

# Service Manual

## **Finisher, Sorter, DeliveryTray Additional Finisher Tray-A1**

**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.

## Corrections

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

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## Caution










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

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## Symbols Used



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This documentation uses the following symbols to indicate special information:

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

The following rules apply throughout this Service Manual:

1. Each chapter contains sections explaining the purpose of specific functions and the relationship between electrical and mechanical systems with reference to the timing of operation.

In the diagrams,  represents the path of mechanical drive; where a signal name accompanies the symbol, the arrow  indicates the direction of the electric signal.

The expression "turn on the power" means flipping on the power switch, closing the front door, and closing the delivery unit door, which results in supplying the machine with power.

2. In the digital circuits, '1' is used to indicate that the voltage level of a given signal is "High", while '0' is used to indicate "Low". (The voltage value, however, differs from circuit to circuit.) In addition, the asterisk (\*) as in "DRMD\*" indicates that the DRMD signal goes on when '0'.

In practically all cases, the internal mechanisms of a microprocessor cannot be checked in the field. Therefore, the operations of the microprocessors used in the machines are not discussed: they are explained in terms of from sensors to the input of the DC controller PCB and from the output of the DC controller PCB to the loads.

The descriptions in this Service Manual are subject to change without notice for product improvement or other purposes, and major changes will be communicated in the form of Service Information bulletins.

All service persons are expected to have a good understanding of the contents of this Service Manual and all relevant Service Information bulletins and be able to identify and isolate faults in the machine."



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# Chapter 1 Specifications

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# 1.1 Product Specifications

## 1.1.1 Specifications

0004-8823

T-1-1

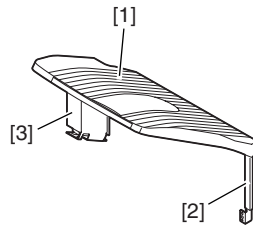
Item	Specifications	Remarks
Stacking orientation	Face up / Face down	
Stacking size	A3, A4, A4R, A5, A5R, B4, B5, B5R, postcard, 279 mm x 432 mm (11 x 17), LGL, LTR, LTRR, STMT, STMTR, elongation size	Feed direction: 139.7 to 482.6 mm: cross feed direction: 98.4 to 330.2 mm; both maximum
Paper weight	64g/ m <sup>2</sup> ~ 250g/ m <sup>2</sup>	

## 1.2 Names of Parts

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### 1.2.1 External View

0004-8827



F-1-1

T-1-2

[1] Additional finisher tray

[2] Front tray stay cover

[3] Rear tray stay cover

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# Chapter 2    Functions

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# Contents

2.1 Basic Construction .....	2-1
2.1.1 Functional Construction .....	2-1



## 2.1 Basic Construction

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### 2.1.1 Functional Construction

0004-9190

The additional finisher tray is optionally installed in the tray 1 of the finisher.

Additional finisher tray paper sensor (PI44) are provided to detect the presence of the paper stacked on the tray.



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# Chapter 3    Installation

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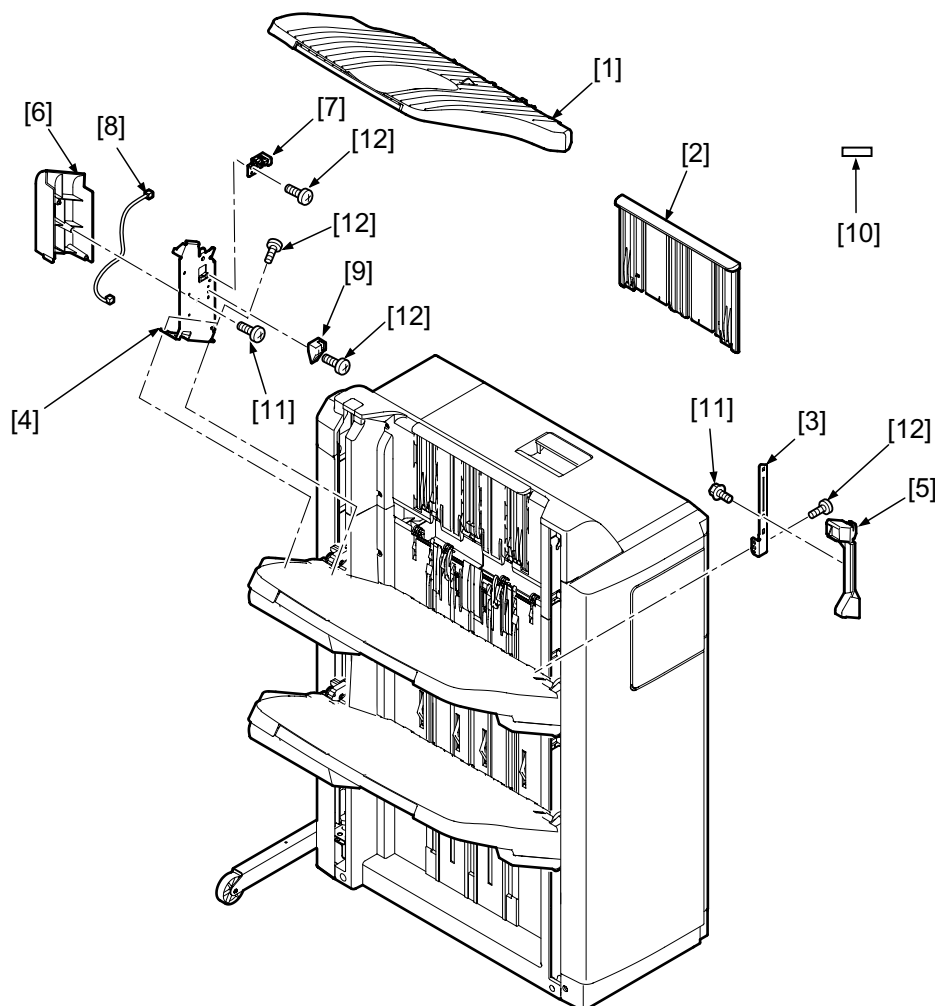




## 3.1 Making Pre-Checks

### 3.1.1 Checking the Contents

0003-2135



F-3-1

T-3-1

[1]Additional finisher tray	1 pc.	[7]Sensor unit	1 pc.
[2]Slide guide	1 pc.	[8]Sensor cable	1 pc.
[3]Front tray stay	1 pc.	[9]Sensor unit cover	1 pc.
[4]Rear tray stay	1 pc.	[10]Settings label	1 pc.
[5]Front tray stay cover	1 pc.	[11]Screw (tapping; M4x12)	2 pc.
[6]Rear tray stay cover	1 pc.	[12]Screw (binding; M4x6)	5 pc.

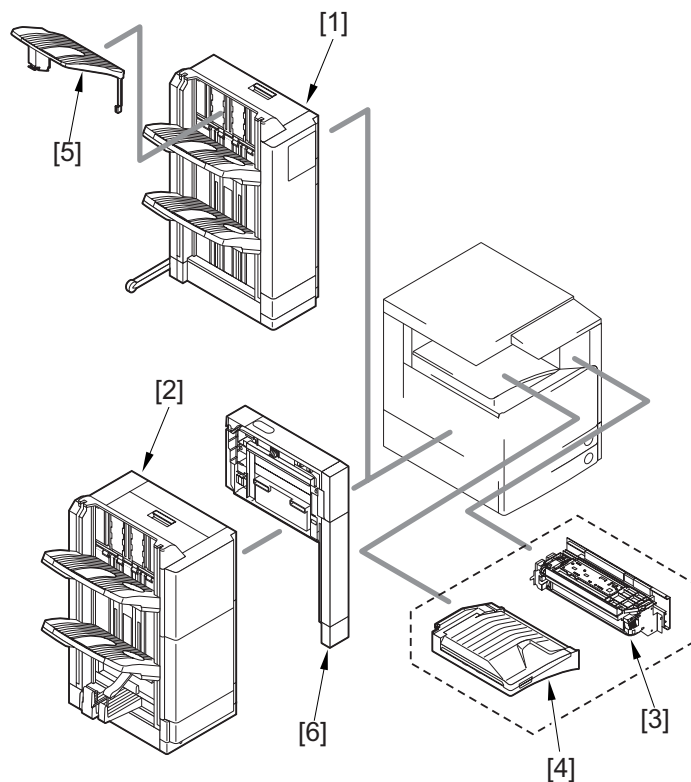
### 3.1.2 Installing the Accessories

0003-2136

If you are installing other accessories at the same time as the additional finisher tray, be sure to install the host machine and then the accessories in the following order:

- 1.Side paper deck (See the Side Paper Deck Installation Procedure.)
- 2.Finisher [1], [2] (See “Preparing the Host Machine for Installation” in the Finisher/Saddle Finisher Installation Procedure.)
- 3.Inner 2-way tray [3] and buffer pass unit [4] (In the case of the Finisher-Q1/Q2, see “Installing the Inner 2-Way Tray and the Buffer Pass Unit” in the Finisher/Saddle Finisher Installation Procedure.)
- 4.Additional finisher tray [5] (See the instructions herein.)
- 5.Puncher unit [6] (See the Puncher Unit Installation Procedure.”
- 6.Connection to the host machine (See the Finisher/Saddle Finisher Installation Procedure or “Connecting to the Host Machine” and thereafter in the Puncher Unit Installation Procedure.)

In the case of the Finisher-R1/R2, the inner 2-way tray [3] and the buffer pass unit [4] are not part of the system configuration.The following diagram shows the Finisher-Q1/Q2.



**⚠** Before starting the work to install an accessory, be sure to perform the following in the order indicated:

1. Turn off the host machine's control panel power switch.
2. Turn off the host machine's main power switch.

3. Disconnect the host machine's power plug (from the power outlet).

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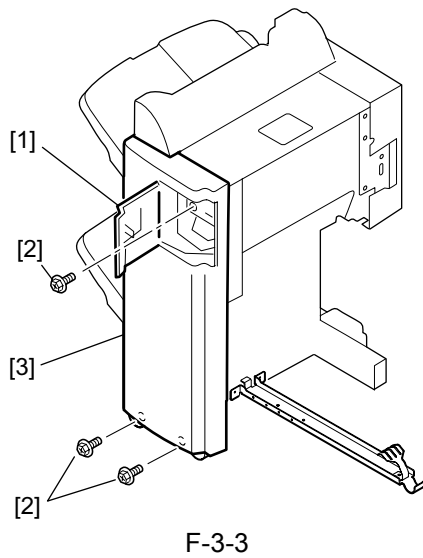
## 3.2 Unpacking and Installation

### 3.2.1 Installation Procedure

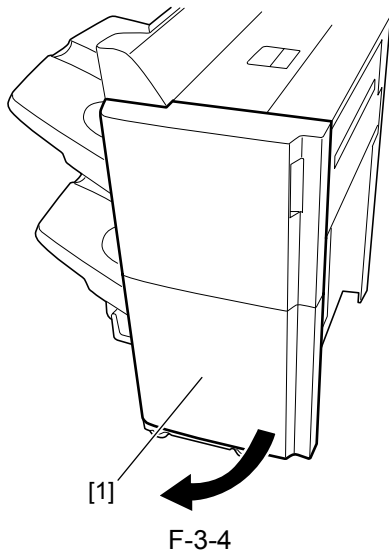
#### 3.2.1.1 Installation

0003-2137

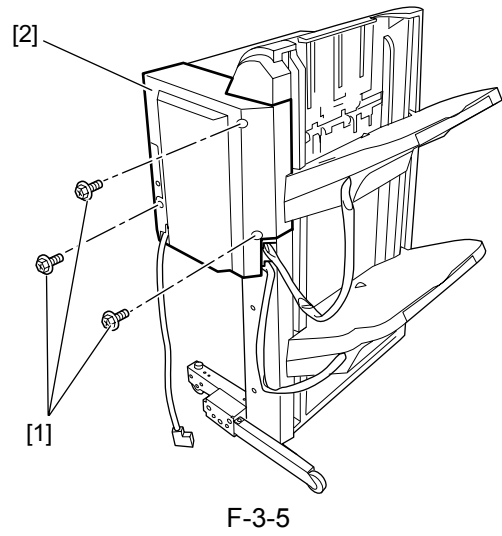
1) In the case of the Finisher-Q1/R1, open the front door [1], remove the 3 screws [2], and detach the front cover [3].



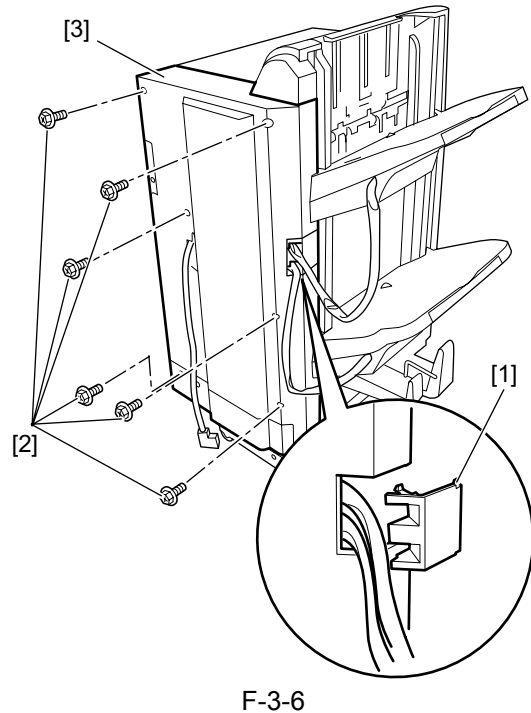
2) In the case of the Saddle Finisher-Q2/R2, open the front cover [1].



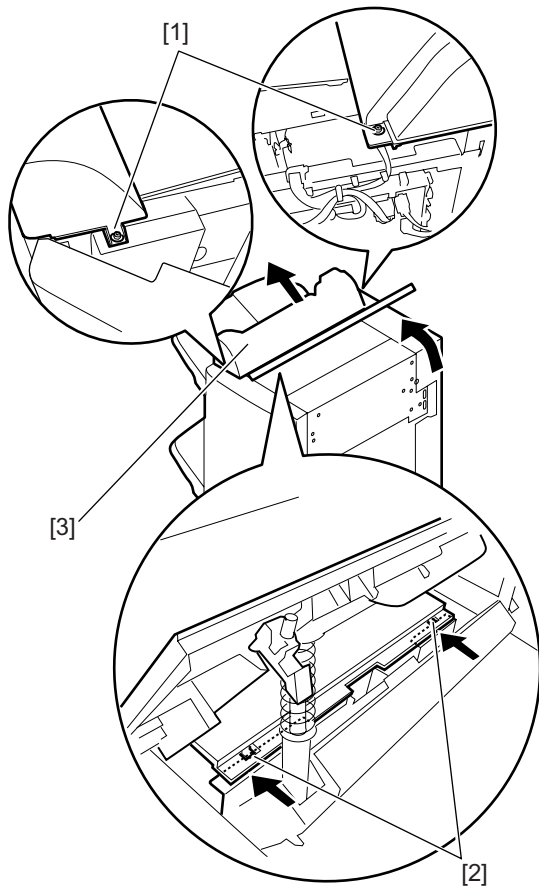
3) In the case of the Finisher-Q1/R1, remove the 3 screws [1], and detach the rear cover [2].



4) In the case of the Saddle Finisher-Q2/R2, detach the cable cover [1], remove the 6 screws [2], and detach the rear cover [3].

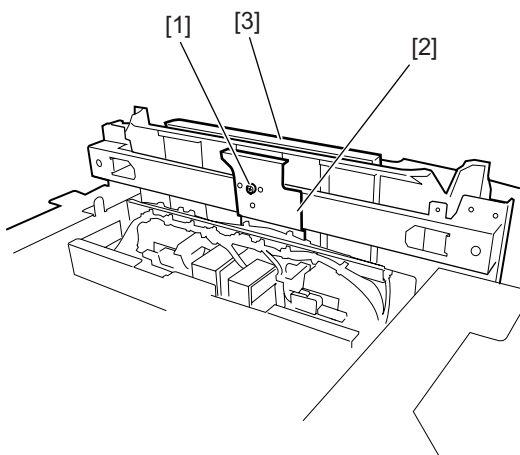


5) Remove the 2 screws [1], and open the upper cover of the finisher; then, detach the upper left cover [3] as if to pull out the claw [2].



F-3-7

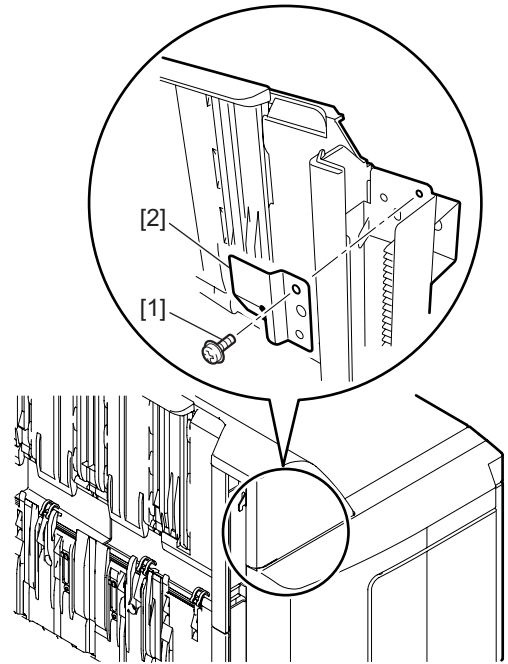
6) Remove the screw [1], and detach the slide guide stopper [2]; then, slide the slide guide [3] upward to detach.



F-3-8

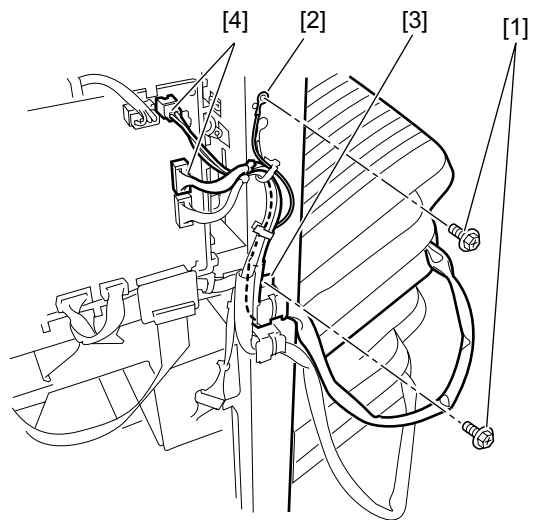
7) Remove the screw [1], and detach the tray stopper

[2].



F-3-9

8) Remove the 2 screws [1], and detach the grounding wire [2] and the cable fixing plate [3]; then, disconnect the 2 connectors [4].



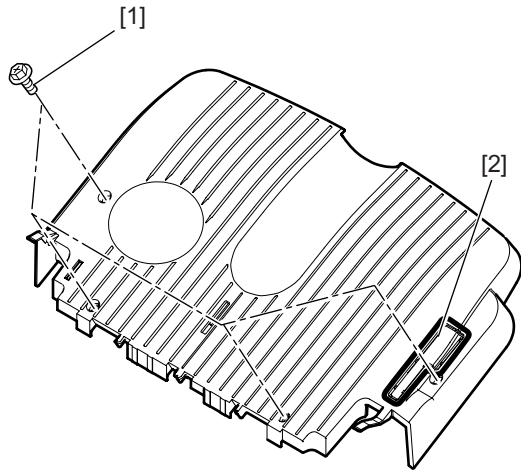
F-3-10

9) Slide the No. 1 tray upward to detach.

10) Remove the 4 screws [1], and detach the tray cover.

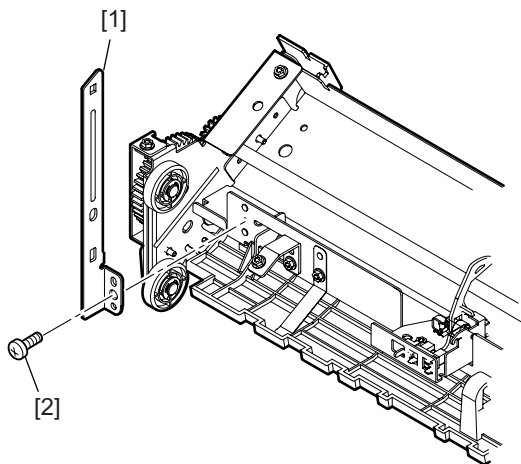
11) Cut off the face cover [2] of the tray cover using nippers.

**⚠**To eliminate the possibility of injury upon contact with the tray, be sure that the cut edge on the tray cover will be smooth without burrs when cutting off the face cover.



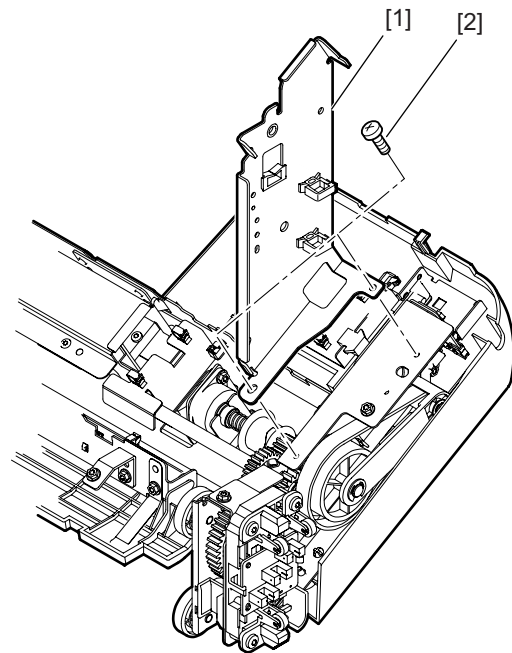
F-3-11

12) Fit the front tray stay [1] to the No. 1 tray using 2 screws [2] (binding; M4x6).



F-3-12

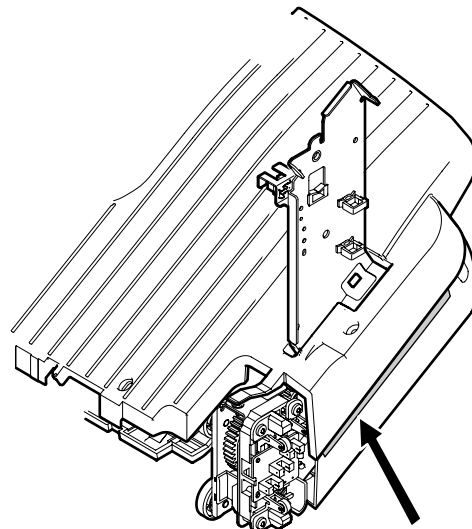
13) Fit the rear tray stay [1] to the No. 1 tray using 2 screws [2] (binding; M4x6).



F-3-13

14) Fit the tray cover of the No. 1 tray using 4 screws.

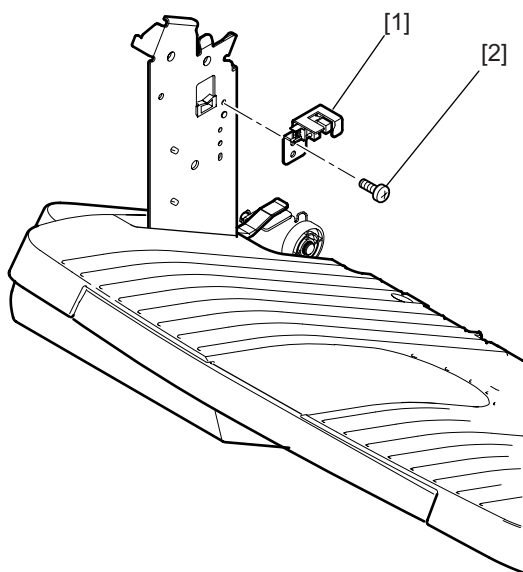
**⚠**The tray cover can ride over the part under it at the location indicated by the arrow; be sure to pay attention to the line of alignment when fitting it.



F-3-14

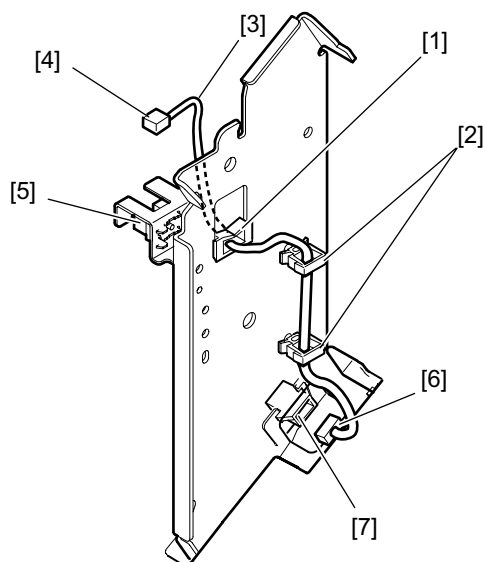
15) Mount the sensor unit [1] using a screw [2]

(binding; M4x6).



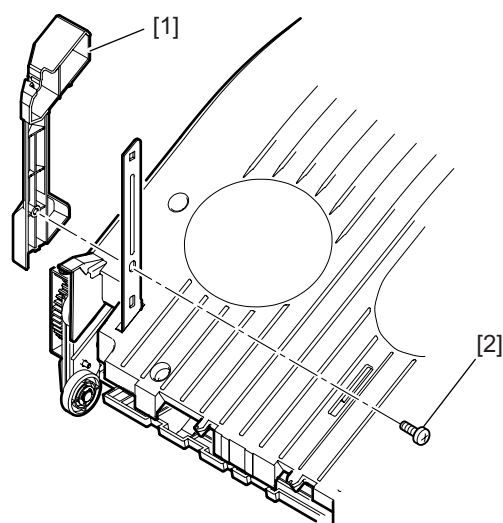
F-3-15

16) Route the sensor cable [3] through the edge saddle [1] and the cable clamps [2]. Join the connector [4] to the sensor [5] and the another connector [6] to the connector [7] of the No. 1 tray.



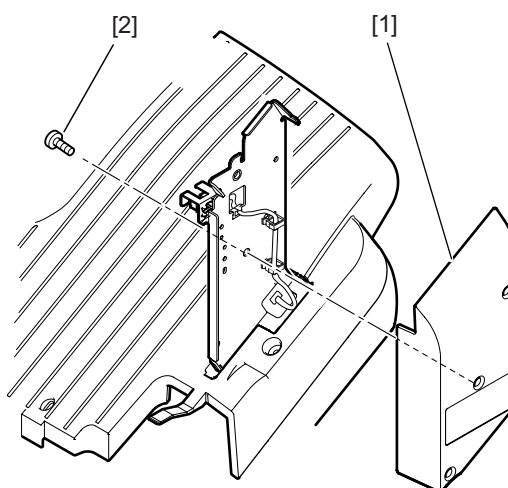
F-3-16

17) Mount the front tray stay cover [1] Using a screw [2] (tapping; M4x12).



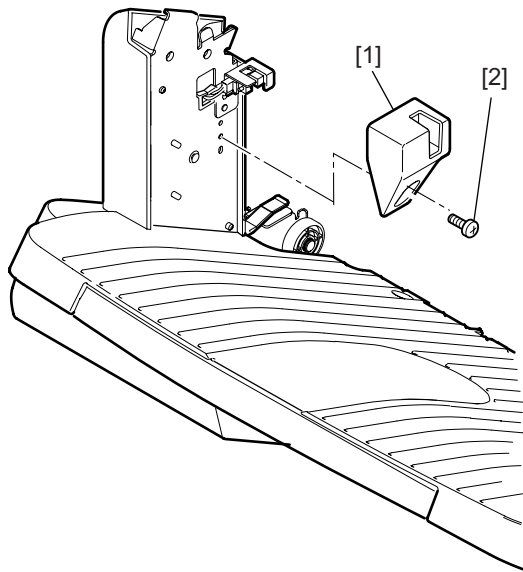
F-3-17

18) Mount the rear tray stay cover [1] using a screw [2] (tapping; M4x12).



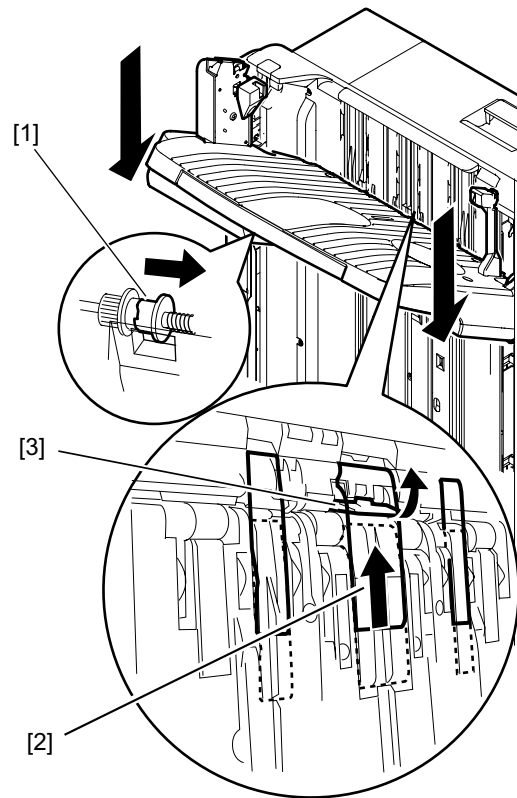
F-3-18

19) Mount the sensor unit cover [1] using a screw (binding; M4x6).



F-3-19

20) Attach the No. 1 tray from above, and lower it by releasing the latch [1] at the back of the No. 1 tray. At this time, be sure to lower the No. 1 tray while pushing up the shutter [2] and the stack delivery gate [3] at the delivery outlet is covered.

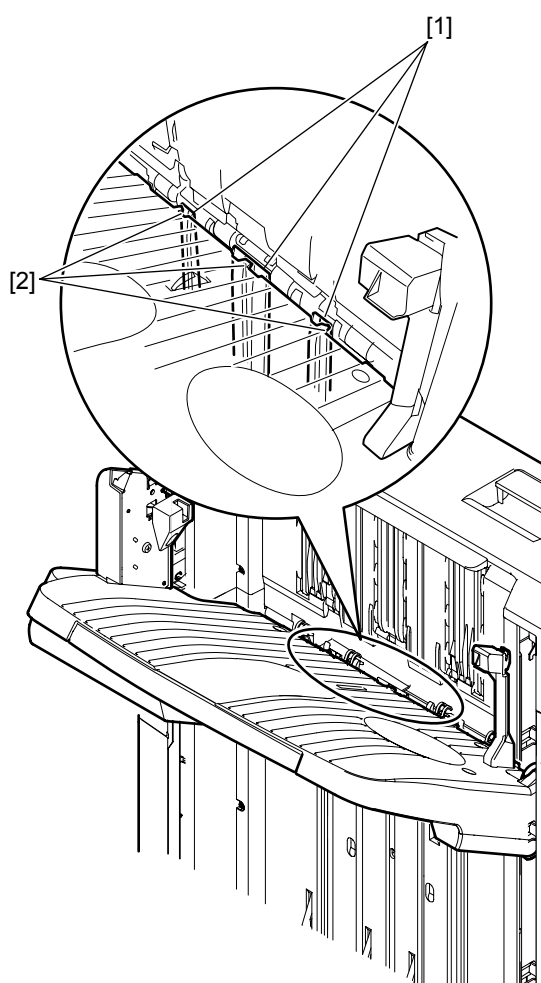


F-3-20

**⚠**The stack delivery gate comes off from the finisher when the No. 1 tray is lowered without raising the shutter at the delivery outlet. If the stack delivery gate comes off by accident, attach it back to its home position, and care should be taken not to lose the shaft spring of the stack delivery gate at this time. Since the tray free falls once the latch is released, hold the tray during the work.

**⚠**So that there will be no discrepancy in phase between the front and rear rails, you must make sure that the tray is level. Move down the No. 1 tray as far as shown, and compare the top edge [1] of the shutter guide and the protrusion [2] of the tray at both front and rear; if the height is not correct, detach the No. 1 tray once and put it back on.





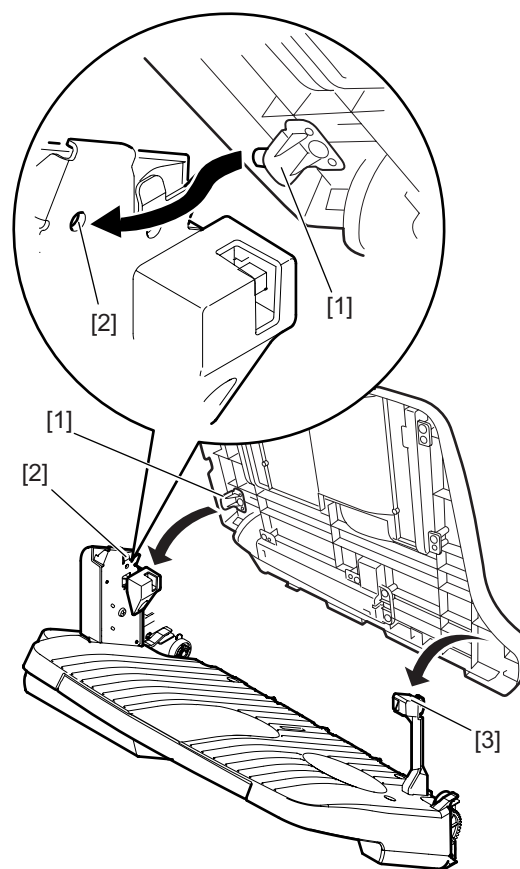
F-3-21

21) Mount the tray stopper removed at the step 7 using a screw.

22) Connect the 2 connectors of the No. 1 tray to the finisher controller PCB; then, fix the grounding wire and the cable fixing plate using 2 screws.

23) Mount the additional finisher tray to the tray stay of the No. 1 tray. Fit the additional finisher tray so that the protrusion [1] found at the joint are in the hole [2] of the rear tray stay; work as if to slide it from above the front tray stay [3].

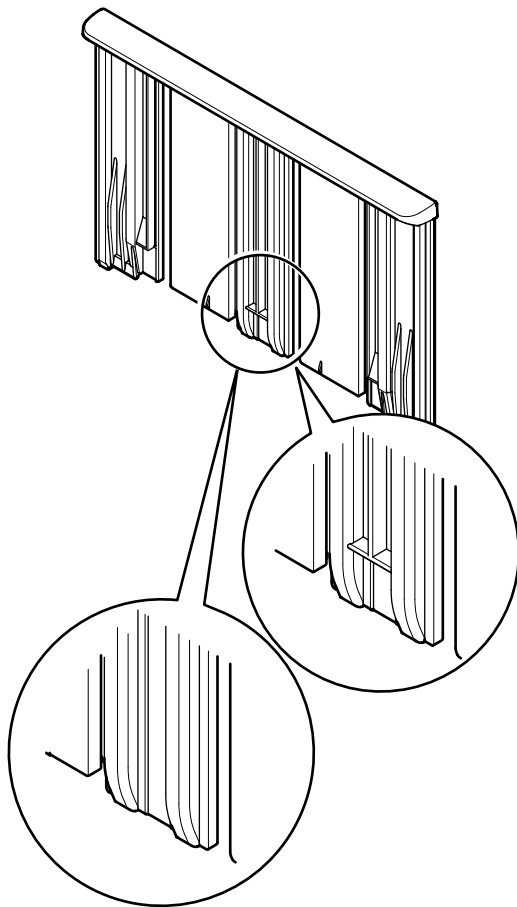
**⚠** Be sure to push in the additional finisher tray until the front tray stay locks into place (a click is heard).



F-3-22

24) Slide-in the slide guide from top, which is contained in the carton box, to the finisher; then fix the slide guide stopper removed at the step 6 in place using a screw.

**⚠** Pay attention not to confuse the included slide guide and the slide guide found on the finisher. The slide guide to be used for the additional finisher tray does not have a rib at the center. (On the other hand, the one on the finisher has a rib.)



F-3-23

25) Mount the upper left cover, rear cover, and front cover (in the case of the Finisher-Q1/R1) of the finisher.

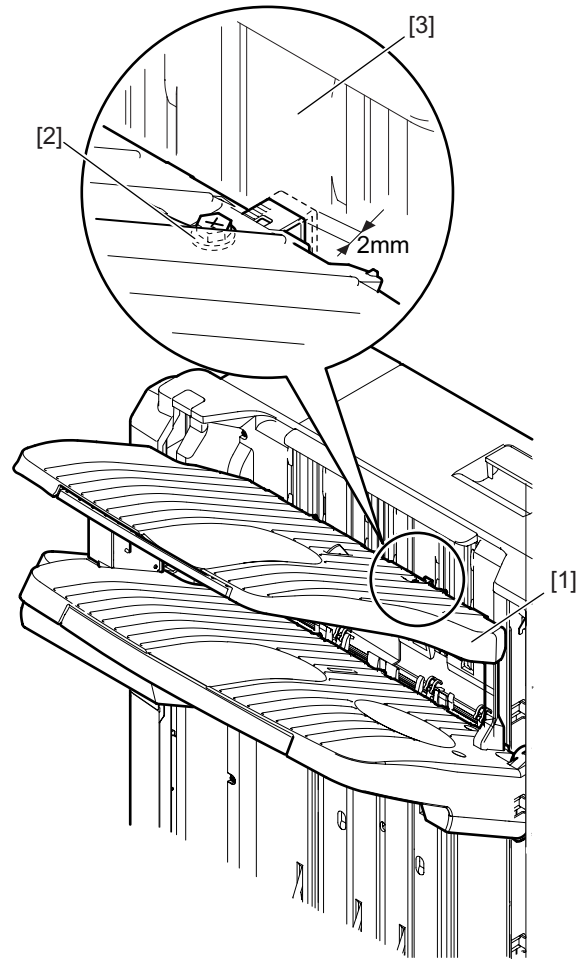
26) Free the latch of the No. 1 tray and move it down so that the additional finisher tray [1] is as shown in the figure.

**⚠** Push up the shutter, and check to make sure that the stack delivery gate at the delivery outlet is covered when lowering the No. 1 tray to near the delivery outlet. (Refer to the fig. in step 20)

27) Loosen the screw [2] on the additional finisher tray detecting plate; then, butt the detecting plate against the vertical face [3] of the finisher, move it over 2 indexes (2 mm), and fix it in place using a

screw.

**⚠** The additional finisher tray detecting plate must be fixed in place by taking measurements where the vertical face of the finisher is smooth without a protrusion (indicated in the figure).

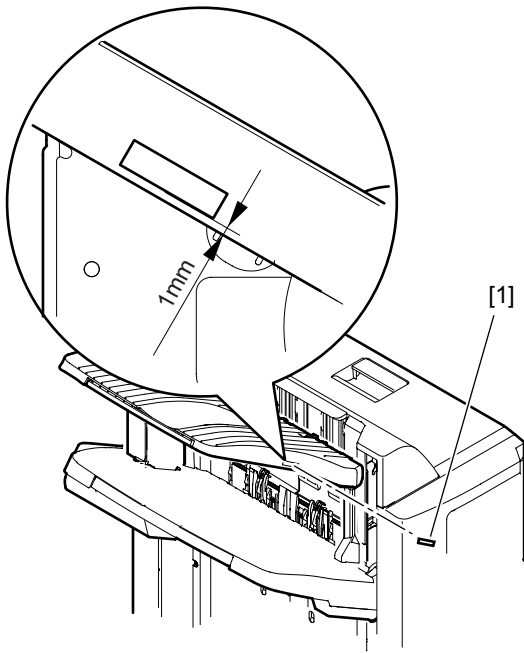


F-3-24

### 3.2.2 Attaching the Labels etc.

#### 3.2.2.1 Attaching the Label 0003-2138

1) Attach the Settings label [1] where indicated on the additional finisher tray.



F-3-25



Dec 10 2003

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