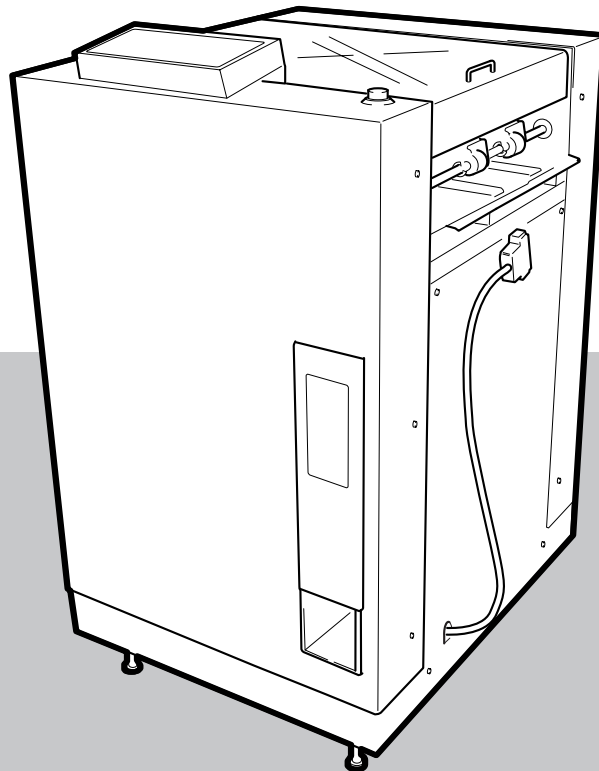

SYSTEM 4000

TRIMMER

DBM-400T

Instruction Manual



DUPLO CORPORATION

DECLARATION OF CONFORMITY



Duplo Corporation, located at 7-6, Izumi Honcho 1-chome, Komae-shi, Tokyo 201-8666, Japan, declares that the following product,

Name of product : TRIMMER , LONG STACKER (incl. KICKER)

Type No. : DBM-400T , DBM-400LS (incl. DBM-400K)

Complies with the provisions defined by the regulations listed below.

Regulation : Low Voltage Directive 73/23/EEC under the application of IEC950 2nd(1991)/ A1(1992)/ A2(1993)/ A3(1995)/ A4(1996) and EN60950 2nd (1992)/ A1(1993)/ A2(1993)/ A3(1995)/ A4(1997).

Electromagnetic Compatibility Directive 89/336/EEC under the application of EN55022(1994) Class B, EN50082-1(1992) , EN61000-3-2(1995) Class A, EN61000-3-3(1995).

ÜBEREINSTIMMUNGSERKLÄRUNG

Die Duplo Corporation mit Sitz in 7-6, Izumi Honcho 1-chome, Komae-shi, Tokyo 201-8666, Japan, versichert, daß das folgende produkt,

Bezeichnung des Produkts : BROSCHUREN FRONTSCHNEIDE-MASCHINE ,
LANGER ABLAGEFACH (einschließlich PAPIERVORSCHUBEINHEIT)

Typen-Nr. : DBM-400T , DBM-400LS (einschließlich DBM-400K)

Entspricht den Bestimmungen, wie sie durch die unten aufgeführten Vorschriften definiert sind.

Vorschriften : EWG-Niederspannungsrichtlinie 73/23/EEC unter Anwendung der IEC950 zweit (1991)/ A1(1992)/ A2(1993)/A3(1995)/A4(1996) und EN60950 zweit (1992)/ A1(1993)/ A2(1993)/ A3(1995)/ A4(1997).

Vorschriften für elektromagnetische Störungsfreiheit 89/336/EEC unter Anwendung der EN55022(1994) Klasse B , EN50082-1(1992) , EN61000-3-2(1995) Klasse A , EN61000-3-3(1995).

DECLARATION DE CONFORMITE

Duplo Corporation, située à 7-6, Izumi Honcho 1-chome, Komae-shi, Tokyo 201-8666, Japon, déclare que le produit suivant;

Nom du produit : ROGNEUSE , PLATEAU RECEPTEUR LONG (Compris EJECTEUR)

No, de type : DBM-400T , DBM-400LS (Compris DBM-400K)

est conforme aux dispositions définies par les réglementations suivantes;

Réglementations : Directive sur la basse tension 73/23/EEC en application de IEC950 2' (1991)/ A1(1992)/ A2(1993)/ A3(1995)/A4(1996) et EN60950 2' (1992)/ A1(1993)/ A2(1993)/ A3(1995)/ A4(1997).

Directive de compatibilité électromagnétique 89/336/EEC application de EN55022(1994) CLASSE B, EN50082-1(1992) , EN61000-3-2(1995) CLASSE A , EN61000-3-3(1995).

INTRODUCTION

Thank you for your purchase. To ensure correct usage, please read this instruction manual thoroughly, especially the section Safety Precautions. After reading, please store this instruction manual in a safe place for future reference.


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1. Safety Precautions


Always observe the cautions and warnings explained below to prevent personal injury or property damage.


- The degree of danger and damage that could occur is indicated in two levels by the following marks.


 **WARNING:** *Ignoring this mark could result in the possibility of serious injury or even death.*


 **CAUTION:** *Ignoring this mark could result in the possibility of injury or physical damage.*


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


 This graphic symbol indicates a forbidden action.


 means “Do not disassemble.”

 means “Do not touch.”


 This graphic symbol indicates actions that must be performed.


 means “Disconnect the power plug.”

 This graphic symbol indicates a “Caution” that must be observed.


 means “Caution: high temperature.”

WARNINGS:


 Do not put your hands under the blade and paper holder when correcting paper jams of the trimming section. There is danger of cutting off your fingers.

 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.

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

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

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

 Do not disassemble, modify or repair this unit. There is danger of fire, electrical shock or injury. Contact your dealer when repairs are necessary.

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



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.



Do not use flammable sprays inside or near the unit (e.g. when cleaning the unit). Such flammable gas can be ignited and cause a fire or combustion.



Make sure that the current consumption listed on the main nameplate does not exceed capacity rating of the power outlet and do not connect other equipment to this same power outlet. Connecting other equipment could cause the power outlet to overheat and catch fire.



Remove any dust that accumulates on the power plug prongs and the surface from which the prongs extend. Accumulated dust can result in fire.



If any foreign object such as metal or liquid should enter this unit, immediately turn off the power switch 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 contact with water is possible. 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.

2. Usage Precautions

2-1. Power Supply

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

230 – 240V AC $+6\%$, -10% , 50Hz

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

2-2. Operating Environment

Operate this unit in the following environment.

- **Temperature range: 5 to 35 °C**
- **Humidity range: 20 to 85% RH (no condensation)**
- **Avoid locations with 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: –10 to +50 °C**
- **Humidity range: 10 to 85% RH (no condensation)**
- **Avoid locations with direct sunlight**
- **Avoid dusty locations**
- **Avoid locations with vibration**
- **Avoid locations that are salty**
- **Avoid locations with special chemicals**

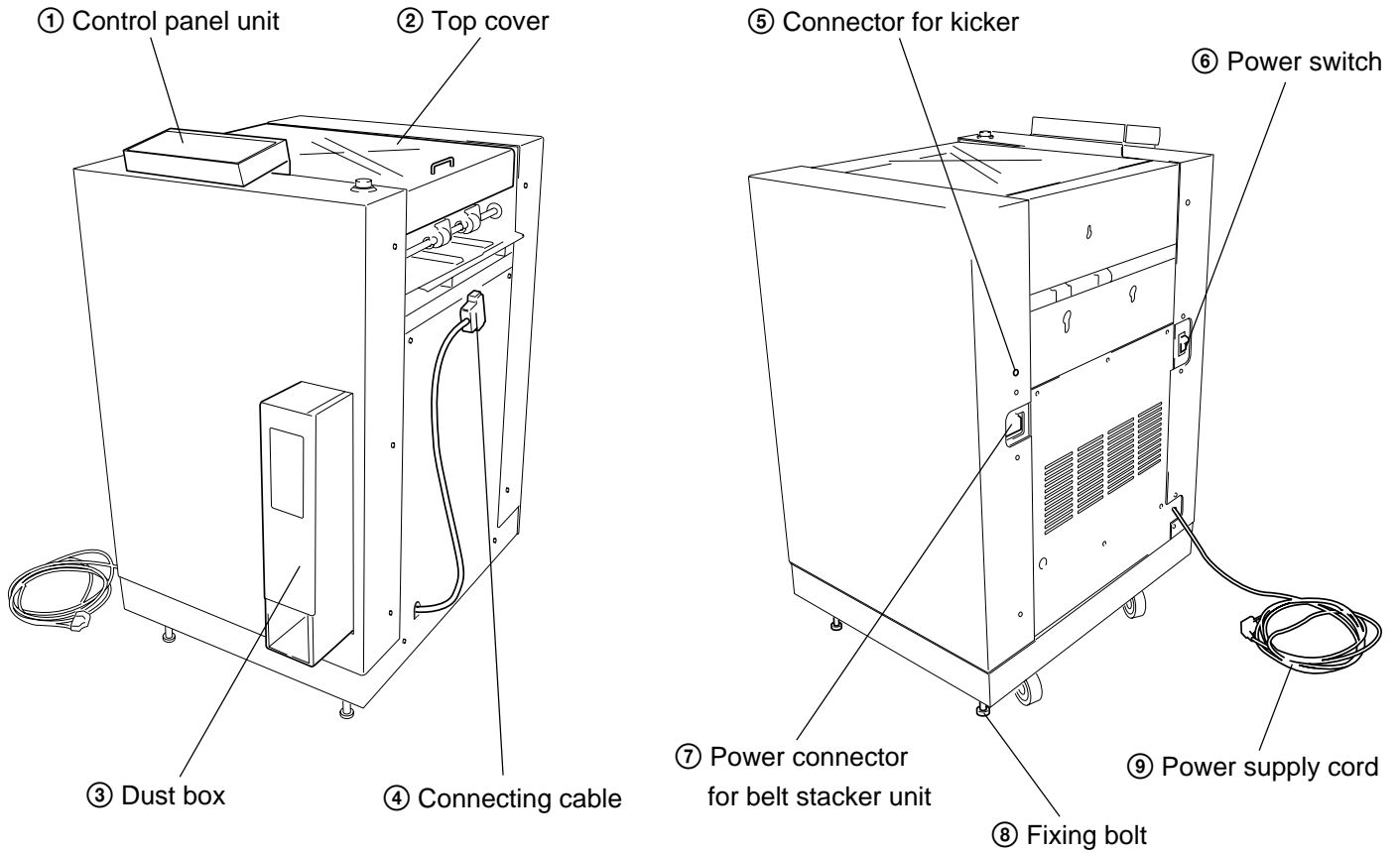
2-4. Maintenance

To protect the characteristics of this unit, the customer should never supply oil or grease to the parts (except when the customer is specifically requested in this instruction manual).

Please contact your dealer in case of any problem.

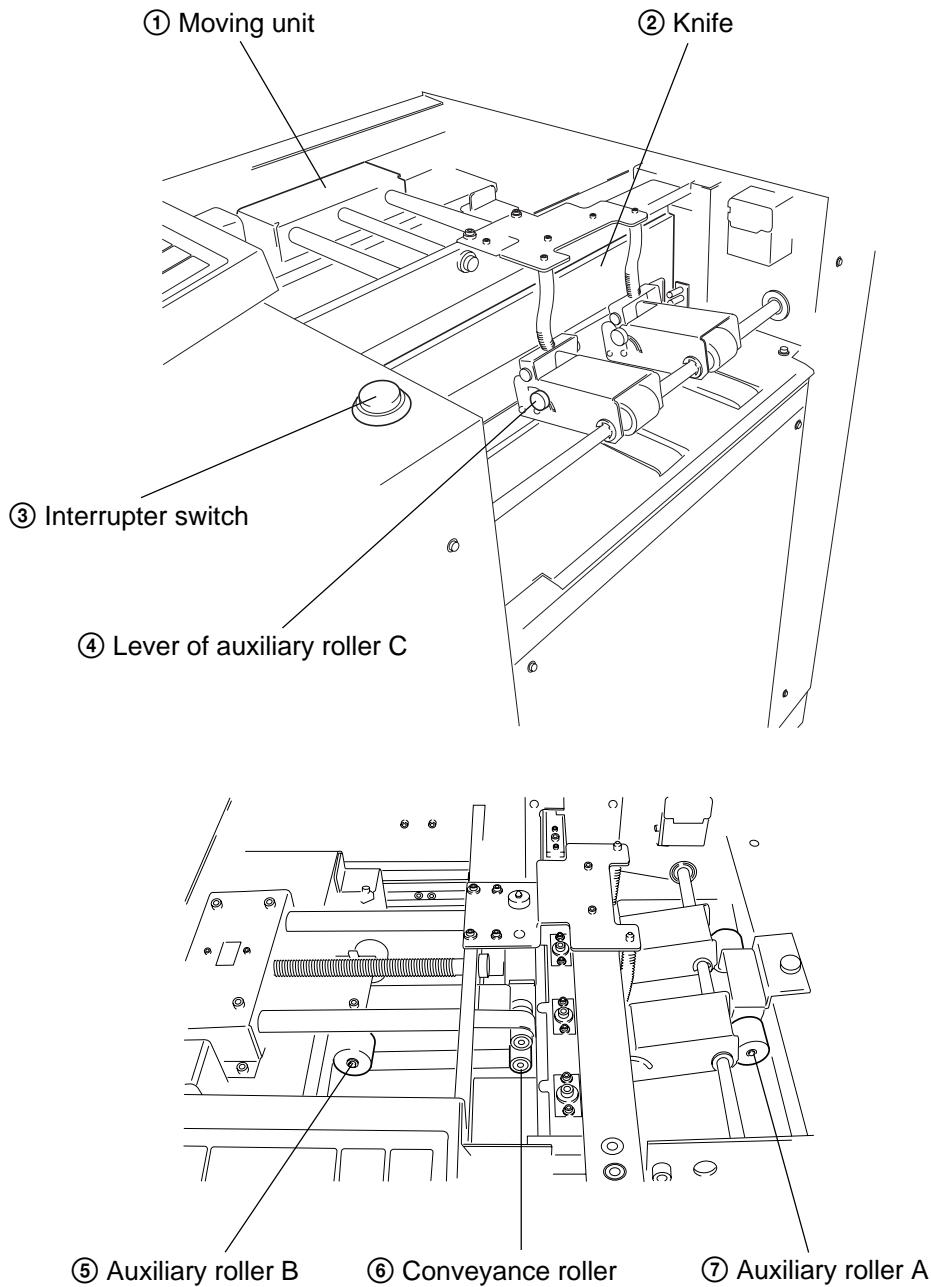
3. Names and Functions of Parts

3-1. General Appearance



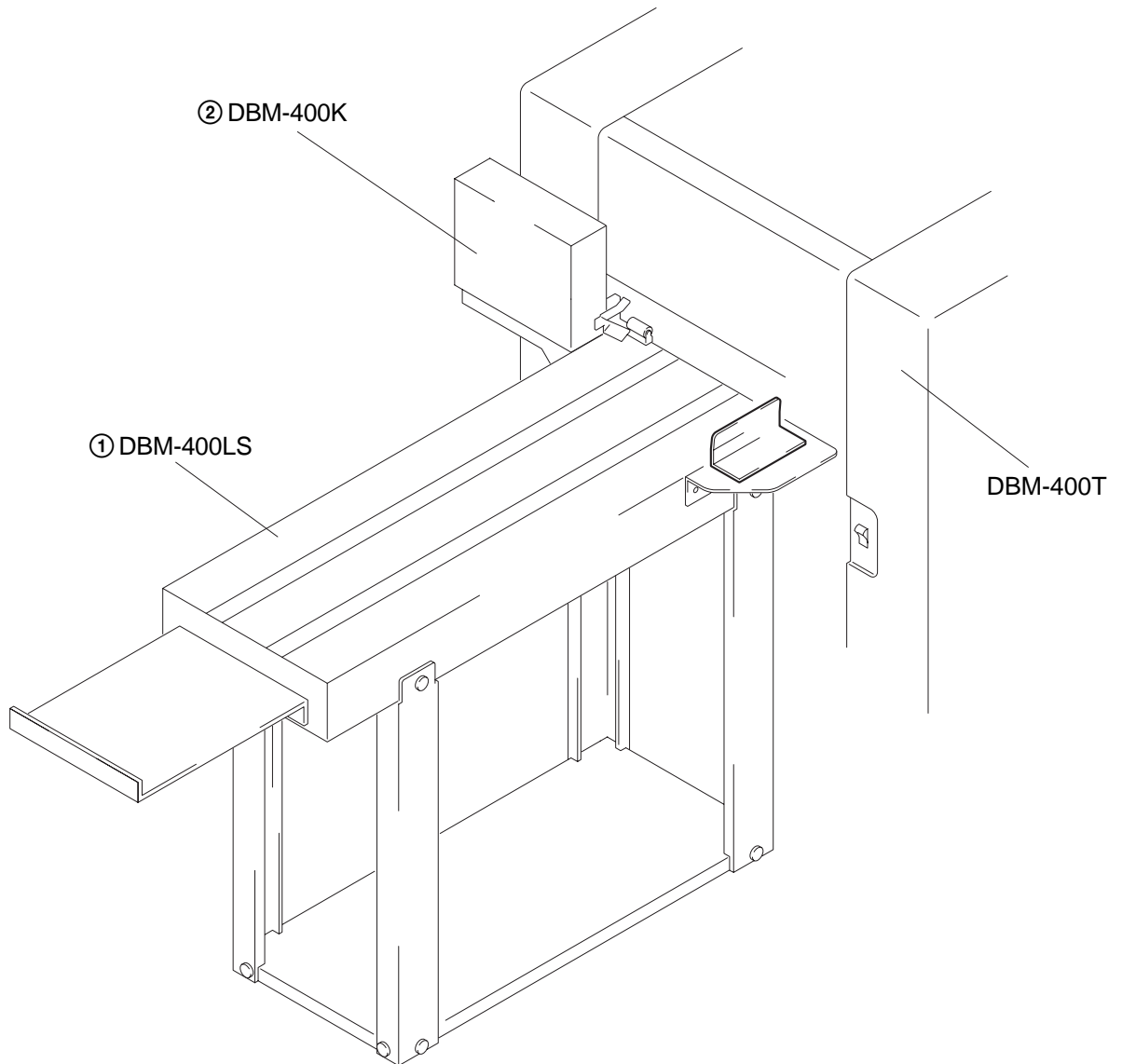
No.	Name	Function
①	Control panel unit	Displays instructions on operating the unit and messages.
②	Top cover	Cover for ensuring safety. Be sure to close this cover before beginning operations.
③	Dust box	Paper scraps are ejected into this box during trimming.
④	Connecting cable	Cable for transmitting signals with DBM-400.
⑤	Connector of kicker	Connect the connecting cable of the DBM-400K (Kicker) to this connector.
⑥	Power switch	When turned on, the unit will be in the standby state.
⑦	Power connector for belt stacker unit	Connect the power cord of the belt stacker unit to this connector.
⑧	Fixing bolt	Used for securing the unit and adjusting the height of the unit in respect to the peripheral units.
⑨	Power supply cord	Be sure to connect to a wall outlet.

3-2. Internal Parts



No.	Name	Function
①	Moving unit	Moves according to the paper size as set on the control panel.
②	Knife	Used to trim cut ends.
③	Interrupter switch	Press to stop the unit immediately. For details, refer to 12. Precautions on Use of Interrupter Switch
④	Lever of auxiliary roller C	Move this lever according to the paper size and number of sheets of paper.
⑤	Auxiliary roller B	Used to push the paper against the stopper appropriately.
⑥	Conveyance roller	Conveys paper.
⑦	Auxiliary roller A	Used for adjusting the height of the roller according to the paper size and number of sheets of paper.

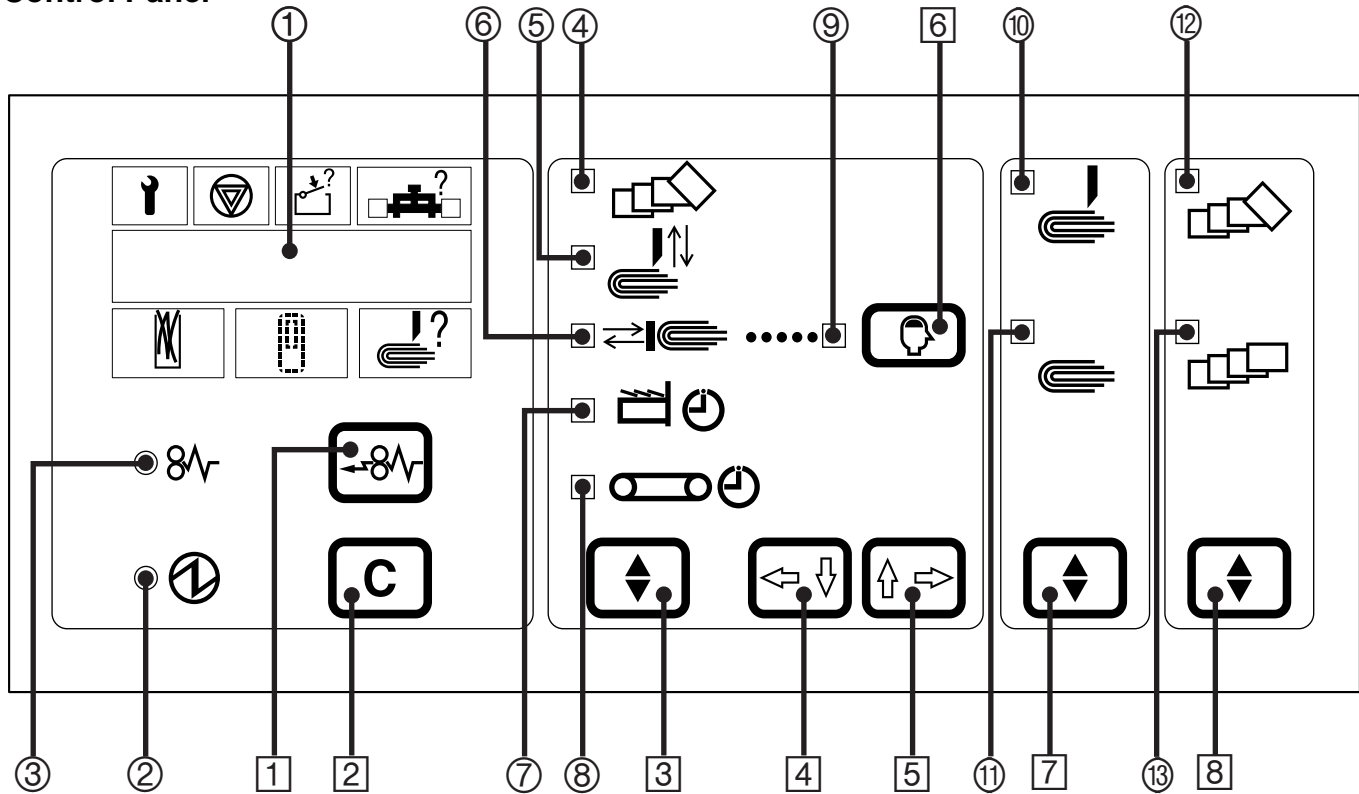
3-3. Long Stacker (Option)



No.	Name	Function
①	DBM-400LS (Long stacker)	Conveys the booklets.
②	DBM-400K (Kicker)	Sorts according to the number input.

4. Names and Functions of Control Panel

Control Panel



Displays Lamp

- ① LCD
- ② POWER lamp
- ③ JAM lamp
- ④ SET NO. OF KICKERS lamp
- ⑤ KNIFE DRIVING lamp
- ⑥ STOPPER FINE ADJUSTMENT lamp
- ⑦ SET BELT STACKER OPERATING TIME lamp
- ⑧ SET BELT STOPPING TIMING lamp
- ⑨ INPUT MEMORY lamp
- ⑩ TRIMMING ON lamp
- ⑪ TRIMMING OFF lamp
- ⑫ KICKER ON lamp
- ⑬ KICKER OFF lamp

Operation Keys

- ① EJECT key
- ② CLEAR key
- ③ SELECT UNIT key
 - Count down
 - Normal direction of knife
 - Movement of stopper to the left
- ④ Move key (←, ↓)
 - Count up
 - Reverse direction of knife
 - Movement of stopper to the right
- ⑤ Move key (↑, →)
 - Count up
 - Reverse direction of knife
 - Movement of stopper to the right
- ⑥ INPUT MEMORY key
- ⑦ SELECT TRIMMING key
- ⑧ SELECT KICKER key

Names and Functions of Control Panel

Operation Keys	Display	Function
	① LCD	<ul style="list-style-type: none"> Displays the final paper size when the power is turned ON, when the memory is called, and when in the step mode. Displays the number of sets collated while the unit is operating and is stopping normally. When an error occurs, indicates the icons around the ①LCD using arrows. When a unit is selected, the settings of the unit will be displayed.
	② POWER lamp	<ul style="list-style-type: none"> Indicates that power is being supplied to the unit.
	③ JAM lamp	<ul style="list-style-type: none"> Lights up when paper has jammed inside the unit.
① EJECT key		<ul style="list-style-type: none"> The conveyance section of the unit drives to eject the paper remaining inside the unit.
② CLEAR key		<ul style="list-style-type: none"> Clears the number of sets collated to 0.
③ SELECT UNIT key		<ul style="list-style-type: none"> Used to select from; setting the number of kickers, the direction moved by the knife, fine adjustment of the stopper, setting the operating time of the belt stacker, and setting the conveyance timing. Each time this key is pressed, the lamps light up in the following order; ④SET NO. OF KICKERS lamp → ⑤KNIFE DRIVING lamp → ⑥STOPPER FINE ADJUSTMENT lamp → ⑦SET BELT STACKER OPERATING TIME lamp → ⑧SET BELT STOPPING TIMING lamp. The ①LCD displays the respective settings.
④ MOVE key (← ↓) • Count down • Normal direction of knife • Movement of stopper to the left	④ SET NO. OF KICKERS lamp	<ul style="list-style-type: none"> When using the kicker, used to set the number of kicks per set. The ① LCD displays the kicking count. The count changes each time this key is pressed. When the key is pressed for more than 1 second, the count will change continuously. The count can be set between 0 and 999.
⑤ MOVE key (↑ →) • Count up • Reverse direction of knife • Movement of stopper to the right	⑤ KNIFE DRIVING lamp	<ul style="list-style-type: none"> While the key is pressed, the knife will move in the normal or reverse direction. The ①LCD will display the number of sets collated performed.
	⑥ STOPPER FINE ADJUSTMENT lamp	<ul style="list-style-type: none"> Each time the key is pressed, the stopper (moving unit) will move 0.5 mm. When the key is pressed for more than 1 second, the stopper (moving unit) will move continuously. The ①LCD will display the final paper size.
	⑦ SET BELT STACKER OPERATING TIME lamp	<ul style="list-style-type: none"> Used to set the belt stacker operating time. The ①LCD displays 1 to 9. Each time the key is pressed, the count changes. The greater the number, the longer will the operating time be.
	⑧ SET BELT STOPPING TIMING lamp	<ul style="list-style-type: none"> Used to set the conveyance time for pressing the paper to the stopper. The ①LCD displays 1 to 9. Each time the key is pressed, the count changes. The greater the number, the longer the operating time will be.
⑥ INPUT MEMORY key	⑨ INPUT MEMORY lamp	<ul style="list-style-type: none"> Used to memorize the final paper size (position of moving unit). When fine adjustment of the stopper (moving unit) has been performed, the ⑨INPUT MEMORY lamp light sup. Pressing the INPUT MEMORY key while the ⑨INPUT MEMORY lamp is lit memorizes the data and turns off the lamp.
⑦ SELECT TRIMMING key	⑩ TRIMMING ON lamp ⑪ TRIMMING OFF lamp	<ul style="list-style-type: none"> Each time this key is pressed, the ⑩TRIMMING ON lamp and ⑪TRIMMING OFF lamp will light up alternately. While the ⑩TRIMMING ON lamp is lit, trimming will performed. While the ⑪TRIMMING OFF lamp is lit, trimming will not be performed.
⑧ SELECT KICKER key *Note 2)	⑫ KICKER ON lamp ⑬ KICKER OFF lamp	<ul style="list-style-type: none"> Each time this key is pressed, the ⑫KICKER ON lamp and ⑬KICKER OFF lamp will light up alternately. While the ⑫KICKER ON lamp is lit, kicker will be performed. While the ⑬KICKER OFF lamp is lit, kicker will not be performed.

Note 1)

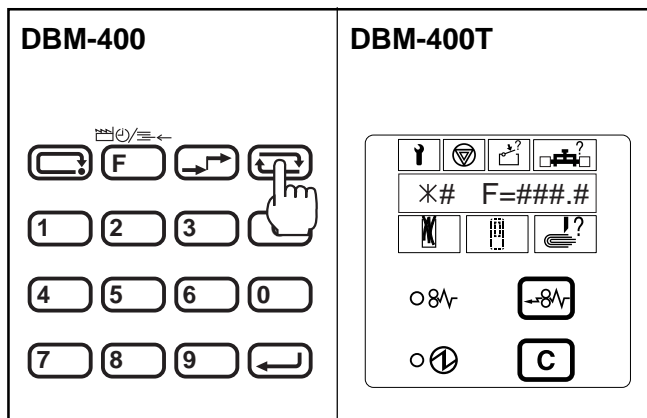
The DBM-400T incorporates a chargeable battery. While the ②power lamp is lit, it means that the battery is being charged. When off, it means that the battery is discharging. When discharged over a long period of time, the battery will wear out, the memory contents will be destroyed, and all the memories F will be changed to the initial value at shipment.

Note 2)

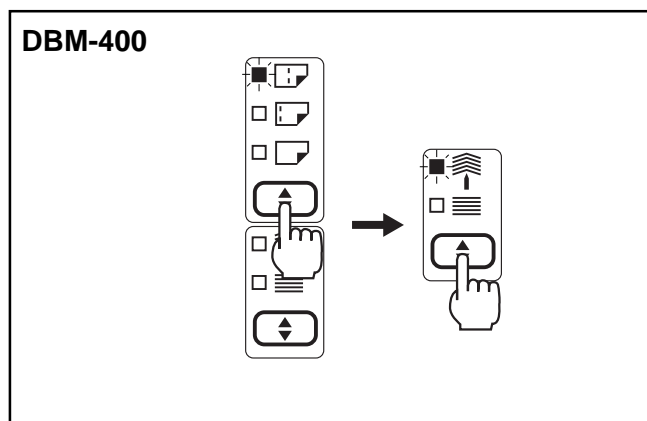
The kicker is an option. The ⑧SELECT KICKER key can be used only when it is attached. When not attached, the ⑫KICKER ON lamp and ⑬KICKER OFF lamp will not light up.

- The following describes an example of saddle-stitching and folding “430X297” paper to compile a “210X297” booklet.
- Input the data as follows. (For details, refer to the instruction manual for the DBM-400.)

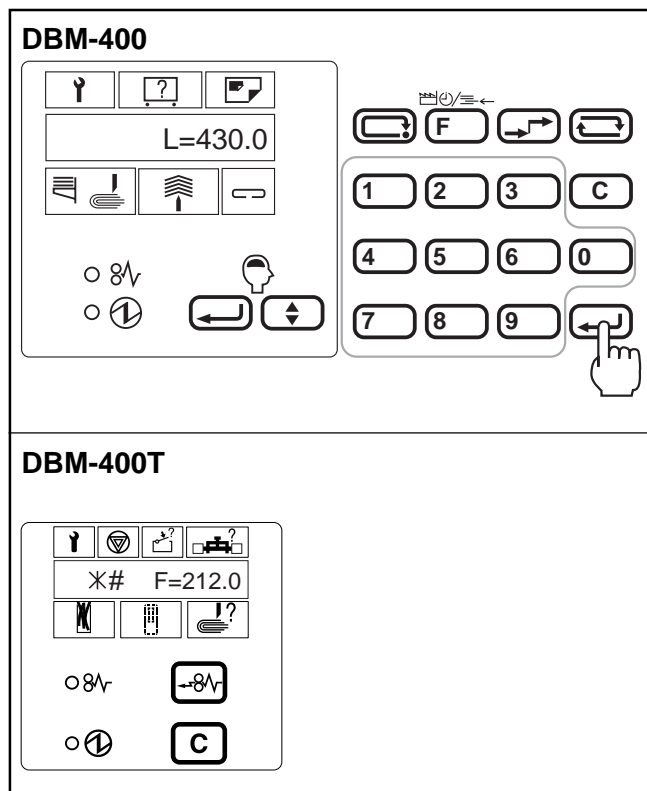
1) Select a memory number overwritten using the Select memory key on the control panel of the DBM-400, and press the CHANGE key. The LCD of the DBM-400T displays the final paper size of the memory selected.



2) Select the stitching and folding method. Set saddle-stitching and folding.

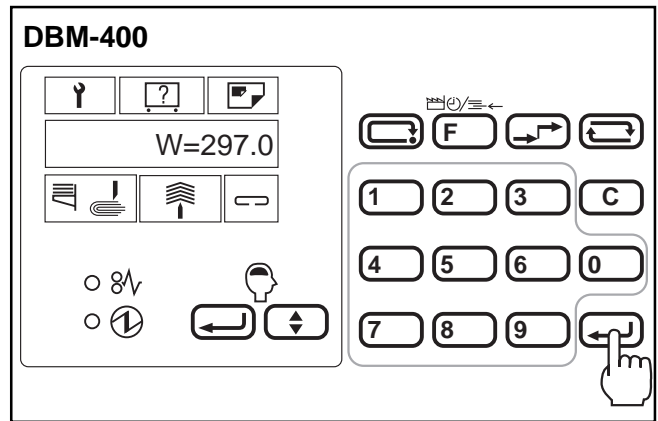


3) Input “L=430.0” with the 10 keys on the control panel of the DBM-400, and press the SET key. The LCD of the DBM-400T displays “F=212.0”. The initial value of F is L/2-3.

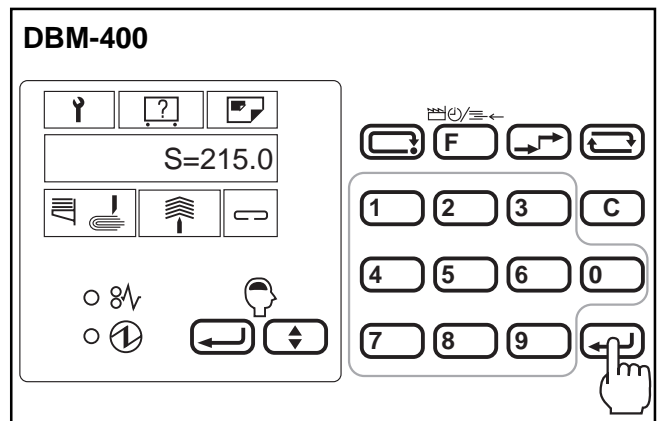


5. Using Procedure

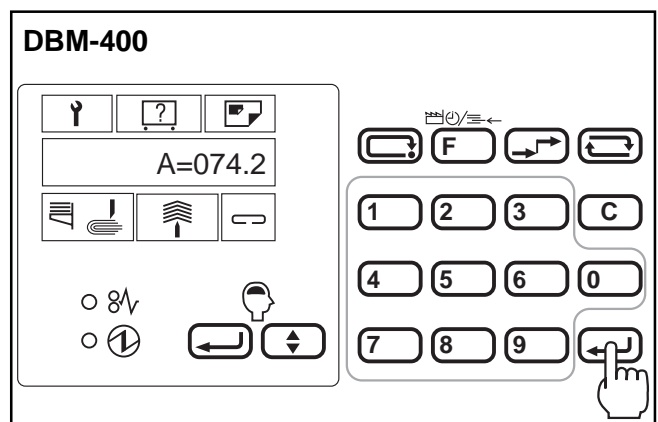
- 4) Input W=207.0 with the 10 keys of the control panel of DBM-400, and press the SET key.



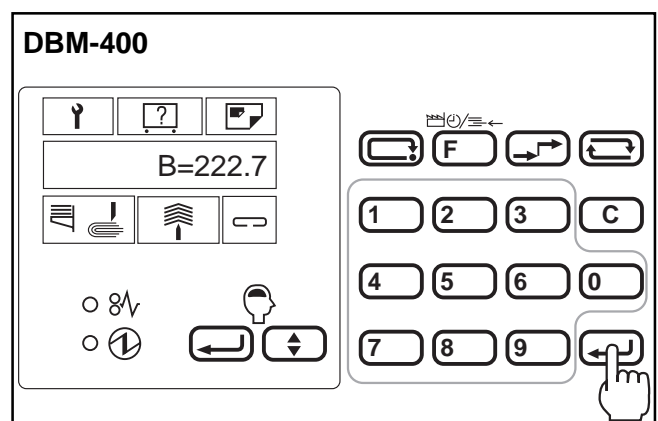
- 5) S=215.0 will be displayed. Input a value with the 10 keys only when this is to be changed, and press the SET key.



- 6) A=074.2 will be displayed. Input a value with the 10 keys only when this is to be changed, and press the SET key.



- 7) B=222.7 will be displayed. Input a value with the 10 keys only when this is to be changed, and press the SET key.



- 8) Input F=210.0 with the 10 keys, and press the SET key.
The LCD of the DBM-400T will display F=210.0.

<Note>

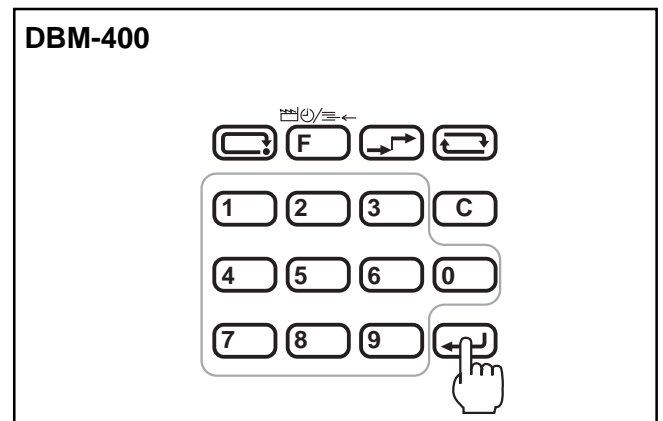
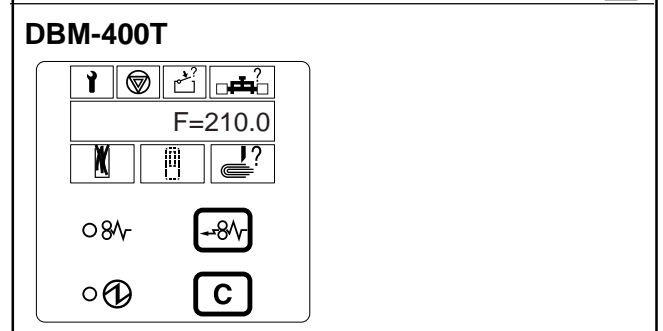
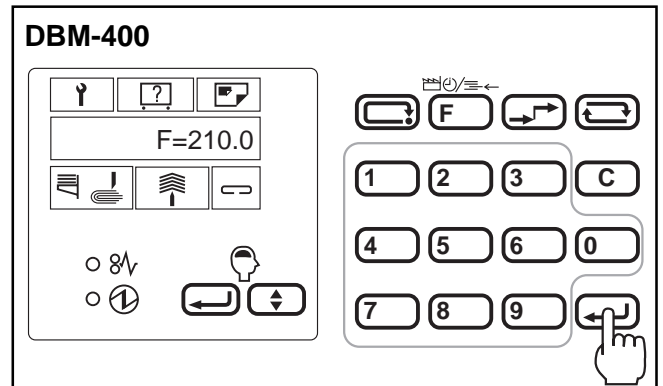
Do not input values smaller than $L/2-75$ (140 in this case) and greater than $L/2$ (215 in this case) for F, as errors will result.

<Note>

F will be displayed even when trimming is not performed.

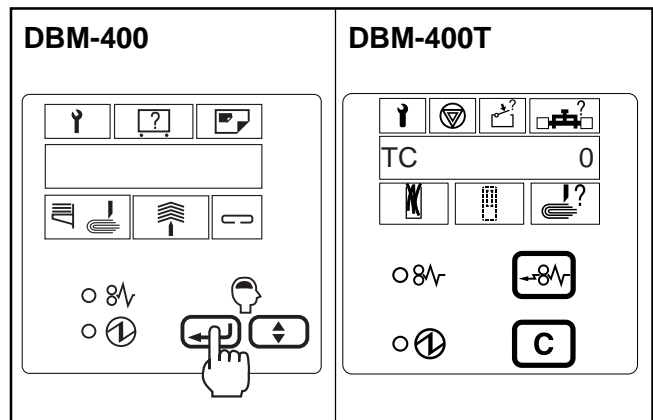
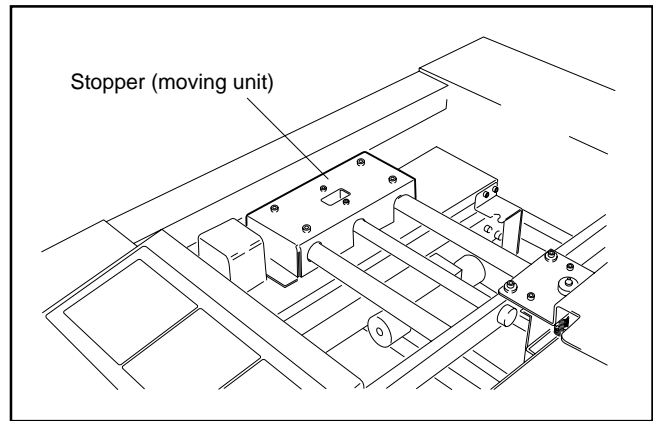
Press the SET key without inputting any value.

- 9) Press the SET key. The memory of the DBM-400 and DBM-400T will be updated.



5. Using Procedure

- 10) The stopper (moving unit) will start moving when the Execute Memory key is pressed.
 When the stopper completes moving, this will be indicated by a buzzer. The LCD of the DBM-400T will display the number of sets collated as TC 0.

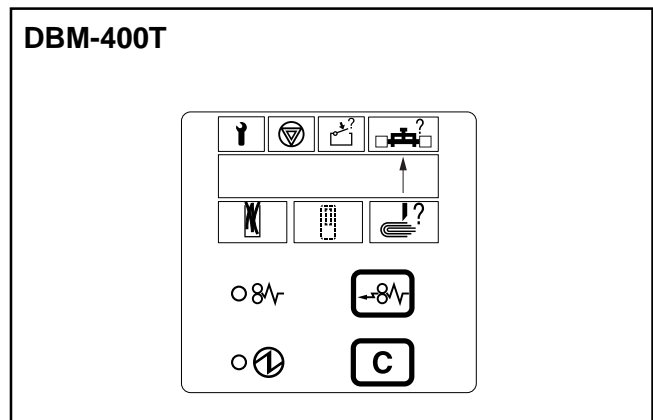


<Note>

When values below 115 mm are input for F with the auxiliary roller B attached, the LCD of the DBM-400T will be displayed the final size error, and the stopper will not move.

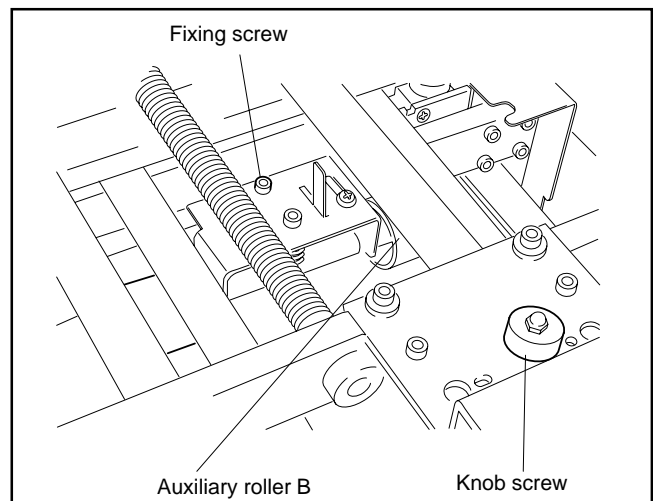
(Refer to 13. LCD Messages and Corrections.)

Remove the auxiliary roller B, and input the value again.



<Note>

The DBM-400T incorporates a chargeable battery. While the power lamp is lit, it means that the battery is being charged. When off, it means that the battery is discharging. When discharged continuously over a long period of time, the battery will wear out, the memory content will be erased, and F will change back to its initial value.

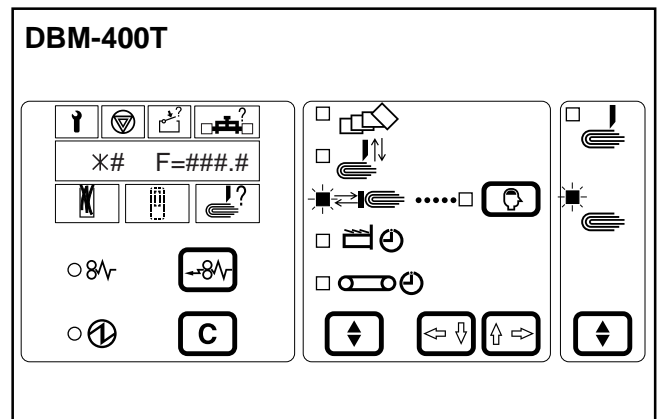
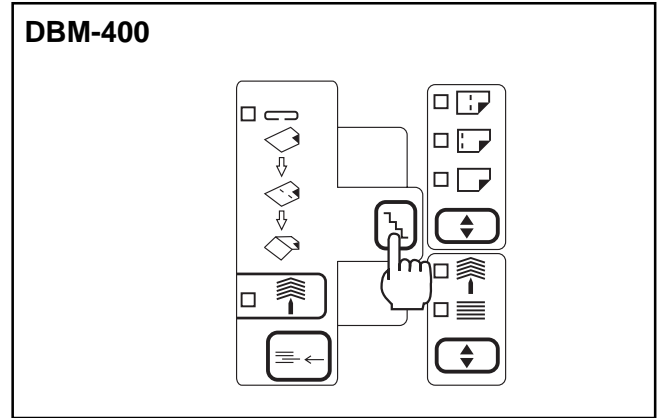


3 Perform fine adjustments in the step mode.

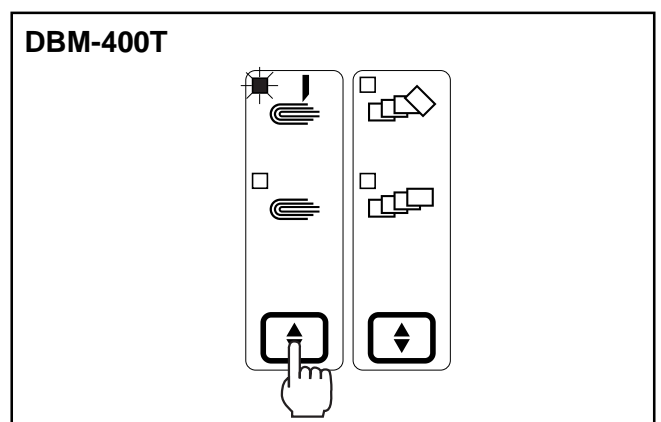
Adjust as follows.

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

- 1) Press the STEP MODE key of the DBM-400 to enter the step mode. The STOPPER FINE ADJUSTMENT lamp and TRIMMING OFF lamp on the control panel of the DBM-400T will blink, and the LCD will display the final paper size (F=###.#).



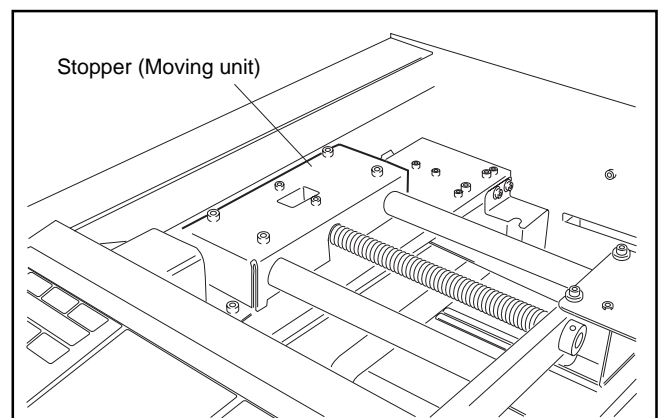
- 2) Turn trimming ON or OFF using the TRIMMING key on the control panel of the DBM-400T. The lamp of the selected setting will start to blink. (The figure shows when the trimming is ON.)
- 3) Press the START key of the collator.
- 4) Adjust the stitching and folding operations of the DBM-400 finely.



- 5) The paper ejected from the DBM-400 will stop at the stopper (moving unit) of the DBM-400T.

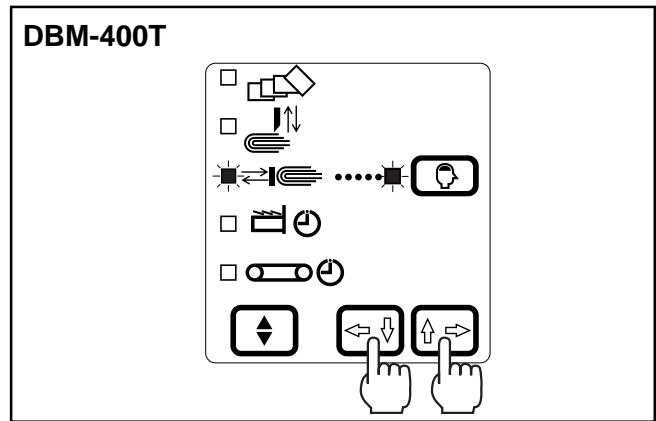
<Note>

If trimming OFF is selected, the paper will be ejected completely without stopping at the stopper.

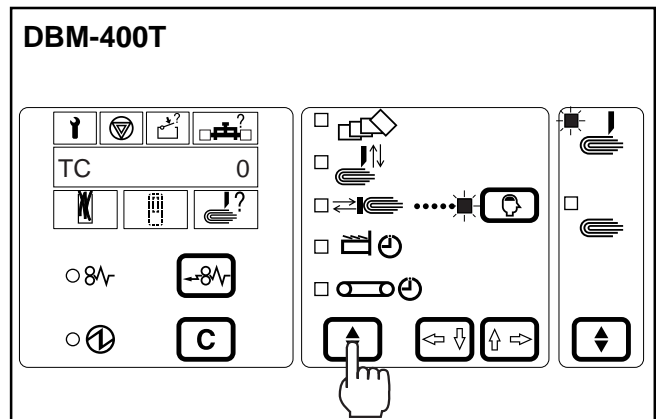


5. Using Procedure

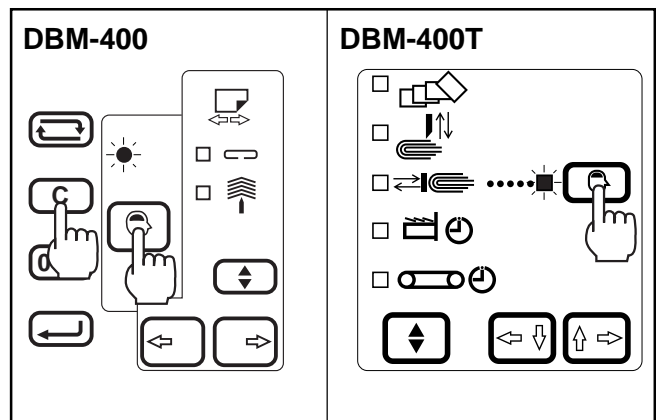
- 6) Press the MOVE keys ($\uparrow \rightarrow$) ($\leftarrow \downarrow$) of the DBM-400T to adjust the trimming position.
Each time a MOVE key is pressed, the stopper (moving unit) will move by 0.5 mm.
When a MOVE key is pressed continuously for more than 1 second, the stopper will also move continuously while the key is pressed.



- 7) After determining the trimming position, press the SELECT UNIT key.
The paper will be trimmed and ejected.
The STOPPER FINE ADJUSTMENT lamp on the control panel of the DBM-400T will go off. The lamp of the state selected before the step mode is set will light up.
When the TRIMMING ON lamp is lit, the LCD displays the number of collated sets.

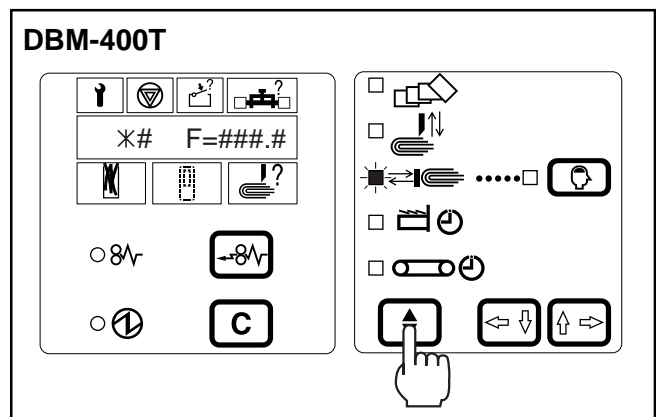


- 8) The INPUT MEMORY lamp of the DBM-400 and DBM-400T will light up.
Press the INPUT MEMORY key of the DBM-400 and DBM-400T to memorize the fine adjustment data.
When the INPUT MEMORY key is pressed, the INPUT MEMORY lamp will go off.
If the data of the DBM-400 is not to be memorized, press the CLEAR key of the DBM-400. The INPUT MEMORY lamp will go off, and the data will not be memorized.

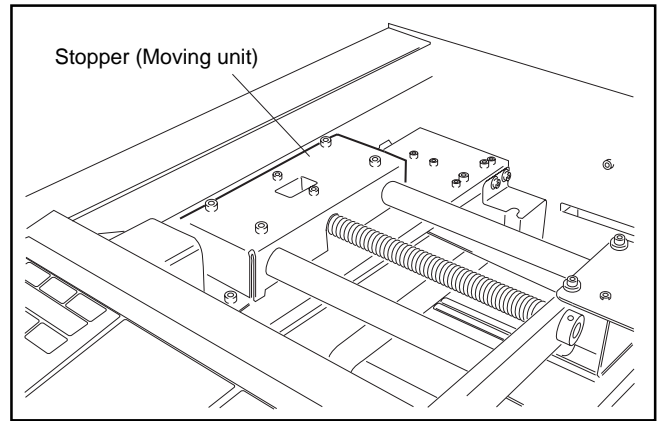


4 It is possible to adjust only the final paper size of the DBM-400T. Perform all operations on the control panel of the DBM-400T according to the following procedure.

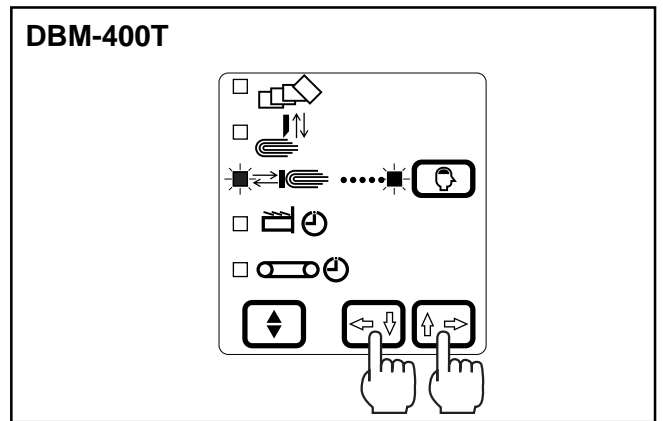
- 1) Press the SELECT UNIT key and select the STOPPER FINE ADJUSTMENT lamp.
The STOPPER FINE ADJUSTMENT lamp will as a result light up.
The LCD displays “*# F=###.#”.



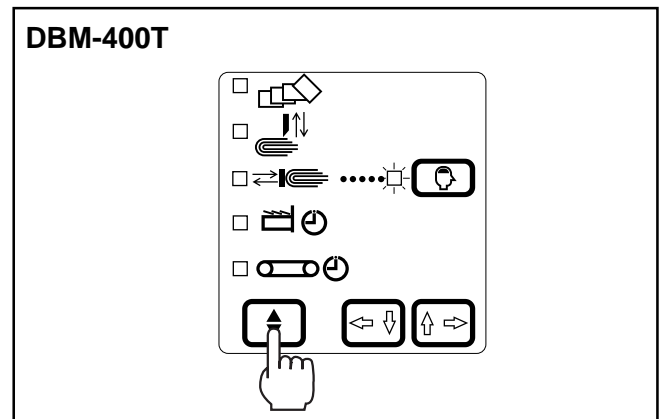
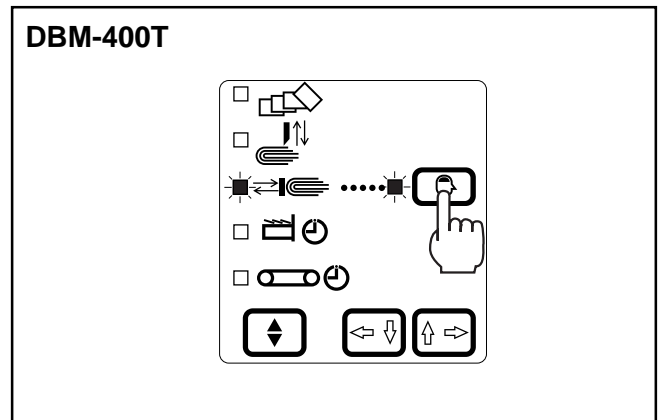
- 2) Move the stopper (moving unit) using the MOVE keys (↑ →) (← ↓) to adjust the trimming position. Each time a MOVE key is pressed once, the stopper (moving unit) moves 0.5 mm. If a MOVE key is pressed continuously for more than 1 second, the stopper (moving unit) will continue moving while the key is pressed.



- 3) The INPUT MEMORY lamp will light up. Press the INPUT MEMORY key to memorize the fine adjustment data. The INPUT MEMORY lamp will then go off.



- 4) Press the SELECT UNIT key to complete fine adjustments.



5. Using Procedure

5 Press the START switch of the collator to start operators.

- The LCD of the DBM-400T will display the number of sets collated.

To reset the number of sets collated to 0 after completing the collation, press the CLEAR key of the control panel of the DBM-400T for one second. The number of sets collated will always be memorized, even when the power has been turned off.

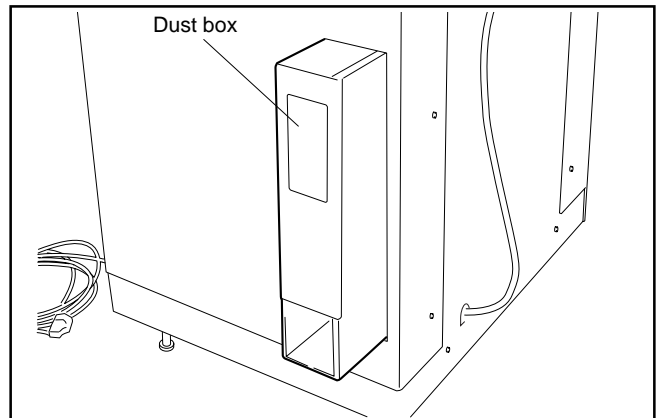
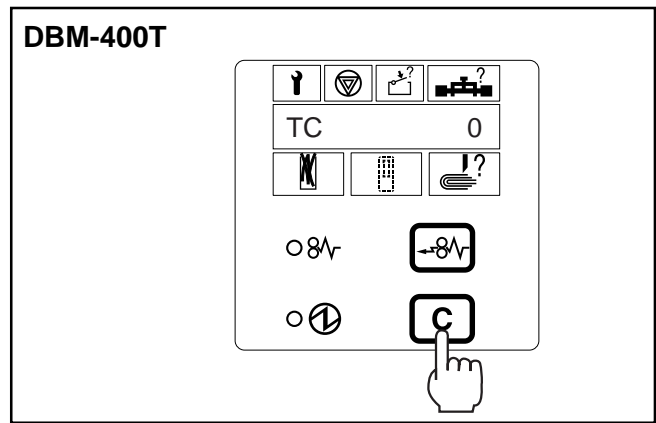
<Note>

It will be cleared to 0 when the contents of the memory are erased.

- When the dust box becomes full with paper scraps ejected, the unit will stop. Remove the paper scraps from the mouth at the bottom of the dust box, or pull out the dust box and empty it.

<Note>

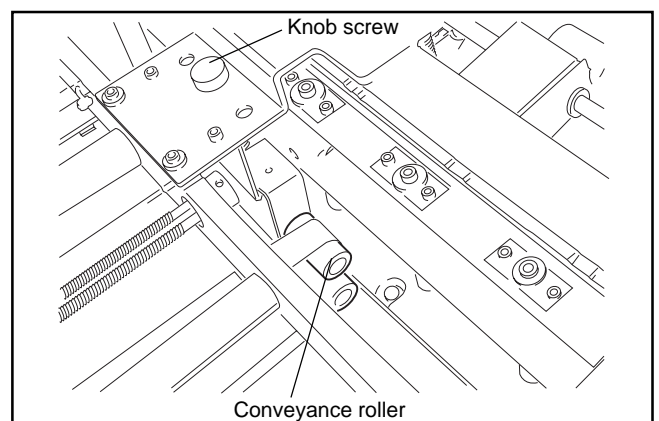
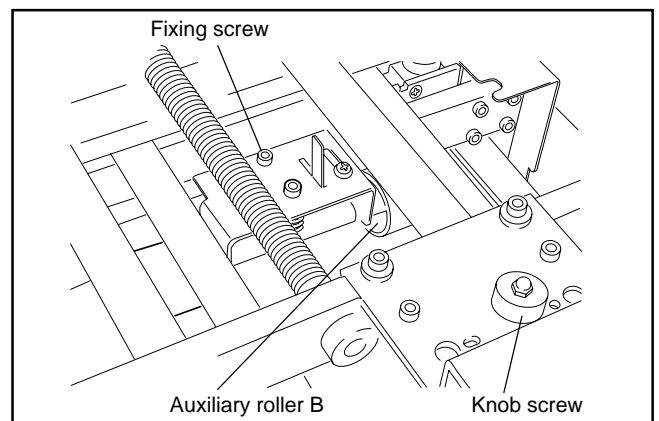
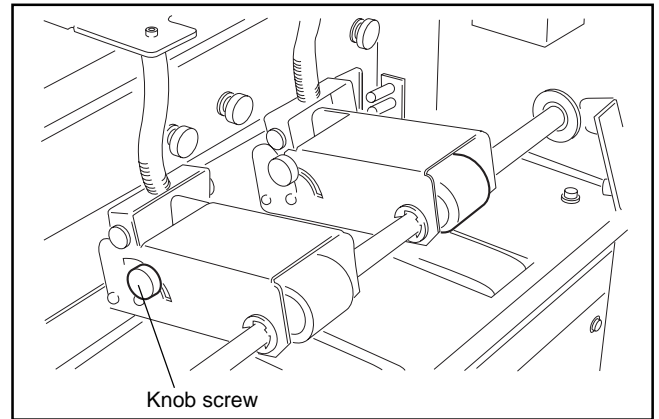
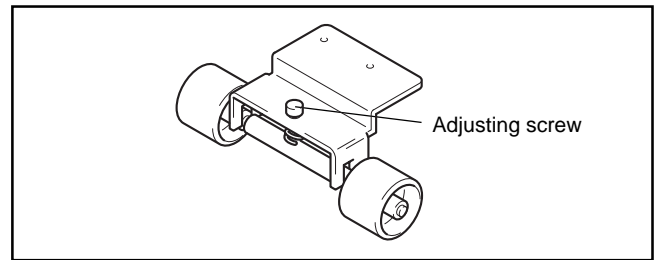
The unit will not start again if the dust box is not set back properly. Insert the dust box completely inside.



6. Collating small sized paper

(Final size below 115 mm)

- Adjust the height of the roller of auxiliary roller A to the position at which paper can be conveyed. Decrease the height of the roller when collating only several sheets of paper, and increase the height when collating many sheets. Rotating the adjusting screws to the right will increase the height, and rotating to the left will decrease it.
- Adjust the lever of auxiliary roller C.
Loosen the knob screw, move it to the right, and tighten the knob screw again.
- Loosen the fixing screws of auxiliary roller B, and remove the auxiliary roller B.
- Adjust the height of the conveyance roller to the position at which paper can be conveyed. Decrease the height of the roller when collating only several sheets of paper, and increase the height when collating many sheets. Rotating the knob screws to the right will increase the height, and rotating to the left will decrease it.



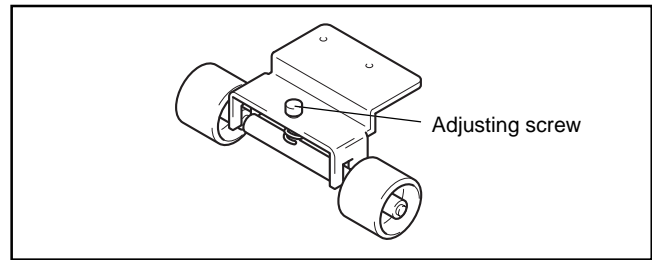
<Note>

If collating small sized paper with the kicker (optional) attached, move the kicker. (Refer to page 29.)

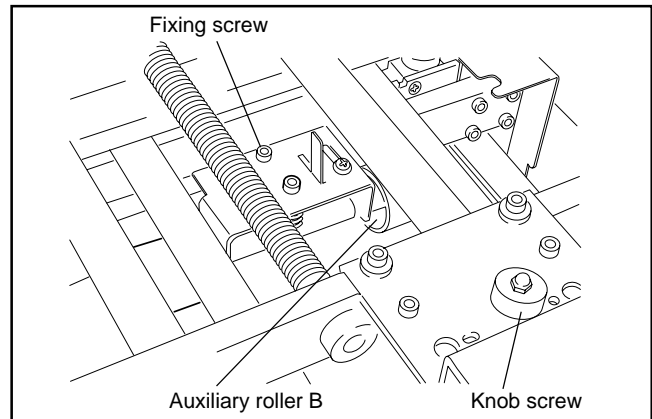
7. To collate many sheets of paper

(When the number of pages collated is above 60)

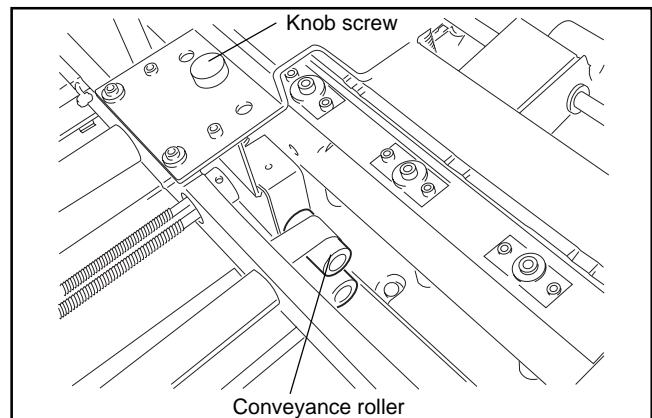
- Adjust the height of the roller of auxiliary roller A to the position at which paper can be conveyed.
Rotating the adjusting screws to the right will increase the height, and rotating to the left will decrease it.



- Loosen the fixing screw of the auxiliary roller B.
Then remove the auxiliary roller B.

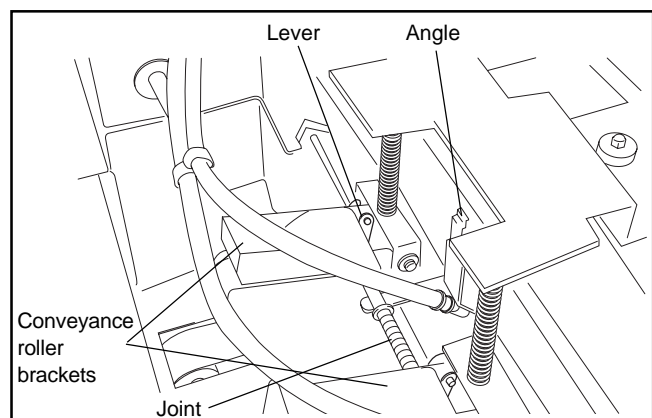


- Adjust the height of the conveyance roller to the position at which paper can be conveyed.
Rotating the knob screws to the right will increase the height, and rotating to the left will decrease it.



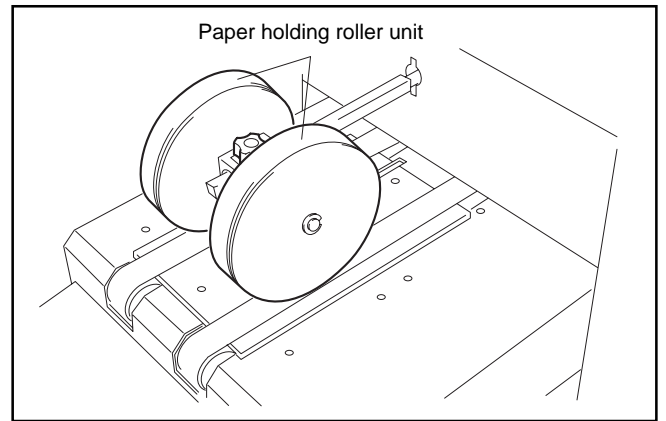
8. To cut paper stack above 25 mm

- Insert the joints provided into the holes of both conveyance roller brackets, and place the joint on the angle.
- Move the lever of auxiliary roller C to the right and adjust to a position where the auxiliary roller C can be conveyed.
Loosen the knob screw of the lever of the auxiliary roller C, and after moving it, tighten the knob screw.



9. Using the belt stacker unit

- Adjust the paper holding roller unit to the final paper size.
- Set the conveyance operating time of the belt according to the final size of the paper.



- 1) Select the SET BELT STACKER OPERATING TIME lamp using the SELECT UNIT key.

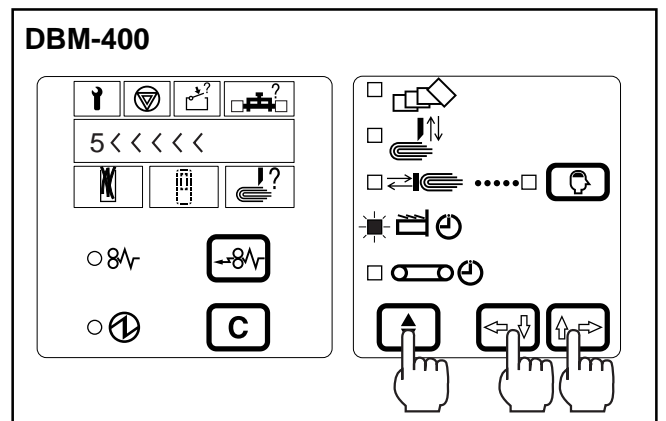
The BELT STACKER OPERATING TIME lamp will light up.

The LCD displays “#<<<<” (the number of < is the same as that of #.)

- 2) The greater the number displayed, the longer will the conveyance time of the belt be .

A large number should be set when there are many sheets of paper.

The number increases with each press of the MOVE key (↑ →) and decreases with each press of the MOVE key (← ↓).



10. If trimming is crooked

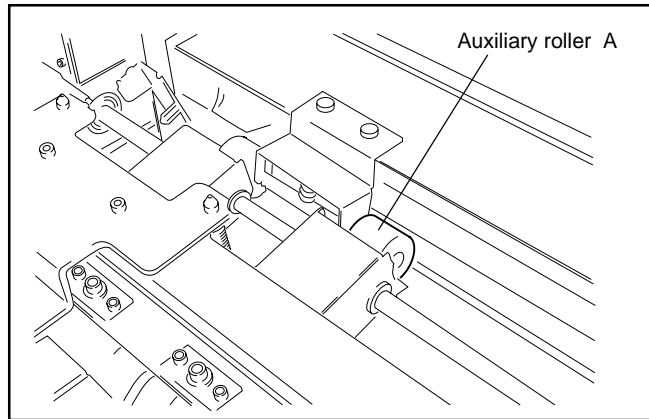
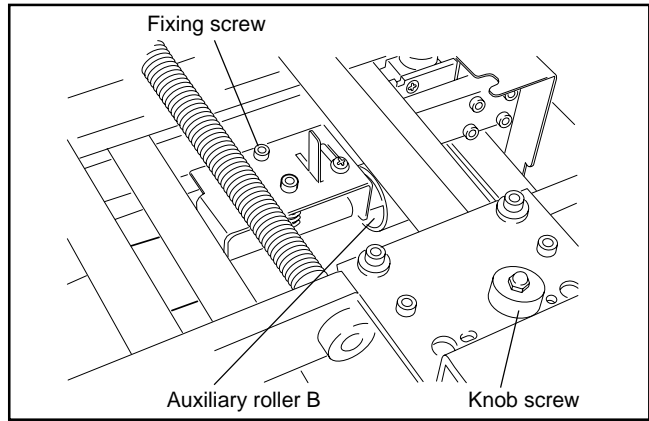
To improve trimming, attach auxiliary roller B.

<Note>

If the final paper size is below 115 mm, auxiliary roller B cannot be attached.

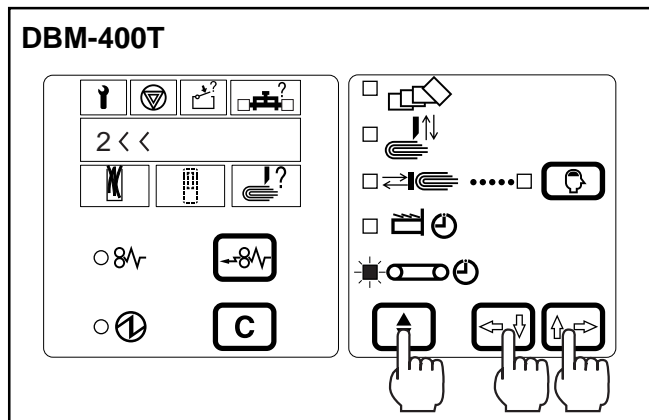
If it cannot be attached, adjust the height of the conveyance roller to the position at which paper can be conveyed. Decrease the height of the roller when collating only several sheets of paper, and increase the height when collating many sheets.

- If paper is conveyed crookedly into the unit
If paper is conveyed crookedly into the unit, adjust the height of the auxiliary roller A to the position at which paper can be conveyed. Decrease the height of the roller when collating only several sheets of paper, and increase the height when collating many sheets.
- If the paper does not reach the stopper
The stopping timing of the conveyance belt must be changed.
Set the stopping timing of the conveyance belt on the control panel of the DBM-400T.

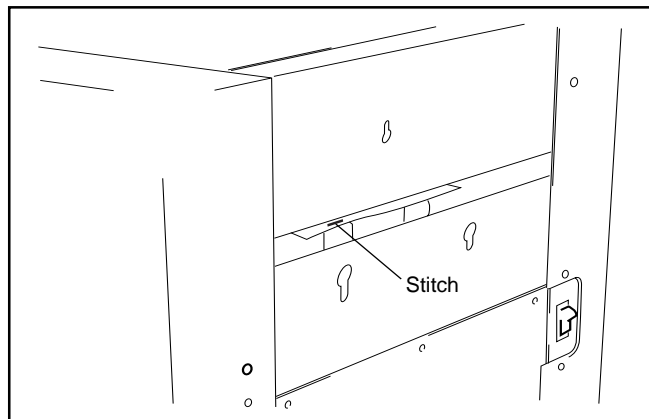


Setting the stopping timing of the conveyance belt

- 1) Select the SET BELT STOPPING TIMING lamp using the SELECT UNIT key.
The SET BELT STOPPING TIMING lamp will light up.
The LCD displays “#<<<” (the number of < is the same as that of #.)
- 2) The greater the number displayed, the longer will the belt conveyance time be, and the longer will the paper be pressed against the stopper. A large number should be set when there are many sheets of paper.
The number increases with each press of the MOVE key (↑ →) and decreases with each press of the MOVE key (← ↓).



- When the stitch is above the conveyance belt
If the stitching position is above the conveyance belt for the DBM-400, change the stitching position.
(For details, refer to the instruction manual for the DBM-400.)

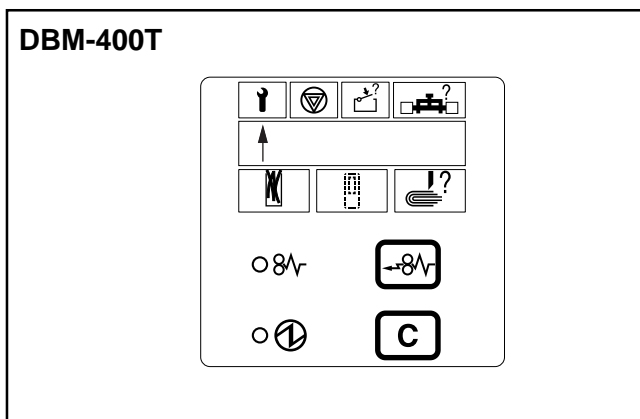


13. LCD Messages and Corrections

1 Call service man message

Displayed when the moving unit or knife locks due to abnormal load.

Turn the POWER switch OFF and then ON again. If the same error message is displayed again when the same operations are carried out, contact our serviceman.

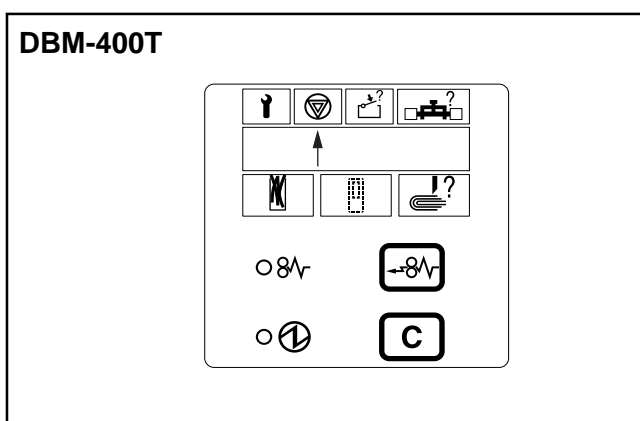


2 Interrupter switch message

Displayed when the Interrupter switch is pressed.

Press another time and clear the message.

Refer to 10. Precautions on Using the Interrupter Switch



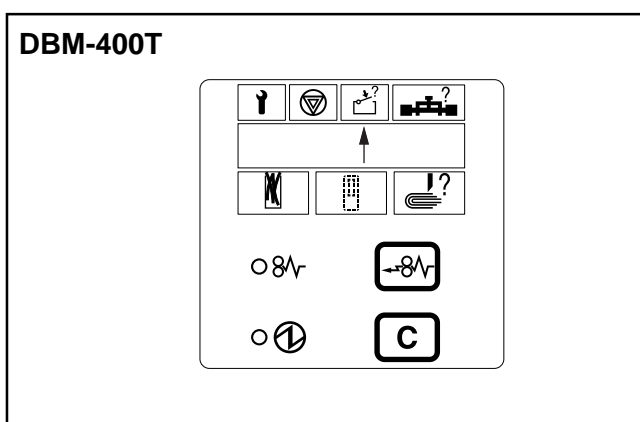
3 Cover open message

Displayed when the top cover is opened.

Close the top cover completely.

<Note>

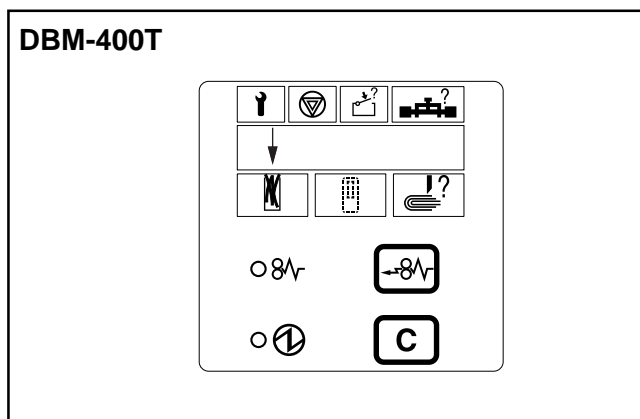
Do not open the top cover during operations as the unit will stop immediately to prevent danger.



4 Dust box full message

Displayed when the dust box becomes full with paper scraps ejected out. The unit will stop.

Remove the paper scraps from the mouth at the bottom of the dust box, or pull out the dust box and empty it.

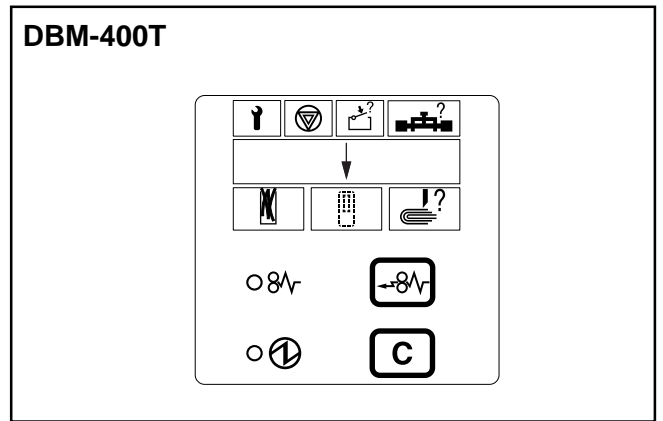


5 Dust box improperly set message

Displayed when the dust box is not properly set. Insert the dust box inside completely.

<Note>

Do not pull out the dust box during operations as the unit will stop immediately to prevent danger.

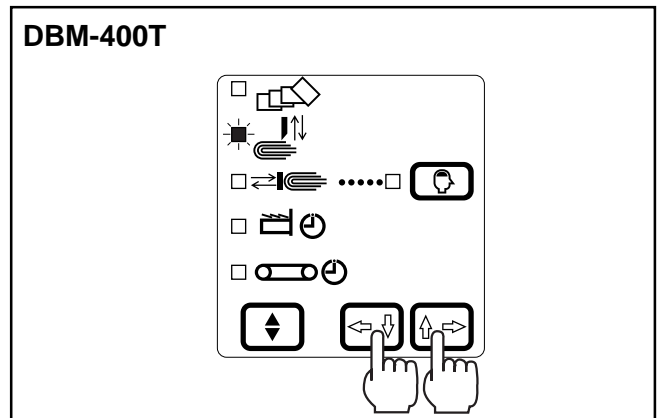
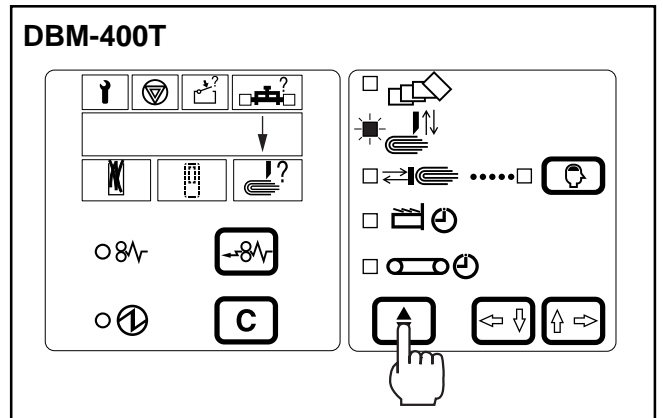


6 Knife position error message

Displayed when the knife does not set into the standby position.

- 1) Select the KNIFE DRIVING lamp using the SELECT UNIT key.
 - Each time the SELECT UNIT key is pressed, the lamps light up in the following order; SET NO. OF KICKERS lamp → KNIFE DRIVING lamp → STOPPER FINE ADJUSTMENT lamp → SET BELT STACKER OPERATING TIME lamp → SET BELT STOPPING TIMING lamp.
Light the KNIFE DRIVING lamp.

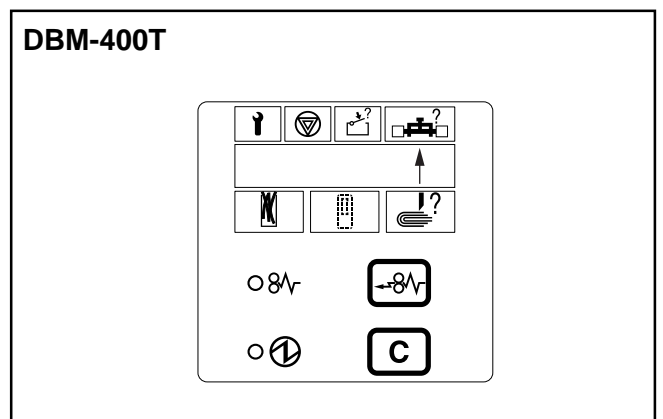
- 2) Move the knife to return it to the standby position.
 - Pressing the MOVE key (← ↓) will move it in the normal direction, and pressing the MOVE key (↑ →) will move it in the reverse direction upwards.



7 Final paper size error message

Displays when F is set to less than 115 mm with the auxiliary roller B attached when the paper size is set. In this case, the moving unit does not move.

Remove auxiliary roller B, execute the memory again, or set the F value again.



14. The unit will stop in the following cases;

When joined to a Duplo collator.

When the desired number of sets has been processed.

- When the number of units to be collated displayed on the collator No. of sets window has been collated, the unit will stop automatically.

When paper runs out.

- When the collator paper feed bin runs out of paper, the unit will stop automatically.
Replenish the paper and press the START key to resume operations.

When problems such as empty-feeding, double-feeding, paper jam, etc. occur at the collator side.

- Inspect the collator.
Refer to the instruction manual of the collator.

If problems occur in the DBM-400

- Refer to the instruction manual of the DBM-400 and correct the problem.

If the top cover is opened while the unit is operating

- The unit will stop due to the working of the SAFETY switch.
Close the cover and press the START key of the collator again to resume operations.

If paper jams inside the unit

- If paper jams inside the unit, inspect and remove the jammed part.

If there is abnormal load on the knife

- If abnormal load generates during cutting, the unit will stop.
Return the knife to the standby position (top).

If the dust box becomes full

- The unit will stop if the dust box becomes full.
Empty the dust box.

If the Interrupter switch is pressed

- The unit still stop due to the working of the SAFETY switch.
Press the switch another time to release it.

When the dust box is pulled out

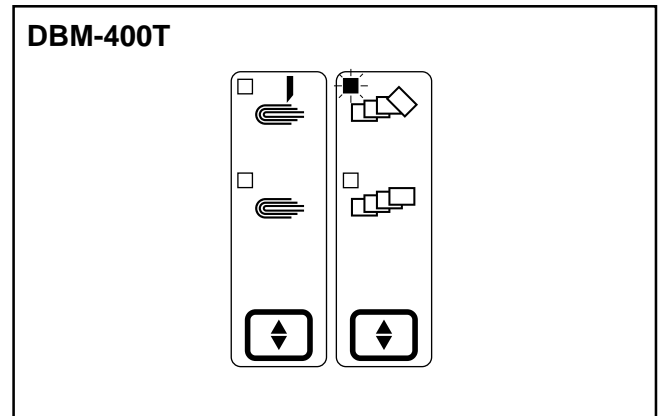
- The unit will be stopped by the operations of the safety switch.
To resume operations, push the dust box back in and press the START key of the collator again.

15. Using the DBM-400LS and DBM-400K (option)

The DBM-400LS (long stacker) and DBM-400K (kicker) are options. All operations are performed with the DBM-400T.

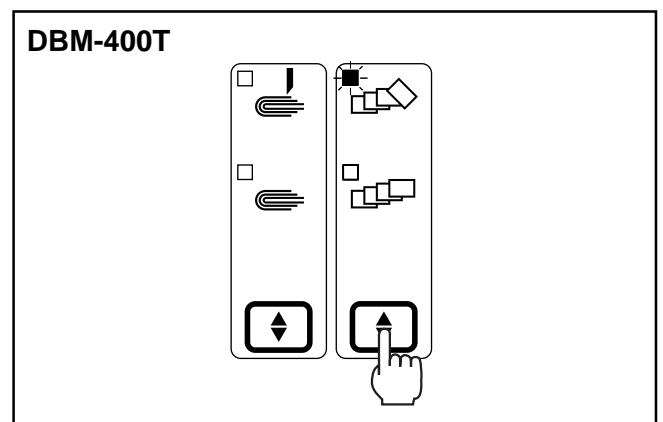
1. Turn ON the power switch of the DBM-400T.

- Press the power switch on the right side of the paper ejection section of the DBM-400T. The Kicker ON lamp on the control panel of the DBM-400T will light up to indicate that the kicker is in use.
- If the connecting cable of the kicker is not connected to the DBM-400T, both the Kicker ON lamp and Kicker OFF lamp on the control panel of the DBM-400T will not light up.



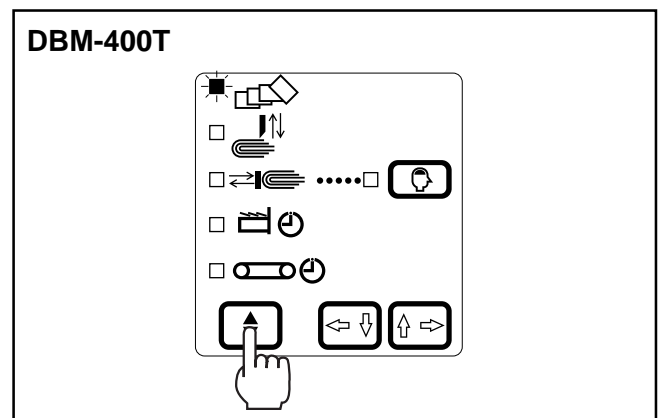
2. Select the kicker.

- Each time the SELECT KICKER key on the DBM-400T is pressed, the Kicker ON lamp and Kicker OFF lamp will light up alternately.
- When the Kicker ON lamp is lit, the ejected paper will be kicked. When the Kicker OFF lamp is lit, it will not be kicked.



3. Set the number of sets.

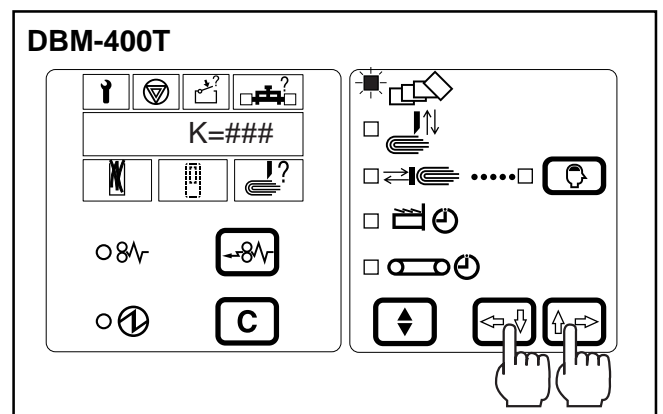
- Each time the SELECT UNIT key of the DBM-400T is pressed, the lamps will light up in the following order. No. of Sets Kicked lamp → Knife Single Operation lamp → Stopper Fine Adjustment lamp → Belt Stacker Operation Time Setting lamp → Belt Stop Timing Setting lamp. Select the No. of Sets Kicked lamp. K=### will be displayed on the LCD of the DBM-400T.



- The count on the LCD “K=###” will increase each time the MOVE key (↑ →) is pressed, and decrease each time the MOVE key (↓ ←) is pressed. Pressing the MOVE keys (↑ →) (↓ ←) continuously for more than 1 second changes the count continuously. Adjust the count to the number of paper sorted.
- Although K=000 to K=999 can be set, the kicker will not operate if set to K=000.

Example)

When the desired number of sets required is set to K=010, the kicker will operate to separate the 10th set. The kicker will operate again after the next 10th set to separate it. This operation will be repeated.



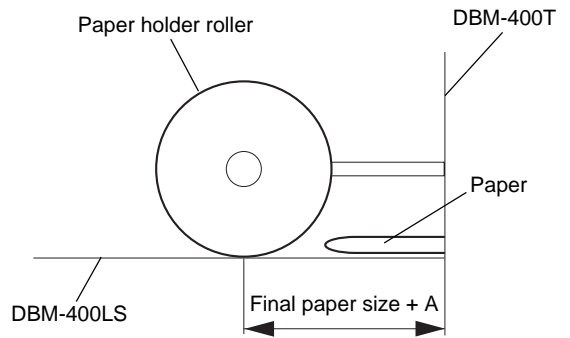
15. Using the DBM-400LS and DBM-400K (option)

4. Adjust the position of the paper holder roller unit.
Adjust the position of the paper holder roller unit to final paper size+A mm.

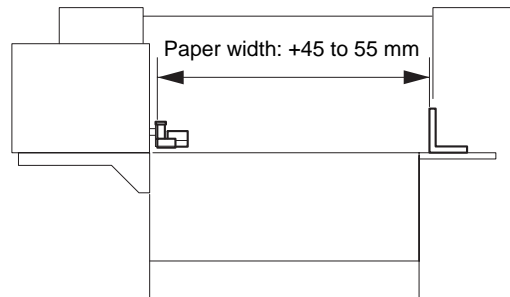
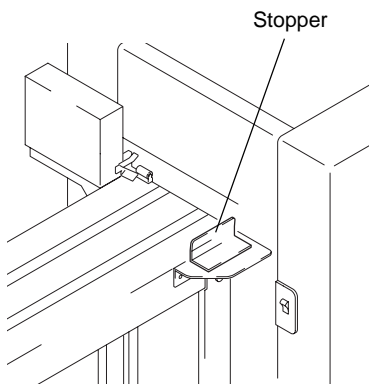
For A4 paper

Paper Quality	No. of Sheets (Final Paper size + A mm)		
	2 sheets	10 sheets	20 sheets
Fine	20 to 40 mm	60 to 70 mm	70 to 90 mm
Coated	20 to 30 mm	40 to 50 mm	60 to 80 mm

Adjust longer for large paper and shorter for small paper.

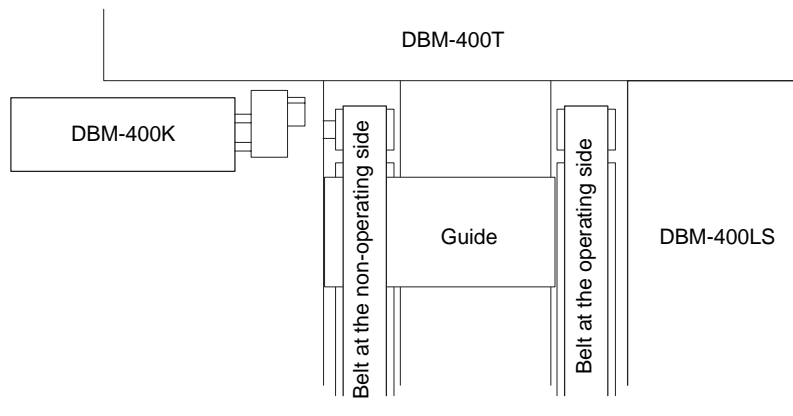


5. Place the stopper.



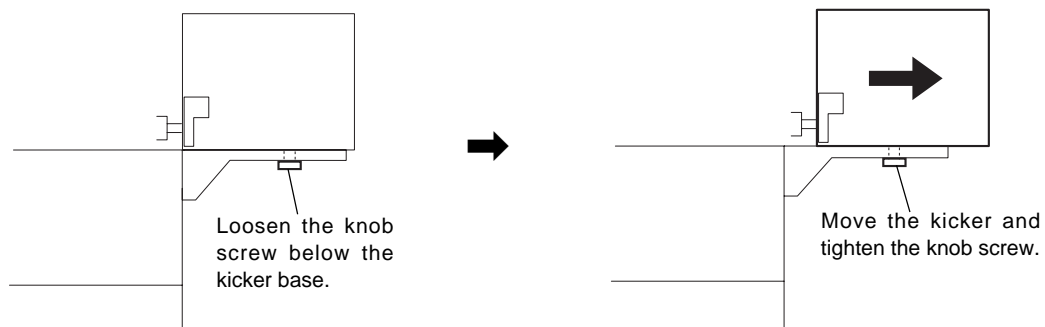
6. Using the guide for small paper
To collate paper less than 180 mm in width, use the guide provided.

Guide: Pass the guide below the belt at the non-operating side and contact it with the belt at the operating side.



7. Start operating the unit.

- The unit will kick and sort automatically according to the number of sets set.
- When the number of sets is reset, the count will start from the new setting, so separate the sets before the setting is changed.
- If the paper is insufficient for sorting, move the wheel slightly away from the trimmer.
- In the following cases, move the wheel nearer to the trimmer, or increase the conveyance operating time of the belt stacker.
 1. When the paper folds apart and cannot be stacked properly (when using thick paper or many sheets of paper)
 2. When the paper stops after the trimmer is ejected (when the final paper size is short, etc.)
- When sorting the paper to less than 120 mm in width and less than 120 mm in final paper length using the DBM-400T, move the kicker as shown in the figure.



<Note>

When the power is turned off, the number of sets to be sorted set will be reset. To start operations, input this according to the above procedure.

16. Specifications

• DBM-400T (Trimmer)

Unit	DBM-400T
Model	Size electronic setting edge cutting machine for booklet
Paper size	Length:85 to 250 mm (After folding) Width:120 to 350 mm
Paper quality	Fine quality (64 to 128 g/m ²), art coated paper (105 to 157 g/m ²)
Collating capacity	Max. 3800 sets/hour. For A4 (before final size), within 10 sheets During high speed mode use: Max. 4,000 sets/hour (Less than 10 sheets of Letter fine quality paper, 80 gm/m ²)
Cutting capacity	80 g/m ² , within 50 sheets
Final paper size	75 to 250 mm (Standard cutting width: Less than 25 mm. However possible within 12 sheets when up to 75 mm depending on the paper quality.)
Jam detection function	2 locations
Interlock switch	Top cover (1 location), Dust box
Size of unit	Main body: 650 (Width) x 700 (Depth) x 1085 (Height) (mm) When installed: (590+612) x 700 x 1085 (mm)
Mass (Weight)	Main body only: 200 kg
Power supply	AC230-240V ^{+6%} / _{-10%} 50Hz
Rating	6.5A

• DBM-400K (Kicker)

Model	DBM-400K
Size of machine	206 (H) x 256 (D) x 80 (W) (mm)
Mass (Weight)	2.5kg

• DBM-400LS (Long stacker)

Model	DBM-400LS
Size of machine	816 (H) x 384 (D) x 1369 (W) (mm) When installing DBM-400K 1369 (W) x 670 (D) x 970 (H) (mm) * When connecting with the DBM-400T, the depth will become 748 mm.
Mass (Weight)	35kg

