].



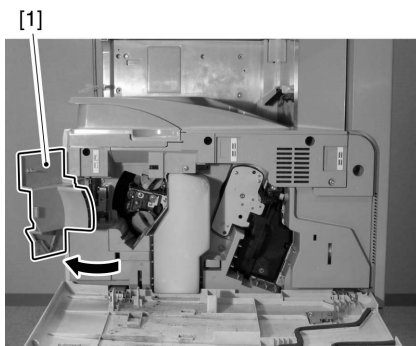
F-4-484

4.5.7 Stack Tray Paper Surface Sensor

4.5.7.1 Removing the Toner Bottle Retainer

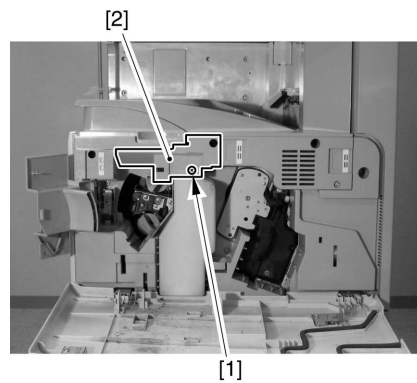
0002-7896

- 1) Open the front cover.
- 2) Open the toner container access cover [1].



F-4-485

- 3) Remove the TP screw [1], and detach the waste toner bottle retainer [2].

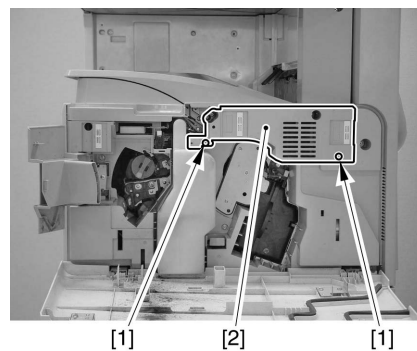


F-4-486

4.5.7.2 Removing the Front Inside Cover (middle)

0002-7964

- 1) Remove the 2 screws [1], and detach the front inside cover (middle) [2].

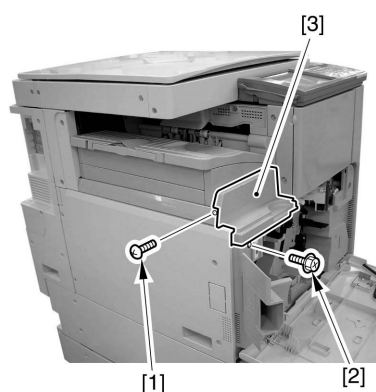


F-4-487

4.5.7.3 Removing the Finisher Tray Front Cover

0002-8079

- 1) Remove the self-tapping screw (small) [1] and the other screw [2]; then, detach the finisher tray front cover [3].

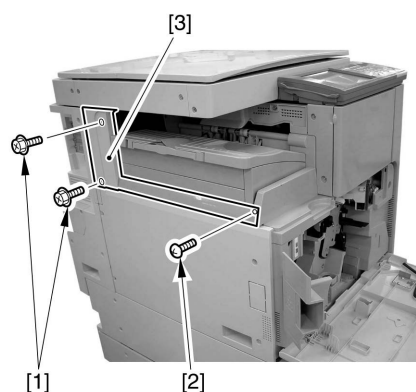


F-4-488

4.5.7.4 Removing the Finisher Left Cover

0002-8128

- 1) Remove the 2 screws [1] and the self-tapping screw (small) [2]; then, detach the finisher left cover [3].

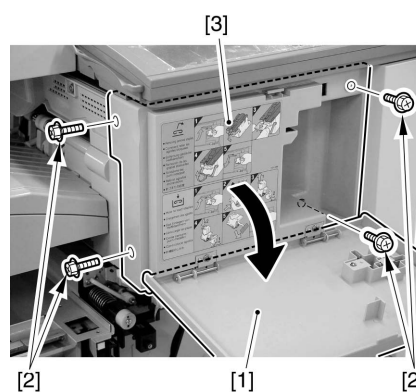


F-4-489

4.5.7.5 Removing the Finisher Front Cover

0003-0288

- 1) Open the finisher front cover [1].
- 2) Remove the 4 screws [2], and detach the finisher front cover [3].

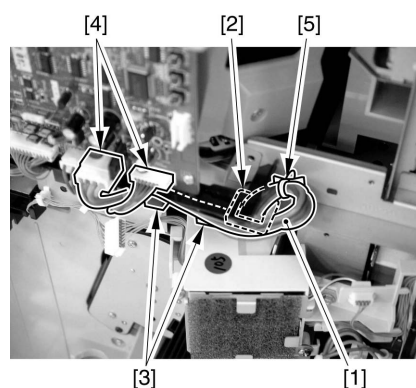


F-4-490

4.5.7.6 Detaching from the Host Machine

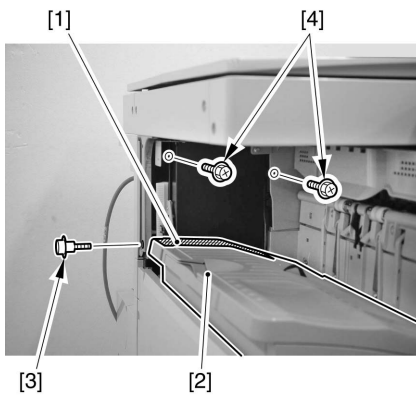
0002-8166

- 1) Remove the reuse band [5].
- 2) Disconnect the 2 connectors [4] of the communication harness.
- 3) Free the communication harness [1] from the wire saddle [2] of the finisher and the cable guide [3].



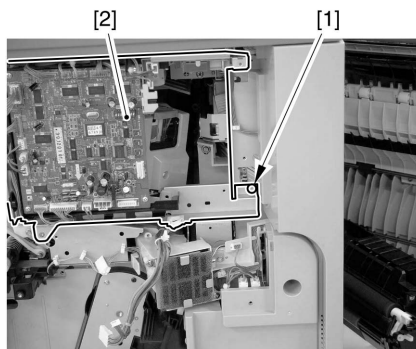
F-4-491

- 4) Press the area of the tray indicated by shading [1] to move down the tray (if it is in up position).
- 5) Remove the stepped screw [3] and the 2 other screws [4]. (The use of a long screwdriver is recommended.)



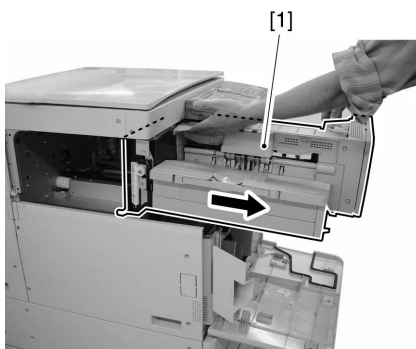
F-4-492

- 6) Remove the screw (M3x8) [1], and release the finisher assembly [2].



F-4-493

- 7) Pull the finisher [1] to detach it from the machine while holding it level.



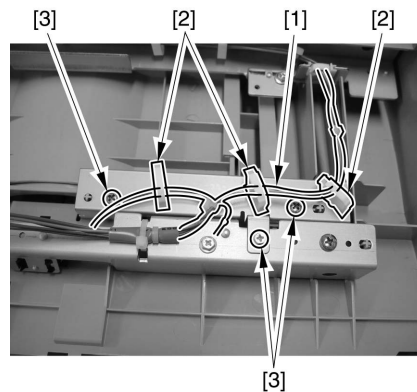
F-4-494

4.5.7.7 Removing the Stack Tray Paper Surface Sensor

0001-1405

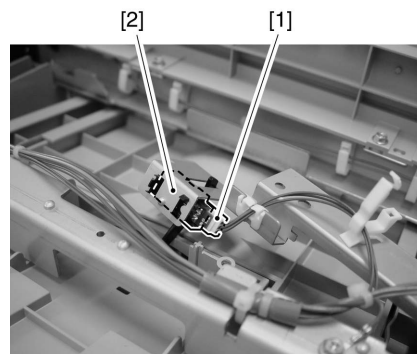
- 1) Turn over the finisher assembly.

- 2) Free the cable [1] from the 3 wire saddles [2], and remove the 3 screws [3].



F-4-495

- 3) Disconnect the connector [1], and detach the sensor [2].



F-4-496

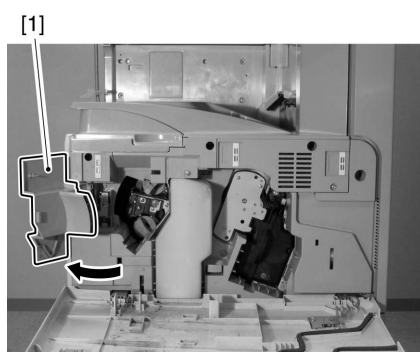
4.5.8 Stack Tray Lower Paper Sensor

4.5.8.1 Removing the Toner

Bottle Retainer

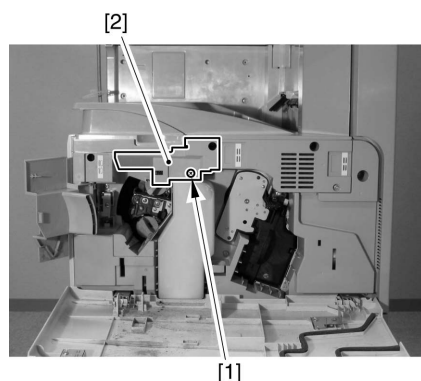
0002-7898

- 1) Open the front cover.
- 2) Open the toner container access cover [1].



F-4-497

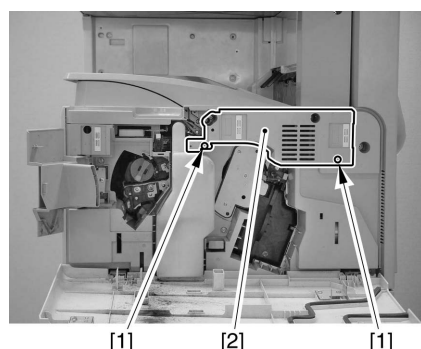
- 3) Remove the TP screw [1], and detach the waste toner bottle retainer [2].



F-4-498

4.5.8.2 Removing the Front Inside Cover (middle) 0002-7966

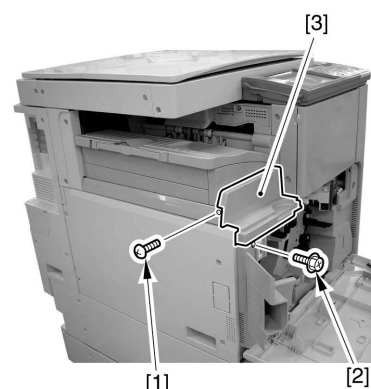
- 1) Remove the 2 screws [1], and detach the front inside cover (middle) [2].



F-4-499

4.5.8.3 Removing the Finisher Tray Front Cover 0002-8080

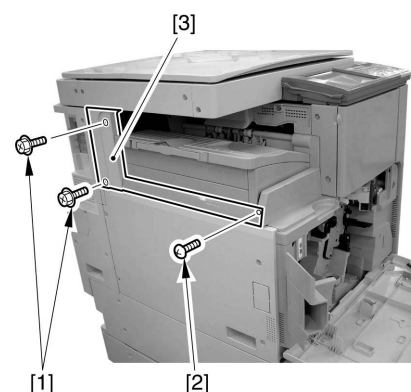
- 1) Remove the self-tapping screw (small) [1] and the other screw [2]; then, detach the finisher tray front cover [3].



F-4-500

4.5.8.4 Removing the Finisher Left Cover 0002-8129

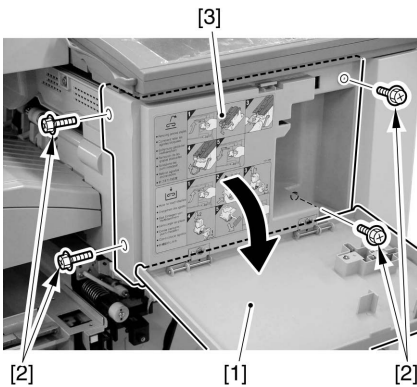
- 1) Remove the 2 screws [1] and the self-tapping screw (small) [2]; then, detach the finisher left cover [3].



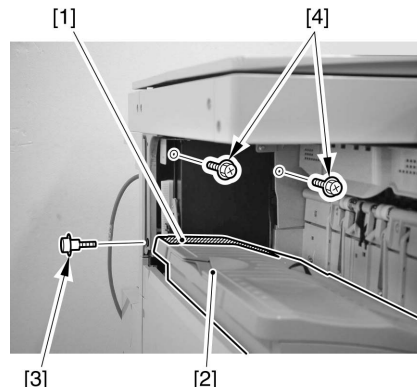
F-4-501

4.5.8.5 Removing the Finisher Front Cover 0003-0289

- 1) Open the finisher front cover [1].
2) Remove the 4 screws [2], and detach the finisher front cover [3].



F-4-502

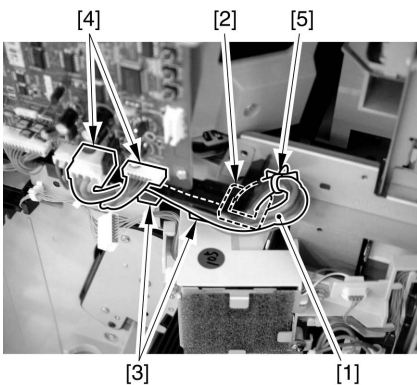


F-4-504

4.5.8.6 Detaching from the Host Machine

0002-8167

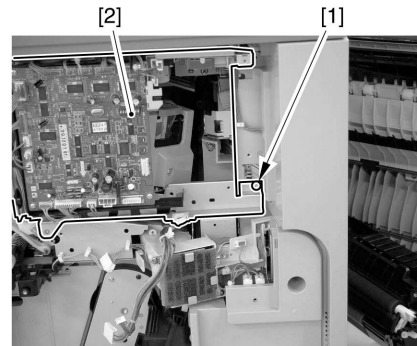
- 1) Remove the reuse band [5].
- 2) Disconnect the 2 connectors [4] of the communication harness.
- 3) Free the communication harness [1] from the wire saddle [2] of the finisher and the cable guide [3].



F-4-503

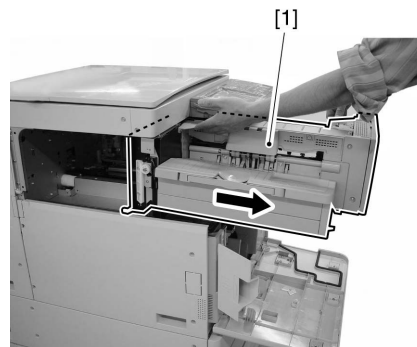
- 4) Press the area of the tray indicated by shading [1] to move down the tray (if it is in up position).
- 5) Remove the stepped screw [3] and the 2 other screws [4]. (The use of a long screwdriver is recommended.)

- 6) Remove the screw (M3x8) [1], and release the finisher assembly [2].



F-4-505

- 7) Pull the finisher [1] to detach it from the machine while holding it level.



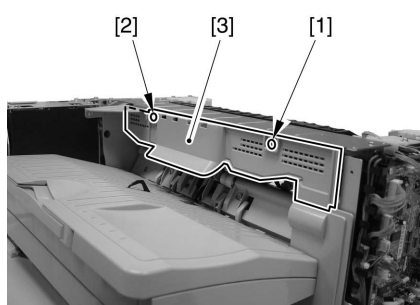
F-4-506

4.5.8.7 Removing the Stack Delivery Cover

0002-8410

- 1) Remove the stepped screw [1] and the other screw

[2]; then, detach the cover [3].

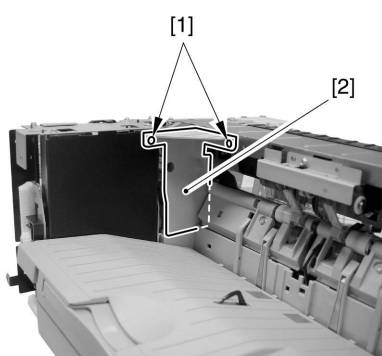


F-4-507

4.5.8.8 Removing the Grip (left)

0002-8411

- 1) Remove the 2 screws [1], and detach the grip (left) [2].

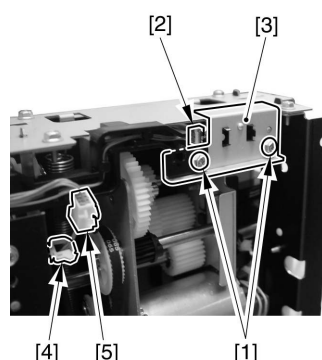


F-4-508

4.5.8.9 Removing the Stack Tray Assembly

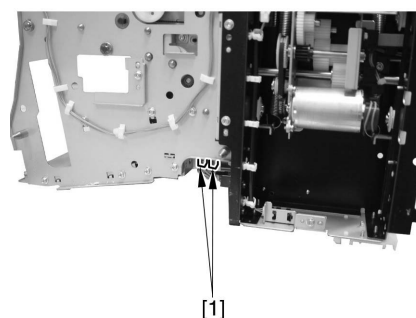
0002-8412

- 1) Remove the 2 screws [1], and disconnect the connector [2]; then, detach the stack tray upper limit sensor assembly [3].
- 2) Open the wire saddle [4], and disconnect the connector [5].



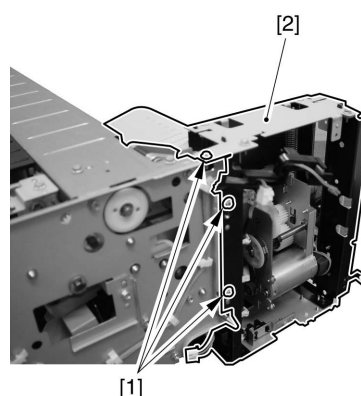
F-4-509

- 3) Disconnect the 2 connectors [1].



F-4-510

- 4) Remove the 3 screws [1], and detach the stack tray assembly [2].



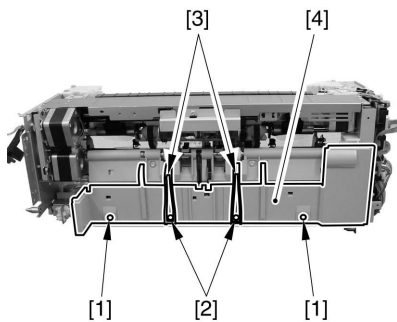
F-4-511

4.5.8.10 Removing the Lattice

Guide

0002-8414

- 1) Remove the 2 stepped screws [1], the 2 other screws, and the 2 grounding plates [3]; then, detach the lattice guide [4].



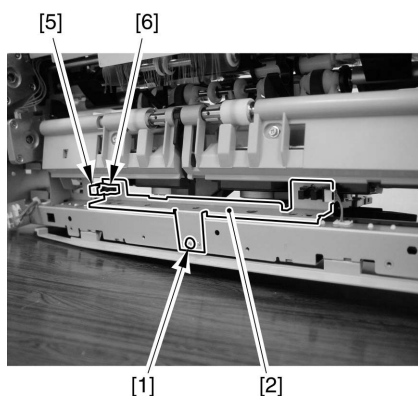
F-4-512

4.5.8.11 Removing the Stack

Tray Lower Paper Sensor

0001-1410

- 1) Remove the screw [1], and detach the sensor base [2].
- 2) Disconnect the connector [5], and detach the stack tray lower paper sensor [6].



F-4-513

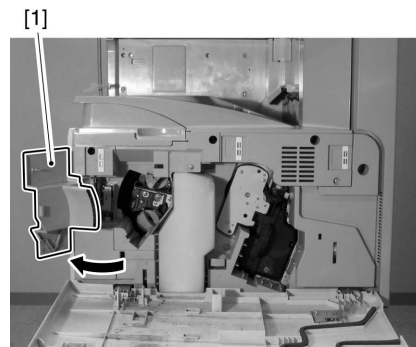
4.5.9 Stack Tray Upper Paper Sensor

4.5.9.1 Removing the Toner

Bottle Retainer

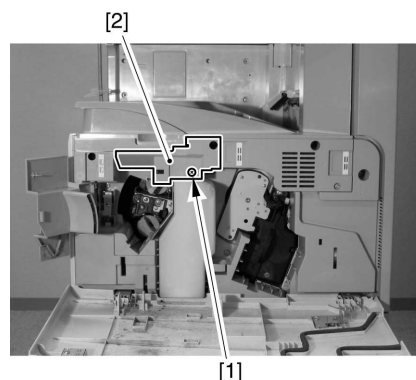
0002-7899

- 1) Open the front cover.
- 2) Open the toner container access cover [1].



F-4-514

- 3) Remove the TP screw [1], and detach the waste toner bottle retainer [2].



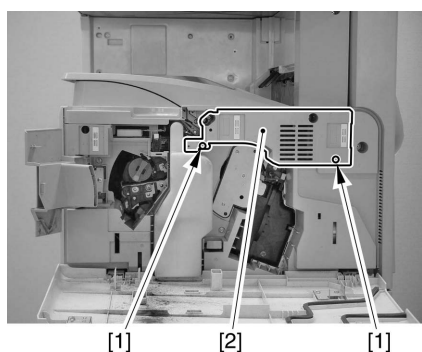
F-4-515

4.5.9.2 Removing the Front

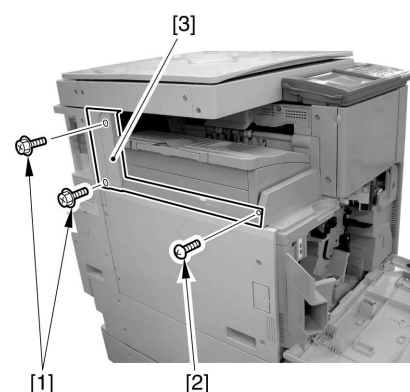
Inside Cover (middle)

0002-7968

- 1) Remove the 2 screws [1], and detach the front inside cover (middle) [2].



F-4-516



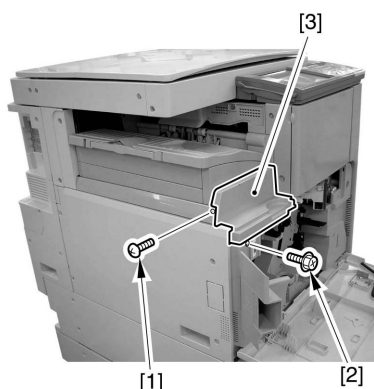
F-4-518

4.5.9.3 Removing the Finisher

Tray Front Cover

0002-8081

- 1) Remove the self-tapping screw (small) [1] and the other screw [2]; then, detach the finisher tray front cover [3].



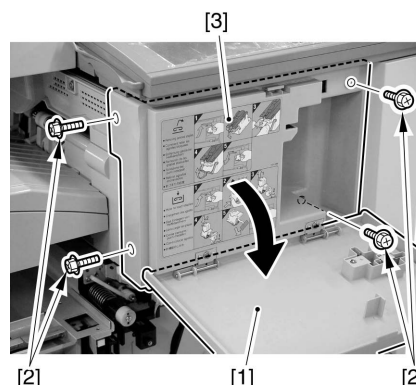
F-4-517

4.5.9.5 Removing the Finisher

Front Cover

0003-0291

- 1) Open the finisher front cover [1].
- 2) Remove the 4 screws [2], and detach the finisher front cover [3].



F-4-519

4.5.9.4 Removing the Finisher

Left Cover

0002-8130

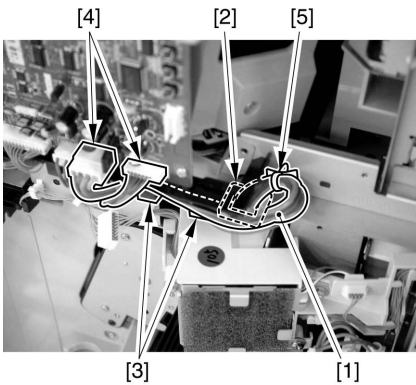
- 1) Remove the 2 screws [1] and the self-tapping screw (small) [2]; then, detach the finisher left cover [3].

4.5.9.6 Detaching from the

Host Machine

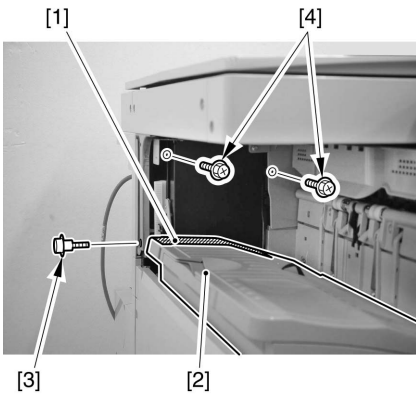
0002-8168

- 1) Remove the reuse band [5].
- 2) Disconnect the 2 connectors [4] of the communication harness.
- 3) Free the communication harness [1] from the wire saddle [2] of the finisher and the cable guide [3].



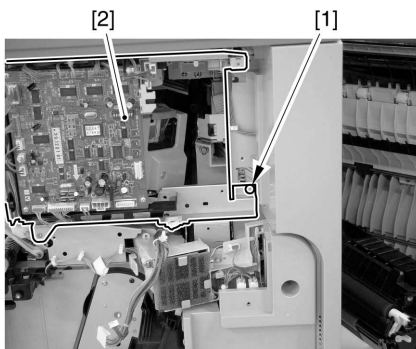
F-4-520

- 4) Press the area of the tray indicated by shading [1] to move down the tray (if it is in position).
- 5) Remove the stepped screw [3] and the 2 other screws [4]. (The use of a long screwdriver is recommended.)



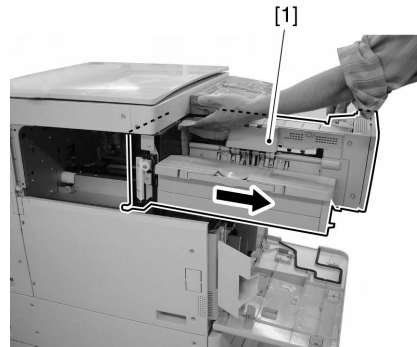
F-4-521

- 6) Remove the screw (M3x8) [1], and release the finisher assembly [2].



F-4-522

- 7) Pull the finisher [1] to detach it from the machine while holding it level.

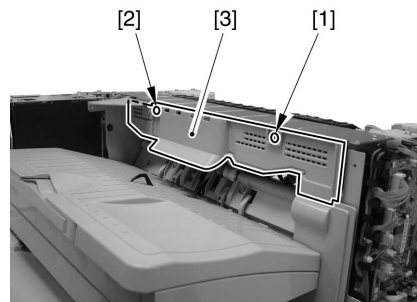


F-4-523

4.5.9.7 Removing the Stack Delivery Cover

0002-8415

- 1) Remove the stepped screw [1] and the other screw [2]; then, detach the cover [3].

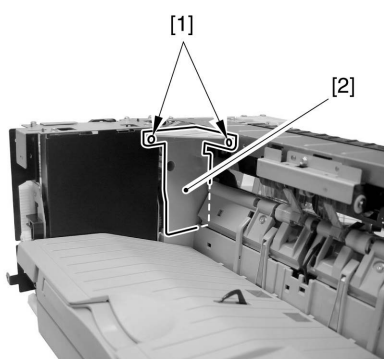


F-4-524

4.5.9.8 Removing the Grip (left)

0002-8417

- 1) Remove the 2 screws [1], and detach the grip (left) [2].

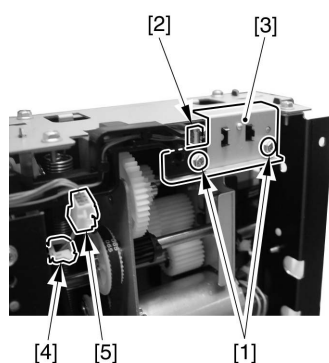


F-4-525

4.5.9.9 Removing the Stack Tray Assembly

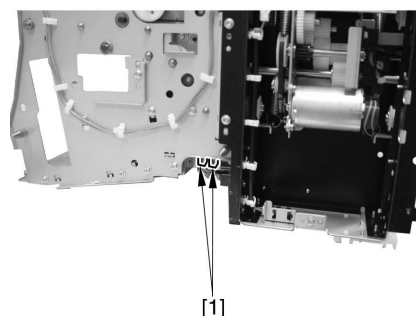
0002-8418

- 1) Remove the 2 screws [1], and disconnect the connector [2]; then, detach the stack tray upper limit sensor assembly [3].
- 2) Open the wire saddle [4], and disconnect the connector [5].



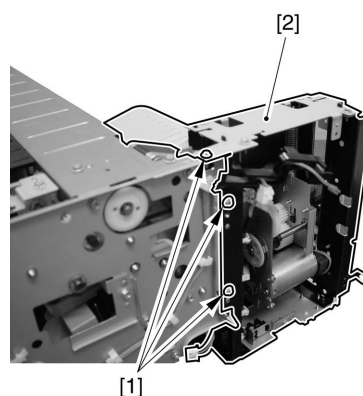
F-4-526

- 3) Disconnect the 2 connectors [1].



F-4-527

- 4) Remove the 3 screws [1], and detach the stack tray assembly [2].

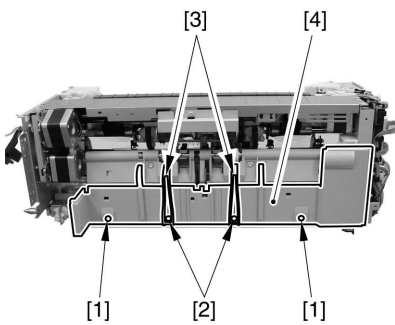


F-4-528

4.5.9.10 Removing the Lattice Guide

0002-8419

- 1) Remove the 2 stepped screws [1], the 2 other screws, and the 2 grounding plates [3]; then, detach the lattice guide [4].



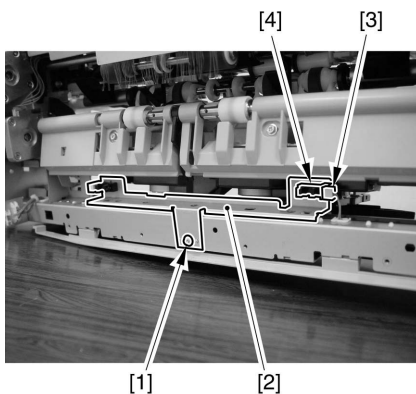
F-4-529

4.5.9.11 Stack Tray Upper

Paper Sensor

0001-1418

- 1) Remove the screw [1], and detach the sensor base [2].
- 2) Disconnect the connector [3], and detach the stack tray upper paper sensor [4].



F-4-530

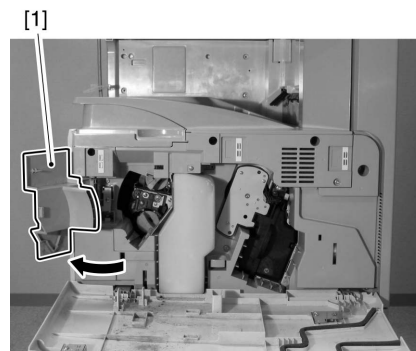
4.5.10 Stack Tray Upper Limit Sensor

4.5.10.1 Removing the Toner

Bottle Retainer

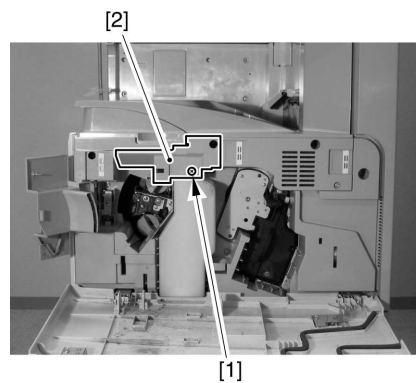
0002-7900

- 1) Open the front cover.
- 2) Open the toner container access cover [1].



F-4-531

- 3) Remove the TP screw [1], and detach the waste toner bottle retainer [2].



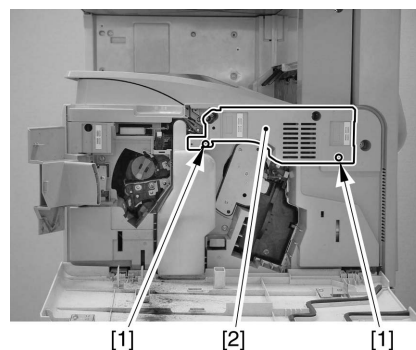
F-4-532

4.5.10.2 Removing the Front

Inside Cover (middle)

0002-7970

- 1) Remove the 2 screws [1], and detach the front inside cover (middle) [2].



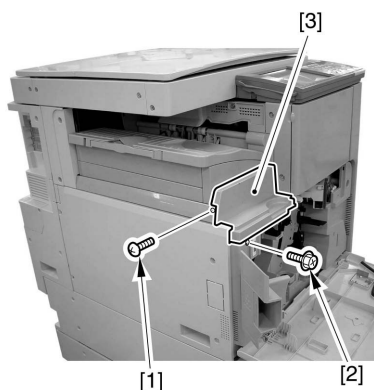
F-4-533

4.5.10.3 Removing the Finisher

Tray Front Cover

0002-8082

- 1) Remove the self-tapping screw (small) [1] and the other screw [2]; then, detach the finisher tray front cover [3].



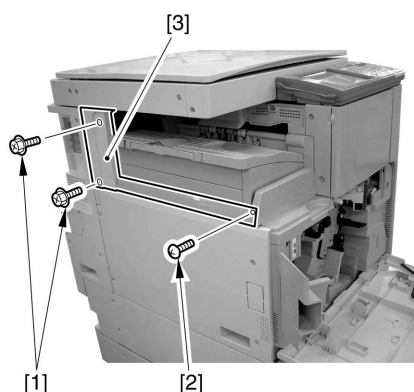
F-4-534

4.5.10.4 Removing the Finisher

Left Cover

0002-8131

- 1) Remove the 2 screws [1] and the self-tapping screw (small) [2]; then, detach the finisher left cover [3].



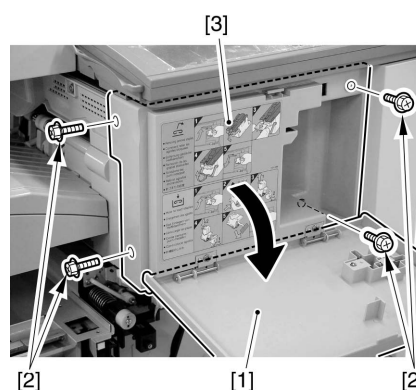
F-4-535

4.5.10.5 Removing the Finisher

Front Cover

0003-0292

- 1) Open the finisher front cover [1].
- 2) Remove the 4 screws [2], and detach the finisher front cover [3].

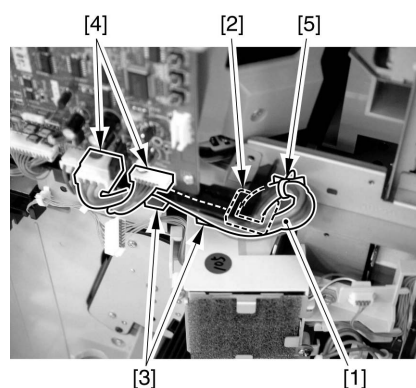


F-4-536

4.5.10.6 Detaching from the Host Machine

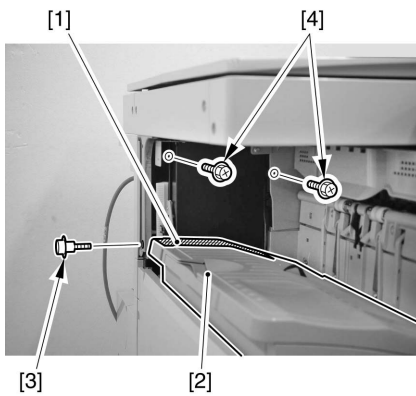
0002-8169

- 1) Remove the reuse band [5].
- 2) Disconnect the 2 connectors [4] of the communication harness.
- 3) Free the communication harness [1] from the wire saddle [2] of the finisher and the cable guide [3].



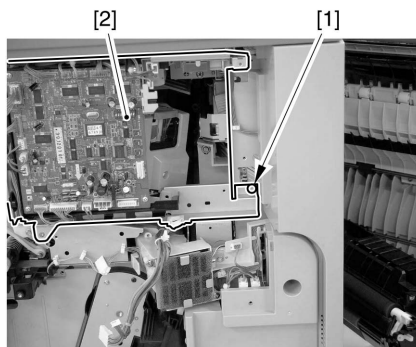
F-4-537

- 4) Press the area of the tray indicated by shading [1] to move down the tray (if it is in up position).
- 5) Remove the stepped screw [3] and the 2 other screws [4]. (The use of a long screwdriver is recommended.)



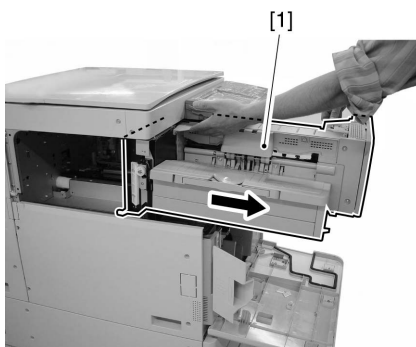
F-4-538

- 6) Remove the screw (M3x8) [1], and release the finisher assembly [2].



F-4-539

- 7) Pull the finisher [1] to detach it from the machine while holding it level.



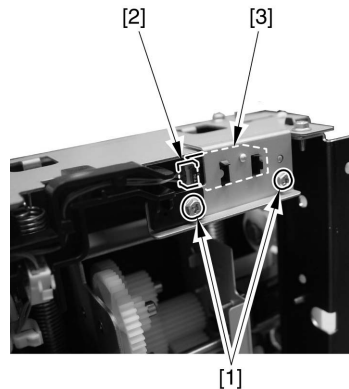
F-4-540

4.5.10.7 Removing the Stack Tray Upper Limit Sensor

0001-1367

- 1) Remove the 2 screws [1], and disconcert the

connector [2]; then, detach the sensor [3].



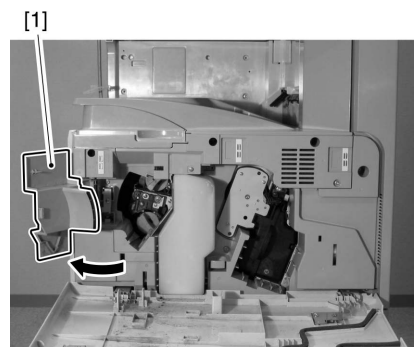
F-4-541

4.5.11 Stack Tray Lower Limit Sensor

4.5.11.1 Removing the Toner Bottle Retainer

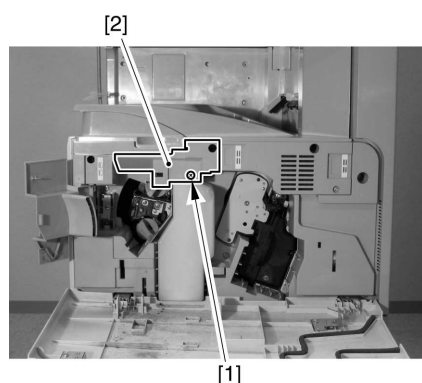
0002-7902

- 1) Open the front cover.
- 2) Open the toner container access cover [1].



F-4-542

- 3) Remove the TP screw [1], and detach the waste toner bottle retainer [2].

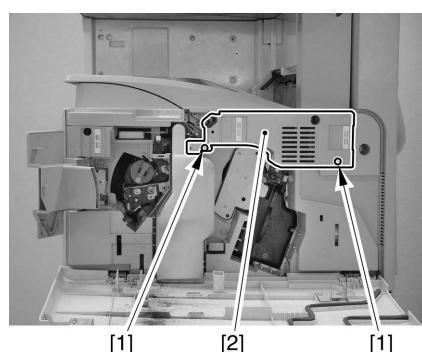


F-4-543

4.5.11.2 Removing the Front Inside Cover (middle)

0002-7971

- 1) Remove the 2 screws [1], and detach the front inside cover (middle) [2].

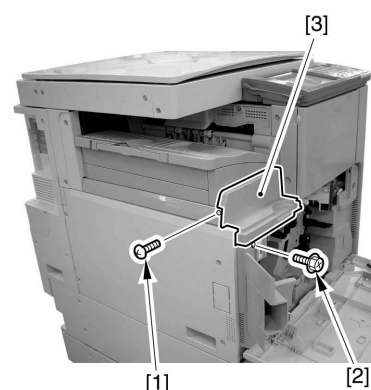


F-4-544

4.5.11.3 Removing the Finisher Tray Front Cover

0002-8083

- 1) Remove the self-tapping screw (small) [1] and the other screw [2]; then, detach the finisher tray front cover [3].

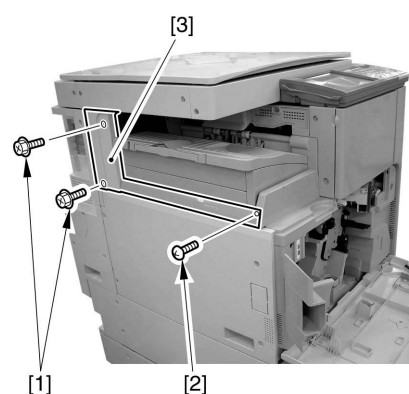


F-4-545

4.5.11.4 Removing the Finisher Left Cover

0002-8132

- 1) Remove the 2 screws [1] and the self-tapping screw (small) [2]; then, detach the finisher left cover [3].

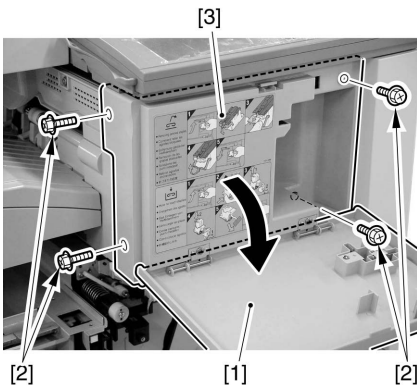


F-4-546

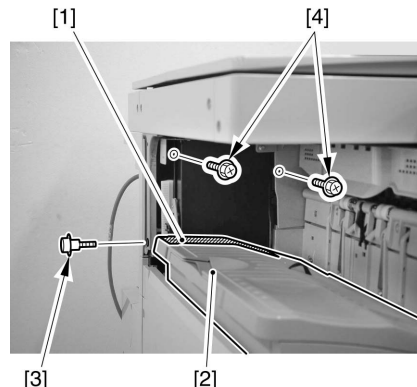
4.5.11.5 Removing the Finisher Front Cover

0003-0293

- 1) Open the finisher front cover [1].
- 2) Remove the 4 screws [2], and detach the finisher front cover [3].



F-4-547

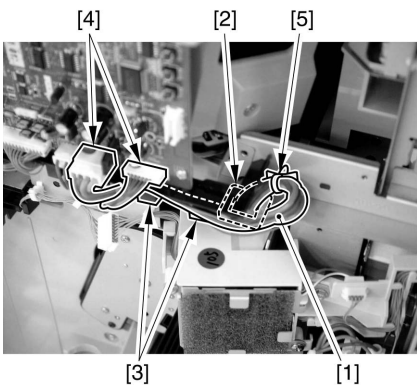


F-4-549

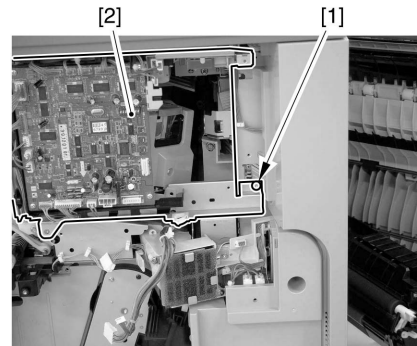
4.5.11.6 Detaching from the Host Machine

0002-8170

- 1) Remove the reuse band [5].
- 2) Disconnect the 2 connectors [4] of the communication harness.
- 3) Free the communication harness [1] from the wire saddle [2] of the finisher and the cable guide [3].

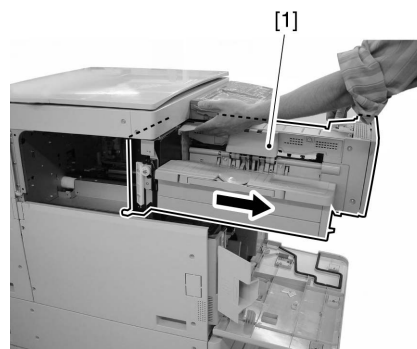


F-4-548



F-4-550

- 7) Pull the finisher [1] to detach it from the machine while holding it level.



F-4-551

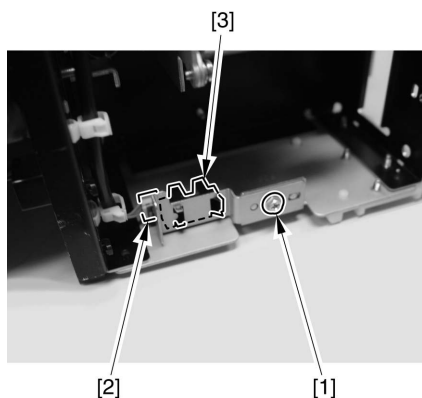
- 4) Press the area of the tray indicated by shading [1] to move down the tray (if it is in up position).
- 5) Remove the stepped screw [3] and the 2 other screws [4]. (The use of a long screwdriver is recommended.)

4.5.11.7 Removing the Stack Tray Lower Limit Sensor

0001-1371

- 1) Remove the screw [1], and disconnect the

connector [2]; then, detach the sensor [2].



F-4-552

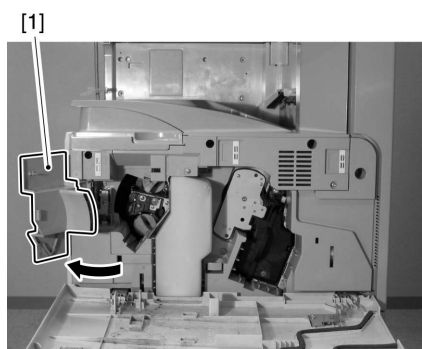
4.5.12 Oscillating Cam HP Sensor

4.5.12.1 Removing the Toner

Bottle Retainer

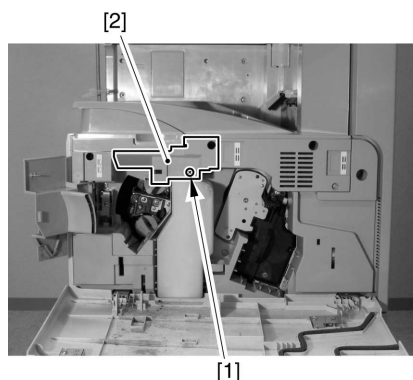
0002-7903

- 1) Open the front cover.
- 2) Open the toner container access cover [1].



F-4-553

- 3) Remove the TP screw [1], and detach the waste toner bottle retainer [2].

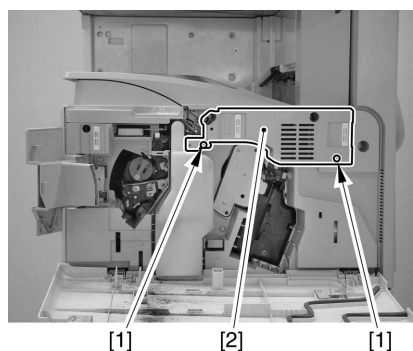


F-4-554

4.5.12.2 Removing the Front Inside Cover (middle)

0002-7972

- 1) Remove the 2 screws [1], and detach the front inside cover (middle) [2].



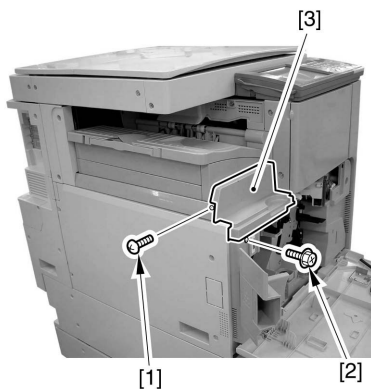
F-4-555

4.5.12.3 Removing the Finisher

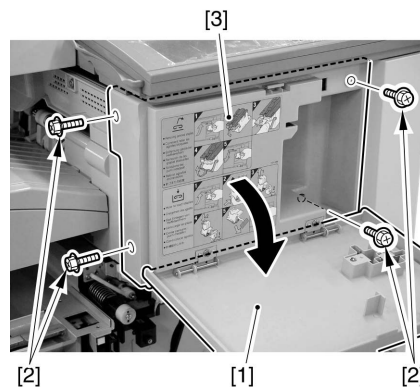
Tray Front Cover

0002-8084

- 1) Remove the self-tapping screw (small) [1] and the other screw [2]; then, detach the finisher tray front cover [3].



F-4-556



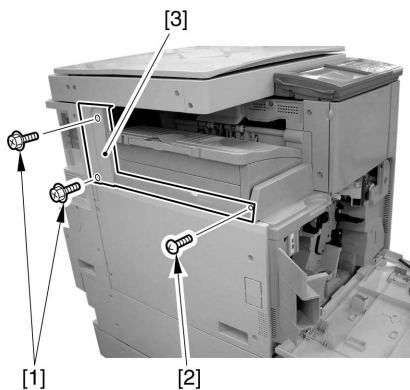
F-4-558

4.5.12.4 Removing the Finisher

Left Cover

0002-8133

- 1) Remove the 2 screws [1] and the self-tapping screw (small) [2]; then, detach the finisher left cover [3].



F-4-557

4.5.12.5 Removing the Finisher

Front Cover

0003-0295

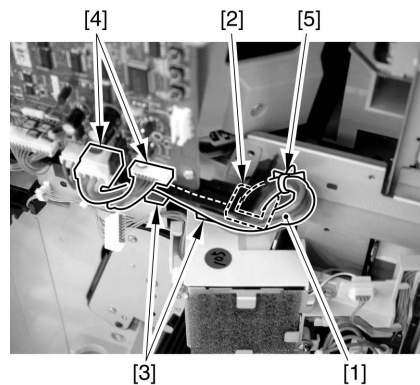
- 1) Open the finisher front cover [1].
- 2) Remove the 4 screws [2], and detach the finisher front cover [3].

4.5.12.6 Detaching from the

Host Machine

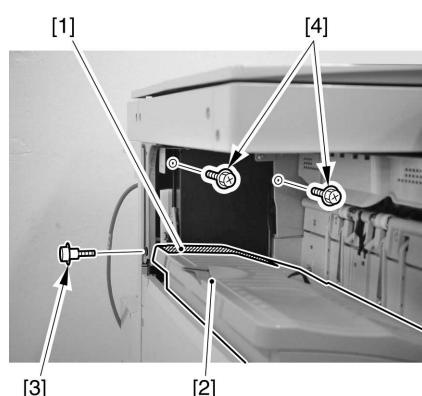
0002-8171

- 1) Remove the reuse band [5].
- 2) Disconnect the 2 connectors [4] of the communication harness.
- 3) Free the communication harness [1] from the wire saddle [2] of the finisher and the cable guide [3].



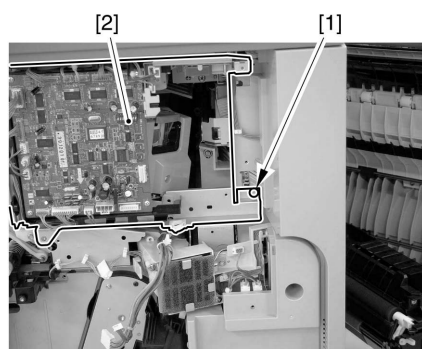
F-4-559

- 4) Press the area of the tray indicated by shading [1] to move down the tray (if it is in up position).
- 5) Remove the stepped screw [3] and the 2 other screws [4]. (The use of a long screwdriver is recommended.)



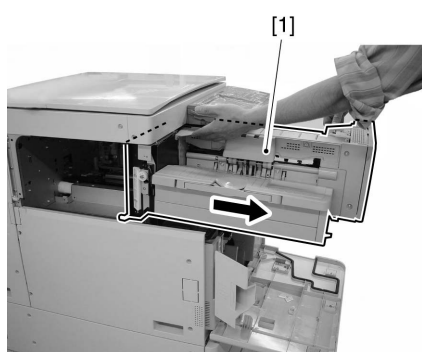
F-4-560

- 6) Remove the screw (M3x8) [1], and release the finisher assembly [2].



F-4-561

- 7) Pull the finisher [1] to detach it from the machine while holding it level.

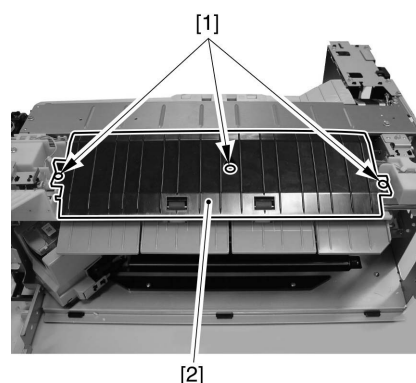


F-4-562

4.5.12.7 Removing the Reversing Guide 0002-8420

- 1) Remove the 3 self-tapping screws, and detach the

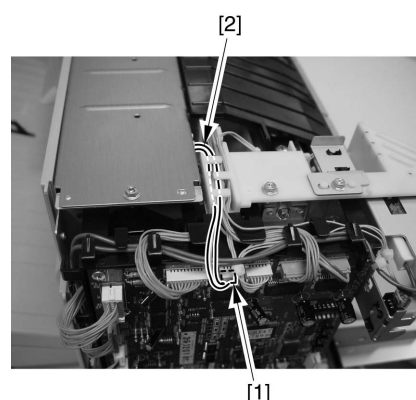
reversing guide [2].



F-4-563

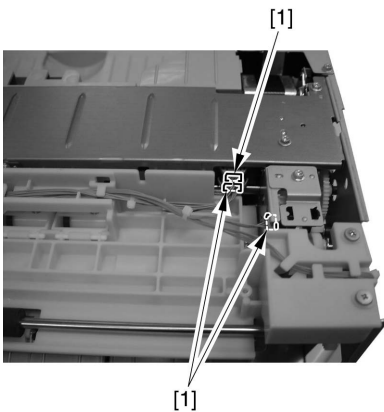
4.5.12.8 Removing the Upper Guide Assembly 0002-8421

- 1) Disconnect the connector [1], and free the cable [2] from the cable guide.



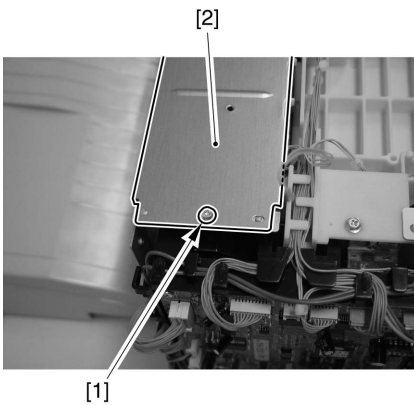
F-4-564

- 2) Disconnect the 3 connectors [1].

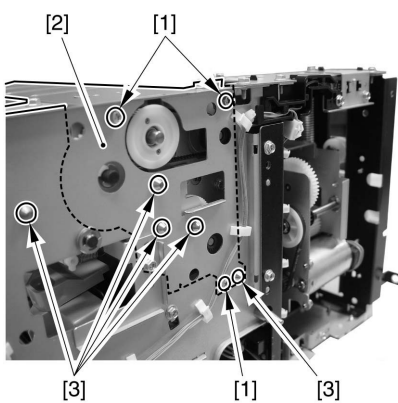


F-4-565

3) Remove the 4 screws [1], and detach the upper guide assembly [2].



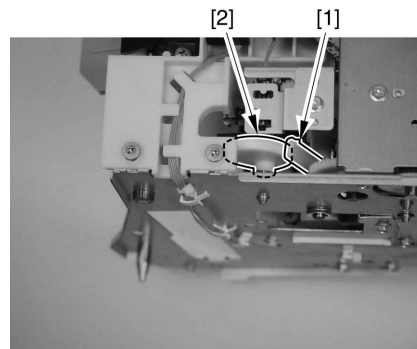
F-4-566



F-4-567

assembly, do so while freeing the 5 bosses [3].

⚠ When mounting the upper guide assembly, be sure that the drive cam [2] is found under the return belt arm [1].



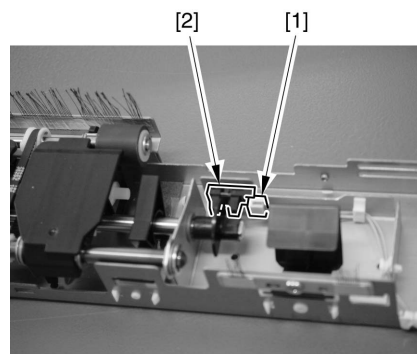
F-4-568

4.5.12.9 Removing the Swing

Cam HP Sensor

0001-1396

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



F-4-569

⚠ To facilitate detachment of the upper guide

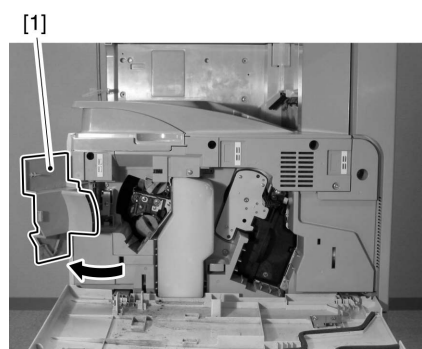
4.5.13 Process Tray Paper Sensor

4.5.13.1 Removing the Toner

Bottle Retainer

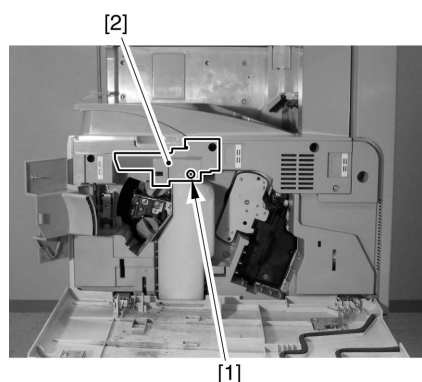
0002-7904

- 1) Open the front cover.
- 2) Open the toner container access cover [1].



F-4-570

- 3) Remove the TP screw [1], and detach the waste toner bottle retainer [2].



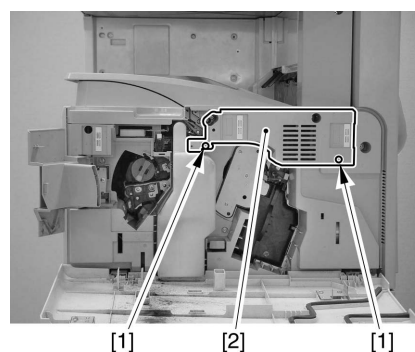
F-4-571

4.5.13.2 Removing the Front

Inside Cover (middle)

0002-7975

- 1) Remove the 2 screws [1], and detach the front inside cover (middle) [2].



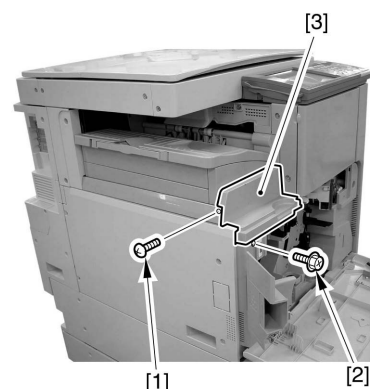
F-4-572

4.5.13.3 Removing the Finisher

Tray Front Cover

0002-8085

- 1) Remove the self-tapping screw (small) [1] and the other screw [2]; then, detach the finisher tray front cover [3].



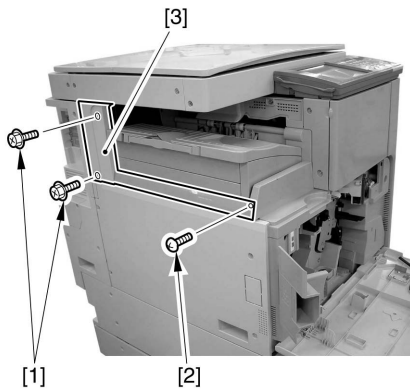
F-4-573

4.5.13.4 Removing the Finisher

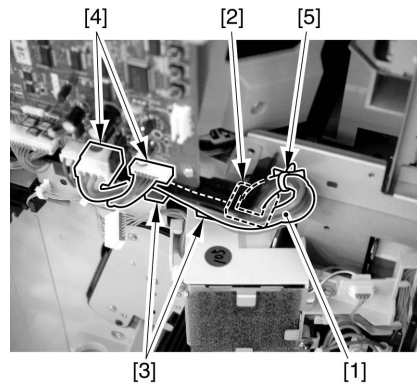
Left Cover

0002-8134

- 1) Remove the 2 screws [1] and the self-tapping screw (small) [2]; then, detach the finisher left cover [3].



F-4-574



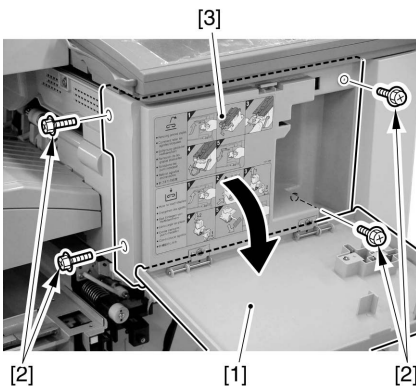
F-4-576

4.5.13.5 Removing the Finisher

Front Cover

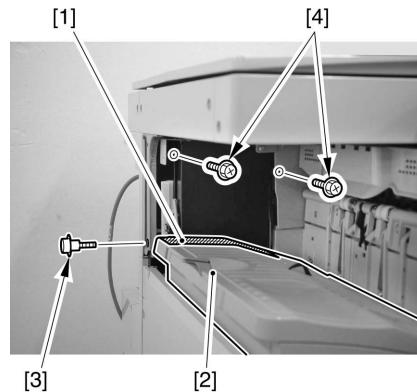
0003-0296

- 1) Open the finisher front cover [1].
- 2) Remove the 4 screws [2], and detach the finisher front cover [3].



F-4-575

- 4) Press the area of the tray indicated by shading [1] to move down the tray (if it is in up position).
- 5) Remove the stepped screw [3] and the 2 other screws [4]. (The use of a long screwdriver is recommended.)



F-4-577

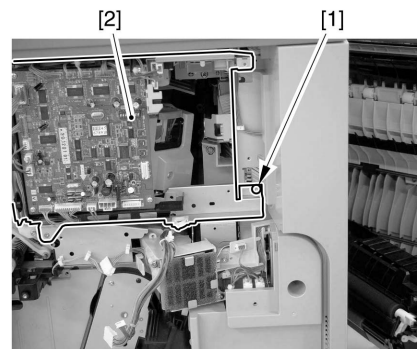
4.5.13.6 Detaching from the

Host Machine

0002-8172

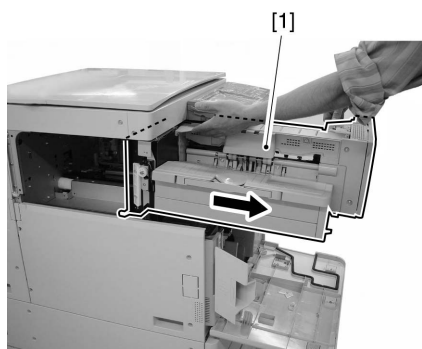
- 1) Remove the reuse band [5].
- 2) Disconnect the 2 connectors [4] of the communication harness.
- 3) Free the communication harness [1] from the wire saddle [2] of the finisher and the cable guide [3].

- 6) Remove the screw (M3x8) [1], and release the finisher assembly [2].



F-4-578

- 7) Pull the finisher [1] to detach it from the machine while holding it level.



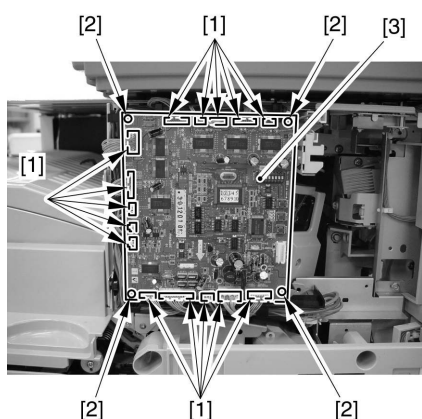
F-4-579

4.5.13.7 Removing the Finisher

Controller PCB

0002-8202

- 1) Disconnect the 5 connectors [1], and remove the 4 screws [2]; then, detach the finisher controller PCB [3].

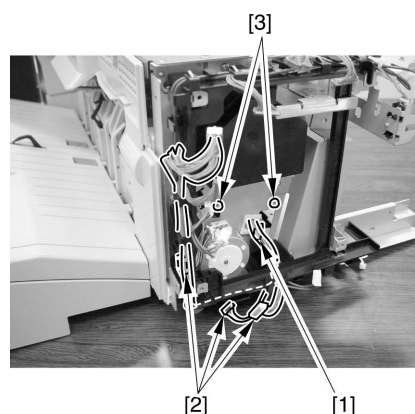


F-4-580

4.5.13.8 Removing the Processing Tray Assembly

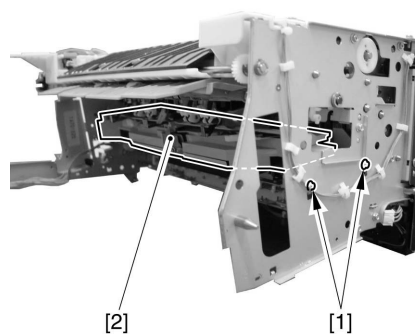
0002-8422

- 1) Open the wire saddle [1], and put the cable [2] inside of the finisher; then, remove the 2 screws [3].



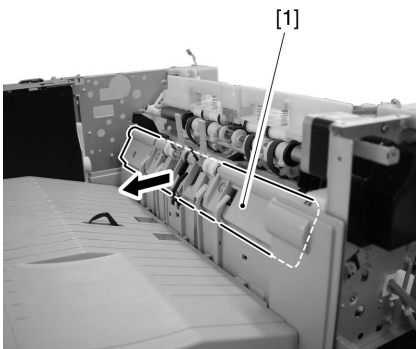
F-4-581

- 2) Remove the 2 screws [2], and detach the processing tray unit.

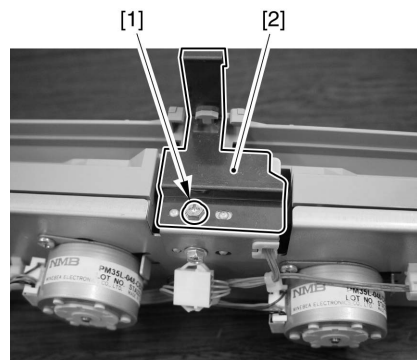


F-4-582

⚠ When mounting the processing tray, be sure to slide the lattice guide unit [1] to the left before doing so. This is to prevent the plastic sheet of the guide unit from interfering with the processing tray assembly.



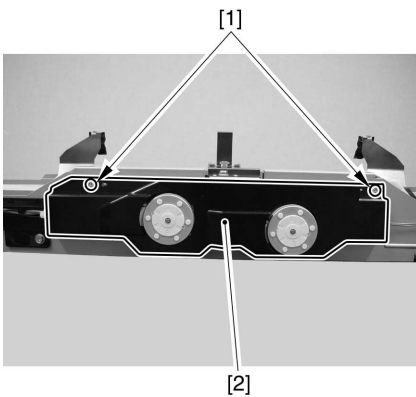
F-4-583



F-4-585

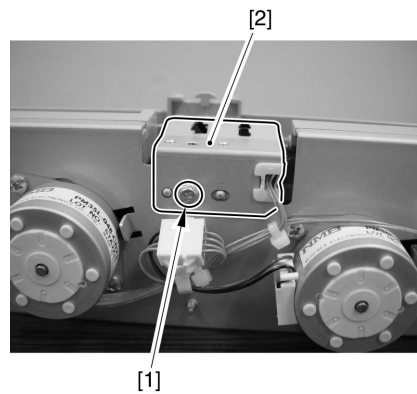
4.5.13.9 Removing the Processing Tray Paper Sensor 0001-1406

1) Remove the 2 screws [1], and detach the cover [2].



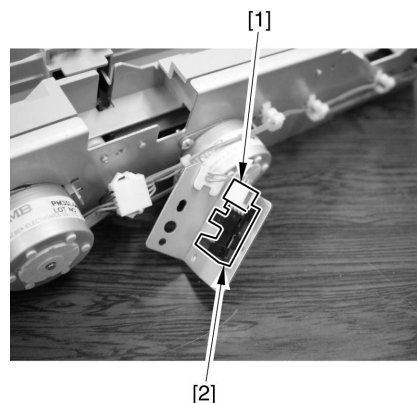
F-4-584

2) Remove the screw [1], and detach the reader guide plate [2].



F-4-586

4) Disconnect the connector [1], and detach the sensor [2].



F-4-587

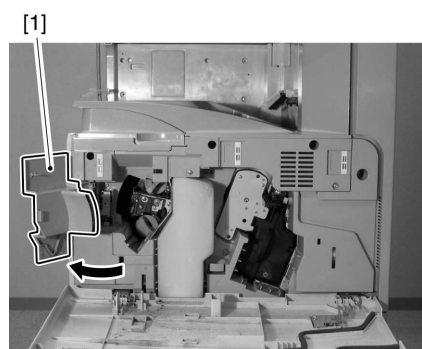
4.5.14 Return Belt Escape HP Sensor

4.5.14.1 Removing the Toner

Bottle Retainer

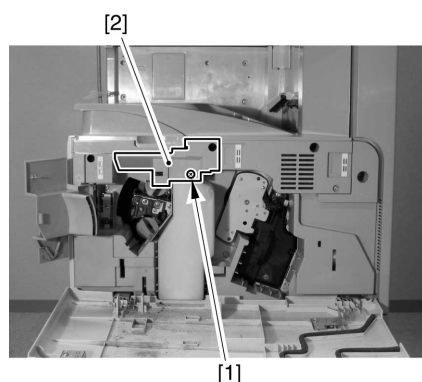
0002-7906

- 1) Open the front cover.
- 2) Open the toner container access cover [1].



F-4-588

- 3) Remove the TP screw [1], and detach the waste toner bottle retainer [2].



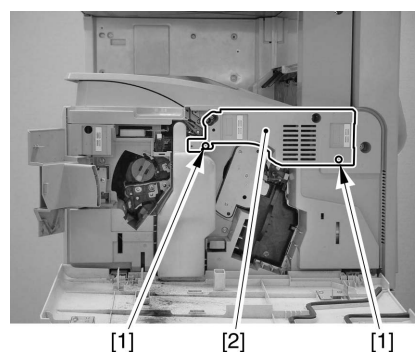
F-4-589

4.5.14.2 Removing the Front

Inside Cover (middle)

0002-7977

- 1) Remove the 2 screws [1], and detach the front inside cover (middle) [2].

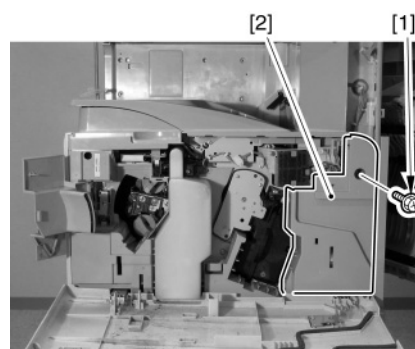


F-4-590

4.5.14.3 Removing the Inside Front Cover (right)

0003-9129

- 1) Remove the screw [1], and detach the inside front cover (right) [2].



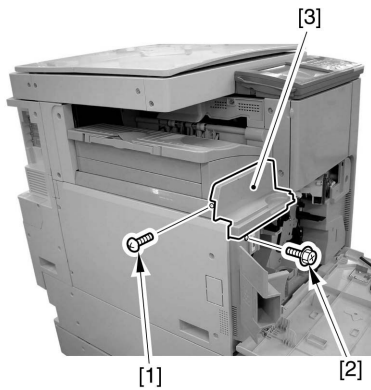
F-4-591

4.5.14.4 Removing the Finisher

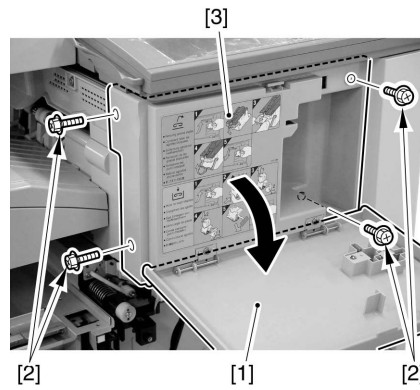
Tray Front Cover

0002-8086

- 1) Remove the self-tapping screw (small) [1] and the other screw [2]; then, detach the finisher tray front cover [3].



F-4-592

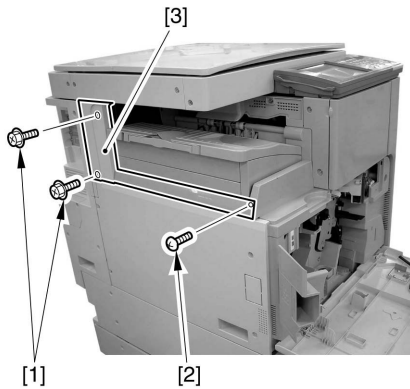


F-4-594

4.5.14.5 Removing the Finisher Left Cover

0002-8135

- 1) Remove the 2 screws [1] and the self-tapping screw (small) [2]; then, detach the finisher left cover [3].



F-4-593

4.5.14.6 Removing the Finisher Front Cover

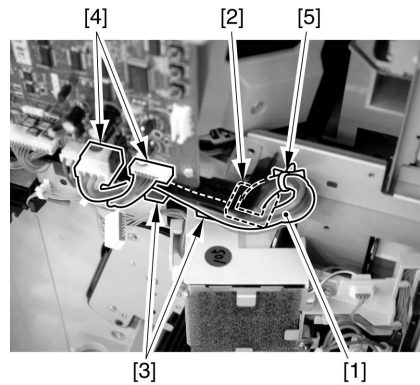
0003-0298

- 1) Open the finisher front cover [1].
- 2) Remove the 4 screws [2], and detach the finisher front cover [3].

4.5.14.7 Detaching from the Host Machine

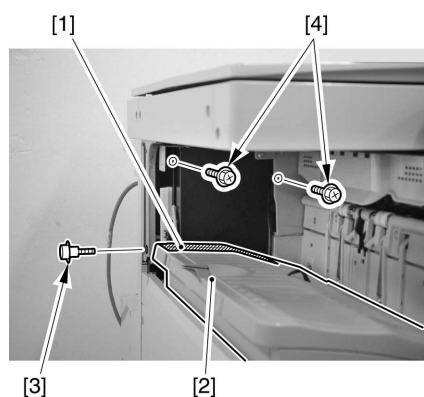
0002-8173

- 1) Remove the reuse band [5].
- 2) Disconnect the 2 connectors [4] of the communication harness.
- 3) Free the communication harness [1] from the wire saddle [2] of the finisher and the cable guide [3].



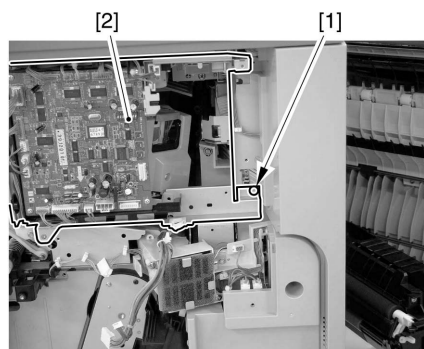
F-4-595

- 4) Press the area of the tray indicated by shading [1] to move down the tray (if it is in up position).
- 5) Remove the stepped screw [3] and the 2 other screws [4]. (The use of a long screwdriver is recommended.)



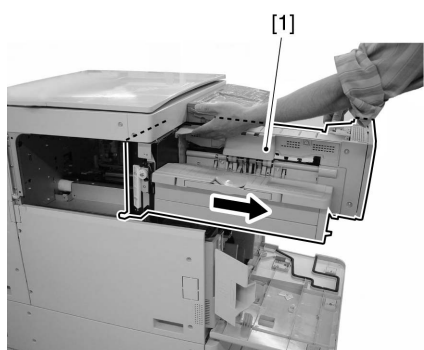
F-4-596

- 6) Remove the screw (M3x8) [1], and release the finisher assembly [2].



F-4-597

- 7) Pull the finisher [1] to detach it from the machine while holding it level.



F-4-598

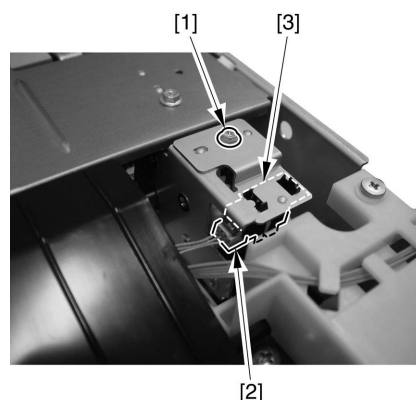
4.5.14.8 Removing the Return

Belt Escape HP Sensor

0001-1411

- 1) Remove the screw [1], and disconnect the

connector [2]; then, detach the sensor [3].



F-4-599

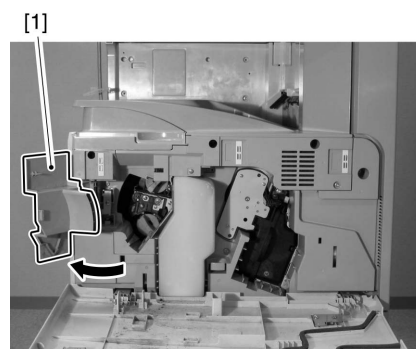
4.5.15 Delivery Sensor

4.5.15.1 Removing the Toner

Bottle Retainer

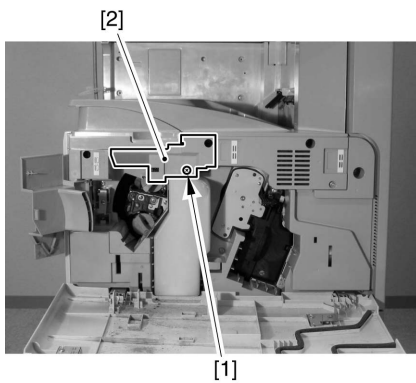
0002-7907

- 1) Open the front cover.
- 2) Open the toner container access cover [1].



F-4-600

- 3) Remove the TP screw [1], and detach the waste toner bottle retainer [2].

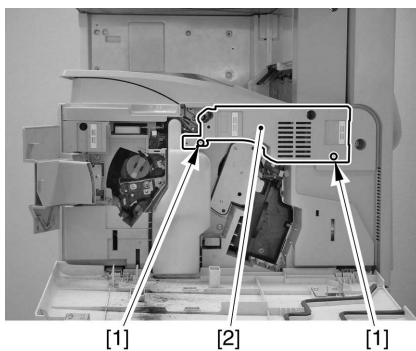


F-4-601

4.5.15.2 Removing the Front Inside Cover (middle)

0002-7978

- 1) Remove the 2 screws [1], and detach the front inside cover (middle) [2].

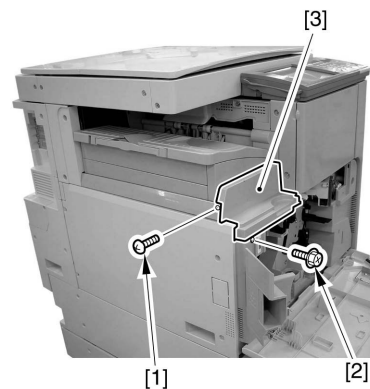


F-4-602

4.5.15.3 Removing the Finisher Tray Front Cover

0002-8087

- 1) Remove the self-tapping screw (small) [1] and the other screw [2]; then, detach the finisher tray front cover [3].

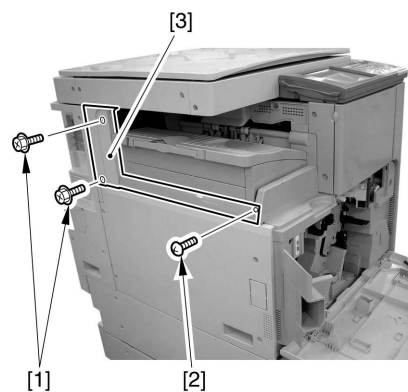


F-4-603

4.5.15.4 Removing the Finisher Left Cover

0002-8136

- 1) Remove the 2 screws [1] and the self-tapping screw (small) [2]; then, detach the finisher left cover [3].

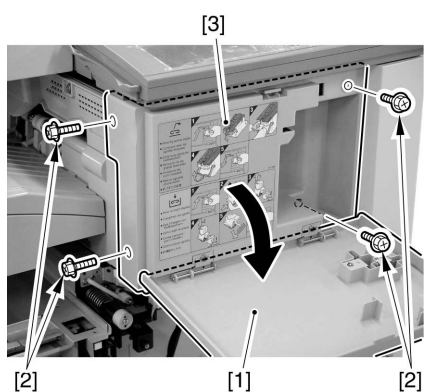


F-4-604

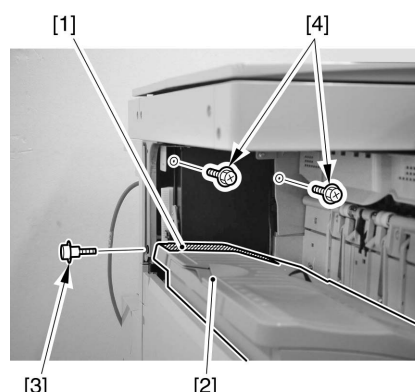
4.5.15.5 Removing the Finisher Front Cover

0003-0299

- 1) Open the finisher front cover [1].
- 2) Remove the 4 screws [2], and detach the finisher front cover [3].



F-4-605

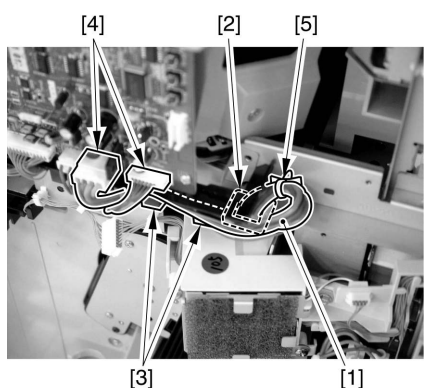


F-4-607

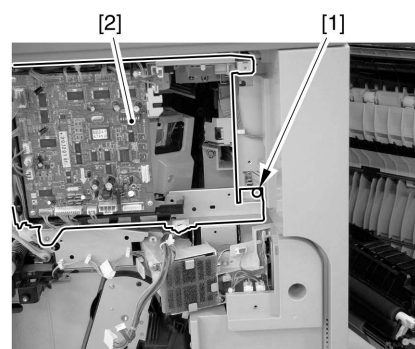
4.5.15.6 Detaching from the Host Machine

0002-8174

- 1) Remove the reuse band [5].
- 2) Disconnect the 2 connectors [4] of the communication harness.
- 3) Free the communication harness [1] from the wire saddle [2] of the finisher and the cable guide [3].

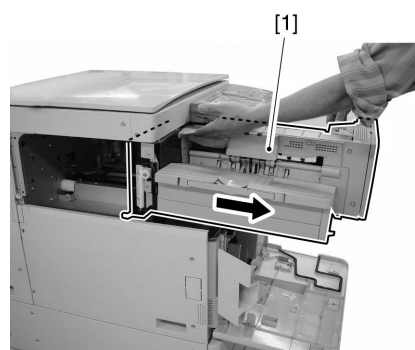


F-4-606



F-4-608

- 6) Remove the screw (M3x8) [1], and release the finisher assembly [2].
- 7) Pull the finisher [1] to detach it from the machine while holding it level.



F-4-609

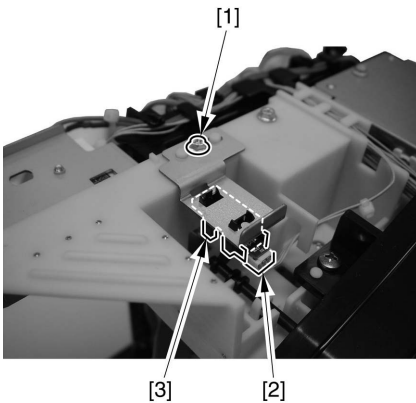
- 4) Press the area of the tray indicated by shading [1] to move down the tray (if it is in up position).
- 5) Remove the stepped screw [3] and the 2 other screws [4]. (The use of a long screwdriver is recommended.)

4.5.15.7 Removing the Delivery Sensor

0001-1428

- 1) Remove the screw [1], and disconnect the

connector [2]; then, detach the sensor [3].



F-4-610

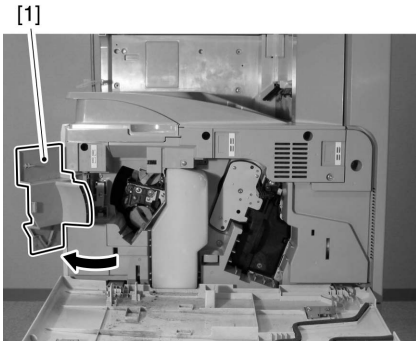
4.5.16 Staple Slide HP Sensor

4.5.16.1 Removing the Toner

Bottle Retainer

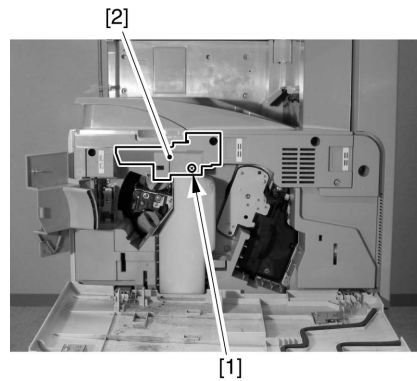
0002-7908

- 1) Open the front cover.
- 2) Open the toner container access cover [1].



F-4-611

- 3) Remove the TP screw [1], and detach the waste toner bottle retainer [2].



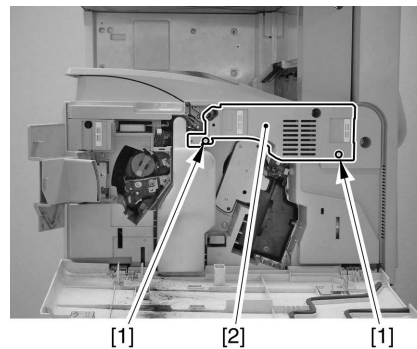
F-4-612

4.5.16.2 Removing the Front

Inside Cover (middle)

0002-7981

- 1) Remove the 2 screws [1], and detach the front inside cover (middle) [2].



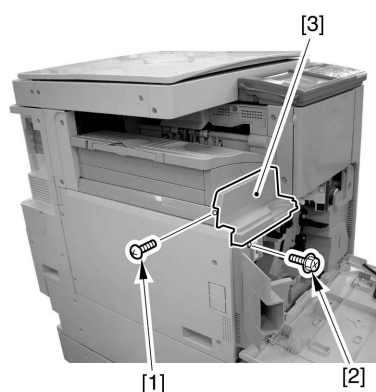
F-4-613

4.5.16.3 Removing the Finisher

Tray Front Cover

0002-8088

- 1) Remove the self-tapping screw (small) [1] and the other screw [2]; then, detach the finisher tray front cover [3].

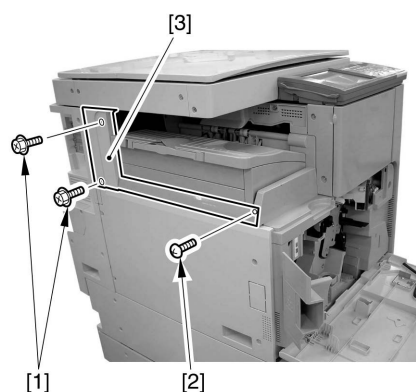


F-4-614

4.5.16.4 Removing the Finisher Left Cover

0002-8137

- 1) Remove the 2 screws [1] and the self-tapping screw (small) [2]; then, detach the finisher left cover [3].

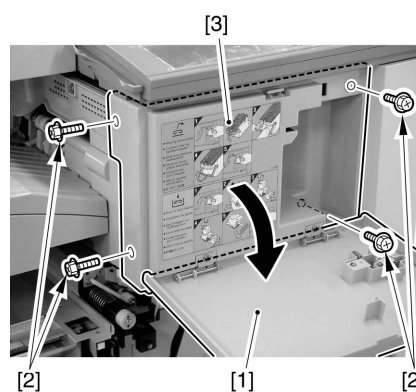


F-4-615

4.5.16.5 Removing the Finisher Front Cover

0003-0301

- 1) Open the finisher front cover [1].
- 2) Remove the 4 screws [2], and detach the finisher front cover [3].

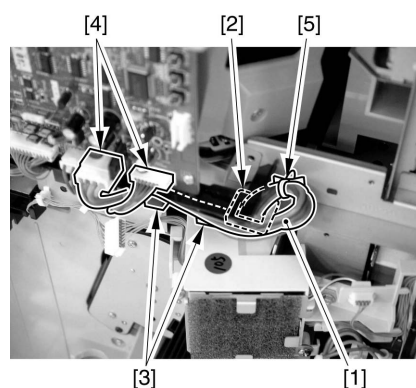


F-4-616

4.5.16.6 Detaching from the Host Machine

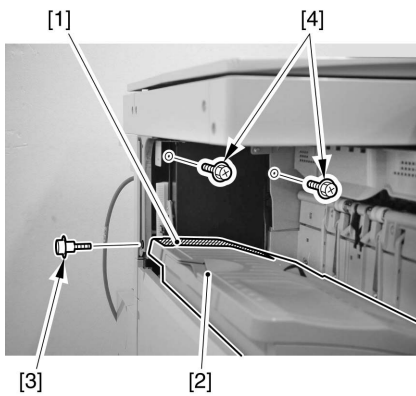
0002-8175

- 1) Remove the reuse band [5].
- 2) Disconnect the 2 connectors [4] of the communication harness.
- 3) Free the communication harness [1] from the wire saddle [2] of the finisher and the cable guide [3].



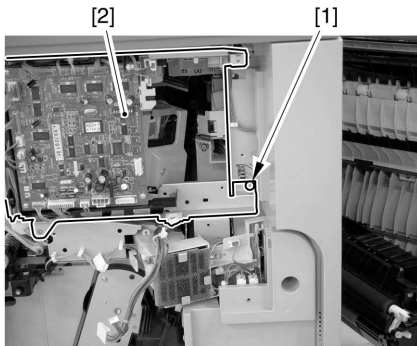
F-4-617

- 4) Press the area of the tray indicated by shading [1] to move down the tray (if it is in up position).
- 5) Remove the stepped screw [3] and the 2 other screws [4]. (The use of a long screwdriver is recommended.)



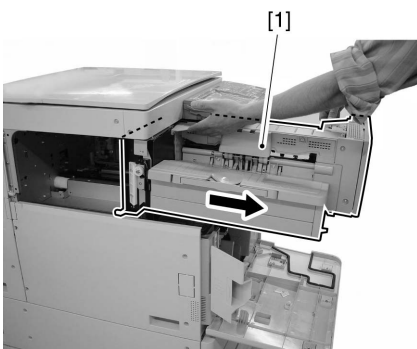
F-4-618

- 6) Remove the screw (M3x8) [1], and release the finisher assembly [2].



F-4-619

- 7) Pull the finisher [1] to detach it from the machine while holding it level.



F-4-620

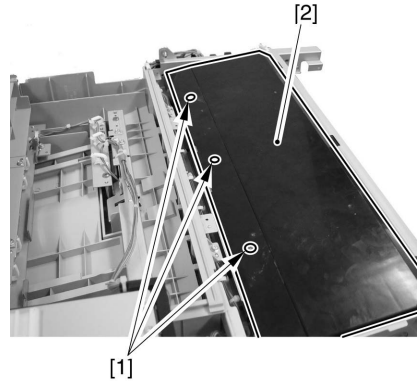
4.5.16.7 Removing the Stapler Drive Assembly Cover

0002-8426

- 1) Turn over the finisher.

- 2) Remove the 3 screws [1], and detach the cover [2].

⚠ The screw in the figure is an M4x4 binding screw; the others are stepped screws.



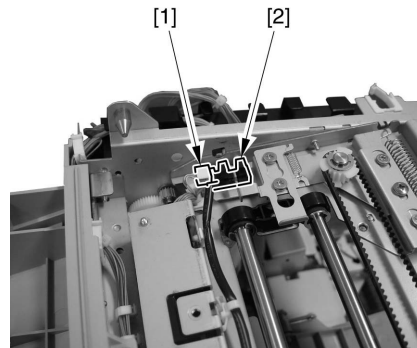
F-4-621

4.5.16.8 Removing the Stapler

Slide HP Sensor

0001-1620

- 1) Disconnect the connector [1], and detach the sensor [2].



F-4-622

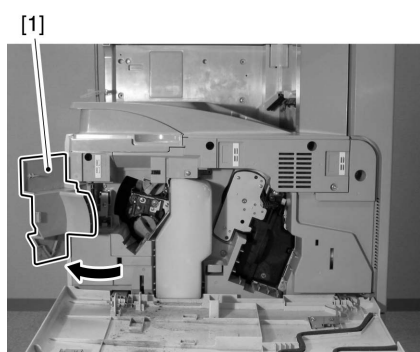
4.5.17 Rear End Plate Sensor

4.5.17.1 Removing the Toner

Bottle Retainer

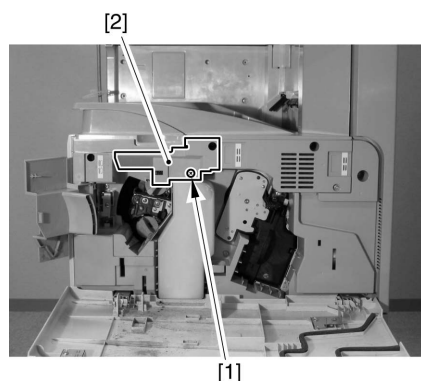
0002-7909

- 1) Open the front cover.
- 2) Open the toner container access cover [1].



F-4-623

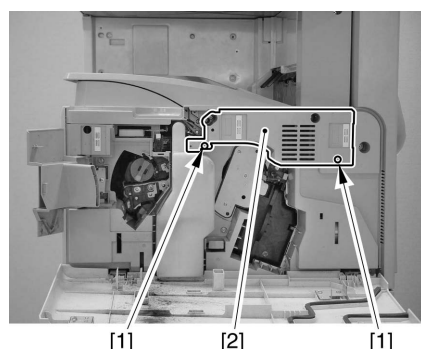
- 3) Remove the TP screw [1], and detach the waste toner bottle retainer [2].



F-4-624

4.5.17.2 Removing the Front Inside Cover (middle) 0002-7983

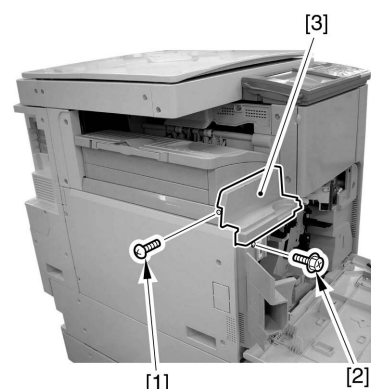
- 1) Remove the 2 screws [1], and detach the front inside cover (middle) [2].



F-4-625

4.5.17.3 Removing the Finisher Tray Front Cover 0002-8089

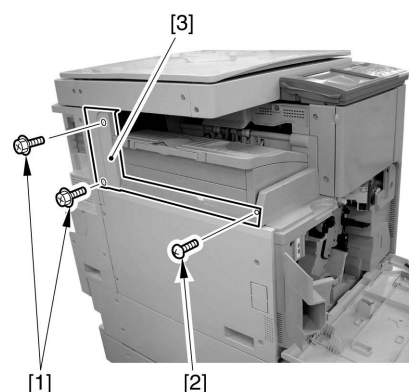
- 1) Remove the self-tapping screw (small) [1] and the other screw [2]; then, detach the finisher tray front cover [3].



F-4-626

4.5.17.4 Removing the Finisher Left Cover 0002-8138

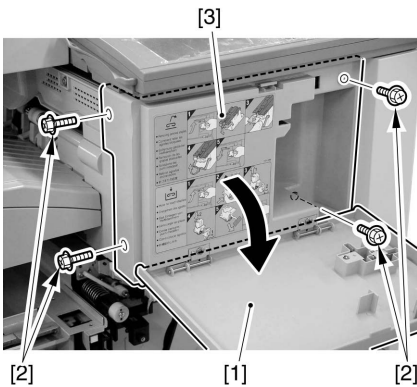
- 1) Remove the 2 screws [1] and the self-tapping screw (small) [2]; then, detach the finisher left cover [3].



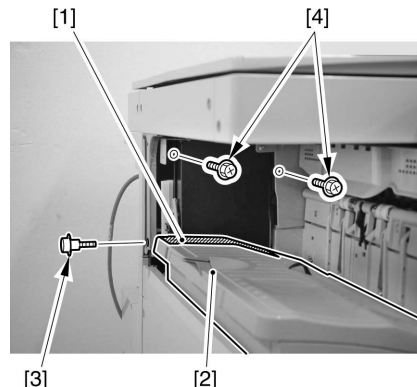
F-4-627

4.5.17.5 Removing the Finisher Front Cover 0003-0302

- 1) Open the finisher front cover [1].
2) Remove the 4 screws [2], and detach the finisher front cover [3].



F-4-628

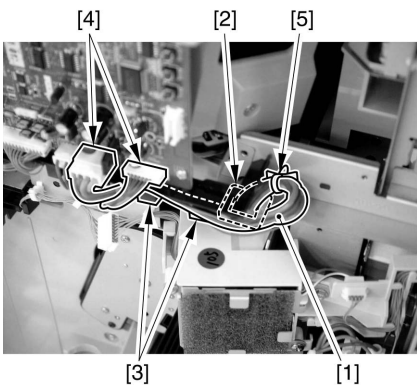


F-4-630

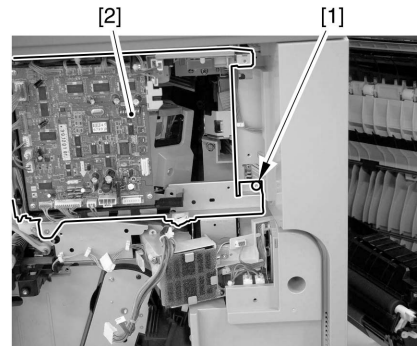
4.5.17.6 Detaching from the Host Machine

0002-8176

- 1) Remove the reuse band [5].
- 2) Disconnect the 2 connectors [4] of the communication harness.
- 3) Free the communication harness [1] from the wire saddle [2] of the finisher and the cable guide [3].

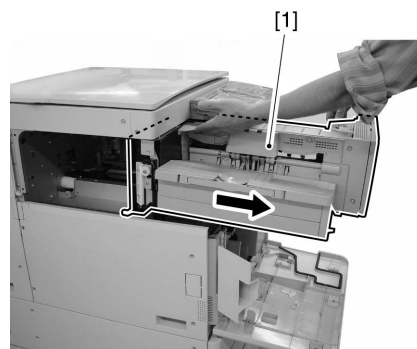


F-4-629



F-4-631

- 7) Pull the finisher [1] to detach it from the machine while holding it level.



F-4-632

- 4) Press the area of the tray indicated by shading [1] to move down the tray (if it is in up position).
- 5) Remove the stepped screw [3] and the 2 other screws [4]. (The use of a long screwdriver is recommended.)

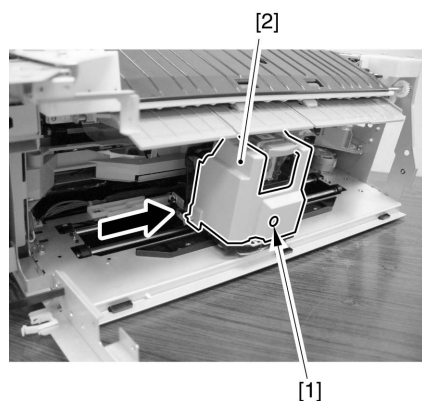
4.5.17.7 Removing the Rear End Guide Plate Sensor

0001-1625

- 1) Move the stapler unit to the center.

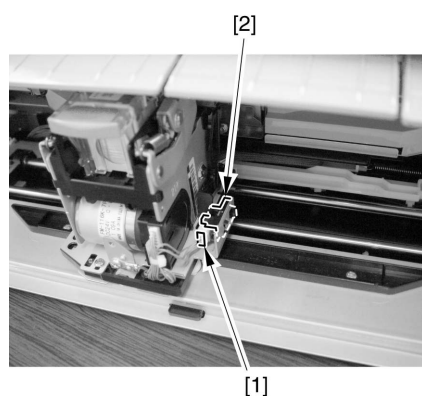
⚠ When relocating the stapler unit, be sure to hold it by the center of its rotation.

2) Remove the screw [1], and detach the cover [2].



F-4-633

3) Disconnect the connector [1], and detach the rear end guide plate sensor [2].



F-4-634

4.5.18 Front Alignment HP Sensor

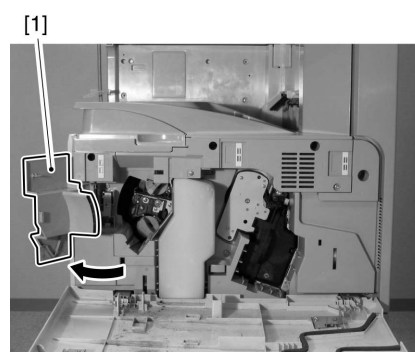
4.5.18.1 Removing the Toner

Bottle Retainer

0002-7910

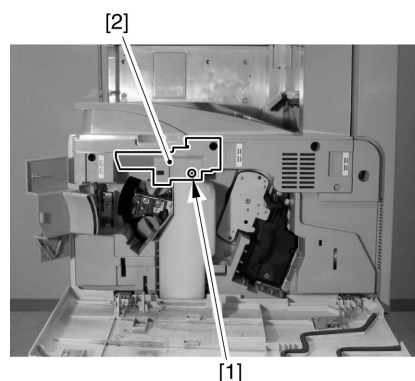
1) Open the front cover.

2) Open the toner container access cover [1].



F-4-635

3) Remove the TP screw [1], and detach the waste toner bottle retainer [2].

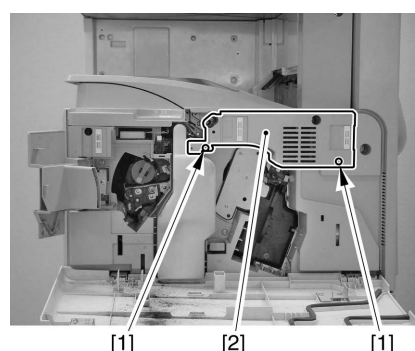


F-4-636

4.5.18.2 Removing the Front Inside Cover (middle)

0002-7985

1) Remove the 2 screws [1], and detach the front inside cover (middle) [2].



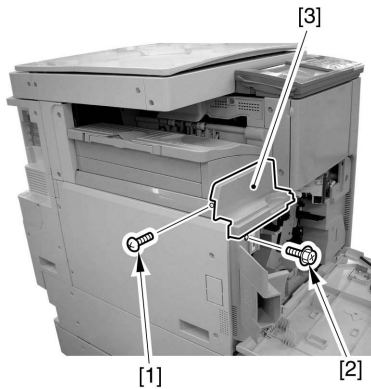
F-4-637

4.5.18.3 Removing the Finisher

Tray Front Cover

0002-8090

- 1) Remove the self-tapping screw (small) [1] and the other screw [2]; then, detach the finisher tray front cover [3].



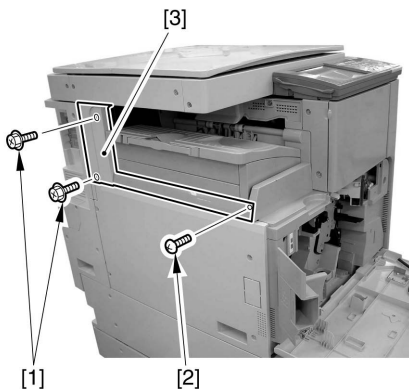
F-4-638

4.5.18.4 Removing the Finisher

Left Cover

0002-8139

- 1) Remove the 2 screws [1] and the self-tapping screw (small) [2]; then, detach the finisher left cover [3].



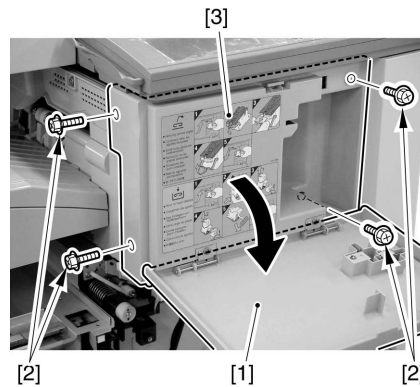
F-4-639

4.5.18.5 Removing the Finisher

Front Cover

0003-0303

- 1) Open the finisher front cover [1].
- 2) Remove the 4 screws [2], and detach the finisher front cover [3].

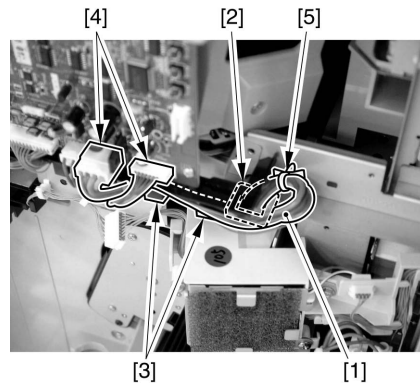


F-4-640

4.5.18.6 Detaching from the Host Machine

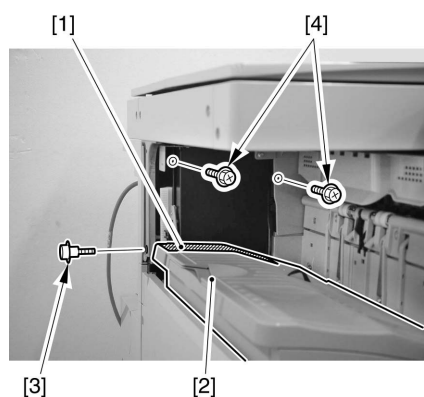
0002-8177

- 1) Remove the reuse band [5].
- 2) Disconnect the 2 connectors [4] of the communication harness.
- 3) Free the communication harness [1] from the wire saddle [2] of the finisher and the cable guide [3].



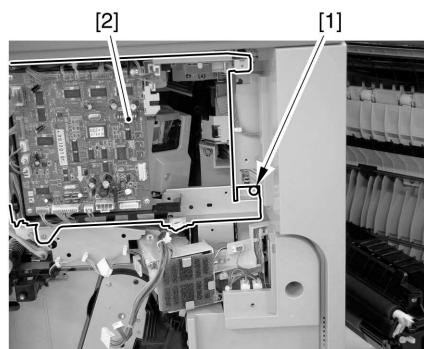
F-4-641

- 4) Press the area of the tray indicated by shading [1] to move down the tray (if it is in up position).
- 5) Remove the stepped screw [3] and the 2 other screws [4]. (The use of a long screwdriver is recommended.)



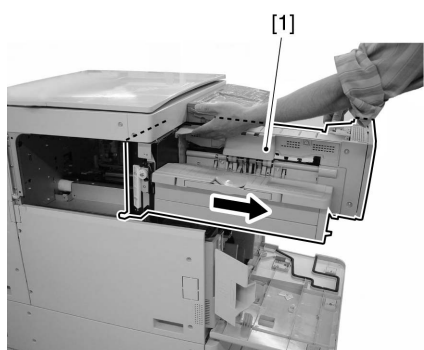
F-4-642

- 6) Remove the screw (M3x8) [1], and release the finisher assembly [2].



F-4-643

- 7) Pull the finisher [1] to detach it from the machine while holding it level.



F-4-644

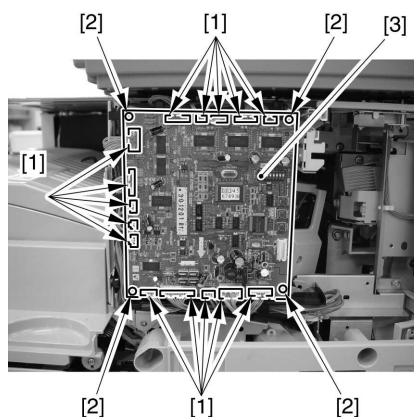
4.5.18.7 Removing the Finisher

Controller PCB

0002-8203

- 1) Disconnect the 5 connectors [1], and remove the 4

screws [2]; then, detach the finisher controller PCB [3].

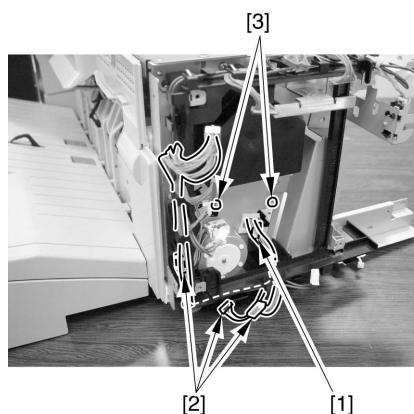


F-4-645

4.5.18.8 Removing the Processing Tray Assembly

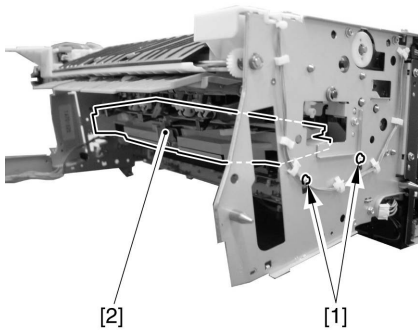
0002-8428

- 1) Open the wire saddle [1], and put the cable [2] inside of the finisher; then, remove the 2 screws [3].

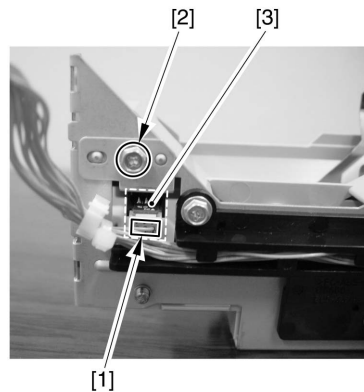


F-4-646

- 2) Remove the 2 screws [2], and detach the processing tray unit.

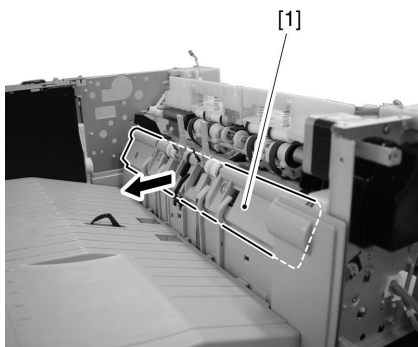


F-4-647



F-4-649

⚠ When mounting the processing tray, be sure to slide the lattice guide unit [1] to the left before doing so. This is to prevent the plastic sheet of the guide unit from interfering with the processing tray assembly.



F-4-648

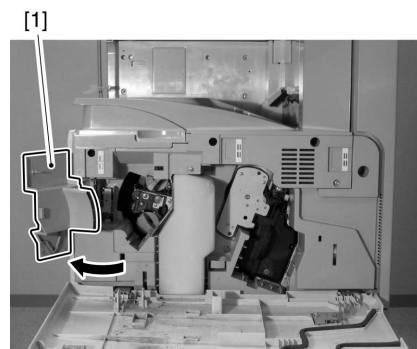
4.5.19 Rear Alignment HP Sensor

4.5.19.1 Removing the Toner

Bottle Retainer

0002-7911

- 1) Open the front cover.
- 2) Open the toner container access cover [1].



F-4-650

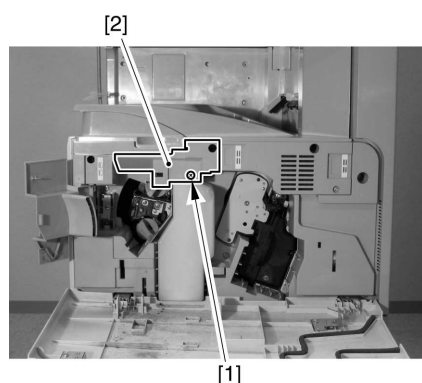
- 3) Remove the TP screw [1], and detach the waste toner bottle retainer [2].

4.5.18.9 Removing the Front

Alignment HP Sensor

0001-1658

- 1) Disconnect the connector [1], and remove the screw [2]; then, detach the sensor [3].

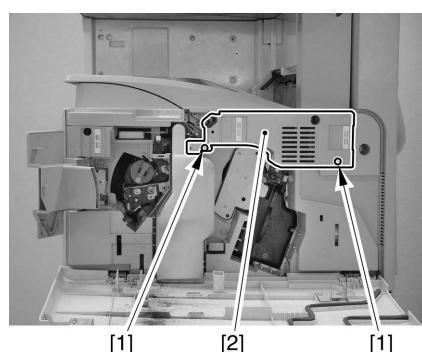


F-4-651

4.5.19.2 Removing the Front Inside Cover (middle)

0002-7986

- 1) Remove the 2 screws [1], and detach the front inside cover (middle) [2].

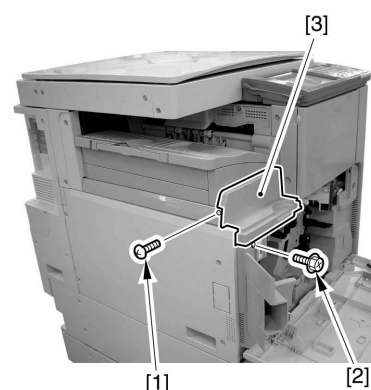


F-4-652

4.5.19.3 Removing the Finisher Tray Front Cover

0002-8091

- 1) Remove the self-tapping screw (small) [1] and the other screw [2]; then, detach the finisher tray front cover [3].

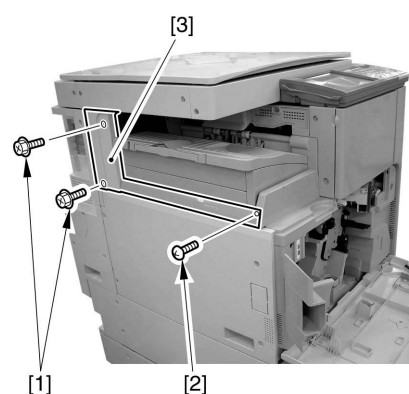


F-4-653

4.5.19.4 Removing the Finisher Left Cover

0002-8140

- 1) Remove the 2 screws [1] and the self-tapping screw (small) [2]; then, detach the finisher left cover [3].

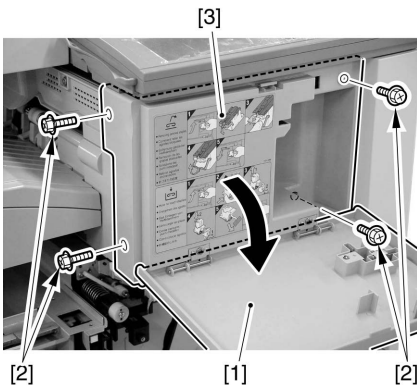


F-4-654

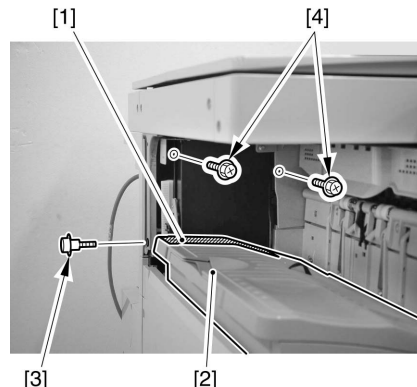
4.5.19.5 Removing the Finisher Front Cover

0003-0304

- 1) Open the finisher front cover [1].
- 2) Remove the 4 screws [2], and detach the finisher front cover [3].



F-4-655

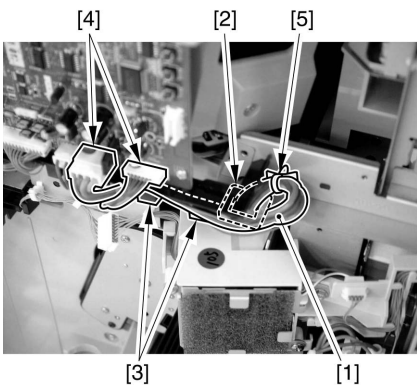


F-4-657

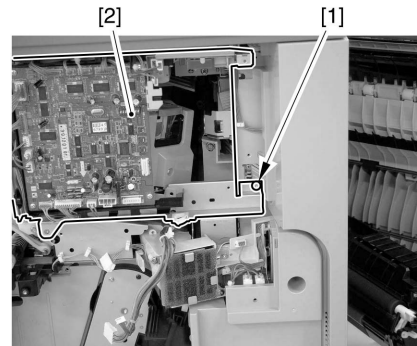
4.5.19.6 Detaching from the Host Machine

0002-8178

- 1) Remove the reuse band [5].
- 2) Disconnect the 2 connectors [4] of the communication harness.
- 3) Free the communication harness [1] from the wire saddle [2] of the finisher and the cable guide [3].

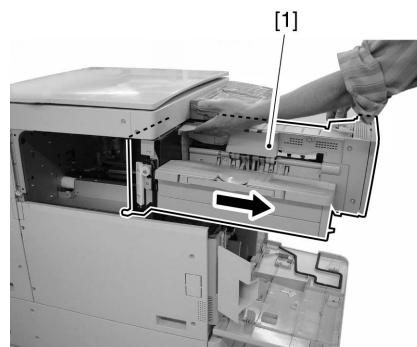


F-4-656



F-4-658

- 7) Pull the finisher [1] to detach it from the machine while holding it level.



F-4-659

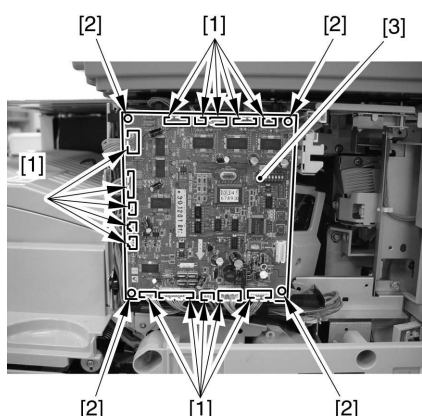
- 4) Press the area of the tray indicated by shading [1] to move down the tray (if it is in up position).
- 5) Remove the stepped screw [3] and the 2 other screws [4]. (The use of a long screwdriver is recommended.)

4.5.19.7 Removing the Finisher Controller PCB

0002-8204

- 1) Disconnect the 5 connectors [1], and remove the 4

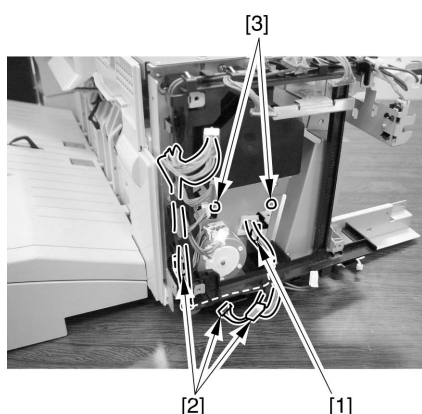
screws [2]; then, detach the finisher controller PCB [3].



F-4-660

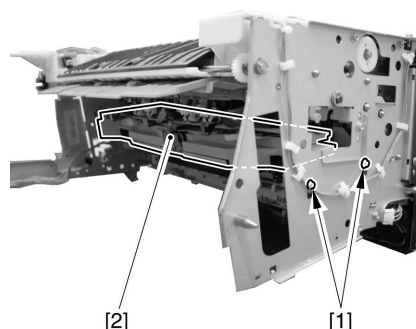
4.5.19.8 Removing the Processing Tray Assembly 0002-8429

- 1) Open the wire saddle [1], and put the cable [2] inside of the finisher; then, remove the 2 screws [3].



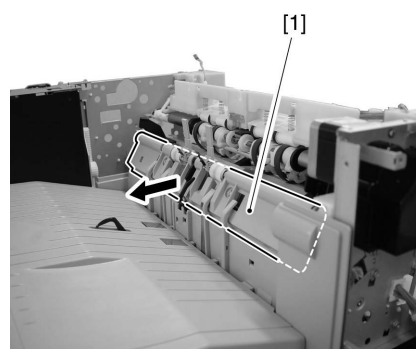
F-4-661

- 2) Remove the 2 screws [2], and detach the processing tray unit.



F-4-662

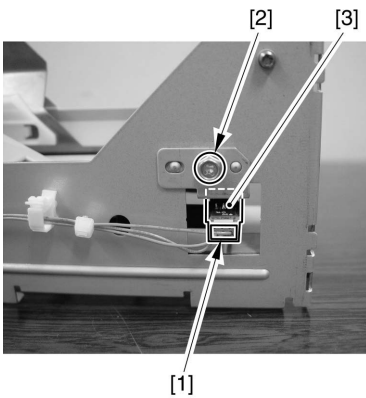
⚠ When mounting the processing tray, be sure to slide the lattice guide unit [1] to the left before doing so. This is to prevent the plastic sheet of the guide unit from interfering with the processing tray assembly.



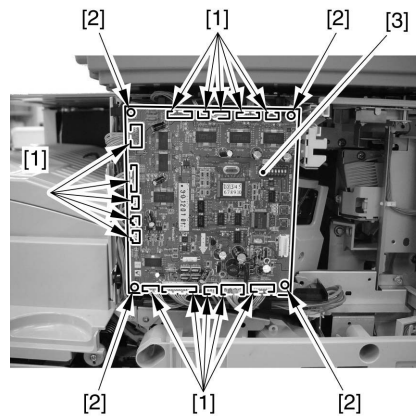
F-4-663

4.5.19.9 Removing the Rear Alignment HP Sensor 0001-1669

- 1) Disconnect the connector [1], and remove the screws [2]; then, detach the rear alignment HP sensor [3].



F-4-664



F-4-666

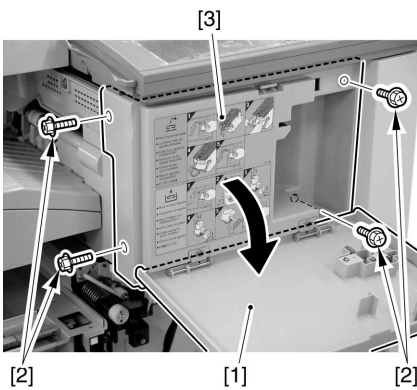
4.5.20 Paddle HP Sensor

4.5.20.1 Removing the Finisher

Front Cover

0002-8365

- 1) Open the finisher front cover [1].
- 2) Remove the 4 screws [2], and detach the finisher front cover [3].



F-4-665

4.5.20.2 Removing the Finisher Controller PCB

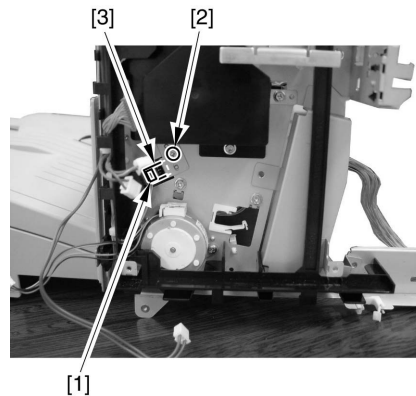
0002-8205

- 1) Disconnect the 5 connectors [1], and remove the 4 screws [2]; then, detach the finisher controller PCB [3].

4.5.20.3 Removing the Paddle HP Sensor

0001-1700

- 1) Disconnect the connector [1], and remove the screw [2]; then, detach the sensor [3].



F-4-667

4.5.21 Finisher Controller PCB

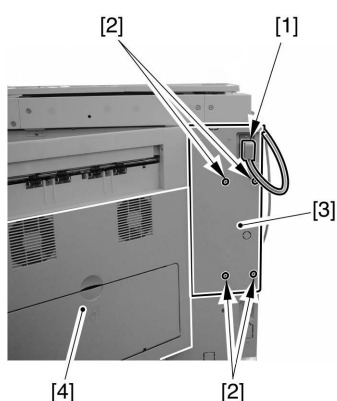
4.5.21.1 Relay Delivery Assembly Controller PCB

4.5.21.1.1 Removing the Reader Unit

Power Cable/Rear Right Cover

0002-9141

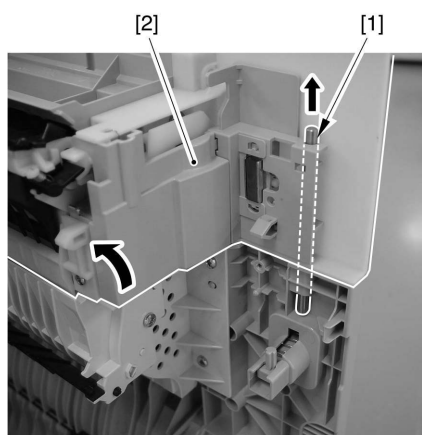
- 1) Disconnect the reader unit power cable [1].
- 2) Remove the 4 screws [2], and detach the rear right cover [3].
- 3) Open the right cover [4].



F-4-668

4.5.21.1.2 Removing the Relay Delivery Assembly 0002-9149

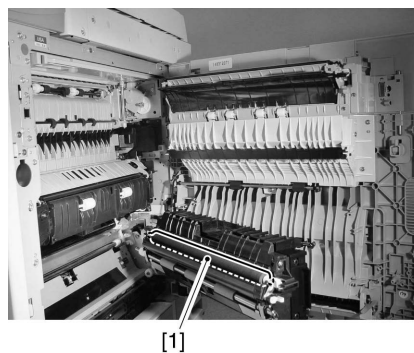
- 1) Remove the joint pin [1], and lift the relay delivery assembly [2] to separate it from the right door.



F-4-669

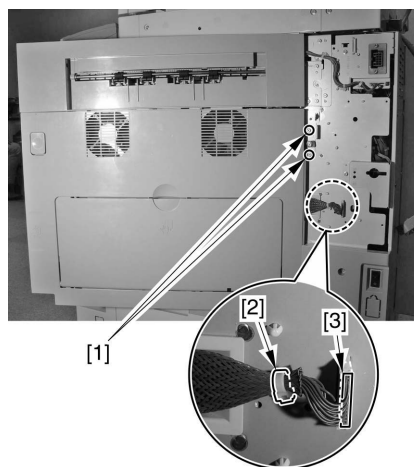
- 2)

⚠ When detaching the right door, be sure not to touch the secondary transfer outside roller [1].



F-4-670

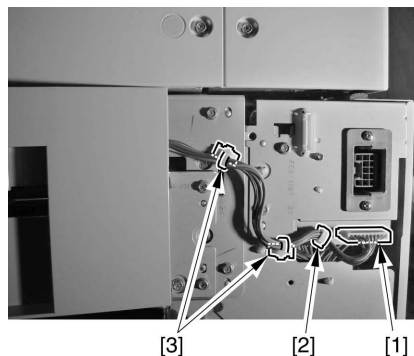
Remove the 2 screws [1], remove the reuse band [2], and disconnect the connector [3]; then, lift the right door to detach.



F-4-671

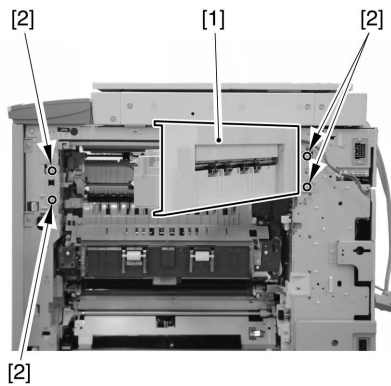
- 3) Disconnect the controller [1], and free the harness from the cable clamp [2].

- 4) Remove the 2 reuse bands [3].



F-4-672

- 5) Open the relay delivery assembly [1], and remove the 4 screws [2]; then, close the relay delivery assembly.

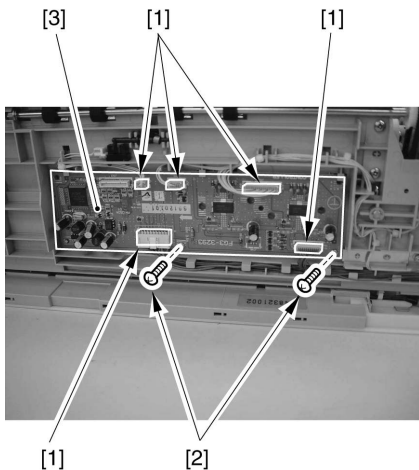


F-4-673

- 6) Detach the relay delivery assembly.

4.5.21.1.3 Removing the Relay Delivery Assembly Controller PCB 0002-9145

- 1) Disconnect the 5 connectors [1], and remove the 2 screws [2]; then, detach the relay delivery assembly controller PCB [3].



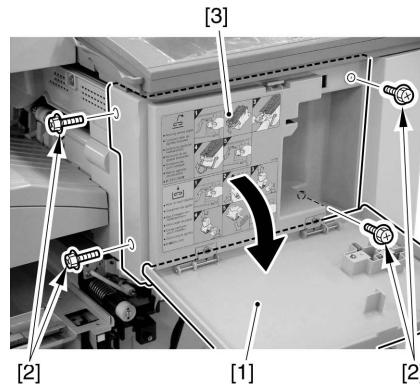
F-4-674

4.5.21.2 Finisher Controller PCB

4.5.21.2.1 Removing the Finisher Front Cover 0002-8824

- 1) Open the finisher front cover [1].

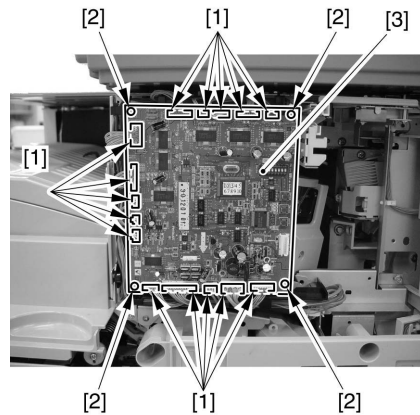
- 2) Remove the 4 screws [2], and detach the finisher front cover [3].



F-4-675

4.5.21.2.2 Removing the Finisher Controller PCB 0002-7180

- 1) Disconnect the 5 connectors [1], and remove the 4 screws [2]; then, detach the finisher controller PCB [3].

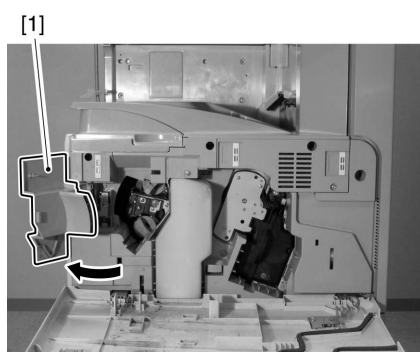


F-4-676

4.5.22 Static Charge Eliminator 1

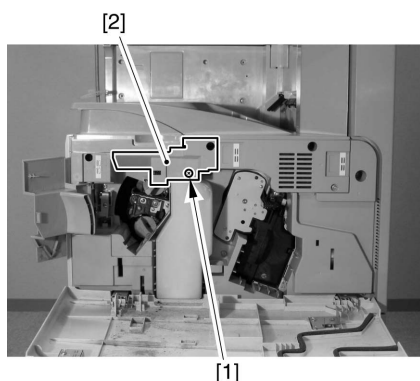
4.5.22.1 Removing the Toner Bottle Retainer 0002-7912

- 1) Open the front cover.
- 2) Open the toner container access cover [1].



F-4-677

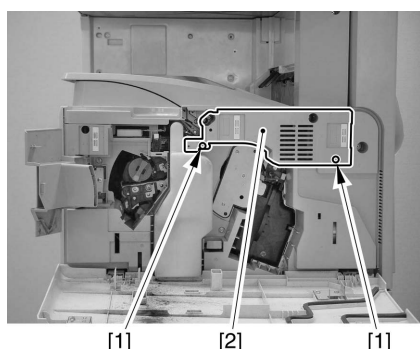
- 3) Remove the TP screw [1], and detach the waste toner bottle retainer [2].



F-4-678

4.5.22.2 Removing the Front Inside Cover (middle) 0002-7988

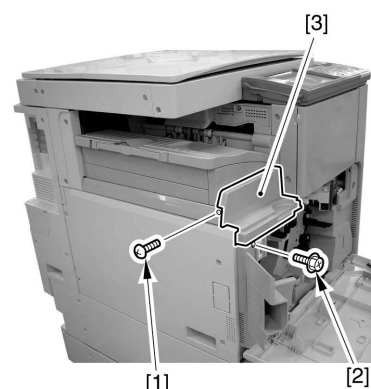
- 1) Remove the 2 screws [1], and detach the front inside cover (middle) [2].



F-4-679

4.5.22.3 Removing the Finisher Tray Front Cover 0002-8095

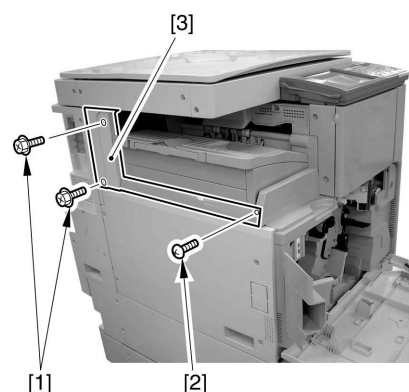
- 1) Remove the self-tapping screw (small) [1] and the other screw [2]; then, detach the finisher tray front cover [3].



F-4-680

4.5.22.4 Removing the Finisher Left Cover 0002-8141

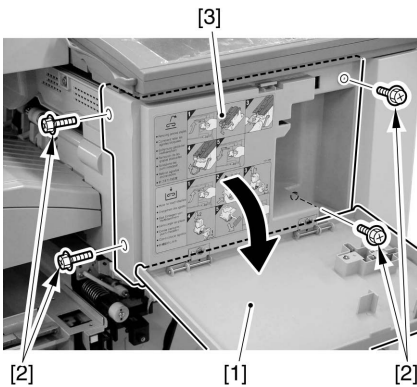
- 1) Remove the 2 screws [1] and the self-tapping screw (small) [2]; then, detach the finisher left cover [3].



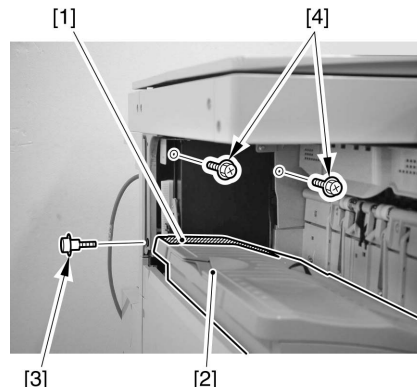
F-4-681

4.5.22.5 Removing the Finisher Front Cover 0003-0305

- 1) Open the finisher front cover [1].
2) Remove the 4 screws [2], and detach the finisher front cover [3].



F-4-682

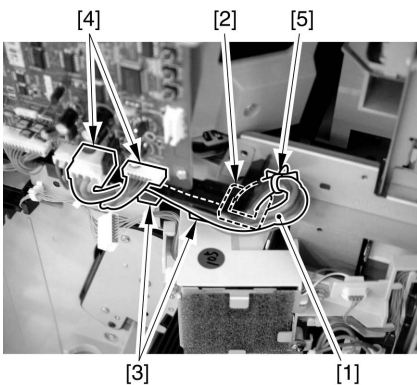


F-4-684

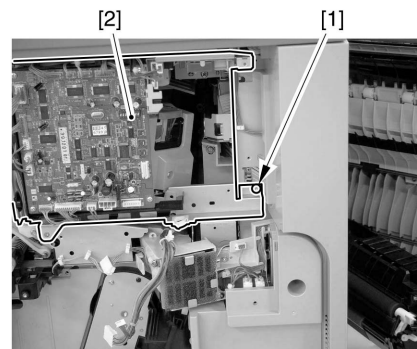
4.5.22.6 Detaching from the Host Machine

0002-8179

- 1) Remove the reuse band [5].
- 2) Disconnect the 2 connectors [4] of the communication harness.
- 3) Free the communication harness [1] from the wire saddle [2] of the finisher and the cable guide [3].

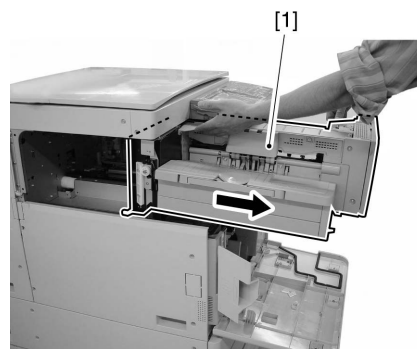


F-4-683



F-4-685

- 7) Pull the finisher [1] to detach it from the machine while holding it level.



F-4-686

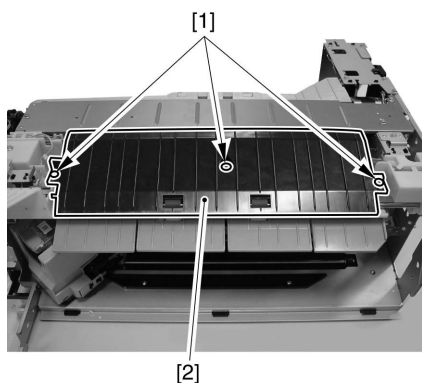
- 4) Press the area of the tray indicated by shading [1] to move down the tray (if it is in up position).
- 5) Remove the stepped screw [3] and the 2 other screws [4]. (The use of a long screwdriver is recommended.)

4.5.22.7 Removing the Reversing Guide

0002-8431

- 1) Remove the 3 self-tapping screws, and detach the

reversing guide [2].

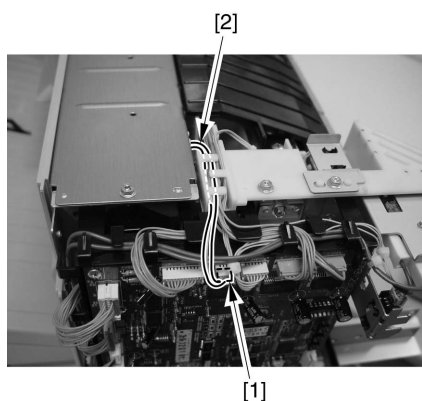


F-4-687

4.5.22.8 Removing the Upper Guide Assembly

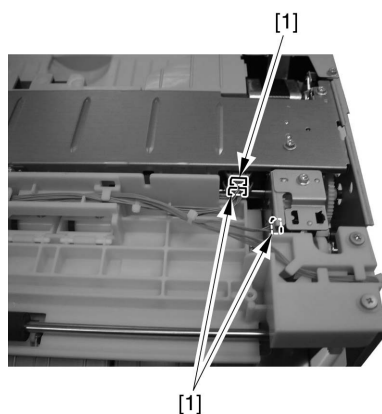
0002-8435

- 1) Disconnect the connector [1], and free the cable [2] from the cable guide.



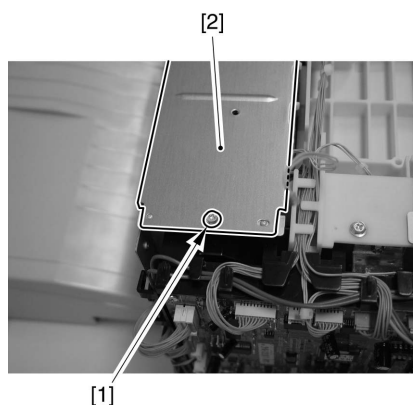
F-4-688

- 2) Disconnect the 3 connectors [1].

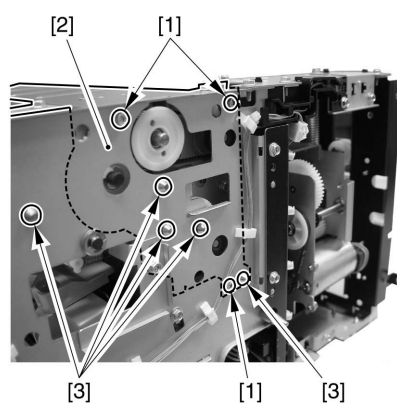


F-4-689

- 3) Remove the 4 screws [1], and detach the upper guide assembly [2].



F-4-690

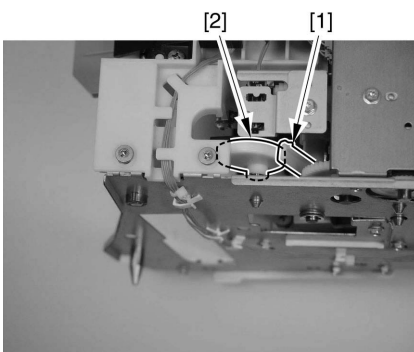


F-4-691

! To facilitate detachment of the upper guide

assembly, do so while freeing the 5 bosses [3].

⚠ When mounting the upper guide assembly, be sure that the drive cam [2] is found under the return belt arm [1].

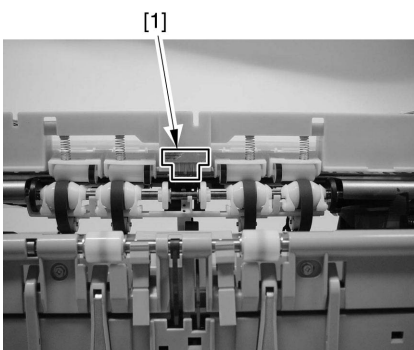


F-4-692

4.5.22.9 Removing the Static Eliminator 1

0002-7422

1) Remove the static eliminator 1 [1].



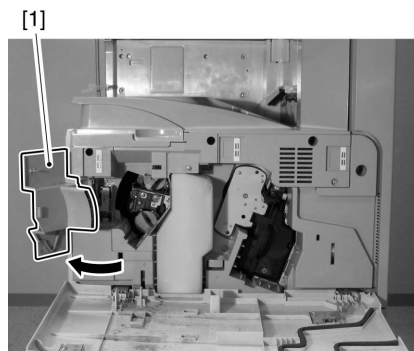
F-4-693

4.5.23 Static Charge Eliminator 2

4.5.23.1 Removing the Toner Bottle Retainer

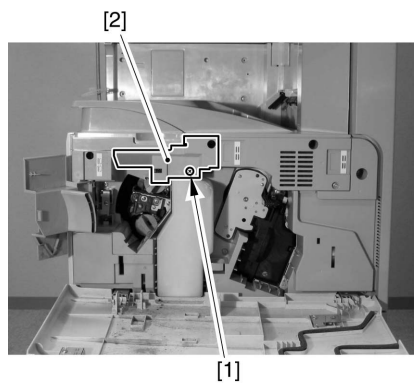
0002-7913

- 1) Open the front cover.
- 2) Open the toner container access cover [1].



F-4-694

3) Remove the TP screw [1], and detach the waste toner bottle retainer [2].

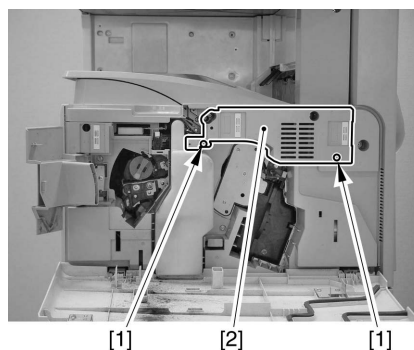


F-4-695

4.5.23.2 Removing the Front Inside Cover (middle)

0002-7989

1) Remove the 2 screws [1], and detach the front inside cover (middle) [2].



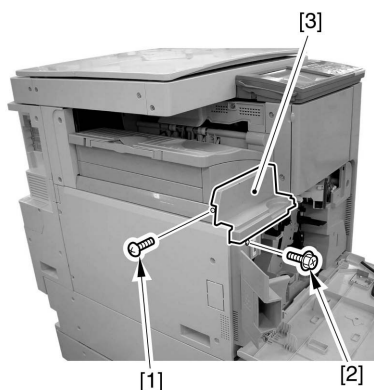
F-4-696

4.5.23.3 Removing the Finisher

Tray Front Cover

0002-8096

- 1) Remove the self-tapping screw (small) [1] and the other screw [2]; then, detach the finisher tray front cover [3].



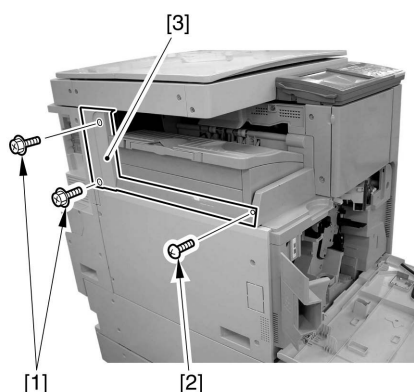
F-4-697

4.5.23.4 Removing the Finisher

Left Cover

0002-8142

- 1) Remove the 2 screws [1] and the self-tapping screw (small) [2]; then, detach the finisher left cover [3].



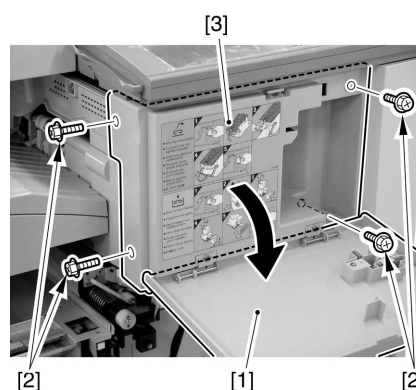
F-4-698

4.5.23.5 Removing the Finisher

Front Cover

0003-0306

- 1) Open the finisher front cover [1].
- 2) Remove the 4 screws [2], and detach the finisher front cover [3].

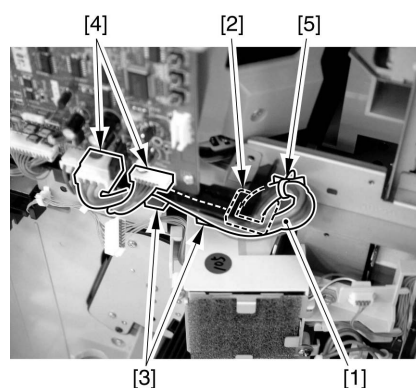


F-4-699

4.5.23.6 Detaching from the Host Machine

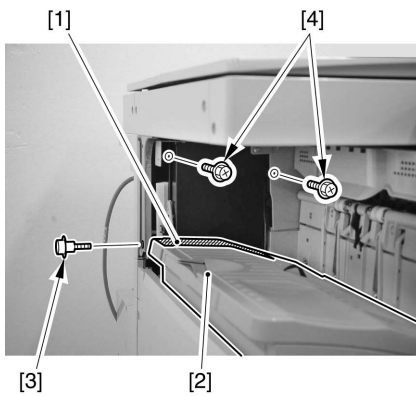
0002-8180

- 1) Remove the reuse band [5].
- 2) Disconnect the 2 connectors [4] of the communication harness.
- 3) Free the communication harness [1] from the wire saddle [2] of the finisher and the cable guide [3].



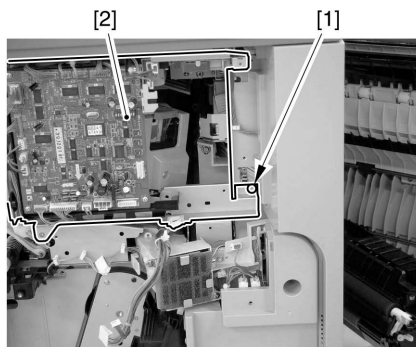
F-4-700

- 4) Press the area of the tray indicated by shading [1] to move down the tray (if it is in up position).
- 5) Remove the stepped screw [3] and the 2 other screws [4]. (The use of a long screwdriver is recommended.)



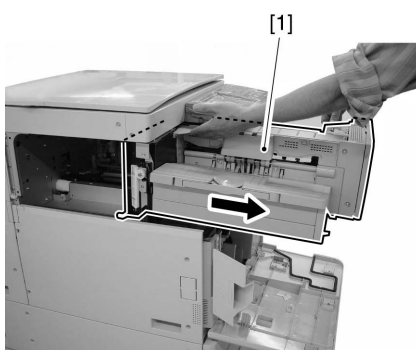
F-4-701

- 6) Remove the screw (M3x8) [1], and release the finisher assembly [2].



F-4-702

- 7) Pull the finisher [1] to detach it from the machine while holding it level.

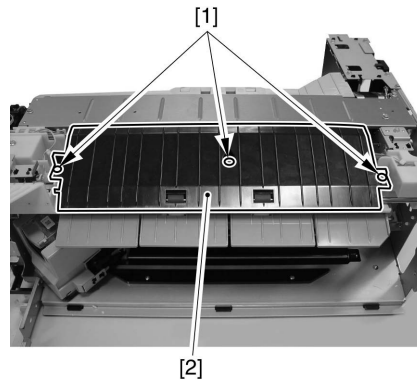


F-4-703

4.5.23.7 Removing the Reversing Guide 0002-8434

- 1) Remove the 3 self-tapping screws, and detach the

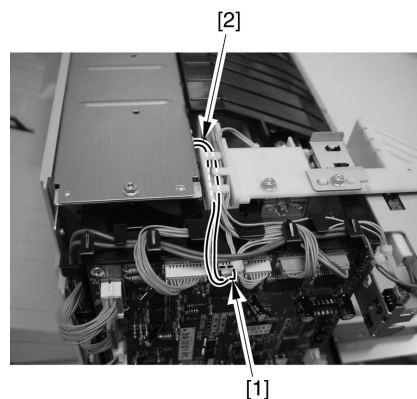
reversing guide [2].



F-4-704

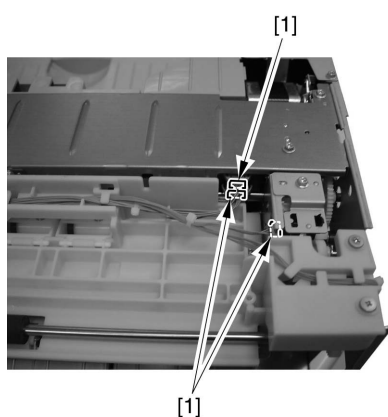
4.5.23.8 Removing the Upper Guide Assembly 0002-8437

- 1) Disconnect the connector [1], and free the cable [2] from the cable guide.



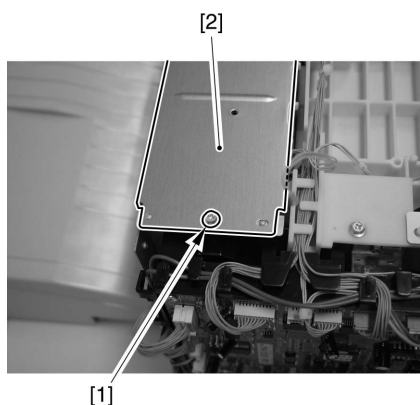
F-4-705

- 2) Disconnect the 3 connectors [1].

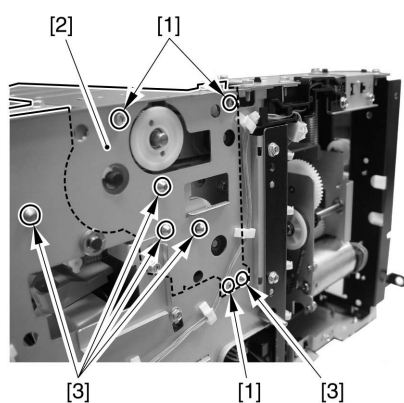


F-4-706

3) Remove the 4 screws [1], and detach the upper guide assembly [2].



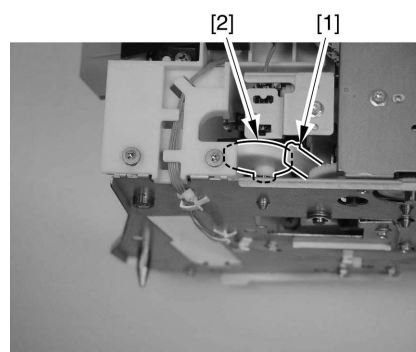
F-4-707



F-4-708

assembly, do so while freeing the 5 bosses [3].

⚠ When mounting the upper guide assembly, be sure that the drive cam [2] is found under the return belt arm [1].



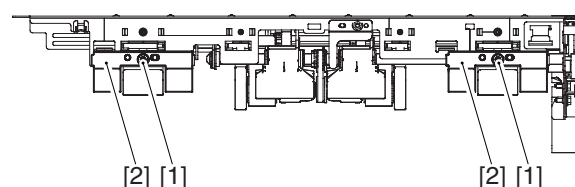
F-4-709

4.5.23.9 Removing the Static

Eliminator 2

0001-1720

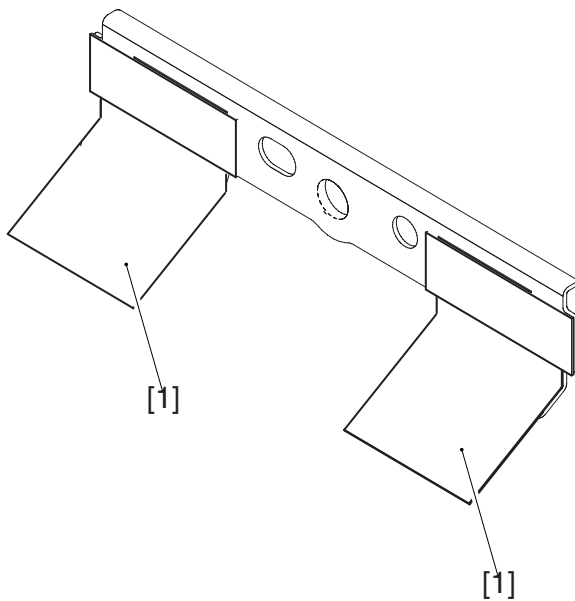
1) Remove the 2 screws [1], and detach the static eliminator 2 unit [2].



F-4-710

2) Detach the static eliminator 2 [1].

⚠ To facilitate detachment of the upper guide



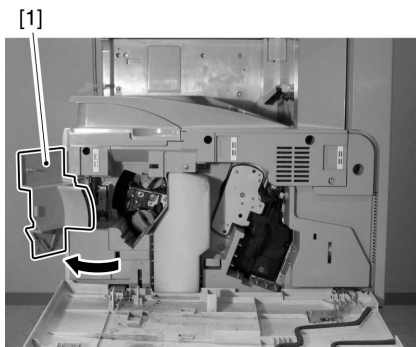
F-4-711

4.5.24 Static Charge Eliminator 3

4.5.24.1 Removing the Toner Bottle Retainer

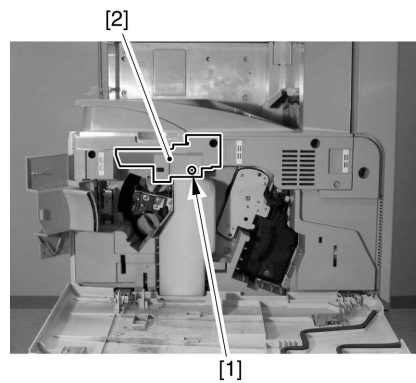
0002-8841

- 1) Open the front cover.
- 2) Open the toner container access cover [1].



F-4-712

- 3) Remove the TP screw [1], and detach the waste toner bottle retainer [2].

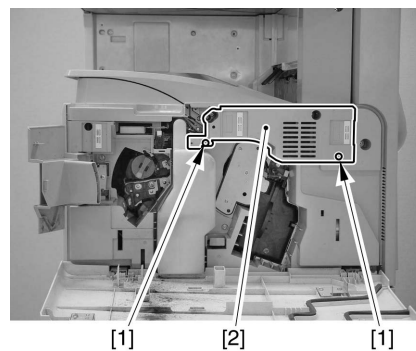


F-4-713

4.5.24.2 Removing the Front Inside Cover (middle)

0002-8843

- 1) Remove the 2 screws [1], and detach the front inside cover (middle) [2].

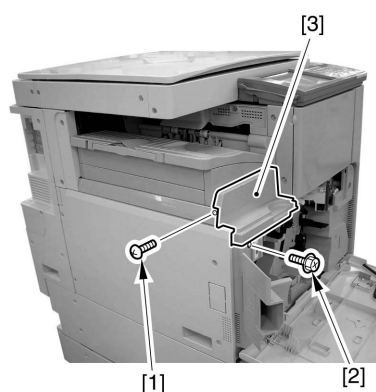


F-4-714

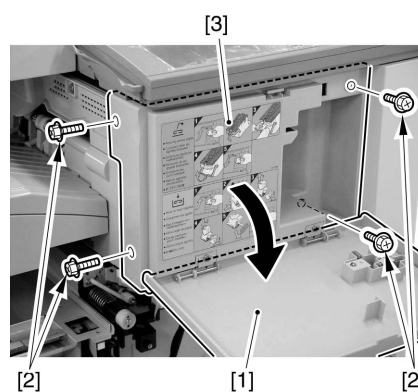
4.5.24.3 Removing the Finisher Tray Front Cover

0002-8849

- 1) Remove the self-tapping screw (small) [1] and the other screw [2]; then, detach the finisher tray front cover [3].



F-4-715

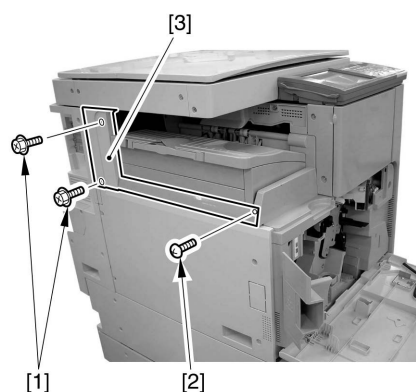


F-4-717

4.5.24.4 Removing the Finisher Left Cover

0002-8852

- 1) Remove the 2 screws [1] and the self-tapping screw (small) [2]; then, detach the finisher left cover [3].



F-4-716

4.5.24.5 Removing the Finisher Front Cover

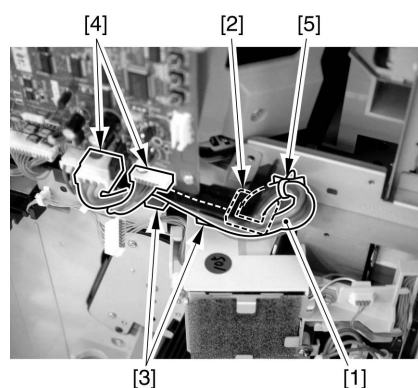
0003-0308

- 1) Open the finisher front cover [1].
- 2) Remove the 4 screws [2], and detach the finisher front cover [3].

4.5.24.6 Detaching from the Host Machine

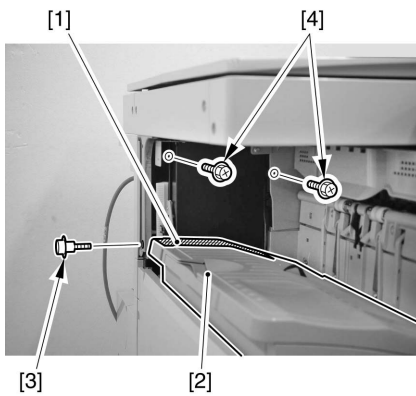
0002-8854

- 1) Remove the reuse band [5].
- 2) Disconnect the 2 connectors [4] of the communication harness.
- 3) Free the communication harness [1] from the wire saddle [2] of the finisher and the cable guide [3].



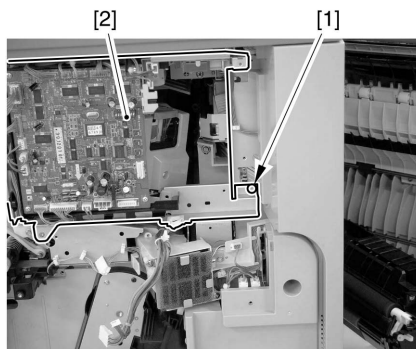
F-4-718

- 4) Press the area of the tray indicated by shading [1] to move down the tray (if it is in up position).
- 5) Remove the stepped screw [3] and the 2 other screws [4]. (The use of a long screwdriver is recommended.)



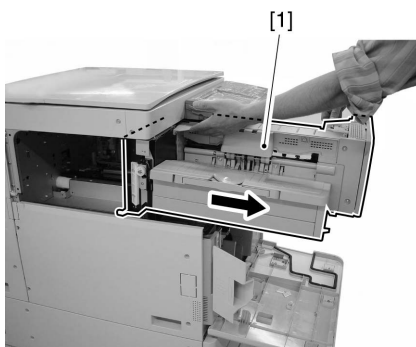
F-4-719

- 6) Remove the screw (M3x8) [1], and release the finisher assembly [2].



F-4-720

- 7) Pull the finisher [1] to detach it from the machine while holding it level.



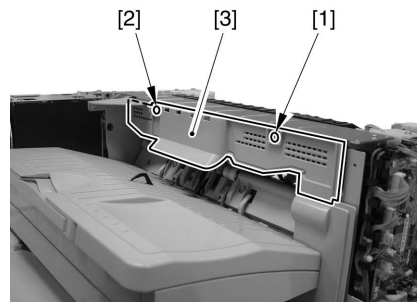
F-4-721

4.5.24.7 Removing the Stack Delivery Cover

0002-8857

- 1) Remove the stepped screw [1] and the other screw

[2]; then, detach the cover [3].

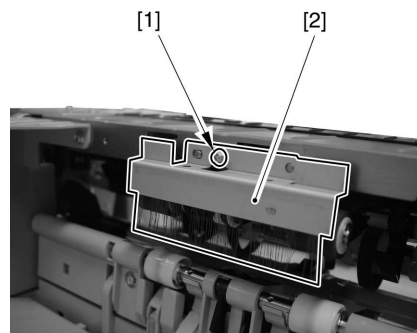


F-4-722

4.5.24.8 Removing the Static Eliminator 3

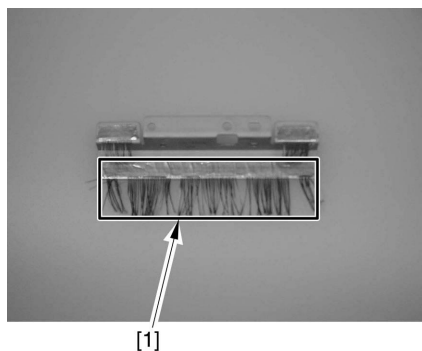
0002-7489

- 1) Remove the screw [1], and detach the static eliminator unit [2].



F-4-723

- 2) Remove the static eliminator 3 [1].



F-4-724

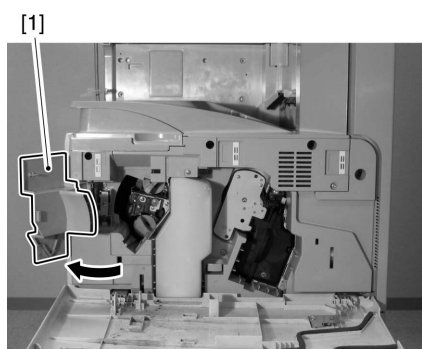
4.5.25 Static Charge Eliminator 4

4.5.25.1 Removing the Toner

Bottle Retainer

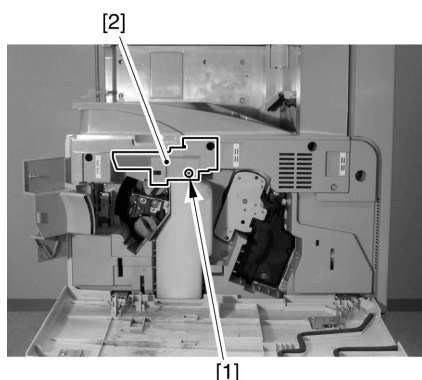
0002-8842

- 1) Open the front cover.
- 2) Open the toner container access cover [1].



F-4-725

- 3) Remove the TP screw [1], and detach the waste toner bottle retainer [2].

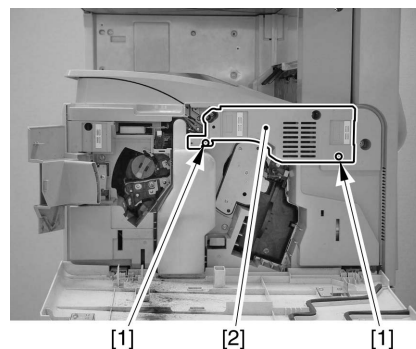


F-4-726

4.5.25.2 Removing the Front Inside Cover (middle)

0002-8844

- 1) Remove the 2 screws [1], and detach the front inside cover (middle) [2].

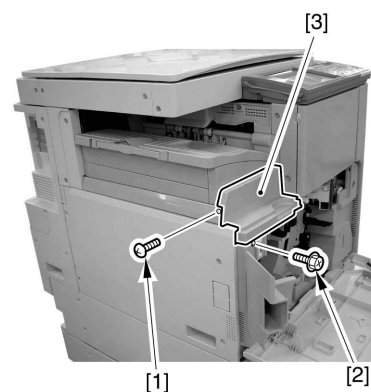


F-4-727

4.5.25.3 Removing the Finisher Tray Front Cover

0002-8850

- 1) Remove the self-tapping screw (small) [1] and the other screw [2]; then, detach the finisher tray front cover [3].

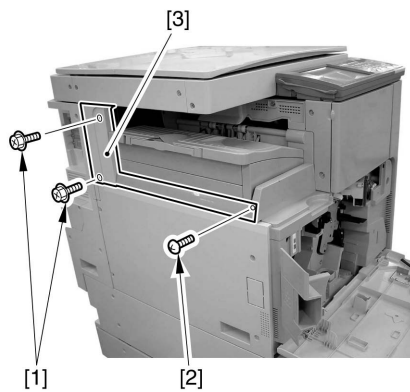


F-4-728

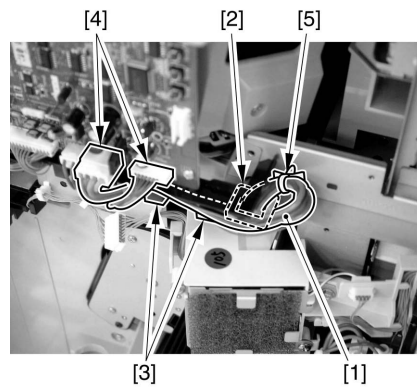
4.5.25.4 Removing the Finisher Left Cover

0002-8853

- 1) Remove the 2 screws [1] and the self-tapping screw (small) [2]; then, detach the finisher left cover [3].



F-4-729



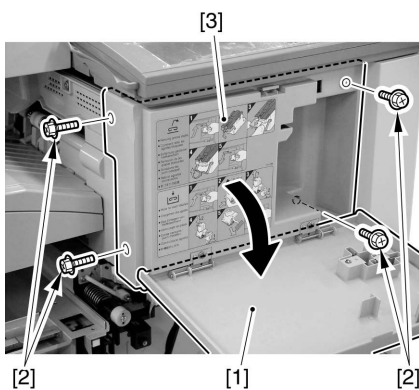
F-4-731

4.5.25.5 Removing the Finisher

Front Cover

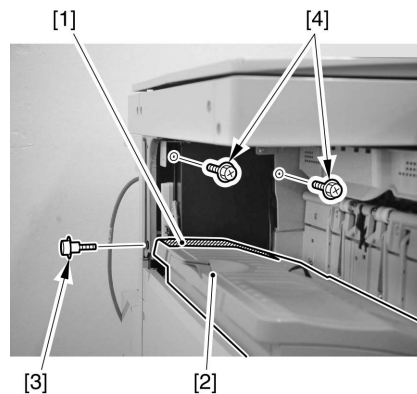
0003-0309

- 1) Open the finisher front cover [1].
- 2) Remove the 4 screws [2], and detach the finisher front cover [3].



F-4-730

- 4) Press the area of the tray indicated by shading [1] to move down the tray (if it is in up position).
- 5) Remove the stepped screw [3] and the 2 other screws [4]. (The use of a long screwdriver is recommended.)



F-4-732

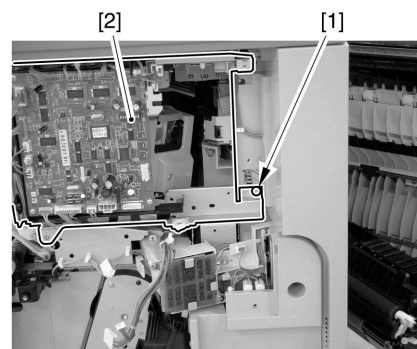
4.5.25.6 Detaching from the

Host Machine

0002-8855

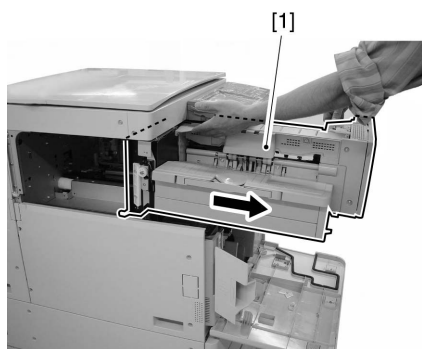
- 1) Remove the reuse band [5].
- 2) Disconnect the 2 connectors [4] of the communication harness.
- 3) Free the communication harness [1] from the wire saddle [2] of the finisher and the cable guide [3].

- 6) Remove the screw (M3x8) [1], and release the finisher assembly [2].

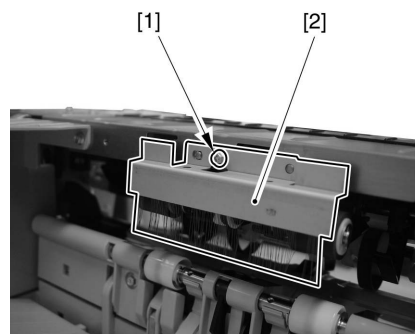


F-4-733

- 7) Pull the finisher [1] to detach it from the machine while holding it level.



F-4-734



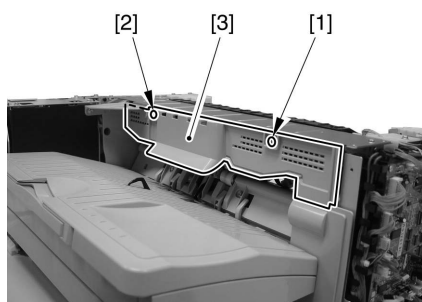
F-4-736

4.5.25.7 Removing the Stack

Delivery Cover

0002-8858

- 1) Remove the stepped screw [1] and the other screw [2]; then, detach the cover [3].



F-4-735

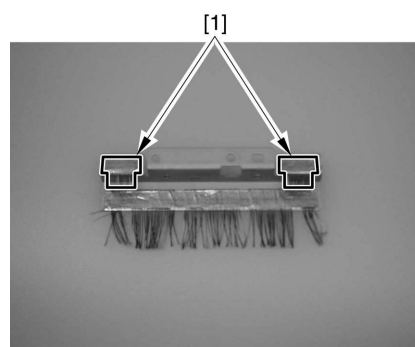
4.5.25.8 Removing the Static

Eliminator 4

0002-7491

- 1) Remove the screw [1], and detach the static eliminator unit [2].

- 2) Remove the static eliminator 4 [1].



F-4-737

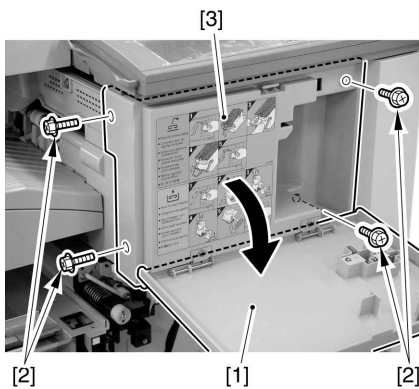
4.5.26 Front Cover Open/Closed Sensor

4.5.26.1 Removing the Finisher

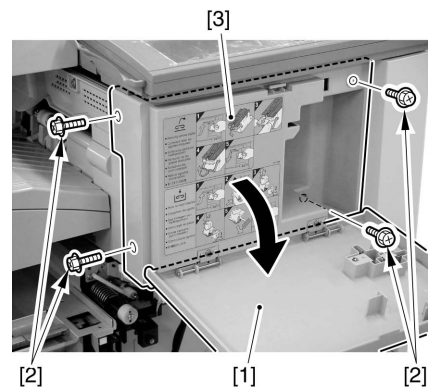
Front Cover

0002-8829

- 1) Open the finisher front cover [1].
2) Remove the 4 screws [2], and detach the finisher front cover [3].



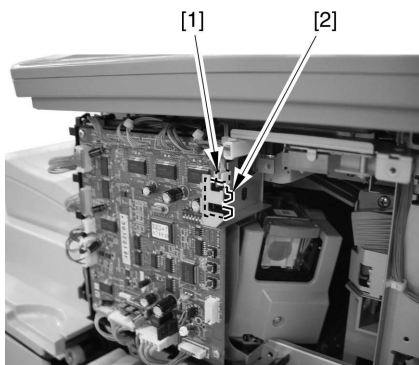
F-4-738



F-4-740

4.5.26.2 Removing the Front Cover Open/Closed Sensor 0001-1729

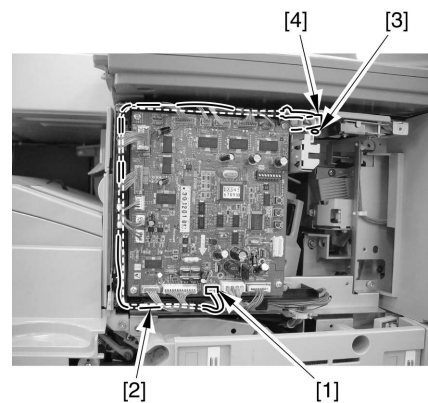
- 1) Disconnect the connector [1], and detach the sensor [2].



F-4-739

4.5.27.2 Removing the Front Door Safety Switch 0001-1734

- 1) Disconnect the connector [1], and free the harness [2] from the harness guide.
- 2) Remove the screw [3], and detach the switch [4].



F-4-741

4.5.27 Front Cover Safety Switch

4.5.27.1 Removing the Finisher Front Cover 0002-8833

- 1) Open the finisher front cover [1].
- 2) Remove the 4 screws [2], and detach the finisher front cover [3].

Chapter 5 Maintenance

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5.1 User Maintenance

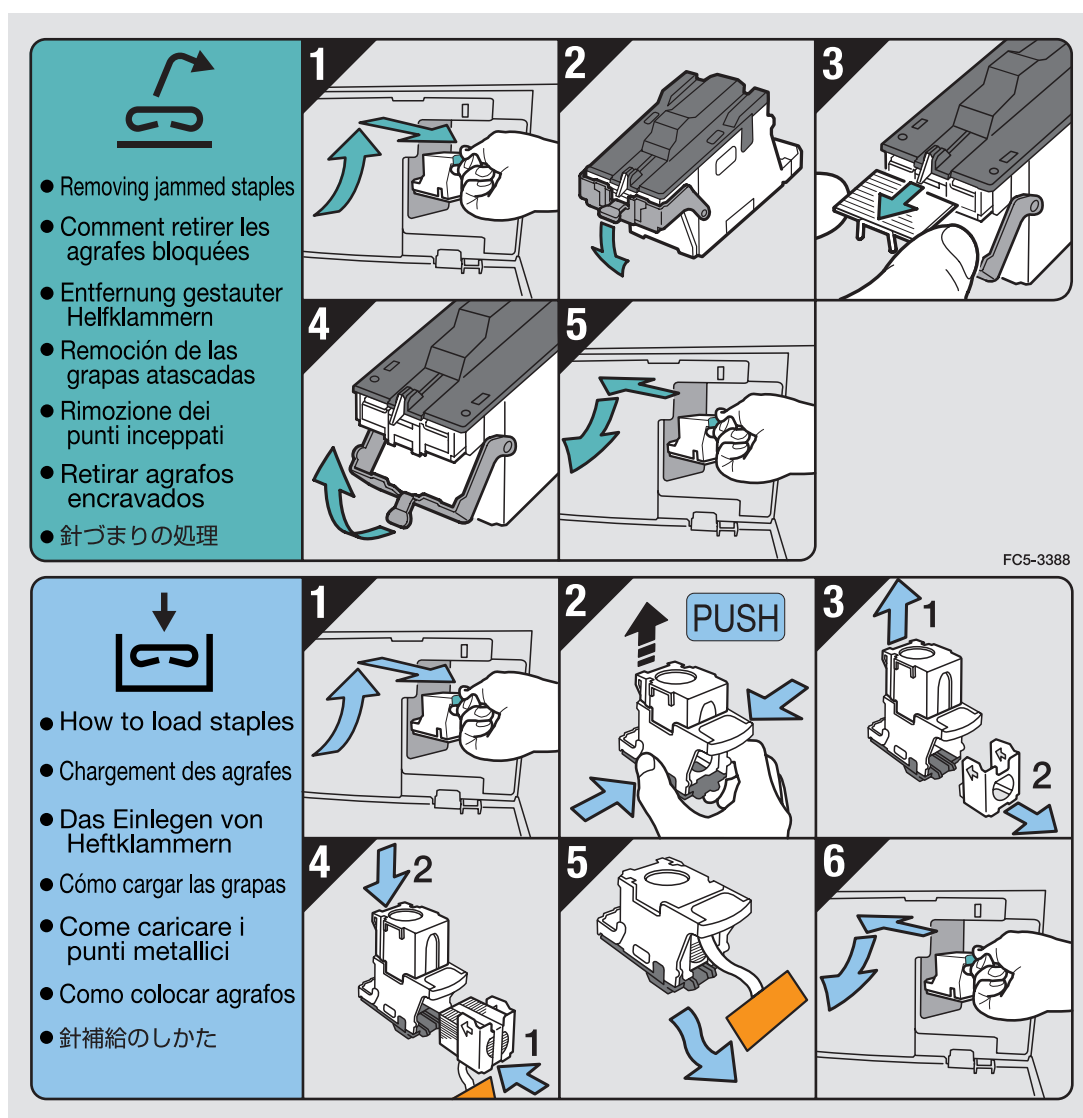
5.1.1 Items to Be Maintained by the User

0002-2285

T-5-1

No.	Item	Interval
1	Staple cartridge, replacement of	When instructed by host machine

Guide to Maintenance by the User



F-5-1

5.2 Maintenance and Inspection

5.2.1 Periodically Replaced Parts

5.2.1.1 Periodically Replaced Parts

0002-2295

The machine does not have parts that must be replaced on a periodical basis.

5.2.2 Durables

5.2.2.1 Durables

0002-2296

Some parts of the machine may have to be replaced once or more during product warranty because of wear or damage. See the table below for a guide, and replace the parts as needed.

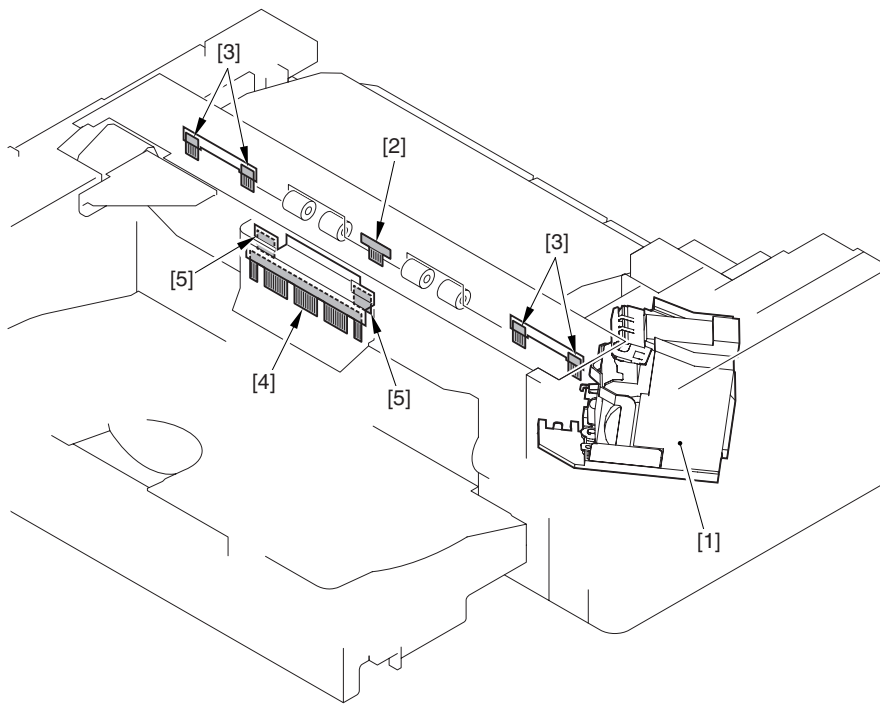
T-5-2

Finisher-J1 Durables

as of June 2003

No.	Parts name	Parts No.	Q'ty	Estimated life	Remarks
1	Stapler	FM2-0665-000	1	500,000 times	number of stapling operations
2	Static eliminator 1	FC5-3366-000	1	1,000,000 prints	
3	Static eliminator 2	FC5-3305-000	4	1,000,000 prints	
4	Static eliminator 3	FC5-4510-000	1	1,000,000 prints	
5	Static eliminator 4	FC5-4509-000	2	1,000,000 prints	

 The above values are estimates only, and are subject to change depending on future data.



F-5-2

- [1] Stapler
- [2] Static eliminator 1
- [3] Static eliminator 2
- [4] Static eliminator 3
- [5] Static eliminator 4

5.2.3 Periodical Servicing

5.2.3.1 Scheduled Servicing

0002-2319

The machine does not have parts that must be serviced on a periodical basis.

5.3 Adjustment

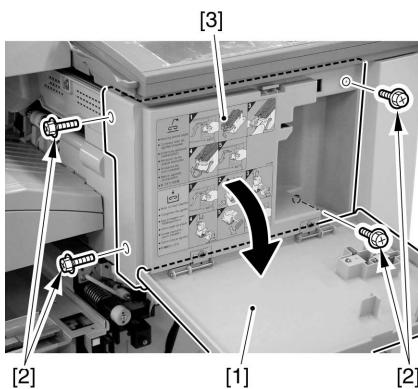
5.3.1 Basic Adjustment

5.3.1.1 Before Making Adjustments

0002-7564

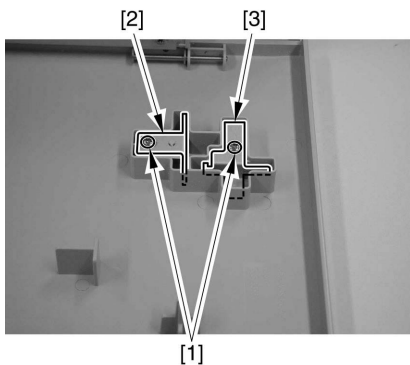
Before making adjustments using the DIP switch (SW104), you must turn on the sensor and switch as follows:

- 1) Open the finisher front cover [1].
- 2) Remove the 4 screws [2], and detach the finisher front cover [3].



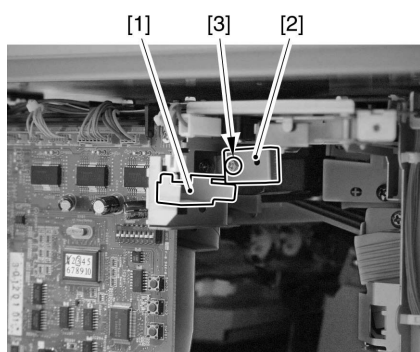
F-5-3

- 2) Remove the 2 screws [1] from behind the front cover, and detach the sensor tool [2] and the switch tool [3].



F-5-4

- 3) Turn on the front cover open/closed sensor (SR15) with the sensor tool [1].
- 4) Fix the switch tool [2] in place with a screw (M3) [3], and turn on the front cover safety switch (SW1).



F-5-5

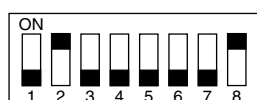
5.3.2 Adjustment at Time of Parts Replacement

5.3.2.1 Adjusting the Alignment

0002-8102

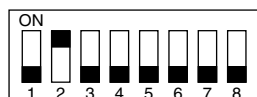
If you have replaced the finisher controller PCB, front aligning plate motor (M3), or rear aligning plate motor (M4), make the following adjustments:

1) Set the DIP switch SW101 on the finisher controller PCB as follows:



F-5-6

AB-Configuration

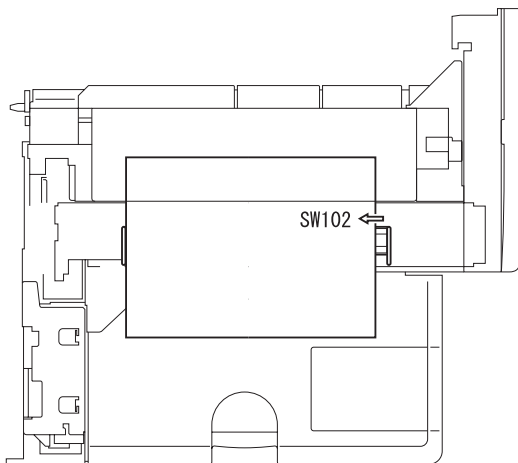


F-5-7

Inch-Configuration

2) Press SW101 on the finisher controller PCB.

- The front aligning plate and the rear aligning plate move to home position. Thereafter, the rear aligning plate moves to the rear alignment position, while the front aligning plate moves to a point approximately A4 or LTR width from the rear aligning plate.
- 3) Put several sheets of A4 or LTR together, and put the resulting stack in the processing tray (so that the leading edge of the stack is in contact with the rear guide plate).
- 4) Butt the rear edge of the stack against the rear aligning plate.
- 5) Press SW102 as many times as necessary so that the distance between the paper front edge and the front aligning plate is 0 to 0.5 mm.
- A single press on SW102 moves the front aligning plate by 0.172 mm.



F-5-8

Memo:

In response to a press on SW103, the front aligning plate first moves to home position and then returns to the adjustment start position.

6) Press SW101 to store the adjustment value.

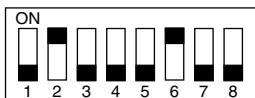
7) Shift all bits of SW104 to OFF.

5.3.2.2 Adjusting the Stapling Position (front/rear direction)

0002-8210

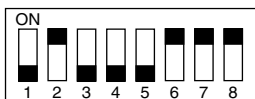
If you have replaced the finisher controller PCB or replaced the stapler, make the following adjustments:

1) Set SW104 of the finisher controller PCB as follows:



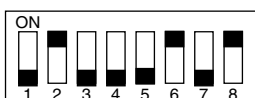
F-5-9

AB-configuration, 1-point stapling



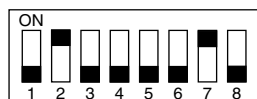
F-5-10

AB-configuration, 2-point stapling



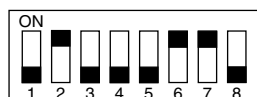
F-5-11

AB-configuration, 1-point stapling



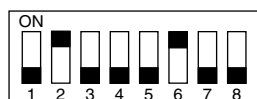
F-5-12

Inch-configuration, 1-point stapling, front



F-5-13

Inch-configuration, 2-point stapling



F-5-14

Inch-configuration, 1-point stapling, rear

2) Press SW101 of the finisher controller PCB.

- The front aligning plate and the rear aligning plate move to home position. Thereafter, the rear aligning plate moves to alignment position. At the same time, the stapler moves to the appropriate stapling position.

3) Put several sheets of A4 or LTR paper together, and put the stack in the processing tray. At this time, be sure to put the rear edge against the rear guide plate.

4) Press SW101 of the finisher controller PCB.

- The stapler starts stapling operation.

5) Take out the stack, and check the point of stapling against the standard. If correct, end the adjustment work. If the position needs to be adjusted, go to the following step:

6) Press SW101 once so that the machine is ready to accept a new adjustment value.

- The stapler first moves to home position, and then returns to stapling position.

7) In keeping with the result of the check, press SW102 or SW103 of the finisher controller PCB.

- A press on SW102 shifts the stapling position to the front by 1.172 mm.

- A press on SW103 shifts the stapling position to the rear by 0.172 mm.

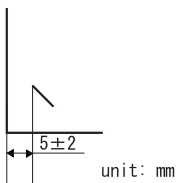
- The foregoing orientation refers to the orientation in relation to paper in the processing tray placed and ready to receive a staple (i.e., it is laid face down).

8) Press SW101 to store the adjustment value. In response, the stapler starts stapling.

9) Shift all bits of SW104 to OFF.

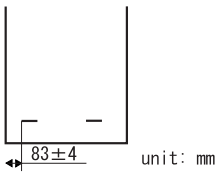
Memo:

Standard for Stapling Position



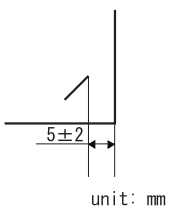
F-5-15

front, 1-point stapling



F-5-16

2-point stapling



F-5-17

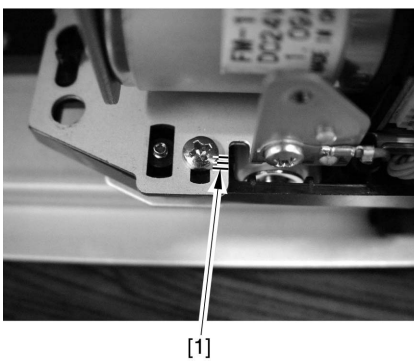
rear, 1-point stapling

5.3.2.3 Adjusting the Stapling Position (feed direction)

0002-8240

If you have replaced the stapler, make the following adjustments:

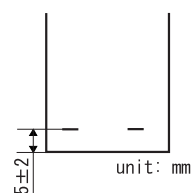
- 1) By referring to the index [1], move the stapler back and forth in feed direction to adjust the stapling position (for feed direction).



F-5-18

Memo:

Standards for Stapling Position



F-5-19

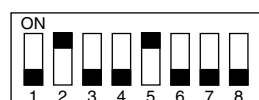
5.3.2.4 When Replacing the Finisher Controller PCB0002-8245

If you have replaced the finisher controller PCB, perform the following:

1. RAM initialization
2. alignment width adjustment
3. stapling position adjustment (rear/front direction)

To initialize the RAM, go through the following steps:

- 1) Set SW104 of the finisher controller PCB as follows:



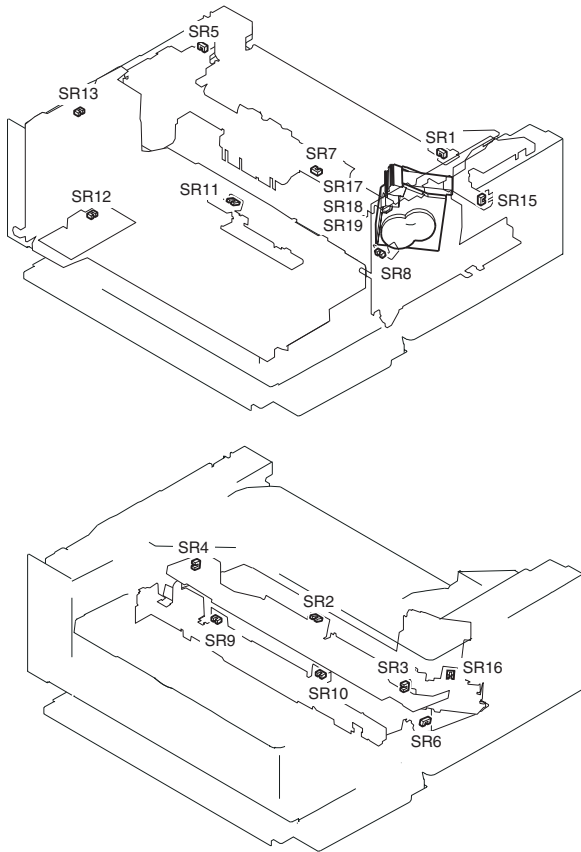
F-5-20

- 2) Hold down SW101 and SW103 of the finisher controller PCB for 3 sec or more.
- 3) Shift all bits of SW104 to OFF.

5.4 Outline of Electrical Components

5.4.1 Arrangement of Electrical Components

0001-4507

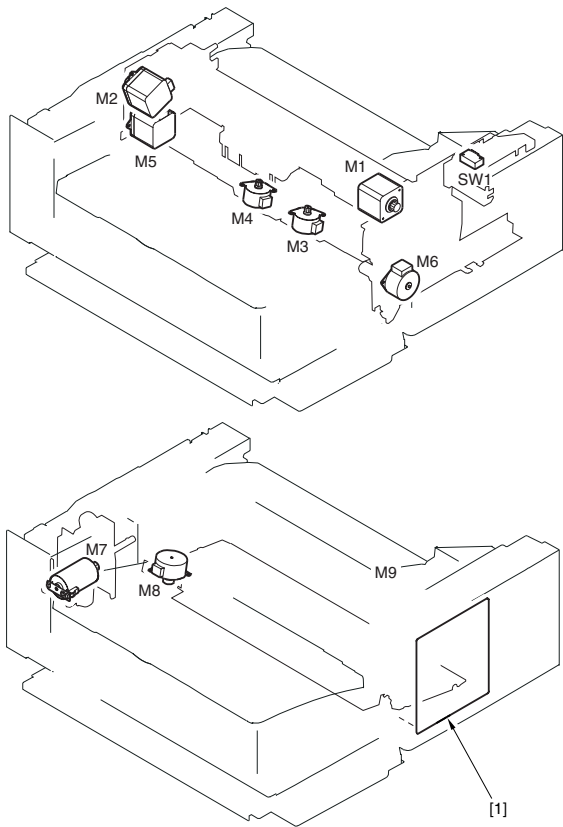


F-5-21

T-5-3

SR1	delivery sensor
SR2	processing tray paper sensor
SR3	front alignment HP sensor
SR4	rear alignment HP sensor
SR5	return belt escape HP sensor
SR6	stapler slide HP sensor
SR7	swing cam HP sensor
SR8	paddle HP sensor
SR9	stack tray upper paper surface sensor

SR10	stack tray lower paper surface sensor
SR11	stack tray paper sensor
SR12	stack tray lower limit sensor
SR13	stack tray upper limit sensor
SR15	front cover open/closed sensor
SR16	rear edge guide plate sensor
SR17	stapler sensor
SR18	stapling home position sensor
SR19	stapler edging sensor



F-5-22

T-5-4

Motor		
Notation	Name	Description
M1	Delivery motor	delivers paper.

Motor		
M2	Stack delivery motor	delivers a stack; moves the return belt up and down.
M3	Front alignment motor	drives the front aligning plate.
M4	Rear alignment motor	drives the rear aligning plate.
M5	Swing cam motor	moves the stack roller up and down.
M6	Paddle motor	drives the paddle; drives the stacking wall.
M7	Stack tray shift motor	moves the stack tray up and down.
M8	Stapler slide motor	drives the stapler slide.
M9	Stapler motor	drives the punching of the stapler.

T-5-5

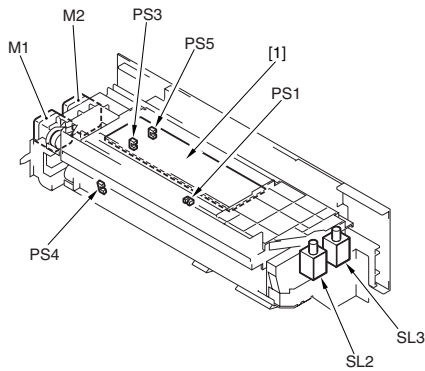
Stapler	
Notation	Name
SW1	Front cover safety switch

T-5-6

PCB	
Notation	Name
[1]	Finisher controller PCB

5.4.2 Arrangement/Functions of the Relay Delivery Unit Electrical Components

0002-3539



F-5-23

T-5-7

Sensor

Notation	Name
PS1	No. 2 delivery sensor
PS3	duplexing inlet sensor
PS4	reversal sensor
PS5	No. 3 delivery sensor

Motor

Notation	Name
M1	No. 2 delivery motor
M2	No. 3 delivery motor

Solenoid

Notation	Name
SL2	No. 2 delivery solenoid
SL3	No. 3 delivery solenoid

PCBs

Notation	Name
[1]	relay delivery unit controller PCB

5.5 Variable Resistors (VR), Light-Emitting Diodes (LED), and Check Pins by PCB

5.5.1 LEDs and Check Pins by PCB

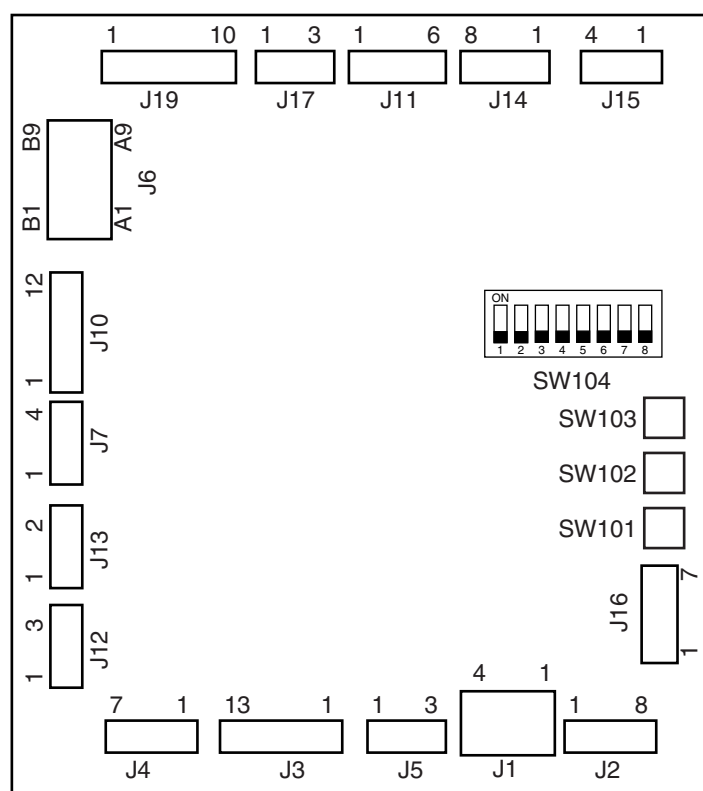
0002-8358

Of the LEDs and check pins used in the machine, those used in the field are discussed.

⚠ Those VRs and check pins not indicated in the table are for the factory, and they must be adjusted to a high level of precision using special tools and instruments. Do not touch them in the field.

5.5.2 Finisher Controller PCB

0002-8327



F-5-24

SW101: use it to make adjustments, to initiate test start-up.

SW102: use it to enter a numerical value.

SW103: use it to enter a numerical value

SW104: use it to make mode settings.

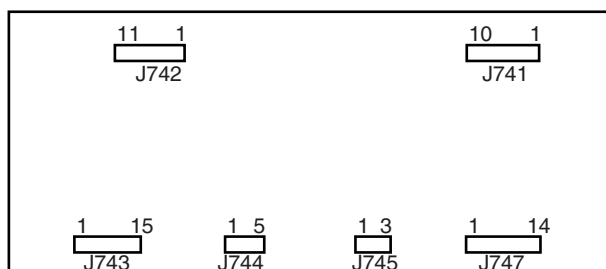
T-5-8

Connector	Target of connection	
J1	Power supply	-
J2	Communication	-
J3	M9	stapler motor
	SR16	rear end guide plate sensor
	SR17	stapler staple sensor
	SR18	stapling home position sensor
	SR19	stapler edging sensor
J4	M8	stapler slide motor
	SR6	stapler slide HP sensor
J5	SW1	front cover safety switch
J6A	M3	front alignment motor
	M4	rear alignment motor
J6B	SR2	processing tray paper sensor
	SR3	front alignment HP sensor
	SR4	rear alignment HP sensor
J7	M6	paddle motor
J8	M1	delivery motor
J9	SR5	return belt escape HP sensor
	SR12	stack tray lower limit sensor
	SR13	stack tray upper limiter sensor
J10	SR9	stack tray upper paper sensor
	SR10	stack tray lower paper sensor
	SR11	stack tray paper sensor
J11	SR1	delivery sensor
	SR15	front cover open/closed sensor
J13	M7	stack tray shift motor
J14	M2	stack delivery motor
	M5	swing cam motor

Connector	Target of connection	
J15	M1	delivery motor
J17	SR7	swing cam HP sensor

5.5.3 Relay Delivery Controller PCB

0002-8334



F-5-25

5.5.4 DIP Switch Functions

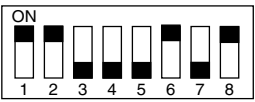
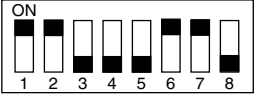
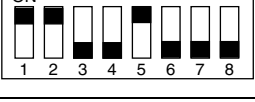
0002-8303

The DIP switch (SW104) found on the finisher controller PCB has the following functions:

- Each press on SW104 enables a different operation.
- All bits of SW104 must be shifted to OFF at the end of a check.

T-5-9

Setting	Target	Description
	delivery motor (M1)	forward, low-speed -> forward, high-speed -> rest -> reverse, low-speed -> reverse, high-speed -> rest
	delivery motor (M2)	forward low-speed -> forward, high-speed -> rest -> reverse -> rest -> return belt initialize -> return belt down
	front alignment motor (M3)	HP each -> standby position (A4R, front, 1-point) -> alignment position (A4R, front, 1-point)
	rear alignment motor (M4)	HP search -> standby position (A4R, front, 1-point) -> alignment position (A4R, front, 1-point)
	swing cam (M5)	HP search -> paper return position -> stack delivery position -> stack delivery standby position

	paddle motor (M6)	paddle (single rotation)
	stack tray shift motor (M7)	paper surface search
	stapler slide motor (M8)	HP search -> A4, front, 1-point -> A4, 2-point (front) -> A4, 2-point (rear) -> A4, rear, 1-point
	stapler motor (M9)	stapling

Chapter 6 Error Code

Contents

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6.1.2 Temporary Functional Limit	6-3

6.1 Service Error Code

6.1.1 Service Error Code

0001-3797

T-6-1

Code	Detail code	Cause	Description
E500	01	- The harness is faulty.	An error has been detected 5 times or more within a specific period of time in communication between the finisher controller PCB and the host machine. Or, an error lasting 5 sec or more has been detected in communication.
		- The finisher controller PCB is faulty, or the host machine is faulty.	
E505	01	- The backup memory is faulty.	An error has been detected in communication with the backup memory. A write or read operation to or from the backup memory does not end within 20 msec.
E514	01	- The stack delivery motor (M2) is faulty. The return belt escape HP sensor (SR5) is faulty. The stack retaining roll drive mechanism is faulty.	The return belt escape HP sensor does not go on within 1.5 sec when the stack retaining roll is moved to home position.
	02		The return belt escape HP sensor does not go off within 1.5 sec when the stack retaining roll is moved from home position.
E530	01	- The rear alignment motor (M4) is faulty. The rear aligning plate HP sensor (SR4) is faulty. The aligning plate drive belt is faulty.	The rear alignment HP sensor does not go on within 2.0 sec when the rear aligning plate is moved to home position.
	02		The rear alignment HP sensor does not go off within 1.0 sec when the rear aligning plate is moved from home position.
E531	01	- The stapler motor (M9) is faulty. The stapling HP sensor (SR18) is faulty.	The stapling HP sensor does not go on within 0.5 sec after the start of reverse rotation of the stapler motor at time of staple jam recovery.
	02		The stapling HP sensor does not go off within 0.5 after the start of forward rotation of the stapler motor.

E532	01	- The stapler slide motor (M8) is faulty. The stapler slide HP sensor (SR6) is faulty. The stapler shift belt is faulty.	The stapler slide HP sensor does not go on within 11 when the stapler is moved to home position.
	02		The stapler slide HP sensor does not go off within 1.0 sec when the stapler is moved from home position.
E535	01	- The swing cam motor (M5) is faulty. The swing cam HP sensor (SR7) is faulty. The stack delivery motor swing mechanism is faulty.	The swing cam HP sensor does not go on within 2.0 when the stack delivery roller swing arm is moved to home position.
	02		The swing cam HP sensor does not go off within 1.0 sec when the stack delivery roller swing arm is moved from home position.
E537	01	- The front alignment motor (M3) is faulty. The front alignment HP sensor (SR3) is faulty. The aligning plate drive belt is faulty.	The front alignment HP sensor does not go on within 2.0 sec when the front aligning plate is moved to home position.
	02		The front alignment plate HP sensor does not go off within 1.0 sec when the front aligning plate is moved from home position.
E540	02	-The stack tray shift motor (M7) is faulty. The stack tray upper paper surface sensor (SR9) is faulty. The stack tray lower paper surface sensor (SR10) is faulty. The stack tray lower limit sensor (SR12) is faulty. The stack tray upper limit sensor (SR13) is faulty.	The search for the surface of paper on the stack tray does not end within 1.0 sec.
	03		Any of the combinations of sensor states indicated in the table has been detected.
E577	01	- The paddle motor (M6) is faulty.	The paddle HP sensor does not go on when the paddle is moved to home position.
	02	- The paddle HP sensor (SR8) is faulty.	The paddle HP sensor does not go off within 1.0 when the paddle is moved from home position.

E540 Detail Code 03

T-6-2

Stack tray upper limiter sensor (SR13)	Stack tray lower limit sensor (SR12)	Stack tray upper paper surface sensor (SR9)	Stack tray lower paper sensor (SR10)
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ON	ON	ON	ON
			OFF
	OFF	OFF	ON
			OFF
	OFF	ON	OFF
		OFF	ON
		OFF	OFF

6.1.2 Temporary Functional Limit

0002-5946

1. Overview

The machine is equipped with a mechanism that puts a temporary limit to its operation (other than delivery) in response to an error, during which time stapling and alignment do not take place until the error is removed. The delivery sensor (SR1), however, will remain enabled to detect any jam.

2. Operation

1) When the host machine has started up, use service mode or user mode as follows:

1-a) Service Mode

Set 'I' for the following: SORTER>OPTION>MD-SPRTN.

1-b) User Mode

Press [limit function mode]; when a Confirmation screen has appeared, press [yes].

3) Turn off and then on the main power switch of the host machine.

3. Communication with the Host Machine

1) When the main power switch is turned on, the DC controller PCB will communicate to the main controller PCB that a functional limit has been imposed. The control panel will indicate that a functional limit has been imposed on the finisher.

2) The DC controller PCB backs up information on the functional limit.

3) Each time pickup occurs, the main controller PCB communicates the presence of a functional limit to the DC controller PCB.

4) The DC controller PCB executes control only on delivery operation.

T-6-3

Functional Limit and Error Code

E530 rear alignment motor (M4) error

E531 stapler motor (M9) error

E532 stapler slide motor (M8) error

E537 front alignment motor (M3) error

E540 stack tray shift motor (M7) error

E577 paddle motor (M6) error

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