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# System 4000

DYNAMIC BOOKLET MAKER

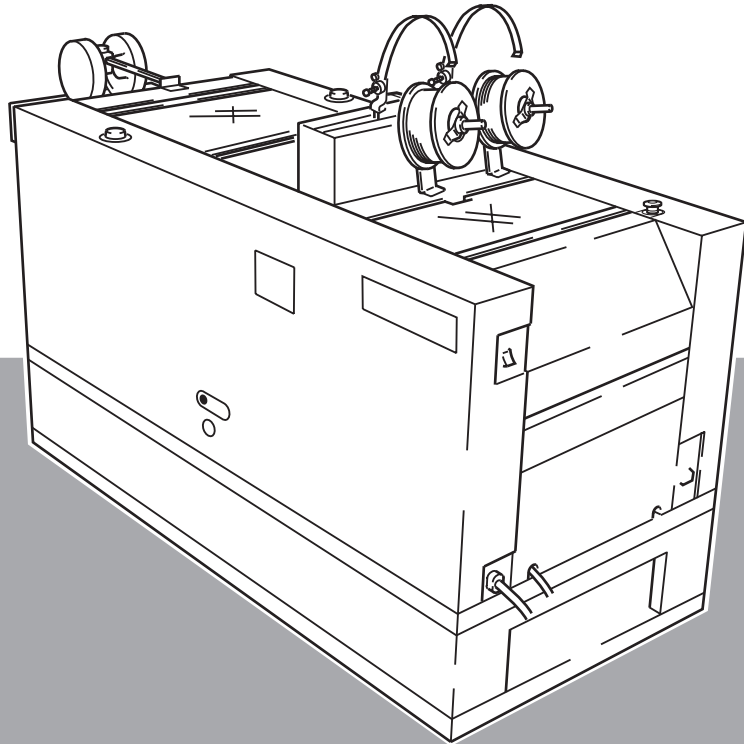
*DBM-400 SHEET BY SHEET (SxS)*

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## *Instruction Manual*

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[120V]



DUPLO CORPORATION

**The DBM-400 Sheet by Sheet (SxS) conforms with FCC regulations only when used in the following system configurations.**

**System1:DB-10+DR-14+DBM-400 SxS+DBM-400T+DBM-400LS+DBM-400K**

**System2:DB-10+DB-10TR+DBM-400 SxS+DBM-400T+DBM-400LS+DBM-400K**

- This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by or more of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

# INTRODUCTION

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Thank you for purchasing a DBM-400 sheet by sheet SxS. To ensure correct usage, please read this instruction manual thoroughly, especially the section “Safety Precautions”. After reading, please keep this instruction manual handy for future reference.

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# 1. Safety Precautions






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Always observe the following cautions and warnings to prevent personal injury and damage to properties.

- The degree of dangers and damages that could occur is indicated in two levels by the following symbols.


 **WARNING:** Ignoring this symbol could result in serious injury or even death.  
 **CAUTION:** Ignoring this symbol could result in injury or physical damage.

- The following symbols indicate the various types of actions to be performed or avoided.


-  This symbol indicates a forbidden action.
  -  means “Do not disassemble.”
  -  means “Do not touch.”
-  This symbol indicates actions that must be performed.
  -  means “Disconnect the power plug.”

## **WARNINGS:**

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 Do not place metal objects or vessels containing liquids on top of the unit. The entry of any metal object or liquid could result in fire or electrical shock.

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 Do not insert any metal or combustible object inside this unit. This could result in fire or electrical shock.


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 Do not touch or insert foreign objects into any rotating part during operation. This could result in injury.


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 Do not remove the cover or back panel. This unit contains high-voltage components that could cause electrical shock.

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 Do not disassemble, modify or repair this unit. This could result in fire or electrical shock, or injury. Contact your dealer when repairs are necessary.

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 Use only the power supply voltage specified on the main label. Use of other voltages could result in fire or electrical shock.

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 Keep this unit and the power cord away from heaters and heater vents. Excessive heat could melt the cover or power cord covering and result in fire or electrical shock.

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Do not use flammable sprays inside or near the unit (e.g. when cleaning the unit). Flammable gas may ignite and cause fire or combustion.



Make sure that the current consumption indicated on the main label does not exceed the capacity rating of the power outlet. Also do not connect other equipment to the same power outlet, otherwise the power outlet may overheat and cause fire.



Remove any dust that has accumulated on the power plug prongs and the surface from which the prongs extend. Accumulated dust can cause fire.



If any foreign objects such as metal or liquid enters the unit, turn off the power switch immediately and disconnect the power plug from the power outlet. Failure to do so could result in fire or electrical shock. Contact your dealer immediately.



Do not damage the power cord or power plug. (Do not scratch, alter, bend, twist, pull or place heavy objects on the power cord or power plug.)

This could result in damage, fire or electrical shock.



Always grip the plug when disconnecting the power plug from the power outlet. Pulling on the power cord could cause damage, resulting in fire or electrical shock.



Do not handle the power plug with wet hands. This could result in electrical shock.



Before cleaning this unit, turn off the power switch and disconnect the power plug from the power outlet. Accidental operation of the unit during cleaning could result in injury.

**⚠ CAUTIONS:**



Always disconnect the power plug from the power outlet when this unit is not to be used for an extended period. Failure to do so could result in fire due to leakage current if the insulation should deteriorate.



Install this unit on a level, stable stand or floor, with sufficient space around it. Failure to do so could result in the unit overturning and injury.

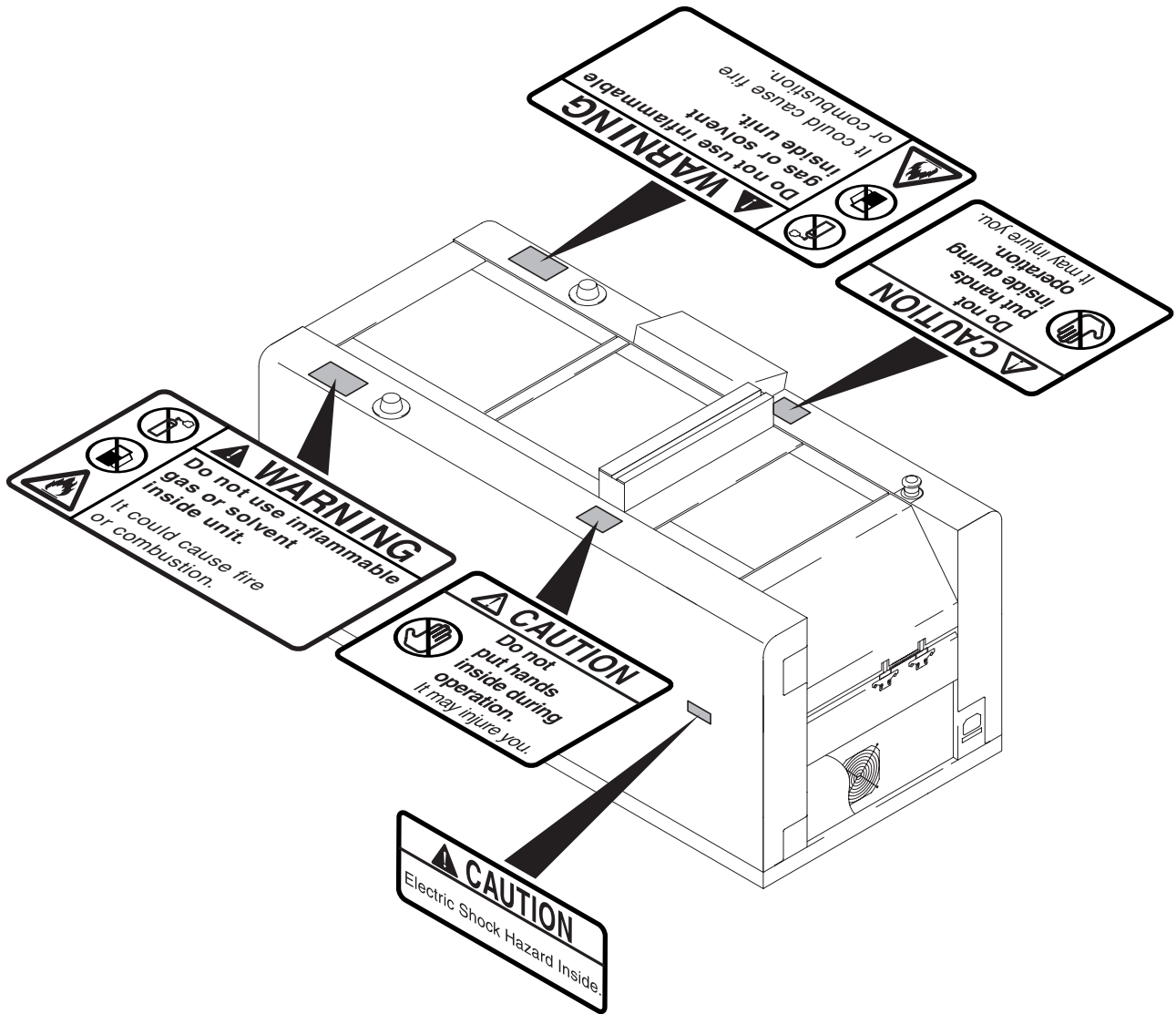


Do not install this unit in a location where there is excessive humidity or where it may be exposed to water. Failure to do so could result in deterioration of the insulation, fire or electrical shock.



Disconnect the power plug from the power outlet before attempting to move this unit. Failure to do so could result in power cord damage, fire or electrical shock.

## Warning/Caution label location



## 2. Usage Precautions

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### 2-1. Power Supply

Make sure the power supply used is always within the following range.

**120V AC 50Hz**

Plug the power cord plug directly into a wall power outlet.

This equipment shall be installed near the socket-outlet where the plug on the power supply cord is easily accessible.

### 2-2. Operating Environment

Operate this unit in the following environment.

- **Temperature range: 5 to 35 °C (41 to 95°F)**
- **Humidity range: 20 to 85% RH (no condensation)**
- **Avoid exposure to direct sunlight.**
- **Avoid dusty locations**
- **Avoid locations with vibration**
- **Avoid locations that are salty**
- **Avoid locations with special chemicals**

### 2-3. Storage Conditions

Store this unit in the following environment.

- **Temperature range: -5 to +50 °C (23 to 122°F)**
- **Humidity range: 10 to 90% RH (no condensation)**
- **Avoid exposure to direct sunlight.**
- **Avoid dusty locations**
- **Avoid locations with vibration**
- **Avoid locations that are salty**
- **Avoid locations with special chemicals**

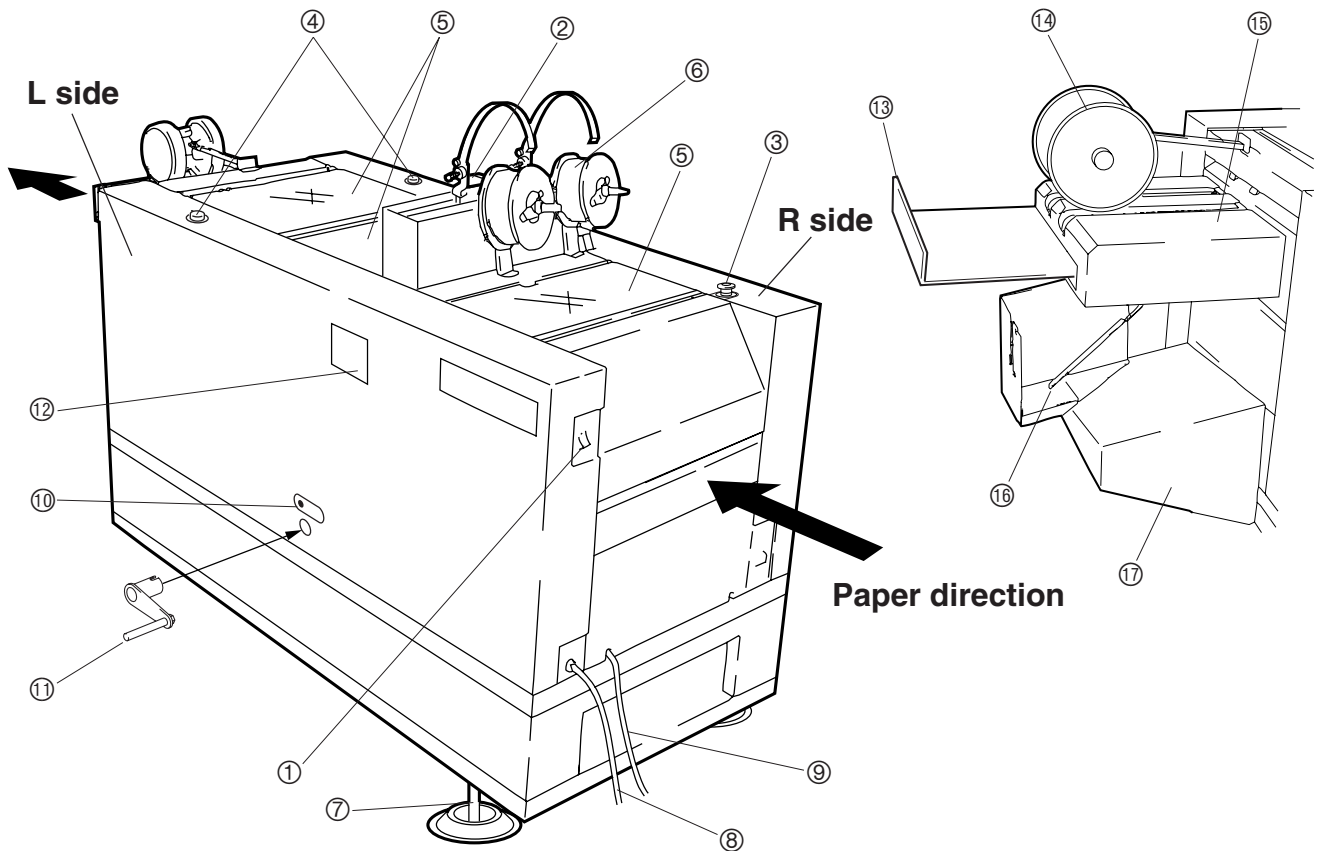
### 2-4. Maintenance

To maintain the performance of this unit, you should never apply oil or grease to parts (unless specified in this instruction manual to do so).

Please contact your dealer if a problem is suspected.

# 3. Names and Functions of the Parts

## 3-1. External View

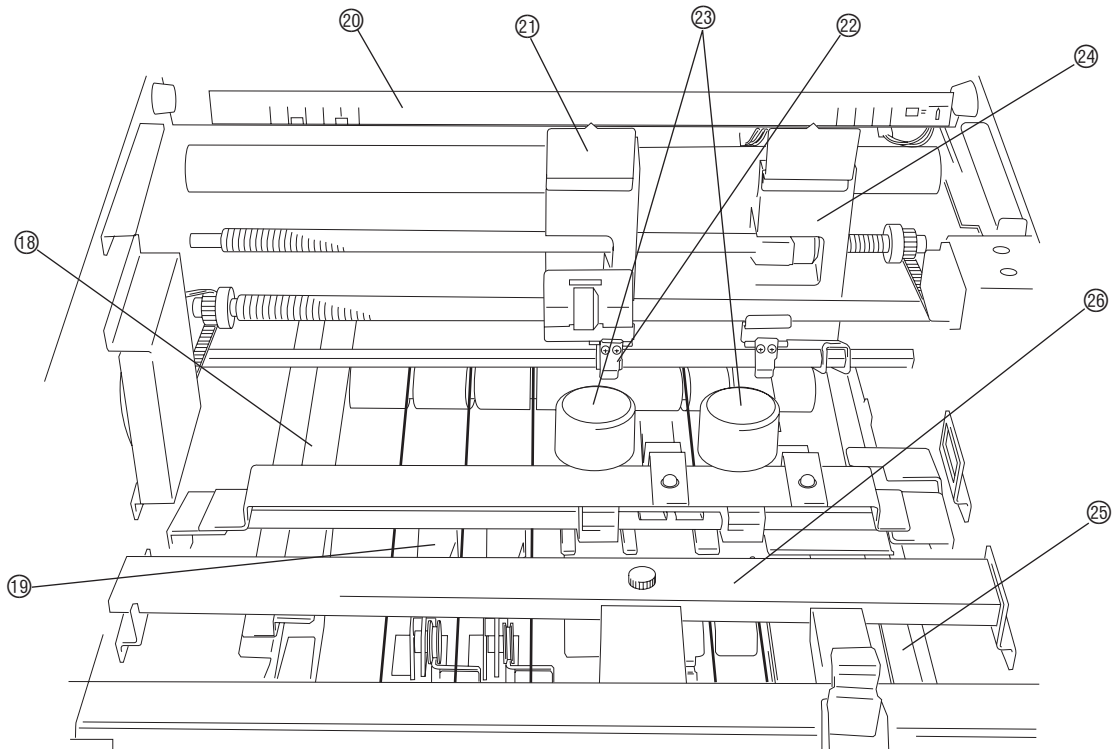


No.	Name	Function
①	<b>POWER Switch</b>	When the switch is turned on, power is supplied and the unit sets into the standby state.
②	<b>Control Panel Unit</b>	Displays instructions and messages on operating the unit.
③	<b>Emergency stop switch</b>	Press this switch only to stop the unit immediately. Press the Stop Key on the collator to stop the unit normally. Turn the switch clockwise to release.
④	<b>Clearance Adjusting Knob</b>	Used to adjust the clearance with the first press roller.
⑤	<b>Top Cover</b>	Cover to ensure safety. Be sure to close the cover before starting operations. Note) Do not fan paper nor perform other jobs on top of this cover during operations when connected to other devices, because operations may stop due to vibration.
⑥	<b>Wire</b>	Paper is stitched with this wire.
⑦	<b>Fixing Bolt</b>	Used to secure the unit and adjust the height of the unit to the peripheral units.
⑧	<b>Power Cord</b>	Connect to a wall outlet.
⑨	<b>Connecting Cable</b>	Signal transmission cable to be connected to the upstream processing device.
⑩	<b>Shutter</b>	Door for inserting the manual handle. Normally use closed. If open, the safety switch operates and the unit will not operate.
⑪	<b>Manual Handle</b>	Used to clean the press roller. Rotates only in the clockwise direction.
⑫	<b>Sub Cover</b>	Cover for use by service personnel. Normally fixed by screws and cannot be opened.
⑬	<b>Stacker Plate</b>	Receives single-folded paper.
⑭	<b>Paper Guide Roller Unit</b>	Guides discharged paper into the stacker section and conveys the paper to the stacker plate on the conveyance belt.
⑮	<b>Belt Stacker Unit</b>	Transmits single-folded paper to the stacker plate using the conveyance belt.
⑯	<b>Guide</b>	Guides unfolded paper to the stacker unit.
⑰	<b>Stacker Unit</b>	Receives unfolded paper.



## 3-2. Internal Parts

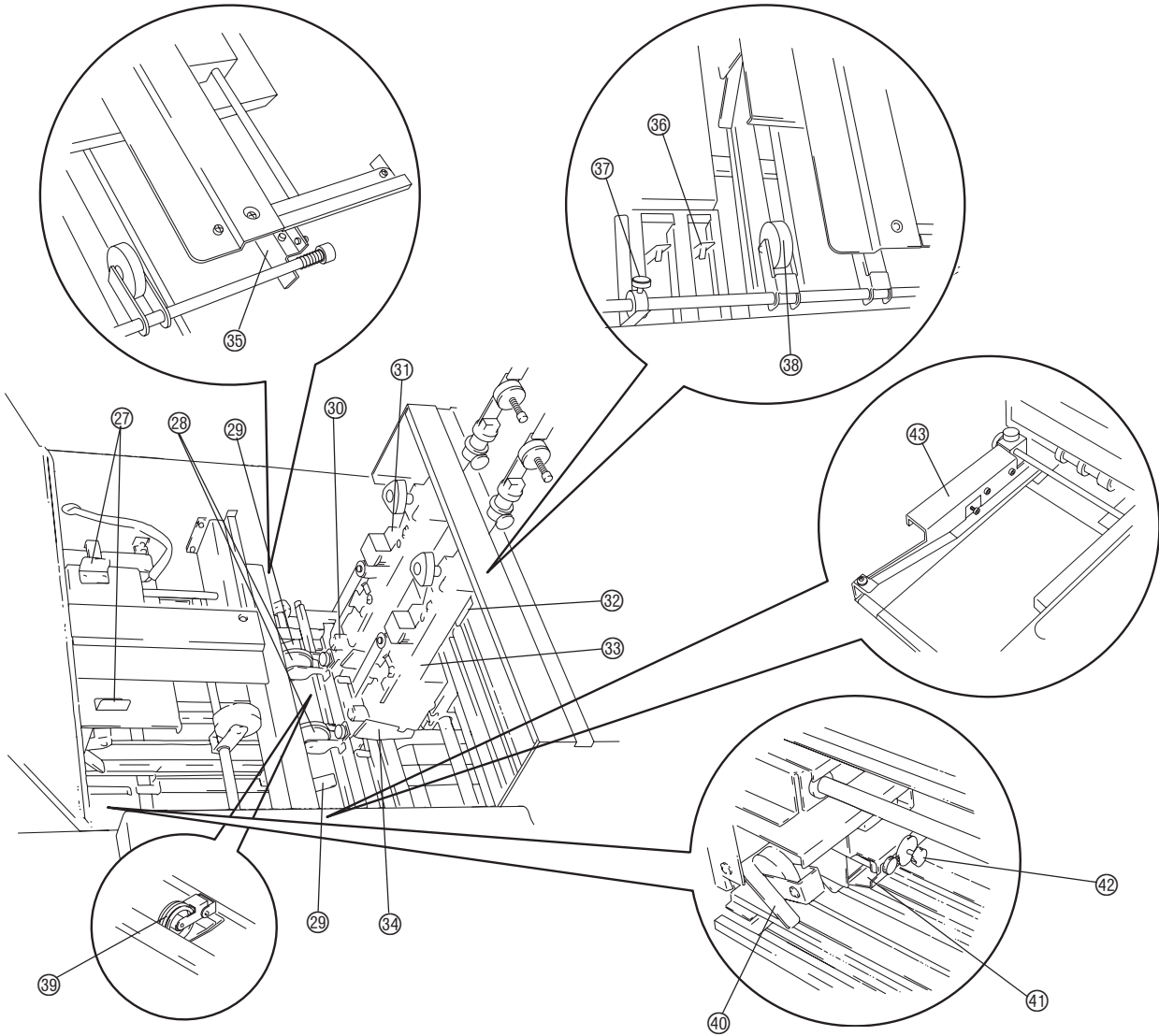
### 1 Entrance Section



No.	Name	Function
⑱	<b>Movable Side Guide</b>	Guides side of the paper when stitching.
⑲	<b>Back Jog</b>	Aligns the tail end of the paper.
⑳	<b>Stitcher Position Warning Label</b>	Displays the relation between the position of the stitcher and folding knife during stitching and folding operations.
㉑	<b>Pointer</b>	Displays the stitching position.
㉒	<b>Paper Discharge Roller Unit</b>	Discharges stitched paper.
㉓	<b>Conveyance Roller Unit</b>	Conveys paper to the stitching stopper via the conveyance belt.
㉔	<b>Head Holder</b>	Holds the stitching head.
㉕	<b>Side Jog Guide</b>	Aligns side of the paper.
㉖	<b>Auxiliary Roller Stay</b>	Conveys conveyance force to the paper.

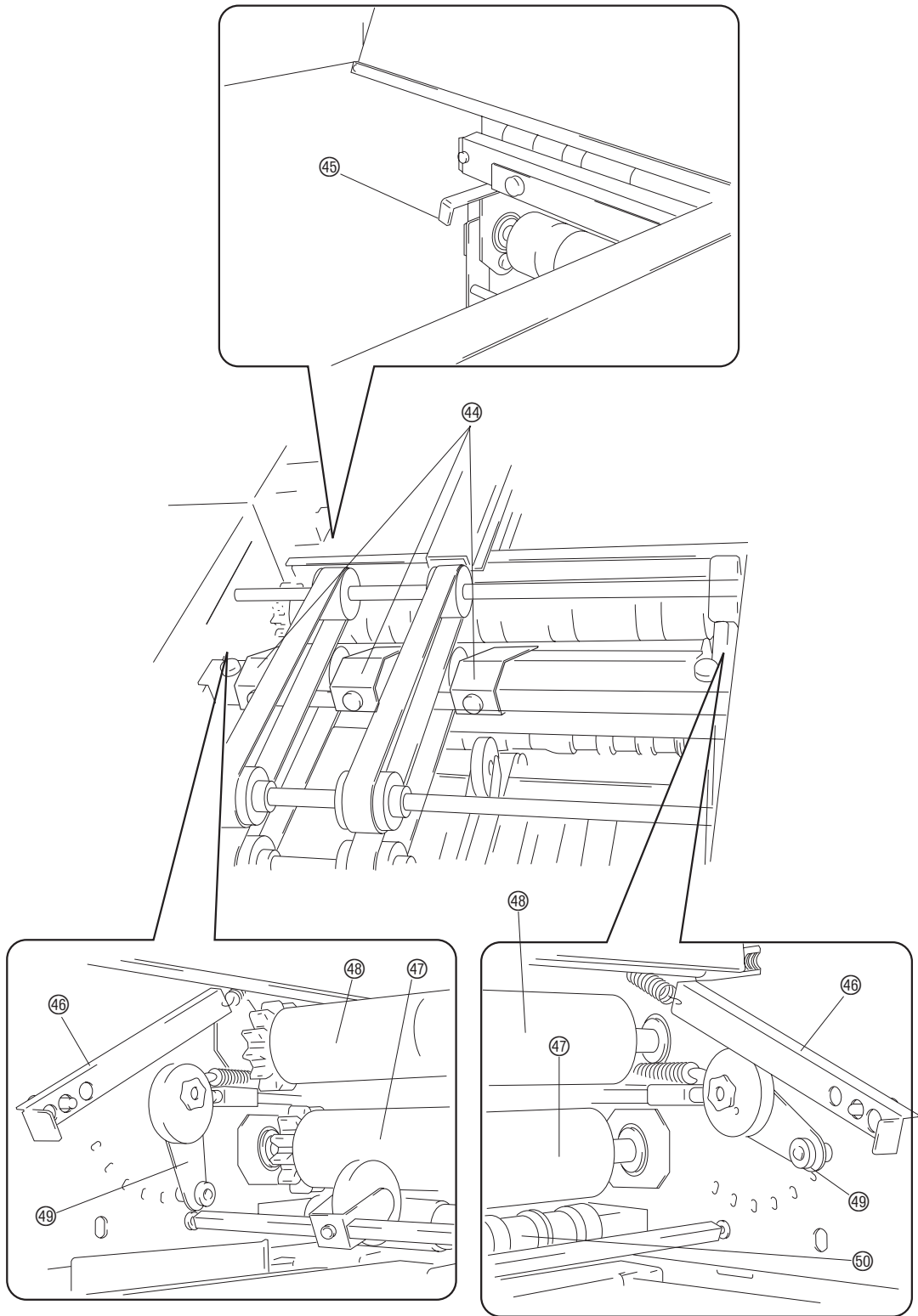
### 3. Names and Functions of the Parts

## 2 Stitching Section



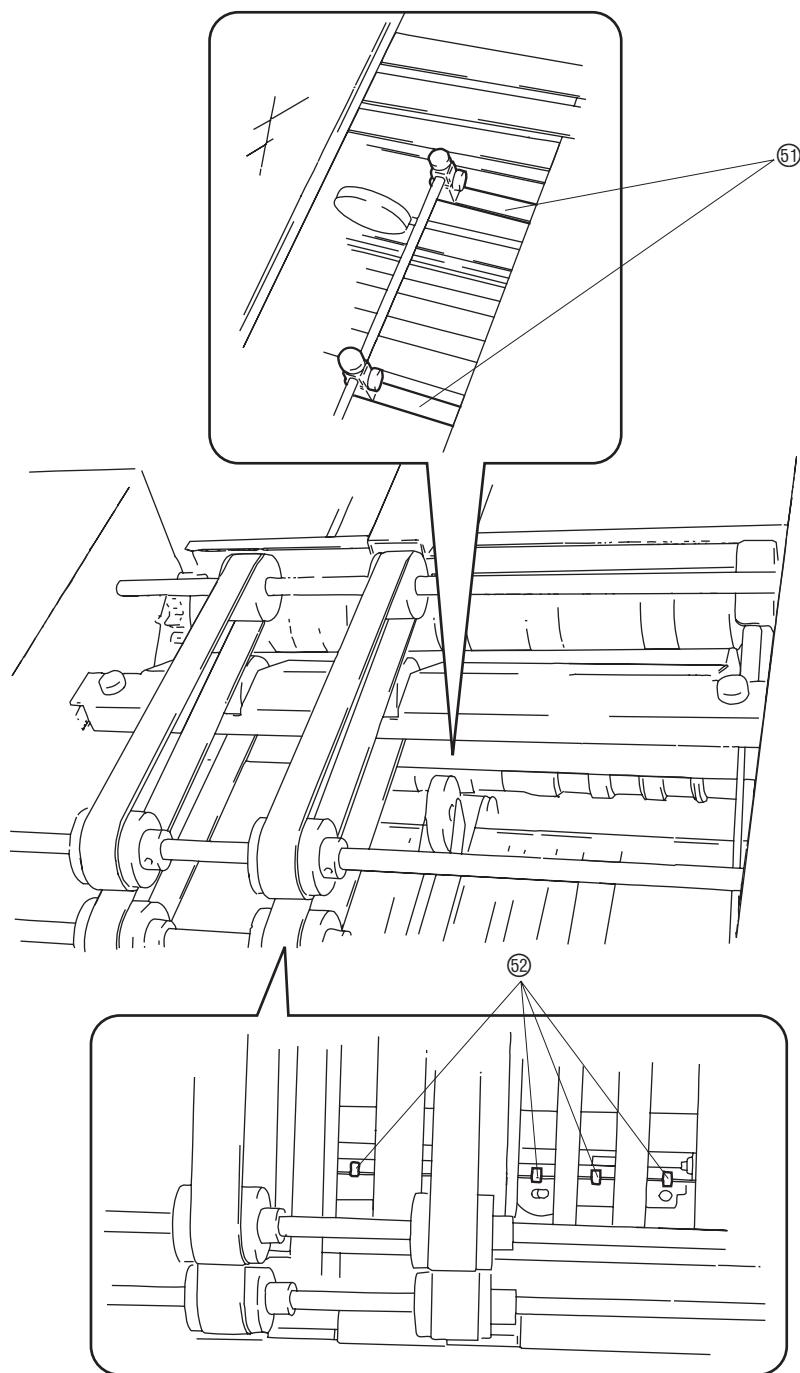
No.	Name	Function
27	<b>Pressure Release Lever</b>	Releases the pressure of the conveyance roller at the R side.
28	<b>Ejection Roller Unit</b>	Discharges stitched paper. Attach and detach the roller at the L side according to the paper width.
29	<b>Paper Guide</b>	Prevents the saddle-stitched paper from curling.
30	<b>Side-Stitching Stopper</b>	Rises to stop the paper during side-stitching.
31	<b>Stitching Head R</b>	Unit which stitches paper.
32	<b>Lever</b>	Lift up the lever and move to the L side when not performing stitching operations.
33	<b>Stitching Head L</b>	Unit which stitches paper.
34	<b>Paper Guide</b>	Prevents the paper from projecting out of the stopper when side-stitching paper.
35	<b>Side Guide</b>	Determines the stopping position before folding paper.
36	<b>Saddle-Stitching Stopper</b>	Rises to stop the paper during saddle-stitching.
37	<b>Paper Guide</b>	Prevents large sized paper from curling.
38	<b>Conveyance Roller Unit</b>	Conveys conveyance force to the paper. Jammed paper can be removed more easily when detached.
39	<b>Upper Guide Unit</b>	Prevents incoming paper from flipping.
40	<b>Back Stopper</b>	Aligns the rear edge position before folding paper.
41	<b>Guide</b>	Used to prevent the tip of the paper from being raised when discharging after stitching.
42	<b>Roller Moving Knob</b>	Moves the roller.
43	<b>Auxiliary Side Guide</b>	Determines the stopping position before folding large paper.

### 3 Folding Section



No.	Name	Function
④④	<b>Guide</b>	Use when the cover is deformed as shown in “9-8. Using the Guide after Folding”.
④⑤	<b>Pressure Release Lever</b>	Releases the pressure of press rollers 2.
④⑥	<b>Lever</b>	Changes and releases the pressure of press rollers 3.
④⑦	<b>Press Rollers 2</b>	Presses the fold line of the paper.
④⑧	<b>Press Rollers 3</b>	Further presses the fold line of the paper.
④⑨	<b>Clearance Adjusting Lever</b>	Adjusts the clearance between press rollers 2.
⑤⑩	<b>Press Rollers 1</b>	Catches the paper lifted up by the folding blade.

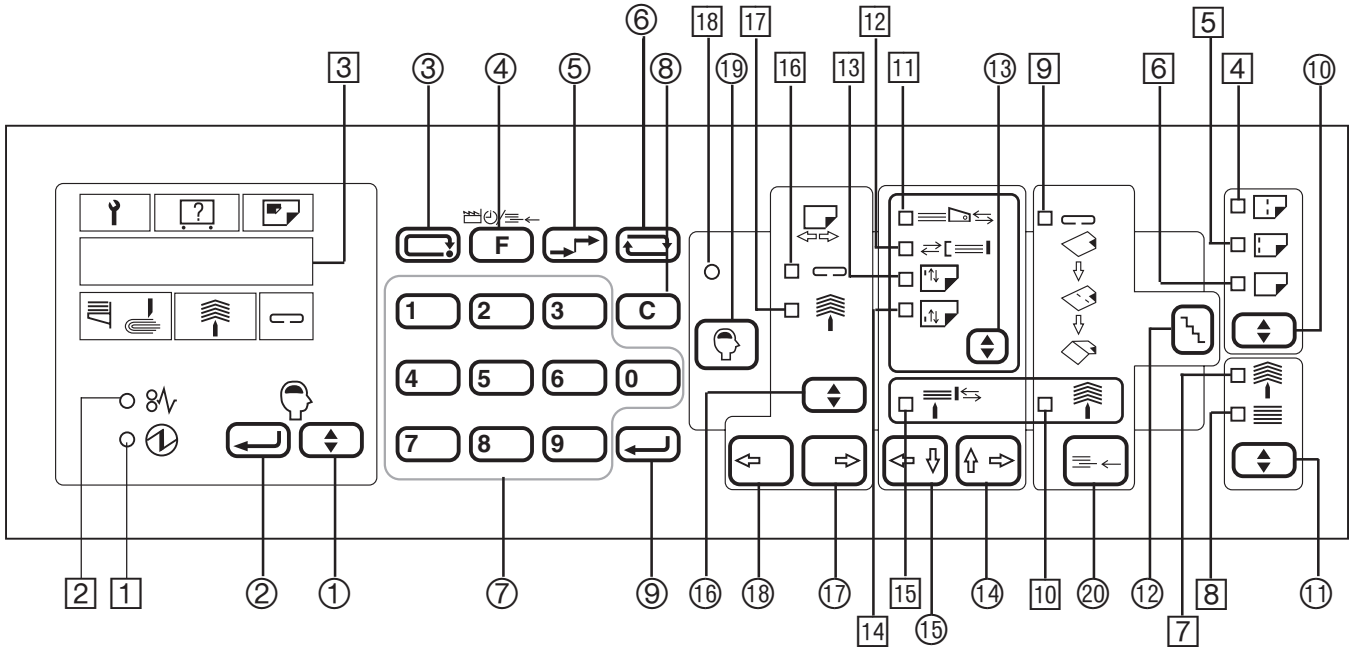
## 4 Folding Stopper Section



No.	Name	Function
⑤①	<b>Paper Guide</b>	Prevents the folded paper from curling.
⑤②	<b>Folding Stopper</b>	Normally, remains lifted to stop the paper. The stopper goes down if not be folded.

## 3-3. Control Panel

### Control Panel



#### Lamps/Displays

- ① ○ ① Power Lamp
- ② ○ ⚡ PAPER JAM Lamp
- ③ LCD
- ④ □ □ Saddle-Stitching Lamp
- ⑤ □ □ Side-Stitching Lamp
- ⑥ □ □ No-Stitching Lamp
- ⑦ □ □ Folding Lamp
- ⑧ □ □ No-Folding Lamp
- ⑨ □ □ Step Mode Stitching Area Lamp
- ⑩ □ □ Step Mode Folding Area Lamp
- ⑪ □ □ Back Jog Lamp
- ⑫ □ □ Side Guide Lamp
- ⑬ □ □ Stitching Head R Lamp
- ⑭ □ □ Stitching Head L Lamp
- ⑮ □ □ Back Stopper Lamp
- ⑯ □ □ Stitching Position Lamp
- ⑰ □ □ Folding Position Lamp
- ⑱ □ □ Input Memory Lamp

#### Operation Keys

- ① □ □ Select Memory Key
- ② □ □ Execute Memory Key
- ③ □ □ Escape Key
- ④ □ □ Function Key
- ⑤ □ □ Shift Key
- ⑥ □ □ Change Key
- ⑦ □ 0 Numerical Keys
- ⑧ □ C Clear Key
- ⑨ □ □ Set Key
- ⑩ □ □ Select Stitch Key
- ⑪ □ □ Select Fold Key
- ⑫ □ □ Step Mode Key
- ⑬ □ □ Select Unit Key
- ⑭ □ □ Move (↑→) Key
- ⑮ □ □ Move (←↓) Key
- ⑯ □ □ Select Parallel Movement Key
- ⑰ □ □ Parallel Movement (→) Key
- ⑱ □ □ Parallel Movement (←) Key
- ⑲ □ □ Input Memory Key
- ⑳ □ □ Jog Key

### 3. Names and Functions of the Parts

#### Names and Functions of Control Panel

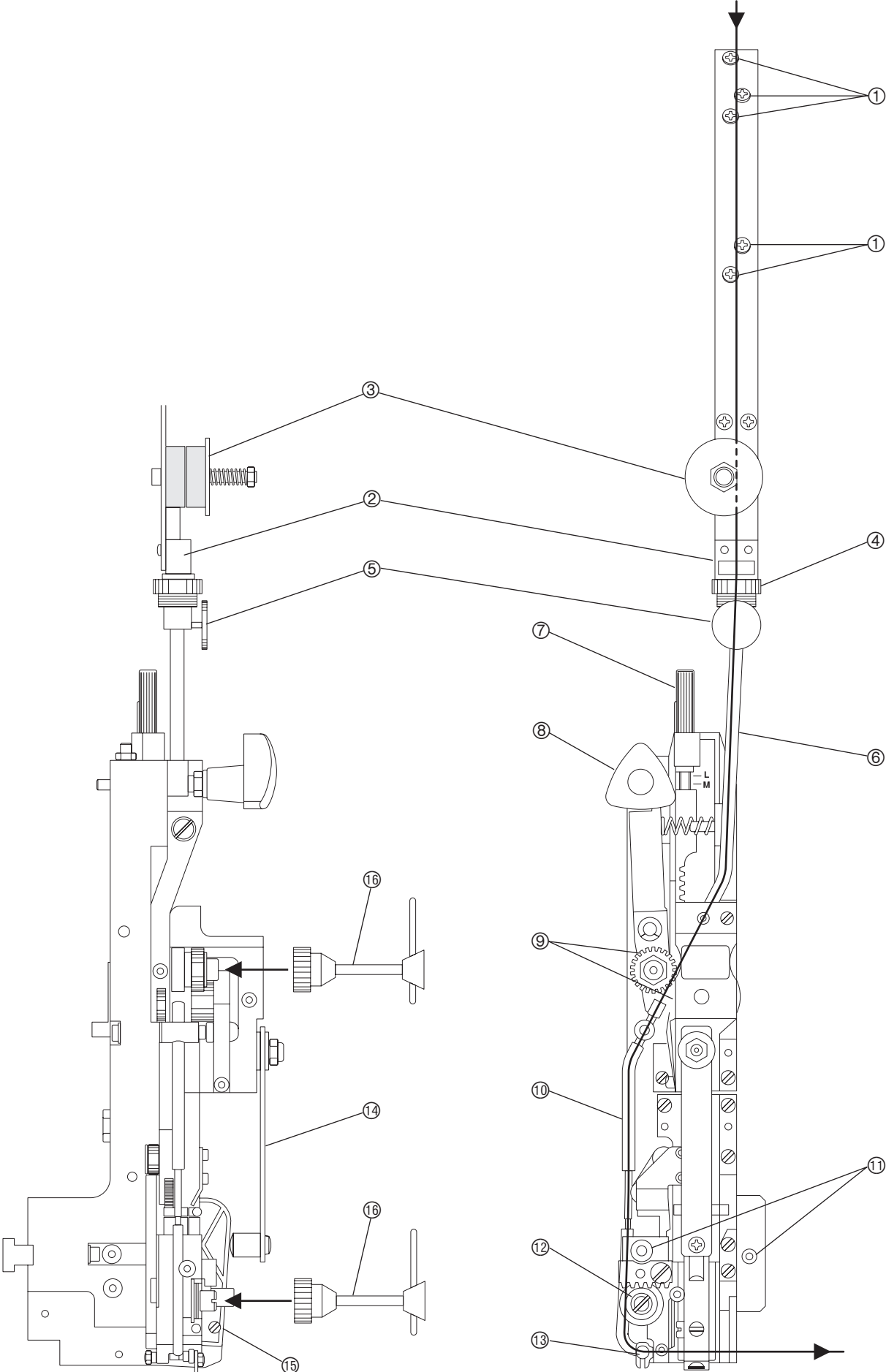
Operation Keys	Display	Function
① Select Memory Key	[1] Power Lamp	Lights up when the power switch is turned on.
	[2] PAPER JAM Lamp	Lights up when paper feeding jam occurs.
	([3] LCD)	Used to select the memory number (paper size).
② Execute Memory Key		Used to set each unit to the size selected by the ① Select Memory Key.
③ Escape Key	([3] LCD)	Used to stop operations while executing function (programs) using the ④ Function Key and ⑥ Change Key or to exit the error state when errors such as JAM, etc. occur.
④ Function Key		Used to set various functions.
⑤ Shift Key		Used to change the functions of each key.
⑥ Change Key	([3] LCD)	Used to change contents selected by the ① Select Memory Key.
⑦ Numerical Keys	([3] LCD)	Used to input numbers such as the paper size, etc.
⑧ Clear Key	([3] LCD)	Used to clear numbers input by the ⑦ Numerical Keys.
⑨ Set Key		Used to set numbers input by the ⑦ Numerical Keys.
⑩ Select Stitch Key	[4] Saddle-Stitching Lamp	Lights up when saddle-stitching has been selected.
	[5] Side-Stitching Lamp	Lights up when side-stitching has been selected.
	[6] No-Stitching Lamp	Lights up when no-stitching has been selected.
⑪ Select Fold Key		Used to select the folding mode.
	[7] Folding Lamp	Lights up when folding has been selected.
	[8] No-Folding Lamp	Lights up when folding has not been selected.

### 3. Names and Functions of the Parts

Operation Keys		Display	Function
⑫ Step Mode Key			Used to finely adjust the size by actually conveying paper.
		⑨ Step Mode Stitching Area Lamp	When blinking, indicates that no paper is conveyed into the stitching area. When lit, indicates that the paper is inside the stitching area, and guides in the area can be finely adjusted.
⑭ ⑮ Move Keys	⑬ Select Unit Key		Used to select the position of ⑪ back jog, ⑫ side guide, ⑬ stitching head R, ⑭ stitching head L.
		⑪ Back Jog Lamp	Enables the back jog to be finely adjusted using the ⑭ Move (↑→) and ⑮ Move (←↓) Keys.
		⑫ Side Guide Lamp	Enables the side guide to be finely adjusted using the ⑭ Move (↑→) and ⑮ Move (←↓) Keys.
		⑬ Stitching Head R Lamp	Enables the stitching head R to be finely adjusted using the ⑭ Move (↑→) and ⑮ Move (←↓) Keys.
		⑭ Stitching Head L Lamp	Enables the stitching head L to be finely adjusted using the ⑭ Move (↑→) and ⑮ Move (←↓) Keys.
		⑩ Step Mode Folding Area Lamp	Enables the back stopper to be finely adjusted when the paper is inside the folding area.
		⑮ Back Stopper Lamp	Enables the back stopper to be finely adjusted using the ⑭ Move (↑→) and ⑮ Move (←↓) Keys.
⑯ Select Parallel Movement Key	⑰ ⑱ Parallel Movement Keys		Used to finely adjust the stitching and folding positions.
		⑯ Stitching position Lamp	Enables the stitch stopper and back jog to be moved simultaneously in the direction of the ⑰ Parallel Movement (→) Key or ⑱ Parallel Movement (←) Key, and to be finely adjusted.
		⑰ Folding position Lamp	Enables the folding stopper and back stopper to be moved simultaneously in the direction of the ⑰ Parallel Movement (→) Key or ⑱ Parallel Movement (←) Key, and to be finely adjusted.
⑲ Input Memory Key		⑱ Input Memory Lamp	While the ⑱ Input Memory Lamp is lit, enables the data changed using the ⑭ and ⑮ Move Keys and ⑰ and ⑱ Parallel Movement Keys to be memorized.
⑳ Jog Key			While the ⑨ Step Mode Stitching Area Lamp is lit, each time it is pressed, the jog will move. When pressed while off, the conveyance belt and conveyance roller will move.

# 4. Stitching Head

## 4-1. Names and Functions of Parts





No.	Name	Function
①	<b>Wire Guide Pin</b>	Guides the wire.
②	<b>Wire Return Stopper Unit</b>	Prevents the wire supplied from being pulled back.
③	<b>Felt</b>	Cleans the wire surface and lubricates slightly.
④	<b>Wire Return Stopper</b>	Used to remove the wire.
⑤	<b>Fixing Knob</b>	Fixed the wire guide to the ⑥ upper wire tube.
⑥	<b>Upper Wire Tube</b>	Path of wire.
⑦	<b>Wire Length Adjusting Knob</b>	Used to adjust the wire length.
⑧	<b>Triangular Knob</b>	Used to switch whether to stitch or not.
⑨	<b>Feed Wheel</b>	Rotating it with the adjusting handle feeds the wire. Used to feed the wire to the ⑩ lower wire tube.
⑩	<b>Lower Wire Tube</b>	Path of wire.
⑪	<b>Cap Screw</b>	Secure the stitching head to the head holder using the cap screw (0.16 inch across).
⑫	<b>Bolt</b>	Adjusts the left and right bending and length of the wire when the adjusting handle is inserted into the head of this bolt.
⑬	<b>Wire Straightener</b>	Straightens the wire.
⑭	<b>Leaf Spring</b>	Holds the ⑮ former.
⑮	<b>Former</b>	Holds the wire horizontally and forms a C shape.
⑯	<b>Adjusting Handle</b>	Used to adjust the balance of leg length. (Provided with the unit.)

## 4-2. Wire

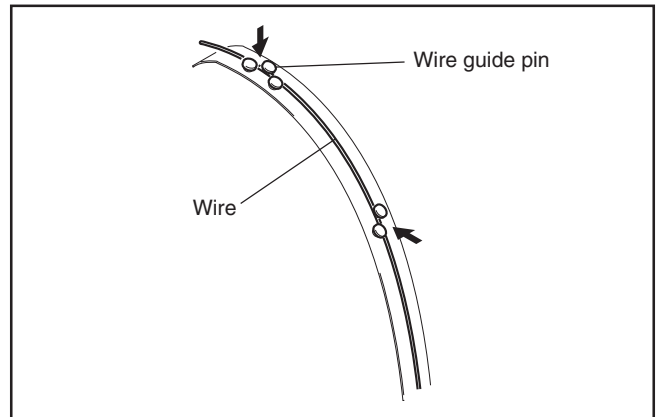
- American wires: No. 25 to 28
- European wires: No. 26 to 30

The wire diameter corresponding to these numbers will differ according to the region.

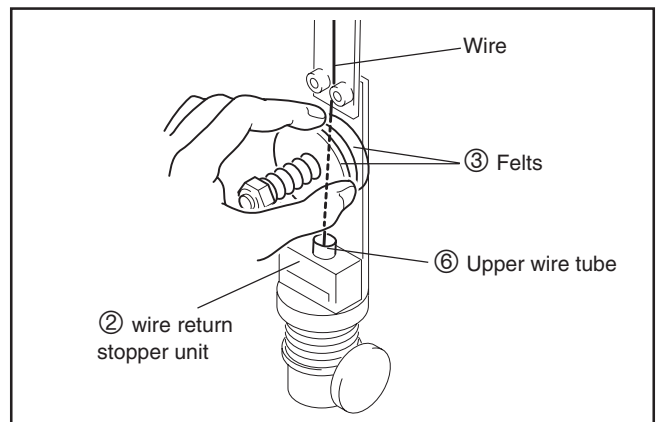
Wire diameters from 0.020 inch to 0.014 inch can be used, but use of the 0.020 inch wire is recommended for stable stitching.

## 4-3. Setting the Wire

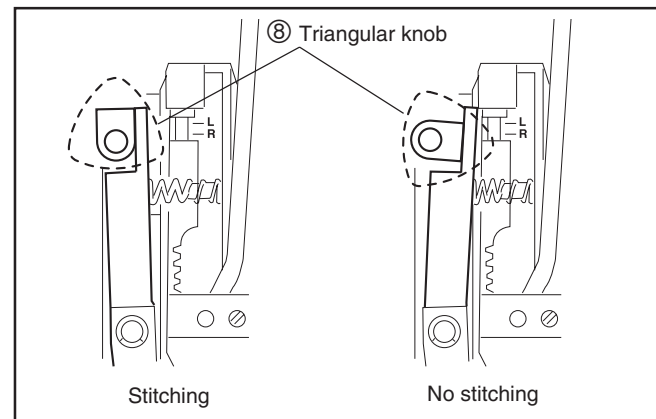
1. Pass the wire between the ① wire guide pins.



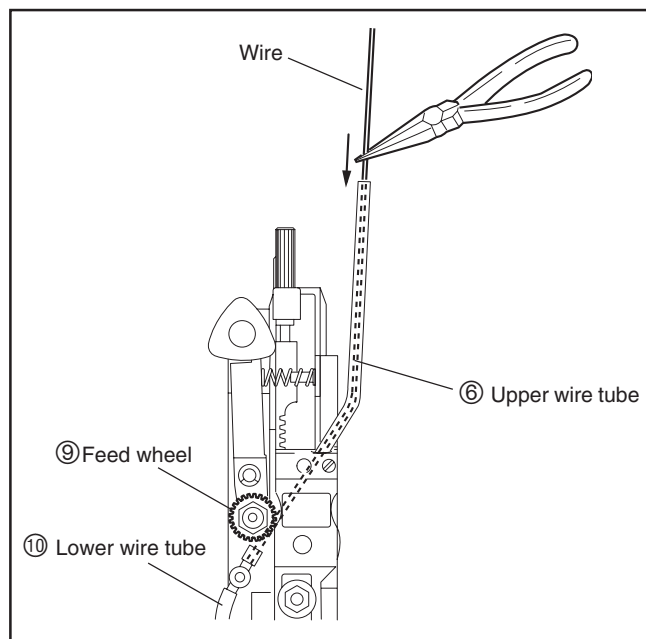
2. Pass the wire through the two ③ felts and through the ② wire return stopper unit.



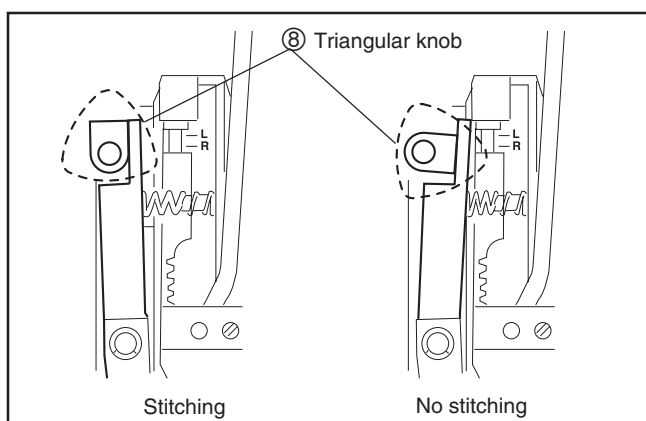
3. Set the ⑧ Triangular knob at the no stitching position, insert the wire into the tip of the ⑥ Upper wire tube. Make sure the wire is not deformed.



4. Insert the wire from the ② Upper wire tube, and feed it gently inside using the pliers provided until the tip of the wire reaches the ⑩ Lower wire tube. Make sure the wire is not deformed.



5. Set the ⑧ Triangular knob at the stitching position.



6. Press the ⑯ Adjusting handle against the head of the ⑨ Feed wheel and rotate it clockwise, and feed the wire out. Rotate the adjusting handle twice.

**Note**

If the wire is bent, it will not go into the ⑩ lower wire tube and will jam. Pull out the wire, cut off the bent part, and set again.



## 4-4. How to Stitch Tests

- 1 Turn on the power.
- 2 Select memory 2, set each unit to Letter Saddle Stitching and Folding. For details of operations, refer to “6-2. Saddle-stitching Double Letter and Letter Paper” and “9. Binding”.

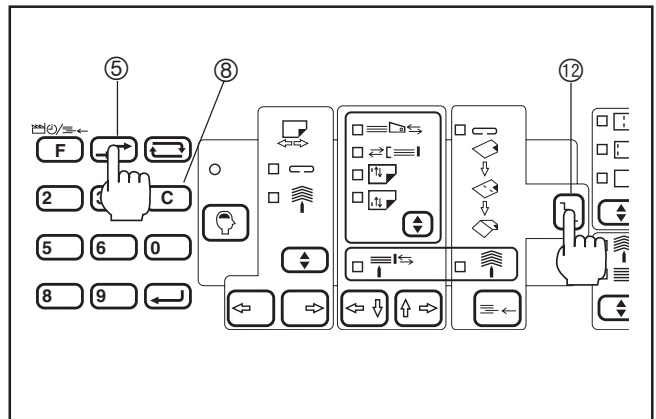
### Note

Remove the auxiliary roller stay before carrying out the operations.

- 3 Press the ⑫ Step Mode Key twice. The driving system such as the conveyance belt will start operating.
- 4 Slide few sheets of Letter paper manually.
- 5 The paper will stop at the Letter saddle-stitching position.
- 6 Press the ⑫ Step mode Key once to jog paper.
- 7 While pressing the ⑤ Shift Key, press the ⑫ Step Mode Key. The paper will move 0.4 inch, and is stitched once. This operation can be carried out six times. (Without using the ⑤ Shift Key).
- 8 After completing the operation, remove the paper.
- 9 The stitch test mode ends when the ⑧ Clear Key is pressed.

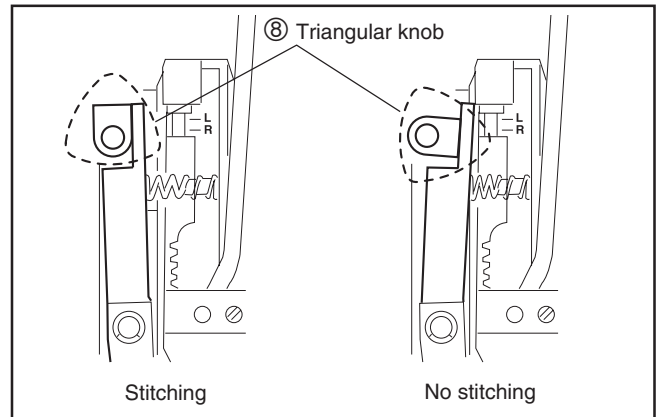
### Note

- If the wire is bent, it will not go into the ⑮ former but may jam instead. In this case, adjust the ⑬ wire straightener. (Refer to 4-6. 3. Straightening the wire.)
- Carry out stitching several times and check the stitches and wire sent.
- If problems are seen, check if the wire is set properly.

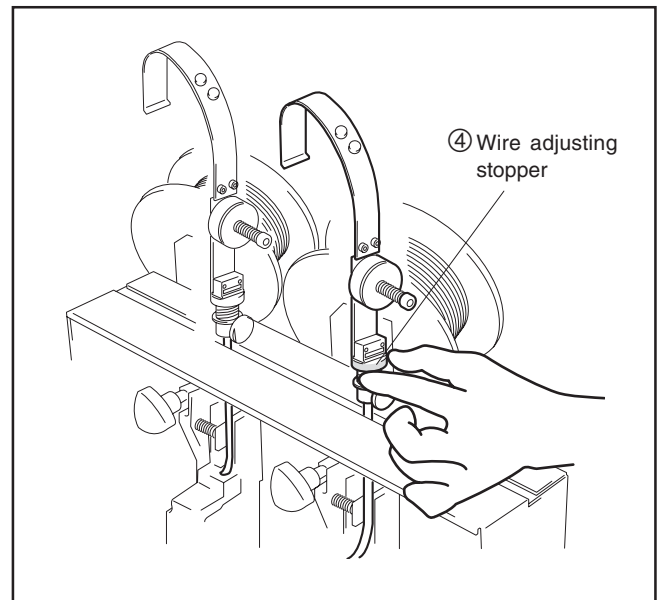


## 4-5. Removing Wires

1. Rotate the ⑧ triangular knob to the “no stitching” position.



2. Pull out the wire upwards while pressing down the ④ wire adjusting stopper.
3. Return the ⑧ triangular knob to the stitching position.

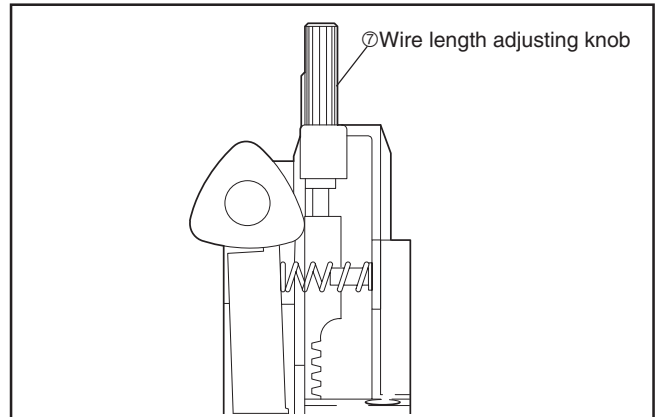


## 4-6. Adjusting Parts

### 1. Adjusting the wire length

Adjust the length of the wire after cutting it according to the thickness of the stitched paper.

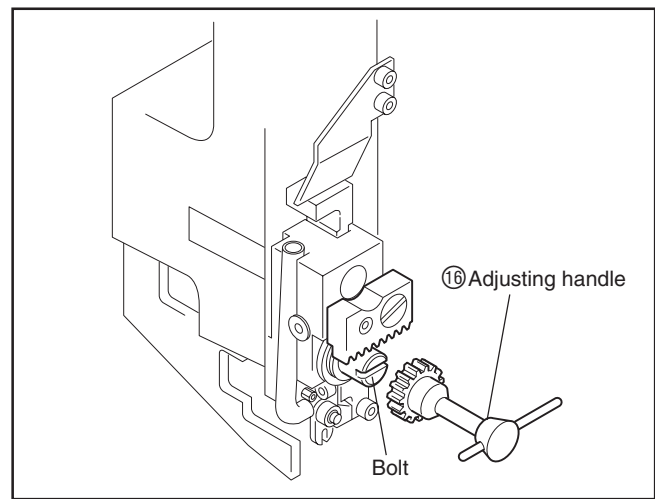
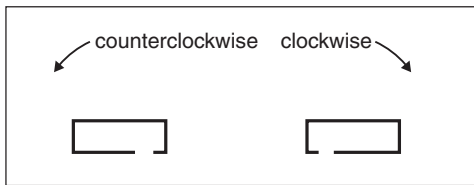
- Rotating the ⑦ wire length adjusting knob clockwise increases the wire length.
- Rotating counterclockwise decreases the wire length.
- The length of the wire changes by 0.064 inch with each rotation.



### 2. Adjusting the wire leg length

- After setting the wire length, adjust so that the bent legs of the wire are equal.
- Put the ⑩ Adjusting handle on the ⑫ Bolt to rotate.

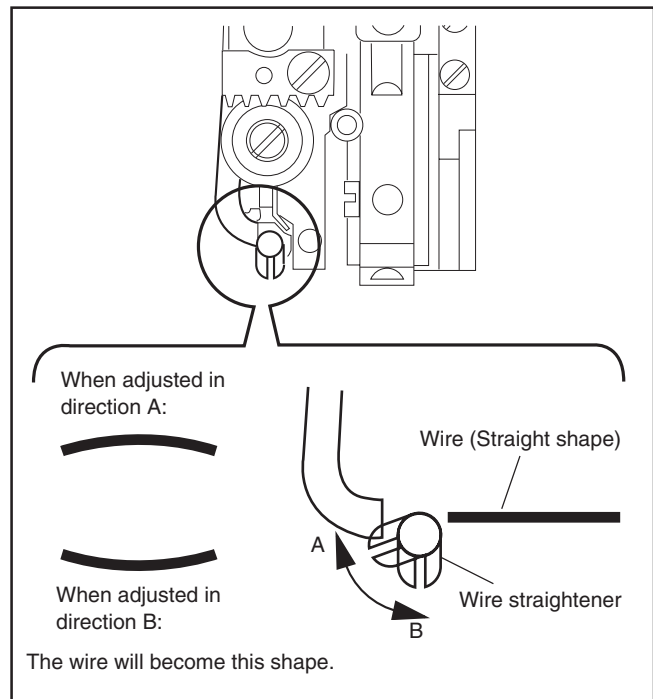
- Rotating clockwise makes right leg longer.
- Rotating counterclockwise makes left leg longer.



### 3. Straightening the wire

- Straighten the wire for better stitching.

The straightener is factory set. Adjustments are required when using wires other than those specified.

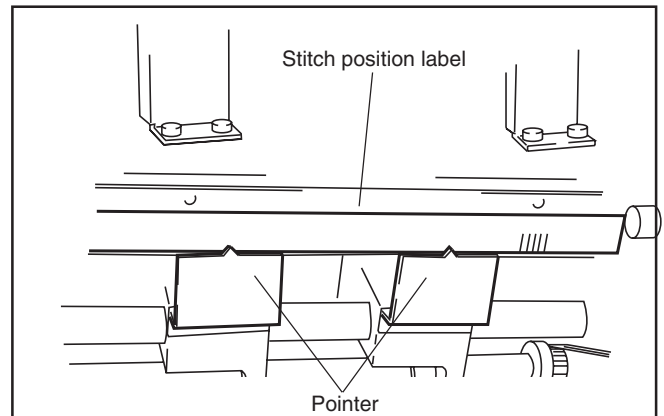


# 5. Stitching Range

## Stitching Position

### Saddle-Stitching

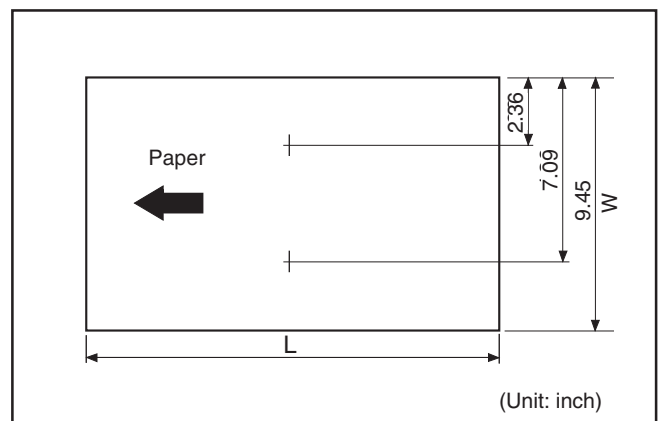
- Stitches at the measurement shown by the pointer.
- The number of stitches can be selected between one and two.



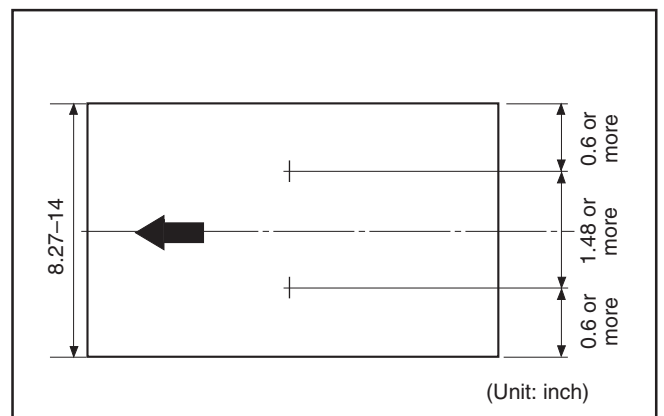
- Refer to 16. Specifications for the length and width.

The standard stitching position is as below:  
When the width (W) is between 8.27 inch and 14 inch: 1:2:1

For example, when the width (W) is 9.45 inch, stitch at the positions of 2.36 inch and 7.09 inch from the paper edge.



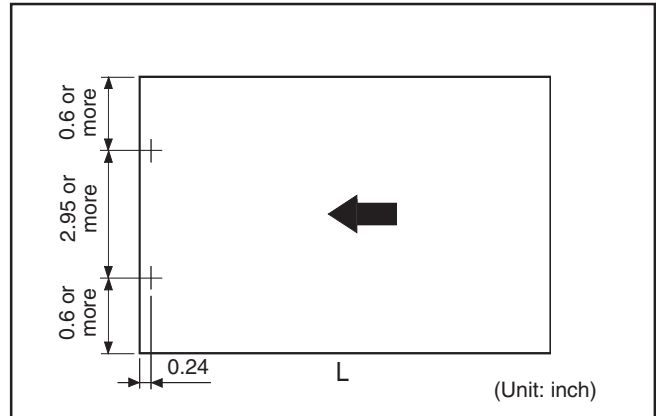
- The paper cannot be stitched within 0.6 inch from the edge of the paper.
- The distance between two stitches must be over 2.95 inch.



## 5. Stitching Range

### Side Stitching

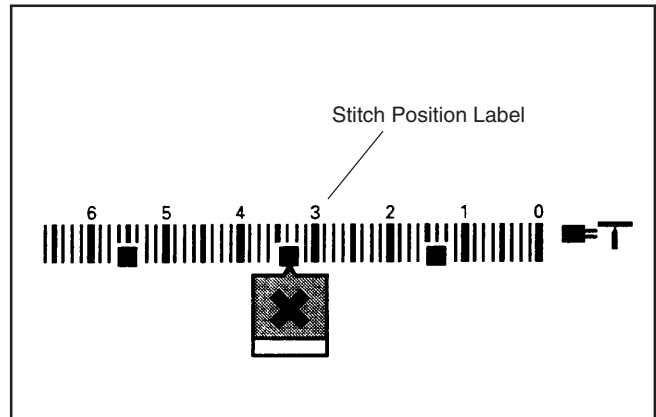
- Stitches 0.24 inch from the edge of the paper.
- The stitches along the width are the same as saddle-stitching.



### Note

When selecting saddle-stitching and folding, do not stitch at the ■ marked position. (8 positions)

When stitching at positions other than the center along the length of the paper, refer to 8. Numerically Inputting the Paper Size.



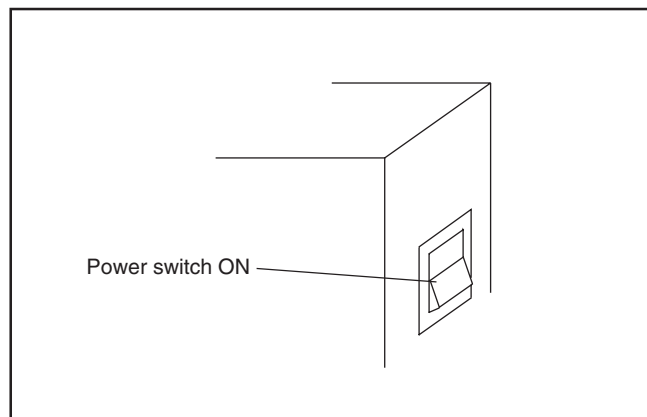


# 6. Stitching Normal Size Paper

## 6-1. Before Starting

**Do not align paper nor perform other operations on the top cover during operations connected to other devices as operations may stop due to vibrations.**

**Turn on the power switch of the unit.**



### Read before use

- The DBM-400 Sheet by Sheet (SxS) is a sheet-by-sheet version of the DBM-400. Note that because the specifications of the DBM-400 SxS differ from those of the DBM-400, it is recommended that you read 16. Specifications (P.70) before use. Also note that the DBM-400 SxS is not fully automatic, and that when changing paper sizes or the number of sheets per set it is accordingly necessary to manually move the wheels above the belt stacker, to move the auxiliary side guides underneath the folder, to adjust the spacing of the folder roller, to remove and attach the auxiliary roller stays, to adjust the paper guides, and to adjust the paper guides above the folder stopper.

Always be sure to remember the following points when executing individual procedures.

### 6-1-1 Points to remember when changing the paper size or number of sheets per set

Be sure to remember the following points when changing the paper size:

It is impossible to input paper sizes on the DBM-400 SxS when attached to the DB-10C. (The size, however, will be displayed.) The paper size must be input on the DB-10C. For this reason, Select memory key ① and Execute memory key ② are disabled on the DBM-400 SxS.


When the power to the DB-10C is turned off, however, it is possible to input paper sizes or to change the paper size using the DBM-400 SxS control panel.

The procedures described in this manual for entering or changing paper sizes are the procedures intended for use when the DBM-400 SxS is not connected to the DB-10C.


The Escape key, Step key, and other keys remain enabled when the DBM-400 SxS is connected to the DB-10C.

- \* After changing the paper size, always be sure to check the points described on the following page before beginning paper feeding.


### 1. Removing and attaching the auxiliary roller stays

- There are three locations on the DBM-400 SxS where auxiliary roller stays may be attached. (For further information, see 9-1: Using the auxiliary roller stays.)  
When you wish to change the paper size, the paper size cannot be changed unless the auxiliary roller stays are removed. (Note that this must be done in order to prevent interference between the auxiliary roller stays and the moving unit.)  
When changing the paper size, always be sure to remove the auxiliary roller stays. When the paper size has been changed, follow the instructions given in 9-1: Auxiliary roller stays, to place the stays back into their proper position.
- \* Changing the paper size with the auxiliary roller stays attached does not display this error message on the DBM-400 SxS. Instead, it will be displayed on the DB-10C. To clear the error condition, press the DBM-400 SxS Escape key  and then change the paper size again.

### 2. Adjusting the auxiliary side guides underneath the folder

- When changing the paper size, check the position of the auxiliary side guides  to make sure that the width is greater than the paper width. If the width between the side guides is less than the paper width, the paper will come into contact with the guides and it will become impossible to feed the paper.  
(For further information, see 9-7: Using the folding guides.)

### 3. Changing the position of the wheel units on the belt stacker

- When changing the paper size, make sure that the paper guide roller unit  on the belt stacker is located in a proper position with respect to the paper length.  
If it is not located in the proper position, paper will not be ejected, and cause a paper jam. Error 08 will then be displayed.  
(For further information, see 9-10: Using the belt stacker unit.)

### 4. Adjusting the spacing of the folder rollers

- When changing the number of sheets per set, paper jams may occur in the roller unit if the spacing between the rollers in the folder unit is not correct.  
When changing the number of sheets per set, always make sure that both of the spaces between the first folding rollers and second folding rollers are correct, respectively.  
(For further information, see 9-9: Using the press rollers.)

5. Adjusting the 29 paper guides and the 37 paper guides

- When the number of sheets per set is changed, there may be times when paper fails to be fed to the stopper or, when paper runs over the stopper if the height of the paper guides is not adjusted correctly. Make sure that the paper guides have been adjusted to the correct height. (For further information, see 9-4: Using the paper guides.)

6-1-2 Points to remember when using step mode

When adjusting in step mode, be sure to load the full number of sheets per set.

6-1-3 Action to be taken when paper is not aligned well

If paper is not aligned well, perform the following steps to correct the problem.

1 Turning subset off

The number of sheets to be stored in the buffer for each set is usually entered on the DB-10C, and the number of jog repetitions per set is determined from the time allocated to that number of sheets.

When paper is not aligned well in the saddle-stitching folding stopper section, release the subset setting using the dip switch of the DB-10C.

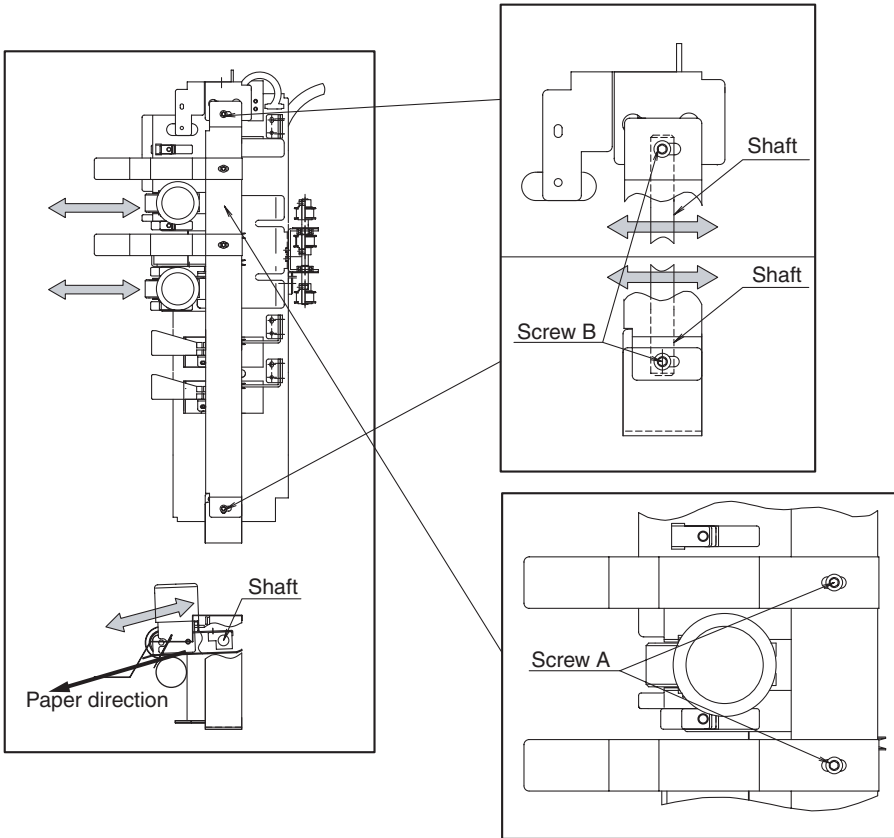
After the mode has been changed, the input values of the first three (or more) sheets in the set will be stored in the buffer, and all the other sheets will be fed through the DB-10C and then stacked in the DBM-400 SxS.

2 Changing the position of the Back Jog auxiliary rollers

The position of the rollers located above the rubber feed rollers in the back jogger unit may be changed back and forth as shown in the diagrams below to change the angle at which paper is fed. Note that the position should be changed according to how paper is fed from between rollers.

Note that the paper guides may be removed or attached by unscrewing the screw A as required when using extra-thin paper.

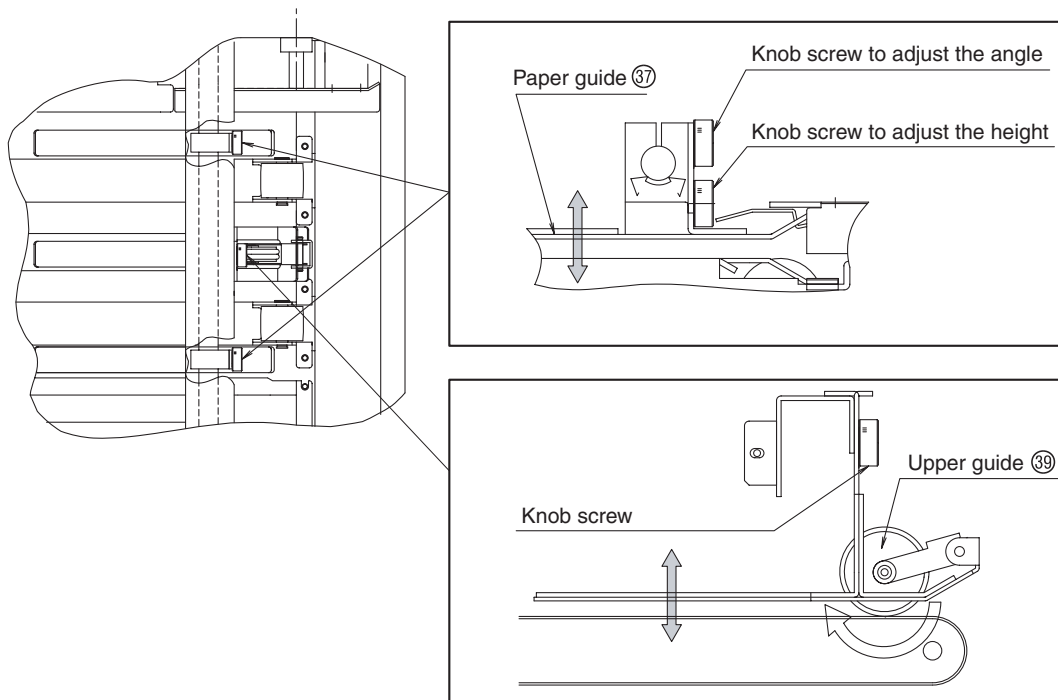
Loosen the screw B in few turns, and adjust the position of the auxiliary rollers.



## 6. Stitching Normal Size Paper

### ③ Checking paper guides

- When performing saddle stitching and folding, the angle and the height of the paper guide ⑳ should be adjusted if sheets fail to reach the stitching stopper. (If the paper guide presses down the paper too heavily, it will become difficult for paper to reach the stopper and the alignment of paper will be poorer.)
- When performing saddle stitching and folding, if sheets bounce back from the stitching stopper, make sure that the upper guide ㉑ touches lightly and paper is fed properly. (If paper bounces back, the alignment will become worse.)
- Loosen the knob screw to adjust the height of the upper guide ㉑.



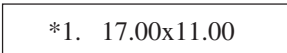
6-1-4 Points to remember when paper runs over the saddle stitching stopper

- Function mode may be used to change the timing at which the stitching stopper rises. Changing this timing makes it possible to relieve problems which would otherwise occur when the stitching stopper fails to rise properly. (For further information, see Item 2 of 10 : Using Function Keys. (P.59))

When the power is turned on, a buzzer sounds, and the following is displayed on the LCD.

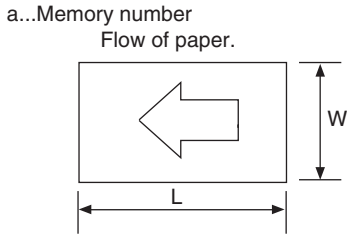
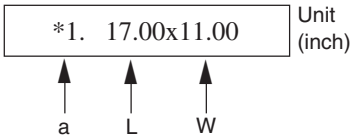
Note

Next, the memory number just before the power is turned off is displayed as shown below. If an error message is displayed, check the details of the error.



(Example : When the memory number is 1)

The meaning of the display is as follows.



This unit is provided with eight different paper processing memory patterns. Memories 1 to 3 are input with the normal paper sizes while memories 4 to 8 are for the users to memorise. Memories 4 to 8 are input with paper size 17 inch 11 inch beforehand.

- \*1. 17.00 x 11.00
- \*2. 11.00 x 08.50
- \*3. 08.50 x 11.00
- \*4. 17.00 x 11.00
- \*5. 17.00 x 11.00
- \*6. 17.00 x 11.00
- \*7. 17.00 x 11.00
- \*8. 17.00 x 11.00

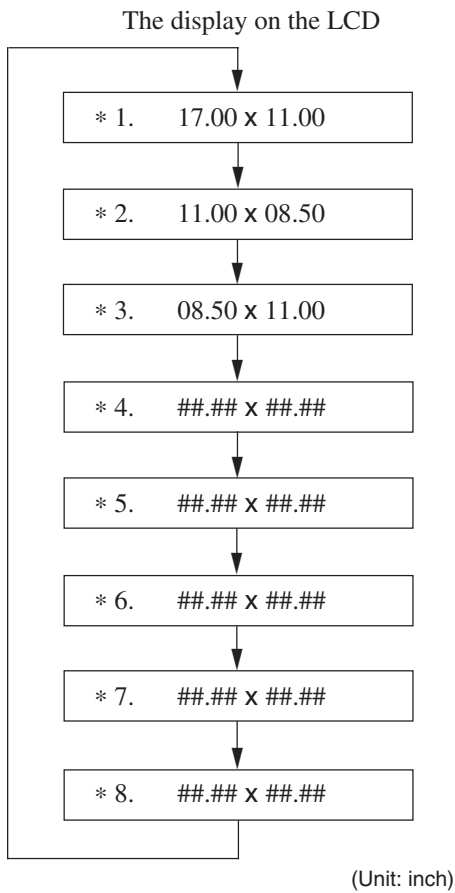
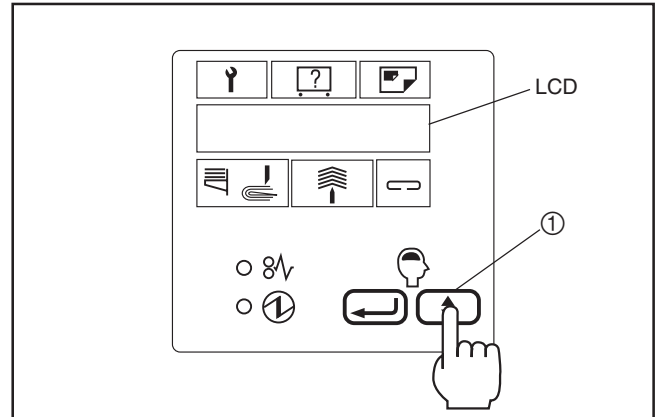
Note

Memories 1 to 8 can be changed. (overwritten)

## 6. Stitching Normal Size Paper

### Selecting the memory number

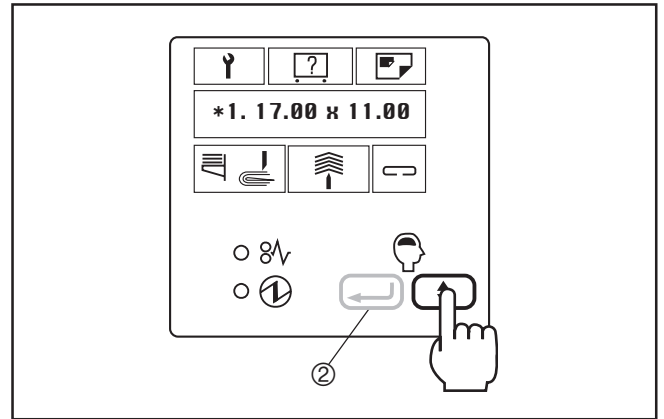
- 1) • Each time the ① Select Memory Key is pressed, the display on the LCD scrolls as follows.
- 2) • When the ① Select Memory Key is pressed while pressing the ⑤ Shift Key, the display scrolls in the reverse.
- As the display scrolls, the LED on the control panel displays the processing type (stitching/folding).
- ⑦ Numerical Keys 1 to 8 correspond to memory numbers 1 to 8. They can be used directly to select the desired memory after pressing the ① Select Memory Key.
- While selecting the memory number, the LCD will blink.
- To cancel selection, press the ③ Escape Key.



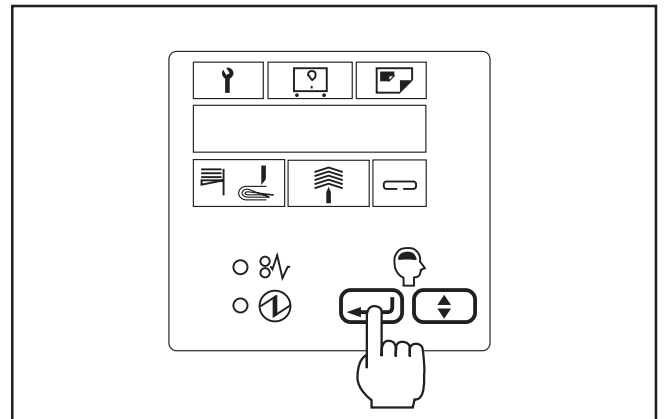
## 6-2. Saddle-Stitching Double Letter and Letter Paper

### Saddle-stitching Double Letter Paper

- 1) • Set the LCD to [\*1. 17.00 x 11.00] according to the previous chapter "Selecting the Memory Number". (The LCD blinks.)



- 2) • When the ② Execute Memory Key is pressed, the guides move.



- 3) • When they stop moving, the LCD stops blinking and lights up, and a buzzer sounds.
- 4) • To perform fine adjustments, refer to "6-4. Fine Adjustment in Step Mode".

#### Note

The standard stitching position is at the 11 inch width of the paper [1:2:1].

### Stitching Letter Paper

- 1) • Set the LCD to [\*2. 11.00 x 08.50] according to the previous chapter "Selecting the Memory Number". (The LCD blinks.)
- 2) • When the ② Execute Memory Key is pressed, the guides move.
- 3) • When they stop moving, the LCD stops blinking and lights up, and a buzzer sounds.
- 4) • To perform fine adjustments, refer to "6-4. Fine Adjustment in Step Mode".

#### Note

The standard stitching position is at the 8.5 inch width of the paper [1:2:1].

### 6-3. Side-Stitching Letter Paper (No Folding)

- 1) • Set the LCD to [\*3. 08.50 x 11.00] according to the previous chapter "Selecting the Memory Number".  
(The LCD blinks.)
- 2) • When the ② Execute Memory Key is pressed, the guides move.
- 3) • When they stop moving, the LCD stops blinking and lights up, and a buzzer sounds.
- 4) • To perform fine adjustments, refer to "6-4. Fine Adjustment in Step Mode".

#### Note

The standard stitching position is at the 11 inch width of the paper [1:2:1].

### 6-4. Fine Adjustment in Step Mode

- When using step mode, always be sure to set the number of copies to '1' on the printer.
- 1) • Press the ⑫ Step Mode Key while the unit is stopping.  
(The ⑨ Step Mode Stitching Area Lamp blinks green.)
  - 2) • Input one set in the upstream unit, and press the start button of the upstream unit. For details, refer to the Instruction Manual of the upstream unit.
- This unit will start operating when the upstream unit starts.

When one set of paper ejected from the upstream unit is conveyed to the stitching stopper, the ⑨ Step Mode Stitching Area Lamp will light up, and at the same time, the side jogger and back jogger will start jogging. Wait for jogging to complete. After jogging completes, the back jogger, side guide, stitching heads R and L can be moved separately.

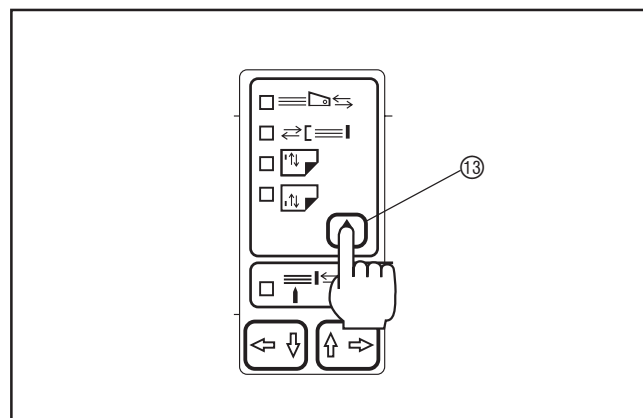
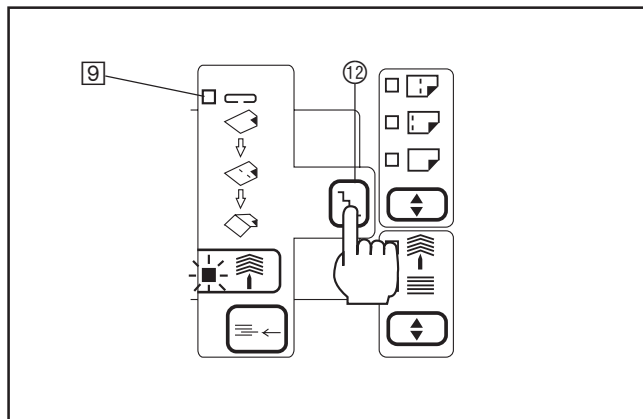
#### Note

Do not input the number of set more than 2 sets.

- 3) • Select the unit to be fine adjusted using the ⑬ Select Unit Key.

#### Note

The LED of the unit selected lights up.





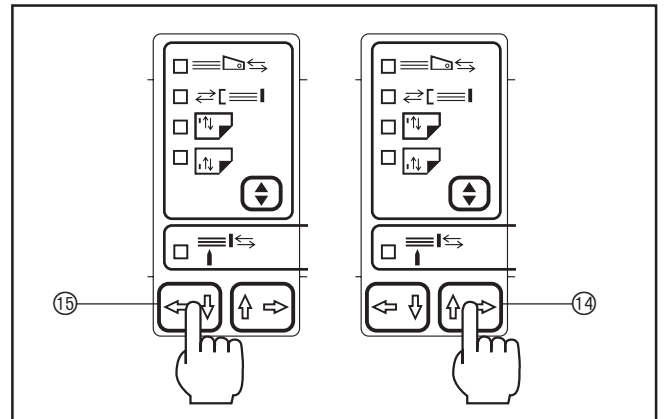
- 4) • The unit selected at 3) will move by 0.004 inch each time the ⑭ Move (↑ →) Key or the ⑮ Move (← ↓) Key is pressed. It will move by 0.04 inch each time the ⑭ Move (↑ →) Key or the ⑮ Move (← ↓) Key is pressed while pressing the ⑤ Shift Key.

**Note**

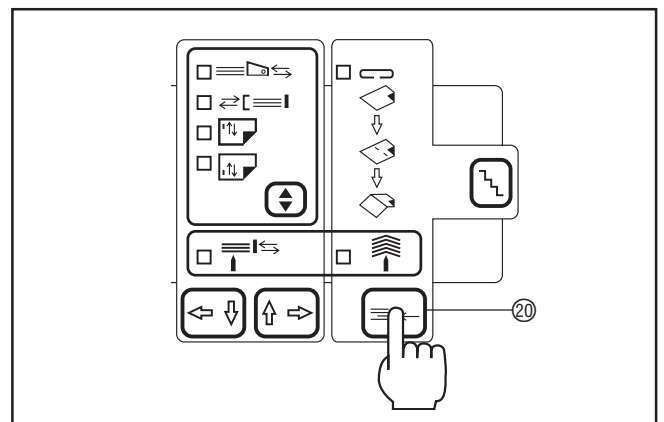
When setting the guides, move them out completely, and then move them inwards again.

**Precautions on fine adjustments**

Move the side guide carefully when the back jogger is raised. The side guide may be damaged if it touches the back jogger.

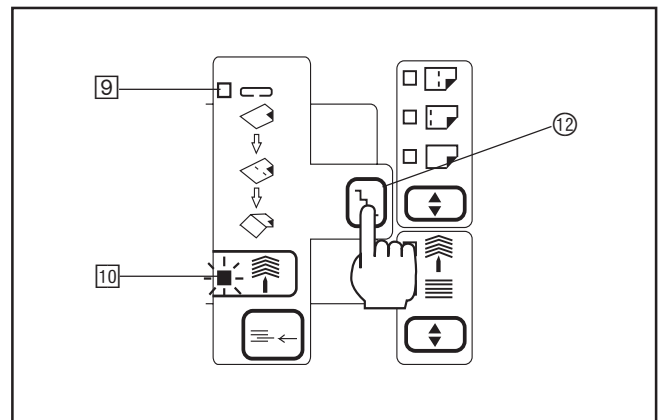


- 5) • Press the ⑳ Jog Key to align the paper, and check if the stitching area has been adjusted finely.  
• To carry out fine adjustments again, perform steps 3) to 5).



- 6) • After completing fine adjustments in the stitch area, press the ⑫ Step Mode Key again.

- After stitching, the paper will be conveyed to the folding stopper.
- When conveyed to the folding stopper, the ⑨ Step Mode Stitching Area Lamp will go off and the ⑩ Step Mode Folding Area Lamp and the ⑮ Back Stopper Lamp will light up together, and the back stopper will start operating.

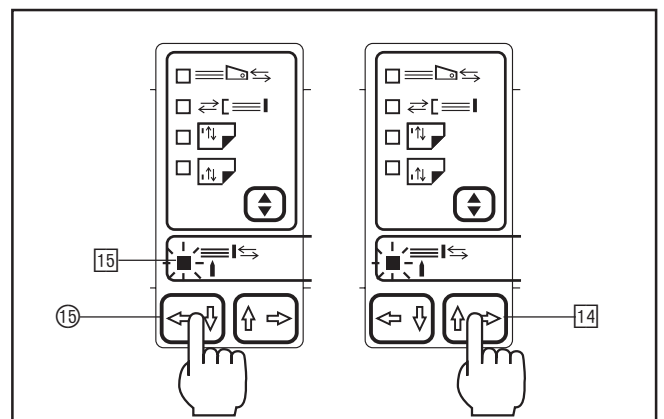


- The back stopper can be moved in this state.

- 7) • The back stopper unit will move by 0.004 inch each time the ⑭ Move (↑ →) Key or ⑮ Move (← ↓) Key are pressed.

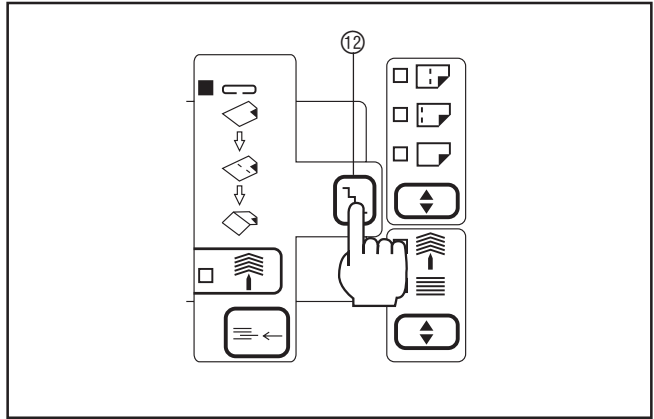
**Note**

When setting the back stopper, move it backward completely, and move it forward again.

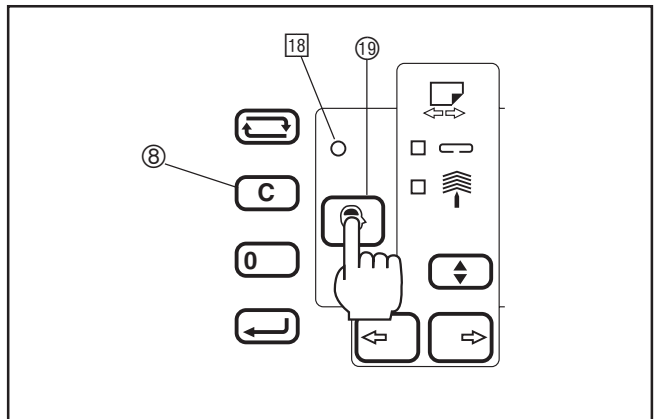


## 6. Stitching Normal Size Paper

- 8) • After completing fine adjustments of the folding area, press the ⑫ Step Mode Key.
- The paper will be ejected folded, and the ⑩ Step Mode Folding Area Lamp and the ⑮ Back Stopper Lamp will go off, and the ⑱ Input Memory Lamp will light up.



- 9) • To store the fine adjustment data, press the ⑲ Input Memory Key.
- If the data need not be stored, press the ⑧ Clear Key. The ⑱ Input Memory Lamp will go off.



### Note

The ⑲ Input Memory Key is effective only while the ⑱ Input Memory Lamp is lit. Once it is pressed, data will be stored in the memory displayed on the LCD (overwritten) and the ⑱ Input Memory Lamp will go off.

## 6-5. Other Functions

### To check paper alignment at the folding area in the step mode

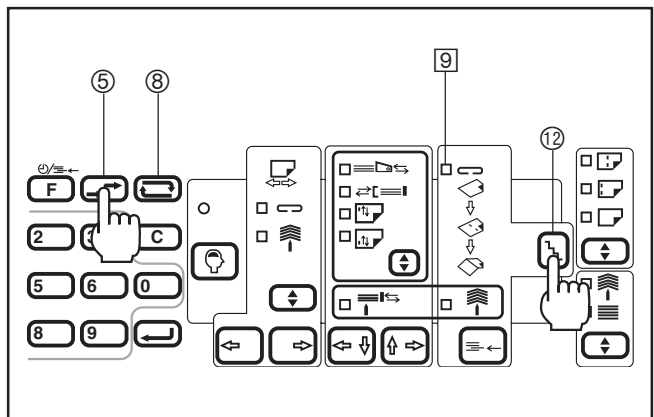
- 1) Press the ⑫ Step Mode Key once. ( ⑨ blinks.)
- 2) Press the ⑫ Step Mode Key another time. (The conveyance system operates.)
- 3) Press the ⑫ Step Mode Key while pressing the ⑤ Shift Key. The back stopper operates to align the paper.
- 4) Return to step 7) in 6-4.

### To check paper alignment at the stitching area in the step mode

- 1) Press the ⑫ Step Mode Key once. ( ⑨ blinks.)
- 2) Press the ⑫ Step Mode Key another time. (The conveyance system operates.)
- 3) Press the ⑫ Step Mode Key another time. The back stopper and side joggers operate to align the paper.
- 4) Return to step 3) in 6-4.

### Note

To stop the step mode halfway through, press the ⑧ Clear Key.



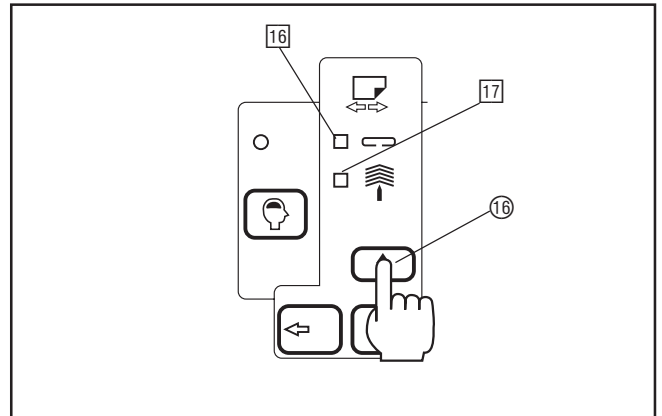
## 6-6. After Starting

### To finely adjust stitching and folding positions

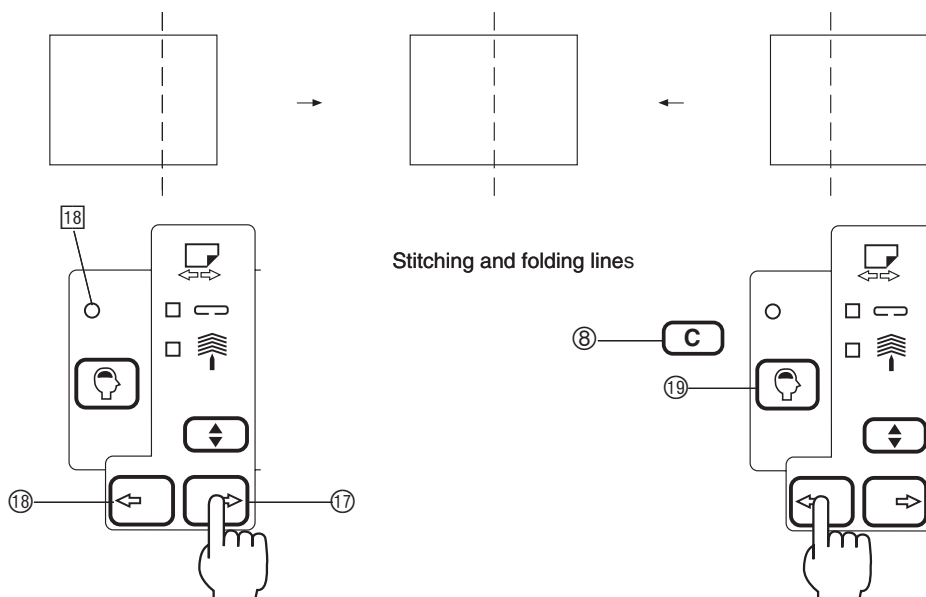
- Press the ⑮ Select Parallel Movement Key, and select the stitch position or folding position.
  - Each time the ⑮ Select Parallel Movement Key is pressed, the lamps light up in the following order.  
Only the ⑮ Stitching Position Lamp lights up → Only the ⑰ Folding Position Lamp lights up → both lamps light up → both lamps go off.

### Meaning of LED lamps

- While the ⑮ Stitching Position Lamp is lit, it indicates that the back jog and the Saddle stitching stopper unit can be adjusted.
- While the ⑰ Folding Position Lamp is lit, it indicates that the back stopper and the folding stopper unit can be adjusted.
- While both lamps are lit, it indicates that the back jogger, saddle stitching stopper, back stopper, folding stopper units can be adjusted.
- When both lamps are off, it indicates that no units are being selected.



- Each time the ⑰ (→) or ⑮ (←) Parallel Movement Key is pressed, the unit selected at step 1) will move in the direction of the key by 0.004 inch.
  - Pressing this key lights up the ⑮ Input Memory Lamp.



## 6. Stitching Normal Size Paper

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- 3) • To store the fine adjustment data, press the **19** Input Memory Key.
- If the data need not be stored, press the **8** Clear Key. The **18** Input Memory Lamp will go off.

### Note

Parallel movement can be performed using the **12** Step Mode Key.

The **19** Input Memory Key is effective only while the **18** Input Memory Lamp is lit. Once it is pressed, data will be stored in the memory number displayed on the LCD (overwritten) and the **18** Input Memory Lamp will go off.

### Precautions on memorizing

Take note that the slight difference between the memory data and actual positions of each unit cannot be corrected by performing fine adjustment in the Step Mode only once. Pay particular attention when adjusting the stitching position and folding position by parallel movement.

### If the actual position differs

1. Change the size using the same memory number.
2. Perform fine adjustment in the step mode another time.

Match the memory data and actual position by repeating steps 1 and 2 above (repeat until no more fine adjustment is required.).

Follow this precautions especially when using a paper size used often.

## 6-7. After Completing Operations

- Turn off the power of the unit.
- Remove the auxiliary roller stay from the inside.

### Note

Before turning off the power, always memorize the paper size desired.

If it is not memorized, the previous size (data) will be effective.

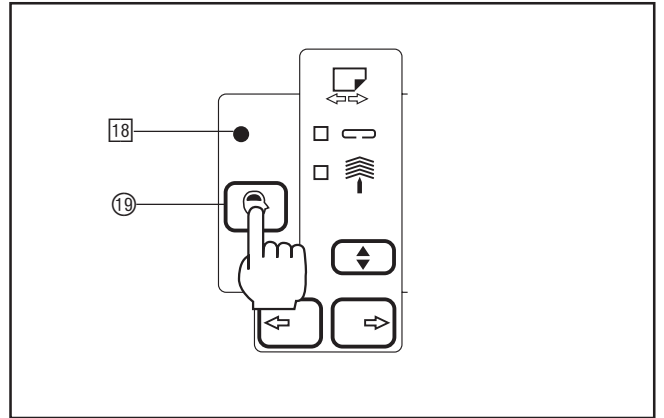
If the data need not be memorized, press the **8** Clear Key while the unit is stopping to turn off the **18** Input Memory Lamp.

# 7. Memorizing

- The 18 Memory Input Lamp lights up immediately after “6-4. Fine Adjustment in Step Mode” ends or immediately after performing fine adjustments by the parallel movement.
- Immediately after performing fine adjustment, to memorize the data, press the 19 Input Memory Key.
- When the Key is pressed, the data after the fine adjustment will be stored in the memory number displayed on the LCD (overwritten) and the 18 Input Memory Lamp will go off.

## Note

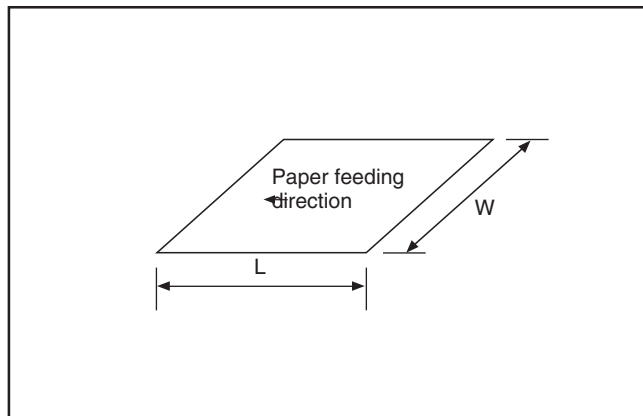
- The 19 Input Memory Key is effective only while the 18 Input Memory Lamp is lit.
- If the data need not be stored, press the 8 Clear Key while the unit is stopping. The 18 Input Memory Lamp will go off.
- If parallel movements are performed during operations, the 18 Input Memory Lamp will light up after operations stop.



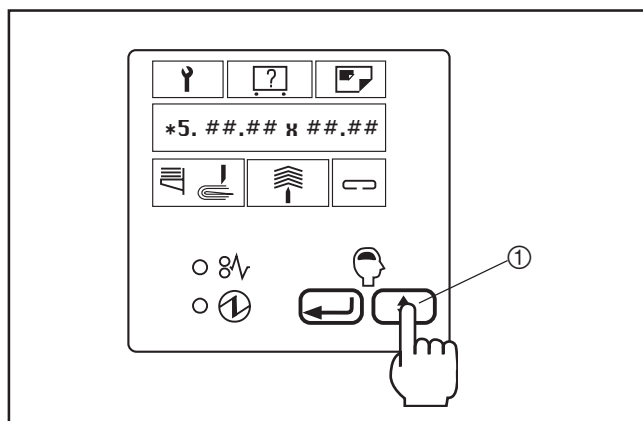
# 8. Numerically Inputting the Paper Size

## 8-1. Saddle-Stitching and Folding

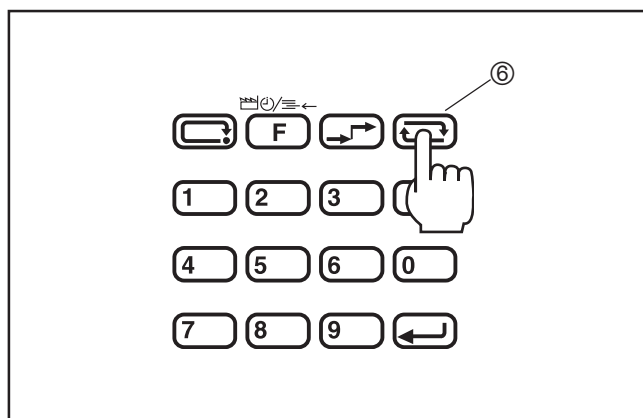
- 1) • As the paper size is input in numerals, measure the paper size on the scale.  
For example;  
L=13.6 inch W=9.2 inch



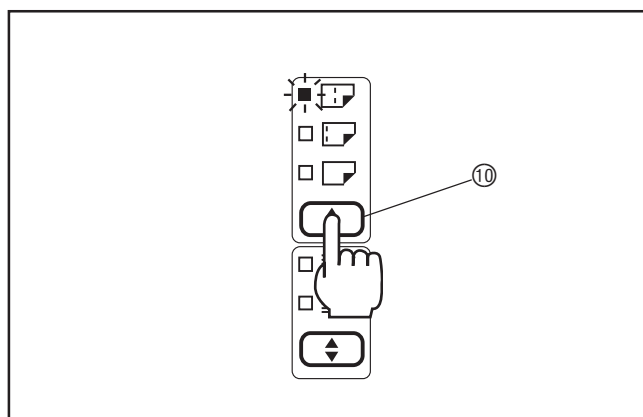
- 2) • Select the number of the desired size to overwrite according to the previous section "Selecting the Memory Number".  
For example;  
When 5 is selected, the LCD displays [\*5. ##.## x ##.## x ##.##]. (The LCD blinks.)



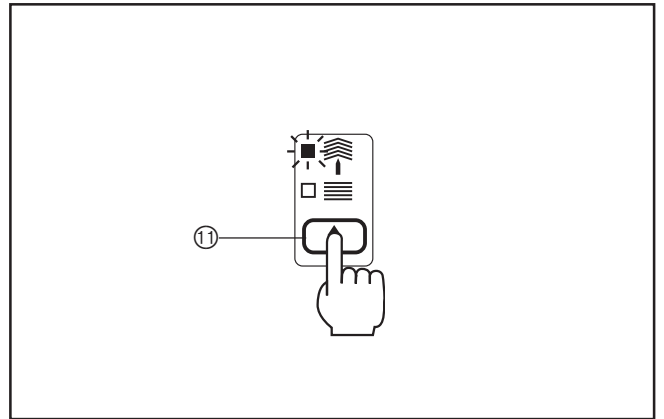
- 3) • When the ⑥ Change Key is pressed, the LCD displays [\*5. L=##.##]. (The LCD will light up.)  
• Select the desired processing method.



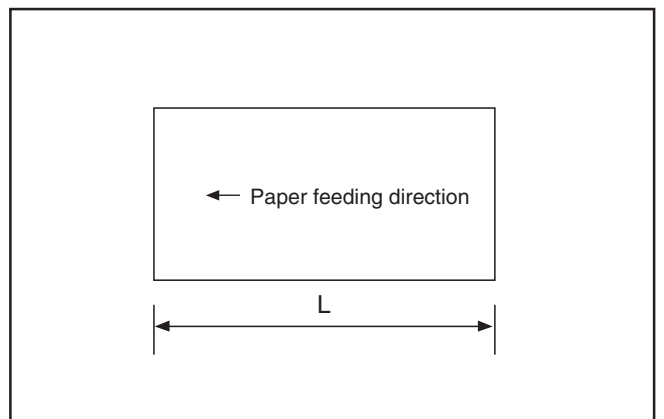
- 4) • Press the ⑩ Select Stitch Key and select saddle-stitching.



- 5) • Press ⑪ Select Fold Key and select folding.



- 6) • Input the length of the paper (L) as shown below.



- Using the ⑦ Numerical Keys, input four digits.

Example)

Press the ⑦ Numerical Keys in the following order.

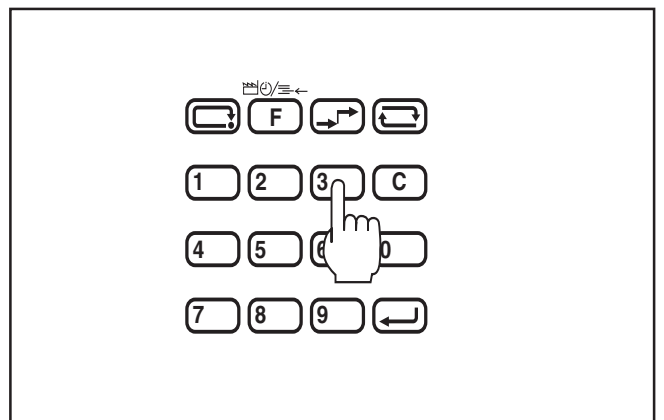
① ③ ⑥ ⑦

However, input a value (L) between 11 and 18.5 inch.

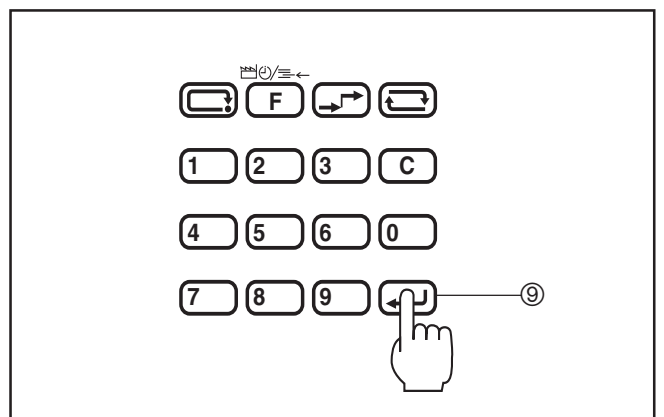
**Note**

To clear the input number, press the ⑧ Clear Key.

To return to the most recent input mode, press the ③ Escape Key.

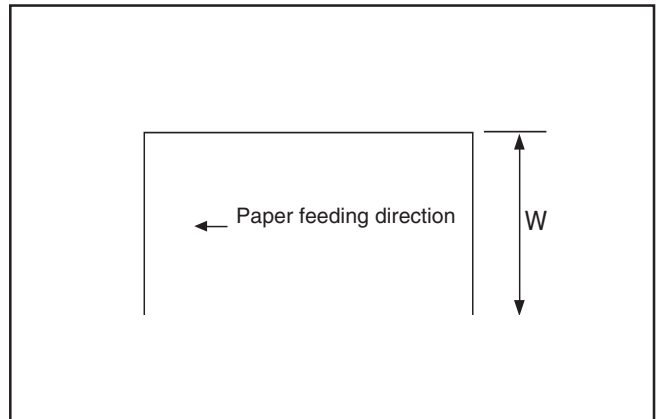


- 7) • When the ⑨ Set Key is pressed, the LCD displays [\*5.W=##.##].  
[W] is the width of the paper.



## 8. Numerically Inputting the Paper Size

- 8) • Input the width of the paper (W) as shown below.



- Using the ⑦ Numerical Keys, input four digits.

Example)

Press the ⑦ Numerical Keys in the following order.

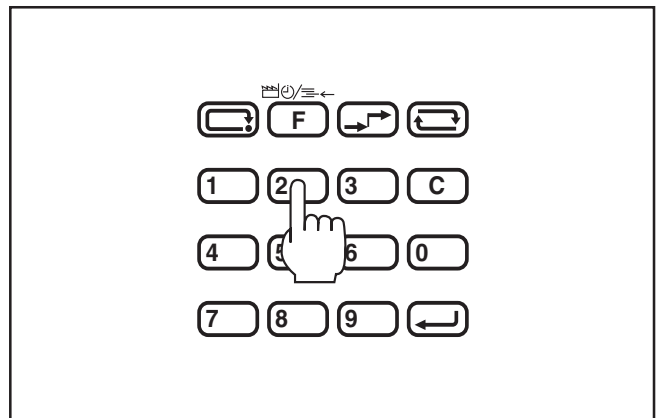
0 9 2 0

However, input a value (W) between 8.27 and 14inch.

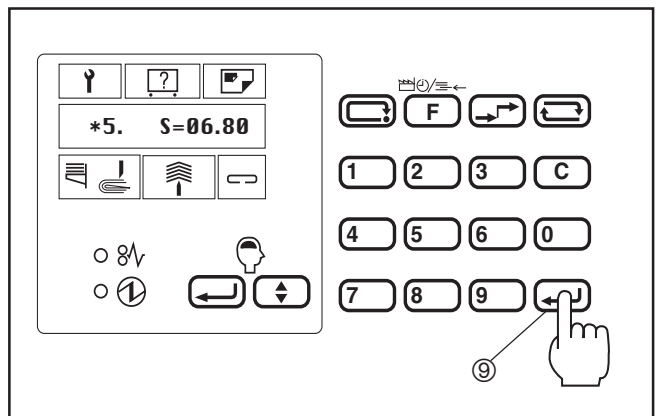
**Note**

To clear the input number to 0, press the ③ Clear Key.

To return to the most recent input mode, press the ③ Escape Key.



- 9) • When the ⑨ Set Key is pressed, the LCD displays [\*5. S=06.80].  
[S] is the length from the saddle stitching stopper to the stitching position.

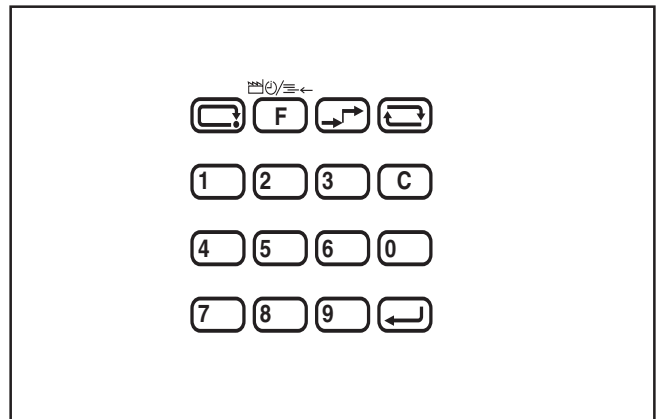
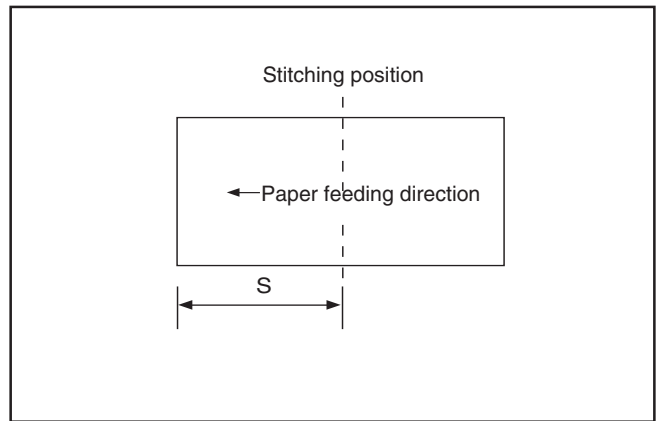




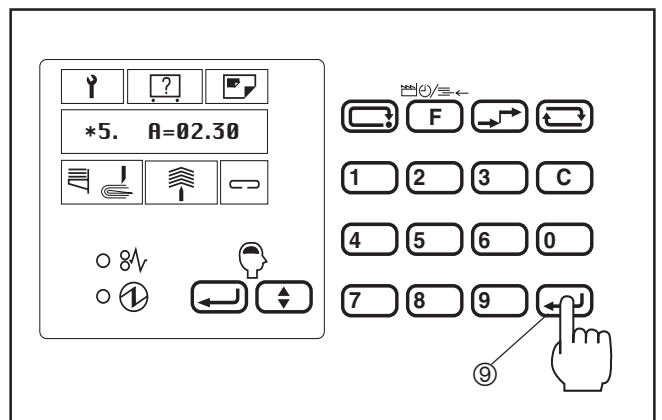
## 8. Numerically Inputting the Paper Size

- 10) • Input the length [S] from the saddle stitching stopper to the stitching position.
- The length is automatically calculated (from 1:1) [ $L \times 1/2$ ], and the LCD displays [ $*5. S=06.80$ ].
  - To change the input, input the four digits again using the  $\text{\textcircled{7}}$  Numerical Keys.

The range is  $S=5.51$  inch to the smaller value of  $L-5.51$  inch or 8.86inch.



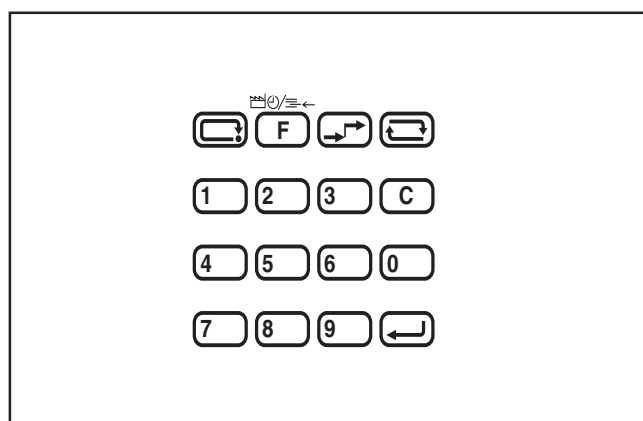
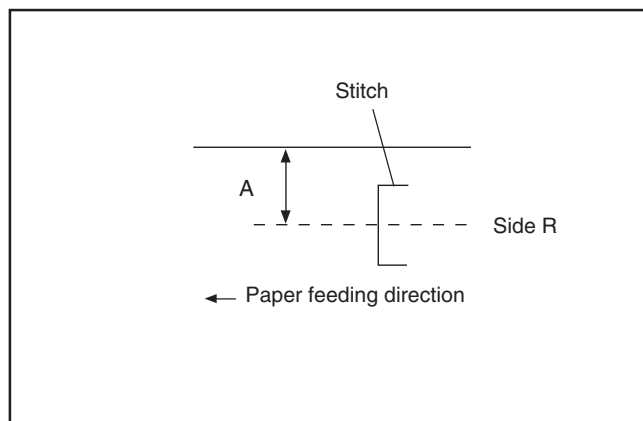
- 11) • Press the  $\text{\textcircled{9}}$  Set Key once. The LCD displays [ $*5. A=02.30$ ].



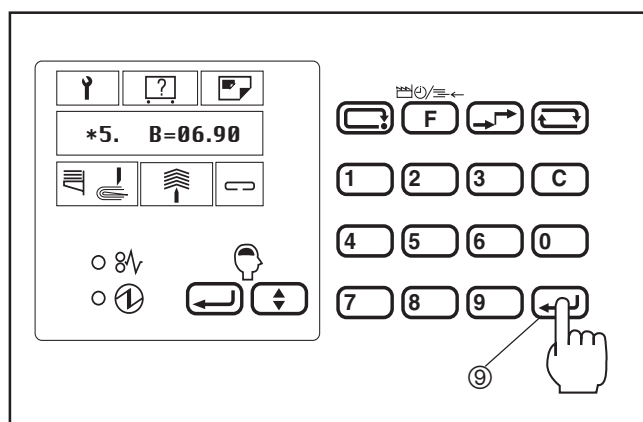
## 8. Numerically Inputting the Paper Size

12) • Next input the stitching position [A] at the R side.

- The position is automatically calculated (from 1:2:1) [W x 1/4], and the LCD displays [\*5. A=02.30].
- To change the input, input the four digits again using the ⑦ Numerical Keys. However, the input range A is 15 to (W/2 – 1.58) inch.

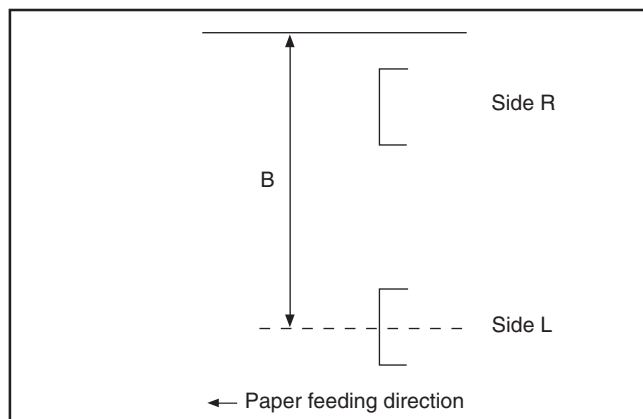


13) • Press the ⑨ Set Key once. The LCD displays [\*5. B=06.90].

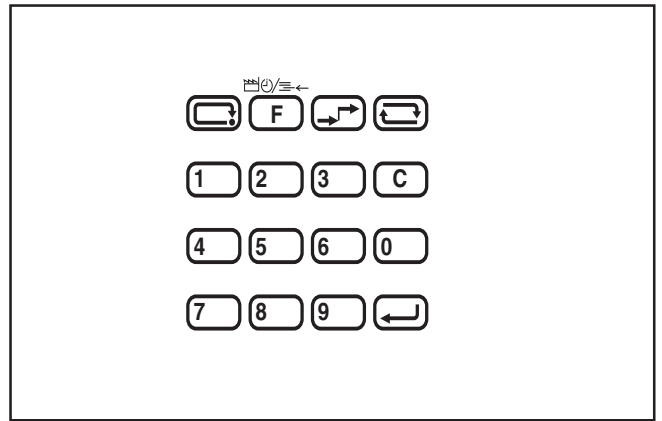


14) • Next, input the stitching position [B] at the L side.  
 • First calculate this position as follows (from 1:2:1); [W x 3/4]

The LCD displays [\*5. B=06.90].



- To change the input, input the four digits again using the ⑦ Numerical Keys. However, the input range  $B = (W/2+1.58)$  to  $(W-0.6)$  inch and within 13.19 inch.



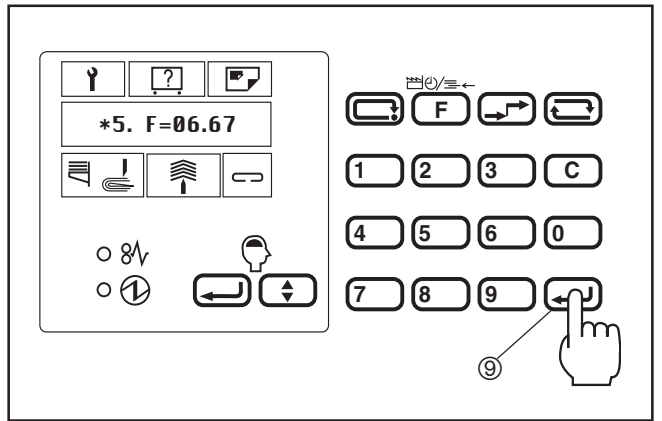
15) When connected to Duplo trimmer DBM-400T

**Note**

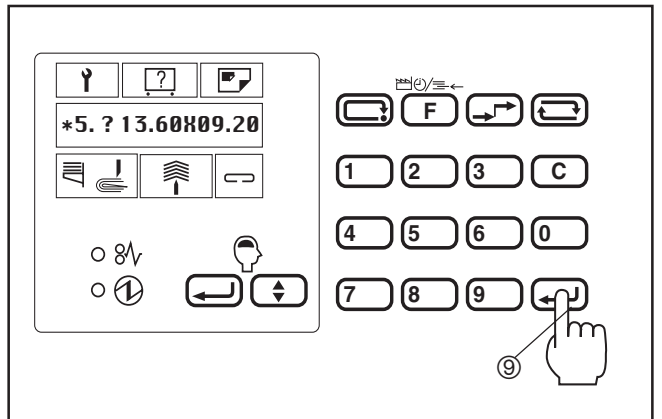
If connected to any downstream unit other than DBM-400T or if not connected to DBM-400T, proceed to 16).

- When the ⑨ Set Key is pressed once, the LCD displays [\*5. F=06.67]. “F=6.67” is the final size.
- If no changes are required, proceed to 16).
- To change the value, input a 4-digit number in the same way using the ⑦ Numerical Keys and proceed to 16).

(For details, refer to the instruction manual for DBM-400T.)

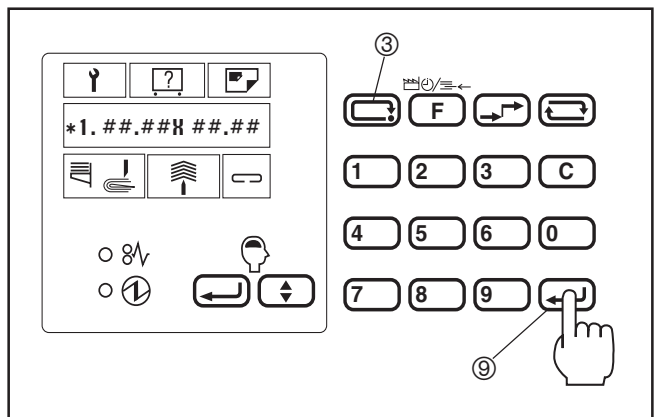


16) • When the ⑨ Set Key is pressed, the LCD displays [\*5. ? 13.60x09.20].



17) • Perform the final check here.

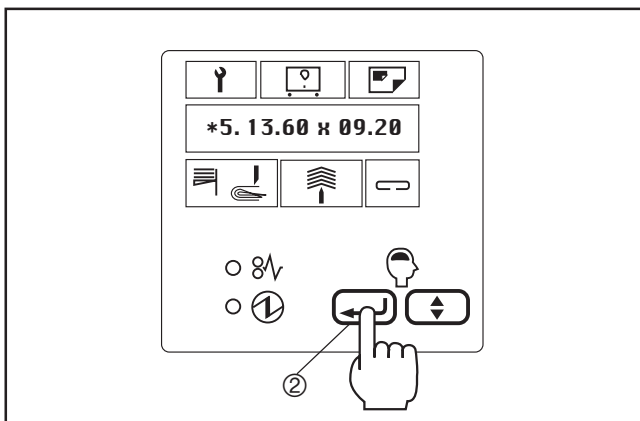
- If OK, press the ⑨ Set Key and memorize the value. The display will start blinking.
- If NG, press the ③ Escape Key to return to the first display (the state when the ① Select Memory Key was pressed), and the LCD displays [\*1. ##.## x ##.##] blinking. Input again.



This ends input of paper size.

## 8. Numerically Inputting the Paper Size

- 18) • Press the ② Execute Memory Key and start moving the guides.
  - When they complete moving, the LCD displays [\*5. 13.60 x 09.20] and a buzzer sounds.
  - To perform fine adjustment, refer to “6-4. Fine Adjustment in Step Mode”.



### 8-2. Side-Stitching

- 1) • Since paper size is input using numerals, measure the paper size on the scale.  
For example, L=8.27 inch, W=11.69 inch.
- 2) • Referring to the previous section "Selecting the Memory Number", select the number of the desired size to overwrite.  
For example, when 6 is selected, and the LCD display switches to [\*6. ##.##x##.##].  
(The LCD blinks.)
- 3) • When the ⑥ Change Key is pressed, the LCD displays [\*6. L=##.##].
  - Select the desired processing method.
- 4) • Press the ⑩ Select Stitch Key and select side-stitching.
- 5) • Press the ⑪ Select Fold Key and select no-folding.
- 6) • Input the length of the paper (L) as shown below.
  - Using the ⑦ Numerical Keys, input four digits.

Example)

Press the ⑦ Numerical Keys in the following order.

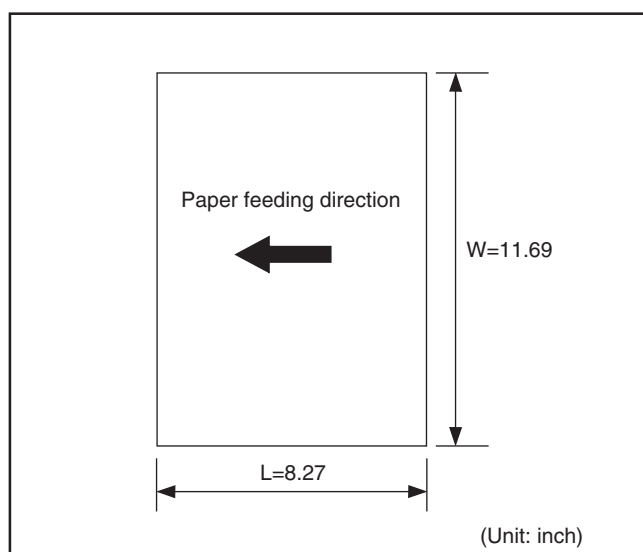
① 0   ② 8   ③ 2   ④ 7

However, input a value (L) between 7.88 and 9.48 inch.

#### Note

To clear the input number to 0, press the ⑧ Clear Key.

- 7) • When the ⑨ Set Key is pressed, the LCD displays [\*6. W=##.##].  
[W] is the width of the paper.



- 8) • Using the ⑦ Numerical Keys, input four digits.

Example)

Press the ⑦ Numerical Keys in the following order.



However, input a value between 8.27 and 14 inch.

**Note**

To clear the input number to 0, press the ③ Clear Key.

- 9) • When the ⑨ Set Key is pressed, the LCD displays [\*6. A=02.92].  
[A] is the stitching position length at the R side.
- First calculate this position as follows (from 1:2:1);  
[W x 1/4]
  - To change the input, input the four digits again using the ⑦ Numerical Keys.  
However, input a value (A) between 0.6 and (W/2-1.58) inch.

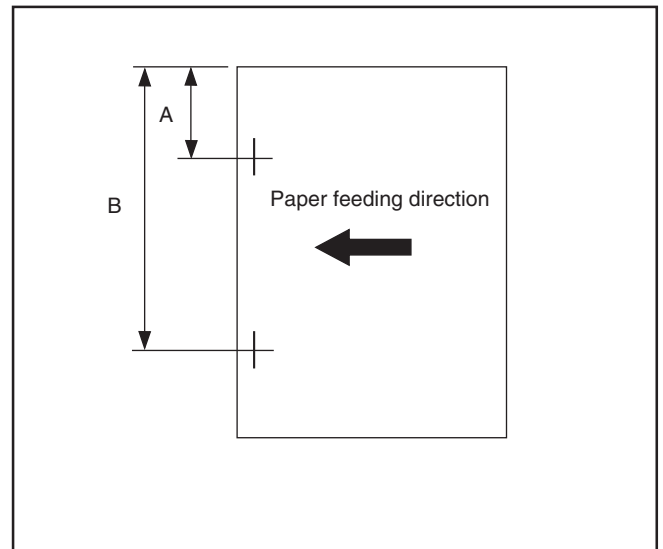
- 10) • When the ⑨ Set Key is pressed, the LCD displays [\*6. B=08.76].  
[B] is the stitching position length at the L side.
- First calculate this position as follows (from 1:2:1);  
[W x 3/4]
  - To change the input, input the four digits again using the ⑦ Numerical Keys.  
However, input a value (B) between (W/2+1.58) and (W-0.6) inch.

- 11) • When the ⑨ Set Key is pressed, the LCD displays [\*6. ? 08.27 x 11.69].

- 12) • Perform the final check here.
- If OK, press the ⑨ Set Key, and it will be memorized.
  - If NG, press the ③ Escape Key to return to the first display (the state when the ① Select Memory Key was pressed), and the LCD display [\*1. ##.##x##.##] blinks.

This ends input of paper size.

- 13) • Press the ② Execute Memory Key and start moving the guides.
- When they complete moving, the LCD displays [\*6. 08.27 x 11.67], and a buzzer sounds.
  - To perform fine adjustment, refer to "6-4. Fine Adjustment in the Step Mode".



### 8-3. Corner-Stitching

- 1) • Since paper size is input using numerals, measure the paper size on the scale.  
For example, L=8.27 inch, W=11.69 inch.
- 2) • Select the number of the desired size to overwrite according to the previous section “Selecting the Memory Number”.  
For example, when 7 is selected, and the LCD displays [\*7. ##.##x##.##].  
(The LCD blinks.)
- 3) • When the ⑥ Change Key is pressed, the LCD displays [\*7. L=##.##].
  - Select the desired processing method.
- 4) • Press the ⑩ Stitch Key and select side-stitching.
- 5) • Press the ⑪ Fold Key and select no-folding.
- 6) • Input the length of the paper [L] as shown below.
  - Using the ⑦ Numerical Keys, input four digits.

Example)

Press the ⑦ Numerical Keys in the following order.

0 8 2 7

However, input a value (L) between 7.88 and 9.49 inch.

#### Note

To clear the input number to 0, press the ③ Clear Key.

- 7) • When the ⑨ Set Key is pressed, the LCD displays [\*7. W=##.##].  
[W] is the width of the paper.
- 8) • Using the ⑦ Numerical Keys, input four digits.

Example)

Press the ⑦ Numerical Keys in the following order.

1 1 6 9

However, input a value (W) between 8.27 and 14 inch.

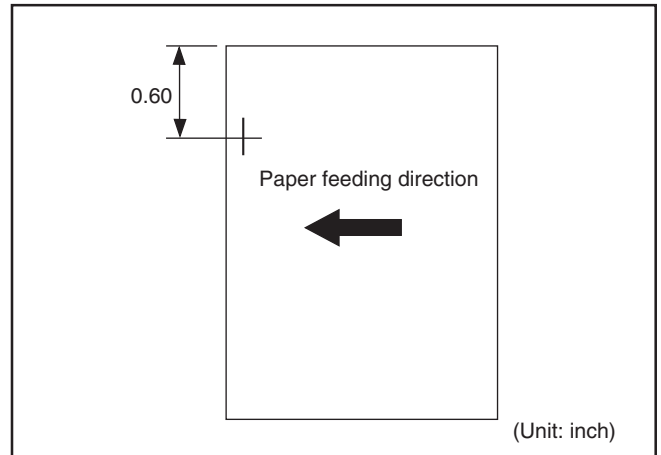
#### Note

To clear the input number to 0, press the ③ Clear Key.

**When Corner-Stitching at Right Side**

- 9) • When the **Ⓢ** Set Key is pressed, the LCD displays [\*7. A=02.92].  
[A] is the stitching position at the R side.  
However, input a value (A) between 0.6 and (W/2-1.58) inch.
  - First calculate this position as follows (from 1:2:1);  
[W x 1/4]
- 10) • Input the four digits(0150)using the **Ⓝ** Numerical Keys.  
However, input a value (A) between 0.6 and 4.27 inch.
- 11) • When the **Ⓢ** Set Key is pressed, the LCD displays [\*7. B=08.76].
- 12) • When the **Ⓢ** Set Key is pressed, the LCD displays [\*7. ? 08.27 x 11.69].
- 13) • Perform the final check here.
  - If OK, press the **Ⓢ** Set Key to memorize this value. At this time, the display will start blinking.
  - If NG, press the **Ⓟ** Escape Key to return to the first display (the state when the **Ⓛ** Select Memory Key was pressed).  
The LCD display [\*1. ##.##x##.##] blinks.  
Input again.

This ends input of paper size.



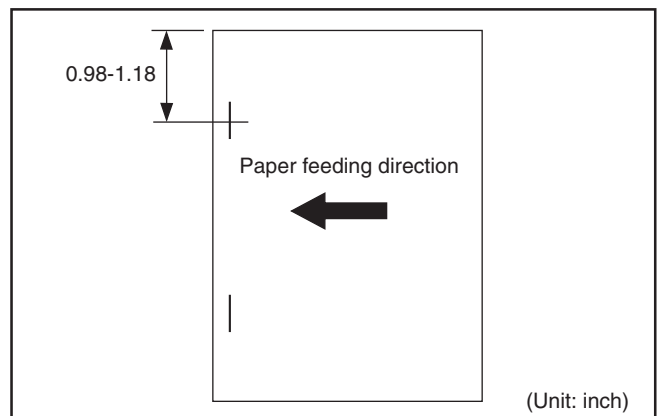
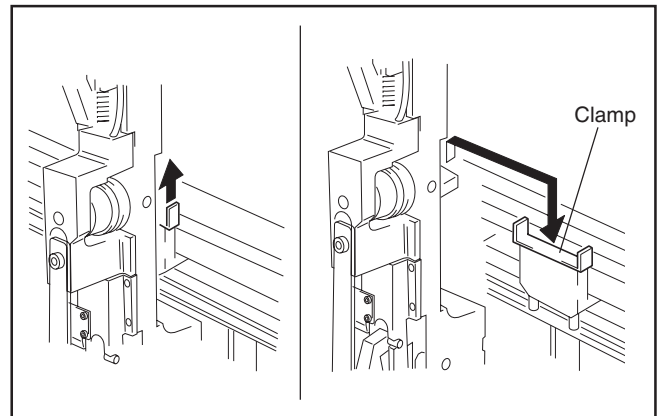
- 14) • Remove the clamp of the stitching head L side driver.
- 15) • Rotate the **Ⓢ** Triangular Knob of the stitching head to the “no stitching” position.

**Note**

When corner-stitching paper of the maximum width 14 inch at the L side, be sure to move the stitching head with the clamp on the driver. If the clamp is not on the driver, the stitching head cannot be moved to the corner-stitching position.

When performing the corner-stitching at the R side, avoid setting the stitching head R outside the area between 0.98 and 1.18inch.

Proceed onto step 18).



## 8. Numerically Inputting the Paper Size

### When Corner-Stitching at Left Side

Steps 1 to 8 are the same. (page 44)

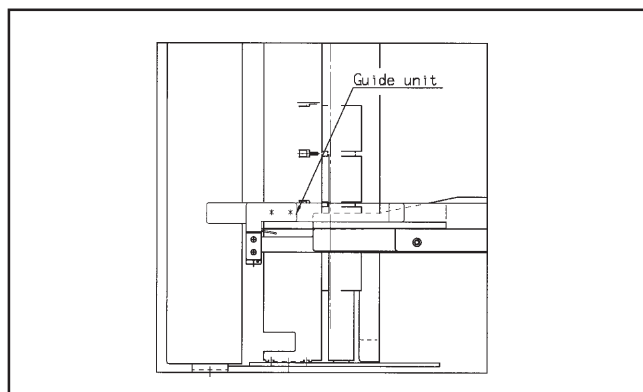
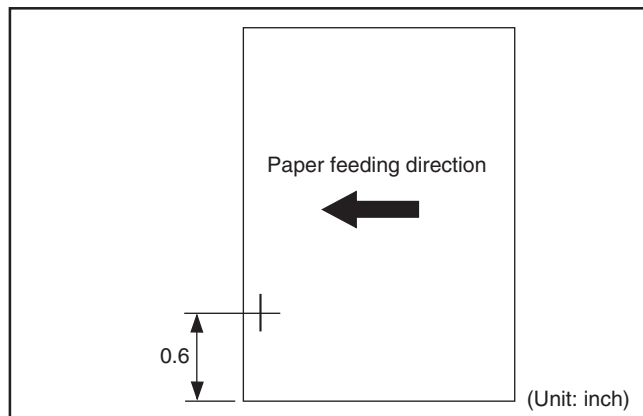
#### Releasing guides

Always be sure to release the guide unit when performing corner stitching on the left side.

- 9) • Press the  $\odot$  Set Key once. The LCD displays [\*7. A=02.92].
- 10) • Press the  $\odot$  Set Key once. The LCD displays [\*7. B=08.76].  
[B] is the L side stitching position measurement. However, input a value (B) between (W/2+1.58) and (W-06) inch.
  - First calculate this position as follows (from 1:2:1); [W x 3/4].
- 11) • Input the four digits (2820) using the  $\odot$  Numerical Keys.  
However, input a value (A) between 7.43 and 11.09 inch.
- 12) • When the  $\odot$  Set Key is pressed, the LCD displays [\*7. ? 08.27 x 11.69]
- 13) • Perform the final check here.
  - If OK, press the  $\odot$  Set Key to memorize this value. At this time, the display will start blinking.
  - If NG, press the  $\textcircled{3}$  Escape Key to return to the first display (the state when the  $\textcircled{1}$  Select Memory Key was pressed). The LCD displays [\*1. ##.## x ##.##] blinking.

This ends input of paper size.

- 16) • Remove the clamp of the stitching head R side driver.
- 17) • Rotate the  $\textcircled{8}$  Triangular Knob of the stitching head to the non-stitching position.
- 18) • When the  $\textcircled{2}$  Execute Memory Key is pressed, the guides start moving.
  - When they complete moving, the LCD displays [\*7. 08.27 x 11.69], and a buzzer sounds.
  - To perform fine adjustment, refer to “6-4. Fine Adjustment in Step Mode”.





## 8-4. No-Stitching No-Folding

Use this mode to convey paper to the Duplo stacker through the DBM-400 SxS.

- 1) • Measure the width of the paper and input the value.  
For example, W=8.2 inch.
- 2) • Select the number of the desired size to overwrite according to the previous section “Selecting the Memory Number”.  
For example, when 4 is selected, the LCD displays [\*4. ##.## x ##.##].
- 3) • Press the ⑥ Change Key. The LCD displays [\*4. L=##.##].
- 4) • Press the ⑩ Select Stitch Key and set to the no-stitching mode.
- 5) • Press the ⑪ Select Fold Key and set to the no-folding mode.
- 6) • Value L need not be input.
- 7) • Press the ⑨ Set key. The LCD displays [\*4. W=##.##].  
W is the width of the paper.
- 8) • Using the ⑦ Numerical Keys, input the four digits.  
Example)  
Press the ⑦ Numerical Keys in the following order.  

0
8
2
0
- 9) • Press the ⑨ Set Key three times. The LCD displays [\*4. ? 08.20].
 

**Note**

Values A and B (stitching positions) need not be input.
- 10) • \*Perform the final check here.  
\*If OK, press the ⑨ Set Key to memorize this value. At this time, the display will start blinking.  
\*If NG, press the ③ Escape Key to return to the first display (the state when the ① Select Memory Key was pressed). The LCD displays [\*1. ##.## x ##.##] blinking.  
Input again.  
This ends input of paper size.
- 11) • When the ② Execute Memory Key is pressed, the guides start moving.
  - When they complete moving, the LCD displays [\*4. 08.20], and a buzzer sounds.
- 12) • Attach the auxiliary roller stay.  
Refer to "9-1 Using the Auxiliary Roller Stay".  
Attach at parts A, B, C, and D.

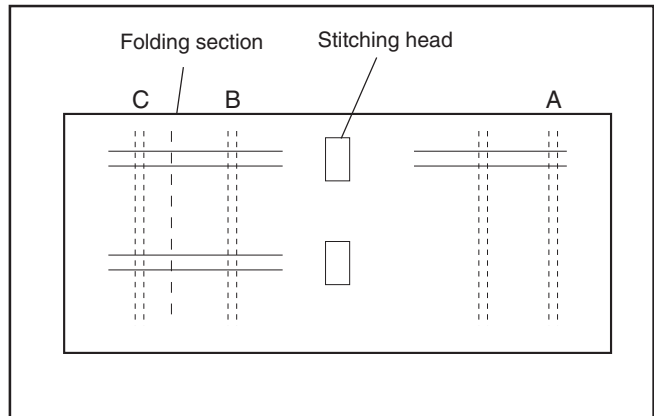
### Note

- Paper will jam if the paper guides are set too tightly against the paper thickness. Refer to "9-4 Using the Paper Guides", and distance the paper guides of the saddle-stitching and folding stoppers away from the paper.
- Jams which occur near the stitching area may be caused by the incorrect timing of the paper discharge roller unit. In this case, change the setting of the function. Refer to “2” in “10. Using Function Keys”.

# 9. Binding

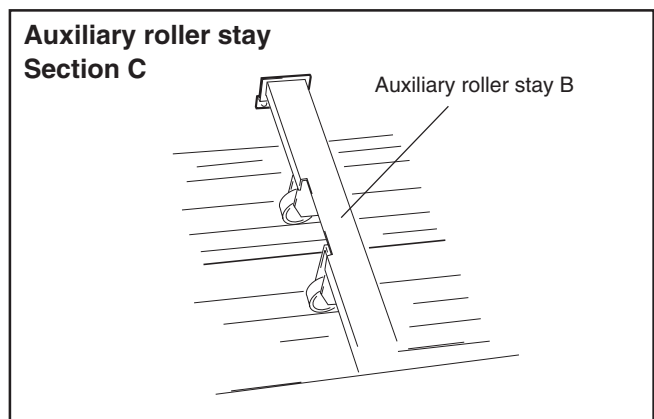
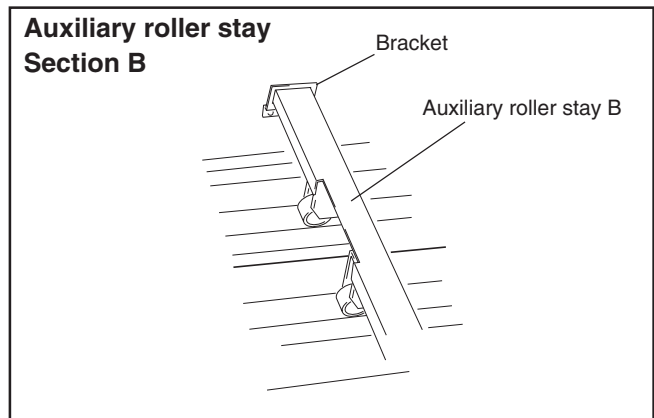
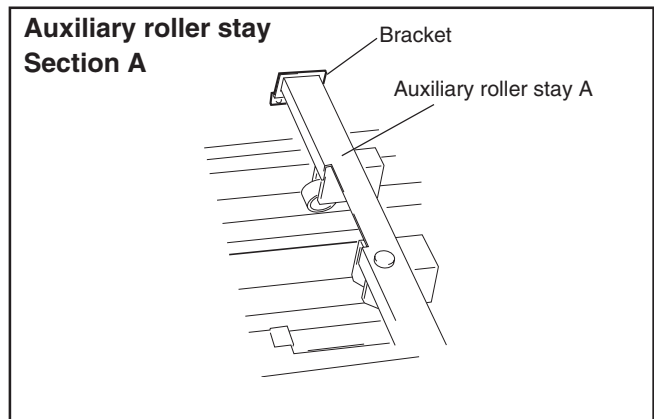
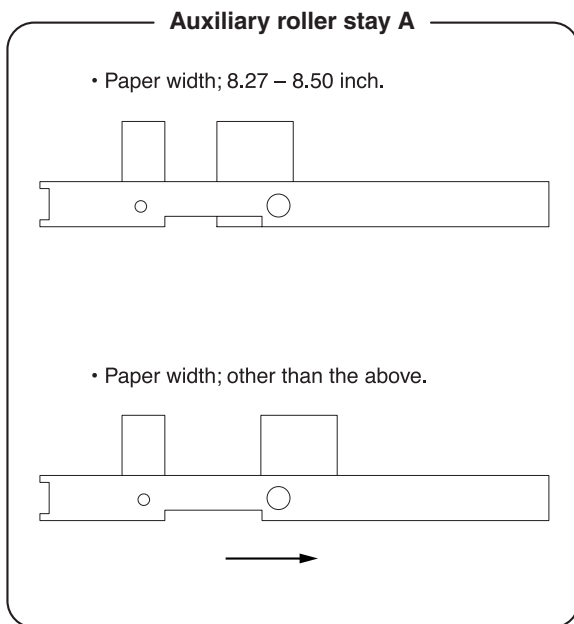
## 9-1. Using the Auxiliary Roller Stay

- The auxiliary roller stay for applying conveyance force to the paper can be attached to this unit at three locations.
- To prevent guides from contacting each other, this unit is provided with sensors at A, B and C. If the auxiliary roller stay is attached to any one of these sensors, size cannot be changed.



### 1 Attaching

Fit the auxiliary roller stay to the square hole on the bracket at the R side.

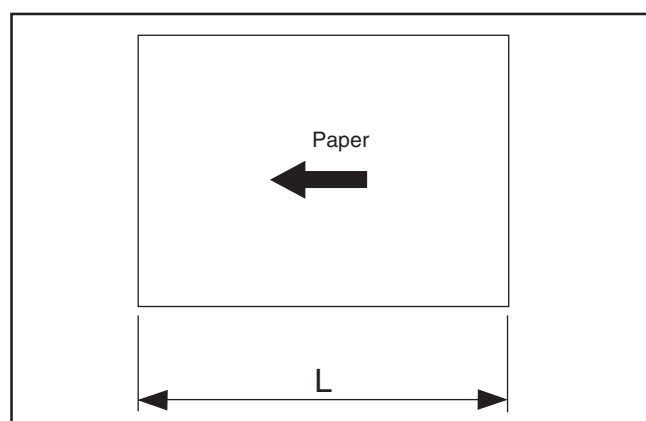


## 2 Attaching Conditions

### Attaching Conditions for Positions A and B

○ means “attach”. X means “do not attach”. (: inch)

Stitching and Folding Conditions and Paper Length				
A	Saddle-Stitching Folding	Side-Stitching No Folding	No Stitching and Folding	Side-Stitching No Folding
X	17.72-18.50	—	14.00-18.50	
○	11-17.72	7.88-9.48	7.88-14.00	7.88-9.48



### Attaching Conditions for Position C

(: inch)

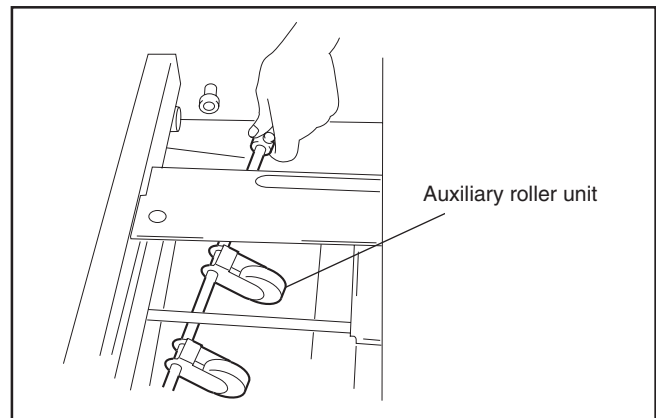
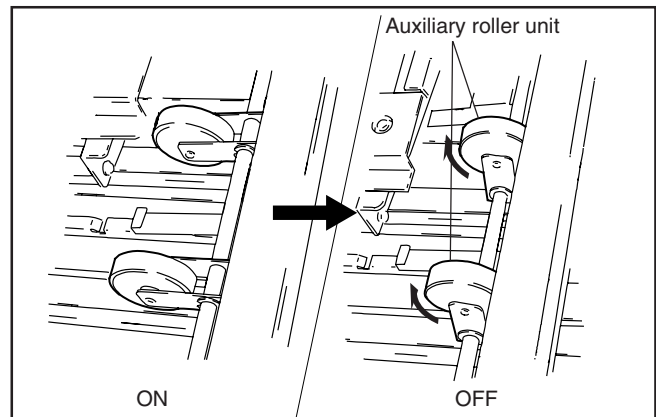
Saddle-Stitching Folding	Side-Stitching No Folding	No Stitching and Folding	Side-Stitching No Folding
—	All paper	—	All paper

## 9-2. Using the Auxiliary Roller Unit

### Auxiliary Roller Unit for Center Section

L side	R side	Corresponding Paper Conditions
OFF	OFF	When length of paper to be saddle-stitched over 16.54 inch.
ON	ON	When length of paper to be saddle-stitched is 16.54 inch or less.

- This auxiliary roller unit can be removed by pushing the shaft into the R side and raising it up. Removing it enables jams to be cleared more easily.



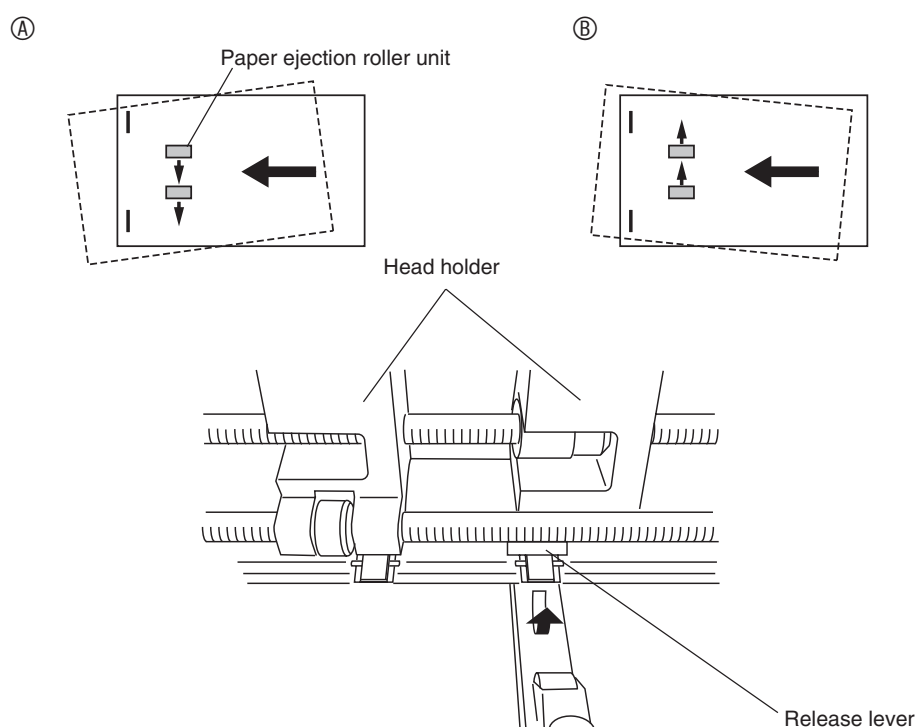
## 9-3. Using the Paper Ejection Roller Unit

If the paper skews immediately after stitching, or if the auxiliary roller unit and paper ejection roller unit contact each other, pull the release lever attached to the head holder and move the paper ejection roller unit.

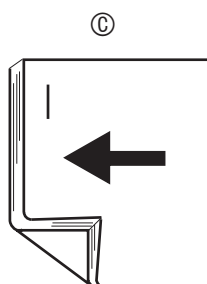
- If the paper jams as shown in (A), move the paper discharge roller unit to the L side.
- If the paper jams as shown in (B), move it to the R side.

### Note

- Paper ejection will be disabled if the paper ejection rollers are moved too close to the side guide.
- Do not move one paper ejection rollers onto the flat belt and the other onto the rubber roller, as this will cause paper to skew.
- When you change the paper size without coupling paper discharge roller unit and head holder, be sure to set the release lever to the original position.



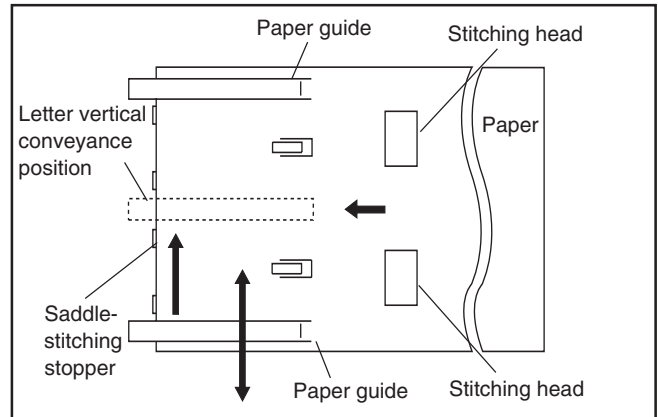
- During side-stitching or corner-stitching operations  
The paper may skew and jam if the paper ejection roller unit and head holder are linked.  
In this case, place the paper ejection roller units on the two flat belts.  
If the paper bends as shown in (C) when ejected after stitching, it may indicate that the paper is fed crookedly. Change the position of the paper ejection roller unit. If the problem still exists, use the Function key.  
Refer to “10. Using Function Keys”.



## 9-4. Using the Paper Guide

- 1** When saddle-stitching paper, move the paper to the stitching position using the step mode. Loosen the B knob screw, and secure the paper guide at the edge of the paper.

\* To feed Letter size paper vertically, move the paper guide to the position shown in the figure.

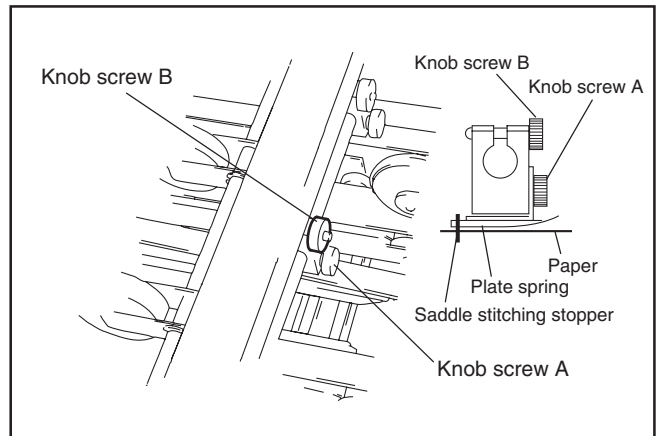


- 2** Loosen the knob screw A, and secure it where the paper touches the plate spring lightly.

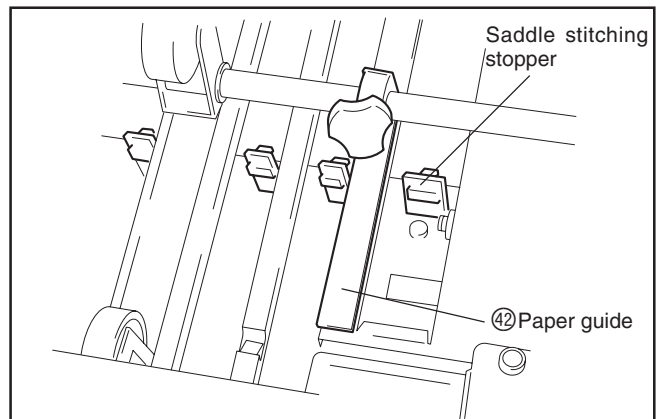
- This paper guide prevents the paper from riding onto the saddle-stitching stopper. It also prevents the bending of the paper by the plate spring and helps align the paper.

**Note**

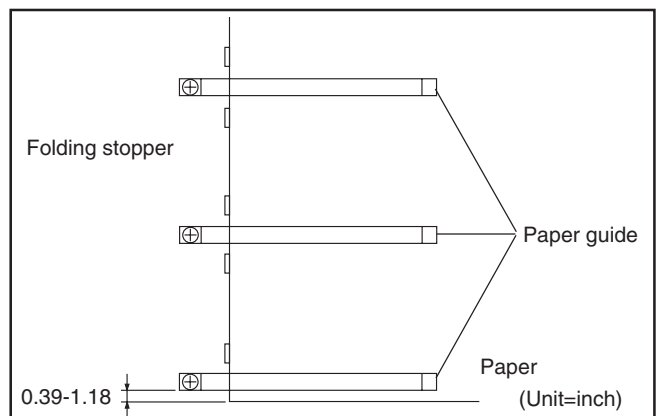
When performing operations other than saddle-stitching, loosen the knob screw A, and secure at the topmost position.



- 3** Use the ④② paper guide as shown in the figure on the right, when the paper width is more than 9.84 inch. Position so that it does not touch the saddle-stitching stopper.



- 4** When performing folding operations, stop the paper at the folding stopper using the step mode. Loosen the knob screw at (C), and secure it at the edge of the paper. Secure at 0.39 to 1.18 inch from the edge of the paper.

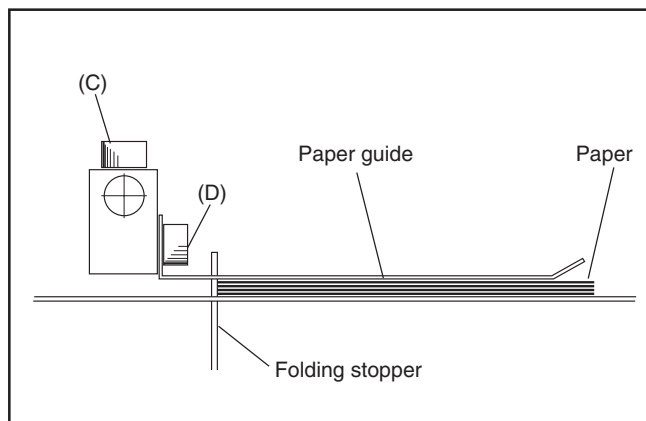


## 5 Loosen the knob screw at (D), and secure it where the paper guide touches the paper lightly.

- If the paper guide touches the paper with force, folding problems may occur.

### Note

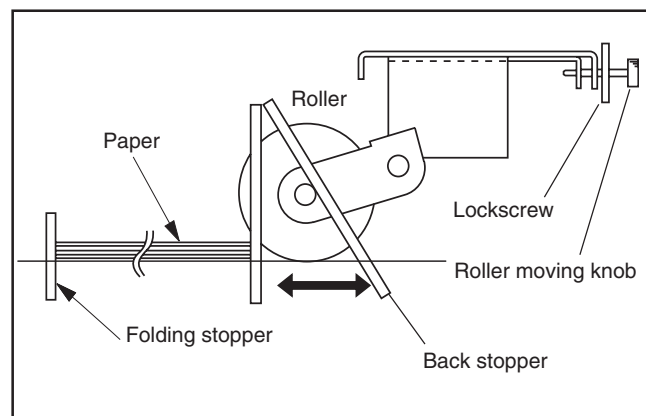
When performing operations other than folding, loosen the knob screw at (D), and secure paper guide separated from the paper.



## 9-5. Using the Back Stopper and Roller

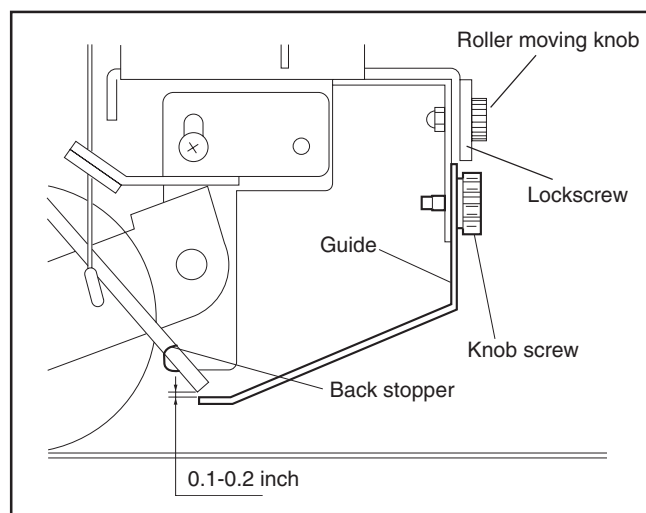
**1** Move the paper using the step mode, and stop it under the folding roller. Loosen the lockscrew, rotate the roller moving knob until the roller touches the paper lightly, and secure the lockscrew.

**2** The pressure release lever is used for moving the roller at the R side so that the roller rises above the belt. When processing 2 to 5 sheets of paper larger than Double Letter size paper, folding accuracy can be increased by setting the roller so that it rises. Normally, set it so that the roller rides onto the belt.



**3** Use the guides provided if the tip of paper tilts upwards during conveyance and the paper is jammed around this place. To attach, loosen the knob screw, insert the guide from the bottom, and fix at the position where a 0.1 to 0.2 inch gap forms below the top of back stopper.

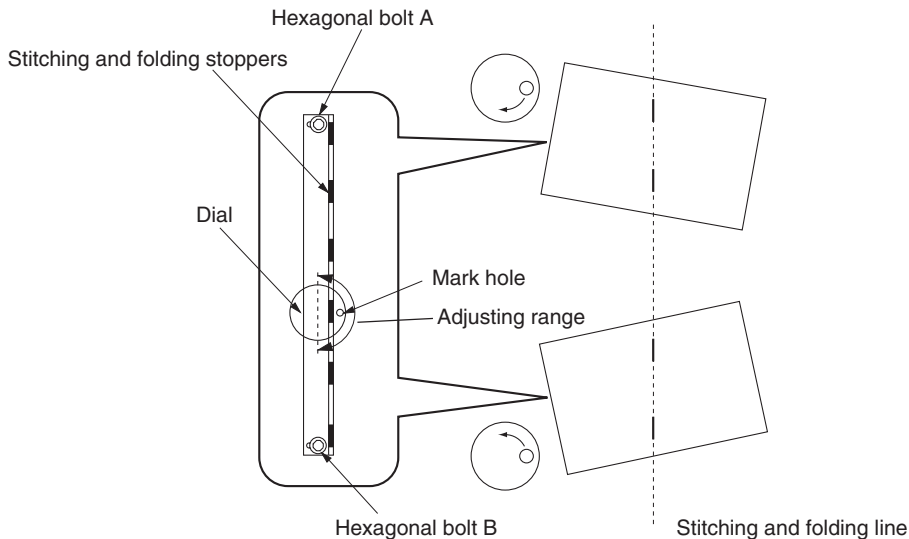
- When changing paper size, be sure to take the guide out first prior to change.



## 9-6. Using the Stitching Stopper and Folding Stopper

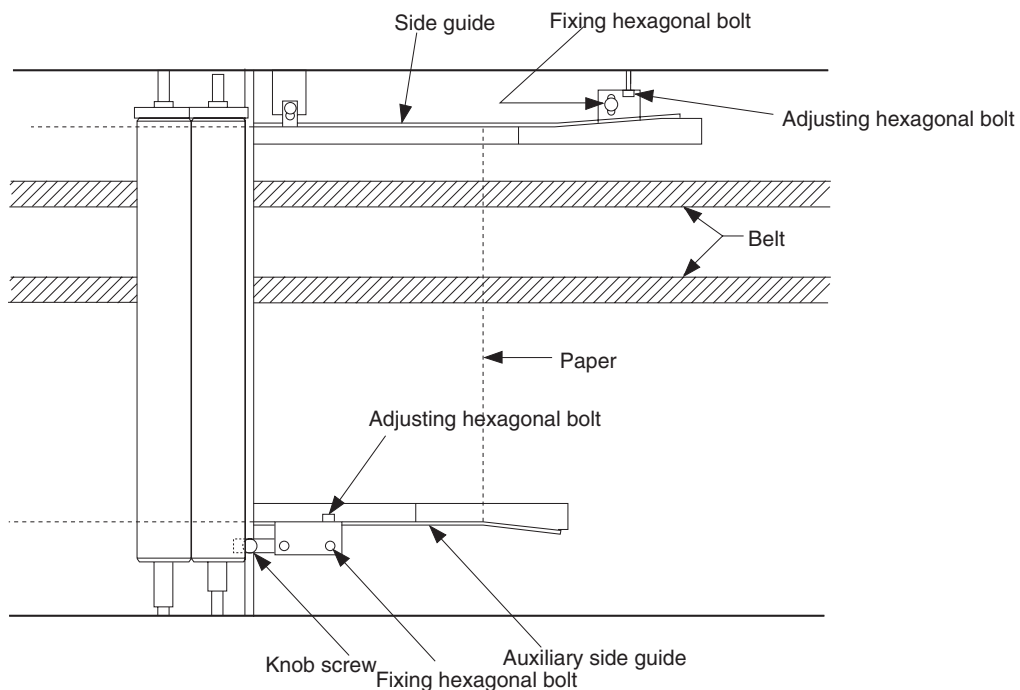
The stitching stopper and folding stopper are used for adjusting stitching and folding respectively, as well as the stitching and folding lines. The adjusting method is the same for both stoppers.

- Loosen the hexagonal bolts A and B, and rotate the dial to change the stitching and folding stopper angle. Decide the position and secure the hexagonal bolt firmly.



## 9-7. Using the Folding Guide (For Folding)

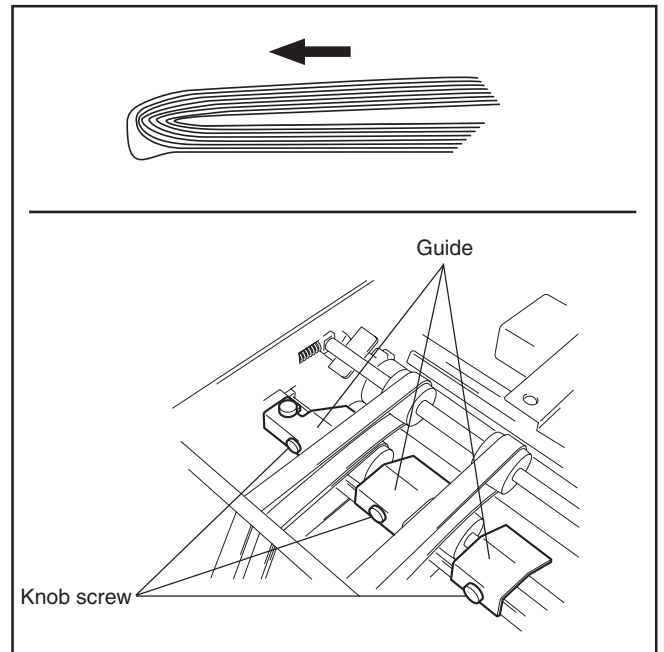
- Set the auxiliary side guide according to paper size.
- Adjust the angle of the side guide according to the angle of the folding stopper. Loosen the fixing hexagonal bolts of the side guide and auxiliary side guide, and adjust the angle using the adjusting hexagonal bolt. Tighten the fixing screw after adjusting.





## 9-8. Using the Guides After Folding

Use these guides if the cover is deformed as shown in the figure.  
Loosen the knob screw, raise up the guide, and secure the knob screw.  
Normally, use them slightly lowered.



## 9-9. Using the Press Roller

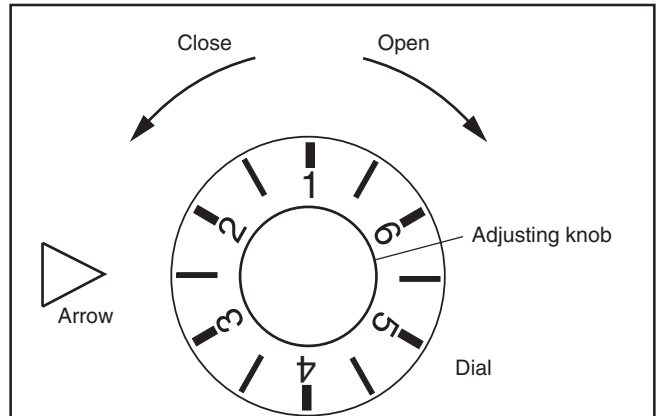
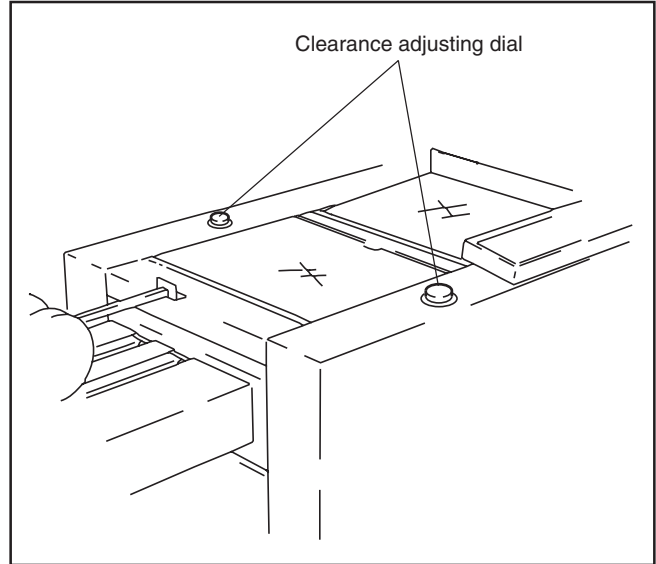
With performing folding operation, the press rollers 1 clip papers, the press rollers 2 and 3 reinforce the fold line.

Adjust the clearances between the press rollers 1 and between press rollers 2.

### 1 Adjusting the clearance of press rollers 1

1. Set the clearance adjusting dial to the appropriate position shown in the following table according to the thickness of the bound set.
2. As conditions change according to the paper quality, the actual positions for setting the dial may differ from those in the following table.
3. Always set the same position number for the left and right sides.

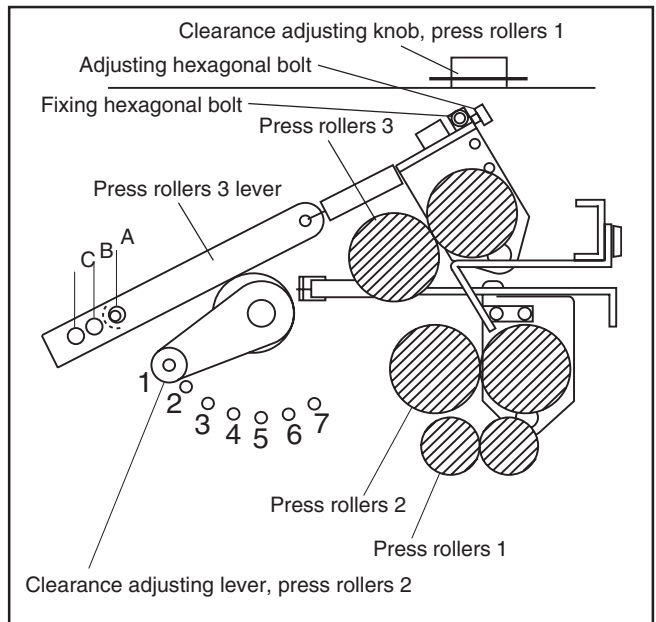
Thickness of Bound Set 1	Dial Position No.
0.04 inch or less	1
0.04-0.08 inch	2
0.08-0.12 inch	3
0.12-0.16 inch	4
0.16-0.2 inch	5, 6



### 2 Adjusting the clearance of press rollers 2

1. Set the clearance adjusting lever to the appropriate position shown in the following table according to the thickness of the bound set.
2. As conditions change according to the paper quality, the actual positions for setting the lever may differ from those in the following table.
3. Always set the same position number for the left and right sides.

Thickness of Bound Set 1	Dial Position No.
0.04 inch or less	1, 2
0.04-0.08 inch	3
0.08-0.12 inch	4
0.12-0.16 inch	5
0.16-0.2 inch	6, 7



### 3 Adjusting the press rollers 3 lever

- Normally perform folding operations at position A.
- Set to position B when the paper stops (jams) just before press rollers 3 when folding operations are carried out at position A.  
The pressure will decrease.
- Set to position C when correcting jams.

#### Note

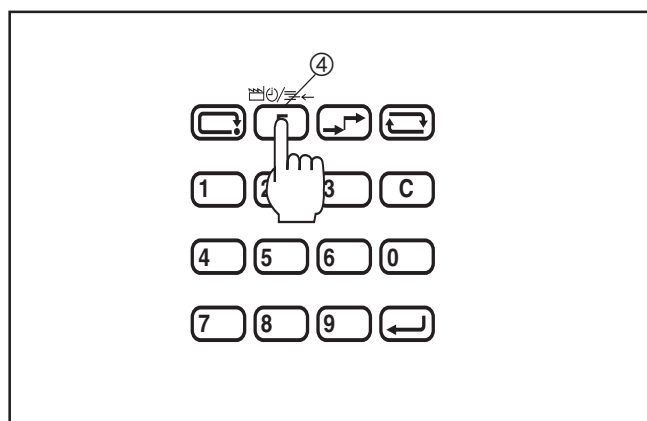
Always set the same position for the left and right sides.

- Loosen the fixing hexagonal bolt on both sides, screw-in the adjusting hexagonal bolt completely to widen the clearance.
- After adjusting, tighten the fixing hexagonal bolt firmly. In this case, as the conveyance ability of short paper will decrease, it cannot be used for booklet under 4.72 inch.

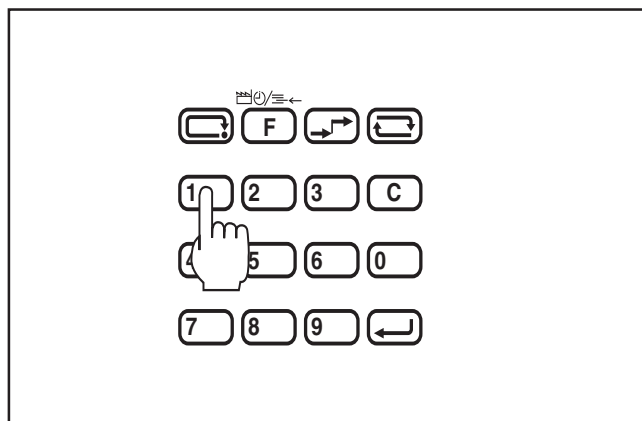
## 9-10. Using the Belt Stacker Unit

- **Adjust the paper guide roller unit to the booklet size.**
- **Set how long to move the conveyance belt after booklet is discharged onto the stacker according to the booklet size.**

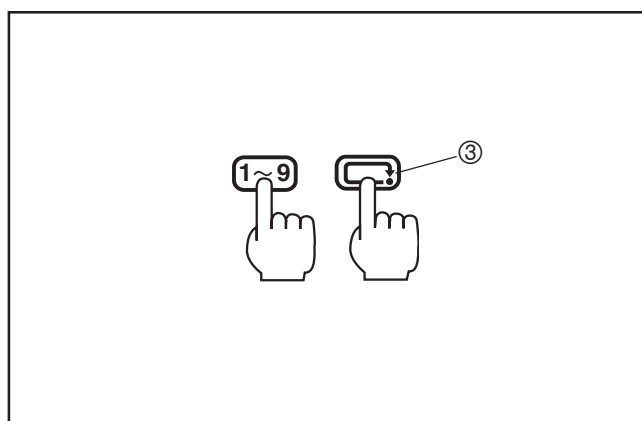
**1** When the machine is stationary, press the ④ Function Key.



- 2** Press 1 of the ⑦ Numerical Keys and press the ⑨ Set Key. This will set the mode for setting the belt conveyance time.



- 3** Set the length of time by inputting one-digit numbers between 1 to 9 of the ⑦ Numerical Keys (approx. 0.7 to 2.3 seconds). The conveyance time increases by 0.2 seconds each time the number is increased by one. Press the ⑦ Numerical Keys, and press the ③ Escape Key twice to complete the input.



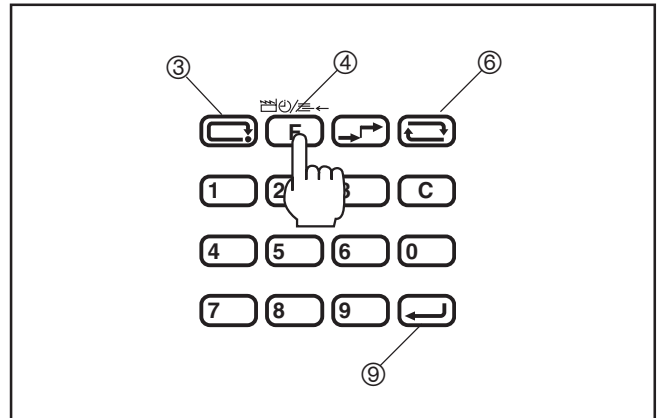
**Note**

- If the conveyance time set is not appropriate for the booklet size, the ejection sensor may display a paper jam message. In this case, set the conveyance time again.
- The belt conveyance time is factory set to 3.

# 10. Using Function Keys

## Operating the Function Keys

- Press the ④ Function Key while the machine is stopping.
- Press one of the ⑦ Numerical Keys corresponding to the following items, and press the ⑨ Set Key to confirm.
- Enter the value using the ⑦ Numerical Keys.
- Press the ③ Escape Key twice to end .

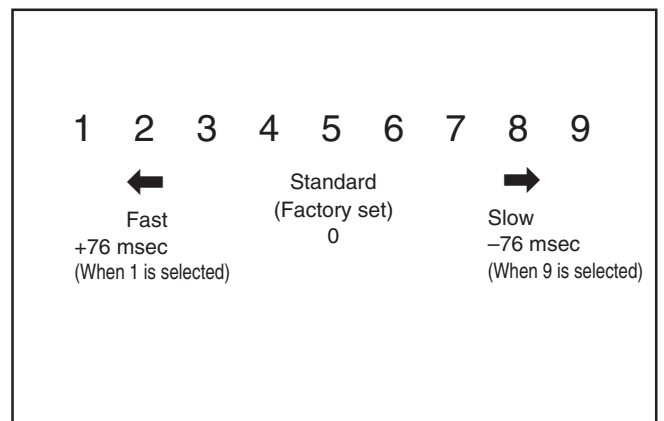


### 1 Pressing 3 of the ⑦ Numerical Keys displays [Jog-MAX] to restrict the number of jogs.

- This is factory set to 7.

### 2 Pressing 4 of the ⑦ Numerical Keys displays [4. S-STOP] to change the timing at which the saddle-stitching stopper rises in 9 steps.

- This is factory set to 5.
- When performing the saddle-stitching process at 60 sets/minute, if the saddle-stitching stopper timing is bad and causes the paper to ride onto the stopper, use the ⑦ 4 key.

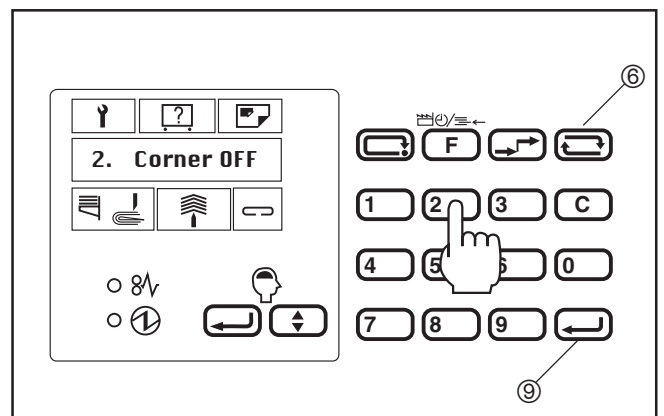
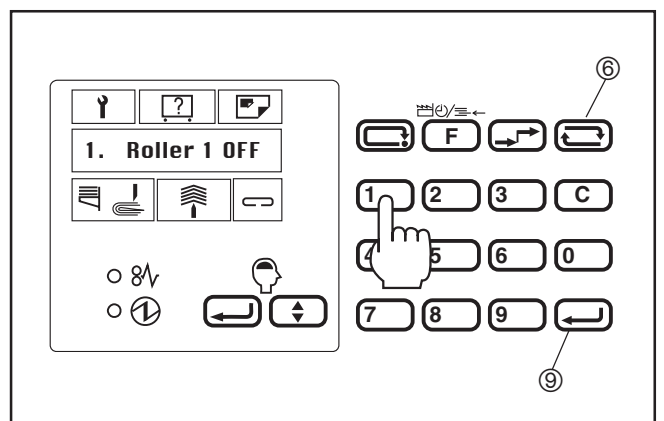


### 3 Pressing 8 of the ⑦ Numerical Keys displays [8.MODE SELECT 1] to set the following items. Press the ⑨ Set Key.

- Pressing 1 of the ⑦ Numerical Keys displays [1. Roller 1 ON/OFF]. To switch between ON and OFF, press the ⑦ 1 key while pressing the ⑥ Change key. It is factory set to OFF.
- Pressing 2 of the ⑦ Numerical Keys displays [2. Corner ON/OFF]. To switch between ON and OFF, press the ⑦ 2 key while pressing the ⑥ Change key. It is factory set to OFF. When set to ON, the side guide escapes more quickly when the paper ejection roller unit descends, enabling smooth ejection of the paper.

#### Note

When saddle-stitching, be sure to turn to OFF.



## 10. Using Function Keys

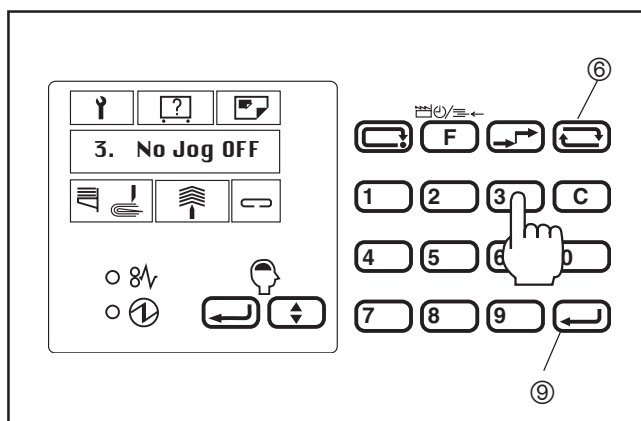
- Pressing 3 of the ⑦ Numerical Keys displays [3. No Jog OFF].

When performing no-stitching folding operation, set whether to perform jog operations at the stitching area.

To switch between ON and OFF, press the ⑦ 3 key while pressing the ⑥ Change key.

Jog operations will be carried out when OFF and not carried out when ON.

It is factory set to OFF.

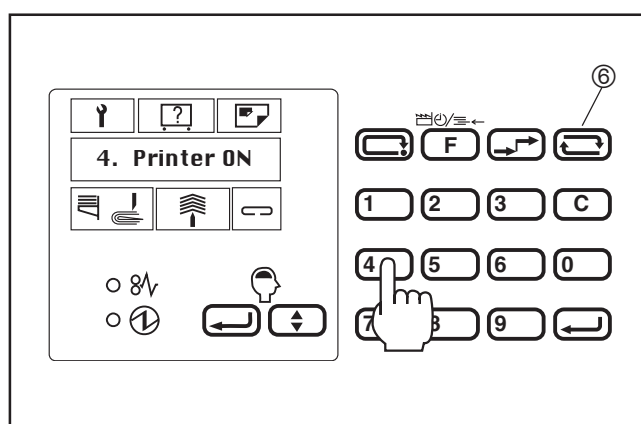


- When ⑦ 4 key is pressed, [4. Printer ON/OFF] is displayed.

To switch between ON and OFF, press ⑦ 4 key while pressing the ⑥ Change key.

Always set to ON.

It is factory set to ON.



- Pressing 5 of the ⑦ Numerical Keys displays [5. Jog Auto ON/OFF].

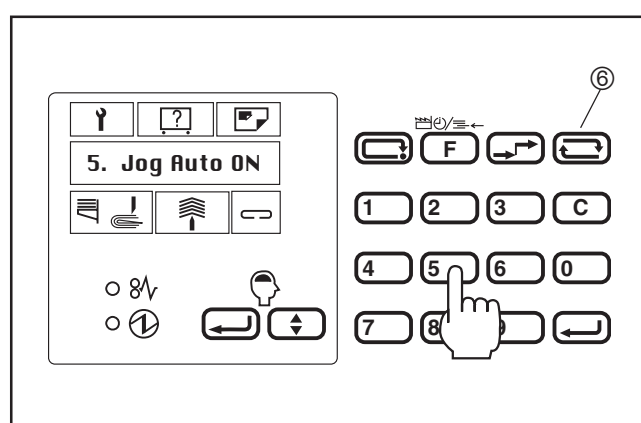
Set to ON when used connecting to a Duplo suction feed collator.

Set to OFF when used connecting to a Duplo friction feed collator.

To switch between ON and OFF, press the ⑦ 5 key while pressing the ⑥ Change key.

In this case, jog operation is performed once for the first set only.

It is factory set to ON.



- Pressing 6 of the ⑦ Numerical Keys displays [6. Same Time ON/OFF].

Use this setting to set how to perform jog operations at the stitching area.

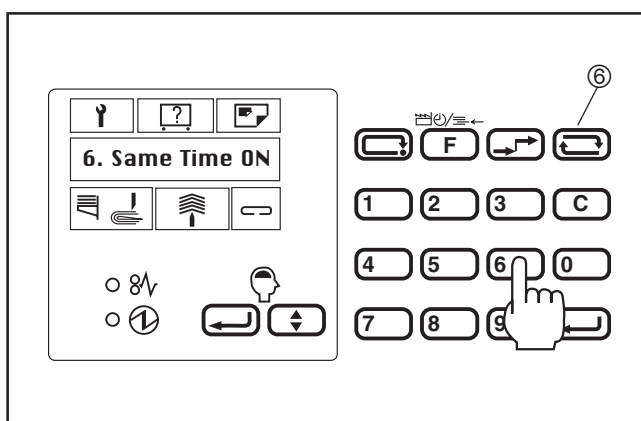
This controls the side jog and back jog timing.

To switch between ON and OFF, press the ⑦ 6 key while pressing the ⑥ Change key.

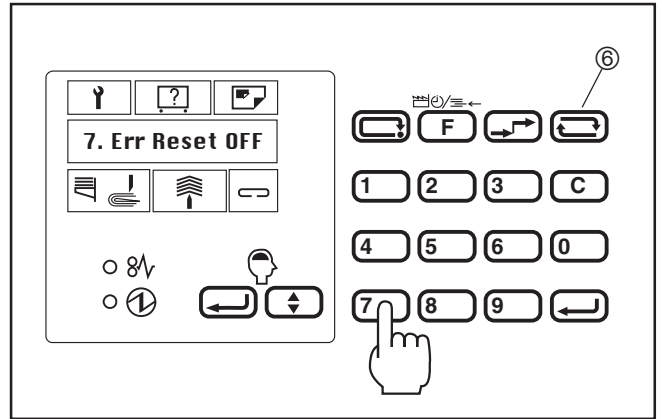
When set to OFF, side jog and back jog operations are performed alternately.

When set to ON, they are performed at the same timing.

It is factory set to ON.



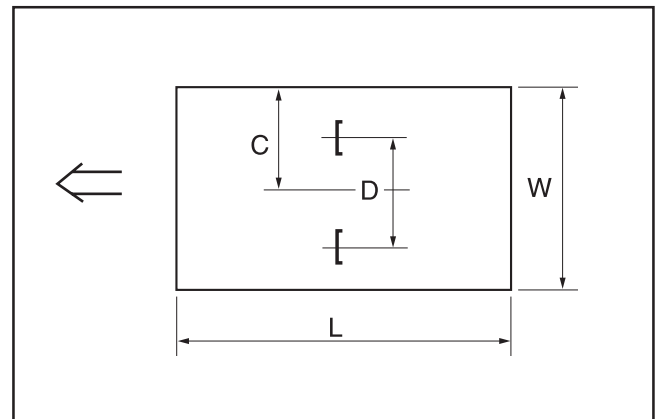
- Pressing 7 of the ⑦ Numerical Keys displays [7. Err Reset ON/OFF].  
Use this setting to set the error message displayed when an error has occurred in DBM-400.  
To switch between ON and OFF, press the ⑦ 7 key while pressing the ⑥ Change key.  
When set to OFF, the code of the error first detected will be displayed.  
When set to ON, the latest error code will be displayed.



Error Priority Order

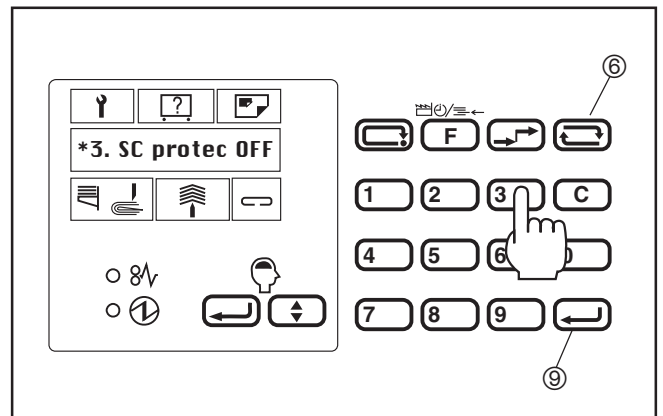
- Error 25 DC-24V power supply (Error of Over voltage protection, etc.)
- Error 21 Emergency Stop switch (in pressed state)
- Error 26 Side cover (Open)
- Error 22 Top cover (Open)
- Error 51 Downstream processing device (trimmer, stacker error)
- Error 15 Driver unit (Error)  
It is set to OFF at shipment.

- Pressing 8 of the ⑦ Numerical Keys displays [8. Relative ON/OFF].  
Use this setting to change the method for inputting the stitching head.  
To switch between ON and OFF, press the ⑦ 8 key while pressing the ⑥ Change key.  
It is factory set to OFF.  
When set to ON, the stitching head is input at C and D.
- To change to this operation method, contact a Duplo service personnel.



**4 Pressing 9 of the ⑦ Numerical keys displays [9. MODE SELECT 2]. The following items can be set.**

- Pressing 3 of the ⑦ Numerical Keys displays [3. SC protec ON/OFF].  
To switch between ON and OFF, press 3 of the ⑦ Numerical Keys while pressing the ⑥ Change key.  
Perform the setting to prevent operations at incomplete size change.  
By setting to ON, the system will wait for the trimmer to complete size change when performing the size change, during which [Wait...] will be displayed.  
If an error has occurred during size change or after test stitching, attempts to start operations will display error no.32 and the system will not operate.  
This function is factory set to OFF.



# 11. Precautions Using Emergency Stop Switch

The Emergency stop switch should be used only in case of emergency. Avoid excessive use of this switch.

In normal operation, use the stop key on the collator.

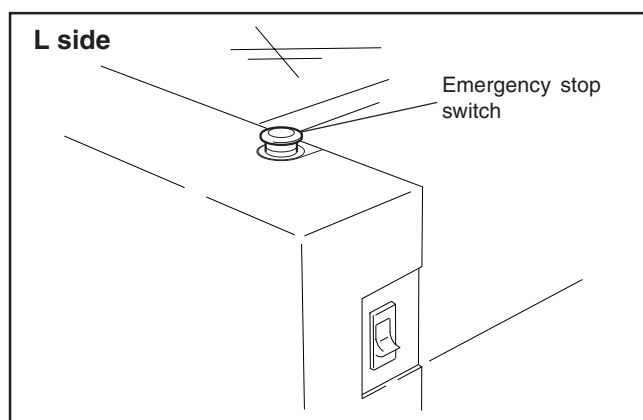
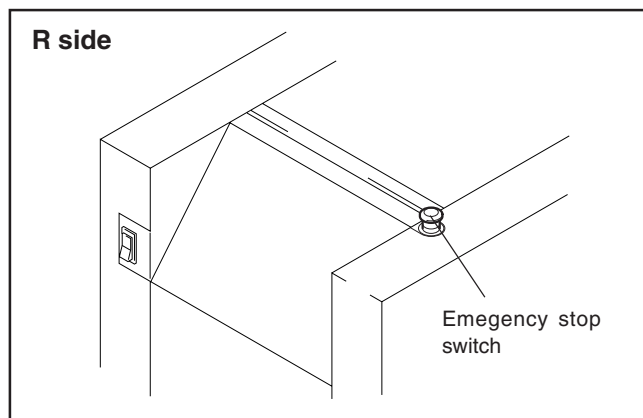
Problems during operation will automatically be detected to stop the machine.

## [If you press the emergency stop switch]

Jamming may occur in the conveyer route of the collator, the conveyer bridge, the stitcher and etc. In such a case be sure to remove jammed paper.

## [How to cancel emergency stop switch]

Turn the switch clockwise to release.





# 12. LCD Error Messages and Corresponding Actions to Take

## 12-1. Error Messages

When errors occur, the following error numbers are displayed on the LCD, and the arrow indicates the corresponding section.

Resolve the error according to the following table.

Error No. at Side of Arrow	Details of Error	Steps to Take
01	Paper is not conveyed to Sensor ①.	Refer to 12-2.
02	Paper remains at Sensor ①.	Refer to 12-2.
03	Paper is not conveyed to Sensor ②.	Refer to 12-2.
04	Paper remains at Sensor ②.	Refer to 12-2.
05	Paper is not conveyed to Sensor ③.	Refer to 12-2.
06	Paper remains at Sensor ③.	Refer to 12-2.
07	Paper is not conveyed to Sensors ④ and ⑤.	Refer to 12-2.
08	Paper remains at Sensors ④ and ⑤.	Refer to 12-2.
11	The main motor rotation speed is too slow.	Refer to 12-4.
12	The main motor rotation speed is too fast.	Refer to 12-4.
13	The folding clutch stop position is incorrect	Refer to 12-4.
14	The stitching clutch stop position is incorrect	Refer to 12-4.
15	Driver board error	Refer to 12-4.
16	CPU error	Refer to 12-4.
18	Serial communication error	Refer to 12-4.
21	The emergency stop switch remains pressed.	Refer to 12-3-1.
22	The top cover is open	Refer to 12-3-2.
23	The auxiliary roller stay is attached	Refer to 12-3-3.
24	The power was turned off during operations	Refer to 12-3-4.
25	24V is not supplied	Refer to 12-3-5.
26	The side cover or shutter is open	Refer to 12-3-6.
32	<ul style="list-style-type: none"> <li>• An error has occurred during size change.</li> <li>• Performed test stitching.</li> </ul>	Perform size change.
41	Overload of the moving motor of the side guide	Remove the obstacle.
42	Overload of the jog motion motor of the back jog	Remove the obstacle.
43	Overload of the moving motor of the back jog	Remove the obstacle.

## 12. LCD Error Messages and Steps to Take

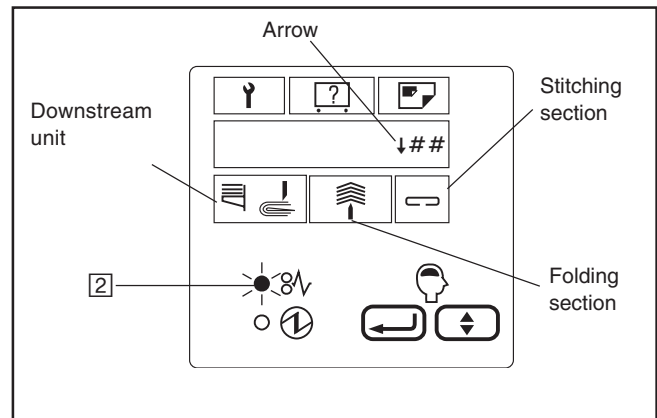
Error No. at Side of Arrow	Details of Error	Steps to Take
44	Overload of the moving motor of the saddle-stitching stopper	Remove the obstacle.
45	Overload of the moving motor of the back stopper	Remove the obstacle.
46	Overload of the moving motor of the folding stopper	Remove the obstacle.
47	Overload of the moving motor of the stitching head R	<ul style="list-style-type: none"> <li>Remove the obstacles.</li> <li>Apply a few drops of oil provided to the screw shaft.</li> </ul>
48	Overload of the moving motor of the stitching head L	<ul style="list-style-type: none"> <li>Remove the obstacles.</li> <li>Apply a few drops of oil provided to the screw shaft.</li> </ul>
51	Downstream unit error	Read the instruction manual for the downstream unit.
52	The DBM-400T dust box is full	Dispose the cut paper waste according to the instruction manual of the downstream unit.
OE	Could not reject the faulty sets.	Remove the faulty sets in the unit.

### 12-2. Paper Jam Display

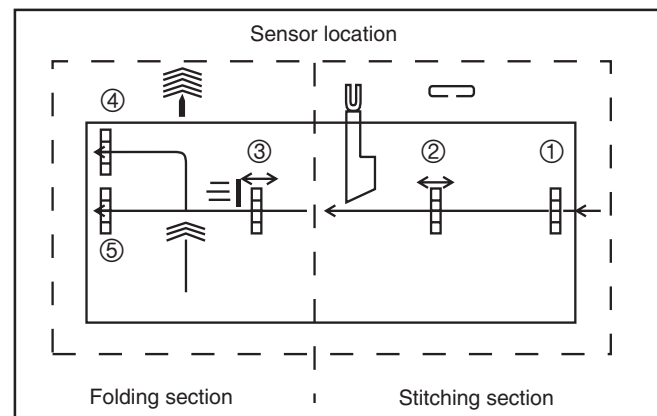
- When paper jams, the  jam lamp lights up and the LCD shows the location of the jam with the arrow.

The right figure shows that paper jam has occurred at the stitching area.

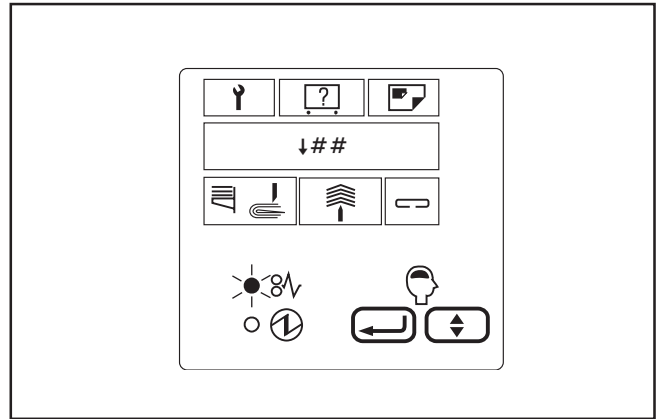
(Error numbers 01 to 04)



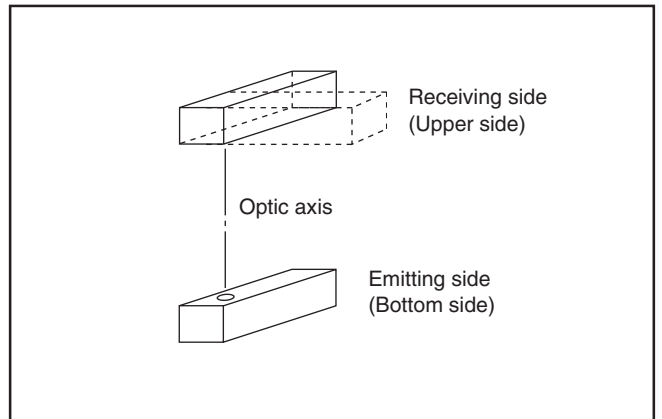
- Paper jams are detected by sensors. The locations of these sensors are as shown in the figure.



- **Display when the paper jam has occurred at the folding section**  
**(Error number 05 to 08)**



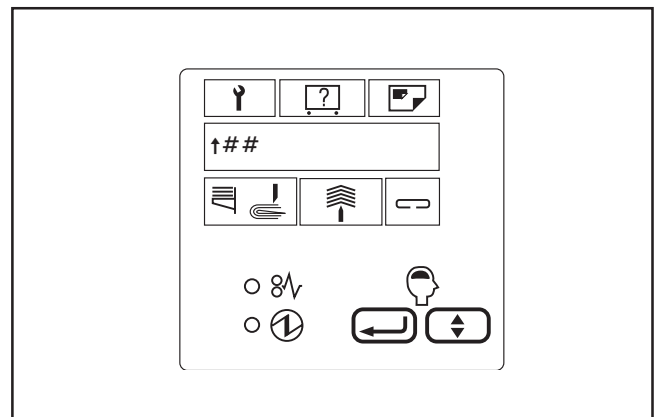
- **If an error message is displayed immediately after the unit is restarted after removing the paper, the following causes can be suspected.**
  - The sensor is blocked by a paper piece.
  - Paper dust are adhered to the sensor.  
It will cause mis-detection. Clean the sensor in the emitting and receiving sides by blowing air, etc.
  - If anything other than paper is blocking the sensor, remove it.



If operations still cannot be performed even after the above, contact a Duplo service personnel.

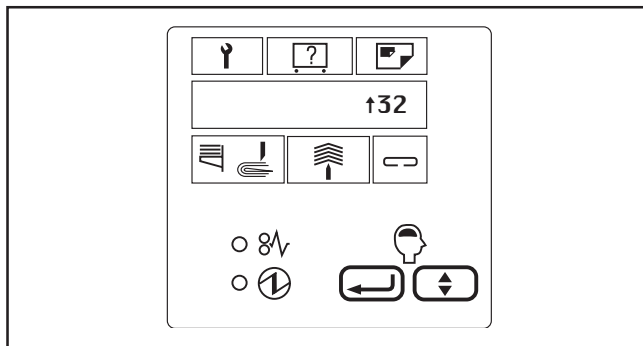
### 12-3. Serious Problems

- **The display shows error numbers 11 to 18 at which a serious problem has occurred.**  
**If those error numbers are displayed, press the ③ Escape Key. If the error number cannot be cleared, turn the power switch off, then turn it on again. If the same error number is displayed, call a Duplo service personnel.**

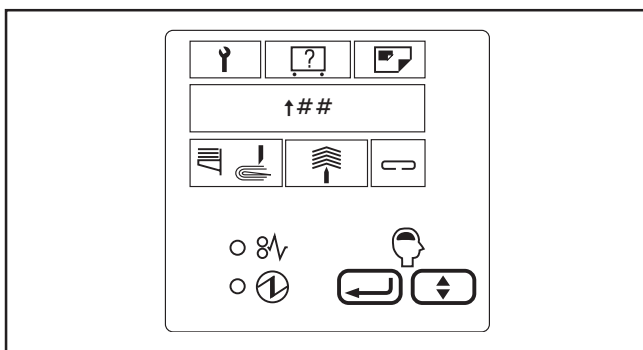


## 12-4. Other Messages

- If an error has occurred during size change or after test stitching, attempts to start operations will display error number 32 to warn of incomplete size change. The system will also stop at the same time. As the guides are not at their designated positions, perform size change again, or move the guides to their proper positions in the step mode.



- Error messages are displayed when errors occur in the unit. The error contents differ according to the number displayed.



### 1 When error No. 21 is displayed.

- Press the switch button another time to clear the error.
- \* If displayed during operations, the guides may not be at their designated positions. Change the guide sizes using the memory number.

### 2 When error No. 22 is displayed.

- Close the top cover properly.
- \* If displayed during operations, the guides may not be at their designated positions. Correct the guide positions using the memory number.

### 3 When error No. 23 is displayed.

- This will occur if the auxiliary roller stay is attached when changing the paper size. Refer to “9-2. Using the Auxiliary Roller Unit” and remove.

### 4 When error No. 24 is displayed.

- This is displayed when the power is turned on again after it had been turned off during operations, if the power cord is disconnected from the outlet, or if the indoor wiring breaker has been cut.
- To return to the previous message, open/close the top cover or press the Ⓜ Escape Key.
- \* As the guides may not be at their designated positions, correct the guide positions using the memory number.

### 5 When error No. 25 is displayed

- Turn off the power switch, and after 10 minutes, turn it on again.
- \* If displayed during operations, the guides may not be at their designated positions. Correct the guide positions using the memory number.
- \* If error No. 25 occurs frequently, contact a Duplo service personnel.

### 6 When error No. 26 is displayed

- Close the cover and shutter.
- \* If displayed during operations, the guides may not be at their designated positions. Correct the guide positions using the memory number.

### 7 When error No. 41 to 48 is displayed.

- Overload of the moving motor has occurred. Check if the motor has hit something and remove the obstacle if any

# 13. The Unit will Stop in These Cases

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The top cover is opened during operations.

- The safety switch works to stop the unit.  
Operations will start again when the cover is closed, and the start key is pressed.

**Note**

The unit will operate while it is in the step mode.

When paper jams inside the unit.

- Remove the paper jammed.

## **When connected to the downstream unit.**

If an error occurs at the downstream unit

- Refer to the instruction manual of the downstream unit and solve the error.

# 14. Cleaning

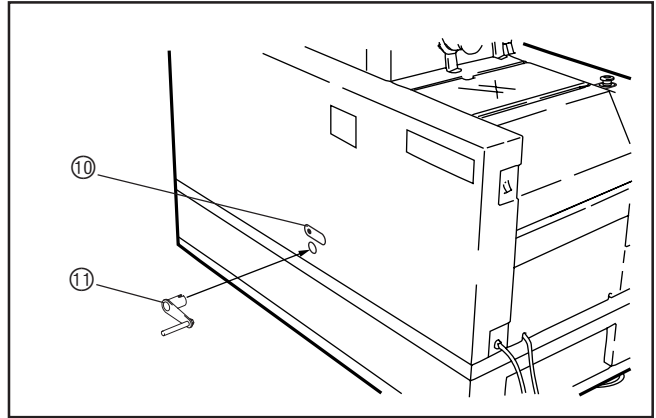
**For safety purposes, be sure to turn OFF the power before starting cleaning.**

Cleaning the conveyance belt and roller

- Moisten a cloth with water or cleaner and wipe off the dirt.
- To clean the press roller and flat belt, open the ⑩ Shutter, and rotate the ⑪ Manual Handle clockwise.

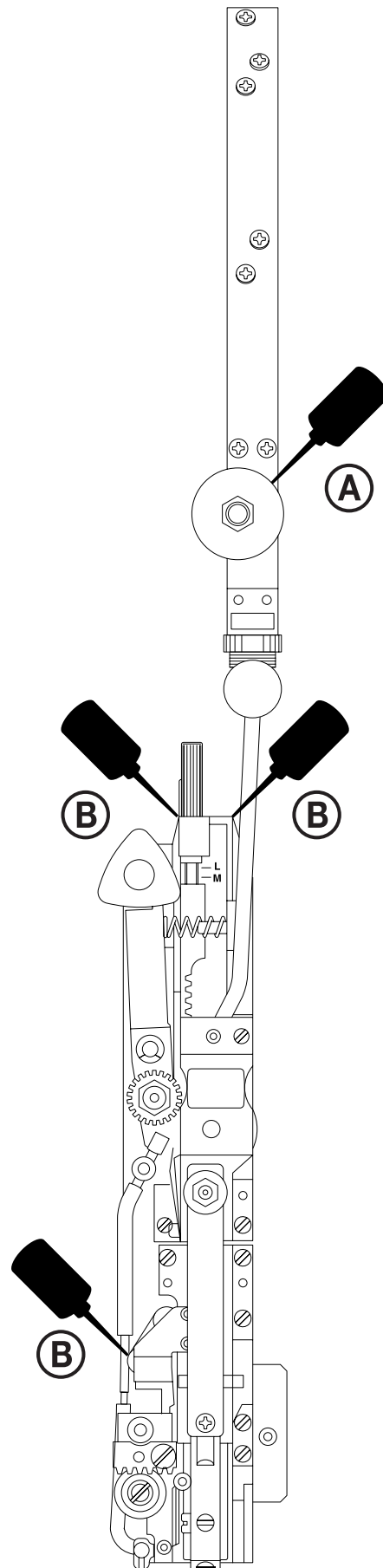
## Note

- After completing operations, be sure to close the ⑩ Shutter, otherwise the interlock switch will function and disable operations.



# 15. Maintenance of the Stitching Head

Lubricate part ① once a week and part ② once a month with a few drops of the lubricant provided.



# 16. Specifications

<b>Model name</b>	DBM-400 Sheet by Sheet
<b>Model</b>	Automatic size setting stitcher folder
<b>Paper size</b>	Saddle stitching and folding Length : 11 to 18.5 inch      Width : 8.27 to 14 inch Side stitching Length : 7.88 to 9.48 inch      Width : 8.27 to 14 inch (Some sizes cannot be processed due to the vertical and horizontal ratio.)
<b>Paper quality</b>	Cover paper : fine paper (17 to 34 lb), coated paper (28 to 42 lb)(only with 1 cover sheet) Other : fine paper (17 to 34 lb) Maximum processing capacity (when connected to DB-10)
<b>Processing speed</b>	Stacker : 180sheets/minute ..... Buffer:Minimum of 3 sheets/minute Processing speed : 60 set/minute ..... Buffer:Minimum of 3 sheets/minute * Above applies only for Letter size portrait output 5 mm (Equivalent to 50 sheets of 21 lb paper.)
<b>Stitching capacity</b>	0 to 2 places (Minimum width: 2.95 inch)
<b>No. of stitches</b>	Less than 24 sheets (21 lb paper) + 1 sheet cover paper (42 lb paper.)
<b>Folding capacity</b>	Saddle-stitching      Total thickness of a single set must be 0.12 inches or less
<b>Processing capacity</b>	Width 11.81 to 14 inch ..... 12 sheets or less Width 8.27 to 11.81 inch ..... 20 sheets or less (or 25 sheets or less when using 80 g/m <sup>2</sup> EEL high-quality bond paper) Side-stitching      Total thickness of a single set must be 3.0 mm or less Width 11.81 to 14 inch ..... 20 sheets or less Width 8.27 to 11.81 inch ..... 30 sheets or less Width 8.27 to 11.81 inch/Length 8.27 inch...25 sheets or less Art/coated paper cannot be corner stitched Width 8.27 to 11.81 inch/Length 7.88 to 9.48 inch...30 sheets or less 5 places
<b>Jam detection</b>	Top covers : 3 places, Shutter
<b>Interlock switch</b>	82 dB (including a peak)
<b>Noise level</b>	Unit      56.5 (Width) x 27.56 (Depth) x 35.74 (Height) (inch)
<b>Size of unit</b>	During installation (56.5+24.09) x 27.56 x (35.74+15.35) (inch) 683 lb
<b>Mass (Weight)</b>	AC120V 60 Hz
<b>Power supply</b>	8A
<b>Rating</b>	

Note : If the downstream unit is connected, conforms to the paper size and speed of the downstream unit.



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