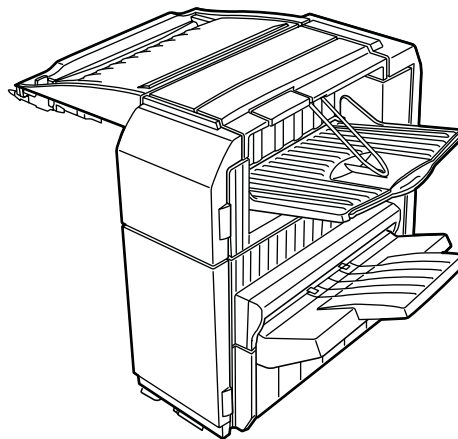


B83F



## LASER PRINTER OPTIONS

**Finisher - B83F**

# Table of Contents

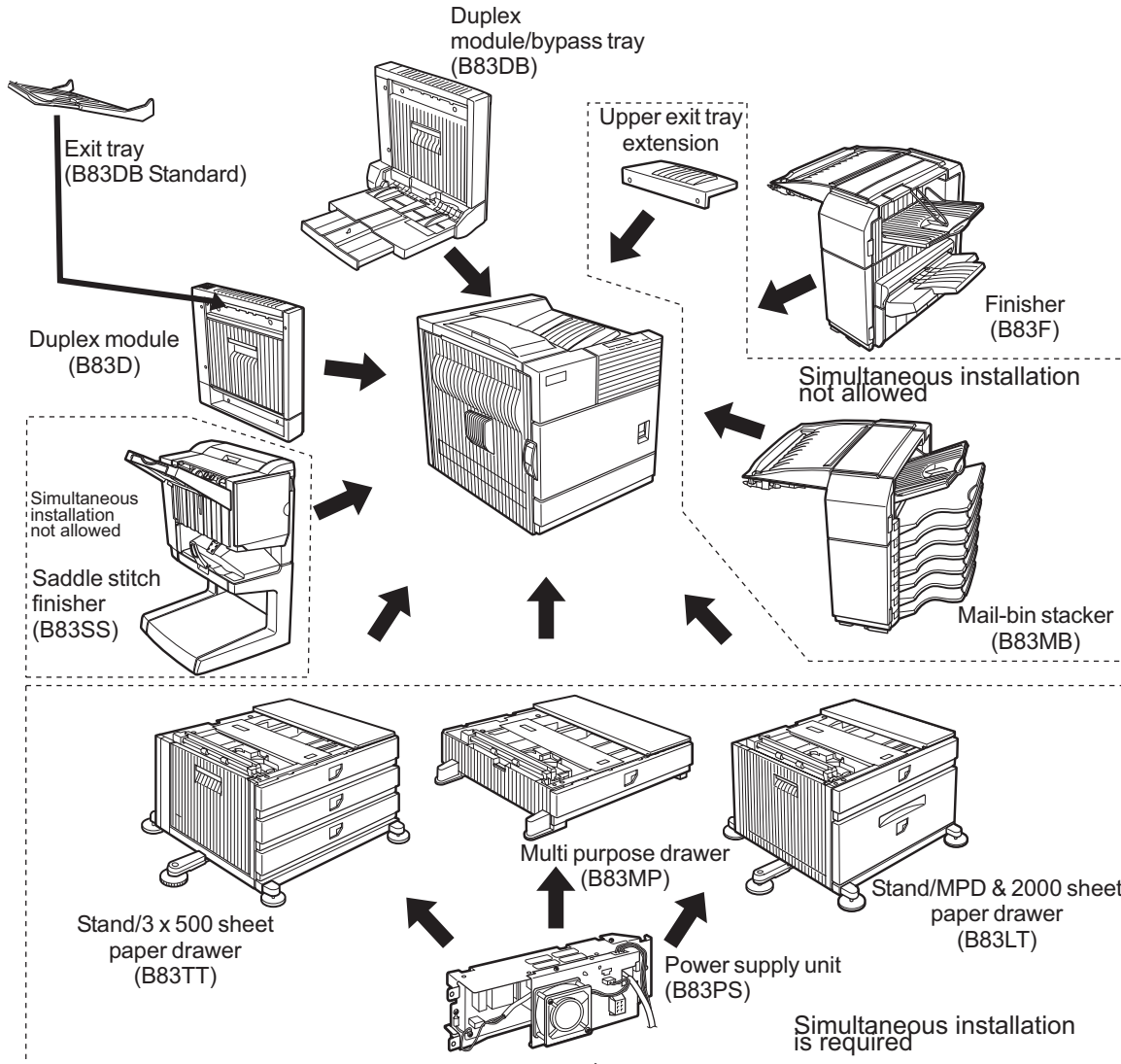
<b>[1] PRODUCT OUTLINE</b>	<b>1</b>	Jogger F/R .....	1
CONFIGURATION .....	1	Printer model adjustment procedure .....	1
<b>[3] SPECIFICATIONS</b>	<b>1</b>	<b>[9] DISASSEMBLY AND ASSEMBLY, MAINTENANCE</b>	<b>1</b>
Basic .....	1	Maintenance System Table .....	1
Staple parts .....	1	Disassembly and assembly .....	1
Consumable parts .....	1	Unit transit .....	1
<b>[4] UNPACKING AND INSTALLATION</b>	<b>1</b>	External cabinet .....	2
		Transport unit.....	2
	<i>Before installation 1</i>	Gate solenoid .....	2
<b>[5] EXTERNAL VIEWS AND INTERNAL STRUCTURES</b>	<b>1</b>	Transport roller .....	3
External view .....	1	Upper open/close sensor .....	3
Internal structure .....	1	Upper cover .....	3
Sensor .....	2	Paper entry sensor .....	3
Motor, Clutch, Solenoid, PWB.....	3	De-curler roller .....	3
<b>[6] MACHINE OPERATION</b>	<b>1</b>	Transport roller .....	4
Using the stapling function from the printer .....	1	Rear side of the unit .....	4
	<i>NOTES: 1</i>	Main motor .....	4
Stapling position quick reference list .....	2	Main control PWB.....	4
	<i>NOTES: 2</i>	Staple shift motor .....	4
<b>[7] OPERATIONAL DESCRIPTIONS</b>	<b>1</b>	Elevator motor / Staple rotation motor .....	4
Paper transport path .....	1	Pressure-release solenoid.....	5
Machine paper exit reverse (Switchback) .....	1	Stapler .....	5
Paper exit to the upper tray .....	1	Stapler unit .....	5
Paper exit to the lower tray .....	1	Inside of the unit .....	6
Descriptions of each section .....	1	Jogger motor .....	6
Upper transport section.....	1	Pusher motor .....	6
Paper transport path .....	1	Elevator unit .....	7
Interface unit paper entry gate .....	2	Right side of the unit (Paper exit side).....	7
S paper entry gate .....	2	External cabinet .....	7
Tray 1 paper full detection .....	2	Lower stage tray paper exit roller .....	7
Alignment tray section .....	2	Paper exit paddler .....	7
Jogger F/R .....	2	Front side of the unit .....	8
Pusher .....	2	Stopper solenoid .....	8
Stopper .....	2	Paper holding solenoid .....	8
Pressure release roller .....	2	Compiler paper entry gate solenoid.....	8
Paper holder .....	2	Gears, Clutch .....	8
Alignment and paper exit in offset .....	2	Belts .....	9
	<i>Alignment in stapling 2</i>	<b>[10] OTHERS</b>	<b>1</b>
	<i>Staple unit 2</i>	SF MAIN PWB TF UN .....	1
	<i>Stapler 3</i>		
	<i>Stapling 3</i>		
	<i>Paper exit after stapling 3</i>		
Tray 2 paper exit section .....	3		
Paper transport .....	3		
Elevator operation and tray 2 paper full detection .....	3		
Paddler operation/			
Tray 2 upper limit detection actuator operation .....	4		
Basic operation .....	4		
Basic operation flow .....	4		
<b>[8] ADJUSTMENTS</b>	<b>1</b>		
Jogger position adjustment .....	1		

# [1] PRODUCT OUTLINE

This unit is installed to serve as an after-process unit of output paper of the printer. This unit allows the shifting of each bundle of paper printed in the page sequence or sorted by each page. It also allows stapling of a bundle of paper sorted in the page sequence.

## 1. CONFIGURATION

1. To use this unit, the multi purpose paper feed tray (B83MP), the 3-stage paper feed drawer (B83TT), or the large capacity paper feed drawer (B83LT) must be installed in advance.
2. When this unit and the B83MP are installed, the optional power unit (B83PS) must be installed as well.
3. This unit cannot be installed together with the male bin staker (B83MB) and the upper exit tray extension.



Output unit	Finisher (B83F)	Multi purpose drawer (B83MP)	Stand/3 x 500 sheet paper drawer (B83TT)	Stand/MPD & 2000 sheet paper drawer (B83LT)	Duplex module/bypass tray (B83DB)	Duplex module (B83D)	Saddle stitch finisher (B83SS)	Finisher (B83F)	Mail-bin staker (B83MB)	Upper exit tray extension	Punch unit	Print server Card	Power supply unit (B83PS)	Hard disk drive
Finisher	B83F	○ <sup>*1</sup>					×	—	×	×	×		○	

○<sup>\*1</sup> = Any of the units must be installed together.  
 × = Cannot be used in conjunction with Finisher.

# [3] SPECIFICATIONS

## 1. Basic

Type	Desktop type finisher with dual exit tray	
Transport speed	To support 35-45 sheet/minute	
Transport alignment	Center alignment	
Tray type (No. of tray)	Upper tray	EXIT tray
	Lower Tray	Ascent/descent type offset tray
Output paper capacity	Upper tray	500 sheets sheets (A4/8.5"x11", 80g/m <sup>2</sup> /21lbs)
	Lower Tray	750 sheets (A4/8.5"x11", 80g/m <sup>2</sup> /21lbs)
Output paper delivery	Face-down	
Output paper size	Upper tray	A3, B4, A4, A4R, B5, B5R, A5R 11"x17", 8.5"x14", 8.5"x13", 8.5"x11", 8.5"x11"R, 5.5"x8.5"R, Executive, Japanese post card, Monarch (98x191), Com-10 (105x241), DL (110x220), C5 (162x229), ISO B5 (176x250)
	Lower Tray	
Spec of media for paper output	Upper tray	Tracing paper:52-59g/m <sup>2</sup> / 14-15lbs Plain paper:60-128g/m <sup>2</sup> / 16-34lbs Index paper:176g/m <sup>2</sup> / 47lbs Cover paper:205g/m <sup>2</sup> / 54-55lbs Transparency
	Lower Tray	Plain 60-128g/m <sup>2</sup> /16-34lbs
Remaining paper detection	Upper tray	Not provided
	Lower Tray	Provided
Exit tray full detection	Upper tray	Provided
	Lower tray	Provided
Power consumption	Less than about 67.3W	
Power source	Supplied from the optional power source (B83PS) (DC24V 2.7A / DC5V 0.5A)	
External dimensions (WxDxH)	18.11" x 20.87" x 20.00" 460 x 530 x 508 (mm)	
Occupied dimensions (WxD)	18.11" x 20.87" 460 x 530 (mm)	
Weight	Approx. 46.29lbs / 21kg	

## 2. Staple parts

Offset stack	Offset volume: 25mm	
Paper size to be stapled	A4, B5, 8.5"x11"	
Ability of stapler (Max. # of pages for staple)	30 sheets (smaller than A4/8.5"x11", 80g/m <sup>2</sup> /21lbs)	
Stapling pattern	3 patterns (front 1/rear 1/both)	
Stacking performance	Offset	Horizontal displacement: Less than 15mm (Less than 10mm up to 250 sheets) Vertical displacement: Less than 15mm (In the non-staple mode on the offset tray)
	Matching	Max. deviation width Within 2mm (In the staple mode on the offset tray)
Staple supply	Refill system	
Staple detection	Staple empty	Provided
	No cartridge	Provided
	Staple jam	Provided
Kinds of paper which cannot be stapled	Pre-punched paper, transparency film, heavy paper, label, envelope, postcard	

## 3. Consumable parts

Name	Content	Life	Remark
Staple cartridge	Staple cartridge x3	3000x3	Common with cartridge for B83F

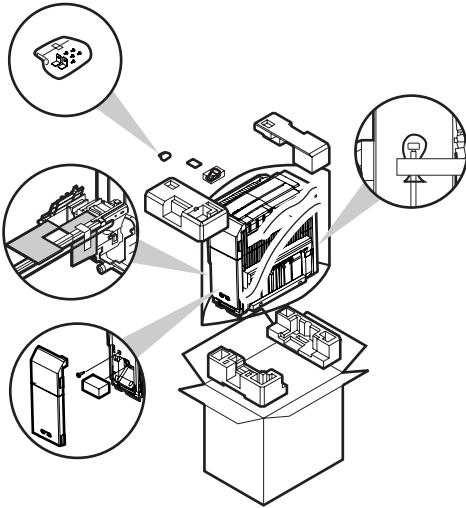
Note: The meaning of "R" in paper size indications

- Some paper sizes can be placed in the printer so that it feeds either long edge first or short edge first.
- To differentiate between the two sizes in the various tables, the short edge first size indication will contain an "R". These are indicated as 8½ x 11R, 5½ x 8½R, A4R, B5R, etc.
- Sizes that can be placed only in the landscape orientation (11 x 17, 8½ x 14, 8½ x 13, A3, B4) do not contain the "R" in their size indication.

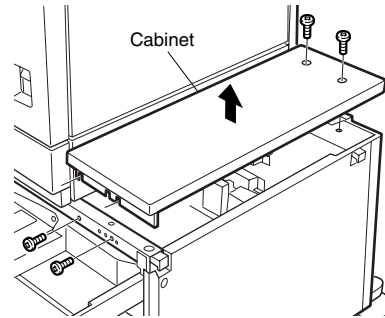
# [4] UNPACKING AND INSTALLATION

## Before installation

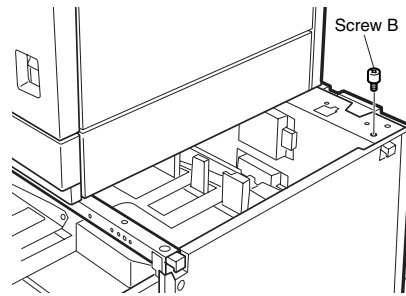
- Start installation after checking that the DATA and COMMUNICATION indicators on the operation panel are neither lit nor blinking.
- For installation of B83F, an optional stand/paper drawer (stand/MPD & 2000 sheet paper drawer, stand/3 x 500 sheet paper drawer or multi purpose drawer) must have been installed. Also, if a multi purpose drawer has been installed, a power supply unit (B83PS) is needed additionally.



- a. Pull out the paper tray of the stand/paper drawer. Remove the four screws attached to the right on the top of the stand/paper drawer and remove the cabinet.

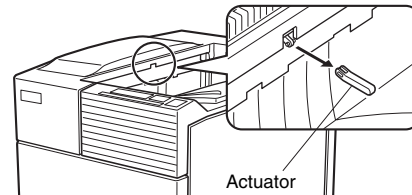


- b. Mount screw B to the position shown in the illustration.

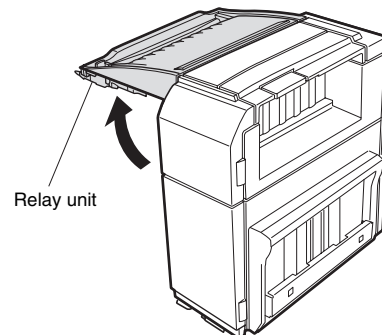


3. Attach the finisher.

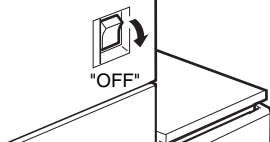
- a. Remove the paper exit actuator from the main unit of the printer.



- b. Raise the relay unit at the side of the finisher.

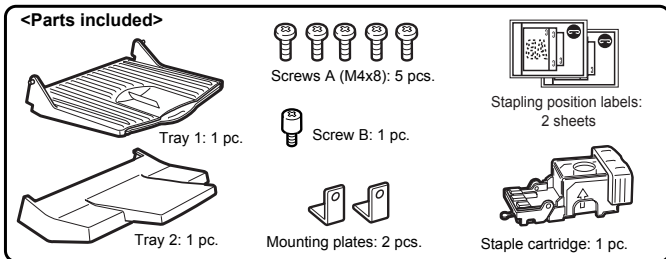


1. Turn the main switch located on the front side of the main unit to the "OFF" position. Then, remove the power plug of the main unit from the outlet.

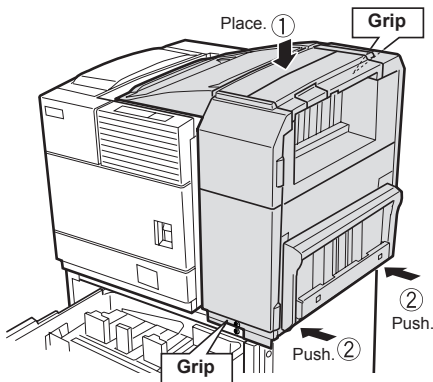


2. Remove the upper cabinet of the stand/paper drawer.

- c. Hold the grip of the finisher and place the finisher on the stand/paper drawer temporarily. Then, push the lower part to attach the finisher by sliding it toward the exit tray of the main unit.

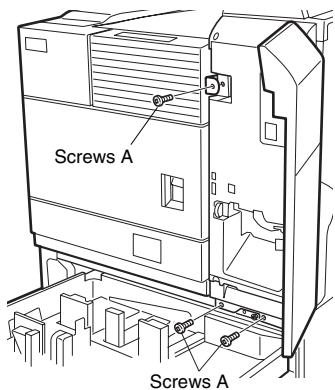


At this time, align the finisher with the exterior line of the stand/paper drawer.



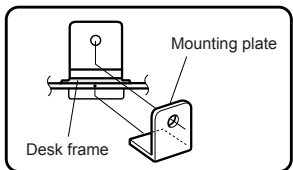
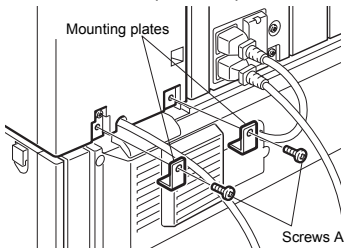
- d. Open the front cover of the finisher and fix the finisher with three screws A at the positions shown in the illustration. Then, close the front cover and close the paper tray of the stand/paper drawer.

(Front side)



- e. Attach the mounting plates to the positions shown in the illustration and fix them with screws A.

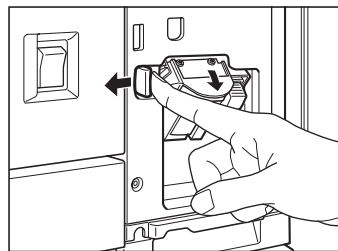
(Rear side)



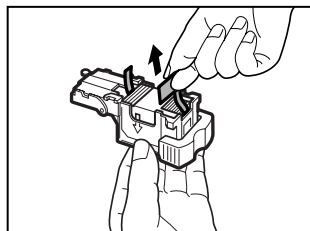
Caution: Insert the mounting plate under the desk frame.

- 4. Insert the staple cartridge.

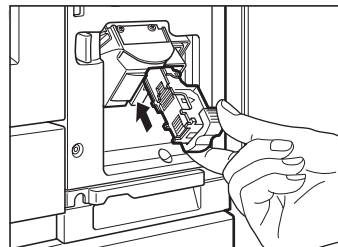
- a. Pull out the staple unit.



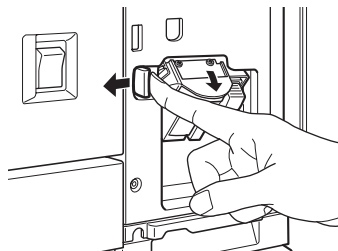
- b. Remove the sealing tape from the staple cartridge.



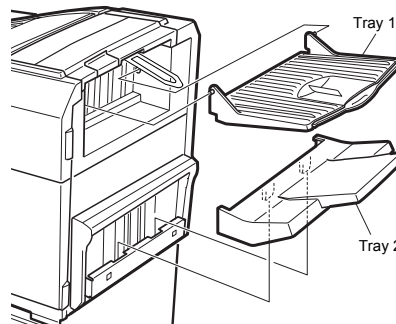
- c. Insert the staple cartridge.



- d. Slide the release lever to the left and return the staple unit.

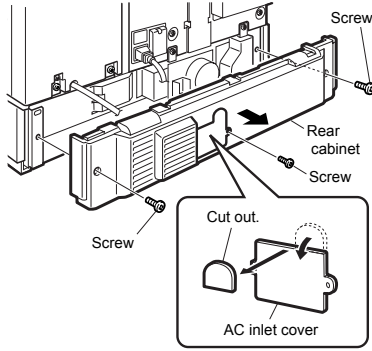


- 5. Attach tray 1, tray 2 to the positions shown in the illustration.

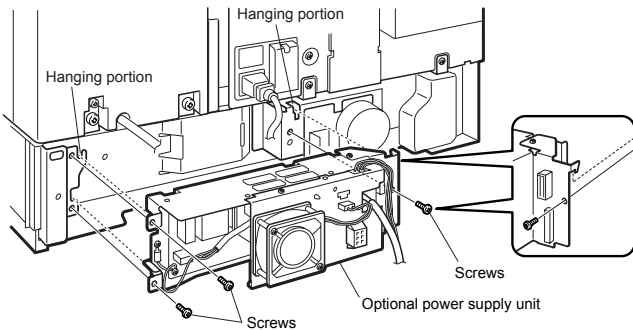


- Steps 6. and after are procedures carried out when a multi purpose drawer has been installed. If a stand/MPD & 2000 sheet paper drawer or a stand/3 x 500 sheet paper drawer has been installed, skip ahead to step 9.
- 6. Process the AC inlet cover attached to the rear cabinet of the stand/paper drawer.
  - a. Remove the two screws that secure the rear cabinet and remove the rear cabinet.

- b. Remove the screw that fixes the AC inlet cover and then remove the AC inlet cover. Process the AC inlet cover as shown in the illustration.

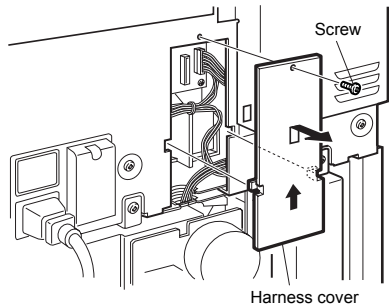


7. Attach the power supply unit to the hanging portions and secure it using the supplied three screws.

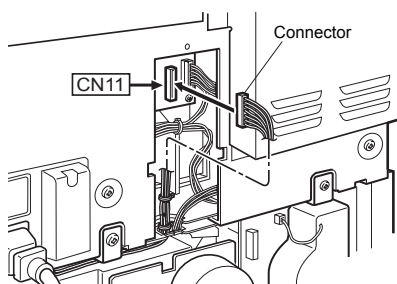


8. Connect the power supply unit harness to the PCU PWB of the main unit of the printer.

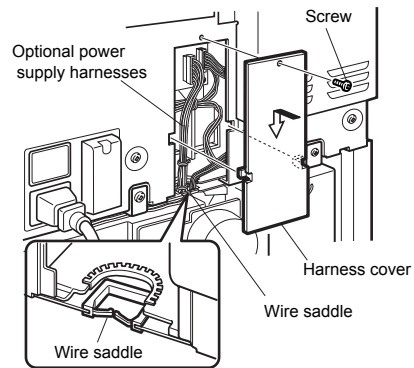
- a. Remove the screw that fixes the harness cover of the main unit of the printer and slide the harness cover up to remove it. Process the harness cover as shown in the illustration.



- b. Connect the power supply unit harness connector to CN11 (red connector) of the PCU PWB of the main unit of the printer.



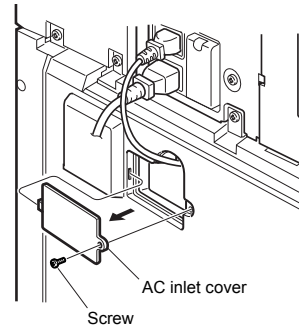
- c. Reattach the harness cover to its original position and fix it with the removed screw. At this time, ensure that the power supply unit harness is arranged as shown in the illustration.



- \* Fix the harness securely to the wire saddle.

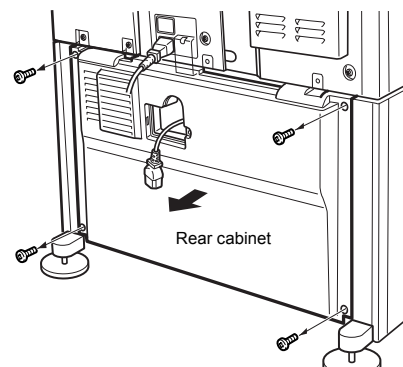
9. Remove the AC inlet cover and then remove the rear cabinet of the stand/paper drawer.

- a. Remove the screw that fixes the AC inlet cover and then remove the AC inlet cover.



(\* Similar work for the multi purpose drawer)

- b. Remove the AC cord of the power supply unit from the inlet connector of the main unit of the printer. Remove the four screws that fix the rear cabinet and then remove the rear cabinet.

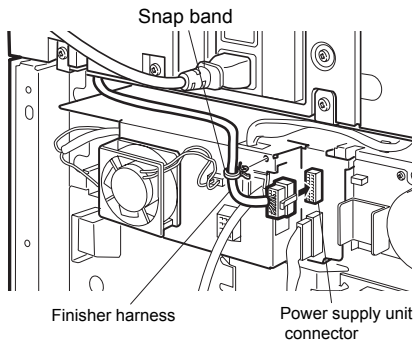


(\* Similar work for the multi purpose drawer)

10. Arrange the harness of the finisher.

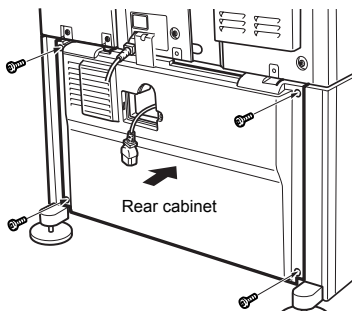
- a. Pass the harness of the finisher between the power supply unit and the frame of the stand/paper drawer and connect it to the connector of the power supply unit.

- b. Fit the snap band attached to the finisher at the position shown in the illustration to fix the harness.



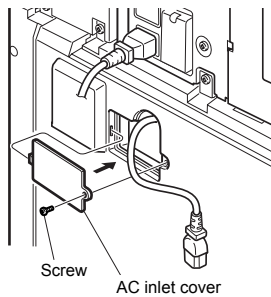
(\* Similar work for the multi purpose drawer)

11. Attach the rear cabinet of the stand/paper drawer.
  - a. Pass the AC cord of the power supply unit as shown in the illustration and fix the rear cabinet of the stand/paper drawer with the screws.



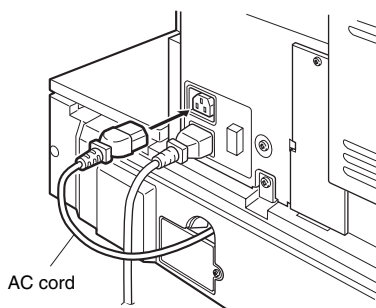
(\* Similar work for the multi purpose drawer)

- b. Attach the AC inlet cover to the rear cabinet of the stand/paper drawer and fix it with the removed screw.



(\* Similar work for the multi purpose drawer)

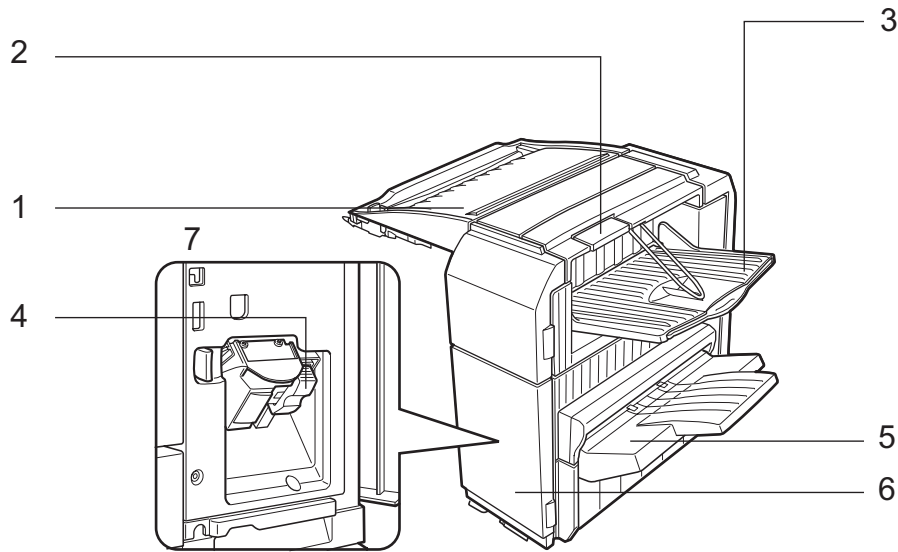
12. Connect the AC cord of the optional power supply unit to the main unit of the printer.
  - a. Connect the AC cord of the power supply unit to the inlet connector of the main unit of the printer at the location shown in the illustration.





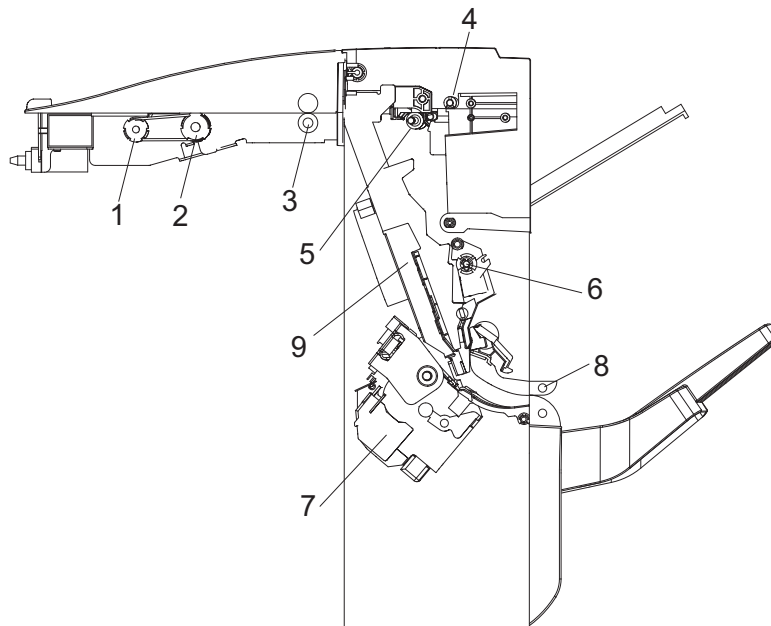
# [5] EXTERNAL VIEWS AND INTERNAL STRUCTURES

## 1. External view



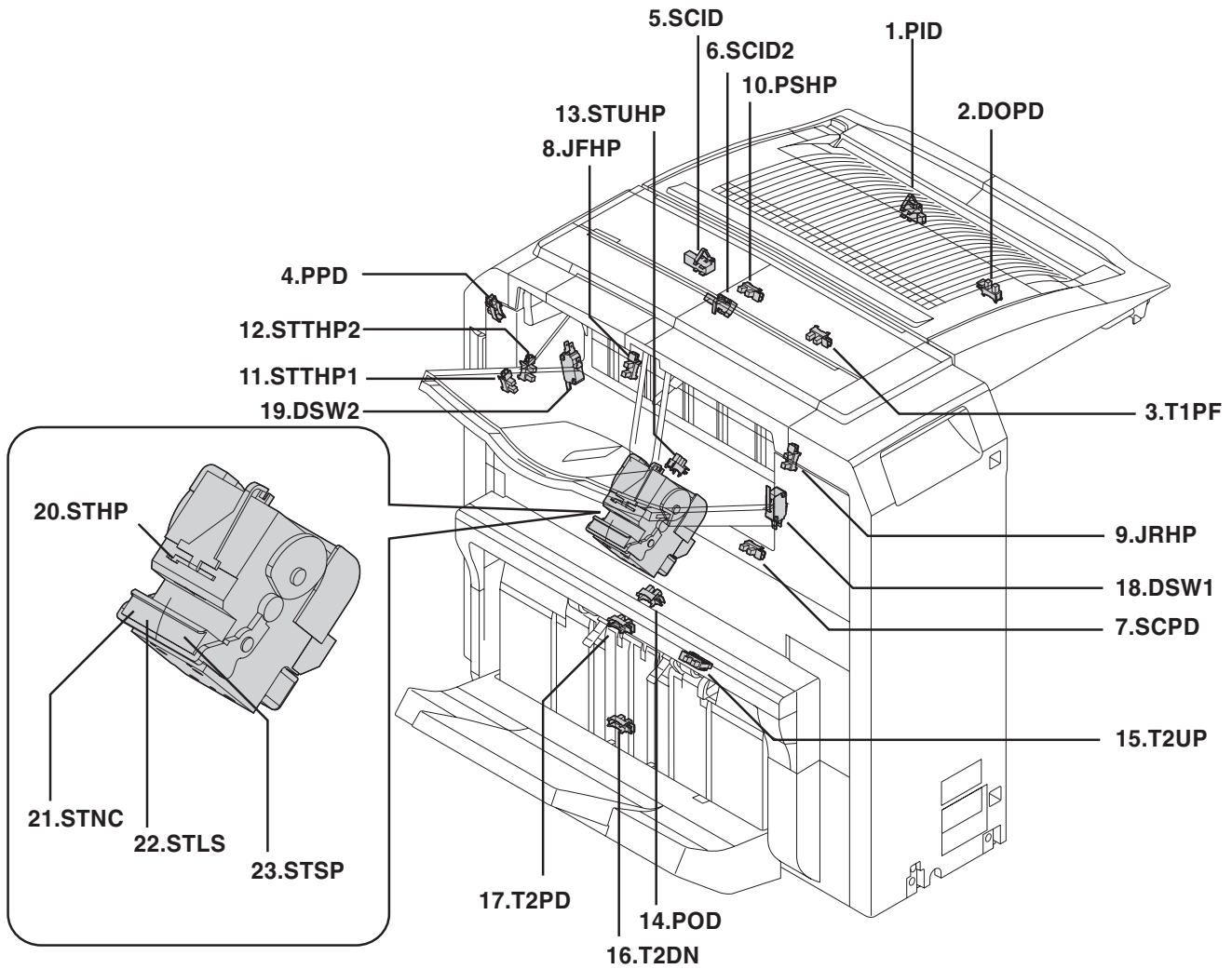
1	Top cover	2	SF Knob	3	Top tray	4	Staple cartridge
5	Offset tray	6	Front door	7	Staple unit		

## 2. Internal structure



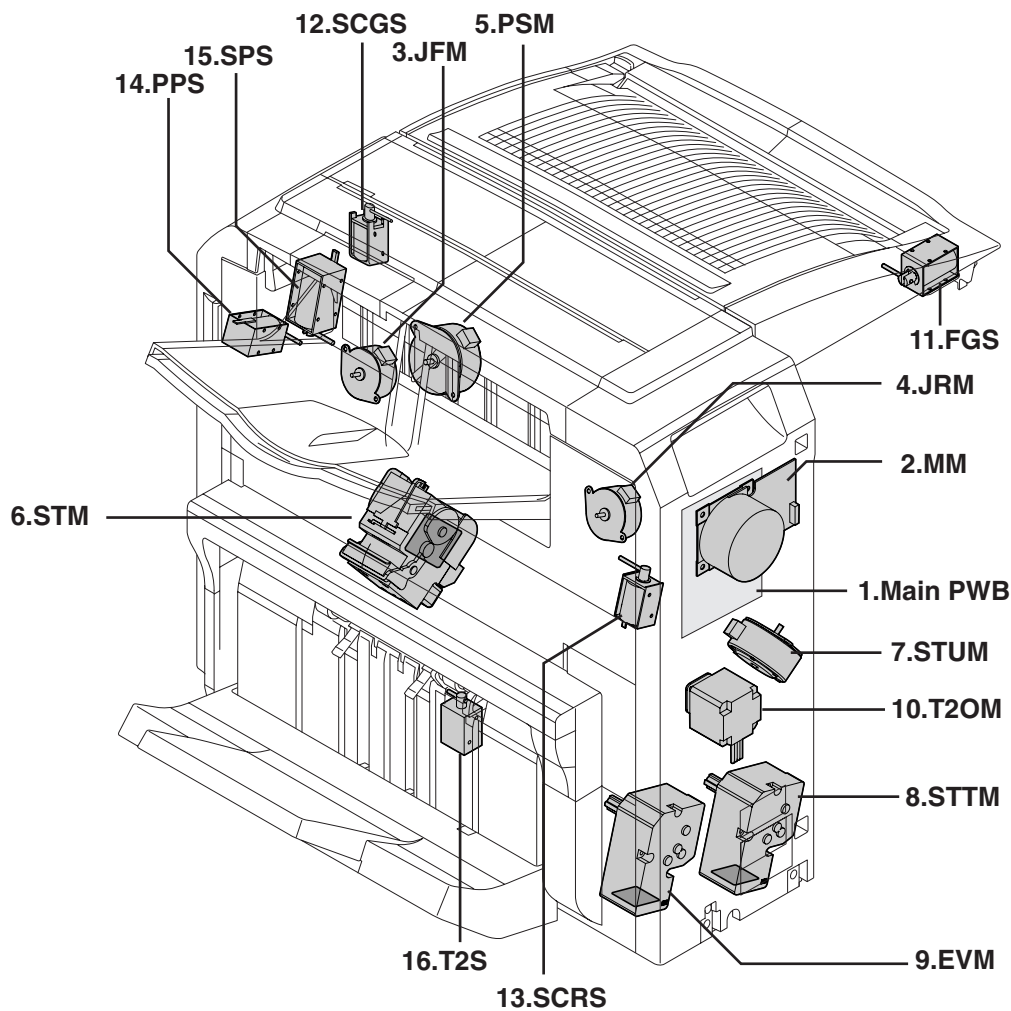
1	Finisher transport roller R1	2	De-curler roller	3	Transport roller R2
4	No.1 tray paper exit roller	5	S paper entry roller	6	Transport roller R2
7	Stapler unit	8	Lower tray paper exit roller	9	Alignment tray

## A. Sensor



	Code	Name	Function	Active condition	Remark
1	PID	Paper In Detect Sensor	Detection of paper entry into the interface transport section	L : Paper loaded	
2	DOPD	Door Open Detect Sensor	Upper side cover open/close detection	L : Door open	
3	T1PF	Tray 1 Paper Full Detect Sensor	Upper side tray paper exit full detection	L : Paper full	
4	PPD	Paper pushl Detect Sensor	Detection of paper holding return in the compiler	H : Home position	
5	SCID	Staple Compiler In Detect Sensor 2	Staple paper entry detection	L : Paper loaded	
6	SCID2	Staple Compiler In Detect Sensor	Staple paper entry detection	L : Paper loaded	
7	SCPD	Staple Compiler Paper Detect Sensor	Paper detection in the compiler	L : Paper loaded	
8	JFHP	Jogger Front Home Position Sensor	Jogger F home position detection	H : Home position	
9	JRHP	Jogger Rear Home Position Sensor	Jogger R home position detection	H : Home position	
10	PSHP	Pushher Home Position Sensor	Pusher home position detection	H : Home position	
11	STTHP1	Staple Turn Home Position Sensor 1	Staple rotation home position detection		Detected by combination of STTHP1 and STTHP2
12	STTHP2	Staple Turn Home Position Sensor 2	Staple rotation home position detection		
13	STUHP	Staple Turn Home Position Sensor	Staple shift home position detection	H : Home position	
14	POD	Paper Out Detect Sensor	Paper exit detection	L : Paper loaded	
15	T2UP	Tray 2 Upper Detect Sensor	Offset tray upper limit position detection	H : Upper limit	
16	T2DN	Tray 2 Down Detect Sensor	Offset tray lower limit position detection	H : Lower limit	
17	T2PD	Tray 2 Paper Detect Sensor	Offset tray paper empty detection	L : Paper loaded	
18	DSW1	Door Switch 1	Right upper door open/close detection	L : Door open	
19	DSW2	Door Switch 2	Front door open/close detection	L : Door open	
20	STHP	Stapler Home Position Sensor	Stapler home position detection	L : Home position	
21	STNC	Stapler No Cartridge Sensor	Stapler cartridge empty detection	H : Empty	
22	STLS	Stapler Low Staple Sensor	Stapler staple empty detection	H : Empty	
23	STSP	Stapler Self Priming Sensor	Stapler staple ready position detection	L : Ready	

## B. Motor, Clutch, Solenoid, PWB



	Code	Name	Function	Remark
1	Main PWB	Main Control PWB	Communication with the machine, control of the machine operations	
2	MM	Main Motor	Drives transport rollers	
3	JFM	Jogger Front Motor	F side alignment plate drive	
4	JRM	Jogger Rear Motor	R side alignment plate drive	
5	PSM	Pushher Motor	Pusher drive	
6	STM	Staple Motor	Staple drive	
7	STUM	Staple Unit Motor	Stapler shift	
8	STTM	Staple Unit Turn Motor	Stapler rotation	
9	EVM	Elevator Motor	Offset tray up-down shift	
10	T2OM	Tray 2 Ouput Motor	Drive of paper exit paddler to offset tray	
11	FGS	Finisher Gate Solenoid	Paper entry gate selection	
12	SCGS	Staple Compiler Gate Solenoid	Staple paper entry gate selection	
13	SCRCS	Staple Compiler Rolor Solenoid	Belt roller press/release selection	
14	PPS	Paper Push Solenoid	Paper rear edge holding drive selection	
15	SPS	Stopper Solenoid	Stopper drive selection	
16	T2S	Tray 2 Solenoid	Paper exit paddler drive selection	

## [6] MACHINE OPERATION

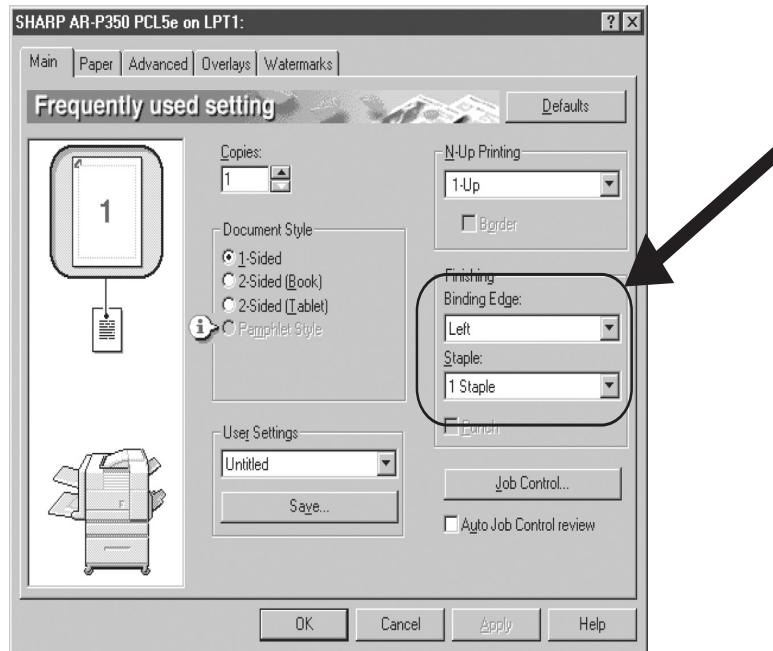
### 1. Using the stapling function from the printer

When using the stapling function, select "Properties" on the printer driver setting screen, open the "Main" tab shown in the illustration, and then select "Left", "Right" or "Top" at "Binding Edge" and "1 Staple" or "2 Staples" in the "Staple" drop down.

#### NOTES:

- The settings screens above will appear only if the devices have been set properly in the printer driver.
- The combination of paper selection and other functions may not be compatible. For instance, if heavy paper, envelopes, label stock, etc. are selected, it will not be possible to select duplex, offset tray, saddle stitch, etc.

The illustration below shows the screen for a PCL printer driver in the Windows 98 environment.



## 2. Stapling position quick reference list

When stapling is performed, the orientation of image data or original is related to the stapling position, binding position and orientation of paper complicatedly. The table below illustrates the relationship.

		Image data or original			Result	
		First page (front side)	Second page (reverse side)	Two sides	One-position stapling	Two-position stapling
Portrait orientation printing	Left binding					
	Top binding					Two-position stapling with top binding cannot be made.
	Right binding					
Landscape orientation printing	Left binding					Two-position stapling with left binding cannot be made.
	Top binding					
	Right binding					Two-position stapling with right binding cannot be made.

■ ■ ■ indicates stapling positions.

### NOTES:

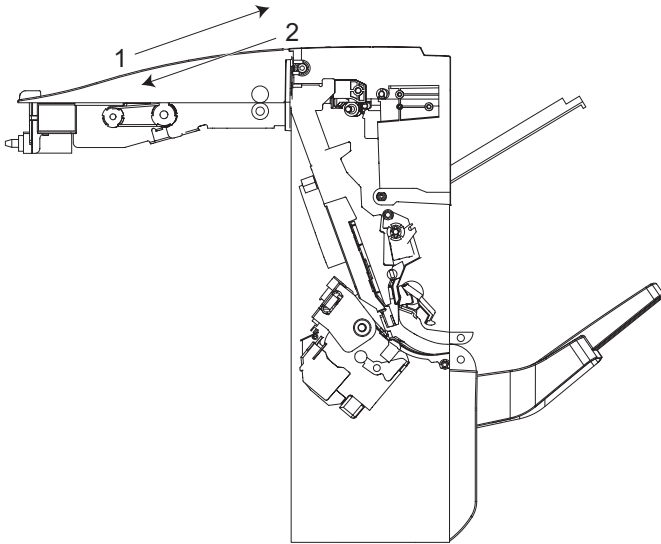
- When using the stapling function, select the offset tray as an exit tray. If another tray is selected, the stapling function cannot be used.
- Select only one paper size. If different sizes are included, stapling cannot be performed.
- The following types of paper cannot be stapled:  
Pre-punched paper, transparency film, heavy paper, label, envelope, postcard.

# [7] OPERATIONAL DESCRIPTIONS

## 1. Paper transport path

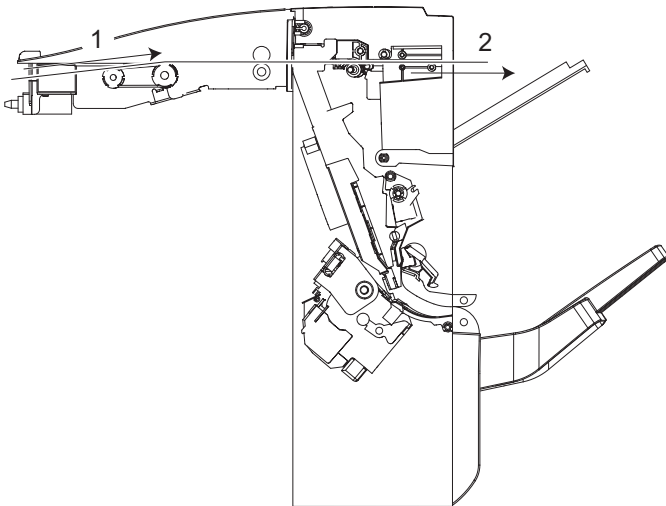
### A. Machine paper exit reverse (Switchback)

When the duplex print or the left side paper exit tray is selected, paper is discharged once to the interface unit and then switched back.



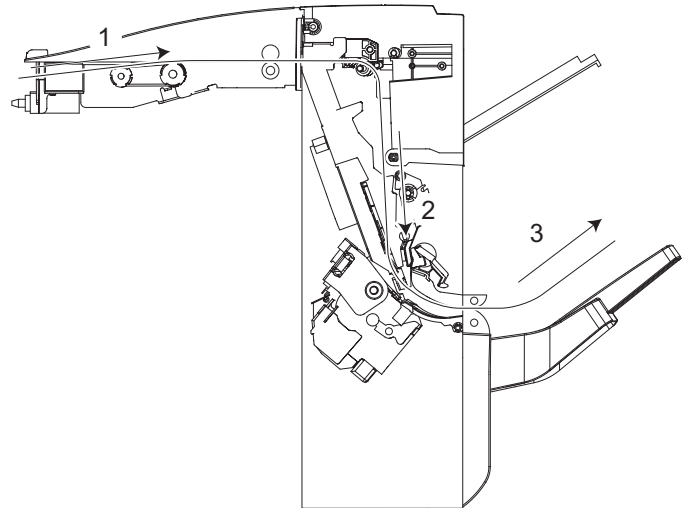
### B. Paper exit to the upper tray

In the normal paper exit operation, paper is discharged to the upper tray.



### C. Paper exit to the lower tray

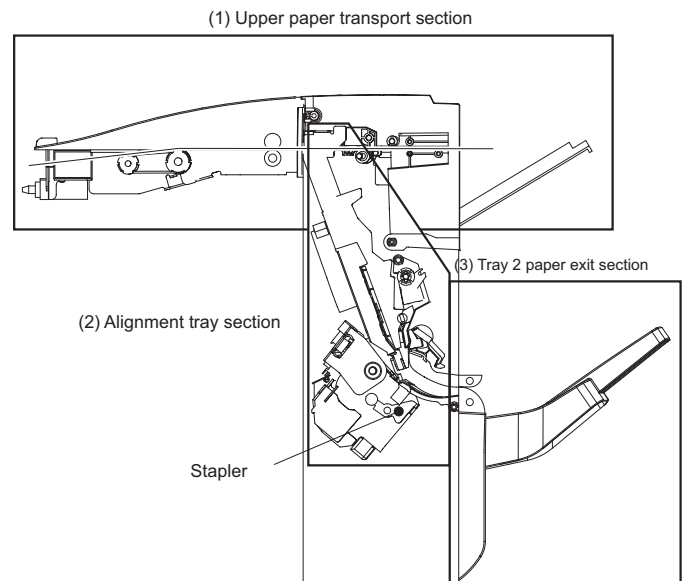
When stapling or offset operation is performed, paper is discharged to the lower tray.



## 2. Descriptions of each section

The finisher is composed of (1) upper paper transport section, (2) alignment tray section, and (3) tray 2 paper exit section.

Offset and stapling (3 positions) can be performed with paper exit to tray 2 as well as the selected tray by the command from the machine.



### A. Upper transport section

#### Paper transport path

By rotating the main motor (MM), all the transport rollers in the unit (except for the tray 2 final roller) are driven.

## Interface unit paper entry gate

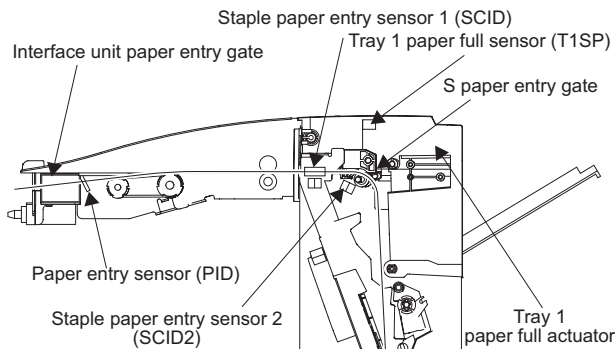
The finisher gate solenoid (FGS) operates the interface unit paper entry gate to perform machine paper exit reversion and selection of the paper path to the tray 1 and the tray 2.

## S paper entry gate

The compiler paper entry gate solenoid (SCGS) operates the S paper entry gate to select the paper path to the tray 1 or the tray 2.

## Tray 1 paper full detection

Tray 1 paper full detection is performed by the tray 1 paper full sensor (T1PF) in linkage with the tray 1 paper full actuator.



## B. Alignment tray section

### Jogger F/R

The jogger F/R motors (JFM, JRM) are driven at the timing of paper entry into the alignment tray to operate the joggers F/R (alignment plates on both sides), making transverse alignment of paper.

### Pusher

The pusher motor (PSM) is driven at the timing of paper entry into the alignment tray to operate the pusher (upper alignment plate). Paper is squeezed with the pusher and the stopper which is provided at the lead edge of paper to make longitudinal alignment of paper. The pusher also serves to hold the rear edge of a paper bundle in order not to change the sequence of the next paper when it enters the alignment tray. It also pushes a stapled paper bundle to the tray 2 in the staple mode.

### Stopper

The stopper is driven by the stopper solenoid (SPS) to stop the lead edge of paper in order to hold paper in the alignment tray.

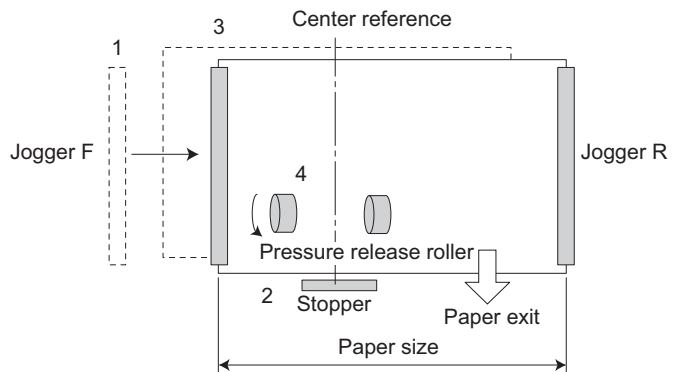
### Pressure release roller

The pressure release roller is driven by the pressure release solenoid (SCRS). It is pressed when paper is transported from the alignment tray to the tray 2. It also serves to improve longitudinal alignment capability when paper enters the alignment tray in the staple mode.

### Paper holder

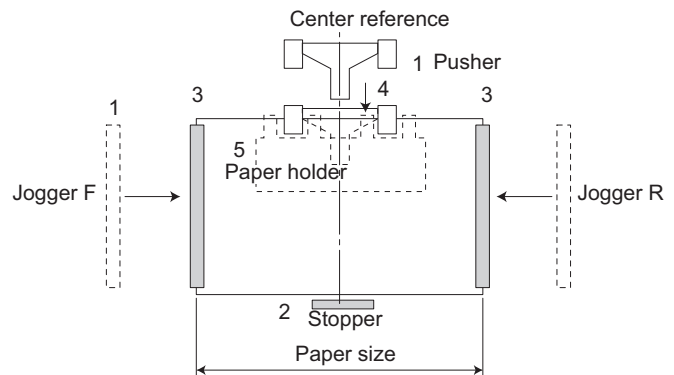
The paper holder is driven by the paper holder solenoid (PPS) to hold the rear edge of paper in the alignment tray.

## Alignment and paper exit in offset



1. The joggers F/R are moved to the standby position before paper entry into the alignment tray, and paper is passed to the alignment tray.
2. When paper is passed into the alignment tray, the stopper solenoid is turned on to receive paper.
3. After paper entry into the alignment tray, the joggers are moved to the suitable positions according to the paper size, and paper is offset.
4. The stopper solenoid is turned off and the pressure release (roller) solenoid is turned on to discharge paper to the tray 2.

## Alignment in stapling



1. Before paper entry into the alignment tray, the joggers F/R are moved to the standby position, and paper is entered into the alignment tray.
2. When paper enters the alignment tray, the stopper solenoid is turned on to receive paper.
3. After paper entry into the alignment tray, the joggers F/R are moved to the paper size positions to align paper.
4. The paper holder solenoid is turned on at the same time with (3) to hold the rear edge of entered paper, and the pusher is moved to the paper size position.
5. After completion of moving the pusher, the paper holder solenoid is turned off.

## Staple unit

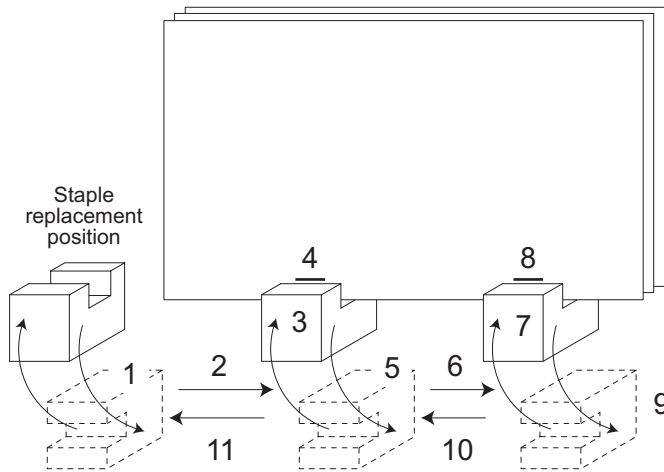
The stapler staples paper. The ST shift motor slides the stapler horizontally with the paper lead edge according to the staple positions (forward, backward, 2 positions).

The ST rotating motor (STTM) rotates the stapler from the save position to the stapling position, and can slide the staple replacement position horizontally and can discharge paper.

## Stapler

The stapler can staple max. 30 pages of 21lb/80g paper. It is composed of the drive DC motor (STM), the home position sensor (STHP), the staple empty sensor (STLS), the cartridge empty sensor (STNC), and the self-priming sensor (STSP) which detects a staplable position.

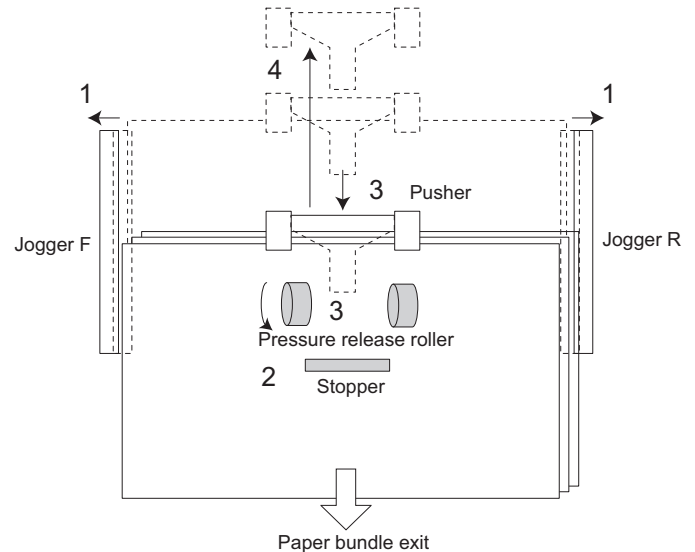
## Stapling



1. The stapler is moved from the staple replacement position to the slidable position.
2. The stapler is shifted to the stapling position.
3. The stapler is rotated to the stapling position.  
Put paper to be stapled in the staple tray.
4. Paper is stapled.
5. The stapler is rotated to the standby position.  
When in one-position stapling, a bundle of paper is discharged to the tray 2 (paper exit section), and the procedure goes to (10).
6. The stapler is shifted to the second stapling position.
7. The stapler is rotated to the stapling position.
8. Paper is stapled. (Second stapling)
9. The stapler is rotated to the standby position.  
The bundle of paper is discharged to the tray 2 (paper exit section)
10. After completion of a job, the stapler is shifted to the staple replacement position.
11. The stapler is rotated to the staple replacement position.

\* For one-position stapling, however, procedures (6) - (10) are not performed.

## Paper exit after stapling



1. The joggers F/R are moved to the paper exit position.
2. The stopper solenoid is turned off.
3. The pressure release solenoid is turned on to shift the pusher to the paper exit position, and the paper bundle is discharged to the tray 2 paper exit section.
4. The pressure release solenoid is turned off and the pusher is returned to the home position.

## C. Tray 2 paper exit section

### Paper transport

Only in paper exit to the tray 2, the final roller is driven by rotating the paper exit motor (T2OM).

### Elevator operation and tray 2 paper full detection

The elevator motor is rotated to move the tray 2 up and down so that paper is discharged at the fixed position according to the quantity of paper loaded in the tray 2.

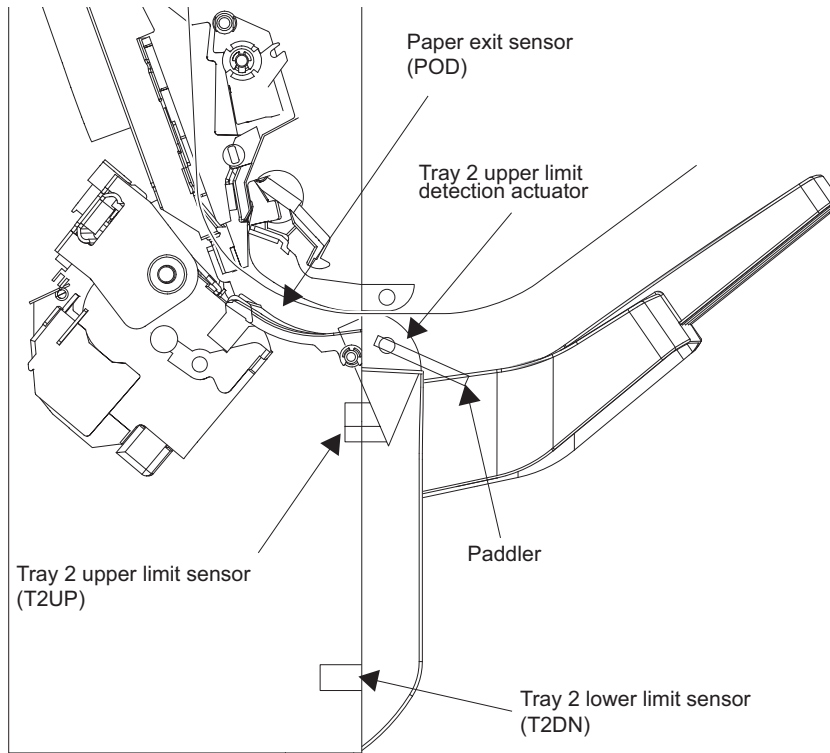
Tray 2 full is detected when both the tray 2 upper limit sensor which is linked with the tray 2 upper limit actuator and the tray 2 lower limit sensor are on.



## Paddler operation/

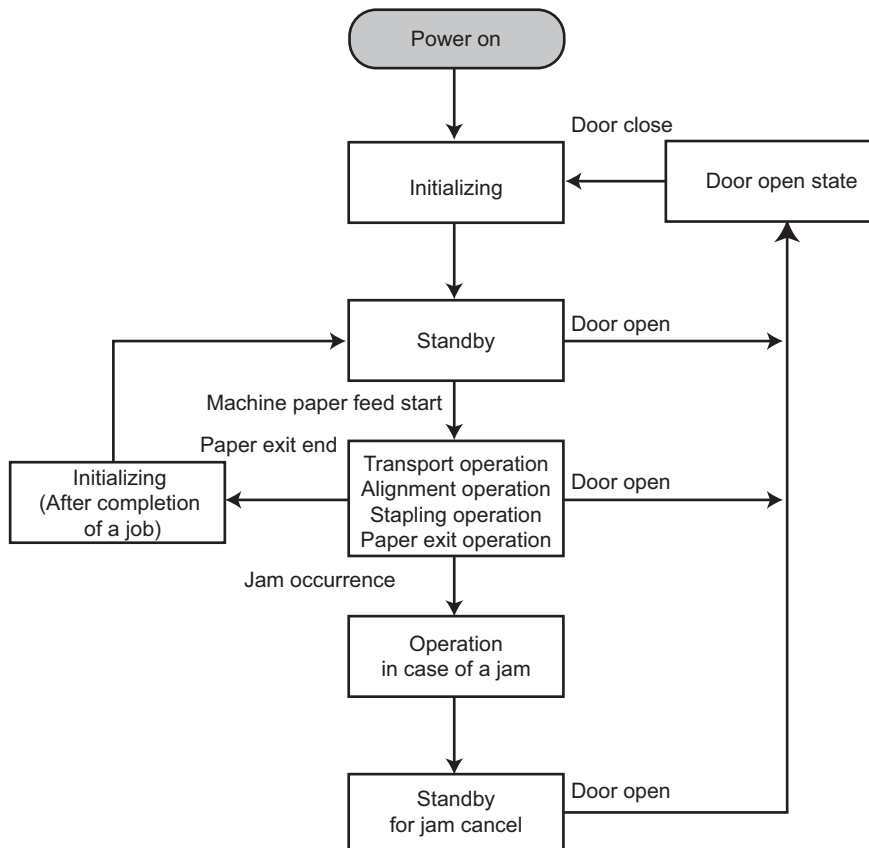
### Tray 2 upper limit detection actuator operation

When the paper exit motor is rotating, the tray 2 solenoid (T2S) is turned on so that the paddler is rotated to pull paper and pull the actuator toward the unit in order to improve the stacking capacity of paper loaded in the tray 2.



## 3. Basic operation

### A. Basic operation flow

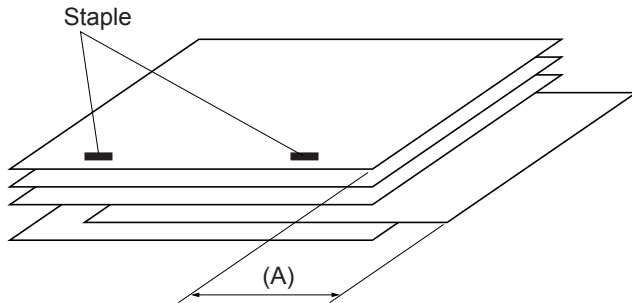


# [8] ADJUSTMENTS

## 1. Jogger position adjustment

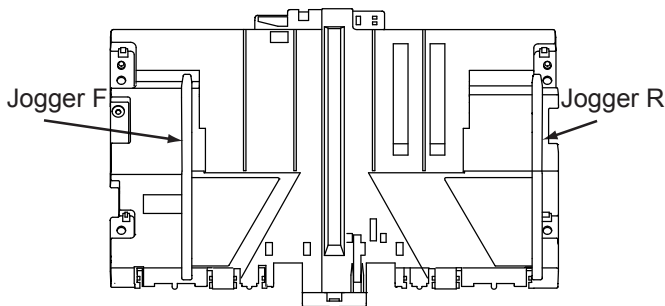
### A. Jogger F/R

1. Staple 5 sheets of A4 or LT paper and check the paper shift (A) shown in the figure below.



2. If the shift (A) is less than 1mm, there is no need to adjust.
3. If the shift (A) is 1mm or greater, adjust as shown in the table below.

Adjustment procedure
DIAG MODE
[FINISHER JOGGER ADJ.]
(Finisher jogger position adjustment)
SIM 3-6(Built-in finisher jogger position adjustment)



### B. Printer model adjustment procedure

1. In the DIAG MODE, select [FINISHER JOGGER ADJ.].

FINISHER JOGGER ADJ.

2. Press **OK** key, and the following display will be shown.  
Use [  $\Delta$  ] key and [  $\nabla$  ] key to change the adjustments value. (Adjustment range: 40 - 60)

ADJUST VALUE 50

3. Change the adjustment value and press **OK** key, and the stopper will be turned on and the finisher joggers F/R will

move to and stop at the positions shown in the table below.

Destination	Jogger position
Inch series	LT size alignment position
AB series	A4 size alignment position

4. When the joggers F/R stop, open the door and load A4/LT paper in the alignment tray, and check the jogger width visually.
5. When the jogger width is too wide or too narrow, use [  $\Delta$  ] key and [  $\nabla$  ] key again to change the adjustments value. Press **OK** key to shift the jogger to the A4/LT alignment position, and check visually.

The table below shows relationship between the adjustment value and the jogger width.

Adjustment value	Jogger width
Decreased by 1.	Increased by about 0.375mm.
Increased by 1.	Decreased by about 0.375mm

6. After completion of the adjustment, remove the paper from the alignment tray and terminate the DIAG MODE.

# [9] DISASSEMBLY AND ASSEMBLY, MAINTENANCE

## 1. Maintenance System Table

× Check (Clean, replace, or adjust as necessary.)

○ Clean

▲ Replace

△ Adjust

☆ Lubricate

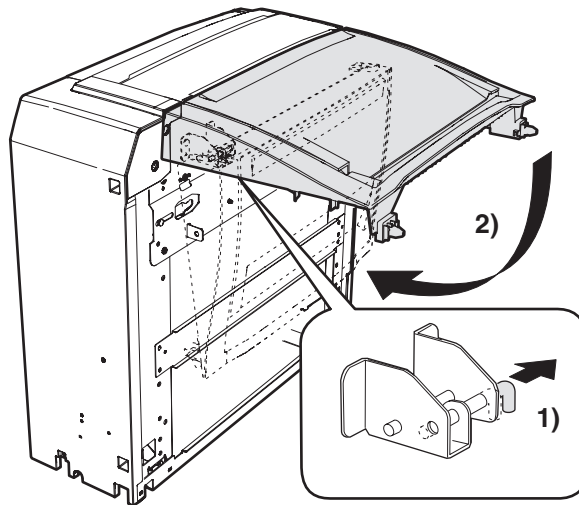
□ Move position

Unit name	Part name	When calling	50K	100K	150K	200K	250K	300K	350K	400K	Remark
Transport section	Transport rollers	○		○		○		○		○	
	De-curler roller	(○) ×	×	○	×	○	×	○	×	○	
	Transport paper guides	○		○		○		○		○	
Drive section	Gears	☆		☆		☆		☆		☆	(Specified position)
	Belts							×			
Other	Sensors	×		×		×		×		×	
	Discharge brush	×		×		×		×		×	
Staple cartridge											User replacement for every 3000pcs.

## 2. Disassembly and assembly

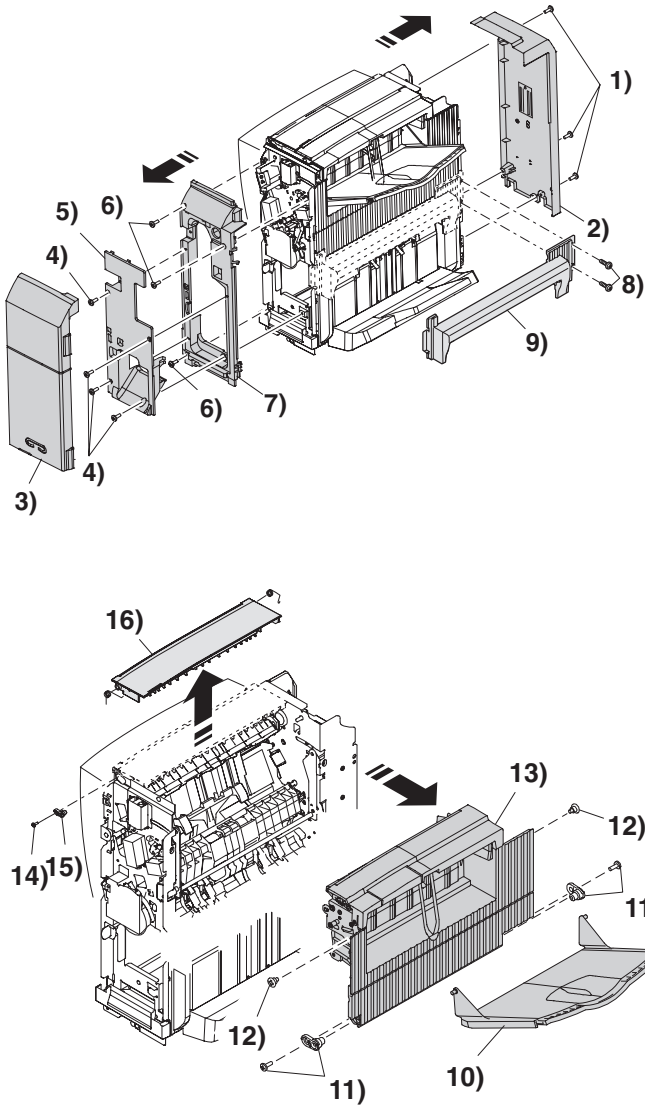
### A. Unit transit

Note: When carrying the finisher unit removed from the printer, fold the transport unit as described below. If not, the frame may be bent, causing a breakdown of the machine.



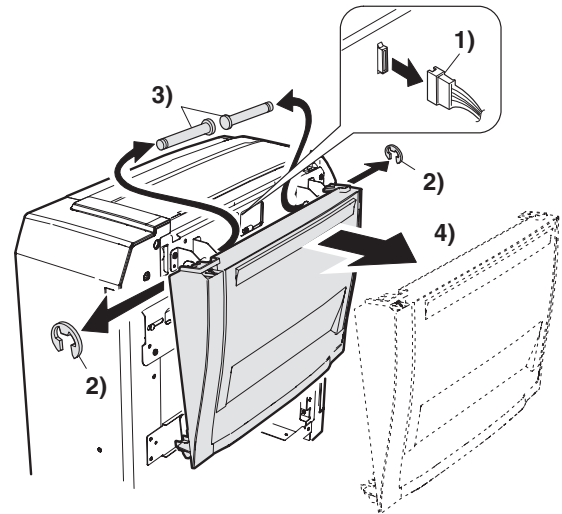
Note: The numbers in illustrations reflect the sequence required for disassembly/assembly.

## B. External cabinet

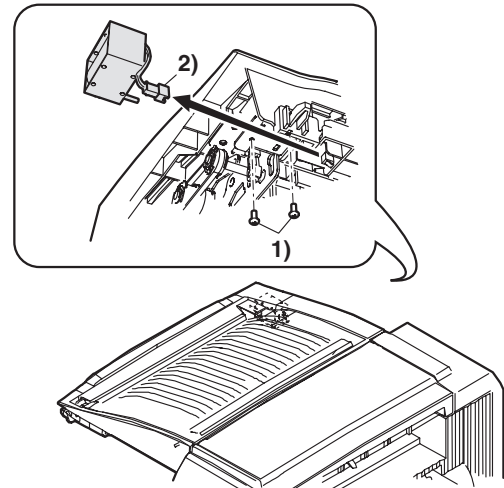


## C. Transport unit

Parts name	Job item	cycle
Transport rollers	Clean	100K
De-curler roller	Check	50K
	Clean	100K
Transport paper guide	Clean	100K

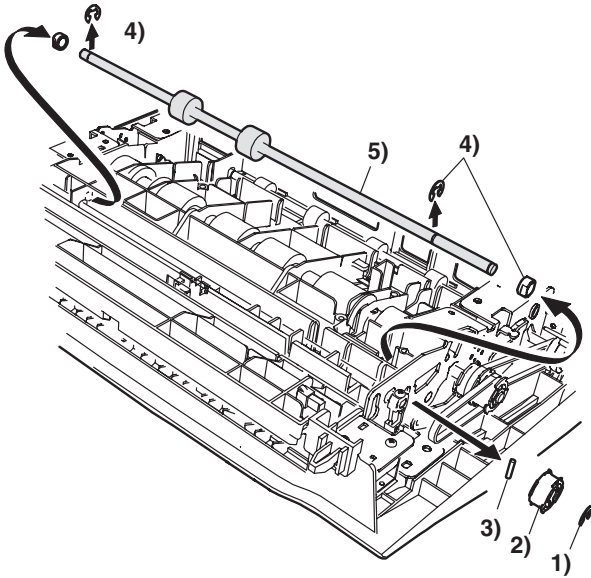


## Gate solenoid

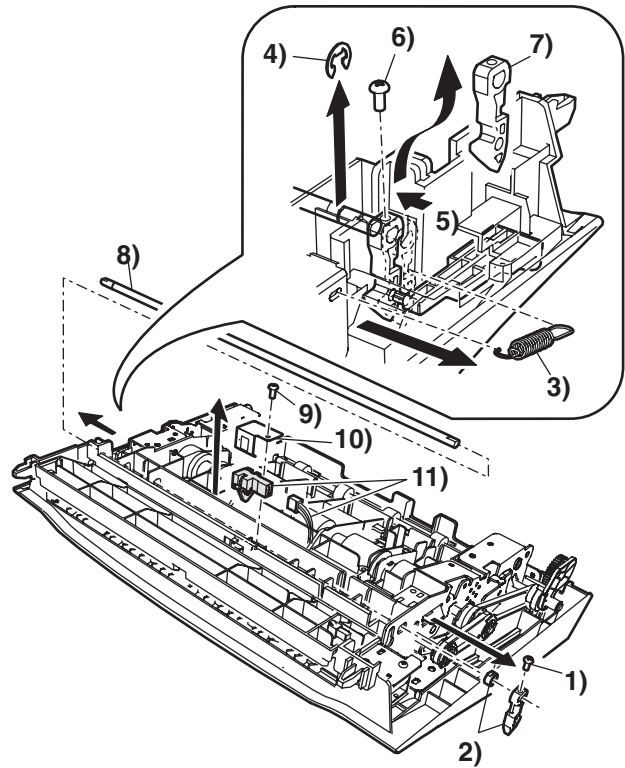


Note: The numbers in illustrations reflect the sequence required for disassembly/assembly.

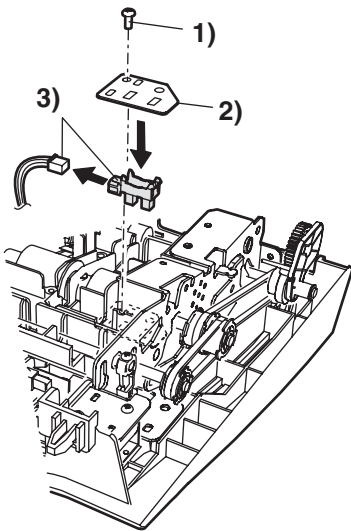
### Transport roller



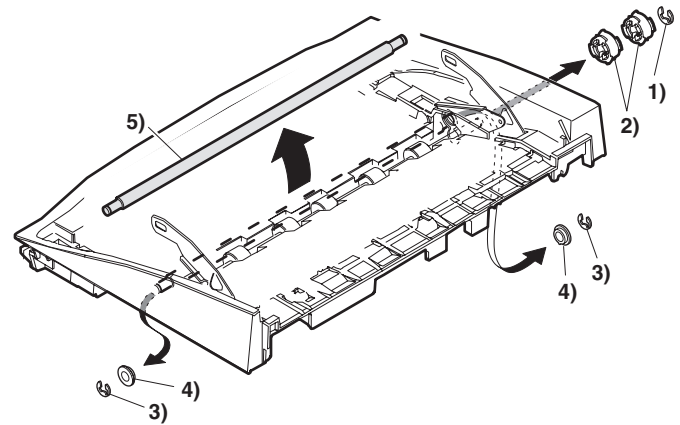
### Paper entry sensor



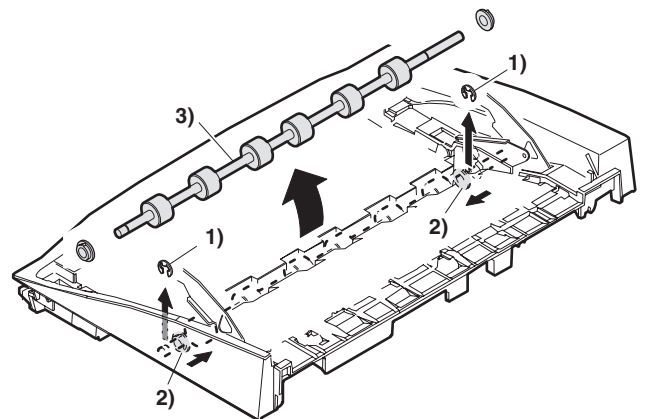
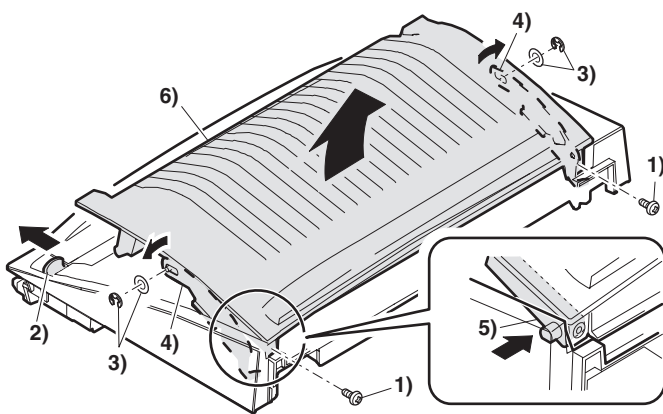
### Upper open/close sensor



### De-curler roller

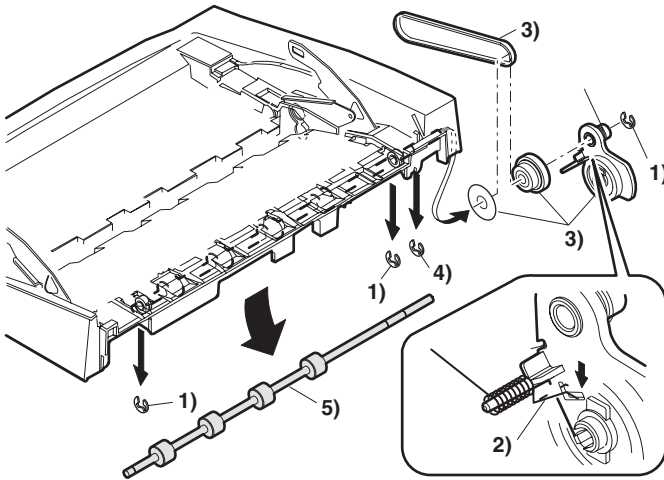


### Upper cover

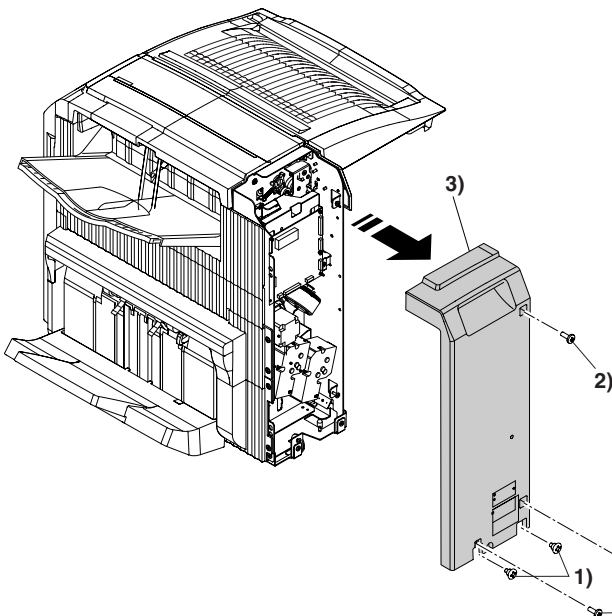


Note: The numbers in illustrations reflect the sequence required for disassembly/assembly.

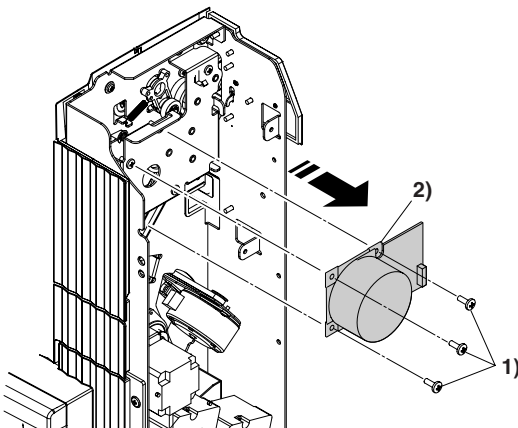
### Transport roller



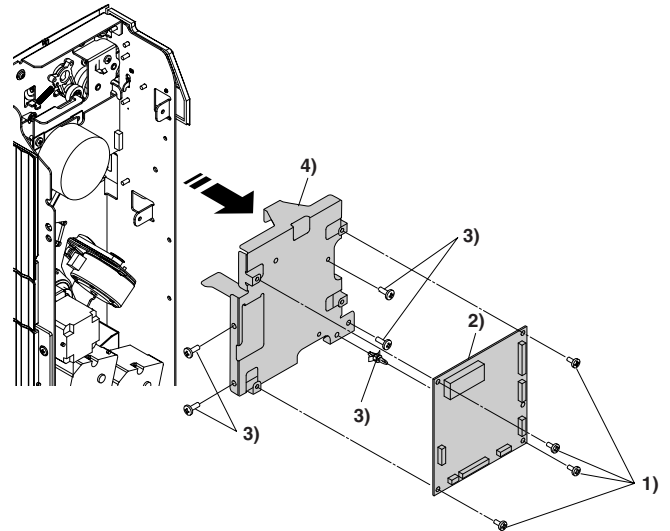
### D. Rear side of the unit



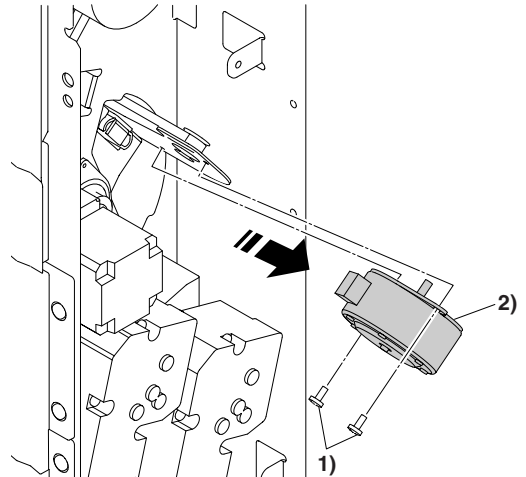
### Main motor



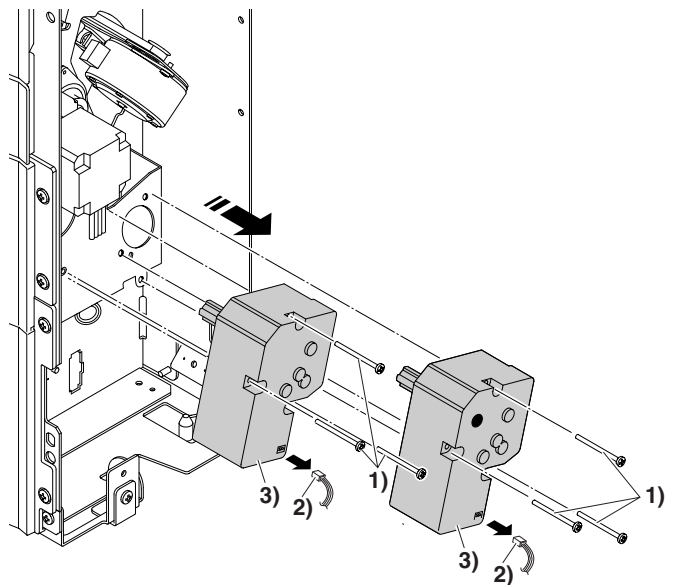
### Main control PWB



### Staple shift motor



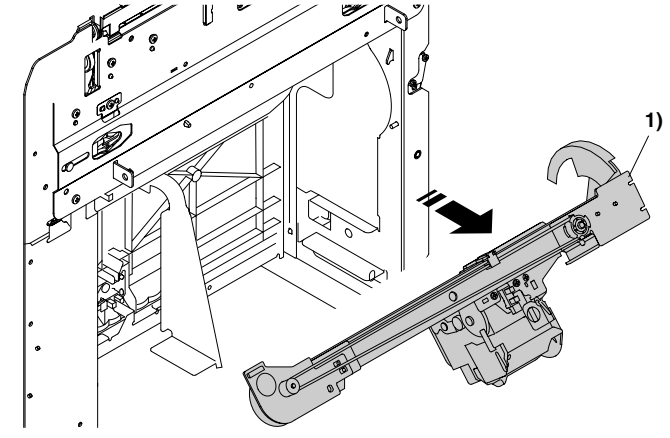
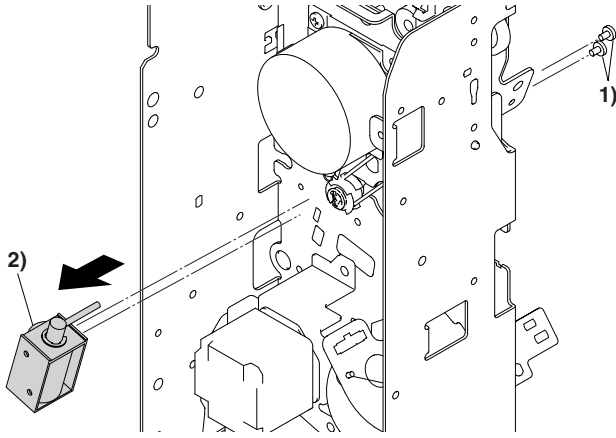
### Elevator motor / Staple rotation motor



\* A red seal is attached to the staple rotating motor.

Note: The numbers in illustrations reflect the sequence required for disassembly/assembly.

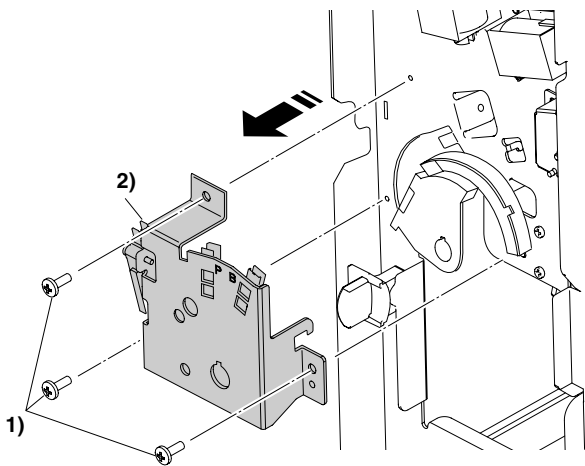
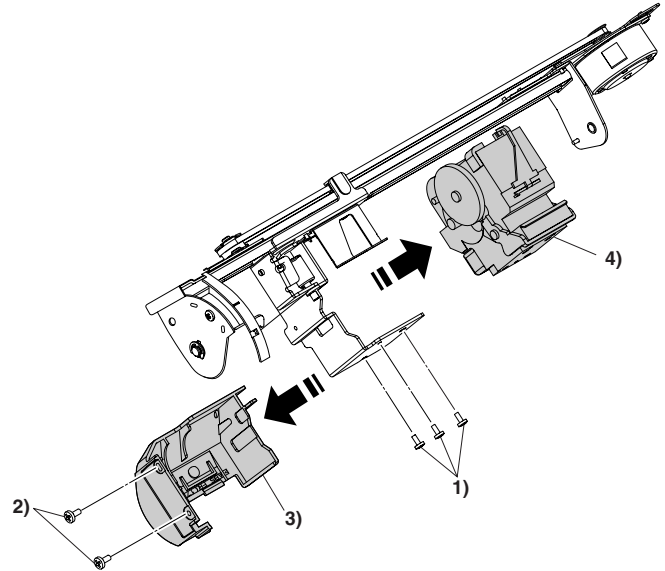
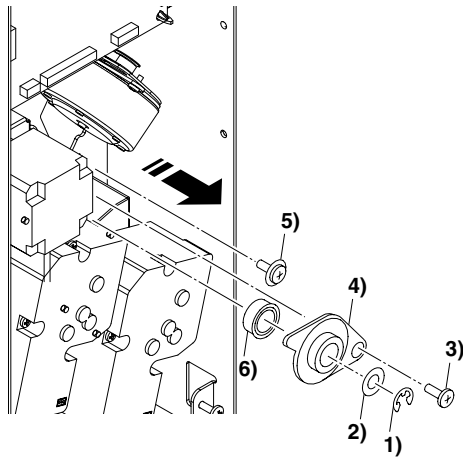
## Pressure-release solenoid



## E. Stapler

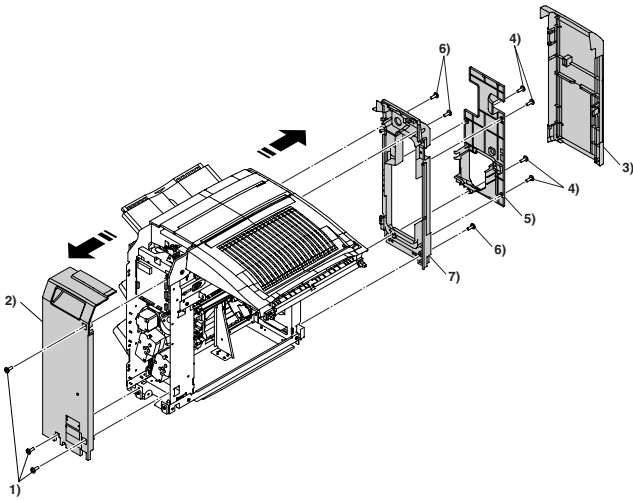
Parts name	Job item	cycle
Staple cartridge	User replacement	3000pc.

## Stapler unit

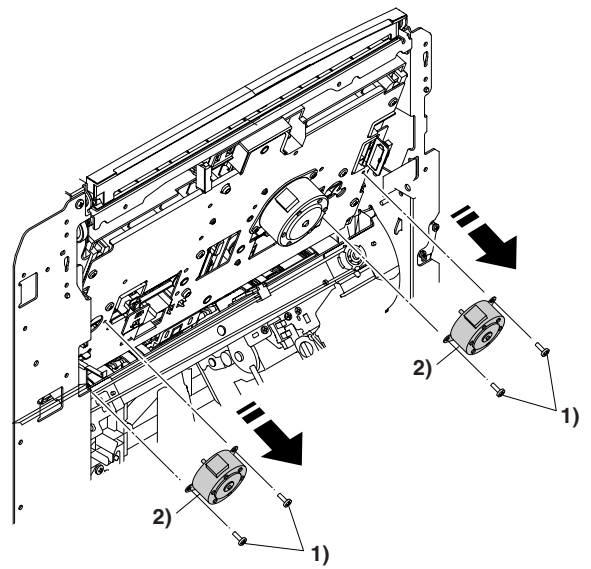


Note: The numbers in illustrations reflect the sequence required for disassembly/assembly.

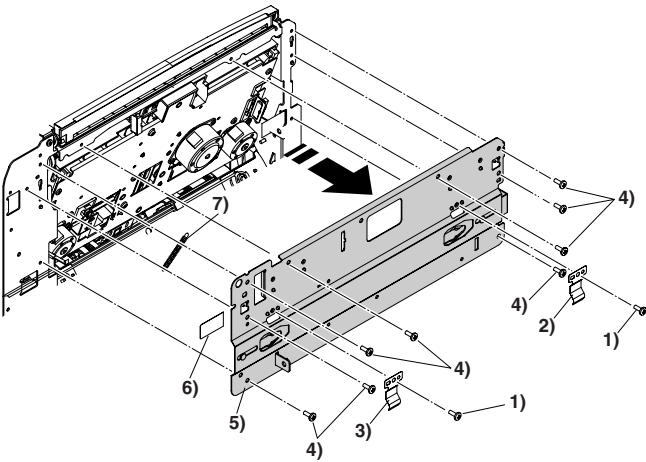
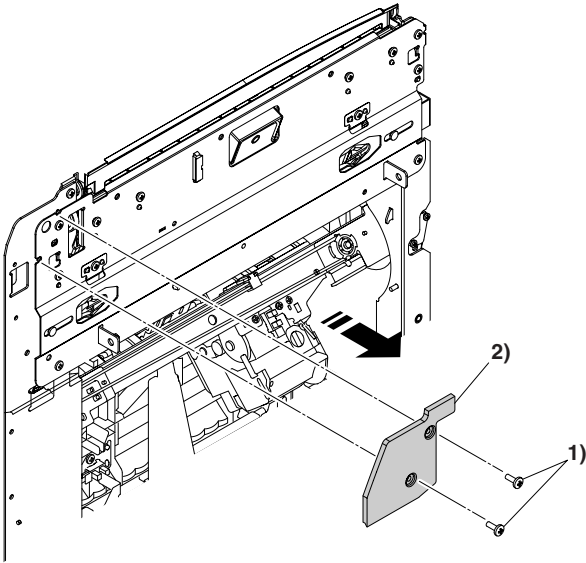
## F. Inside of the unit



Jogger motor



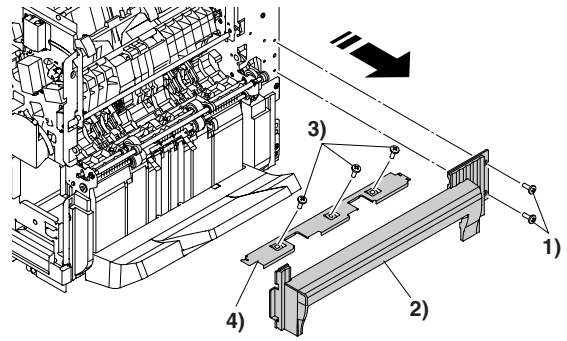
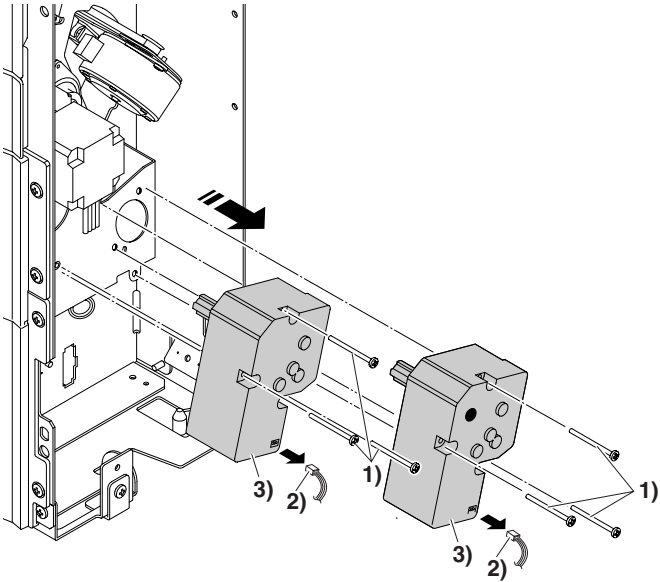
Pusher motor



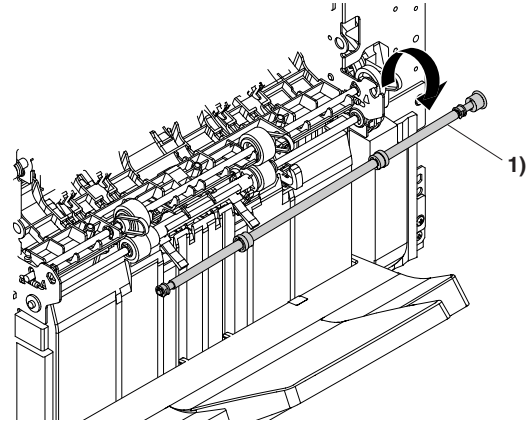
Note: The numbers in illustrations reflect the sequence required for disassembly/assembly.



## Elevator unit



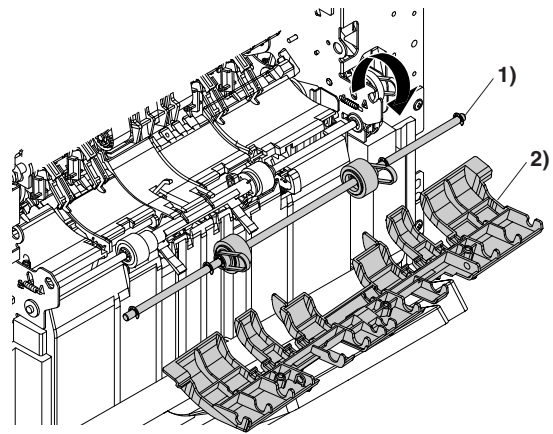
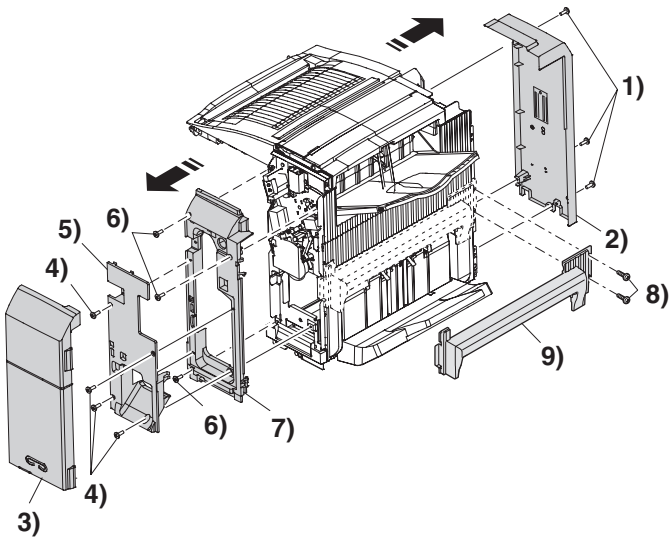
## Lower stage tray paper exit roller



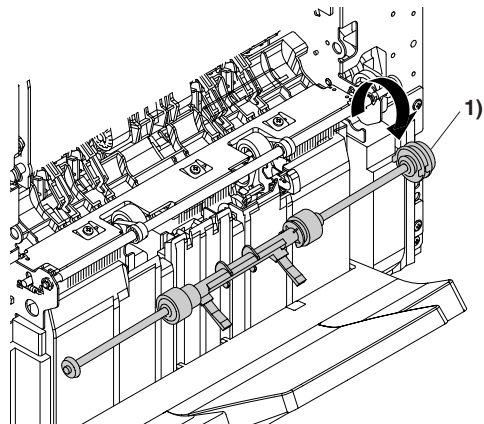
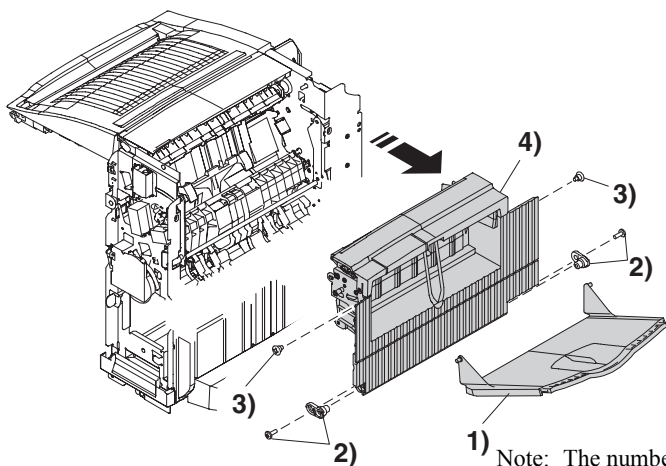
## G. Right side of the unit (Paper exit side)

Parts name	Job item	cycle
Transport roller	clear	100K

## External cabinet



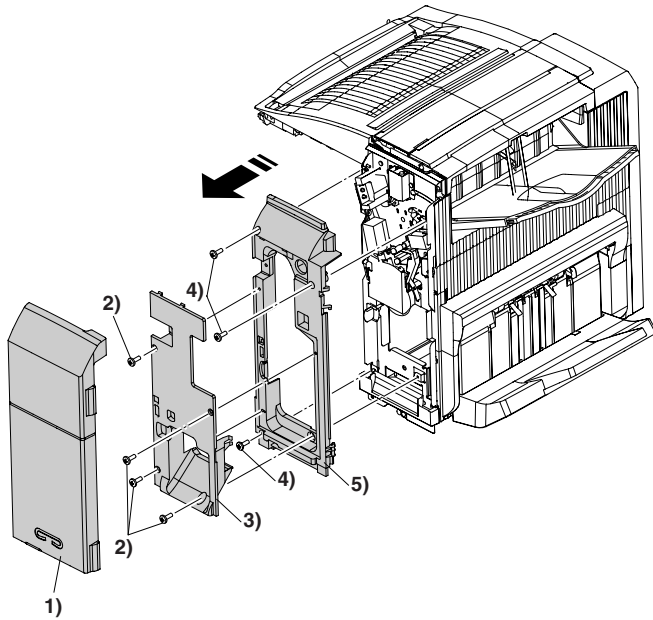
## Paper exit paddler



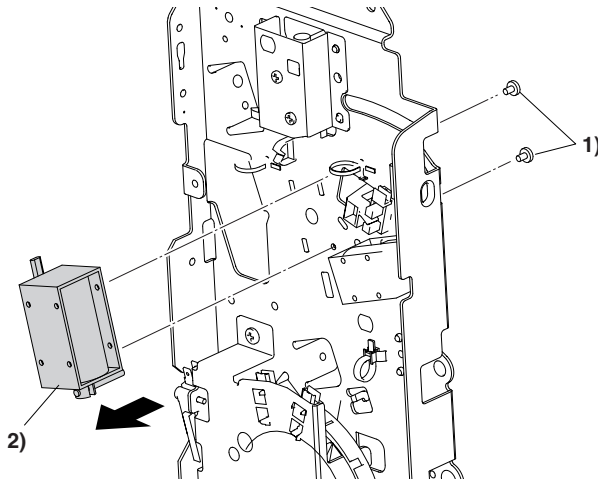
Note: The numbers in illustrations reflect the sequence required for disassembly/assembly.

## H. Front side of the unit

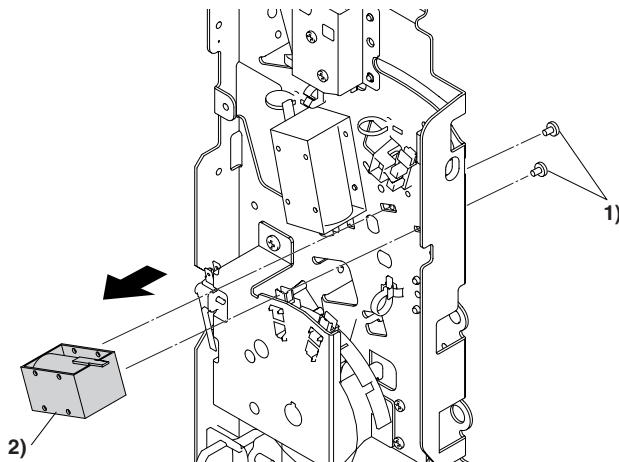
Parts name	Job item	cycle
Paper guide	clean	100K



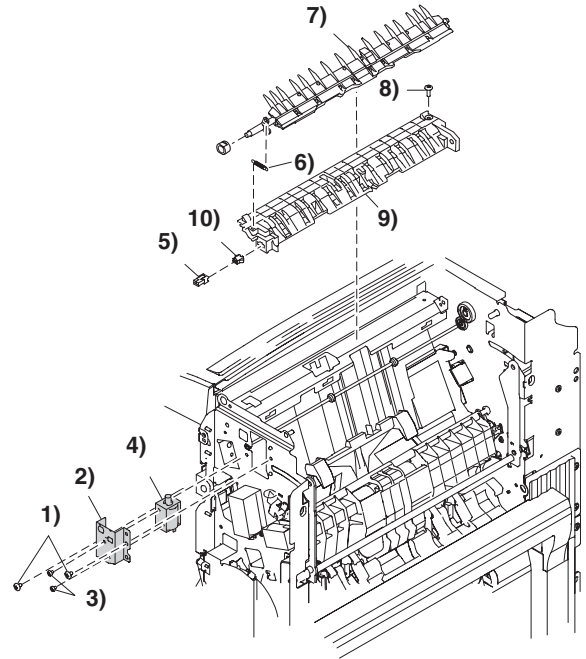
### Stopper solenoid



### Paper holding solenoid

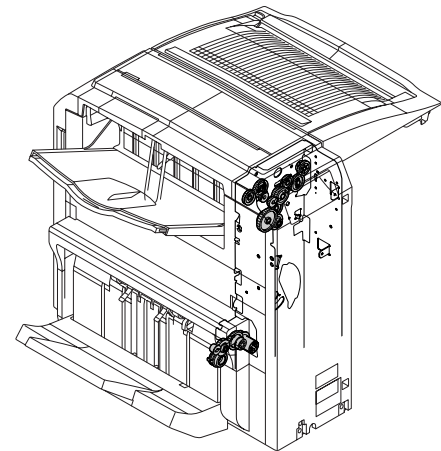


## Compiler paper entry gate solenoid



## I. Gears, Clutch

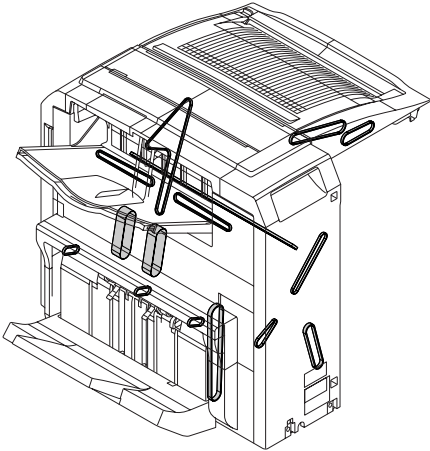
Parts name	Job item	cycle
Gears	Lubricate	100K



Note: The numbers in illustrations reflect the sequence required for disassembly/assembly.

J. Belts

Parts name	Job item	cycle
Belts	clear	300K



Note: The numbers in illustrations reflect the sequence required for disassembly/assembly.

# [10] OTHERS

## A. SF MAIN PWB TF UN

