

# Installation Procedure

## **Finisher, Sorter, DeliveryTray Finisher-V1**





## 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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# Contents

## Chapter 1 Installation Procedure

1.1 Making Pre-Checks .....	2
1.1.1 Checking the Contents .....	2
1.1.2 Order of Installing Accessories .....	3
1.1.3 Installation Space .....	5
1.2 Unpacking and Checking the Components .....	6
1.2.1 Unpacking .....	6
1.3 Installation Procedure .....	10
1.3.1 Preparing the Finisher .....	10
1.3.2 Preparing the Host Machine .....	10
1.3.3 Connecting to the Host Machine .....	11
1.3.4 Connecting to the High-Capacity Stacker .....	12
1.3.5 Connecting to the Professional Puncher .....	14
1.3.6 After the Work .....	17
1.4 Making Adjustments .....	21
1.4.1 Adjusting the Height .....	21
1.5 Attaching the Labels etc. ....	26
1.5.1 Attaching the Various Labels .....	26





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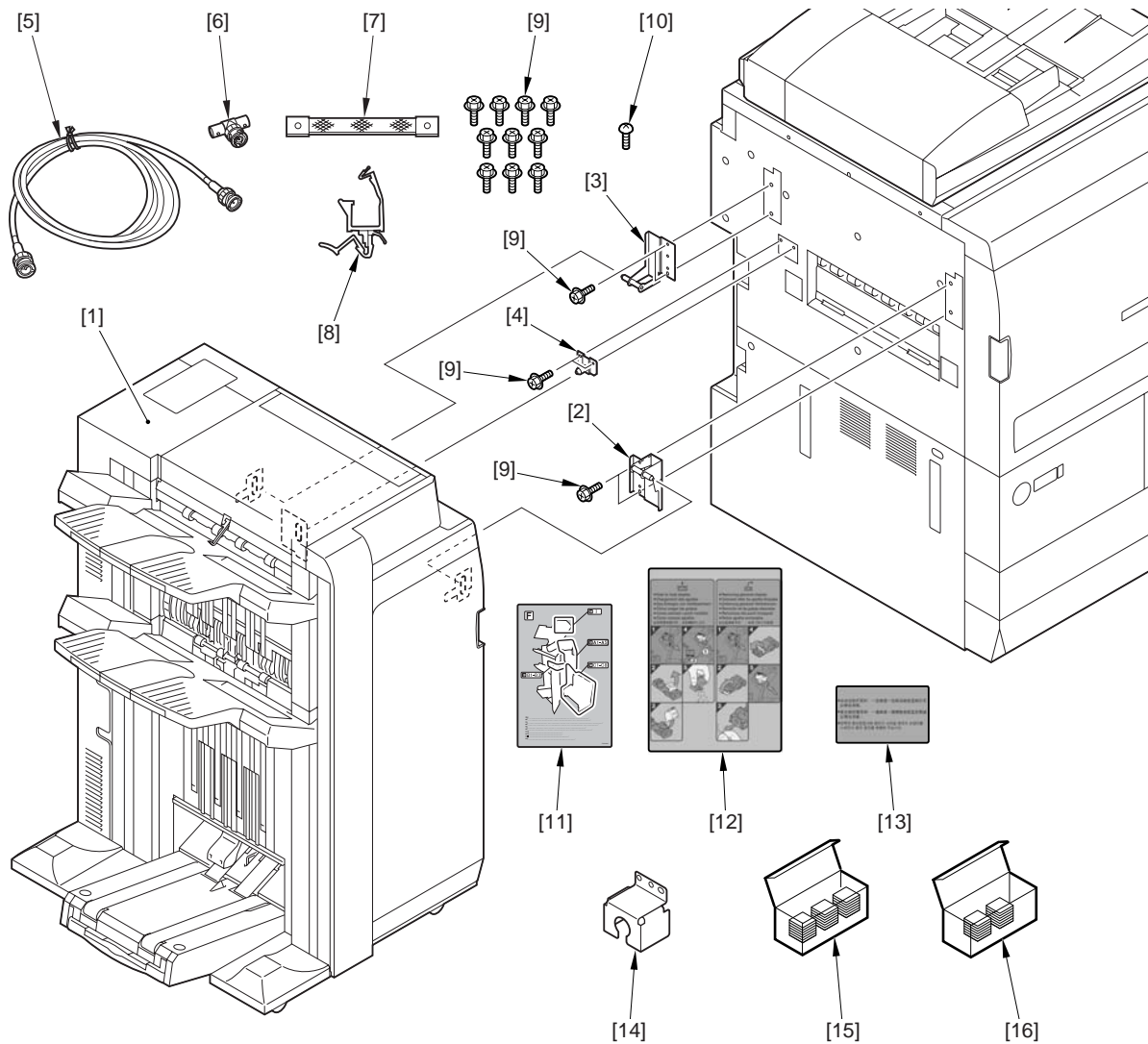
# Chapter 1 Installation Procedure

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# 1.1 Making Pre-Checks

## 1.1.1 Checking the Contents

0011-0982



F-1-1

[1]*1	Finisher	1 pc.	[10]*3	Screw (binding; M4X8)	1 pc.
[2]	Latch plate (for front)	1 pc.	[11]	Guide map label	1 pc.
[3]	Latch plate (for rear)	1 pc.	[12]	Staple label	1 pc.
[4]	Positioning pin	1 pc.	[13]*2	LED lamp label (for China, Korea, Taiwan)	1 pc.
[5]	Signal cable	1 pc.	[14]*3	Plug cover	1 pc.
[6]	T-shaped connector	1 pc.	[15]	Staple cartridge	3 pc.

[7]	Shunt cable	1 pc.	[16]*4	Saddle staple cartridge	2 pc.
[8]	Wire saddle	1 pc.			
[9]	Screw (RS tightening; M4X10)	10 pc.			

\*1; The illustration showing the entire finisher is of the Finisher-V2.

\*2; Shipped with the Saddle Finisher-V2

\*3; Shipped with the Finisher-V1/Saddle Finisher-V2.

\*4; Shipped with the Saddle Finisher-V2.

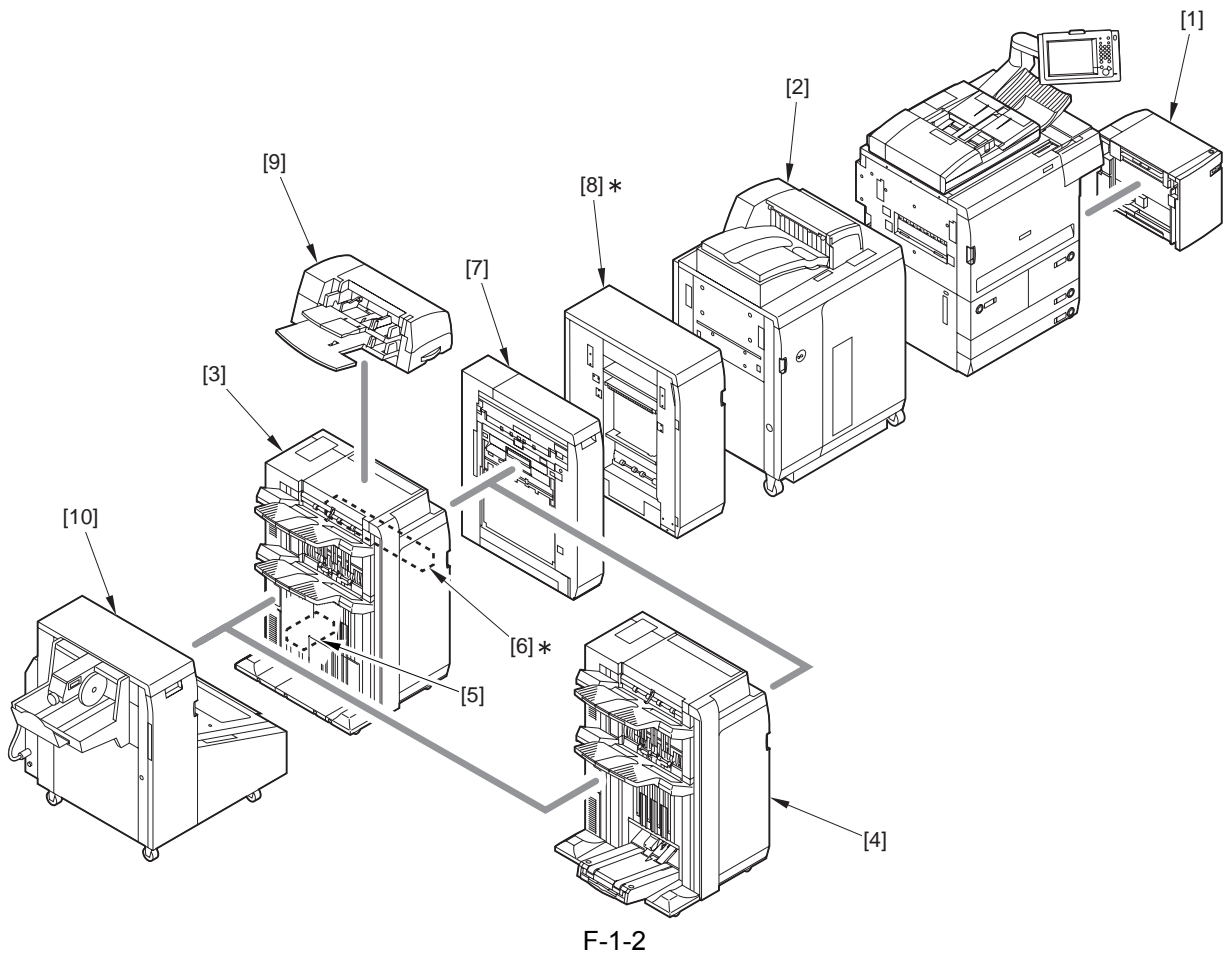
## 1.1.2 Order of Installing Accessories

0011-0983

If you are planning to install other accessories also, go through the following in the order indicated:

1. side paper deck [1] (See the Side Paper Deck Installation Procedure.)
2. high-capacity stacker [2] (See the high-Capacity Stacker Installation Procedure.)
3. finisher [3]/saddle finisher [4] (See the "Preparing the Finisher" in "Finisher/Saddle Finisher Installation Procedure".)
4. finisher accessories power supply unit [5] (See the Finisher Accessories Power Supply Unit Installation Procedure.)
5. inner puncher unit [6]\* (See the Puncher Unit Installation Procedure.)
6. paper folding unit [7] (See the Paper Folding Unit Installation Procedure.)
7. professional puncher (non-Japanese model only) [8]\* (See the Professional Puncher Installation Procedure.)
8. inserter [9] (See the Inserter Installation Procedure.)
9. trimmer [10] (See the Trimmer Installation Procedure.)

\* The inner puncher unit [6] and the professional puncher unit (non-Japanese model only) [8] cannot be installed as part of the same system.

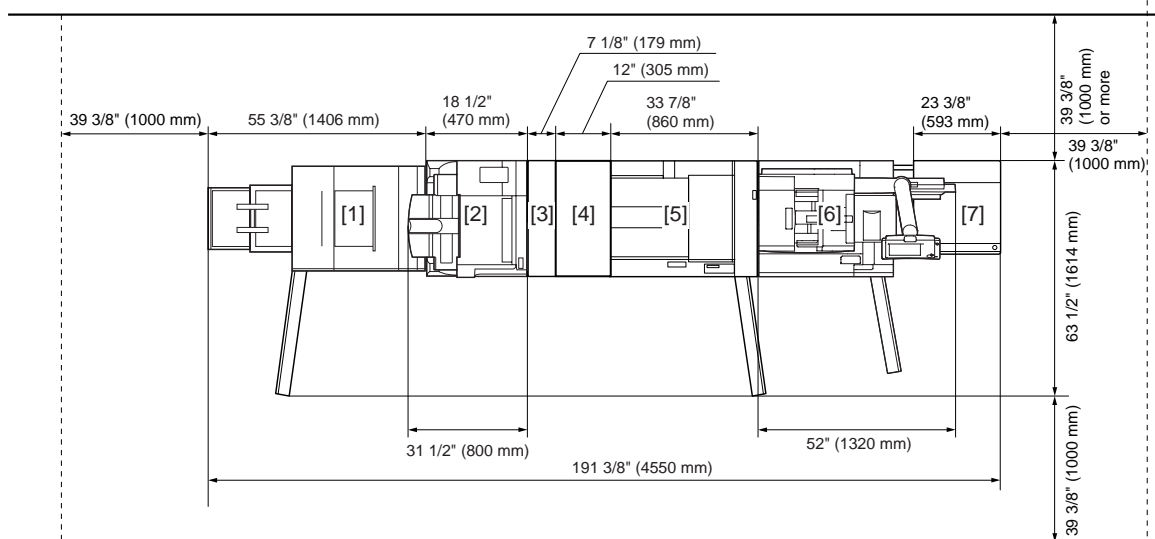


## 1.1.3 Installation Space

0011-6543

### Diagram of the Work Space

There must be enough space around the machine. The following diagram shows the minimum dimensions; whenever possible, be sure there will be more space than indicated:



F-1-3

- [1] Trimmer
- [2] Finisher/Saddle Finisher
- [3] Paper Folding Unit
- [4] High Capacity Stacker
- [5] PRO.Puncher
- [6] Host Machine
- [7] Side Paper Decik

## 1.2 Unpacking and Checking the Components

### 1.2.1 Unpacking

0011-1135

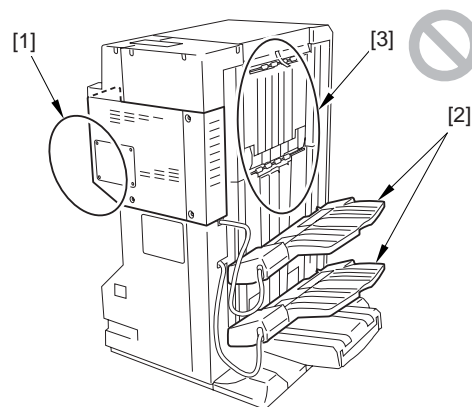
#### MEMO:

The finisher is packed using tape and cushioning material to protect against vibration and impact occurring during transport. Be sure to remove them as indicated before starting the installation work. It is a good idea to store away the removed tape and cushioning material for possible future transport (as for relocation or repairs).

- 1) Remove the shipping box and cushioning material, and open the plastic bag.



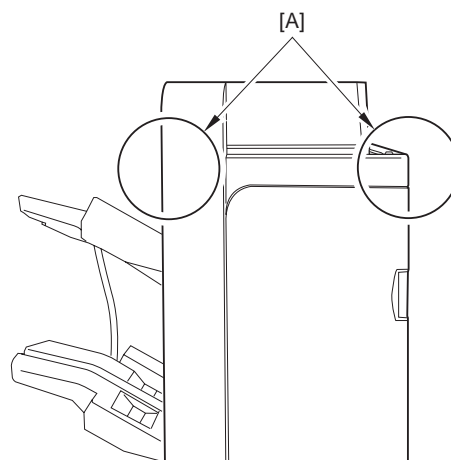
1. Take care not to hold the finisher in ways not indicated while unpacking it. To avoid deformation or damage, do not hold it by the middle rear cover (lower left) [1], tray A/B [2], or functional assembly [3].



F-1-4

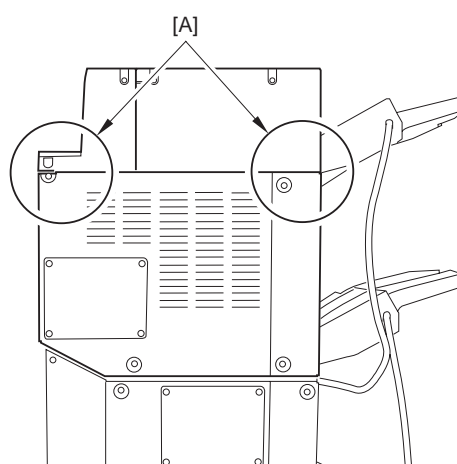
2. When detaching the pad in steps 2) and 3), be sure to hold the finisher by the top [A] of the finisher.

<Front View>



F-1-5

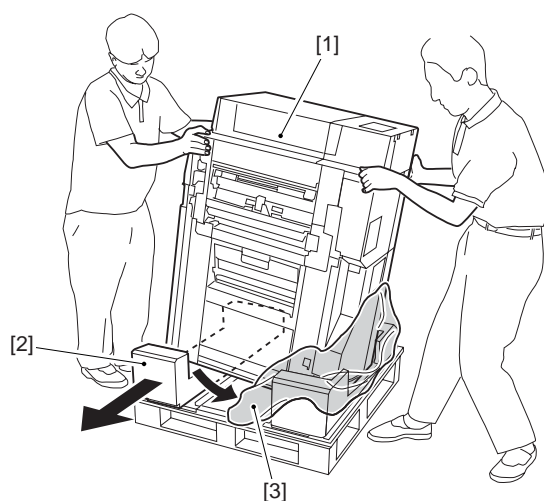
<Rear View>



F-1-6

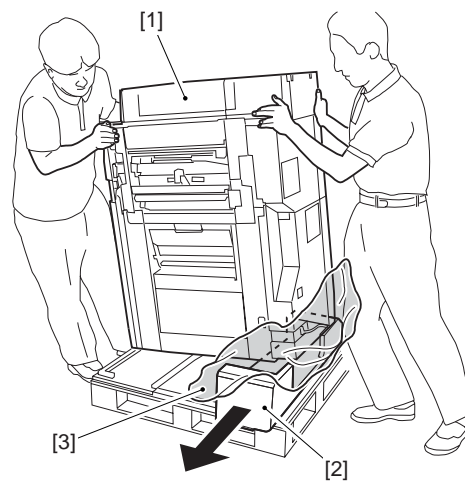
2) Hold the top [1] of the finisher, and the front side to detach the pad [2].

At this time, move the plastic bag [3] toward the remaining pad.



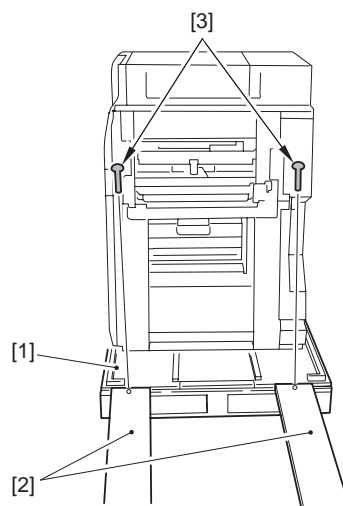
F-1-7

3) Hold the top [1] of the finisher, and lift the rear; then, detach the remaining pad [2] and the plastic bag [3] at the same time.



F-1-8

- 4) Detach the 2 slope plates and the 2 fixing pins from the plate.
- 5) Fix the slope plate [2] to the plate [1] using a fixing screw [3].



F-1-9

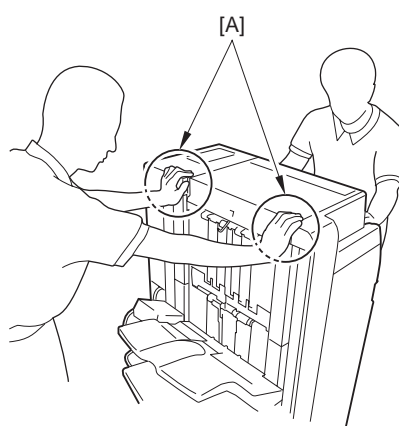
- 6) Move the finisher [1] off the pallet [3] along the slope plates [2].



When moving the finisher of the slope plates, be sure to hold it by the areas identified as [A] in the figure.

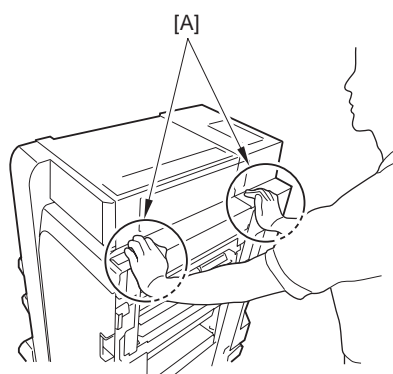


<Left View>

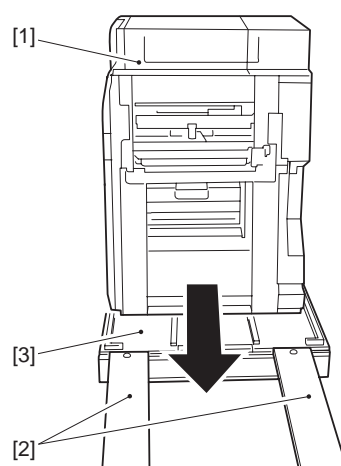


F-1-10

<Right View>



F-1-11



F-1-12

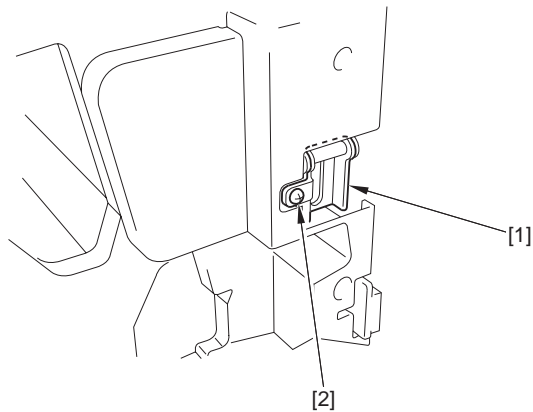
7) Remove the fixing tape.

## 1.3 Installation Procedure

### 1.3.1 Preparing the Finisher

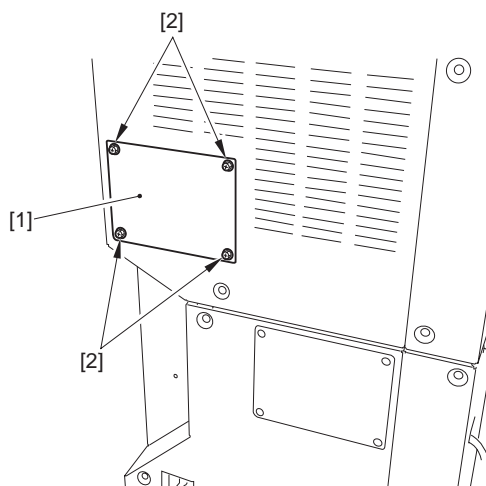
0011-4122

- 1) Open the front cover.
- 2) Remove the screw [2] of the latch base (front) [1].



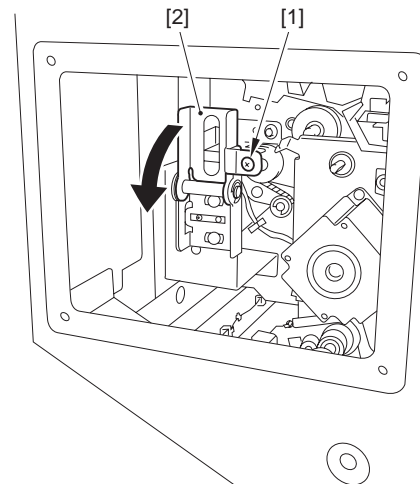
F-1-13

- 3) Remove the rear small cover [1].  
- 4 screws [2]



F-1-14

- 4) Remove the screw [1] from the latch base (rear),  
and shift the hinge [2] toward the front.

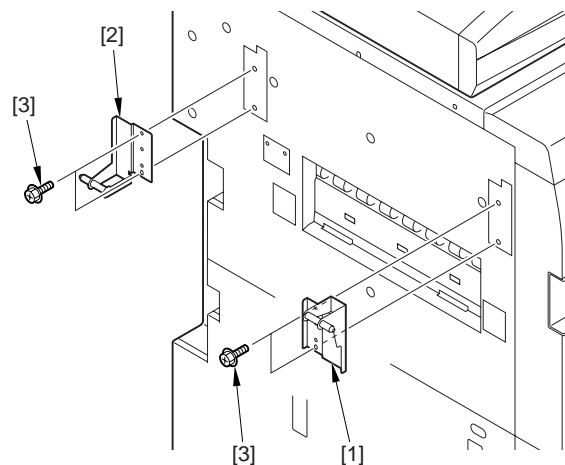


F-1-15

### 1.3.2 Preparing the Host Machine

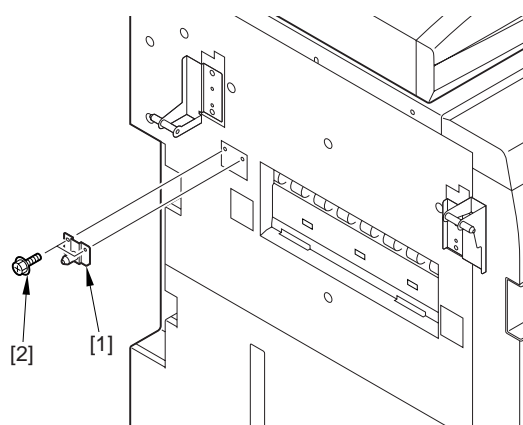
0011-1161

- 1) Fit the latch base ([1] for front; [2] for rear) to the  
host machine's left cover.  
- 4 screws (RS tightening; M4X10)



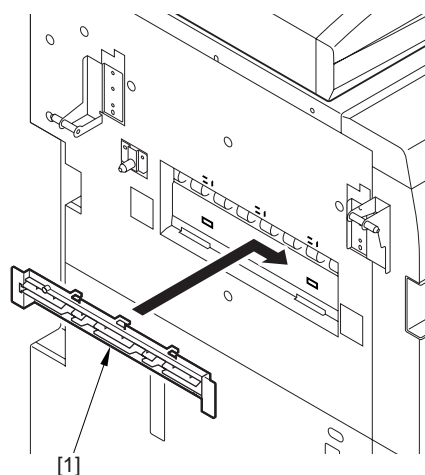
F-1-16

- 2) Fit the positioning pin [1].  
- 2 screws (RS tightening; M4X10)



F-1-17

- 3) Fit the included delivery guide [1] to the host machine.



F-1-18

### 1.3.3 Connecting to the Host Machine

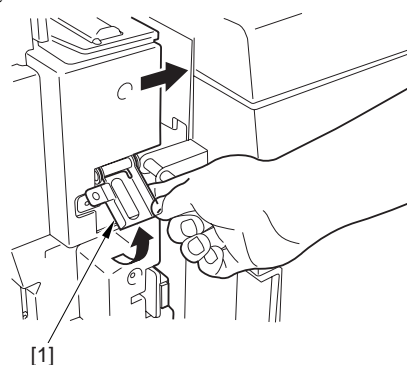
0011-3997



Check to be sure that the host machine is off and its power plug is not connected to the power outlet.

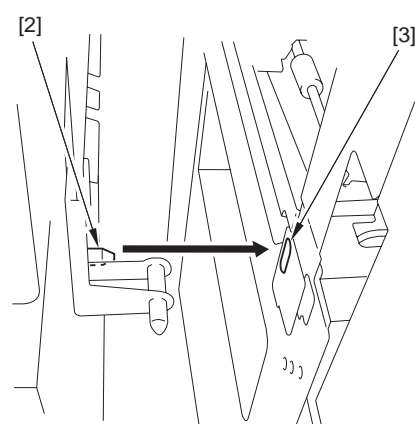
- 1) While lifting the latch base (front) [1], connect the finisher to its host machine by matching the position pin [2] of the host machine against the hole [3] in the positioning plate of the finisher.

&lt;Front&gt;



F-1-19

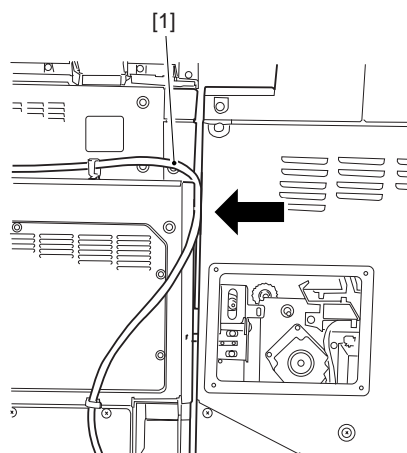
&lt;Rear&gt;



F-1-20

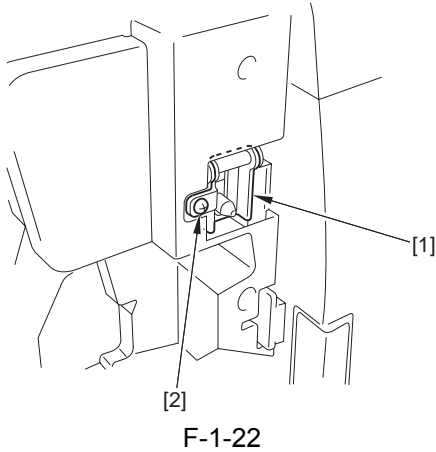


When making a connection, take care not to trap the reader communications cable [1] of the host machine.

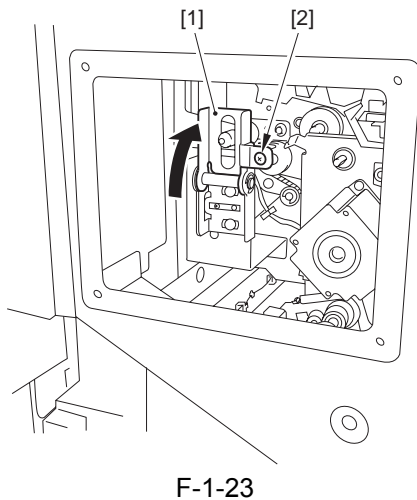


F-1-21

- 2) Fix the latch base (front) [1] in place.
  - 1 screw [2] (from step 2) of "Preparing the Finisher")



- 3) Close the front cover of the finisher.
- 4) Lift the latch base (rear) [1] to fix it in place over the pin.
  - 1 screw [2] (from step 4) under "Preparing the Finisher")



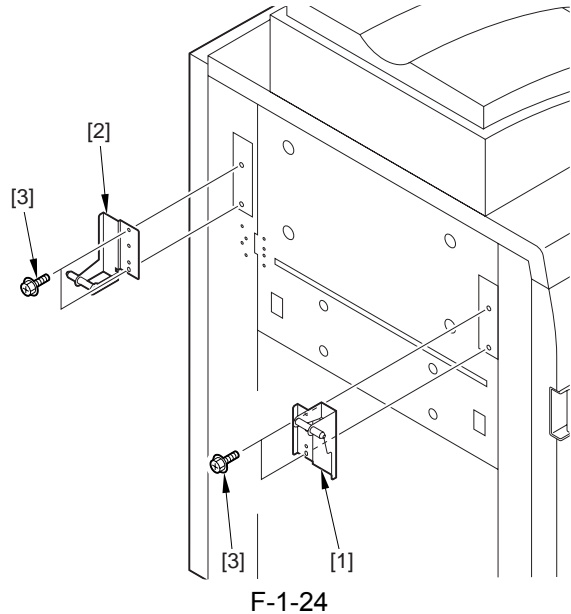
- 5) Mount the rear small cover.

### 1.3.4 Connecting to the High-Capacity Stacker 0011-5646

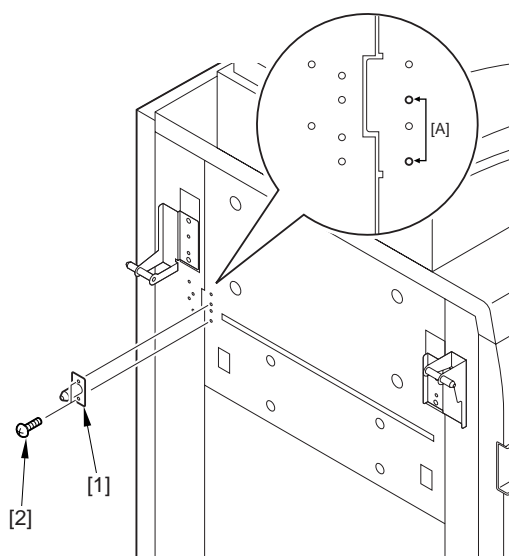


Check to be sure that the host machine is off and that the power plug is disconnected from the power outlet.

- 1) Fit the latch plate of the front [1] and the latch plate of the rear [2] to the left side of the high-capacity stacker.
  - 4 screws (RS tightening; M4X10) [3]

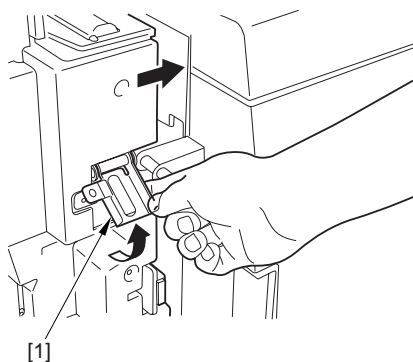


- 2) Fit the positioning pin [1] of the high-capacity stacker in place at [A].
  - 2 screws [2] (previously removed (M3))

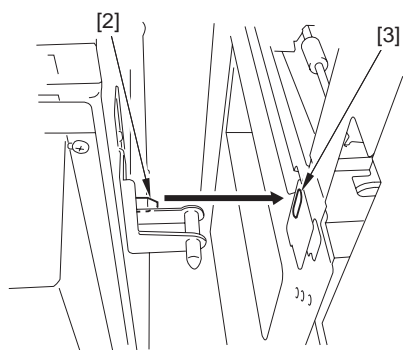


F-1-25

- 3) While lifting the latch base (front) [1], join the positioning pin [2] of the high-capacity stacker and the hole [3] of the positioning plate of the finisher.

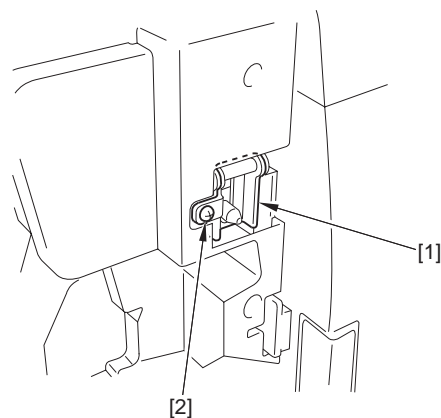


F-1-26



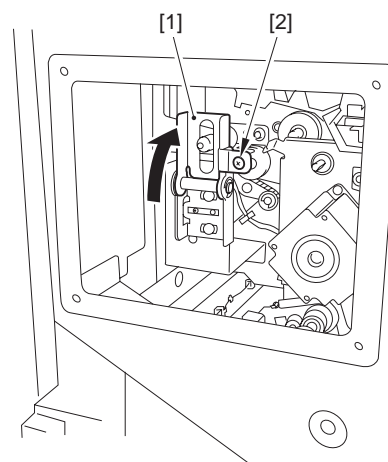
F-1-27

- 4) Fix the latch base (front) [1] in place.  
- 1 screw [2] (removed in step 2) of "Preparing the Finisher")



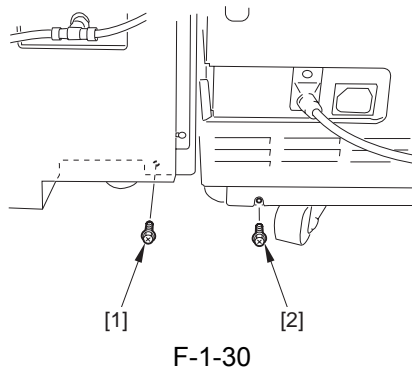
F-1-28

- 5) Close the finisher's front cover.  
6) Lift the latch base (rear) [1], and fit it in place on the pin.  
- 1 screw [2] (removed in step 4) of "Preparing the Finisher")



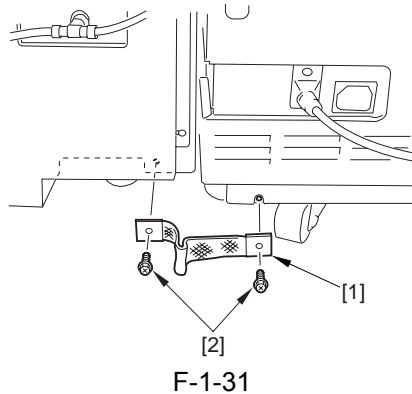
F-1-29

- 7) Mount the rear small cover.  
8) Remove the screw [1] of the large-capacity stacker rear cover and the screw [2] of the finisher's lower rear cover.



F-1-30

- 9) Connect the shunt cable [1].  
- 2 screws (removed in step 8))



F-1-31

- 10) By referring to the instructions in "After the Work", connect the signal cable to the finisher and the high-capacity stacker.



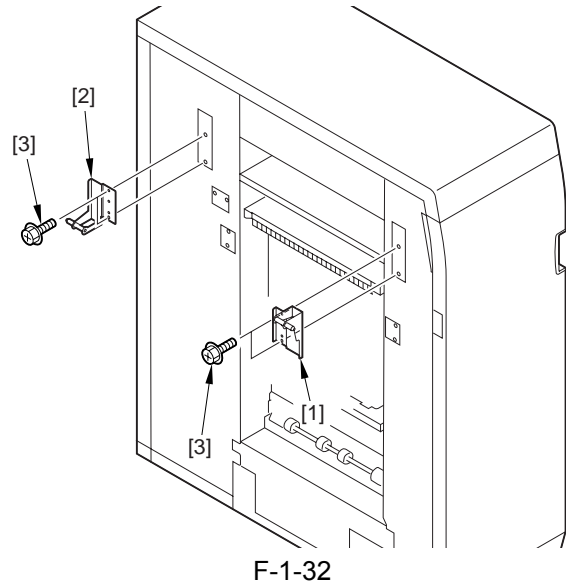
For connection to the host machine, see "High-Capacity Stacker Installation Procedure".

### 1.3.5 Connecting to the Professional Puncher 0011-6030



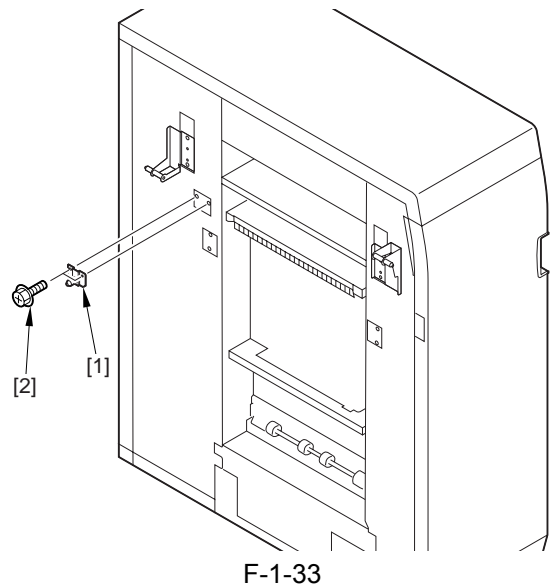
If you are connecting a professional puncher, be sure to install a finisher accessories power supply unit (optional) in advance.

- 1) Fit the latch base for the front [1] and the latch base [2] for the rear to the left side of the professional puncher.  
- 4 screws (RS tightening; M4X10) [3]



F-1-32

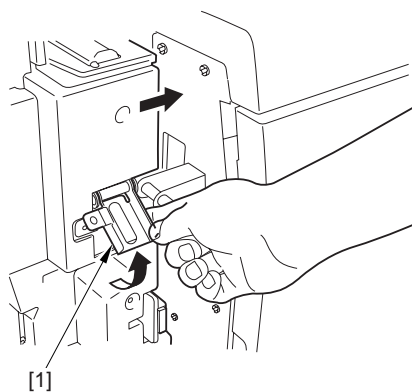
- 2) Fit the positioning pin [1].  
- 2 screws (RS tightening; M4X10) [2]



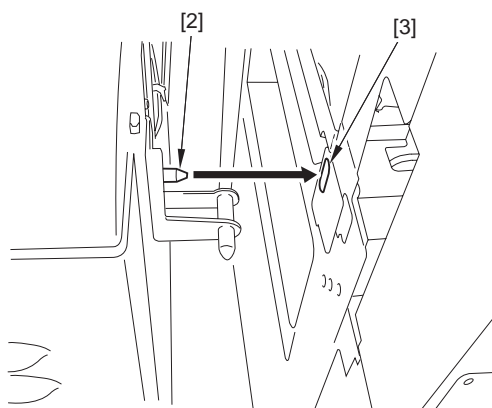
F-1-33

- 3) While lifting the latch base (front) [1], connect the professional puncher by fitting the positioning pin [2] of the professional puncher in the hole [3] of the

positioning plate of the finisher.

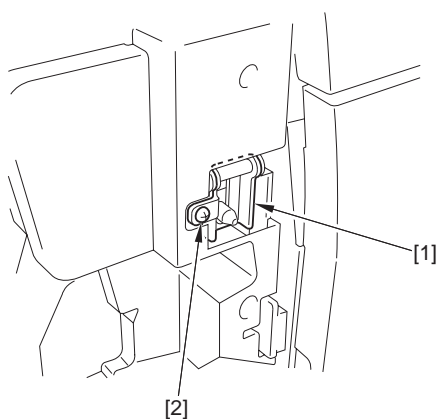


F-1-34



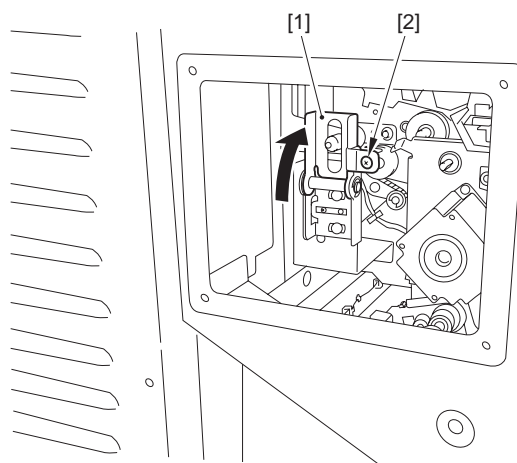
F-1-35

- 4) Fix the latch base (front) [1] in place.  
- 1 screw [2] (removed in step 2) of "Preparing the Finisher")



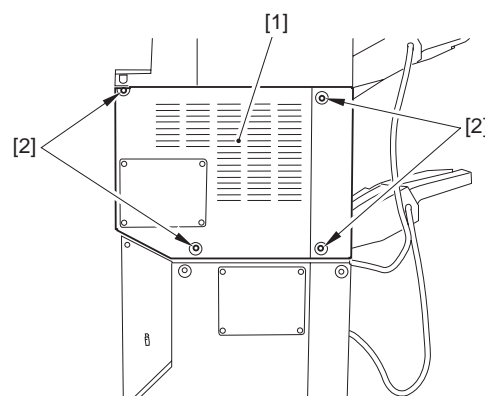
F-1-36

- 5) Close the finisher's front cover.  
6) Lift the latch plate (rear) [1] to fix it in place over the pin.  
- 1 screw [2] (removed in step 4) of "Preparing the Finisher")



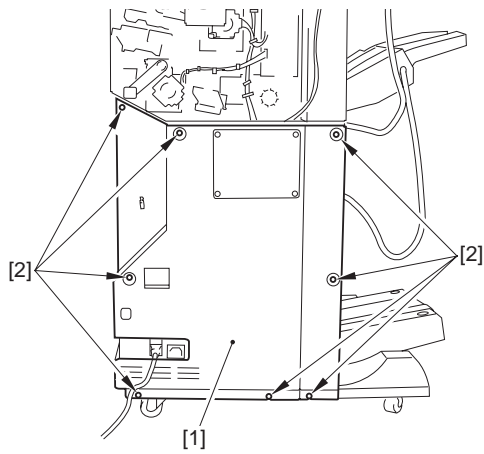
F-1-37

- 7) Mount the rear small cover.  
8) Remove the middle rear cover [1].  
- 4 screws [2]



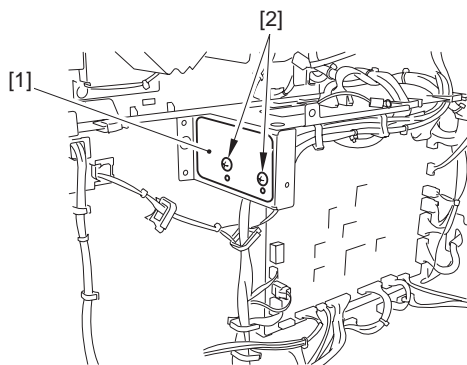
F-1-38

- 9) Remove the lower rear cover [1].  
- 8 screws [2]



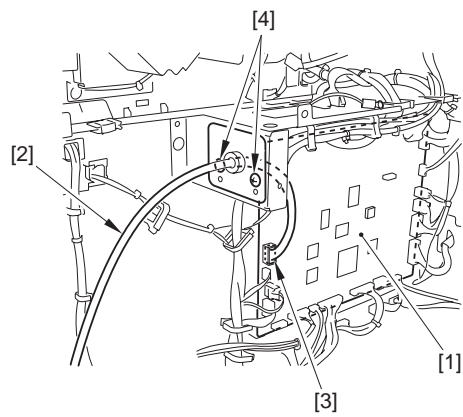
F-1-39

- 10) Remove the face plate [1] from the side of the finisher controller. (The plate will no longer be used.)  
- 2 screws



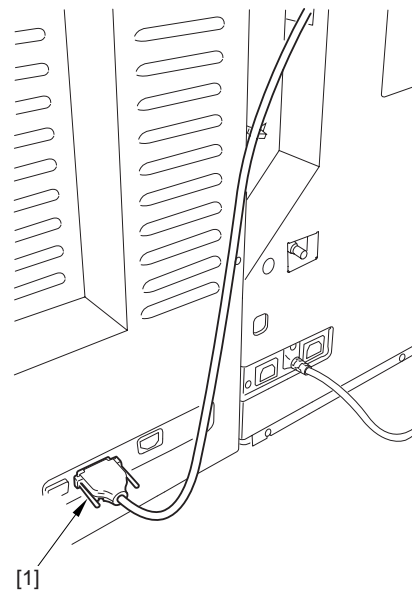
F-1-40

- 11) Fit the communication cable [2] included with the professional puncher to the finisher controller [1].  
- 1 connector [3]  
- 2 screws [4] (removed in step 10))



F-1-41

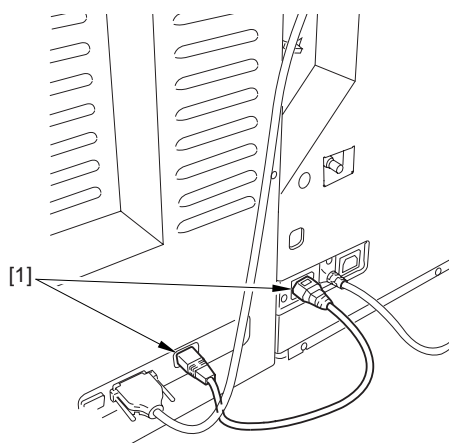
- 12) Mount the lower rear cover and the middle rear cover.  
13) Connect the connector [1] of the communication cable to the professional puncher.



F-1-42

- 14) Connect the power cable [1] included with the professional puncher to the finisher and the professional puncher.

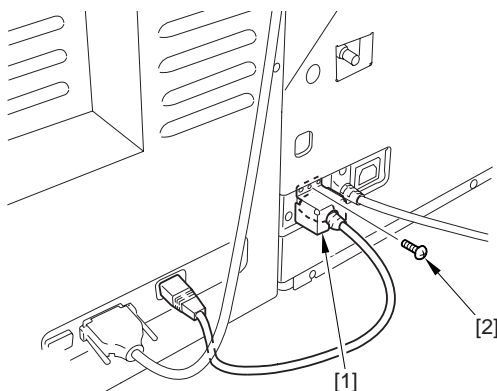




F-1-43

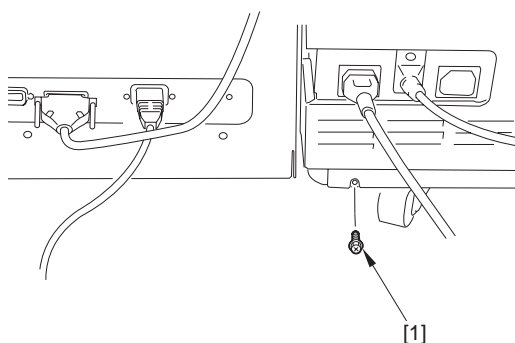
15) Fit the included Plug cover [1] to the professional puncher.

- 1 screws (binding; M4) [2] (included with the professional puncher)



F-1-44

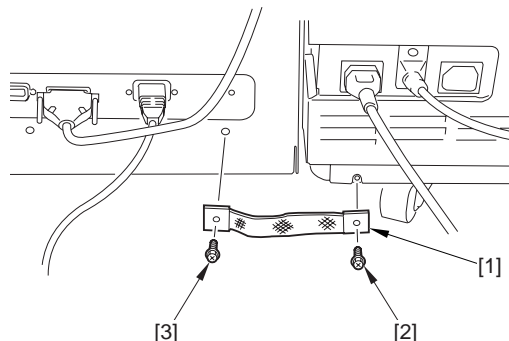
16) Remove the screw [1] from the lower rear cover of the finisher.



F-1-45

17) Fit the shunt cable [1] in place.

- 1 screw [2] (removed in step 15))
- screw (RS tightening; M4X10) [3] (included with finisher)



F-1-46

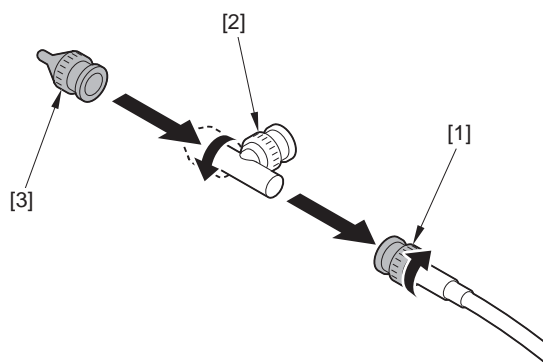


For connection to the host machine, see the "Professional Puncher Installation Procedure".

### 1.3.6 After the Work

0011-6545

1) Connect the included T-shaped connector [2] and the included coaxial connector [3] to the signal cable [1].



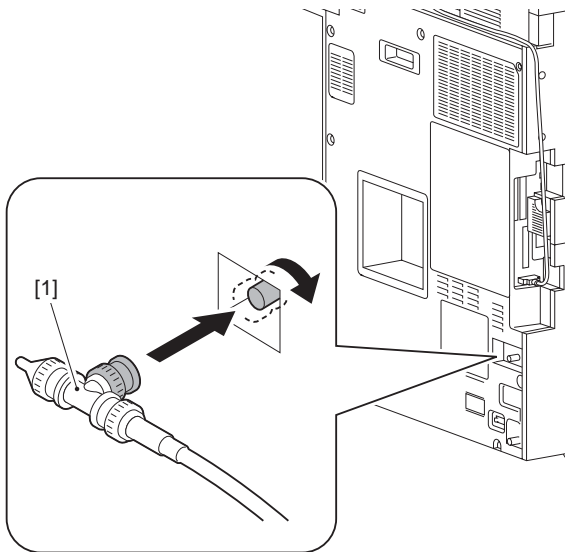
F-1-47

2) Fit the signal cable [1] to the host machine.



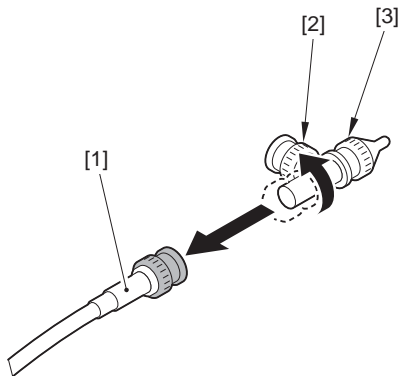
Before connecting the signal cable, be sure to turn off

the host machine and disconnect the power plug from the power outlet.



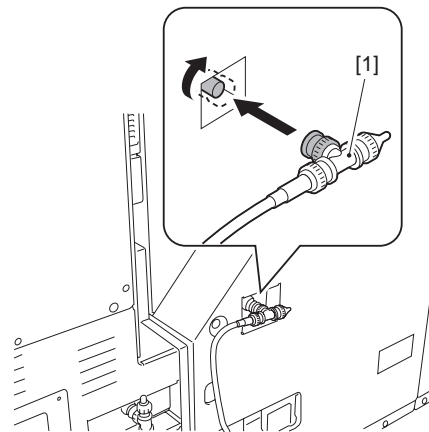
F-1-48

3) Connect the T-shaped connector [2] supplied with the finisher and the coaxial connector [3] supplied with the host machine to the signal cable [1] on the opposite side.



F-1-49

4) Connect the signal cable [1] to the finisher.

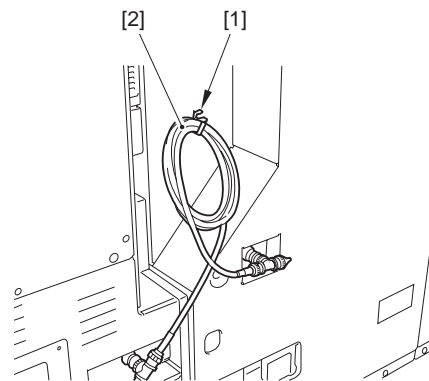


F-1-50



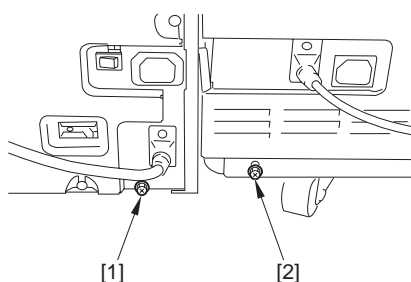
When connecting the signal cable, T-shaped connector, and coaxial connector, be sure to fully turn them, thus ensuring stable electrical contact.

5) Fit the wire saddle [1] to the lower rear cover of the finisher; then, bundle the signal cable [2].



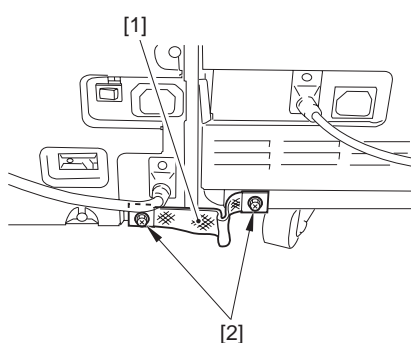
F-1-51

6) Remove the screw [1] from the host machine's rear cover and also the screw [2] from the finisher's lower rear cover.



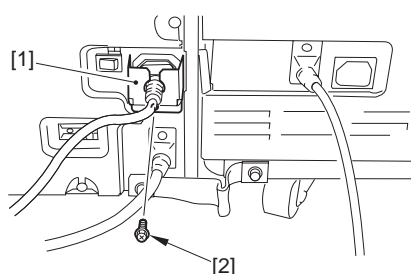
F-1-52

- 7) Connect the shunt cable [1].  
- 2 screws [2] (removed in step 6))



F-1-53

- 8) Connect the finisher's power plug to the host machine.  
9) In the case of the Finisher-V1 or the Saddle Finisher-V2, mount the plug cover [1] to the power outlet of the host machine.  
- 1 screw (binding; M4X8) [2]



F-1-54

- 10) Connect the host machine's power plug to the wall outlet.  
11) Turn on the finisher and then the host machine in the order indicated.  
12) Start service mode, and specify the order of con-

nection:

COPIER > OPTION > ACCST-D > ACC1 through 8. Type in the position of the finisher for 'Finisher'.

#### MEMO:

If the connection to the host machine is direct, type in '1' and press the OK key.

If any accessory exists between the host machine and the finisher, type in '1' for the other accessory and '2' for the finisher.

13) Turn off the host machine and then the finisher in the order indicated.

14) Turn on the finisher and then the host machine in the order indicated.



The host machine must be turned off and then back on after indicating the order of connection; otherwise, it will not be able to recognize the presence of the connected accessories.

#### ⚠ Turning Off the Main Power (host machine)

Be sure to go through the following when turning off the main power to protect the hard disk:

1. Hold down the control panel power switch for 3 sec or more.
2. Go through the instructions on the shut-down sequence screen so that the main switch may be turned off.
3. Turn off the main power switch.
4. Disconnect the power cable (for the power outlet).

#### ⚠ Order of Turning On/Off the Machines (host machine + accessories)

If a delivery accessory (e.g., finisher) is installed, be sure to respect the following order when turning them on/off:

<Turning On the Power>

1. high-capacity stacker, finisher (either)
2. professional puncher (non-Japanese model only)
3. host machine

<Turning Off the Power>

1. host machine
2. high-capacity stacker, finisher (either)
3. professional puncher (non-Japanese only)

- Failure to observe the order of turning on the machines prevents the host machine from recognizing the accessories.
  - Failure to observe the order of turning off the machines will lead to an error ('E730' or 'E503').
-

## 1.4 Making Adjustments

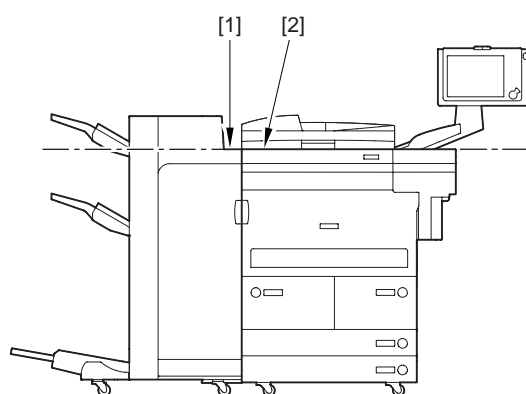
### 1.4.1 Adjusting the Height

0011-4081

Some sites of installation call for the adjustment of the height of the finisher to make up for floor conditions. Incorrect height can lead to frequent jams in the finisher pickup assembly or other problems. Go through the following to make a check and make adjustments as needed.

#### 1. Checking the Height

- 1) Check the height of the finisher and the host machine. Be sure that the difference in height between the right top surface [1] of the finisher and the left top surface [2] of the host machine is  $\pm 2$  mm.

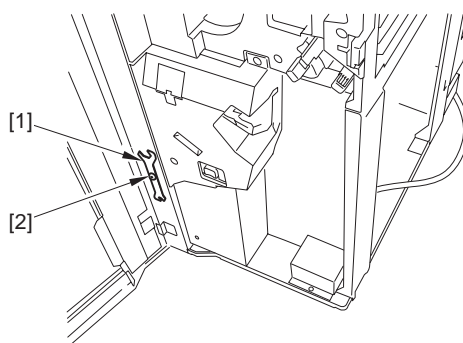


F-1-55

- 2) If the difference is  $\pm 2$  mm or more, adjust the height.

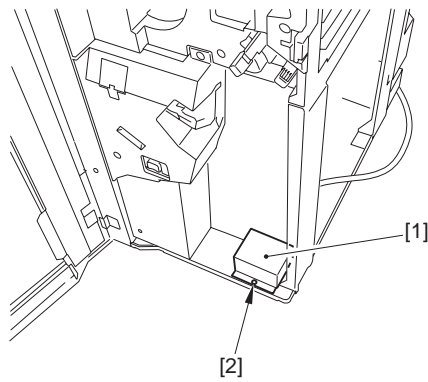
#### 2. Adjusting the Height

- 1) Disconnect the finisher from the host machine.
- 2) Detach the spanner [1] connected to the front cover.  
- 1 screw [2]



F-1-56

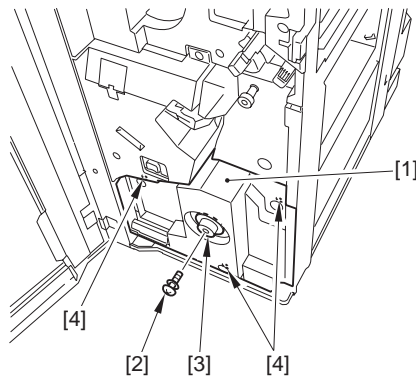
- 3) In the case of the Finisher-V1, remove the caster cover [1].  
- 1 screw [2]



F-1-57

4) In the case of the Saddle Finbserh-V2, detach the saddle inside cover (lower) [1].

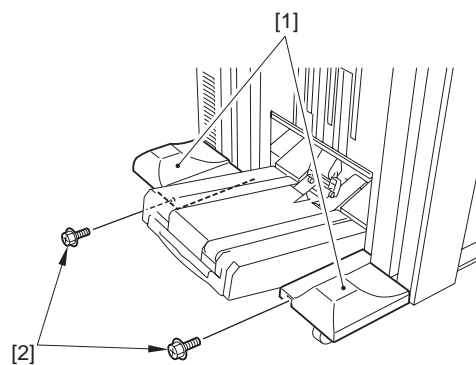
- 1 screw [2]
- 1 knob [3]
- 3 screws [4]



F-1-58

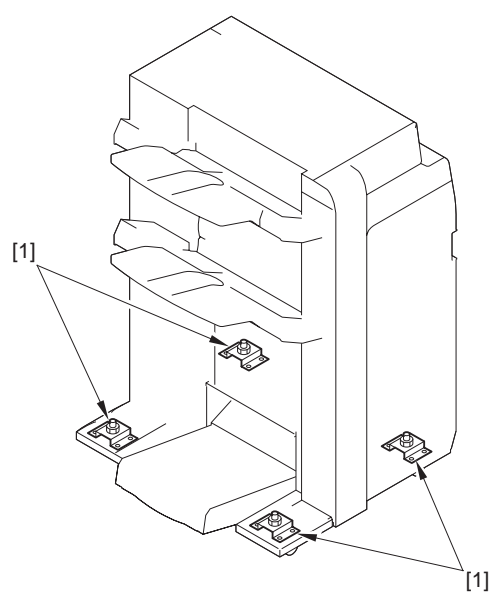
5) Remove the 2 caster covers [1] from the left side. (The illustration shows the saddle finisher.)

- 2 screws [2]



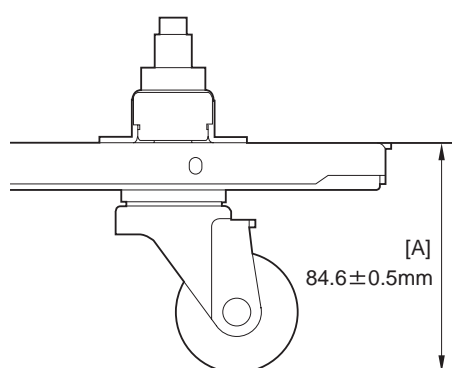
F-1-59

6) Adjust the 4 casters [1].



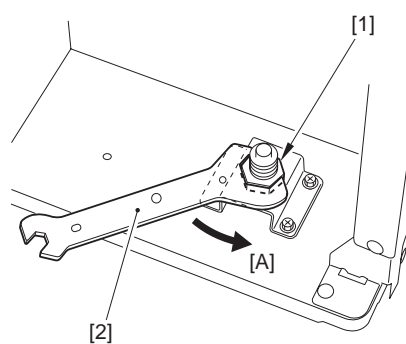
F-1-60

- 7) Measure the height [A] from the floor to the upper surface of the bottom plate. Make adjustments so that it is  $84.6 \pm 0.5$  mm.



F-1-61

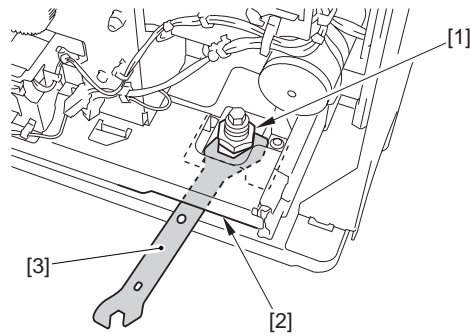
- 8) Loosen the fixing nut [1] of the scanner by turning the spanner (large) [2] in the direction of [A].



F-1-62



When loosening the caster fixing nut [1] on the front of the saddle finisher, be sure to fit the spanner [3] through the gap below the saddle assembly base plate [2].



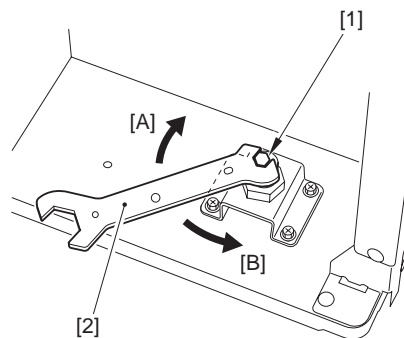
F-1-63

9) Turn the adjusting bolt [1] with a spanner (small) [2].

- to raise, turn in the direction of [A].

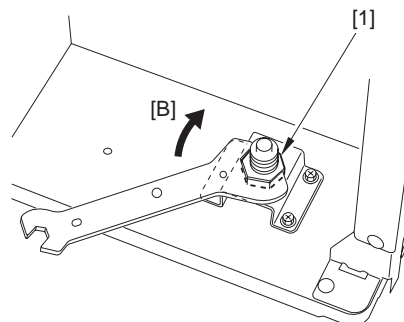
- to lower, turn in the direction of [B].

(A single full turn causes a change of about 1.75 mm.)



F-1-64

10) Tighten the fixing nut [1] in the direction of [B].



F-1-65



- 11) Likewise, adjust the remaining 3 casters.
- 12) Connect the finisher to the host machine, and check the height.

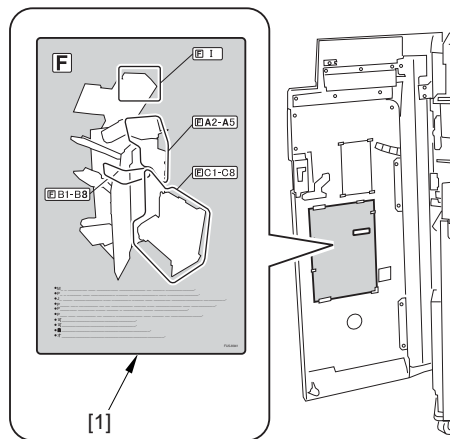
If the difference is as indicated, mount the covers you may have removed. Otherwise, repeat the adjustment procedure.

## 1.5 Attaching the Labels etc.

### 1.5.1 Attaching the Various Labels

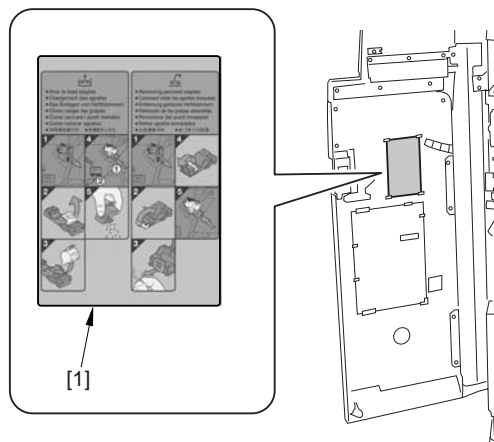
0011-7428

- 1) Open the front cover.
- 2) Attach the map label [1] behind the front cover. (The illustration shows the saddle finisher.)



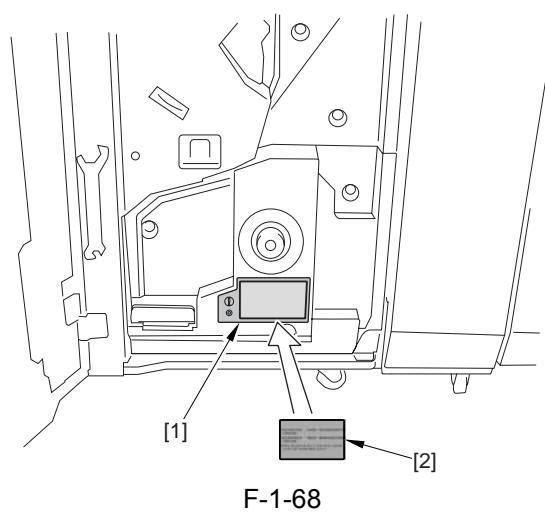
F-1-66

- 3) Attach the staple label [1] behind the front cover.



F-1-67

- 4) In the case of the Saddle Finisher-V2 (for Chinese, Korean, Taiwanese), attach the LED lamp label [2] over the existing label [1] behind the saddle inside cover (lower).



5) Close the front cover.



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**Canon**