RISO COLLATOR **TC5100**

User's Guide

RISO

Welcome to the RISO Collator TC5100

Thank you for purchasing the RISO Collator TC5100, which allows you fast and easy collation of printed copies of multiple-page originals. Given the user-friendly control panel and the application-extension features, the TC5100 will be one of the strong finishing tools in making various booklets from copies printed on your RISO printer.

About This User's Guide

This guide provides all the information necessary to use your RISO Collator TC5100. It is designed to help you take advantage of the features built into your RISO Collator TC5100 and provides information on maintenance and troubleshooting.

Read through this guide before use and keep it at hand to consult it whenever you have any questions during operation.

Table of Contents

⚠ Safety Guides

This section explains the precautions you have to observe when handling the TC5100. Never fail to read this section before using your TC5100 for the first time.

About the Alert Notices

The following alert notices are used in this manual to alert a user to operate the TC5100 correctly and prevent damage or injury.

⚠**WARNING**	Indicates a potentially hazardous situation which, if disregarded, might result in serious injury.
⚠**Caution**	Indicates a potentially hazardous situation which, if disregarded, might result in injury or physical damage.
Important!	Gives you helpful advice for trouble-free operation.

Installation

Your dealer will help determine the proper location for this unit at the time of delivery.

⚠WARNING

● Do not place water containers or metallic objects on this unit. If water drips inside this unit or a metallic object drops inside it, it can result in a fire or an electric shock.

⚠Caution

● Install this unit near an electrical socket (outlet) to avoid using an extension cord between this unit and the electrical socket (outlet). If an extension cord is unavoidable, do not use one longer than 5m (15 ft) nor one without the ground pin on the plug.

● Place this unit on a flat and stable surface [maximum of ±5mm (±3/16 inch) differential allowed]. Injury might occur if it falls.

● Do not place heavy objects on this unit. The objects might fall and cause injury.

● Keep this unit away from dusty or humid areas. Otherwise, a fire or an electric shock might occur.

● If this unit is placed on the dedicated stand, lock the stand casters. Injury might occur if the stand moves or turns down.

● Unplug the electrical (power) cord before moving this unit. Otherwise, the electrical (power) cord might be damaged and a fire or an electric shock might occur.

Important!

● Avoid installing this unit in the locations listed below. Failure to observe this precaution may lead to machine failure or human injury.

❏ Extremely bright locations such as locations close to windows or locations that are exposed to direct sunlight (provide a curtain if you have no choice but to install this unit in such a location)

❏ Locations that are subject to sudden temperature change

❏ Extremely hot and humid locations or cold and dry locations. The recommended temperature/humidity range: 15˚C to 30˚C (59˚F to 86˚F) with 40% to 70% (no condensation)

❏ Locations exposed to direct cold air, direct hot air or direct radiant heat

❏ Badly ventilated locations

❏ Locations where it is impossible to provide a clearance of 10cm (4 inch) or wider behind this unit.

● Secure sufficient installation space according to the following space requirements for the respective configurations:

❏ When placed on the tabletop → 861mm × 631mm × 1031mm (33.9" × 24.9" × 40.6") [W × D × H]

❏ When placed on the dedicated stand → 921mm × 887mm × 1529mm (36.3" × 35.0" × 60.2") [W × D × H]

❏ When two units are jointed → 2082mm × 887mm × 1529mm (82.0" × 35.0" × 60.2") [W × D × H]

❏ When placed on the tabletop with the optional Stapler unit ➜ 1101mm × 631mm × 1013mm (43.4" × 24.9" × 40.6") [W × D × H]

❏ When placed on the dedicated Stand with the optional Stapler unit ➜ 1101mm × 887mm × 1529mm (43.4" × 35.0" × 60.2") [W × D × H]

Power Connections

⚠WARNING

● Do not overload an electrical socket (outlet) or extension cord as it can result in fire or electrical shock (Check the "Specifications" section for the allowable range).

● Make sure that the electrical (power) cord is not crushed under other pieces of machinery or stepped on by normal traffic.

● Do not damage the electrical (power) cord by placing heavy objects on it or pulling or bending it. Otherwise, a fire or an electric shock might occur.

● Do not plug or unplug the electrical (power) cord with wet hands. Otherwise, an electric shock might occur.

⚠Caution

● Do not pull the electrical (power) cord but hold the plug itself when unplugging it. Otherwise, it could become damaged and a fire or an electric shock might occur.

● Pull out the electrical (power) plug from the electrical socket (outlet) more than once a year and clean the teeth of the plug and their surroundings. If dust piles on them, a fire might occur.

Important!

● Check the electrical (power) plug for poor connections. Plug the electrical (power) cord securely into a nearby electrical socket (outlet).

● Be sure to turn off the POWER switch when connecting or disconnecting the electrical (power) cord.

Handling Precautions

⚠WARNING

● Do not insert or drop any metallic material or flammable substance into this unit through any opening. Otherwise, a fire or an electric shock might occur.

● Do not remove the covers. Otherwise, you might be electrically shocked by the high-voltage parts inside.

● Do not disassemble or rebuild this unit by yourself. Otherwise, a fire or an electric shock might occur.

● If this unit gets uncomfortably hot, smokes or smells bad, immediately turn off the power, unplug the electrical (power) cord and contact your service representative because a fire or an electric shock might occur.

● If something drops inside this unit, turn off the power switch first, then unplug the electrical (power) cord and contact your service representative. If you continue using it, a fire or an electric shock might occur.

● Never stick your hands or fingers in the bins or the Paper Receiving Tray during operation.

● Keep loose clothing or long hair away from moving parts to avoid becoming entangled.

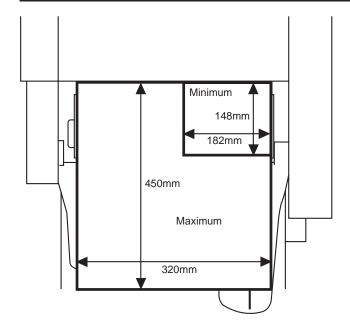● Before cleaning any part of this unit, turn off the power.

⚠Caution

● Do not remove the support feet at the base of this unit. Injury might occur if it falls.

● Do not open any covers or move this unit during operation.

● Unplug the electrical (power) cord, if you do not use this unit for a long time.

Important!

● Do not unplug the electrical (power) cord or turn off the power during operation.

● Be sure to open and close any cover gently.

● Do not place heavy objects on or apply shocks to this unit.

● This unit has precision parts and driving parts inside. Do not handle this unit in other ways than described in this guide.

● Contact your local service representative before moving this unit.

Paper Requirements

Size and Weight

❏ Size

Minimum: 148mm × 182mm (5.8" × 7.2") / A5

Maximum: 320mm × 450mm (12.6" × 17.7") / A3 (Ledger)

Note:

❖ When using the Stapling mode, A4 (Letter)-size paper is only available.

❏ Weight

Minimum: 52 g/m^2 (14lb bond)

Maximum: 128 g/m^2 (34lb bond)

Important!

Do not use the following types of paper, as they can cause jams or misfeeds :

● Chemically treated or coated paper (such as thermal paper)

● Transparent sheets (such as tracing paper or OHP transparencies)

● Paper that is not squarely cut

● Wrinkled, curled or torn paper

● Pasted or stapled paper

Guides in Loading Paper

When you load paper in the bins, follow the directions below to avoid collating errors or jams.
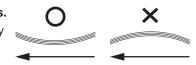
● **Make sure ink is completely dry.**

If ink is wet, loaded sheets stick together and are likely to cause feed errors such as double feed. Besides, wet ink might smudge the Paper Feed Roller or the Paper Stripper Pad, causing collated sheets to be smudged as well.

● **Fan sheets well.**

They might stick together in a stack due to static electricity, thus causing jams or double feed.

● **Flatten sheets if you cannot avoid use curled ones or if they have folds or waves.**

If the curled sheets cannot be flattened well, place them so that their leading edge may curl up, except when using the Stapling mode, in which curled paper is not available.

● **Do not load too many sheets at a time.**

The respective bins can hold an up-to-28mm(1")-thick stack of sheets (equivalent to approx. 280 sheets of 64g/m^2 or 17lb bond paper).
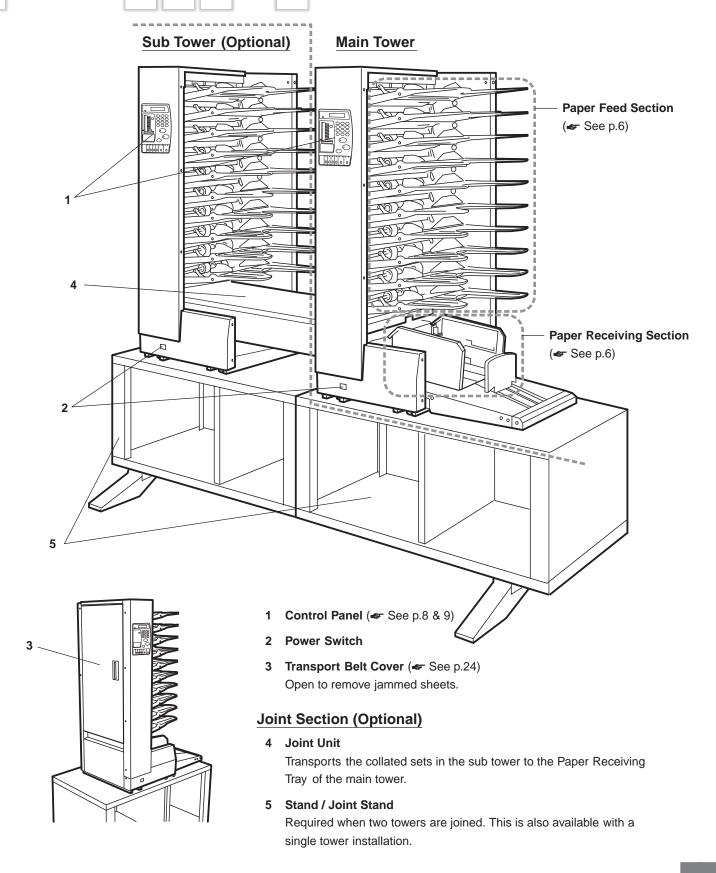
● **Do not mix different sizes or types of sheets in the stack.**

False double feed detection might occur if the sheets of different weight or type are mixed there.
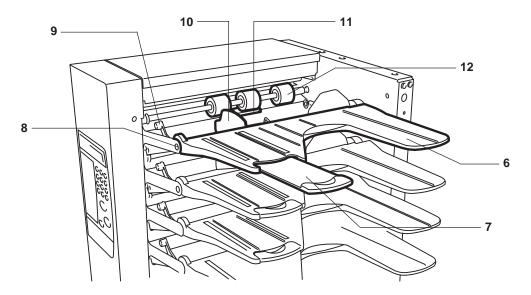
● **Arrange loaded sheets neatly.**

If they are stacked disorderly, their corner might be folded when collated.

Knowing the Parts and Components

Sub Tower (Optional)   **Main Tower**

Paper Feed Section
(☞ See p.6)

Paper Receiving Section
(☞ See p.6)

1   **Control Panel** (☞ See p.8 & 9)

2   **Power Switch**

3   **Transport Belt Cover** (☞ See p.24)
     Open to remove jammed sheets.

Joint Section (Optional)

4   **Joint Unit**
     Transports the collated sets in the sub tower to the Paper Receiving
     Tray of the main tower.

5   **Stand / Joint Stand**
     Required when two towers are joined. This is also available with a
     single tower installation.

Paper Feed Section

6 Bin Tray
Holds sheets to be collated.

7 Extension Tray
Pull out when loading A3(ledger)-size sheets.

8 Bin Number Label
Indicates the page order of sheets to be collated.

9 Paper Feed Pressure Adjustment Lever
Adjusts the paper feed pressure according to paper thickness.

10 Paper Feed Guide
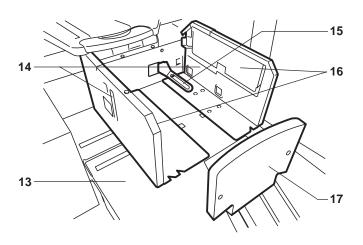Supports and guides sheets in feeding.

11 Paper Stripper Pad (Green plate under the Paper Feed Roller)
Separates a single sheet from the stack of paper.

12 Paper Feed Roller
Feeds a single sheet from the stack of paper.

Paper Receiving Section

13 Paper Receiving Tray
Holds collated sheets.

14 Paper Stacking Guides
Align collated sheets neatly.

15 Paper Stacking Support
Leads collated sheets to sit on the tray orderly.

16 Swing Stacking Wings
Swing collated sheets to right and left in the Swing action stacking mode.

17 Paper Stopper
Stops the collated sheets ejected into the Paper Receiving Tray.

Stapler Section (Optional)

18 Stapler Unit
Staples collated sheets and ejects them into the Paper Receiving Tray.

19 Stapler Top Cover
Open to remove jammed sheets.

20 Staple Cartridge Door
Open to charge the empty cartridge with staples or remove jammed staples.
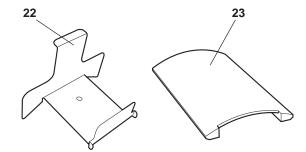
21 Staple Cartridge

Accessories

22 Extension Stopper (☛ See p.13)
Attach to the Paper Stopper when collating small-size paper. The paper sizes which require this accessory are smaller than B5 (or 7.2" × 10.2").

23 Swing Stacking Base (☛ See p.13)
Place on the Paper Receiving Tray when collating sheets in the Swing action stacking mode. This accessory is not required for large-size paper, such as A3 or ledger-size paper.

The Control Panel

Display

1 Check & Error Display (☞ See p.24)
Shows errors or machine status.

2 Machine Monitor Display (☞ See p.24)
Shows locations which should be checked in relation with the error or machine status indicated in the Check & Error Display.

3 Meter Display Key
Shows the total of finished sets of collated sheets in the Main Display.

4 Main Display
Counts the number of finished sets of collated sheets or shows other numeric settings and advice messages.

Basic Control Panel

5 All Reset Key
Returns all settings to initial status. This key is also used to clear error displays after troubleshooting.

6 Numeric Keys (0 to 9 Keys)
Use these keys to enter the number of sheets to be collated or other numeric values.

7 Clear Key
Cancels the number entered and clears the number of finished sets of collated sheets in the Main Display.

8 X Key (☞ See p.18)
Use when specifying the number of partition sheets in the Partition insertion mode.

9 Start Key
Starts operation. The indicator lights when the key is active.

10 Test Key
Makes a sample set of collated sheets, memorising the size and thickness of collated sheets and the activated bin numbers. The indicator lights when the key is active.

11 Stop Key
Interrupts operation or lowers bin trays.

Advanced Control Panel

12 Stapling Mode Key (☞ See p.23)
Activates the optional Stapler unit to staple collated sheets. The indicator lights when this mode is selected.

13 Joint Mode Key (☞ See p.10)
Activates another tower when two towers are joined. The indicator lights when another tower is available.

14 Feed Check Control Key (☞ See p.26)
Suspends the operation of the paper feed monitors. The indicator lights when the operation is suspended.

15 Semiactive Control Mode Key (☞ See p.20)
Divides active bins into two equal parts for tandem or alternate collating operation, increasing productivity for high-volume collating operation. The indicator lights when this mode is selected.

16 Partition Insertion Mode Key (☞ See p.18)
Inserts a specified number of partition sheets per a given number of finished sets of collated sheets. The indicator lights when this mode is selected.

17 Stacking Mode Selection Key (☞ See p.11)
Switches the current stacking mode between the straight alignment mode and the swing action mode. The corresponding indicator lights according to the selected mode.

18 Collating Speed Adjustment Key (☞ See p.14)
Increases or decreases the collating speed. The corresponding indicator lights according to the current speed setting. When the standard speed setting is selected, neither of the indicators lights.

Basic Operation

This section describes the basic operation procedures.

For this operation, you can select how to stack collated sheets on the Paper Receiving Tray between; Straight alignment mode and Swing action mode.
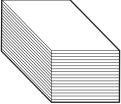

About the Stacking Modes

The TC5100 provides you with two stacking modes, Straight alignment mode and Swing action mode. You can select either of them by pressing the Stacking Mode Selection Key.
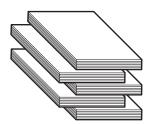
❑ **Straight alignment mode** (≣)

Collated sheets are stacked straight along the Paper Stacking Guides.

❑ **Swing action mode** (≣)

Collated sheets are alternately swung to right and left when ejected into the Paper Receiving Tray and stacked zigzag (as illustrated below).
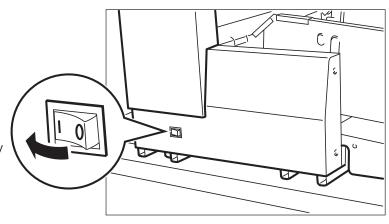

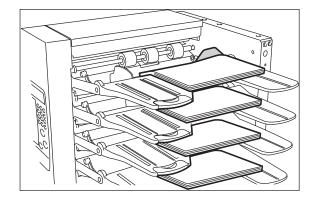**1** **Turn on the power switch.**

[|] : ON

[◯] : OFF

Note:

❖ When two towers are joined, turn on the power switch of the sub tower first. If you use both towers, press the Joint Mode Key on the control panel of the main tower.

2 **Place stacks of sheets in bins.**

Fan sheets well and place them along the right-hand paper guide on the Bin Trays, resting their leading edges on the panel at front.

When placing sheets face up, arrange stacks of sheets from the top bin (No.1) down in the order of pages. When placing them face down, arrange them from the bottom bin (No.10) up in the order of pages.
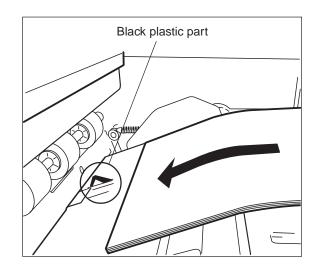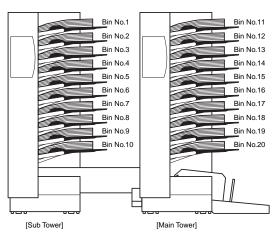
Important!

Be careful not to apply pressure to the sides of the black plastic part protruding on the Bin Tray when placing sheets because the part is easy to be damaged.

Note:

❖ The respective bins can hold an up-to-28mm(1")-thick stack of sheets (equivalent to approx. 280 sheets of 64g/m^2 or 17lb bond paper).

❖ The Extension Tray is stowed into the Bin Tray. Pull it out when placing large-size paper, such as A3 or ledger-size paper.

❖ Place sheets with their long side as the leading edge when their size is smaller than B5 (or 7.2" $\times$ 10.2").
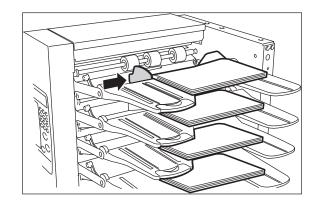
Black plastic part

When two towers are used in collating operation, the top bin of the sub tower corresponds to bin No.1 and the bottom one of the main tower to bin No.20. Take note of this arrangement rule when loading sheets in bins.
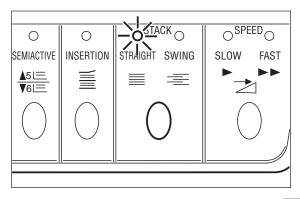
Bin No.1	Bin No.11
Bin No.2	Bin No.12
Bin No.3	Bin No.13
Bin No.4	Bin No.14
Bin No.5	Bin No.15
Bin No.6	Bin No.16
Bin No.7	Bin No.17
Bin No.8	Bin No.18
Bin No.9	Bin No.19
Bin No.10	Bin No.20

[Sub Tower]   [Main Tower]

3 **Slide the Paper Feed Guide to the edge of stacked sheets.**

Do not squeeze the stack with the Paper Feed Guide.

4 **Select the Stacking mode.**

Press the Stacking Mode Selection Key to light the indicator of a desired mode. Two stacking modes, Straight alignment mode and Swing action mode, are available.

SEMIACTIVE   INSERTION   STACK   STRAIGHT   SWING   SPEED   SLOW   FAST

11

5 Adjust the position of the Paper Stacking Guides.

❏ **Adjusting the right-hand Paper Stacking Guide**
Align the base notch with the guide pictograph corresponding to the selected stacking mode on the Paper Receiving Tray.

❏ **Adjusting the left-hand Paper Stacking Guide**
Align the base notch marked with the guide pictograph corresponding to the selected stacking mode with the guide indicator corresponding to the size of sheets to be collated on the Paper Receiving Tray.
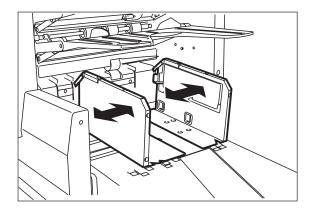
Note that there are two different guide indicators for A3 (ledger)-size paper according to the stacking mode. Make sure to align the base notch with the guide indicator marked with the selected stacking mode pictograph when using A3(ledger)-size paper.
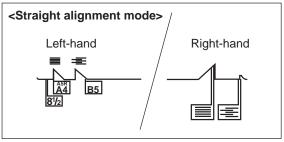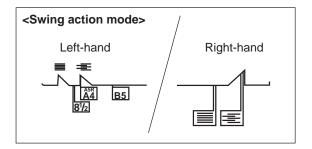
Stacking mode guide pictograph

≡ : Straight alignment mode
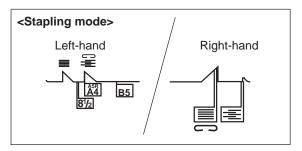≡ : Swing action mode
⊂⊃ : Stapling mode

Important!

To move the Paper Stacking Guides, push the lower part. Otherwise, they may be damaged.

<Straight alignment mode>

Left-hand   Right-hand

<Swing action mode>

Left-hand   Right-hand

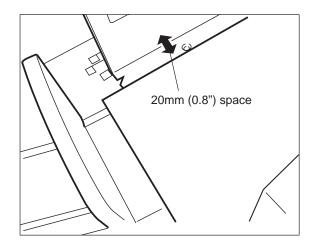**<Stapling mode>**

Left-hand   Right-hand

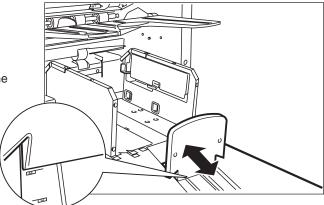**Note:**

❖ **When using irregular size sheets;**
Adjust the position of the right-hand Paper Stacking Guide as instructed above and place the irregular size sheets along it, setting their front edges against the inner panel. Then slide the left-hand Paper Stacking Guide to the edge of the placed sheets (in the Straight alignment mode) or to the point where approx. 20mm (0.8") space can be secured before the placed sheets (in the Swing action mode).

20mm (0.8") space

6 Adjust the Paper Stopper to the size of the sheets to be collated.

Slide the Paper Stopper to a desired position along the paper size scale on the Paper Receiving Tray, holding the side parts by both hands. You can find the paper size guide indicators on the scale.
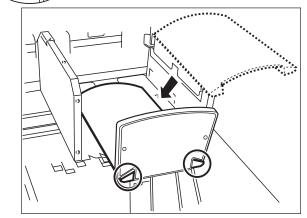
Note:

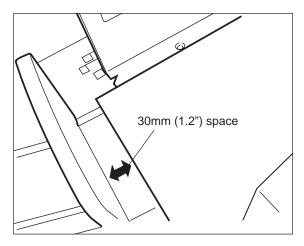❖ **When selecting the Swing action mode for paper stacking;**

Join the Swing Stacking Base to the Paper Stopper after position adjustment. To join them together, insert the partly-indented-edge side of the Swing Stacking Base into the triangular openings at the base of the Paper Stopper from the tower side.

Note that this accessory is not required for large-size sheets, such as A3 and ledger-size paper.

❖ **When using the sheets whose size is irregular or smaller than B5 (or 7.2" × 10.2");**
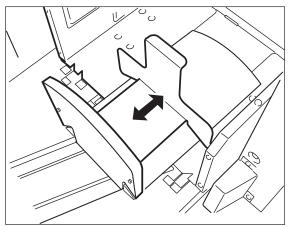
Place them along the right-hand Paper Stacking Guide, setting their front edges against the inner panel. Then slide the Paper Stopper to the point where approx. 30mm (1.2") space can be secured before the placed sheets.

30mm (1.2") space

If the sheet size is smaller than B5 (or 7.2" × 10.2"), attach the Extension Stopper (accessory) to the Paper Stopper before position adjustment.

To attach this accessory, insert the hooks of the attachment panel into the slits in the lower part of the Paper Stopper (from the tower side) and secure the attachment panel on the Paper Stopper with magnet.

When the Extension Stopper is used with the Swing Stacking Base, join the Swing Stacking Base to the base of the Paper Stopper before attaching the Extension Stopper there.

7 Specify desired settings on the Control Panel.

The following advanced operation modes are available with panel key operation.

❏ Programme mode (☞ See p.16)
❏ Partition insertion mode (☞ See p.17)
❏ Semiactive control mode (☞ See p.20)
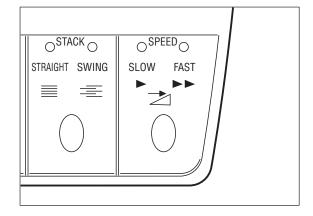❏ Stapling mode (☞ See p.22)

Note:

❖ Holding down the All Reset Key longer than two seconds returns the Control Panel to the initial settings, i.e. the settings when the power switch is turned on.

❖ You can change the collating speed by pressing the Collating Speed Adjustment Key. The following three speed settings are available.

  ❏ SLOW: approx. 33 sets/minute
       (with A4 or letter-size paper)
  ❏ STANDARD: approx. 40 sets/minute
  ❏ FAST: approx. 60 sets/minute

The selected speed setting is [STANDARD] when neither of the speed indicators lights.

Note that the collating speed cannot be changed when two towers are in operation. In this case, it is automatically set to 25 sets/minutes.
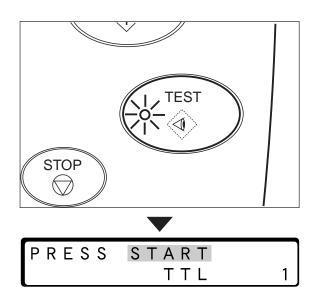
8 Press the Test Key.

A sample set of collated sheets is ejected into the Paper Receiving Tray. Check if the order of the sample set is correct.

The sample set is counted, advancing the total meter by 1, if no error message appears in the Main Display.

Note:

❖ The size and weight (thickness) of collated sheets and the activated bin numbers are memorised and used as reference data in monitoring operation conditions.

❖ In case missing pages (misfeed) or same pages (double feed) are found in the sample set, check the conditions of the sheets stacked on the corresponding bins. Press the Test key again to make another sample set.
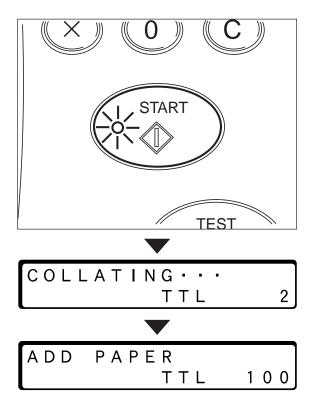
9 Press the Start Key.

The collating operation starts. It automatically stops when any bin becomes empty or a specified job is finished. The number of finished sets of collated sheets appears on the Main Display.

If you want to interrupt operation, press the Stop Key.

Note:
❖ When an error indicator lights in the Check & Error Display, interrupting operation, check the area concerned and then resume operation, following the instructions given in the section "Advice Displays" on p.24.

The set of collated sheets made when the error indicator lights is not counted because it may be an incomplete one. Therefore, remove it from the stack of collated sheets in the Paper Receiving Tray before resuming operation.
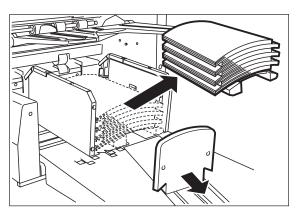


```
COLLATING···
            TTL      2
```
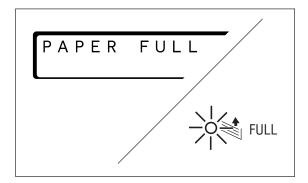
```
ADD   PAPER
            TTL    100
```

10 Remove finished sets of collated sheets from the Paper Receiving Tray.

Slide back the Paper Stopper to let your hand go under the stack of collated sheets. When the Swing Stacking Base is placed under the stack, take it out, keeping the stack placed on it.

Note:
❖ When the "Full Tray" indicator lights, interrupting operation, the Paper Receiving Tray is full of collated sheets. Remove collated sheets as instructed above and resume operation, following the instructions given in the section "Advice Displays" on p.24. The capacity of the Paper Receiving Tray is an approx. 70mm(2.8")-thick stack of collated sheets.


```
PAPER   FULL
```

FULL

Specifying the Number of Required Sets of Collated Sheets [Programme Mode]

You can specify how many sets of collated sheets should be made before starting the collating operation.

Before pressing the Test Key to make a sample set, enter the number of required sets of collated sheets with the numeric keys on the Control Panel. The entered number will appear on the Main Display.
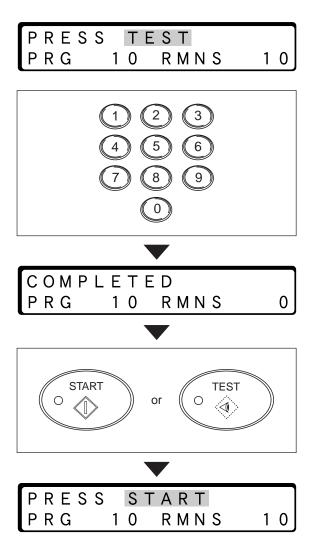
Note:
❖ If you enter a number incorrectly, press the Clear Key to reset the number appearing in the Main Display to zero.

The number on the Main Display will decrease according as the number of finished sets of collated sheets increases. The operation will then stop when the number on the Main Display becomes "0".

Note:
❖ Press the Start Key or the Test Key to recover the specified number on the Main Display and start another collating operation.

❖ Press the Stop Key to lower the Bin Trays when removing the remaining sheets there after the collating operation.
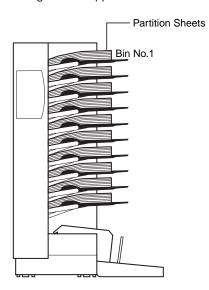
```
PRESS    TEST
PRG    1 0   RMNS      1 0
```

```
 1   2   3
 4   5   6
 7   8   9
     0
```

▼

```
COMPLETED
PRG    1 0   RMNS       0
```

▼

```
  START      or      TEST
   ◇                  ◁
```

▼

```
PRESS    START
PRG    1 0   RMNS      1 0
```

Inserting Partition Sheets at a Specified Interval [Partition Insertion Mode]

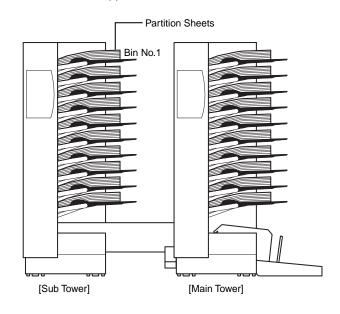You can insert partition sheets of a different colour into the stack of collated sheets at a specified interval.

1 **Place partition sheets in bin No.1.**

Use other bins for the sheets to be collated.

<Single tower application>   <Double tower application>
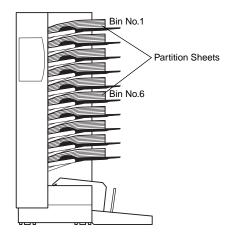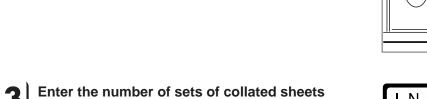

[Sub Tower]   [Main Tower]

Note:

❖ This mode is also available with the Semiactive control mode for single tower application. In this case, partition sheets are to be placed in the top bins of both halves.

<Single tower application>

2 | Press the Partition Insertion Mode Key.

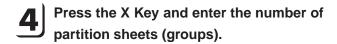The corresponding indicator lights.

```
  ○           ○        ☼          ○STACK ○
FEED CHECK SEMIACTIVE INSERTION STRAIGHT SWING
  OFF
          ▲5
   ⊘      ▼6
```

▼

```
INSERTION  PRG.
CYC      0    TTL      0
```

▼

```
PRESS  TEST  OR  X
CYC    10    TTL      0
```

3 | Enter the number of sets of collated sheets per which a partition sheet is to be inserted.
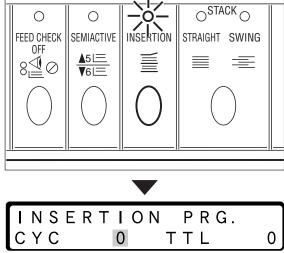
Use the numeric keys to enter a desired number.

Note:

❖ If you enter a number incorrectly, press the Clear Key to reset the number appearing in the Main Display to zero.

4 | Press the X Key and enter the number of partition sheets (groups).

Use the numeric keys.

Skip this step when you do not specify the number of partition sheets.

```
]   ✕    0    C

      START
    ○  ◇
```

▼

```
GROUPING  PRG.
GRP      0    CYC    10
```

▼

```
PRESS  TEST
GRP    5    CYC    10
```

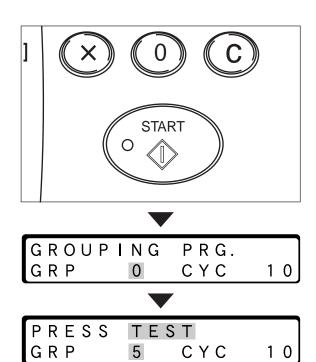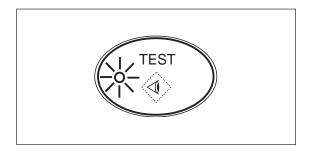**5** **Press the Test Key.**

A partition sheet is fed to the Paper Receiving Tray and a sample set of collated sheets is ejected on it. Check it as instructed in the step 8 of the basic operation.

Note:

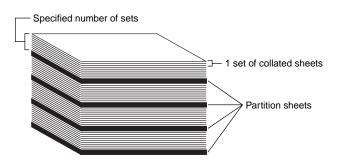❖ When using the Stapling mode, partition sheets are not to be stapled.

```
TEST
◁
```

▼

```
P R E S S   S T A R T
C Y C    1 0    T T L         1
```

or

```
P R E S S   S T A R T
G R P      5      C Y C       9
```
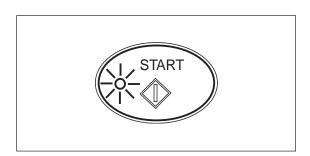
6 **Press the Start Key.**

Partition sheets are inserted into the stack per the specified number of sets of collated sheets. The number of finished sets of collated sheets appears on the Main Display.

If you specify the number of partition sheets, operation will automatically stop after the specified numbers of partition sheets are all inserted and the specified number of finished sets of collated sheets are stacked on them. In this case, the count indications in the Main Display will be "0".

Specified number of sets

1 set of collated sheets

Partition sheets

```
START
◇
```

▼

```
C O L L A T I N G · · ·
C Y C    1 0    T T L         2
```

or

```
C O L L A T I N G · · ·
G R P      5    C Y C        8
```

▼

```
A D D    P A P E R
C Y C   1 0      T T L    1 0 0
```

or

```
C O M P L E T E D
G R P      0    C Y C        0
```

Increasing Productivity for High-volume Collating Operation [Semiactive Control Mode]

You can increase productivity for high-volume collating operation by dividing active bins into two equal parts for tandem or alternate operation.

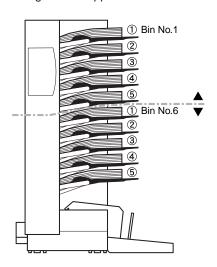In this case, the number of pages to be collated will be half the number of available bins.

1 | **Place stacks of sheets in bins.**

Divide active bins into halves and arrange the same stacks of sheets in the same order in both halves.
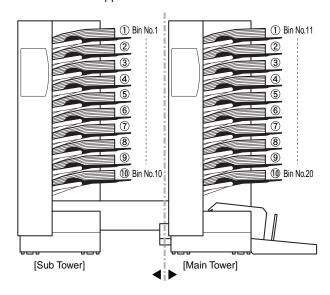
Note:
❖ This mode is also available with the Partition insertion mode for single tower application. (☛ See p.17)

<Single tower application>

① Bin No.1
②
③
④
⑤
① Bin No.6
②
③
④
⑤

<Double tower application>

① Bin No.1
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩ Bin No.10

① Bin No.11
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩ Bin No.20

[Sub Tower]　　[Main Tower]

2 | **Press the Semiactive Control Mode Key.**

The corresponding indicator lights.

JOINT-ON | FEED CHECK OFF | SEMIACTIVE ▲5／▼6 | INSERTION | STRAIGHT | STA

3 | **Press the Test Key.**

Each sample set of collated sheets is made for both halves, delivering two sample sets into the Paper Receiving Tray. Check them as instructed in step 8 of the basic operation.

They are counted, advancing the total meter by 2, if no error message appears in the Main Display.

4 Press the Start Key.

Two different collating operations proceed according to the selected stacking mode or depending on the selection of the Stapling mode.

❑ **When selecting the Swing action mode or the Stapling mode**

The collating operation starts with the first half of bins (the one including bin No.1) only. When any bin in the first half becomes empty, the second half of bins will automatically be applied for collating operation in place of the first one, allowing you to load sheets in the empty bins during collating operation. The respective halves alternately serve for collating operation.

Note:

❖ Push down the Bin Trays by hand when loading sheets in the bins in the inactive half.

❖ You cannot load sheets in the bins in the inactive half during operation when the high speed setting is selected. (☞ See p.14)

❑ **When selecting the Straight alignment mode**

The collating operation proceeds with all bins in both halves, delivering two finished sets of collated sheets into the Paper Receiving Tray at a time. In this way, productivity will be doubled.
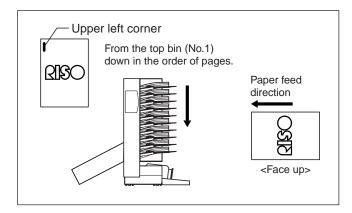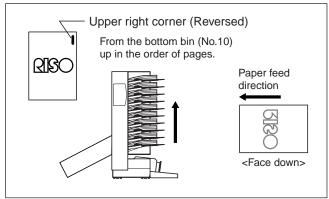
Note:

❖ Even when any bin becomes empty, the half without empty bins will continue to be applied for collating operation. In this case, one finished set of collated sheets will be delivered at a time.
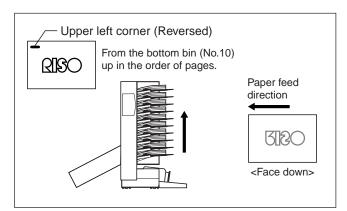
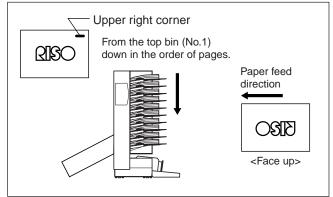# Stapling Collated Sheets [Stapling Mode] (Optional)

You can automatically staple collated sheets with the optional Stapler Unit, in which a staple is put on a corner of paper stacks.

Paper placement patterns and stapling positions

Upper left corner
From the top bin (No.1) down in the order of pages.
Paper feed direction
<Face up>

Upper right corner (Reversed)
From the bottom bin (No.10) up in the order of pages.
Paper feed direction
<Face down>

Upper left corner (Reversed)
From the bottom bin (No.10) up in the order of pages.
Paper feed direction
<Face down>

Upper right corner
From the top bin (No.1) down in the order of pages.
Paper feed direction
<Face up>

Note:

❖ A single paper size, i.e. A4 (Letter) size, is applicable in the Stapling mode, with the sole paper feed direction, i.e. short edge first. However, low-quality paper cannot be used even if the paper size is A4 (Letter).

❖ The stapling capacity is 3.5mm(0.13")-thick stack of sheets (2 pieces of thick paper <between 81g/m^2 and 128g/m^2> like cover sheet can be included.)

❖ The following control panel keys are not available with the Stapling mode.

  • Collating Speed Adjustment Key (The collating speed is automatically slowed down to 17 sets/minute in the Stapling mode.)

  • Stacking Mode Selection Key (The Straight alignment mode is automatically selected in the Stapling mode.)

  • Joint Mode Key

1 Press the Stapling Mode Key.

The corresponding indicator lights.
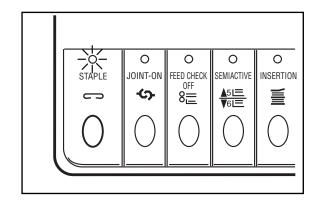
Note:

❖ The initial setting of the Stapling mode can be changed as follows.

To select "ON" as initial setting;

Press the "X" Key while holding down the Stapling Mode Key.

To select "OFF" as initial setting;

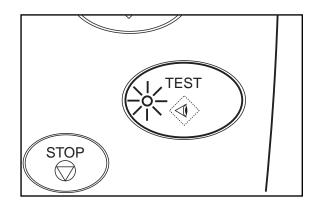Press the "C" Key while holding down the Stapling Mode Key.

2 Press the Test Key.

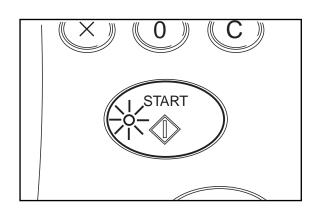A sample set of stapled collated sheets is ejected into the Paper Receiving Tray.

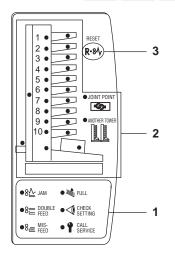Check if the page order and the stapling position of the sample set is correct.

3 Press the Start Key.

The collating operation starts and collated sheets are stapled and ejected into the Paper Receiving Tray.

Advice Displays

You can check the machine status in the Check & Error Display and Machine Monitor Display on the Control Panel when collating operation is interrupted or cannot be started.
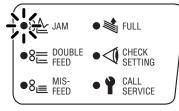
The Check & Error Display (1) indicates the current machine condition, while the Machine Monitor Display (2) shows the locations to be checked in relation with the current machine condition. The related advice message, appears in the Main Display to help you check the machine status.

The All Reset Key (3) is to be pressed to turn off the error indicators on the Control Panel after troubleshooting. To resume operation after clearing the error indication, press the Test Key and then the Start Key.

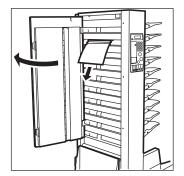| Display	Cause and Action

❏ **Paper Jam**

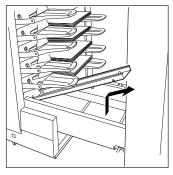**Cause**   Paper is jammed in the area(s) indicated in the Machine Monitor Display.
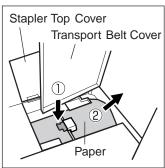
Action   Check the indicated area(s) and remove jammed sheets. Then check the top set of collated sheets in the Paper Receiving Tray for missing pages or damages following the advice message in the Main Display.

Note:

❖ When paper is jammed under the Transport Belt, open the Transport Belt Cover and remove jammed sheets as illustrated to the right.
When the optional Stapler Unit is installed on the Main Tower, in this case, open the Stapler Top Cover before opening the Transfer Belt Cover.

❖ When paper is jammed in the Joint Unit, lift and take out the Paper Transfer Guide on the front side and remove jammed sheets while holding the cover on the rear side.

❖ When paper is jammed in the optional Stapler Unit, open the Stapler Top Cover and then the Transport Belt Cover. Then pull out jammed sheets while holding down the green lever.

Stapler Top Cover
Transport Belt Cover
Paper

Display	**Cause and Action**

Cause The Paper feed check sensor in the area indicated in the Machine Monitor Display may be smudged with ink or covered with paper dust. Or it may be damaged.

Action Request your local service representative to clean or replace the sensor.

If it is necessary to use your machine under this condition, you can temporarily suspend the function of the Paper feed check sensor in question as instructed below.

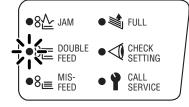**=Suspending the total function of the Paper feed check sensor=**

1. Press the All Reset Key to turn off the error indicators on the Control Panel.

2. While pressing the Feed Check Control Key, hold down the numeric key corresponding to the number of the bin in which the Paper feed check sensor is smudged or damaged ("0" for bin No.10), for more than 1 second.

   The machine monitor indicator of the bin in which the Paper feed check sensor stops functioning starts flashing.

Note:
❖ No paper feed error can be detected when the total function of the Paper feed check sensor is suspended.

❖ To resume the function of the Paper feed check sensor in the bin whose machine monitor indicator is flashing, enter the number of the bin in question with the numeric keys while pressing the Feed Check Control Key. The machine monitor indicator concerned will be turned off when the sensor function is recovered.

❏ **Double Feed**

●8⤒ JAM   ●≶ FULL

✺ DOUBLE FEED   ●◁ CHECK SETTING

●8 MIS-FEED   ● 🛠 CALL SERVICE

In collating operation

Cause More than two sheets have fed together in the same bin(s) indicated in the Machine Monitor Display.

Action Check finished sets of collated sheets in the Paper Receiving Tray for repeated pages following the advice message in the Main Display. Then fan the stack(s) of sheets in the indicated bin(s) before resuming collating operation.

Cause The sheets whose type (thickness) is different from that of the sheets included in the sample set have fed in the bin(s) indicated in the Machine Monitor Display.

Action Check the sheets in the indicated bin(s) and remove those of different type (thickness). If you cannot avoid using the sheets of different type (thickness), cancel the current collating job and make another sample set with the sheets of different type (thickness) or suspend the double feed detection function of the Paper feed check sensor in the indicated bin(s) as instructed on the next page.

Note:
❖ The Paper feed check sensor detects double sheet feed by comparing the paper thickness of feeding sheets with that of the sheets collated for a sample set.

Display	Cause and Action

=Suspending the double feed detection function of the Paper feed check sensor=

1. Press the All Reset Key to turn off the error indicators on the Control Panel.

2. Press the Feed Check Control Key and check in what bins double sheet feed was detected. The machine monitor indicators of the corresponding bins light when the Feed Check Control Key is pressed.

3. While pressing the Feed Check Control Key, enter the number of the bin in which double sheet feed was detected ("0" for bin No.10), with the numeric keys.

   The machine monitor indicator of the bin in which the double feed detection function of the Paper feed check sensor is suspended will light.

Note:
❖ To resume the double feed detection function of the Paper feed check sensor in the bin whose machine monitor indicator lights, enter the number of the bin in question with the numeric keys while pressing the Feed Check Control Key. The machine monitor indicator concerned will be turned off when the sensor function is recovered.
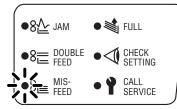
In making a sample set

Cause When too thick sheet is fed or the sheet with dark solid images is fed, it could activate the Paper feed check sensor in the bin(s) indicated in the Machine Monitor Display.

Action Change sheets or load sheets in another direction in the indicated bin(s). If you cannot avoid using the existing sheets or the result is the same in loading sheets in another direction, suspend the double feed detection function of the Paper feed check sensor in the indicated bin(s) as instructed above.

❑ **Paper Misfeed**

●8 JAM   ● FULL

●8 DOUBLE FEED   ● CHECK SETTING

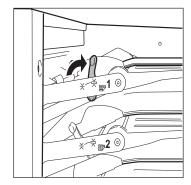MIS-FEED   ● CALL SERVICE

Cause No sheet has fed in the bin(s) indicated in the Machine Monitor Display.

Action Check finished sets of collated sheets in the Paper Receiving Tray for missing pages following the advice message in the Main Display. Then fan the stack(s) of sheets in the indicated bin(s) before resuming collating operation.

Note:
❖ You can increase the paper feed pressure of the indicated bin(s) by adjusting the Paper Feed Pressure Adjustment Lever to "☆".
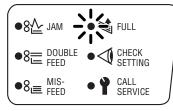
Display	Cause and Action

	Cause The Paper feed check sensor may be damaged in the bin(s) indicated in the Machine Monitor Display if no paper misfeed occurs there.
	Action Request your local service representative to replace the sensor.
	If it is necessary to use your machine under this condition, you can temporarily suspend the function of the Paper feed check sensor in question. For the procedures for suspending the sensor function, see "**Suspending the total function of the Paper feed check sensor**" on page 25 .

❏ **Full Tray**

● 8 JAM   ● FULL

● 8 DOUBLE FEED   ● CHECK SETTING
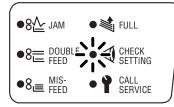
● 8 MIS-FEED   ● CALL SERVICE

Cause The Paper Receiving Tray is full of finished sets of collated sheets.

Action Remove them from the Paper Receiving Tray.

❏ **Check Settings**

● 8 JAM   ● FULL

● 8 DOUBLE FEED   ● CHECK SETTING

● 8 MIS-FEED   ● CALL SERVICE

When the machine monitor indicators of the bins light;

Cause The indicated bins are empty.

Action Load sheets in the empty bins.

When the machine monitor indicator of the Transport Belt Cover lights;

Cause The Transport Belt Cover is open.

Action Close it tightly.

When the machine monitor indicator of the Joint Unit lights;

Cause The Paper Transfer Guide is not correctly set in the Joint Unit.

Action Set it correctly.

When the machine monitor indicator of the optional Stapler Unit lights;

Cause Any of the following parts is open or not correctly set in the optional Stapler Unit; Stapler Top Cover, Staple Cartridge Door and Staple Cartridge.

Action Close or set correctly the part concerned, which will be indicated in the Main Display.

Display	Cause and Action

❏ **Call Service**

●8⩚ JAM ●≦ FULL

●8☰ DOUBLE FEED ●◁ CHECK SETTING

●8☰ MIS-FEED ✲☒ CALL SERVICE

When the advice message "CALL SERVICE E##" is displayed;

Cause An error has occurred in the control system.

Action Turn the power off and then on again.

If this message still appears, contact your local service representative and report the error code (E##).

When the advice message "MAINTENANCE E99" is displayed;

Cause The periodical maintenance service is required.

Action Contact your local service representative.

Although you can continue to operate this machine even when this message appears, paper feed errors may occur frequently due to wear on rubber parts for paper feeding.

❏ **The advice message "PRESS START" at power-on**

Cause Any of the parts listed here (Transport Belt Cover, Stapler Top Cover and Staple Cartridge Door) was opened during operation or the power was interrupted in operation.
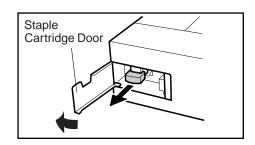
Action Press the Start Key. The machine is set ready for operation.
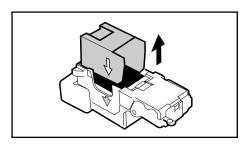
Charging the Staple Cartridge

When the indicator in the Stapler section lights in the Machine Monitor Display and the advice message shown below appears on the Main Display, charge the empty cartridge with staples as instructed below.
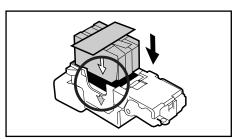
```
ADD STAPLES
```

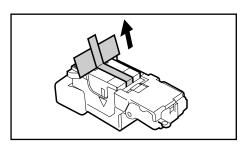**1** **Open the Staple Cartridge Door and pull out the empty staple cartridge, holding the green lever.**
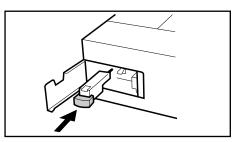

Staple Cartridge Door

2 **Remove the empty staple box from the cartridge.**

3 **Put a new staple box into the cartridge, aligning the arrow marks on them.**

4 **Pull off the holding tape from the staple box.**

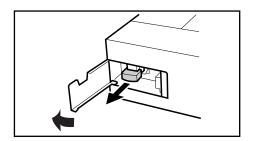**5** **Return the charged staple cartridge into the stapler, and close the Staple Cartridge Door.**
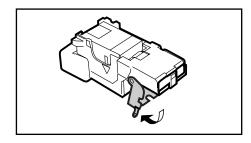
Removing Jammed Staples

When the indicator in the Stapler section lights in the Machine Monitor Display and the advice message shown below appears on the Main Display, remove jammed staples as instructed below.
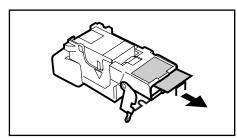
```
STAPLER  ERROR
```

1 **Open the Staple Cartridge Door and pull out the staple cartridge, holding the green lever.**
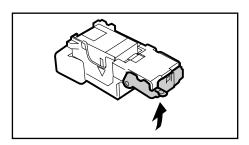

2 **Turn down the mouth tip of the staple cartridge.**
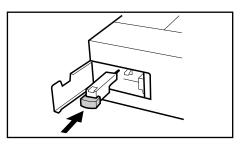

3 **Remove jammed staples from the cartridge mouth.**

4 **Turn back the mouth tip of the staple cartridge to the initial position.**

5 **Return the staple cartridge into the stapler, and close the Staple Cartridge Door.**

Cleaning or Replacing Paper Feed Rollers and Paper Stripper Pads
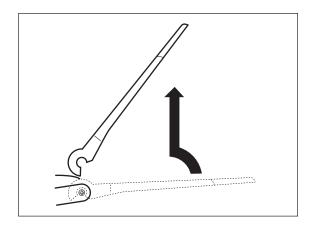
⚠WARNING

Be sure to turn off the Power Switch before performing this operation.

Collated sheets may have unexpected smudges if the Paper Feed Rollers or Paper Stripper Pads are smudged with ink or paper dust. In such a case, clean them with a cleanser recommended by your local service representative after removing them as instructed below. Make sure that they are completely dry before they are re-installed.

The Paper Feed Rollers and Paper Stripper Pads will wear with operation. If they are worn too much, sheets will not be able to feed well, causing frequent paper feed errors. In this case, replace them with new ones.

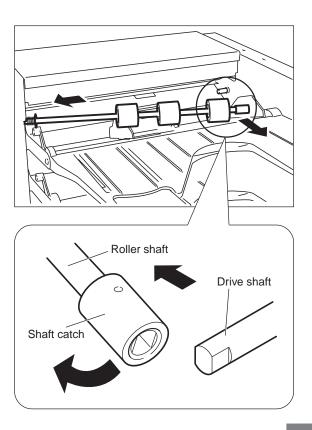### Removing Paper Feed Rollers

1 **Stand the Bin Tray half way up and pull it up and off the support shafts.**

2 **Pushing the shaft of the Paper Feed Roller Ass'y in the direction indicated by the arrow, pull it toward you and remove the assembly.**

Important!

Make sure the shaft catch of the Paper Feed Roller Ass'y is well engaged with the drive shaft, rotating the roller shaft manually, when putting back the assembly in the bin. If they are not well engaged, sheets cannot feed.

Roller shaft

Drive shaft

Shaft catch

Removing the Paper Stripper Pad

1 **Remove the Paper Feed Roller Ass'y.**

2 **Slide the Paper Stripper Pad up and out of the holder in the direction indicated by the arrow.**

Important!

When putting back the Paper Stripper Pad on the holder, push it down with the round edges toward you. Although it may appear somewhat unstable, it will be held down by the Paper Feed Roller when the roller assembly is returned.

Specifications

Type:	Desktop with full panel-key control
Number of bins:	10 bins
Paper size:	Minimum: 148mm × 182mm (5.8" × 7.2") / A5 Maximum: 320mm × 450mm (12.6" × 17.7") / A3 (Ledger) **Note:** A4 (or Letter) size (210mm × 297mm (or 8.5" × 11.0")) is only available in the Stapling mode.
Paper weight:	Minimum: 52 g/m^2 (14-lb bond) Maximum: 128 g/m^2 (34-lb bond) **Note:** Low quality paper is not available in the Stapling mode regardless of paper weight.
Bin capacity:	28mm(1")-thick stack of sheets (equivalent to approx. 280 sheets of 64g/m^2 or 17-lb bond paper)
Receiving tray capacity:	Approx. 70mm(2.8")-thick stack of sheets

Collating speed:	3 levels (33 sets/min., 40 sets/min. and 60 sets/min. [with A4 or letter-size paper feeding lengthwise])
	Note: Only one level is available in the Joint mode and the Stapling mode.
	    - 25 sets/min. in Joint mode
	    - 17 sets/min. in Stapling mode

Stacking mode:	2 modes (Straight alignment mode and Swing action mode) **Note:** - The Sheet swinging wing system is applied in the Swing action mode. - The Swing action mode is not available in the Stapling mode.
Job mode:	4 modes (Standard mode, Programme mode, Partition insertion mode and Semiactive control mode) **Note:** The Stapling mode is available as optional.
Panel display features:	2-line compact LCD (Count and message display), machine monitor panel and machine status display (paper jam, double feed, misfeed, full tray, incomplete setting and service call)
Auxiliary features:	Paper feed check sensor function control and paper feed pressure control
Accessories:	Extension stopper and Swing stacking base
Maintenance parts:	Paper feed roller and Paper stripper pad
Optional equipment:	Joint unit, Joint stand (Stand) and Stapler unit **Note:** The optional Staple cartridge capacity is 3,000 staples.
Power source: <Requirements>	**(100V model)** 100-120V AC, 60Hz <1.2A> **(200V model)** 220-240V AC, 50/60Hz <0.8A> ⚠️**Caution** : **Always check the rating plate on the machine before connecting the power.**

Dimensions: [W × D × H]	When placed on the tabletop: 861mm × 631mm × 1031mm (33.9" × 24.9" × 40.6") When placed on the dedicated stand: 921mm × 887mm × 1529mm (36.3" × 35.0" × 60.2") When two units are jointed: 2082mm × 887mm × 1529mm (82.0" × 35.0" × 60.2") When placed on the tabletop with the optional Stapler unit: 1101mm × 631mm × 1031mm (43.4" × 24.9" × 40.6") When placed on the dedicated stand with the optional Stapler unit: 1101mm × 887mm × 1529mm (43.4" × 35.0" × 60.2")	
Weight:	When one unit stands: When two units are jointed: When the optional Stapler unit is installed:	72kg (159 lbs.) 196kg (432 lbs.) with the dedicated stands 80kg (176 lbs.) 110kg (243 lbs.) with the dedicated stand
Operation temperature and humidity	15˚C to 30˚C (59˚F to 86˚F) with 40% to 70% (noncondensing)	

Note:

❖ The specifications are subject to change without prior notice. Please acknowledge that the illustrations and descriptions in this manual may differ from the actual machine, due to the changes in specifications.

For USA (100V model)

FCC Warning

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

For Australia (200V model)

WARNING

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

For Germany (200V model)

MASCHINENLÄRMINFORMATION

Maschinenlärminformationsverordnung 3, GSGV, 18.01 1991:
Der arbeitsplatzbezogene Schalldruckpegel beträgt 70 dB (A) oder weniger gemäß ISO 7779.

RISO