

FORMAX[®]

2150 Series Production Pressure Sealer

Safety Precautions

Safety precautions are indicated in this manual as follows:



*The term **WARNING** indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.*

*The term **CAUTION** indicates a potentially hazardous situation which, if not avoided, may result in serious injury, or damage to the machine.*



This symbol indicates a note which includes important information. Follow the note to operate the machine safely.



This symbol indicates a prohibited action. Do not perform any prohibited action.



This symbol indicates an essential procedure. Follow the procedure to operate the machine safely.

 Important	• <i>This lists the range of acceptable values and operating conditions.</i>
 Attention	• <i>This information will help you to avoid problems with the machine or help you learn how to operate the machine.</i>
 Note	• <i>Refer to this note when you operate the machine.</i>
 Additional Information	• <i>This explains a mechanism in the machine.</i>

Operating Safety Precautions

WARNINGS for Operation

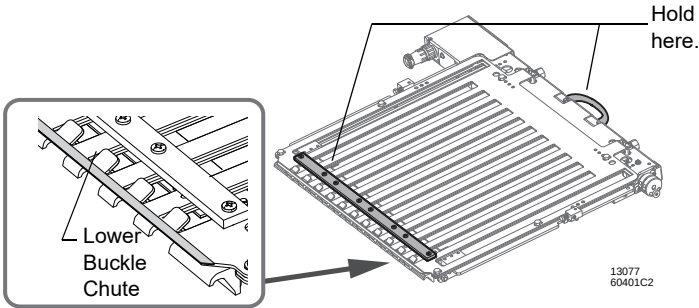
	Keep your hands and fingers outside of the safety covers and away from any moving parts while the machine is running. Otherwise, moving parts can cause severe personal injury.
	The machine must be operated by just one person at a time. Letting someone else operate the machine may cause severe personal injury.
	Do not remove or bypass any safety features. Moving parts can cause severe personal injury.
	Turn off the power switch before adjusting the machine unless instructed otherwise. If the Start button is pressed, the machine may start suddenly and cause severe personal injury.
	Press the Emergency Stop button before turning the manual handwheel. A sudden accidental start of the machine can cause severe personal injury.
	As the working condition may include exposure to high noise levels which can lead to hearing damage, the employer and operator should ensure that any necessary hearing protection is provided and used by the operator and others in the work area.
	Rotating parts may catch your hair or clothing. Arrange your hair in a bun or wear suitable clothing. Otherwise rotating parts can cause severe personal injury.
	When lowering the suction head arm, be careful not to catch your finger.
	Stop the machine completely before checking the roller gaps.
	Take off your gloves before checking the roller gaps. Otherwise, a glove may get caught in the rollers, causing severe personal injury.
	Always wear cut-resistant gloves when installing/removing parts or performing maintenance. Failure to do so may result in severe personal injury. Be careful especially when installing and removing the parts around the fold knives and buckle chutes.

CAUTIONS for Operation

	If you turn off the power switch, wait about ten seconds before turning it on again. Otherwise the circuit board may be damaged.
	Do not use the machine for purposes other than folding or scoring the sheets. Otherwise, the performance of the machine cannot be guaranteed.
	The delivery sensor counts the delivered sheets, however it is not guaranteed 100%. Be sure to confirm also by other method such as weight check.
	Be sure to install the buckle chutes and conveyors correctly. Otherwise the machine may be damaged.
	If a sheet jam occurs, remove all the jammed sheets before you start the operation again. Otherwise the machine may be damaged.

CAUTIONS for Operation	
	Do not place any objects under the feed table. The table may be damaged.
	Only operate the touch panel with your hands. Using hard or pointy objects might damage it.

WARNINGS for Maintenance	
	Turn off the power switch before beginning any maintenance operation. A sudden accidental start of the machine can cause severe personal injury.
	Turn off the power switch before removing the cause of a jam. The machine may start suddenly, causing severe personal injury.
	Work carefully when your hands are inside the machine, and keep them away from any moving parts.
	Turn off the power switch before resetting the circuit breakers. Otherwise, the machine may start suddenly, causing severe personal injury.

CAUTION for Maintenance	
	When you hold the buckle chute, do not hold the part shown in the drawing of the lower buckle chute. If the part of the lower buckle chute is applied, it may be deformed. 
	Use only the recommended lubricating oil and grease. Other kinds of oil or grease may reduce the life of the machine or cause damage.
	Do not leave any tools or cleaning tools on the machine. If these tools are dropped inside the machine, the machine may be damaged. Tools or cleaning tools must be stored in the specific position.

WARNINGS for Installation

	Turn off the main power or circuit breaker in the factory before connecting the power cable to the machine. High voltage electricity can cause severe personal injury.
	If the machine's power cable will be connected directly to a circuit breaker on the power distribution board at the building, ask a qualified contractor to do the job.
	Do not connect the power cable before the instruction of cable connection. High voltage electricity can cause severe personal injury.

CAUTIONS for Installation

	Transport and install the machine safely, and keep the weight of the unit in mind. Install the machine in the place which is suitable
	Be sure to attach the cables, hoses, tubes in the areas where a foot cannot be caught.
	Be sure to install the setting plates to keep the machine level. Otherwise, the machine can be moved by vibration. The folding quality may deteriorate, or the machine may be damaged.
	Install the machine correctly, referring to the installation manual or installation instructions in the operation manual before starting the machine. Otherwise, the binding quality cannot be guaranteed.

	There are electric parts inside. Take care when opening the cover. Otherwise, high voltage can cause severe personal injury.
	Keep your hands away from the rollers while they are moving. Otherwise your hands and fingers may get caught in the rotating rollers.
	Keep your hands away from the suction head while the feed table is moving. Otherwise your hands and fingers may get caught in the suction head.
	Keep your hands away from the feed rotor while it is moving. Otherwise your hands and fingers may get caught in the rotating feed rotor.
	Keep your hands away from the groove of the feed head while the feed table is moving. Otherwise, your hands and fingers may be caught in the table.
	Keep your hands away from the scoring roller position aligner while it is moving. Otherwise, they may get caught in it, resulting in severe personal injury.

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1 General Description

This chapter explains how to use the automatic and manual settings, and describes the parts of the machine and their functions.

1-1

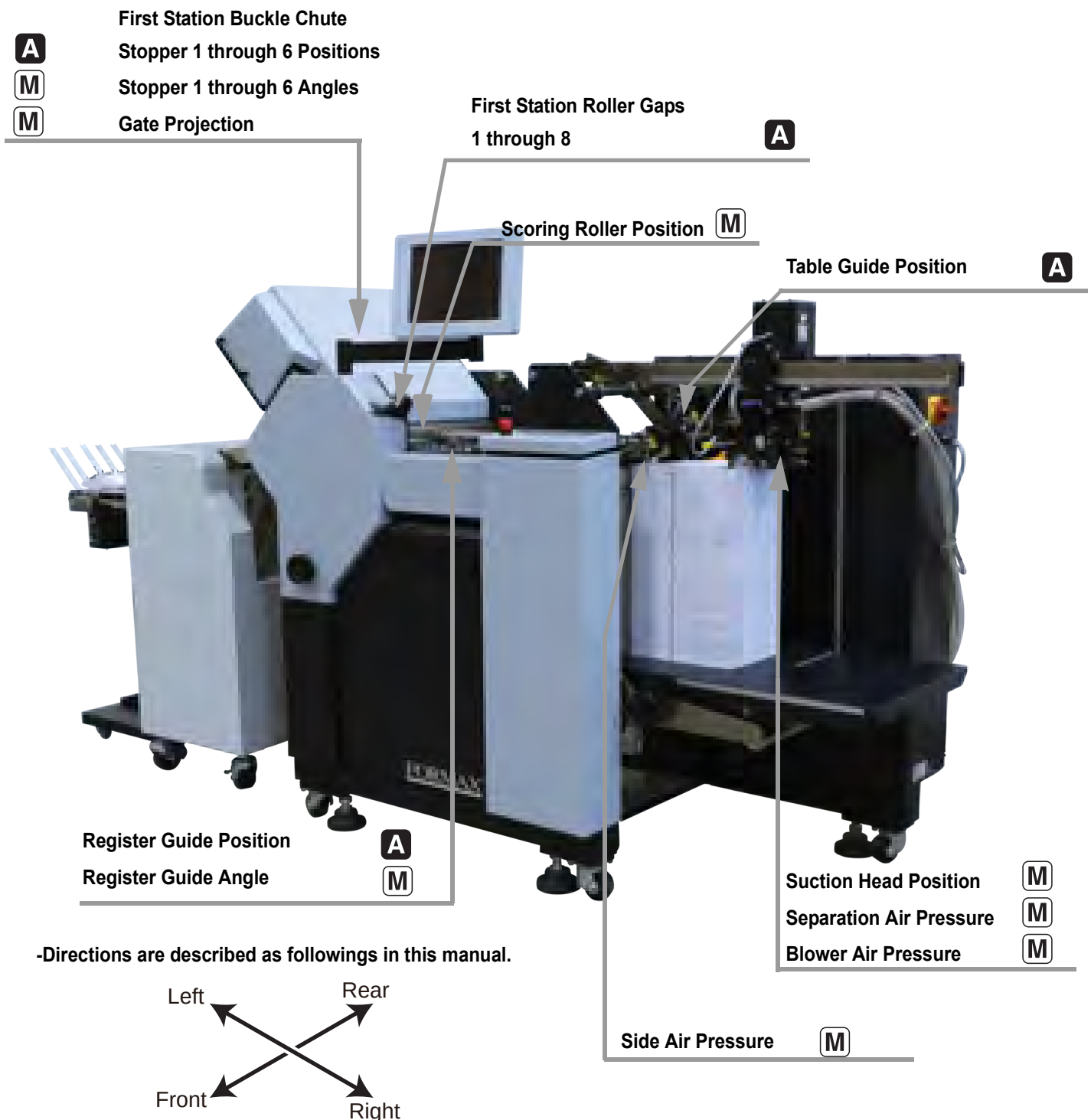
Automatic and Manual Settings

1

1-1-1 For the 2150 Series

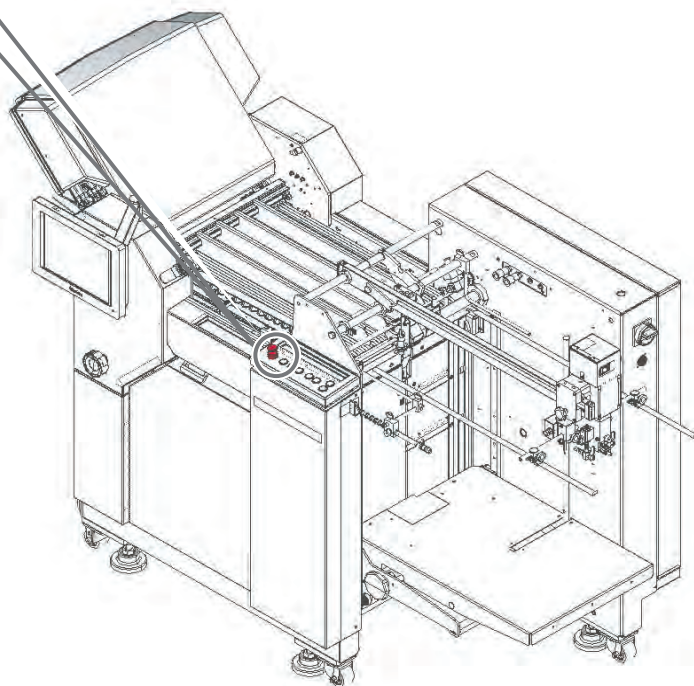
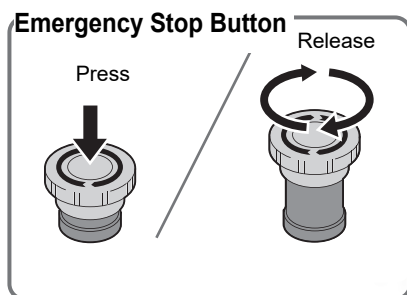
A Automatic: This indicates a setting which is performed automatically to match the sheet size and folding pattern. The setting can be changed using the touch panel.

M Manual: This indicates a setting which is performed manually using a knob or lever.

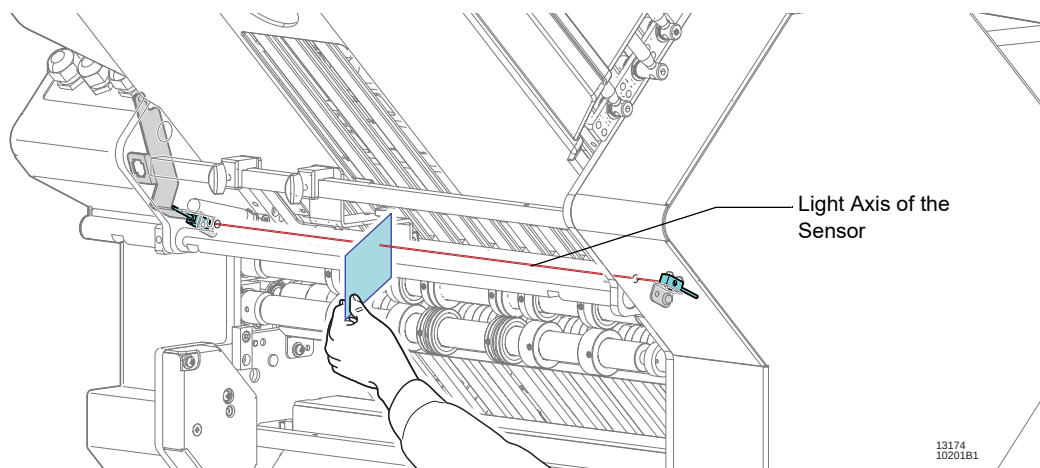


1-2-1 Safety Devices and Safety Functions

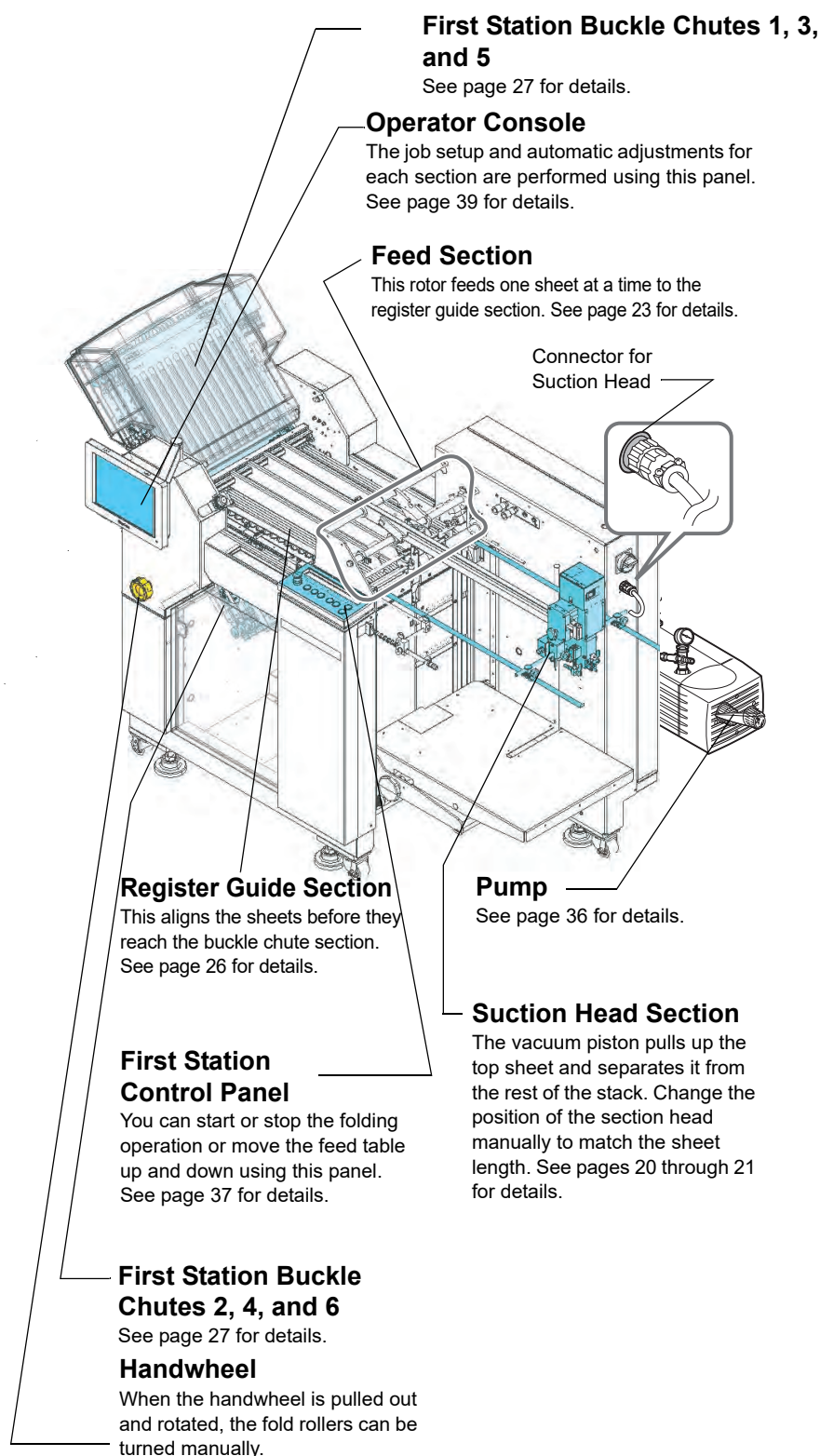
The whole system will stop very quickly if an Emergency Stop button is pressed while the machine is running.



The whole system will stop very quickly if the safety sensor at the delivery section is blocked while the machine is running. The drawing below describes the first station.



1-2-2 General View - Part 1



WARNING



Press the Emergency Stop button before turning the handwheel. If the machine starts accidentally, the handwheel may turn suddenly and cause injury.

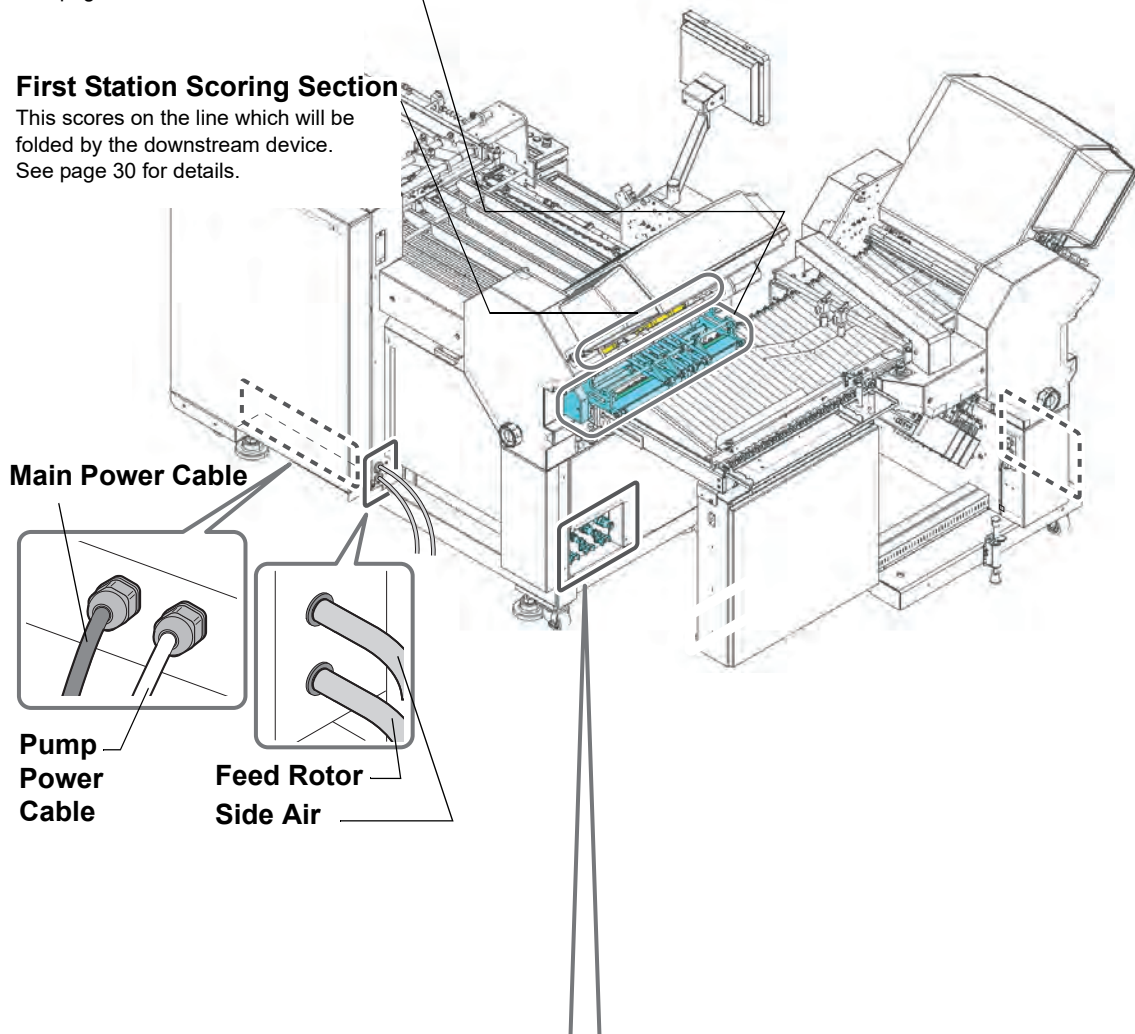
1-2-3 General View - Part 2

First Station Delivery Belt Unit

This changes the delivery angle of each sheet
See page 32 for details.

First Station Scoring Section

This scores on the line which will be folded by the downstream device.
See page 30 for details.



Power Connector for Communication Box

(Use this to connect the T-406A.)

ARCNET communication Connector

Ground Terminal

(Use this to connect the ED-40S.)

Cable Pin

(Lock the connector plate of the signal connector for upstream device here.)

Connector for Gate Fold Buckle Chute

Signal Connector for Downstream Device

Connector for LAN Cable

(Use this to connect to the network.)

Signal Connector for Remote Controller

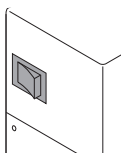
Power Connector for Delivery Conveyor

Power Connector for Downstream Device

1-2-4 Suction Head Section - Part 1

Suction Head Stop Switch

When the vacuum piston picks up the sheets which width is narrow, the suction head can rise a little, and the gap between the vacuum piston and sheets can widen. In this case, turn off this switch so as not to move the vacuum piston.



Important

When lowering the feed table, the suction head raises even if this switch is turned off.

Suction Head Locking Knob

Vacuum Piston Height Adjusting Knob

This knob is used to adjust the space between the suction cup and the top of the stack. The standard space is about 1 mm / 0.04".

Housing Locking Knob

Sheet Hold-down Pressure Adjusting Knob

This knob adjusts the pressure produced by the sheet hold-down bar against the sheet. The higher the setting on this knob, the greater the hold-down pressure.

Sheet Hold-down Bar

This bar lightly holds down the tail of the stack.

Set Register Pin

Fit the pin against the tail of the stack.

Blower Air Nozzle

The blower air exits.

Blower Air Position Adjusting Knob

This knob is used to adjust the height of the blower air nozzles.

Blower Air Pressure Adjusting Lever

This lever is used to adjust the blower air pressure.

Air Guide

This holds the sheet lightly and prevents the separation air going away laterally.

Separation Air Pressure Adjusting Knob

This knob is used to adjust the separation air pressure.

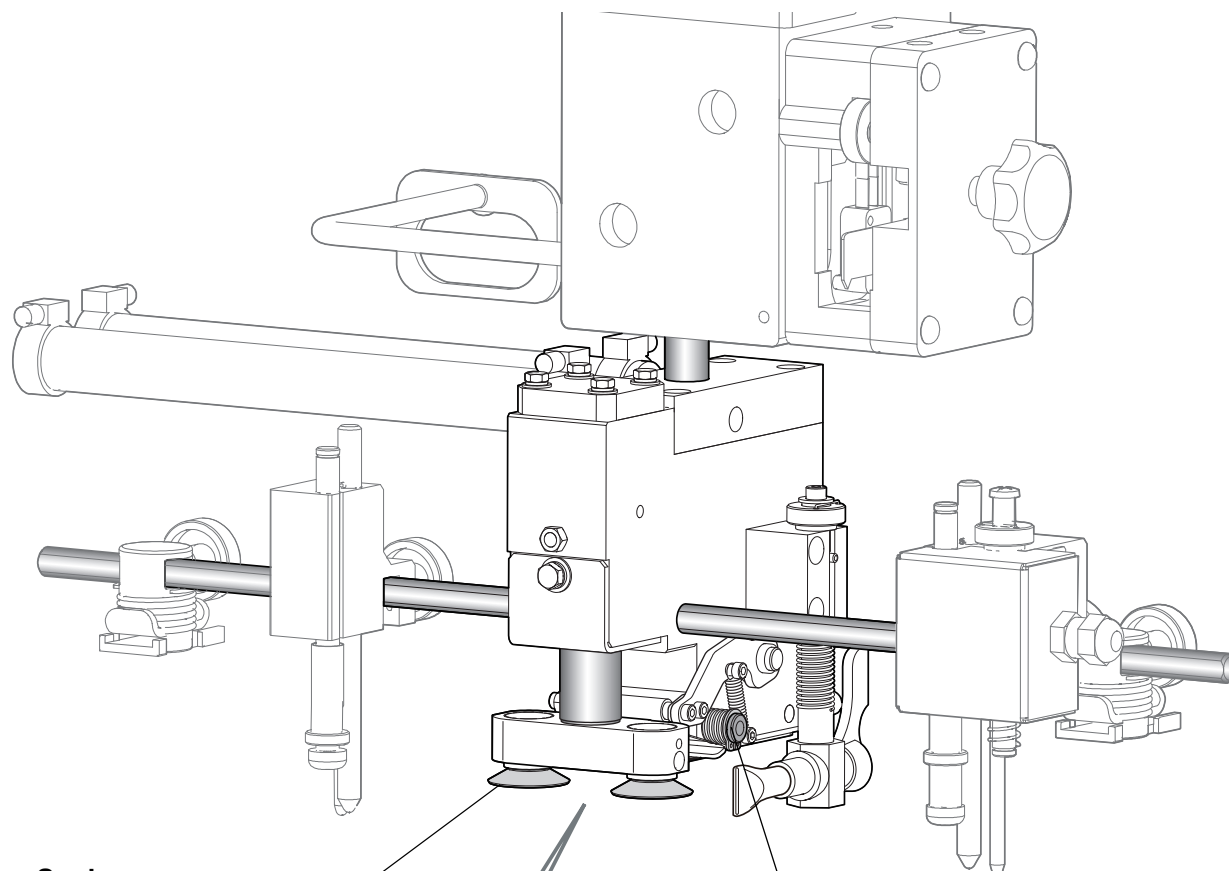
Sheet Hold Angle Adjusting Knob

Turn this knob to the right to increase the angle.

Grip Area Adjusting Knob

Turn this knob to the right to move the grip area forward.

1-2-5 Suction Head Section - Part 2



Sucker

This piston catch the top sheet and lift it up.

Separation Air Nozzles Switching Knob

Select the pattern of the air nozzles depending on the sheet types.

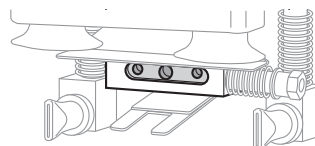
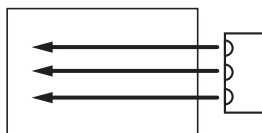
- For thick sheets (Coated)
- For Thin Sheets

Separator

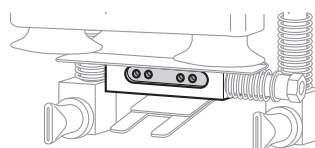
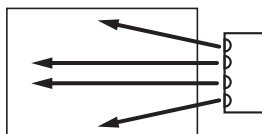
When the vacuum piston lifts up the top sheet, this separator holds the edge of the sheet lightly, and prevents the sheet from double feeding. Adjust the grip area according to the sheet types. This is set to 4 mm / 0.157" at the factory.

Patterns of Separation Air Nozzles

- For thick sheets (Coated)



- For Thin Sheets



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1-2-6 Sheet Holding Unit

Holding Pressure Adjusting Knob

If the knob is turned clockwise, the hold-down pressure is reduced.

Bracket

Small Sheet Support

Assembly Mounting Knob

To install the small sheet support assembly, put the bracket over the suction head arm and tighten this knob.

Aligning Plate

Set the position of small sheet support assembly to match the sheet size by aligning this plate to the scale on the support.

Set Register Pin

Fit the pin against the tail of the stack.

Sheet Hold-down Pin

This pin lightly holds down the tail of the stack. The hold-down pressure can be adjusted by turning the holding pressure adjusting knob or moving the sheet support assembly.

Small Sheet Hold-down Plate

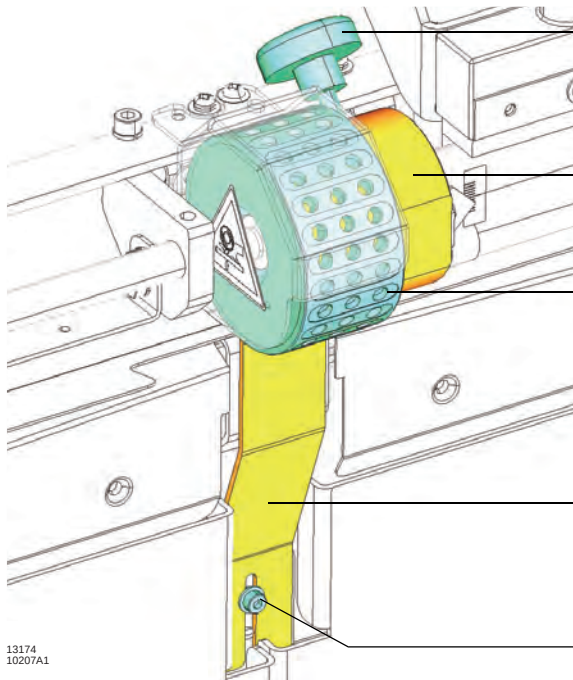
Install this plate when the middle of the small stack is swelled because of the air.

Small Sheet Hold-down Plate Mounting Knob

To install the small sheet hold-down plate, put the bracket over the suction head arm and tighten this knob.

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1-2-7 Feed Rotor Section



Housing Adjusting Knob

If you turn this knob, the angle of the housing built into the feed rotor is changed so that the grip position on the sheet is also changed.

Housing

This housing supplies vacuum from inside of the feed rotor.

Feed Rotor

This pulls against the leading edge of the sheet. The vacuum operates through the slotted holes on the out-side of the rotor. As the rotor turns, sheets are fed to the register guide section.

Push-out Prevention Plate

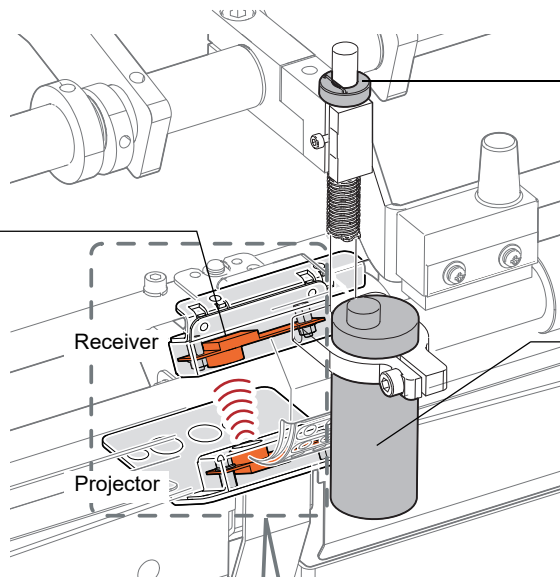
Normally you should not have to change this setting. If the sheets get caught by this plate, move this plate to the lower position.

Push-out Prevention Plate Locking Screw

Full Auto

Double Feed Detect Ultrasonic Sensor (Count Sensor)

This is the sensor for double (multiple) feed detection. If this sensor detects double feeding, the machine stops folding. This sensor counts the sheets which have passed the feed rotor, and also is used to trigger the feed timing.



Feed Table Sensor Adjusting Knob

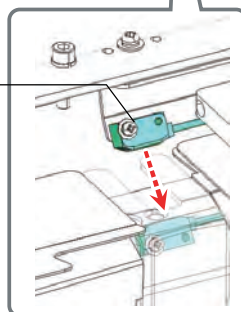
When this knob is turned clockwise, the feed table height detect sensor is raised, and the table is also raised.

Feed Table Height Detect Sensor

This sensor detects the top of the stack and keeps the height of the table. The standard distance between the feed rotor and the top sheet is about 9 to 11 mm / 0.35" to 0.43".

Semi Auto

Feed Timing Sensor



Additional Information

There is a optional sensor for small sheet. (See page 81 for details.) This is a sensor which supports the sheets with length of 60 mm / 2.37" at minimum.

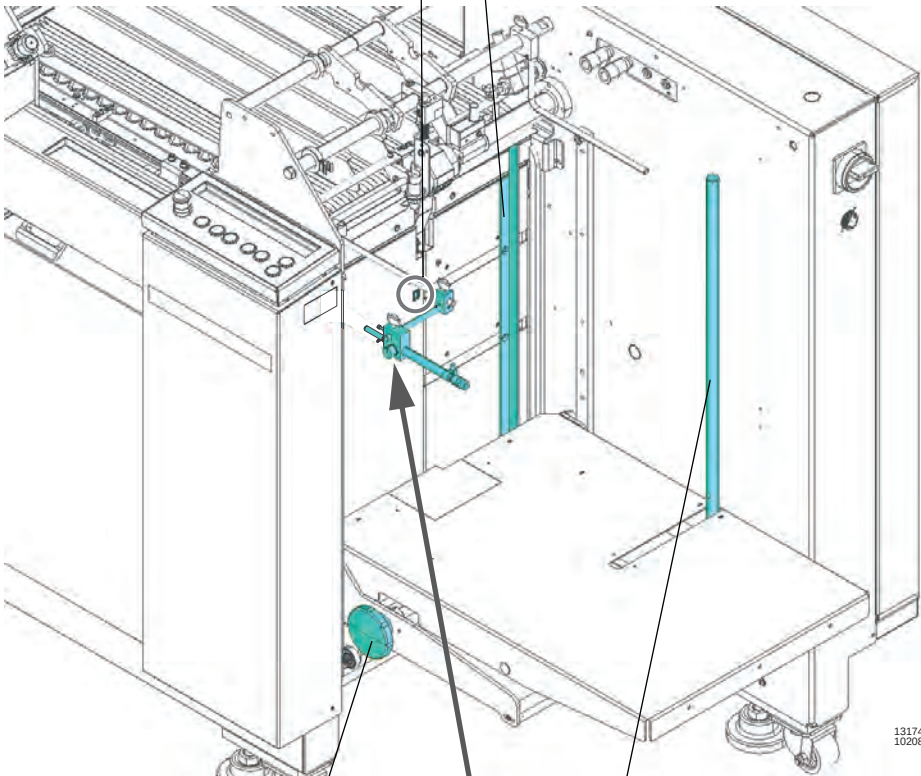
1-2-8 Full Auto: Side Air and Feed Table

Sheet Loading Position Sensor

When the Feed Table Down button is pressed, the table lowers until it reaches this sensor. When there are sheets on the table and the Feed Table Down button is pressed, the table stops with the top of the stack even with the sensor. Press the Feed Table Down button again to lower the table all of the way.

Table Guide

The rear edge of the stack must be pushed against this guide. This guide adjusts position automatically to match the sheet width.



Feed Table Wheel

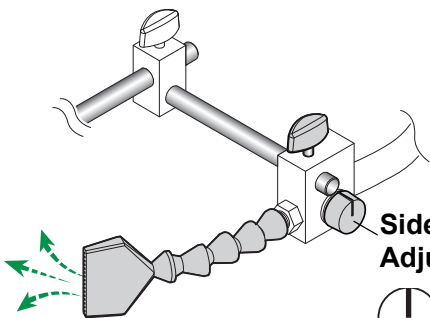
This wheel moves the feed table forward or backward. When this wheel is turned clockwise, the table moves to the backward.

Sheet Guide Bar

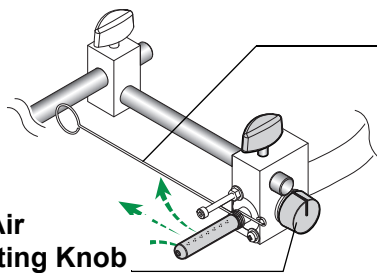
When loading the long sheets, the rear edge of the stack must be pushed against this guide. Adjust the position of this guide manually. If this guide is not necessary, turn this guide counterclockwise to remove it.

Side Air Nozzle Set the side air nozzle to blow the edge of the sheet.

Swivel Nozzle Type



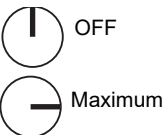
Wire Nozzle Type



Feeler Wire

Place this wire on the top of the stack. The angle of nozzle is adjusted to match the height of sheets that are blown by the air.

Side Air Adjusting Knob



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1-2-10 Register Guide Section

Sheet Holders

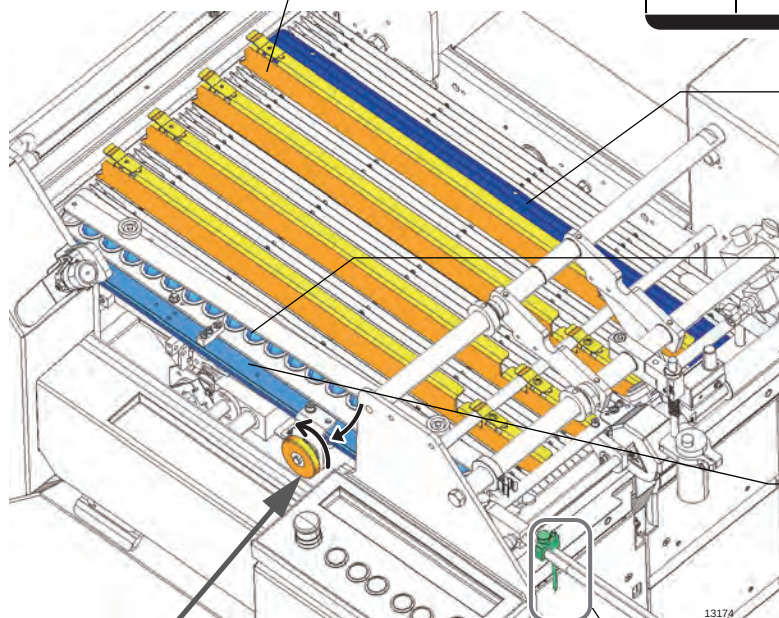
These holders prevent the sheet from lifting. Install or remove holders to match the sheet size.



CAUTION



Move the sheet holders to the rear before changeover from bigger sheet size to smaller. Otherwise the register guide may hit the sheet holders.



Sheet Edge Guide

Set this guide so that it supports the edge of the sheet. This prevents the edge of the sheet from drooping and causing a jam.

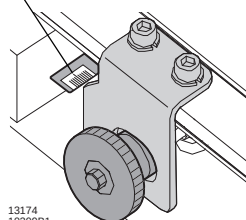
Transport Balls

There are plastic balls and steel balls (for thick sheets). Each sheet is driven through the guide by these balls and the transport belt under the balls.

Register Guide

Each sheet is driven through this guide by a transport belt and the transport balls. The position of this guide is adjusted automatically to match the sheet width.

Register Guide Angle Scale



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Register Guide Angle Adjusting Knob

Adjust the guide angle using this knob so that the sheet is driven through the guide. Turn the knob clockwise to move the right side of the guide to the front.

Feed Scale Pin

This pin prevents the sheet from being skewed during the feeding.

Infeed Section Sheet Holding Roller Locking Screw.

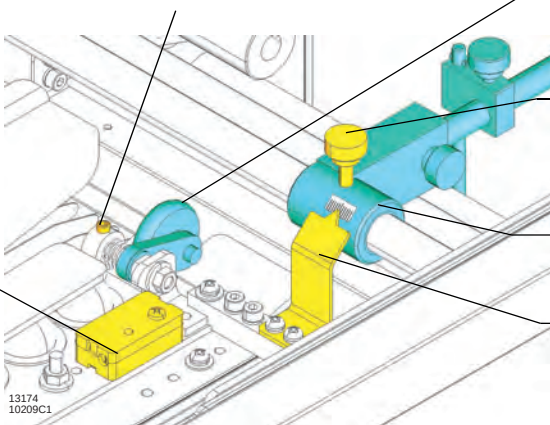
Loosen this screw when you want to change the pressure of the infeed section sheet holding roller. The locking screw should come to the top as standard position.

Infeed Section Sheet Holding Roller

This roller holds down each sheet and feeds it into the register guide.

Double Feed Detect Photoelectric Sensor

This is the sensor for double (multiple) feed detection. If this sensor detects double feeding, the machine stops folding.



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Locking Knob

Loosen this knob to move the feed scale pin holding block manually.

Feed Scale Pin Holding Block

Feed Scale Pin Positioning Indicator

The position of the feed scale pin is set by aligning the near corner of the holding block to this indicator.

1-2-11 Buckle Chute Section

6 Buckle Chutes

Buckle Chute Stopper Angle Adjusting Knob

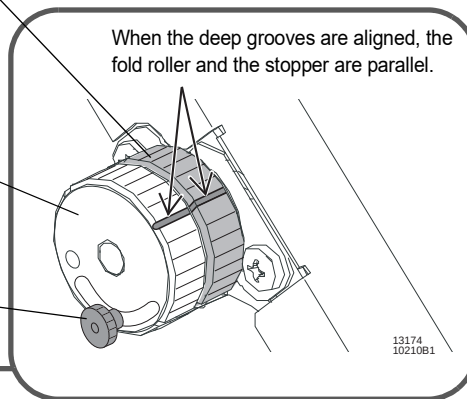
This knob moves only the end of the stopper on the operator side of the machine. The angle of the stopper is adjustable.

Fixed Knob

This knob is driven by a motor. Do not turn it by hand.

Locking Knob for Buckle Chute Stopper Adjusting Knob

Loosen this knob to turn the stopper adjusting knob.



Handle

Hold this handle when you remove the buckle chute.

Gate Adjusting Knob

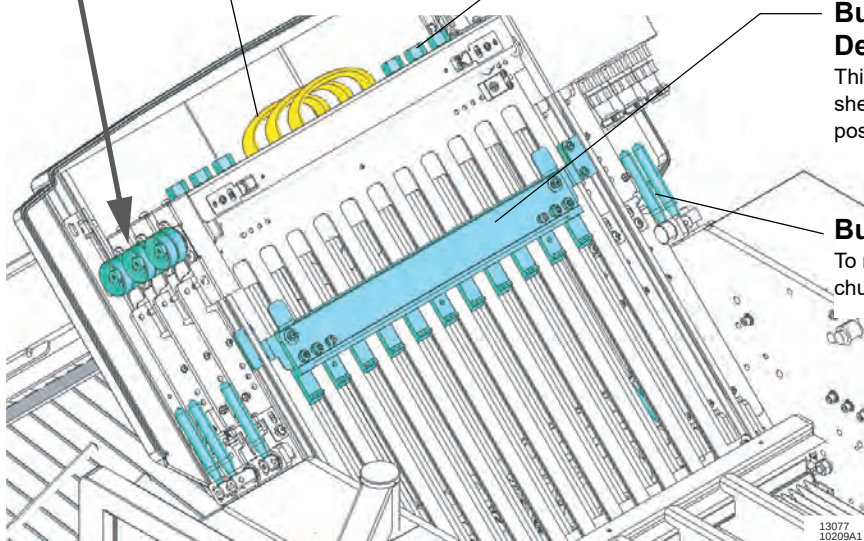
Turn this knob counterclockwise to move forward the buckle gate.

Buckle Chute Stopper and Deflector

This stopper is set automatically to match the sheet size and fold pattern. The stopper position can be adjusted using the screen.

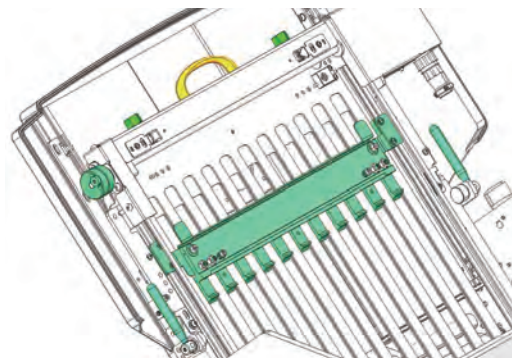
Buckle Chute Locking Lever

To remove the buckle chute, unlock the buckle chute by releasing this lever.



2 Buckle Chutes

Units and their functions are same as above.

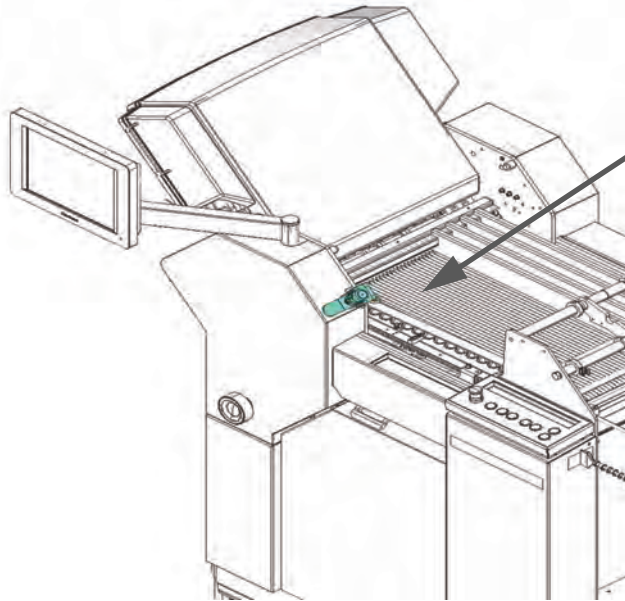


Additional Information

This manual is based on 6 buckle chutes mainly. The numbers of knobs and levers are different depending on the number of buckle chutes.

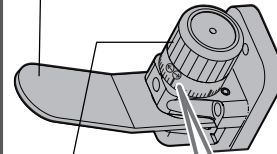
1-2-12 Roller Gap Adjusting Section - Part 1

Full Auto



Gap Adjusting Lever

To set the gap between the rollers, push down on the lever and insert one or ten sheet strips.



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Sheet Thickness Adjusting Knob

Use this knob to set all the roller gaps wider or narrower than the sheet inserted between the gap adjusting lever.

CAUTION



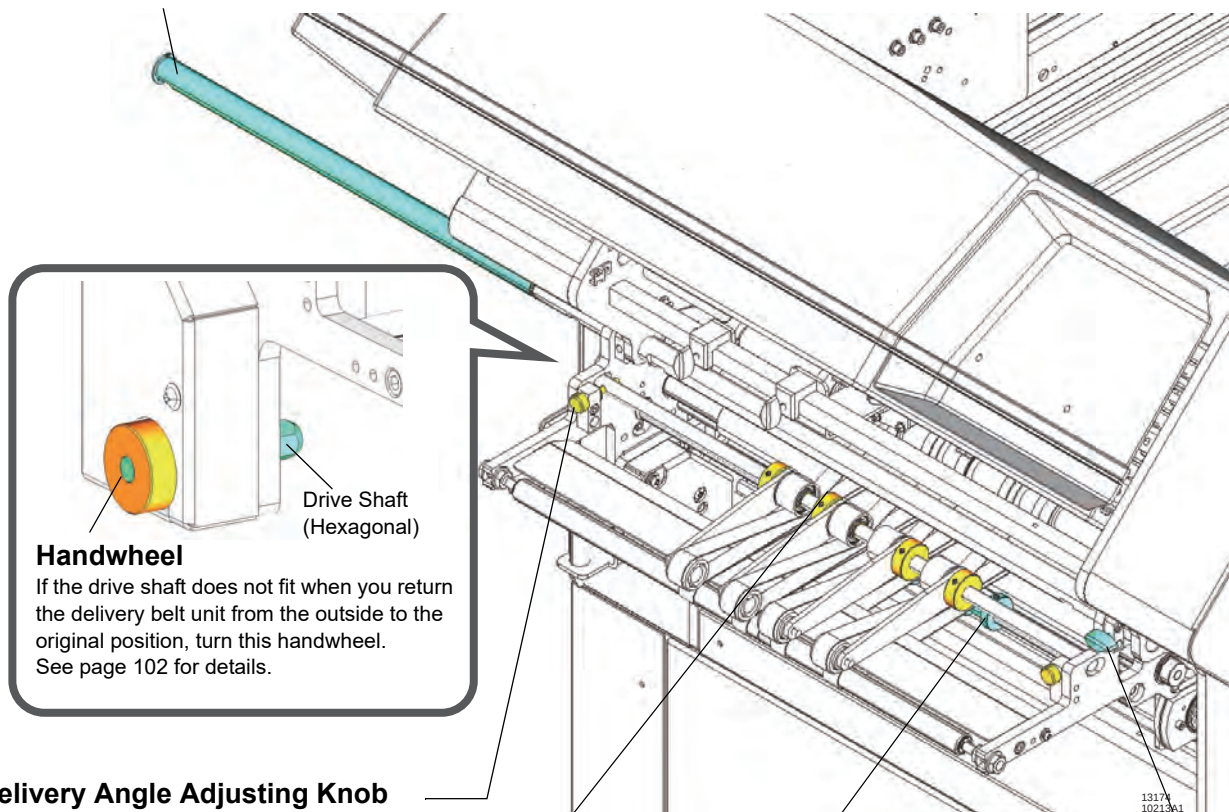
Do not open the roller gaps too far.
Maximum Opening-
First Station: 1.5 mm
If a gap opening is too wide, the
roller may hit the buckle chute.

1-2-13 Delivery Belt Unit

Install the delivery belt unit to the first station.

Slide Shaft

When you make adjustment on the scoring section, slide the delivery belt unit along this shaft to the outside the machine. You can remove this shaft if it is not necessary.



Handwheel

If the drive shaft does not fit when you return the delivery belt unit from the outside to the original position, turn this handwheel. See page 102 for details.

Drive Shaft
(Hexagonal)

Delivery Angle Adjusting Knob

If the sheets from the first station do not enter the register guide these knobs can be used to adjust the sheet delivery angle. See page 154 for details.

Belt Pulley Locking Bushing

If you want to change the position of an upper delivery belt, loosen the locking screw on this bushing and slide the belt. Retighten the locking screw.

Delivery Belt Unit Locking Lever

Loosen this lever before sliding or removing the delivery belt unit.

Guide Pulley

If you want to change the position of a lower delivery belt, loosen the locking screw on this pulley and slide the belt and pulley together along the shaft. Retighten the locking screw.

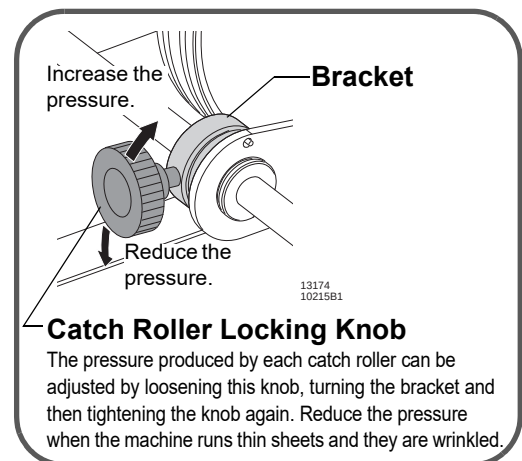
1-2-14 Delivery Conveyor

Catch Rollers

Set the rollers so that delivered sheets are caught immediately by these rollers. Position these rollers over the belts. If the belt positions are changed, also change the positions of these rollers.

Conveyor Belts

The sheets are transported by these belts. The positions of these belts can be changed to match the sheet size. To move a belt, loosen the locking screw on the drive pulley and slide the belt and pulley along the shaft. Retighten the locking screw.



Stacker Arms

Pull out these arms to increase the size of the stack. If the belt positions are changed, also change the positions of these arms.

Slide Arms

Loosen the locking lever and move the arms to change the position of the catch rollers.

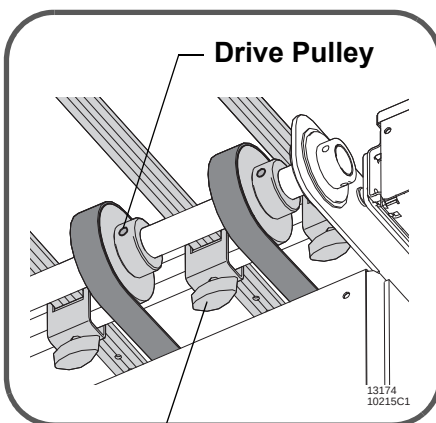
Slide Arm Locking Lever

Attach the remote controller here.

Conveyor Height Locking Handwheel

Loosen this handwheel to adjust the height of the conveyor.

Locking Pad



Stacker Arm Locking Knob

Speed Control Dial

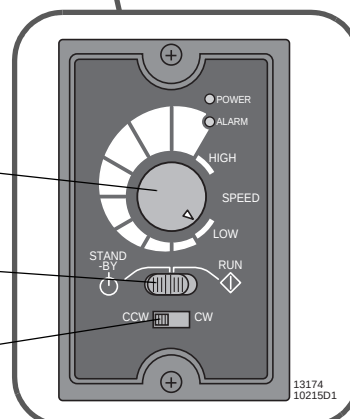
The speed of the conveyor can be changed using this dial.

Conveyor Switch

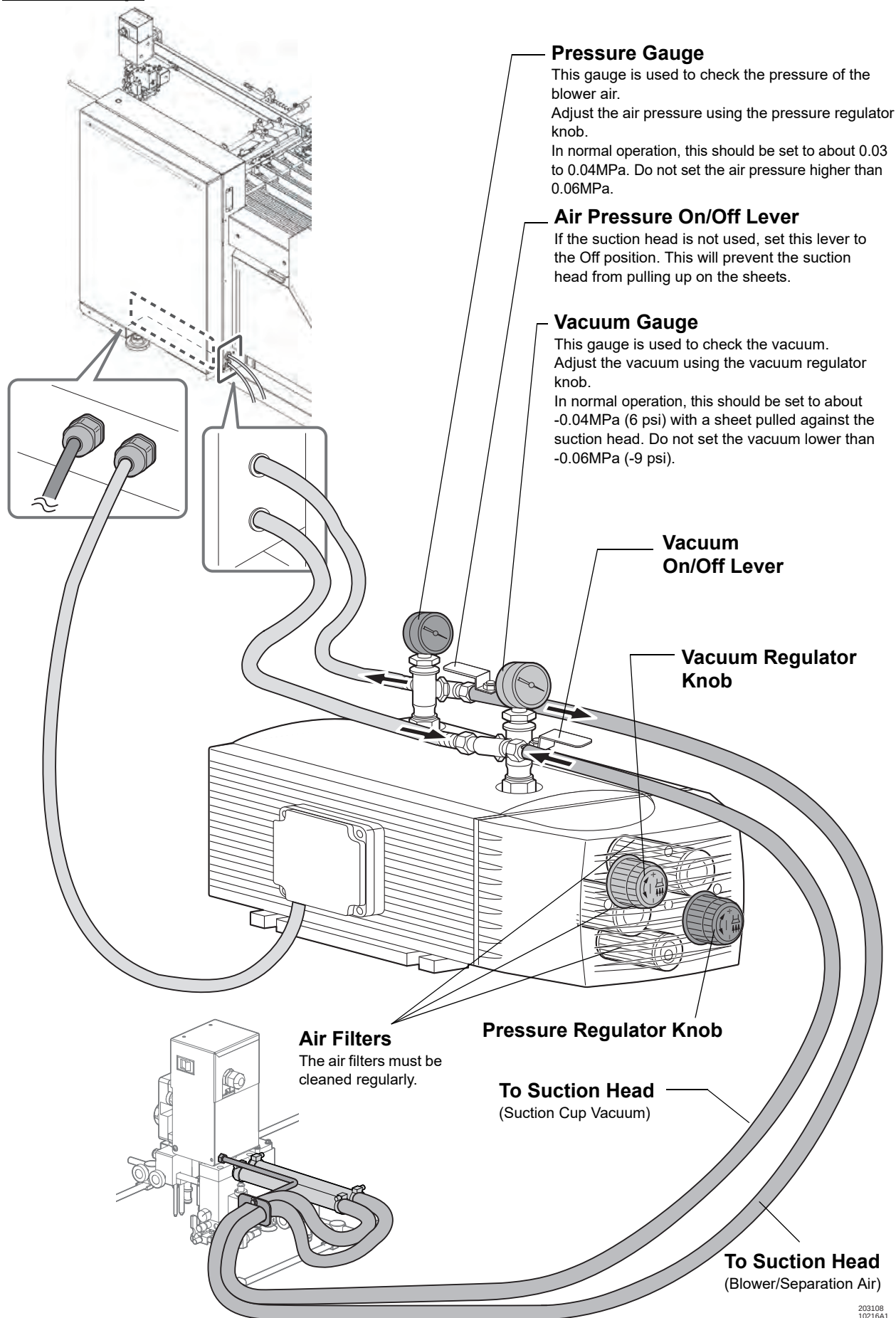
Select Run to use the conveyor.

Reverse Direction Switch

This switch reverses the travel direction of the conveyor belts. If the conveyor belts are going the wrong way, flip this switch.

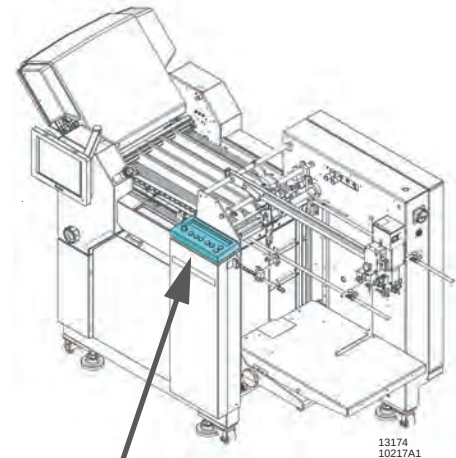


1-2-15 Pump

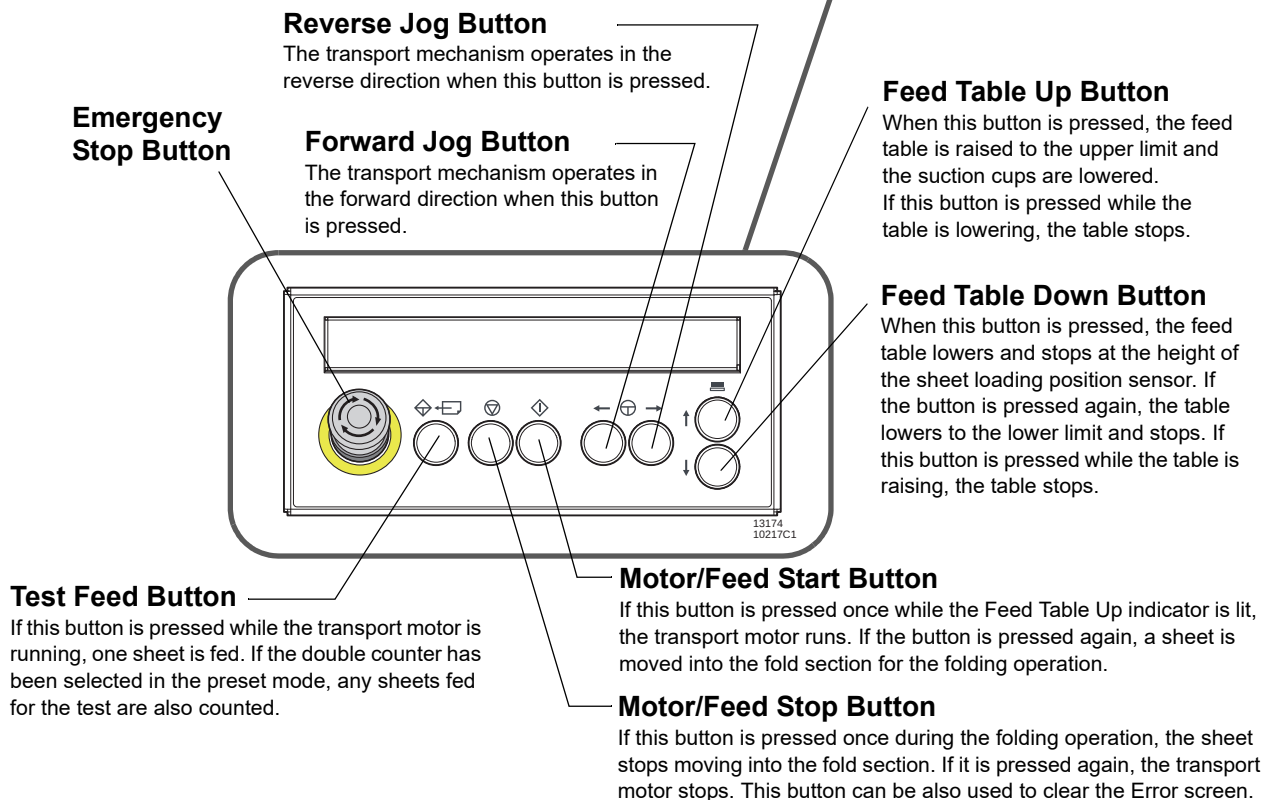


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1-2-16 First Station Control Panel and Remote Control



First Station Control Panel



Note

If you press the Motor/Feed Stop button twice in a short period of time, the machine will stop with some sheets remaining. It is better to stop the transport motor after all the sheets inside the machine have been delivered.

1-3-1 Setup - Unit Combination Screen

▼ Setup - Unit Combination Screen



Go to the Setup - Fold Pattern screen.

Motor/Feed Start Button

If this button is pressed once while the Feed Table Up indicator is lit, the transport motor runs. If the button is pressed again, a sheet is moved into the fold section for the folding operation. The settings are not changed since the power is turned on.

Motor/Feed Stop Button

If this button is pressed once during the folding operation, the sheet stops moving into the fold section. If it is pressed again, the transport motor stops.

**Note**

If you press the Motor/Feed Stop button twice in a short period of time, the machine will stop with some sheets remaining. It is better to stop the transport motor after all the sheets inside the machine have been delivered.

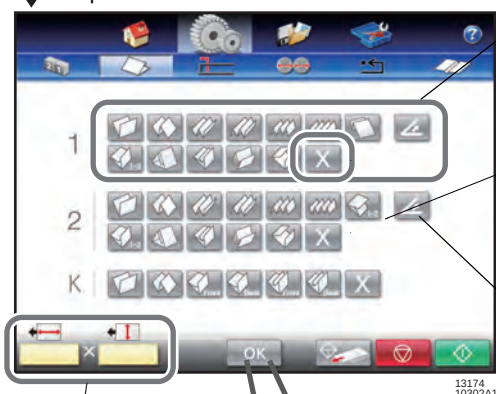
Test Feed Button

If this button is pressed while the transport motor is running, one sheet is fed.

1-3-2 Setup - Fold Pattern Screen

6 Buckle Chutes

▼ Setup - Fold Pattern Screen



Select the fold pattern for the first station from 12 possible patterns.

Custom Fold Pattern

To use a custom fold pattern that is not included in the 17 standard fold patterns, press this button. You can enter the positions for the guides buckle chutes manually to match the fold pattern. (See page 69.)

Sheet Surface/Reverse Select Button

To reverse the sheet, press this button. The button turns blue.)

Semi Auto

Go to the Guide - Buckle Chute screen.

Full Auto

Go to the Sheet Insert Instruction screen.

Sheet Size

Press the value box, then the Numeric Keypad screen is displayed. Enter the value on the Numeric Keypad screen. Enter the value in increments of 0.1 mm / 0.005".

Maximum: Sheet Length 650 mm / 25.5" x Width 430 mm / 16.92"

Minimum: Sheet Length 100 mm / 4.0" x 50 mm / 2.0"

The above screen is an example of 6 buckle chutes. The number of standard fold pattern icons which are selected on the first station is different depending on the number of buckle chutes.

2 Buckle Chutes

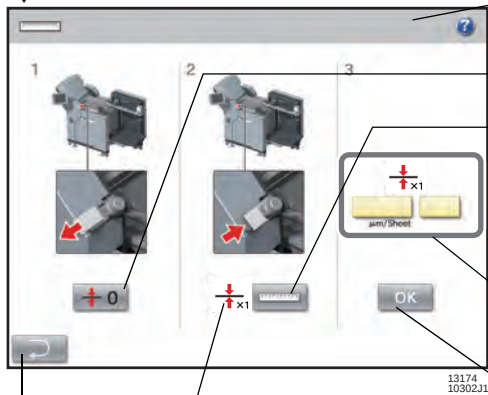
▼ Setup - Fold Pattern Screen



5 Patterns

1-3-4 Setup - Fold Pattern Screen - Part 3

▼ Sheet Insert Instruction Screen



Go back to the Setup - Fold Pattern screen.

The number of sheets to be inserted is displayed.



Insert one strip and measure it.
(Standard Setting)



Insert ten sheets and calculate the average. It is useful when the sheet is thinner than 70 μm or the sheets of the stack are unstable.

You can change the setting using the Administrator Setting screen.

After selecting the fold pattern, measure the sheet thickness using this screen.

Zero Setup Button

Press the Zero Setup button with no sheets to set the value zero.

Thickness Measuring Button

Prepare a strip of the sheet that you will fold and insert it into the sheet thickness detector. Press this button to measure the sheet thickness. After measuring the thickness, turn the sheet thickness adjusting knob and press the Thickness Measuring button again. The value which shows the amount how much you turned the knob will be displayed. It is useful when you set all the roller gaps wider or narrower than the sheet inserted between the gap adjusting lever.

Sheet Thickness Display

This shows the thickness of the sheets inserted under the gap adjusting lever. The value can be also entered directly. The range of adjustment is from 20 to 1,000 μm . When the sheet is changed, press the Thickness Measuring button to update the displayed value. You can continue to use the measured thickness and the thickness of the sheet can be adjusted by entering correction value. The range of adjustment is from -200 to 200 μm .

In case that you want the machine to make the roller gap narrower, operate as the following input example below.



Measured Thickness Correction Value

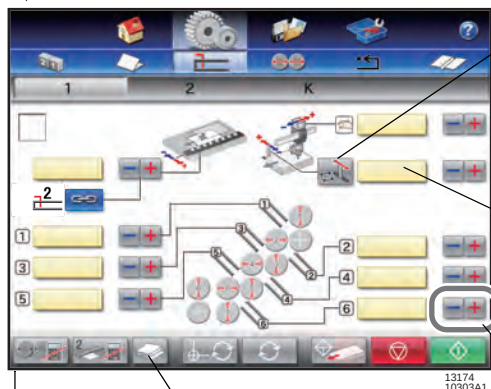
Go to the Guide and Buckle screen.

1-3-5 Setup - Guide - Buckle Chute Screen- Part 1

This screen shows the calculated machine settings in a list, based on the settings on the Fold Pattern screen and on the sheet size. The settings can be fine-tuned using this screen.

6 Buckle Chutes

▼ First Station Guide Buckle Chute Screen



Full Auto



(Blue): This indicates that the table guide is set automatically.

↕ Switching



(Gray): This indicates that the table guide is not set automatically even though the changeover is done.

Entering a Value

Press the area for the value you want to change, and the Numeric Keypad screen is displayed. Enter the new value and

press  to start the changeover.

Micro-Adjusting Buttons



Press to increase the setting by 0.1 mm / 0.005".



Press to decrease the setting by 0.1 mm / 0.005".

If a value is changed using the  and  buttons, machine will move to the new position after one second. Press the button continuously to change the value in high speed.

Roller Gap Recalculation Button

When this button is pressed and turned blue, the roller gap is re-calculated automatically from the current value of the buckle stopper.

Turn off this button if you do not change the value for the roller gap.

Alternatively, use the Fine Adjusting buttons



to change the buckle fold size of the first station.



(Blue) On: The roller gaps are re-calculated. (Default)

↕ Switching



(Gray) Off: The roller gaps are not re-calculated.

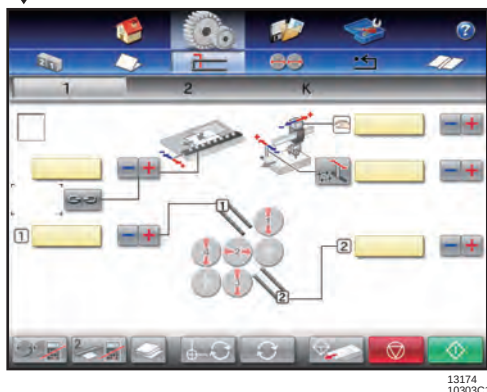
According-fold Adjusting Button

You can correct the parallel shifts of accordion-folded sheets by adjusting all the buckle stopper at once. Press this button to open the Accordion-fold Adjusting screen. See page 96 for details.

The above screen is an example of 6 buckle chutes. The value in the entering value is depending on the number of buckle chutes.

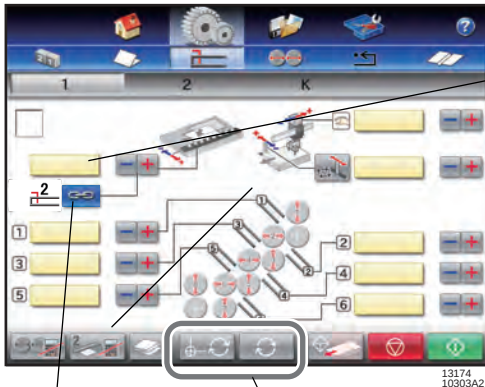
2 Buckle Chutes

▼ First Station Guide Buckle Chute Screen



1-3-6 Setup - Guide - Buckle Chute Screen- Part 2

▼ First Station Guide Buckle Chute Screen



Link Button

(Blue  by default :Link ON)

When the register guide is fine-adjusted with the  and

 while the first station and the second station are installed so as to be L form, the position of buckle chute (first folding position on the second station) whose value is the lowest but bigger than 0 in the buckle chute of the second station is also adjusted. In the state that the creases position and the first holding position are matched, the position of the both sides to the sheet can be shifted the same amount.

When you do not want to link the machines, press this button to turn off the "Link" function. (The button will turn grey. )



Attention

When the number display section is pressed and the value is input while the Link is on, the position of the buckle chute is not changed.

Changeover Start Button

Press this button to start the changeover when the settings on this screen are OK.



: Each mechanism moves directly to the set position.



: Each mechanism returns to the home, and then moves to the set position.

After the Power switch is turned on, the roller gap is also home positioned by pressing this button for the first time. For second times or later, the roller gap does not move by pressing this button.



Note

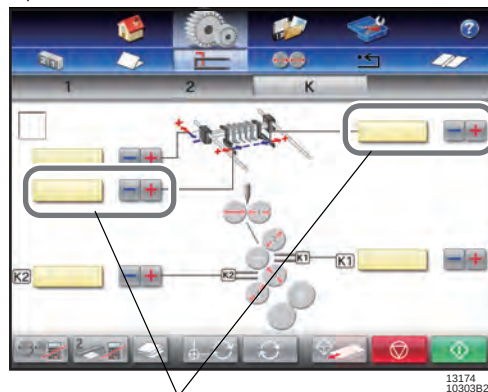
When the Power switch is first turned on, if all of the parts have not returned to their home positions, all of the parts will go to their home positions initially even if the  button has been pressed.



Additional Information

When the register guide is fine-adjusted while the optional knife unit (KTU-40) is connected to the first station, the side guide position on the Setup - Guide - Buckle Chute screen will be also adjusted. (This does not change the actual position of the side guide. See the user's manual for KTU-40 and set the position.)

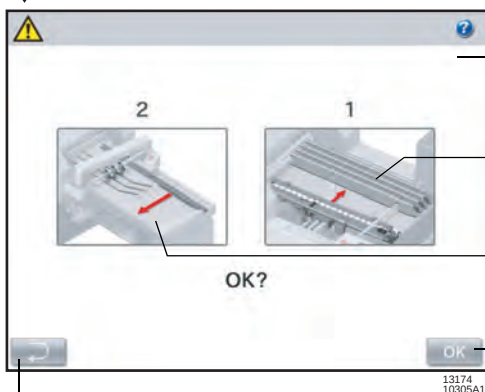
▼ Setup - Guide - Buckle Chute screen - K



Front/Rear Side guide position

1-3-8 Changeover Start Confirmation Screen

▼ Changeover Start Confirmation Screen



This screen confirms if the changeover can be started.

The first station register guide will move. Move the sheet holders to the rear.

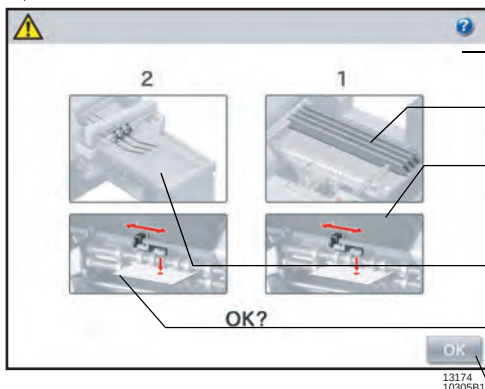
Full Auto

The second station register guide will move. Remove the sheet holding bars.

After following the above procedures, press the OK button. Each part of the machine moves to the setup position.

The display will return to the Guide-Buckle Chute screen.

▼ Changeover Complete Confirmation Screen



Once the changeover has been completed properly, this screen is displayed.

Set the sheet holders on the first station.

Adjust the position of the sheet delivery sensor. The sensor should be positioned where it can detect the passing sheet. The scoring rollers or drive rollers must not be detected by this sensor.

Set the sheet holding bars on the second station.

Adjust the position of the sheet delivery sensor.

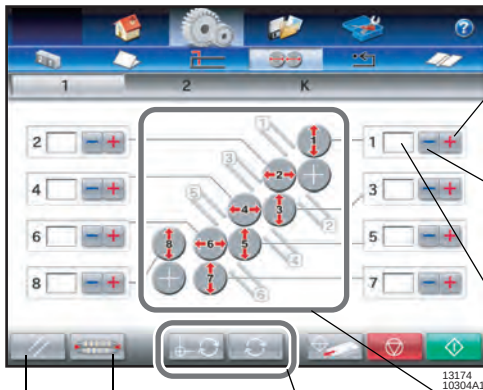
After following the above procedures, press the OK button. The Roller Gap screen appears.

1-3-9 Full Auto: Setup - Roller Gap Screen

This screen shows the gap between each pair of rollers, measured by the number of sheets, according to the settings indicated on the Fold Pattern screen. The gap between each pair of rollers can be adjusted automatically to the desired number of sheets.

6 Buckle Chutes

▼ First Station Roller Gap Screen



Increase the Gap

Each time this button is pressed, the roller gaps increase by one sheet. Actually, the roller gaps do not change until the  button is pressed.

Decrease the Gap

Each time this button is pressed, the roller gaps decrease by one sheet. Actually, the roller gaps do not change until the  button is pressed.

Number of Sheets

This section shows the gap between the rollers, measured by the number of sheets which will fit in the gap.

These areas indicate the buckle chutes being used.

Go to the Roller Gap Fine Adjustment screen.
(See the next page)

Default Value

Set/Indication Button

When you press this button, the Confirmation screen will be displayed. Press OK button so that the machine calculates these settings using the sheet dimensions and fold pattern.

Roller Gap Adjusting Start Button

If you changed the number of sheets which will fit in the gap, press this button to set the new gap.



: Send each roller directly to the gap setting.



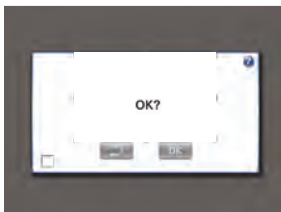
: Send each roller to the home position first and then, send to the set position.



Important

If the actual roller gaps and the settings do not match,

Press  once to reset the gaps the home positions.



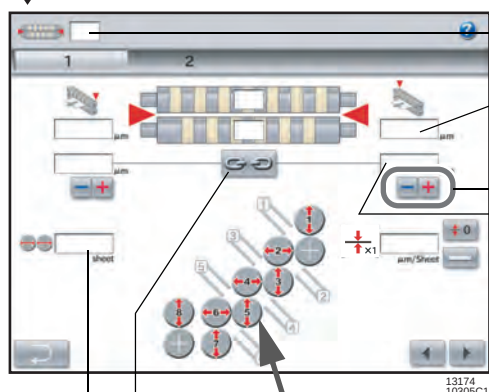
Additional Information

Only the roller gaps move to the home positions or set positions. The other parts such as register guide or buckle chute stopper will not move.

1-3-11 Full Auto: Setup - Roller Gap Fine Adjustment Screen

Each roller gap can be fine adjusted separately using this screen.

▼ First Station Roller Gap Fine Adjustment



Number of Sheets.

You can also select the roller to be adjusted directly.

8 Buckle Chutes



Both/Either Side Select Button



: Adjust only one side



: Adjust both sides at once

Roller Number

Roller Gap

One sheet thickness x number of sheets

Roller Gap Fine Adjusting Button

Minimum adjusting value 5 μm

Roller Gap Fine Adjustment Value

Setting the Value for the Roller Gap

Example: The roller gap is 305 μm .



Example: The roller gap is 295 μm .



1-3-12 Setup-Reset Screen

Some functions in the machines described below can be reset automatically.

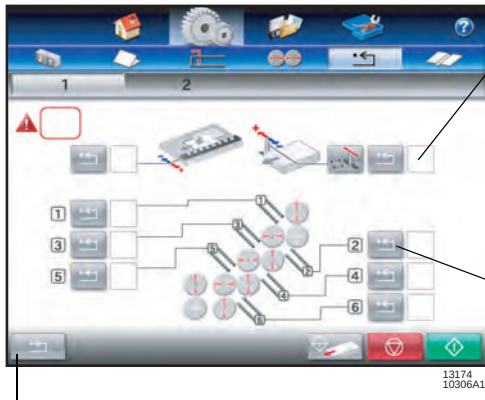
This screen is used to check that these parts are reset correctly.

AF-406F: Eight functions in the first station

AF-402S: 3 functions (first and second buckle chutes and register guide)

6 Buckle Chutes

▼ First Station Reset Screen



Condition Indicator

After each reset function is completed, the symbol  is displayed.

If a reset is not completed for some reason, the symbol  is displayed.

Single Function Reset Buttons

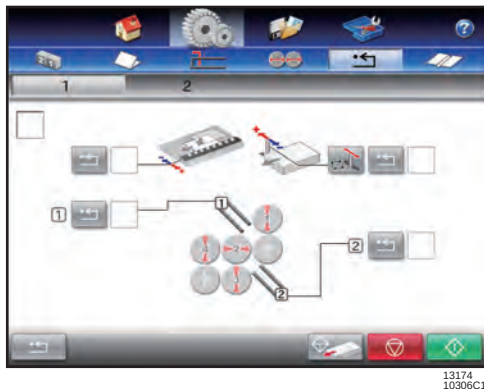
Each button resets one of the mechanisms.

All Reset Button

This button resets all of the mechanisms at the same time.

2 Buckle Chutes

▼ First Station Reset Screen



1-3-13 Main - Function Screen Part 1

Preset Counter

Enter the preset number here. If  (clear) is pressed, the number will reset back to 0. The number decreases by one each time a sheet is fed.

Delivery Counter

The total number of sheets delivered is displayed here. If the  or  buttons are pressed, the count number can be changed.

In case of a sheet jam, if a good folded sheet is delivered using the Jog button, that sheet will not be counted. In this case, increase the delivery count using the  button. If there is a folding problem, decrease the delivery count using the  button.

Feed Counter

The total number of sheets fed during the job is displayed here. This number is saved even if the power is turned off. When changing the job, press  (Clear) to set the counter back to zero.



Attention

Each sheet is counted as it passes through the count sensor, even if the sheet is not delivered completely because of a jam.

Preset Mode Select Button



(Continuous):

Sheets are fed continuously without using the preset counter.



(Stop):

When the number of fed sheets reaches the preset count number, the feeding action stops.



(Pause):

When the number of fed sheets reaches the preset count number, the feeding action pauses for a set time. This creates a gap between the sets on the delivery conveyor.



(Double Counter):

Feeding is repeated until the number of delivered sheets reaches the preset number.

Feeding stops when the delivery count reaches the preset number. If the double counter is selected, sheets fed for the test are also counted.

For example, enter 50 on the preset counter and start feeding. If one sheet jam occurs, the machine will feed a total of 51 sheets. (Feeding continues until 50 sheets are delivered properly.)

The circlink communication is unstable inside the machine.

The ARCNET communication is unstable inside the machine.

The ARCNET communication is unstable between another machine.

The Emergency Stop button is pressed.

End of Job Button

Press this button after a job has been completed.

Production Speed Indicator

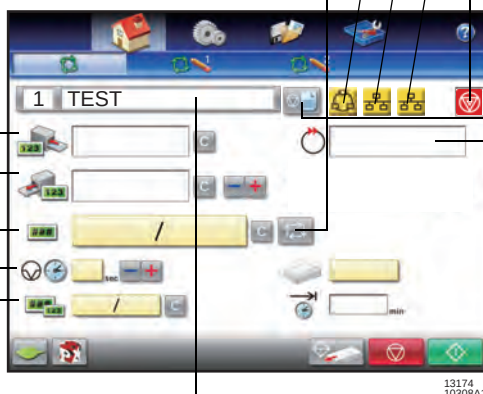
The current production speed is indicated here.

Pause Time

Enter the pause time here.

Batch Counter

Enter the number of sets in each batch here. The feed will stop when the machine has completed that number of sets.



Job Name

The current job is displayed here.

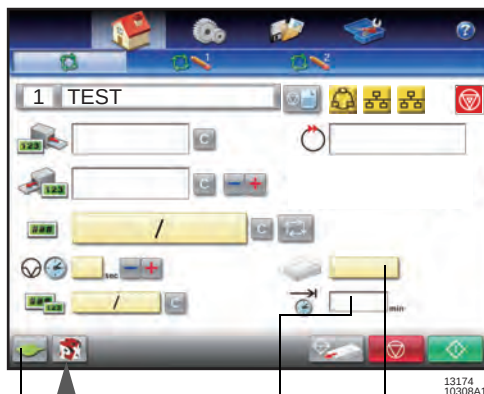


Additional Information



If you change the settings or fine adjustment settings after recalling the job from the memory screen, the name of the job shown in the drawing above will change to red. Save the modified job with a different name if necessary.

1-3-14 Main - Function Screen - Part 2



Remaining Time Indicator

The remaining time required to run the job is displayed here. The calculation is based on the operation speed and the number of sheets remaining.

Power Saving Mode

The Confirmation screen is displayed when this button is pressed.

If **OK** button is pressed, and the machine is not used for a while, the display on the touch panel disappears and the machine goes into the power saving mode. Touch the screen again to return to the normal operation mode.

Press  to go to the Main screen.

pXnet Screen

This button displays the screen shown below only when the pXnet system is being used.



Pause Button

This button is used to pause the current job and handle the other job.

Complete Button

Remaining Sheet Number Entry

The number of sheets remaining can be entered here. This allows the remaining run time to be calculated.



Note

This is just a rough calculation of the remaining run time. Even if the indicator goes to zero, the machine may not stop immediately.

1-3-15 Main - Condition Screen

Feed Rotor Suction Length

Any value from 10 to 999 can be entered.

When  (default) is pressed, the suction length is set to 3/10 of the sheet length.

First Station Belt Speed

This sets the speed of the fold rollers and transport belts.

Maximum Speed: 180 meters per minute

Minimum Speed: 30 meters per minute



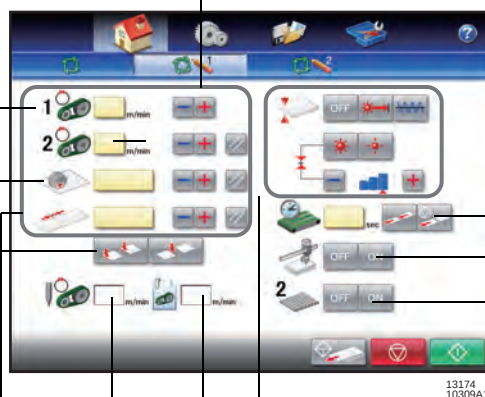
Important

If the belt speed is changed suddenly by a large amount, the folding quality may deteriorate. Do a test feed to check the folding quality before running the machine.



Note

You can change these settings while the machine is running.



Conveyor Drive Time



(Continuous):

The conveyor works with the folder. Set how long the delivery conveyor is running after main motor stops.



(Intermittent):

Set how long the delivery conveyor is running after the sheet is delivered.

Suction Head Setting

ON : Used

OFF: Not used

(If OFF is selected, the suction head is not lowered, even in the standby mode.)

Second Station Condition Setting

ON : Used

OFF: Not used

(Do a test fold only on the first station)

Feed Interval

Any value from 10 to 999 can be entered.

When  (default) is pressed, the interval is set to the standard value.

For normal operation, select



If you want to shorten the feed interval a lot, select



However, this may result in uneven feeding if the sheets are slippery.

Double (Multiple) Feed Detection

OFF

: Double feeding is not detected.

Full Auto



: Double Feeding is detected by the ultrasonic sensor. Two-part form cannot be detected correctly by this sensor. In that case, use the photoelectric sensor.



: Double feeding is detected by the photoelectric sensor. According to the printed condition (paint or color), this sensor may misdetect the double feeding. In that case, use the ultrasonic sensor.

Icons below are displayed only when photoelectric detection is selected.



: Set the brightness of the double feed detecting lamp. When detecting thick sheets (100 gsm or thicker) or sheets with lots of dark printing, use the brighter setting .



: This sets the sensitivity of the double feed detection. The taller the level bar, the higher the sensitivity.

- If the sensor incorrectly detects correct feeding as double feeding, decrease the sensitivity.
- If actual double feeding is not detected, increase the sensitivity.

1-3-16 Memory Screen

This screen stores, loads and deletes the settings for saved jobs. All the settings on the following screens can be saved together as one job:

- Main - Function screen
- Main - Condition screen
- Setup - Unit Combination screen
- Setup - Fold Pattern screen
- Setup - Roller Gap screen
- Setup - Guide/Buckle Chute screen
- Setup - Scoring Position Adjustment Screen



Additional Information

If you press and hold the Scroll button, the screen will scroll faster.

Job Number

- This area stores information for each job based on a job number.
- Up to 200 jobs can be saved.



The screen scrolls upward by four jobs.

The screen scrolls upward by one job.

The screen scrolls downward by one job.

The screen scrolls downward by four jobs.

Job Protecting Button

For the selected job, this protects the job settings so they cannot be overwritten or deleted.

Job Protect Icon

This icon appears for any job which has been protected.

Sheet Length x Width
(Increment of 0.1 mm / 0.005")

Fold Pattern Icons

These icons indicate the selected fold patterns.

Job Number Entry Button

The Numeric Keypad screen is displayed. Enter the desired job number.

Press these icons to sort jobs by job number, job name or date of last update.

Memory Write

Press here to store or save the job using the job number listed to the left. If the same job number has been used before, the older job information will be overwritten.

Memory Delete

Press here to delete the job you selected from the list.

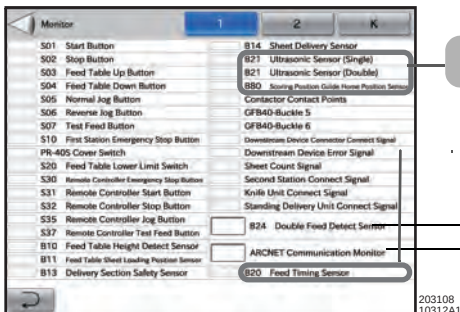
Memory Recall

Press here to load the job you selected in the list. The machine parts will not move to their set positions yet.

1-3-17 Properties Screen

This screen displays information about this machine: date setting, machine operating history, serial number, and software version. This screen also has buttons that go to other screens. The Monitor screen shows the input signals from the sensors. The Job History screen and Error Record screen report on the operation of the machine.

Sensor and Switch Input Monitor



Full Auto

The symbols below show the input condition of each sensor or switch signal.



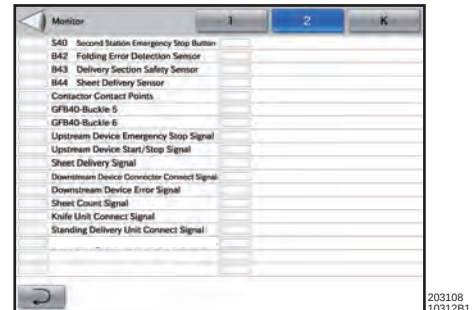
(Green): On

In case of the following situation
The button is pressed / The cover is open /
The sensor is activating



(White): Off

In case of the following situation
The button is not pressed / The cover is closed /
The sensor is not activating



Double Feed Detect Photoelectric Sensor

If the light output is set to , the sensor is operating correctly if a value in the range between 140 and 145 is displayed here. If a value which is out of the range is displayed, clean the sensor.

ARCNET Communication Monitor

This shows the total number of times the ARCNET communication became unstable after the Power switch was turned on.

Time Setting

This indicates the current time. The time can be reset.

Date Setting

This indicates the current date. The date can be reset. To change the date, press this area to display the Numeric Keyboard screen.

Total Feeding Counts

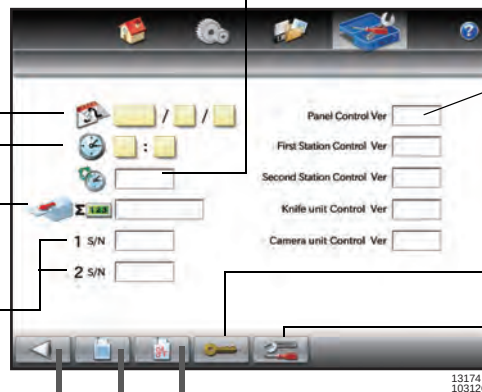
The total number of the sheets run through the machine is displayed here.

Serial Number

The serial number of this machine is displayed here.

Total Run Time

The total run time of the machine (in hours) is displayed here.



Software Version

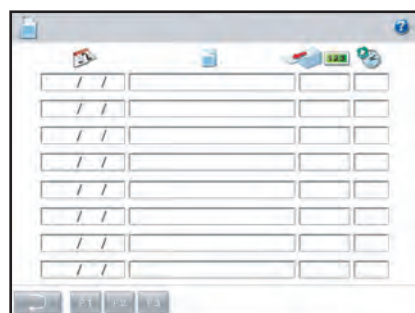
The current software versions of various parts of the machine are displayed here. Please report these numbers in case of a service call.

This goes to the Administrator screen. (See the next page)

This goes to the Service screen. This button should only be used by a service personnel.

Job History

This presents the job log.



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Error Record

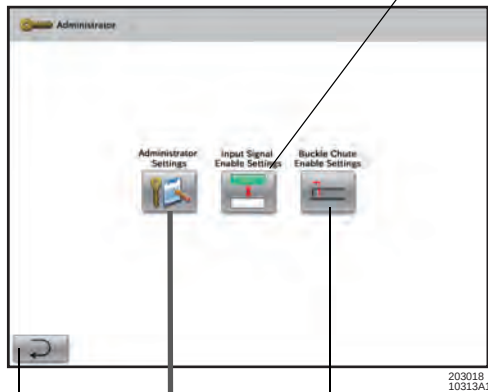
This presents a report of any errors.



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1-3-18 Administrator Screen - Part 1

This screen should only be used by the administrator.



Return to the Properties screen.

Buckle Chute Enable Settings
Not used. (For special order)

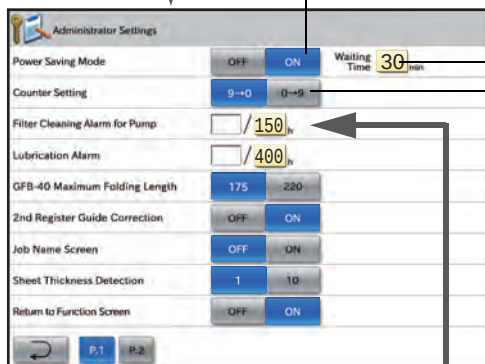
Input Signal Enable/Disable Settings

If a sensor is not working correctly, you can turn off the sensor as an emergency measure. If you want to turn off one of these sensors, contact a service technician for detailed instructions.



Attention

If any devices are disabled using OFF, the Input Signal Enable/Disable screen will be displayed every time you turn on the power.



The value on this screen shows the default settings.

Power Saving Mode



Use the power saving mode



Do not use the power saving mode

Time to Power Saving

This sets the delay before the machine goes into the power saving mode. The setting is adjustable between 1 and 999 (min.)

Counter Setting

This sets the counting method for the preset function and the offset mode.



: Count down (From set number to zero)



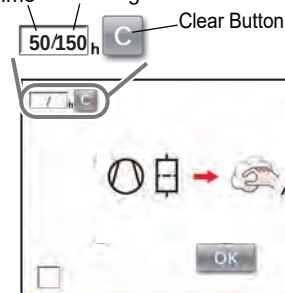
: Count up (From zero to set number)

Filter Cleaning Alarm for Cooling Fan

This is used to set the time to display the alarm for cleaning the vacuum pump filter. When the set time is changing, the count returns to zero. After the machine operating time has come up to a set time, a message screen will be displayed when the Power switch is turned on. Use the screen as an indicator for frequency of cleaning.

Clean or replace the filter, then press **C** (Clear) to return the count to zero. If you press the **OK** button without cleaning the filter, the message will be displayed again when the Power switch is turned on.

Cumulative Time Setting Time



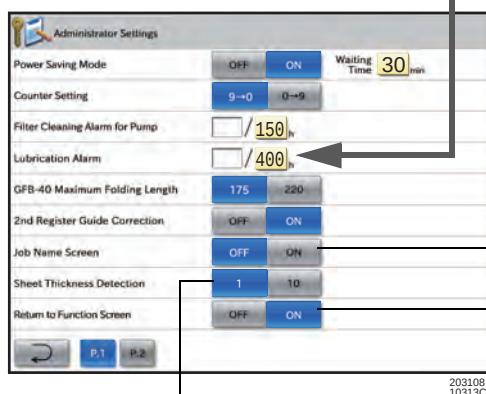
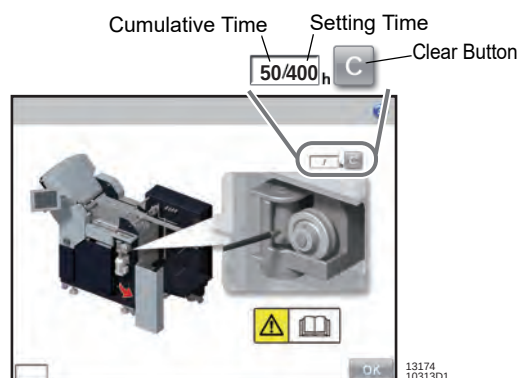
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1-3-19 Administrator Screen - Part 2

Lubrication Alarm

This is used to set the time to display the alarm for lubricating. When the set time is changing, the count returns to zero. After the machine operating time has come up to a set time, a message screen will be displayed when the Power switch is turned on. Use the screen as an indicator for frequency of lubricating.

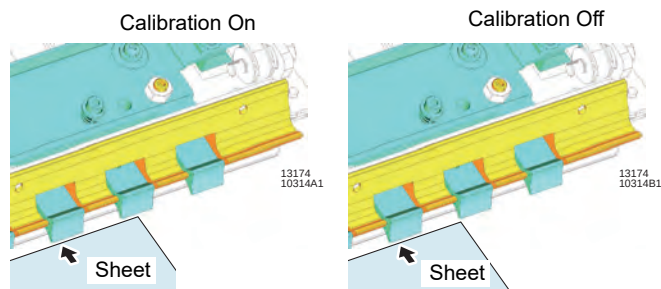
Lubricate the machine, then press **C** (Clear) to return the count to zero. If you press the **OK** button without lubricating the machine, the message will be displayed again when the Power switch is turned on.



Full Auto

Sheet Thickness Measuring Mode

When "1" is selected, insert one sheet strip between the sheet thickness detector. When "10" is selected, insert ten sheet strips. The sheet thickness detector calculates the average thickness. It is useful when the sheet is thinner than 70 μm or the sheets of the stack are unstable.



Job Name Screen

If this function is turned on, you can input the job name after pressing OK button on the Setup - Fold Pattern screen. The job name is displayed on the job history. If this function is turned off, the Keyboard screen is not displayed. If you do not enter a job name, the job will be saved without a job name.

Return to Function Screen On/Off

If this function is turned on, the screen returns to the Main - Function screen automatically when the folding operation is started.

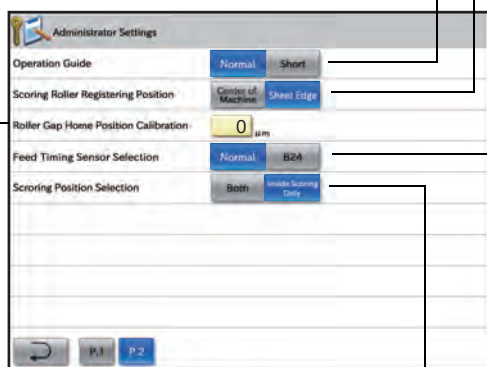
If this function is turned off, the screen does not return even if you start the folding operation.

1-3-20 Administrator Screen - Part 3

Operation Guide

When **Normal** (default) is selected, after the Power switch is turned on, the "Unit Combination" screen will be displayed. After the changeover is complete, the "Changeover Complete Confirmation" screen will be displayed.

When **Short** is selected, after the Power switch is turned on, the "Main - Function" screen will be displayed. After the changeover is complete, the "Guide - Buckle Chute" screen will be displayed. (The "Unit Combination" screen and the "Changeover Complete Confirmation" screen will not be displayed.)



Roller Gap Home Position Calibration

If you want to narrow all the roller gaps at once, enter the calibration value here.

10 μm

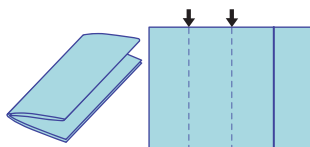
→ All the roller gaps will be reduced 10 μm .

-5 μm

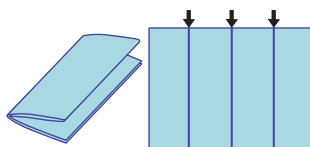
→ All the roller gaps will be increased 5 μm .

Scoring Position Calculation

In case that **Inside Scoring Only** (default) is selected, only the creases of innermost bend line is displayed. For example, in the case of the double parallel fold, two creases are displayed.



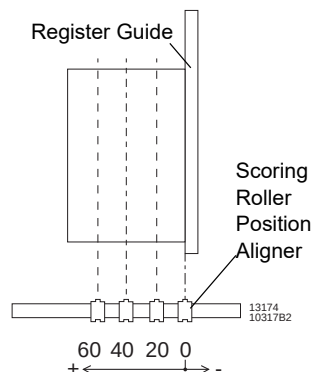
In case that **Both** is selected, all creases of bend lines are displayed. For example, in the case of the double parallel fold, three creases are displayed.



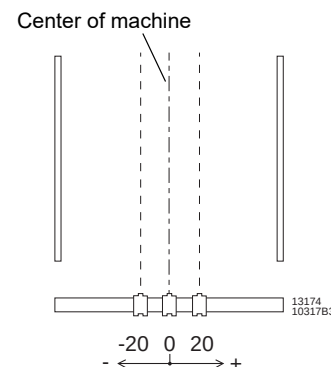
Scoring Roller Registering Position

Full Auto

In case that **Sheet Edge** (default setting) is selected, the zero position for scoring setting is aligned with the register guide.



In case that **Center of Machine** is selected, the zero position is changed to the center of machine.



Additional Information

When the register guide is fine-adjusted while the **Sheet Edge** is selected, the value displayed on the Scoring Position Adjustment screen will be also adjusted. (This does not change the actual position of the scoring roller.)

Feed Timing Sensor Selection

Full Auto

If the B21 ultrasonic sensor does not detect the sheet, select **B24** (Double Feed Detect Photoelectric Sensor).

2 Checks Before Operating

This chapter explains the safety checks you must make before beginning the folding operation.

2-1

Checking the Emergency Stop Function

2

The 2150 Series includes safety functions which protect the customer from possible risk during operation. Before operating the machine, check that all of the safety functions are working normally.

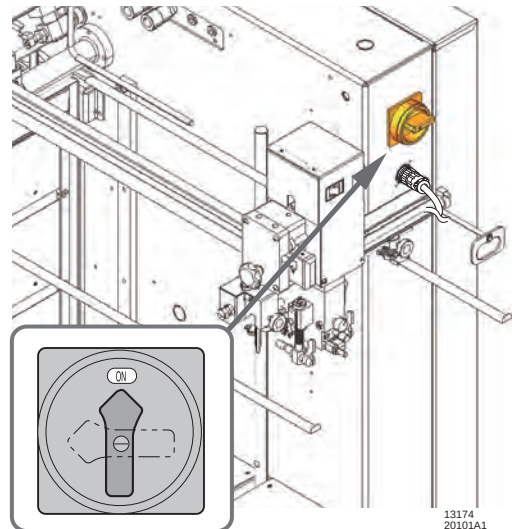
1 Turn on the Power switch.

- Turn the Power switch to the right to turn it on.
- ➔ After the Initial screen is displayed, the Setup - Unit Combination screen is displayed.



Note

- If no other machines are connected to the first station, the "Setup - Fold Pattern" screen is displayed after the "Initial" screen.
- When the "Short" is selected for the Operation Guide on the "Administrator Settings" screen, the "Main - Function" screen is displayed after the "Initial" screen.



▼ Initial Screen



▼ Setup - Unit Combination Screen



2 Check the safety functions of the Emergency Stop buttons.

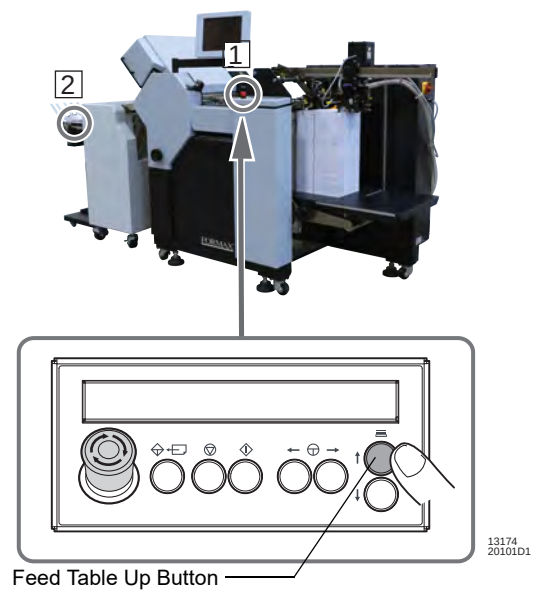
- The machine has two Emergency Stop buttons. Press each Emergency Stop button to ensure that it is working correctly.

1. Emergency Stop Button on First Station
2. Remote Controller Emergency Stop Button

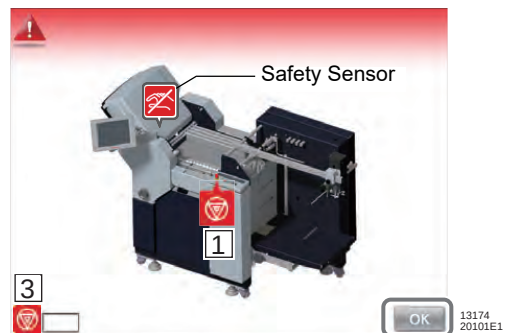
- Press the Emergency Stop button.
- Press the Feed Table Up button.
- In each case, check that the feed table does not move and the correct error icon is displayed on the screen.
- Clear each error icon by turning the Emergency Stop button clockwise.
- Press **OK** to clear the Error screen.

If an error icon is not displayed

- There is a problem with the safety circuit. Stop using the machine and call your local dealer.

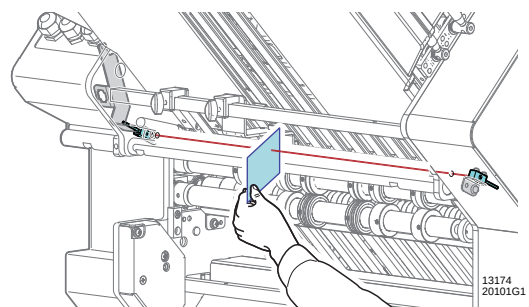


▼ First Station Error Screen



3 Check the safety functions of the delivery section safety sensor.

- Press the Feed Table Up button to raise the feed table.
- Press the Motor/Feed Start button and block the sensor by approaching the sheet.
- Do this check on both first and second stations.
- Check that the motor stops and the correct error icon is displayed on the screen.
- Press **OK** to clear the Error screen.



3 Operating Procedures

This chapter explains the procedure for doing a regular folding job.

3-1

Setting the Screens and Roller Gaps

3

3-1-1 Panel Settings

1 Turn on the Power switch.

- After the Initial screen is displayed, the Setup-Combination screen appears.



Additional Information

In case of the following conditions, the "Unit-Combination" screen will not be displayed.

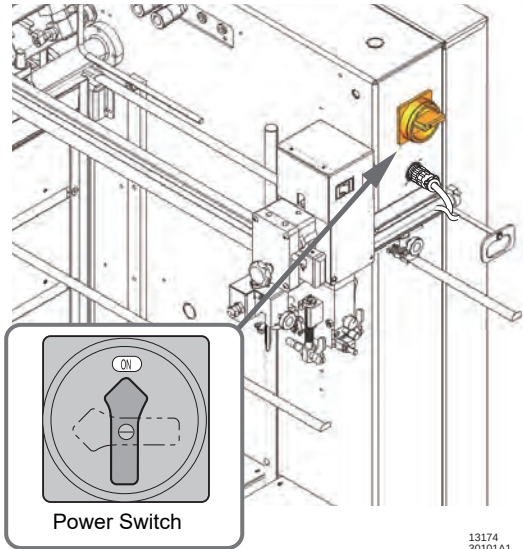
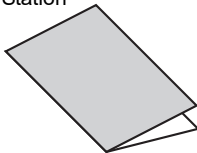
- The "Short" is selected for the Operation Guide on the "Administrator Settings" screen: The "Main - Function" screen will be displayed.

- Set up a new job by going through the following steps. To recall a saved job, refer to page 132.

2 Select the combination of units you want to use.

- The icons that cannot be selected are grayed-out.
- The following procedure will be explained using the folding pattern shown below as an example.

Folded into two parts by First Station



▼ Initial Screen



▼ Unit Combination Screen



3 Press **OK**.

→ The Setup - Fold Pattern screen displayed.

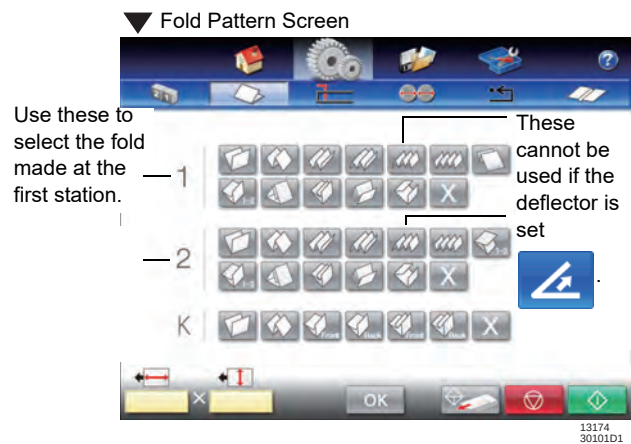
4 Select the fold patterns.

- Select the fold patterns by pressing the icons that are displayed on the screen. In this example,

 has been selected for the first station

- Select  if the desired fold pattern is not displayed on the screen.

- Some folds must be made by the second, fourth and sixth buckle chutes in the lower section of the machine. In this case, press . This will set the deflector for the first buckle chute, and the sheets will be folded by the lower buckle chutes.



5 Enter the sheet size.

Maximum: Length 660 mm / 25.98" x Width 430 mm / 16.92".

Minimum: Length 100 mm / 3.94" x Width 50 mm / 1.97".



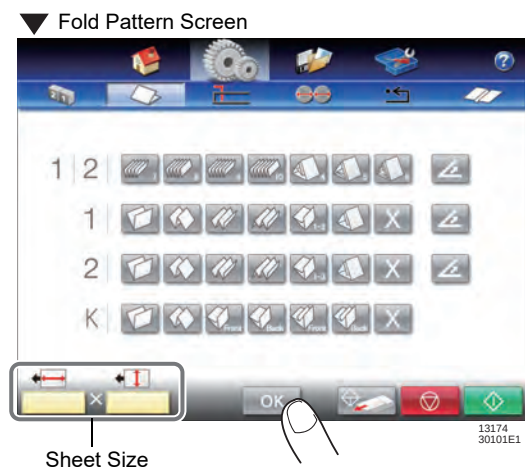
Note

If a width is entered which is out of range, the maximum or minimum width within the range will be entered instead.



Attention

When the optional LT-40S is used: Maximum length is 900 mm / 35.43.
For the AF-406FL(SL) and AF-408FL, the maximum length is 1,100 mm / 43.3".
When the optional sensor for small sheet is used: Minimum length is 60 mm / 2.36".



6 Press **OK**.

→ Full Auto: The Sheet Insertion Instruction screen appears on the display. Go to page 67.

→ Semi Auto: The Guide-Buckle screen appears on the display. Go to the page 71.



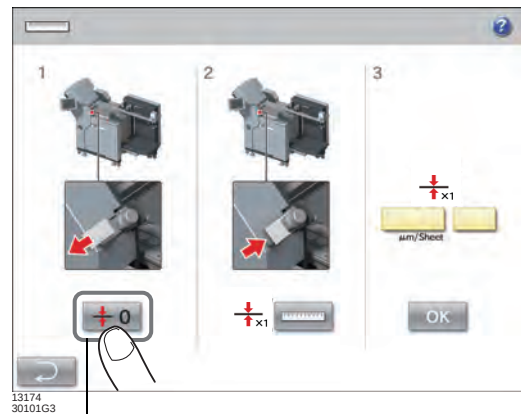
Additional Information

Only when the Job Name Screen is set to "On" on the Administrator Settings screen on the Semi Auto, the Keyboard screen appears before the Guide Buckle screen is displayed. (Default setting: OFF)

3-1-2 Full Auto: Setting the Roller Gap

- 1** Press the Zero Setup button with no sheets to set the value zero.

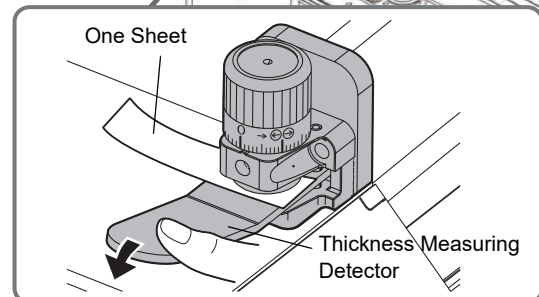
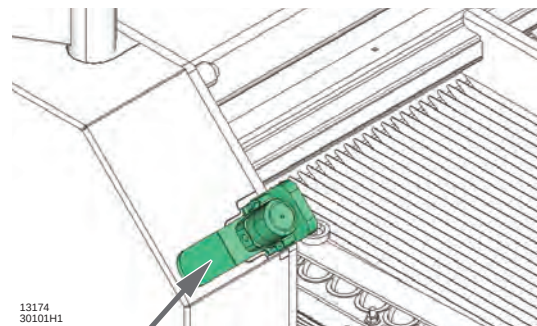
▼ Sheet Insert Instruction Screen



Zero Setup Button

- 2** Insert the sheet into the sheet thickness detector.

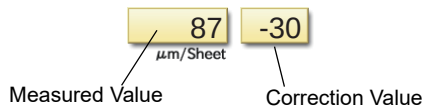
- Prepare a strip of the sheet that you will fold.
- Push down the lever and insert the strip of the sheet into the sheet thickness detector.
- Normally, insert one sheet strip. When "x 10" is displayed on the Instruction screen, insert ten sheet strips.
(See page 60 for details.)



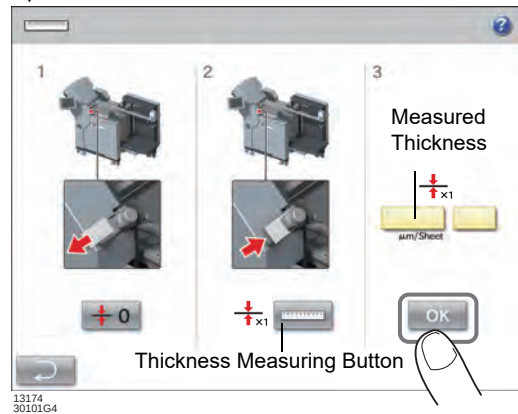
3 Press the Thickness Measuring button.

→ The measured value is displayed.

- Also enter the correction value if necessary.



▼ Sheet Insert Instruction Screen



4 Press **OK** button on the Sheet Insert Instruction screen.

→ The Keyboard screen appears only when the Job Name Save Screen is turned on using the Administrator screen. Enter the job name. The job name is displayed on the job history. If you do not enter the job name, the job is saved without a job name.

→ The Guide/Buckle Chute screen is displayed.

▼ Keyboard Screen



QWERTY Key Layout

Press here after inputting

- Only if the **X** is selected, enter the position for each buckle chute for the first using the Guide -Buckle Chute screen. The positions of the table guide and register guides are automatically entered to match the sheet width.



Note

The default value is displayed for each guide when **X** is selected.

When the sheet width is smaller than 80 mm / 3.15"

Table Guide Position: Sheet Width x 1/2

Register Guide Position: 45 mm / 1.77"

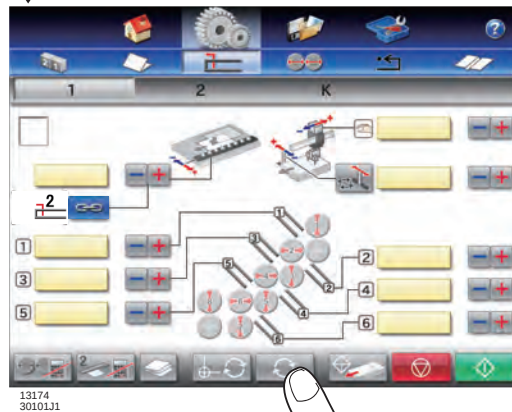
When the sheet width is more than 80 mm / 3.15"

Table Guide Position: Sheet Width x 1/2 + 5

Register Guide Position: Sheet Width x 1/2

Conveyor Guide Position: Sheet Length

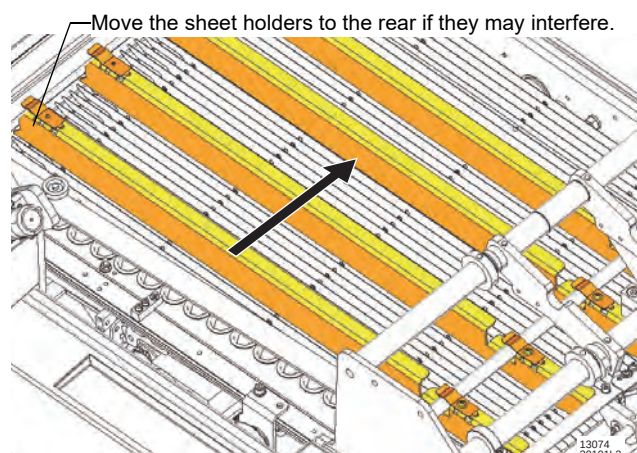
▼ Guide Buckle Chute Screen : Example of 6 buckle chutes



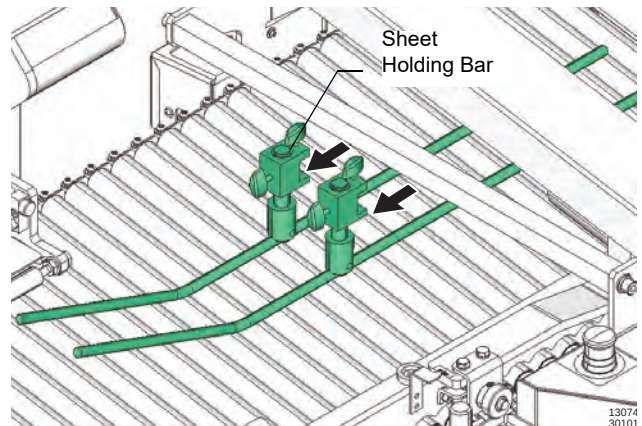
5 Press .

- The Adjustment Check/Instruction screen is displayed.

6 Move the sheet holders on the first station to the rear.



7 Remove the sheet holding bar on the second station.



8 Press **OK**.

- The changeover starts.
- During the first changeover after the main power is first turned on, the guides and buckle chutes will move to their home positions.
- Next, they will move to their set positions.

- The Changeover Complete Confirmation screen appears when the changeover is complete.

9 See the sections 3-2 through 3-8 to follow the set up procedures. Press **OK** after finishing all the procedures.

- The display will return to the Guide - Buckle Chute screen.



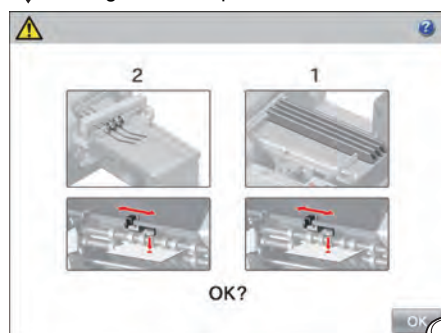
Additional Information

When the "Short" is selected for the operation guide setting on the Administrator Settings screen, the Guide-Buckle screen will be displayed. The Changeover Complete Confirmation screen will not be displayed.

▼ Changeover Start Confirmation Screen



▼ Changeover Complete Confirmation Screen

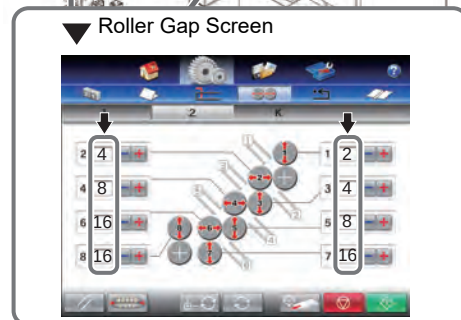
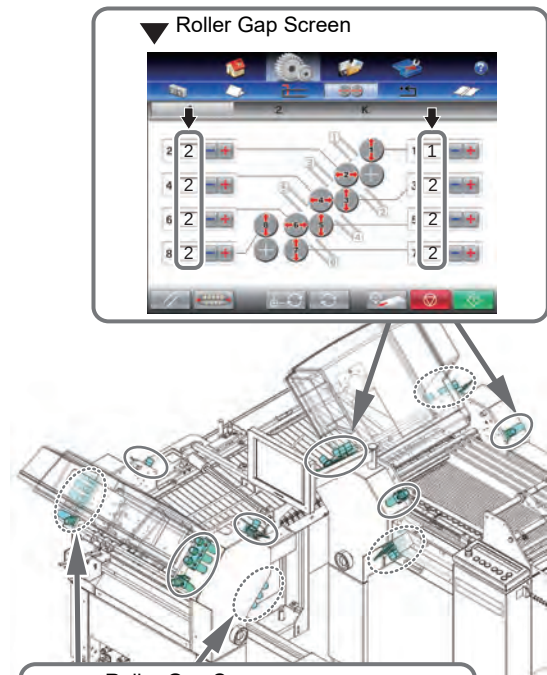


3-1-3 Semi Auto: Setting the Roller Gap

1 Set the fold roller gaps.

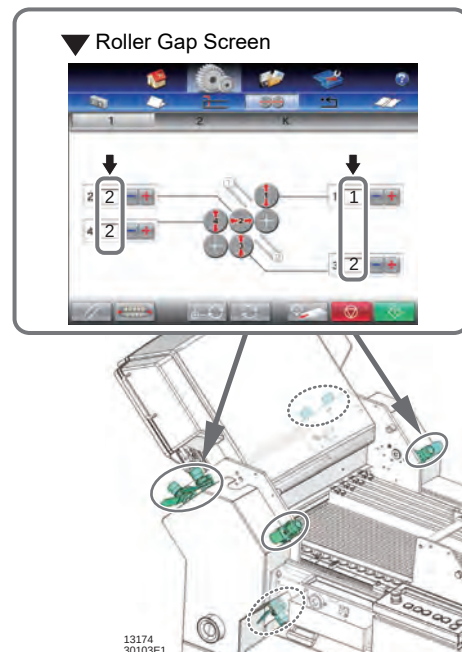
- The Roller Gap screens will indicate how many sheets should go through each roller gap. Each roller gap has a separate adjusting mechanism. Make the actual adjustments using these mechanisms.

6 Buckle Chutes



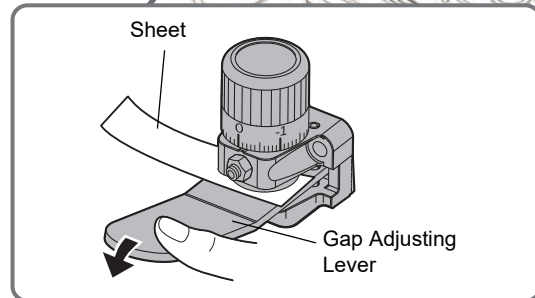
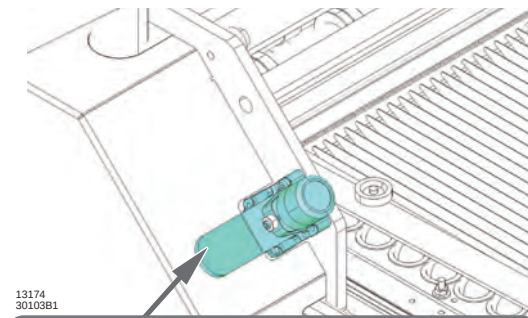
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2 Buckle Chutes



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- Tear some small strips of paper, using the same type of paper that will be run during the job. Check the screen to see how many sheets should be inserted for each gap. Press the gap adjusting lever down, and insert the correct number of sheets above the lever.
- If the screen indicates the number of sheets for a gap is 0, you do not have to set that gap.
- Set the roller gaps for both the first station and the second station.

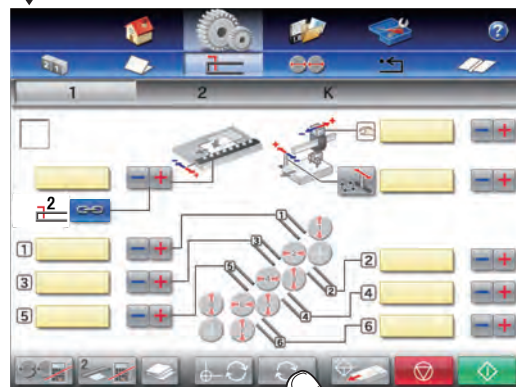


- Only if **X** has been selected, enter the position for each buckle chute and the register guides for the first and second stations using the Guide - Buckle Chute screen. (See page 68 for details.)

2 Press .

- ➔ The Changeover Start Confirmation screen is displayed.

▼ Guide and Buckle Screen : Example of 6 buckle chutes



3 Press **OK** .

→ The changeover starts.

- During the first changeover after the main power is first turned on, the guides and buckle chutes will move to their home positions.

Next, they will move to their set positions.

→ The Changeover Complete Confirmation screen is displayed when the changeover is complete.

4 Complete the setting ups for the steps 3-2 through 3-8. Press **OK** after setting up those steps.

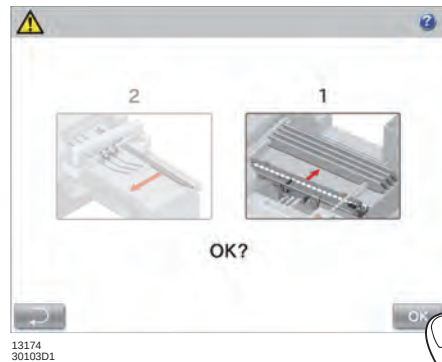
→ The display will return to the Guide - Buckle Chute screen.



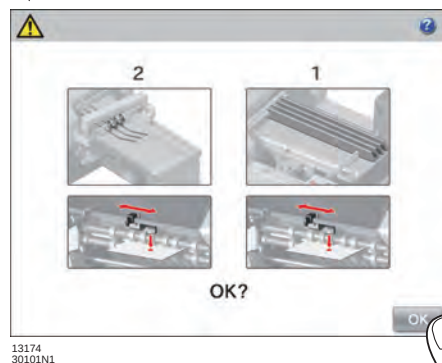
Additional Information

When the "Short" is selected for the operation guide setting on the Administrator Settings screen, the Guide-Buckle screen will be displayed. The Changeover Complete Confirmation screen will not be displayed.

▼ Changeover Start Confirmation Screen



▼ Changeover Complete Confirmation Screen



3-2

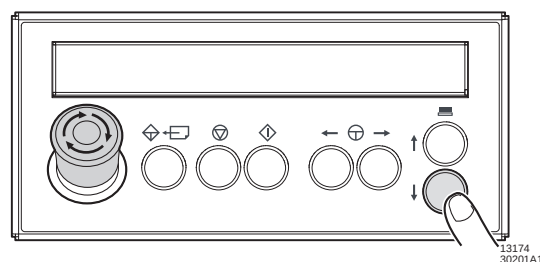
Loading the sheets on the Feed Table

Go to page 76 for the Semi Auto.

3-2-1 Full Auto

1 Lower the feed table.

- 1 Press the Feed Table Down button on the control panel for the first station.
- The table will lower to an intermediate position.



CAUTION



Do not place any objects under the feed table. Otherwise, the table may hit against the object and get damaged.

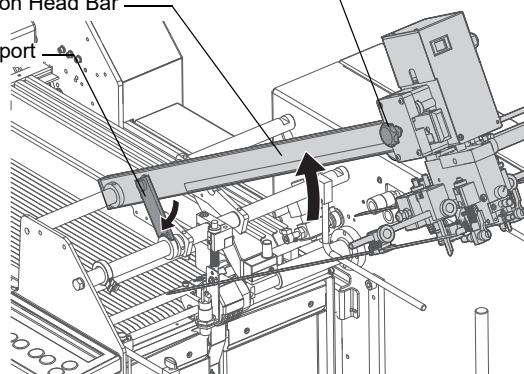
2 Raise the suction head bar.

- Place the notch at the end of the support over the rod.
- When the long support bar is used, raise it and support it using the spring clip.

The locking knob must be tightened.

Suction Head Bar

Support



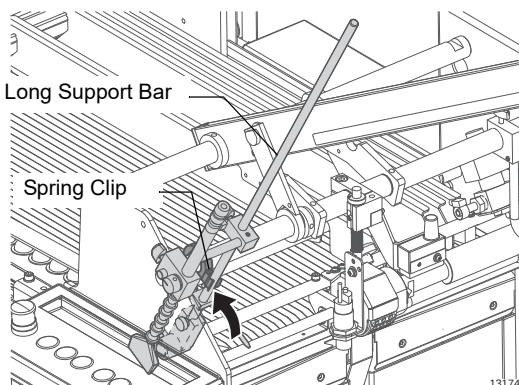
CAUTION



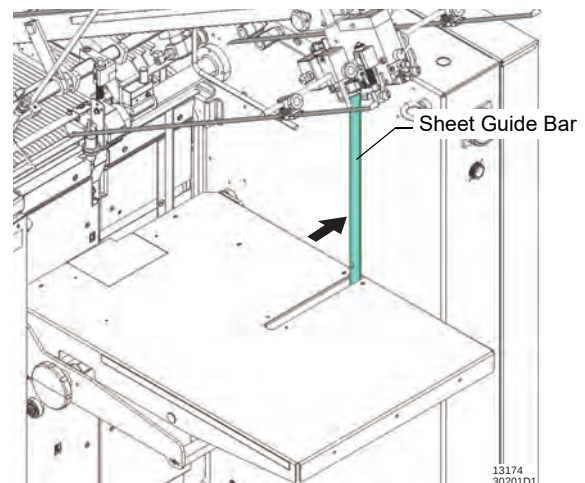
Check that the suction head locking knob is tightened completely when you raise the suction head bar. If the knob is loose, suction head may fall down on your finger.

Long Support Bar

Spring Clip



- 3** Turn the sheet guide bar counterclockwise to loosen it, and move it to the rear.

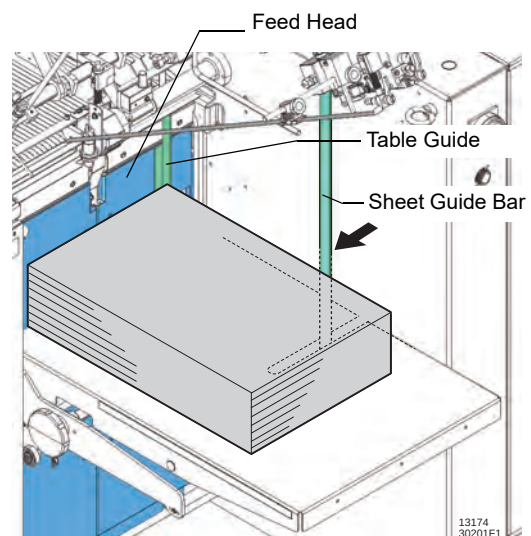


- 4** Load the sheets on the table.

- Fan the sheets correctly. Load the sheets so they are aligned with the table guide. Align the head edge of the stack with the feed head.
- The maximum stack height is following below.
6 buckle chutes: 500 mm or 19.6"
8 buckle chutes: 530 mm or 20.8"

- 5** When loading the long sheets, put the sheet guide bar lightly against the sheets.

- Turn the sheet guide bar clockwise to tighten it.



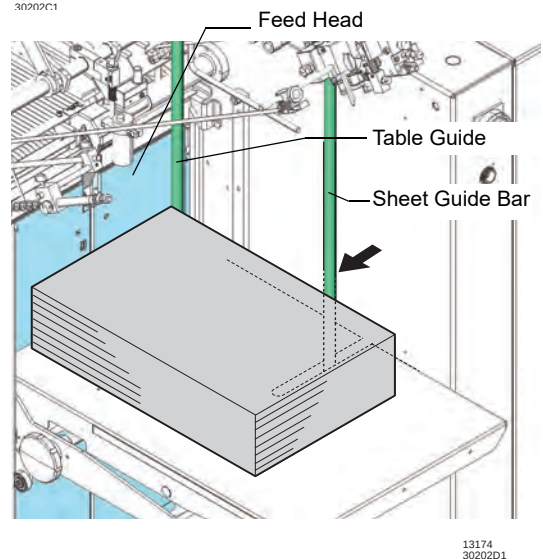
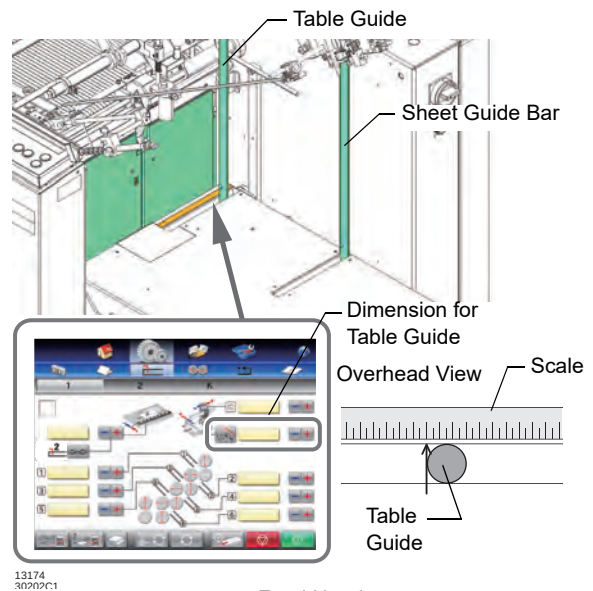
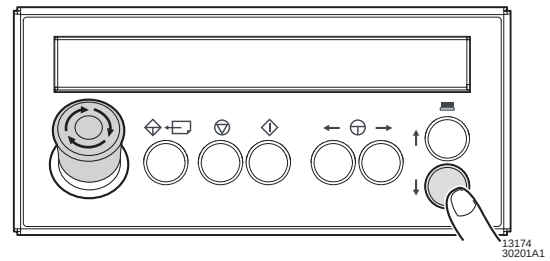
- 6** Lower the suction head bar.

- Lift the suction head bar a little, turn the support up, and lower the suction head bar.

	WARNING
	When lowering the suction head bar, be careful not to catch your fingers.

3-2-2 Semi Auto

- 1 Lower the feed table.**
(See page 74 for details.)
- 2 Raise the suction head bar.**
(See page 74 for details.)
- 3 Set the table guide.**
 - Set the table guide to match the dimension listed on the Guide - buckle Chute screen.
- 4 Turn the sheet guide bar counterclockwise to loosen it, and move it to the rear.**
- 5 Load the sheets on the table.**
 - Fan the sheets correctly. Load the sheets so they are aligned with the table guide. Align the head edge of the stack with the feed head.
 - The maximum stack height is following below.
6 buckle chutes: 500 mm or 19.6"
2 buckle chutes: 440 mm or 17.3"
- 6 When loading the long sheets, put the sheet guide bar lightly against the sheets.**
 - Turn the sheet guide bar clockwise to tighten it.
- 7 Lower the suction head bar.**
 - Lift the suction head bar a little, turn the support up, and lower the suction head bar.



	WARNING
	When lowering the suction head bar, be careful not to catch your fingers.

3-3-1 Setting the Suction Head

This section explains how to set the suction head.

If the suction head is not used, and the small sheet holding unit is installed, go to page 83.

The minimum sheet size which the suction head can feed is: width 128 mm / 5.1" X length 148 mm / 5.9". Use the small sheet holding unit and the side air if the sheet width is smaller than the minimum sheet width for the suction head.

1 Raise the feed table.

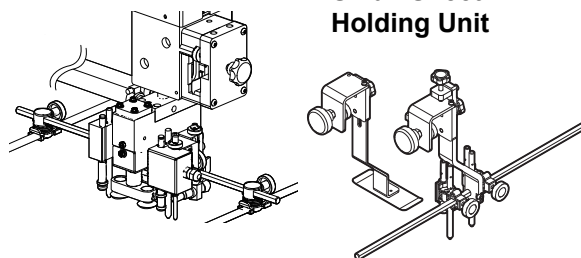
- Press the Feed Table Up button.

WARNING

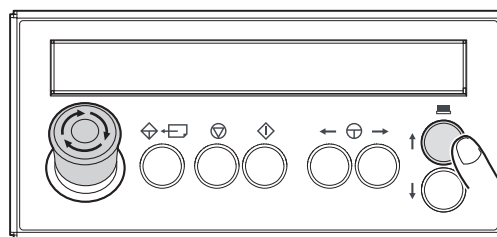
The suction head can move up and down. Keep your fingers away from the mechanism. Otherwise, your fingers may be caught and this can cause severe personal injury.

Suction Head

Small Sheet Holding Unit



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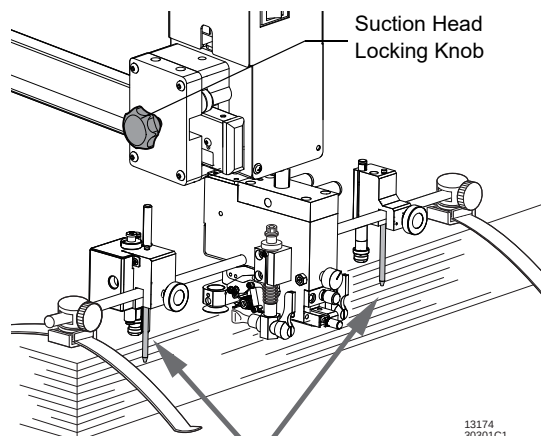
2 Set the position of the suction head once the table has moved up.

- Position the suction head so that the set register pins just touch the tail edge of the stack.

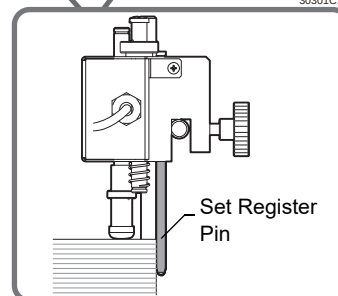


Important

If the stack is not arranged correctly, and the set register pins do not fit against the tail edge of the stack, square-up the stack. If the stack is not squared-up neatly, the feeding action may be unreliable.

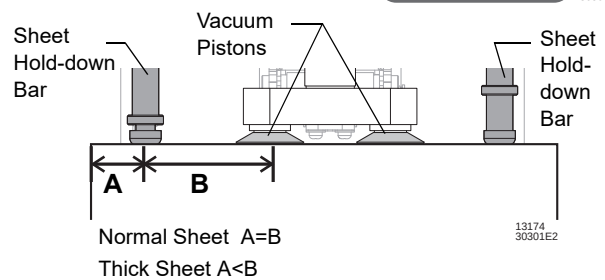
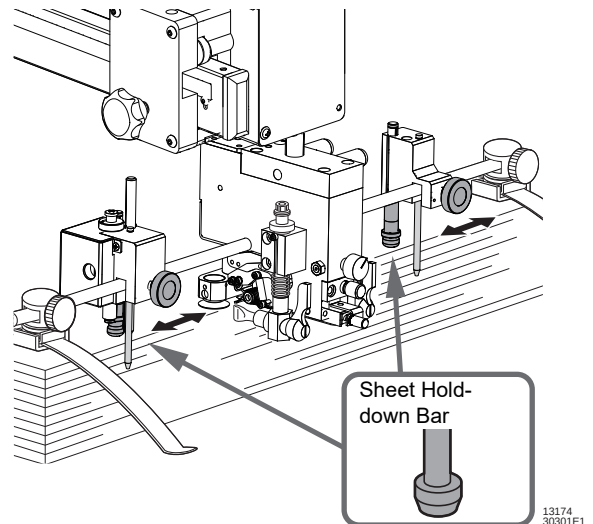


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3 Adjust the positions of the sheet hold-down bars to match the sheet width.

- Normally, set the sheet hold down bar on each side so that distances A and B shown in the drawing to the right are equal.
- When using thick sheets, set the sheet hold-down bars so that the distance B is wider than A.



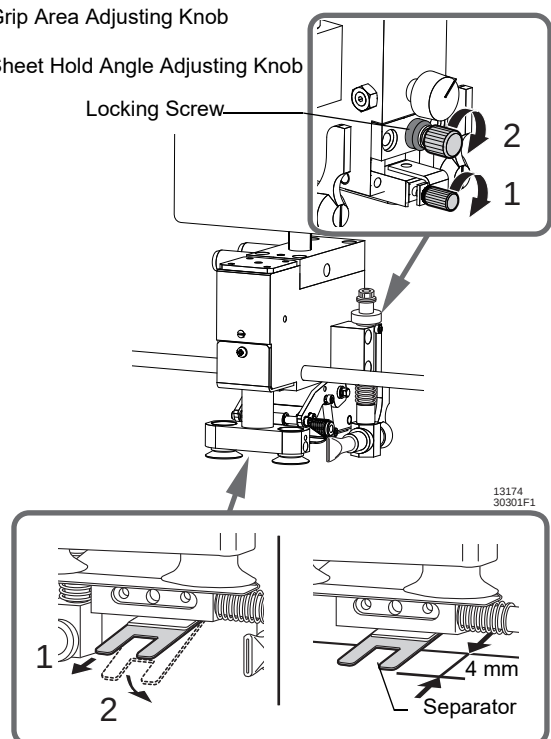
4 Set the separator.

- Adjust the separator so that the grip area is about 4 mm / about 0.16" using the grip area adjusting knob.
- The sheet hold angle is also adjustable. Normally, the mechanism should be level.

Note

If double feeding occurs frequently, increase the grip area. (Turn the grip area adjusting knob in the direction shown by arrow 1 in the drawing to the right. The separator will move out, as shown by arrow 1 below.) You can also increase the sheet hold angle. (Loosen the locking screw first, then turn the sheet hold angle adjusting knob in the direction shown by arrow 2 in the drawing to the right. The separator will move down as shown by arrow 2 below.)

- 1: Grip Area Adjusting Knob
- 2: Sheet Hold Angle Adjusting Knob



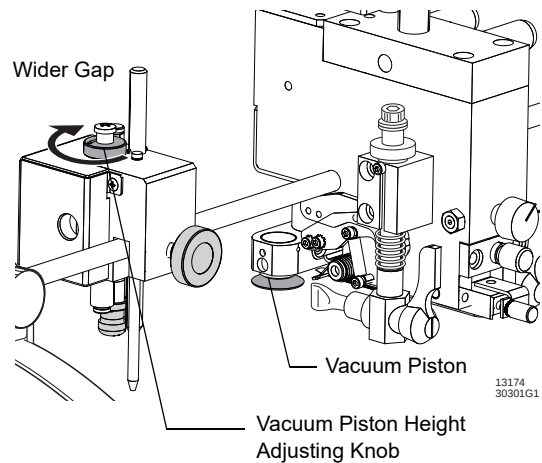
5 Set the height of the vacuum piston.

- In most cases, adjust the vacuum piston using the vacuum piston height adjusting knob so that the gap between the top sheet and the vacuum piston is about 1 mm / 0.04".



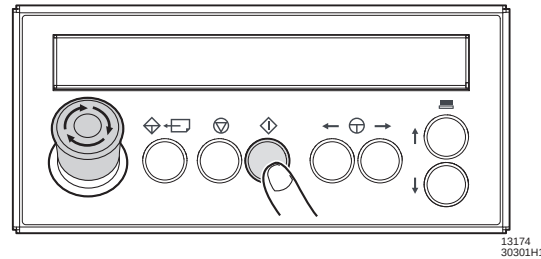
Note

If the vacuum piston feeds two sheets at the same time because the sheets are porous, raise the vacuum piston.
If the vacuum piston fails to feed a sheet because the sheet is heavy, lower the vacuum piston.



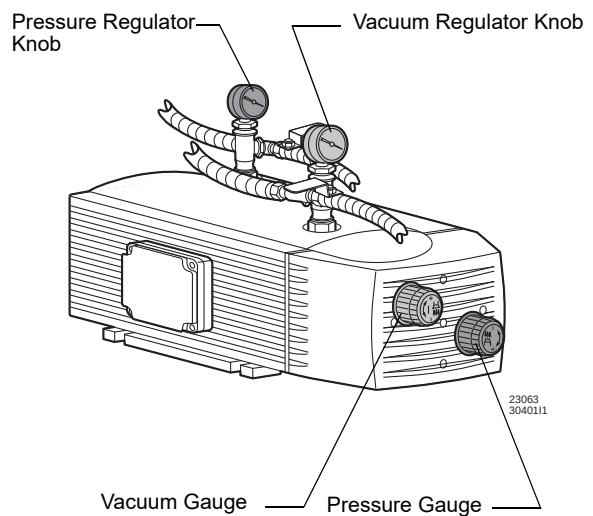
6 Start the air pump.

- Press the Motor/Feed Start button on the first station control panel. The air pump will start, and the vacuum piston will grip the top sheet and lift it.



7 Adjust the vacuum and air pressure.

- Adjust the vacuum and the pressure regulator knobs so that the vacuum gauge is set to -0.04 MPa (-5.8psig).
- The pressure gauge should be set to 0.03 to 0.04 MPa (4.4 to 5.8 psig).



8 Adjust the blower air pressure.

- Adjust the blower air using the blower position adjusting knobs and the blower pressure adjusting levers. About 10 to 15 sheets at the top of the stack should be separated.

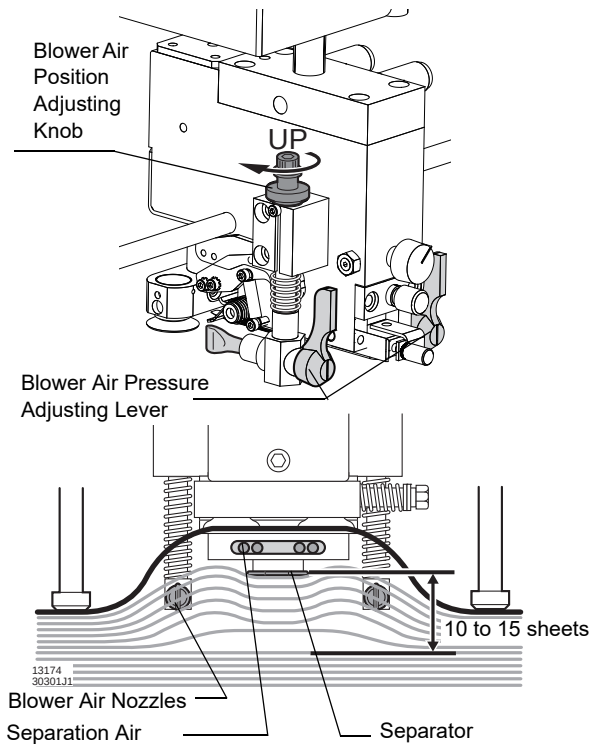
Note

In most cases, both the blower air pressure adjusting knobs should be set to the same settings. If the sheets are distorted on both sides of the vacuum piston because the sheets are curved, adjust the amount of lift using the blower air pressure adjusting levers.



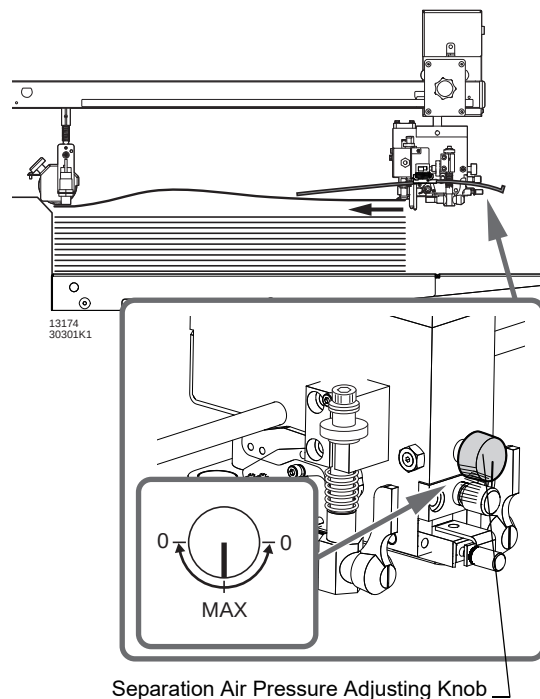
Additional Information

If the blower pressure is too strong, this can cause double feeding.



9 Adjust the separation air pressure.

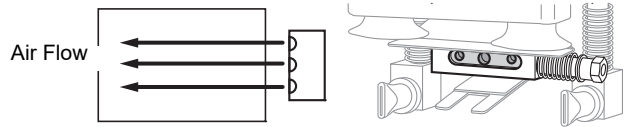
- Adjust the separation air pressure so that the head of the top sheet is lifted by the air so that it touches the feed rotor.
- If the separation air pressure is too strong, this can cause double feeding.



- There are two types of the separation air nozzles; for thick sheets (coated sheets) and for thin sheets. Select the nozzle depending on the sheet quality you use.

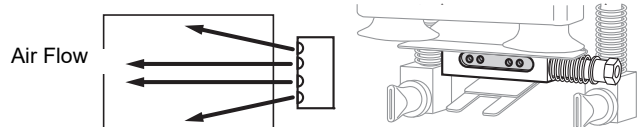
For Thick Sheets (Coated Sheets)

From all three blower outlets, the air blows straight to under the feed rotor.



For Thin Sheets

It has four blower outlets. From two of them in the middle, the air blows straight to under the feed rotor. From the other two, the air blows outward.



10 Set the air guide.

- Set the air guide position and length depending on the sheet size.

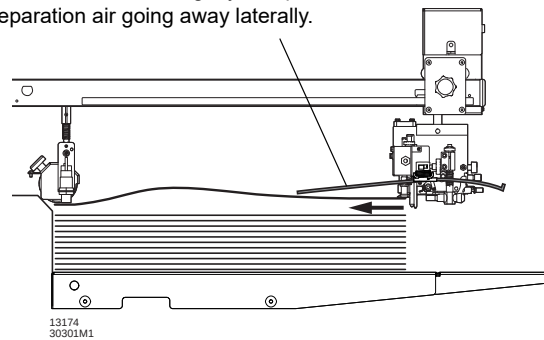


Note

The sheet is raised by the air from the blower air nozzle. Set the air guide so that the air flows smoothly and raises the sheet. If the sheet is raised too much, reduce the air pressure or put the air guide outside.

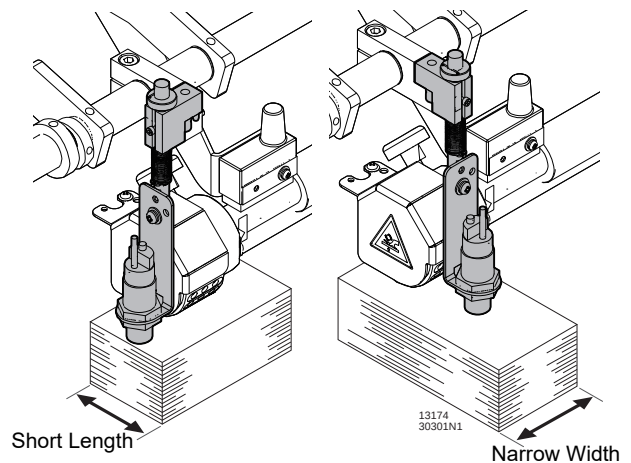
Air Guide

This holds the sheet lightly and prevents the separation air going away laterally.

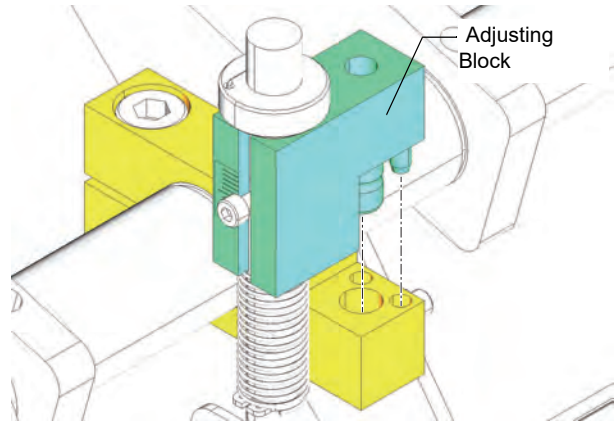


11 Change the direction of the feed table height detect sensor.

(Only when the optional sensor for small sheet is used.)



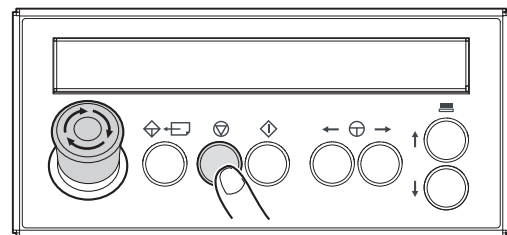
- Hold and lift the adjusting block up, change the direction and insert the pin.



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12 Press the Motor/Feed Stop button.

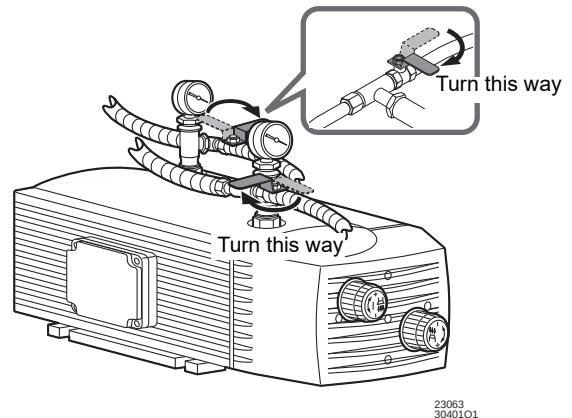
- ➔ This will stop the air.



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3-3-2 Setting the Small Sheet Holding Unit

- 1 Turn the valve levers to shut off the air and vacuum to the suction head.



- 2 Press Off for the suction head setting.

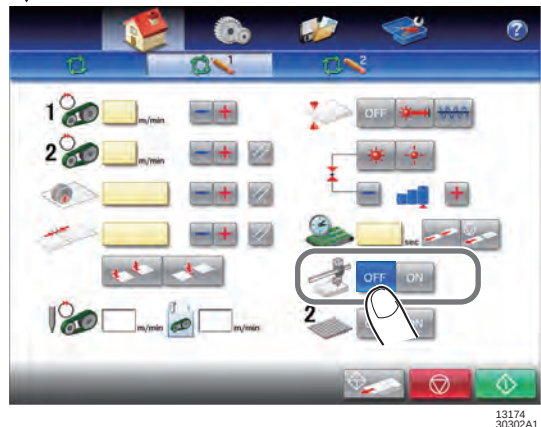
- Press Off for the suction head setting on the Condition screen.



Note

Once Off is selected, the suction head will not lower, even in the standby mode.

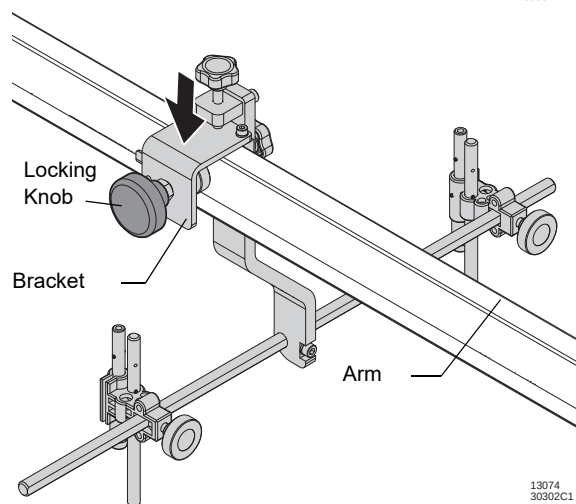
▼ Main - Condition Screen



- 3 Move the suction head to the rear and install the small sheet holding unit.

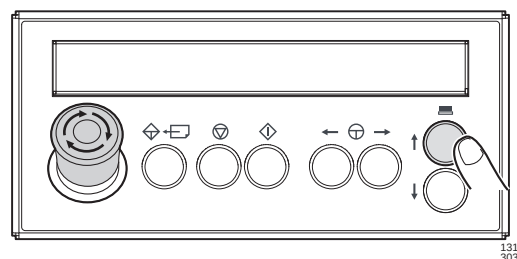
Installing the small sheet holding unit

1. Place the bracket on the arm.
2. Tighten the locking knob.



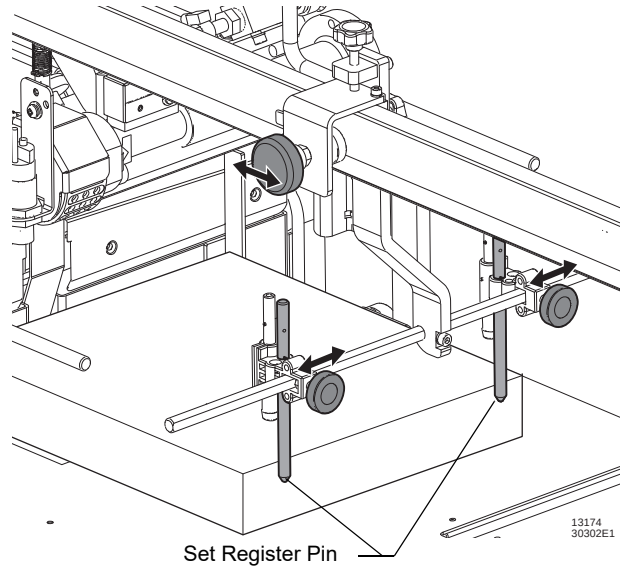
- 4 Raise the feed table.

- Press the Feed Table Up button.



5 Position the set register pins.

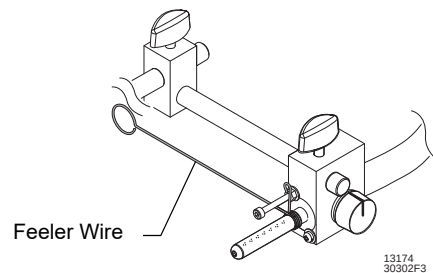
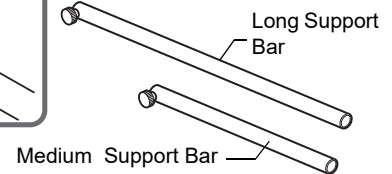
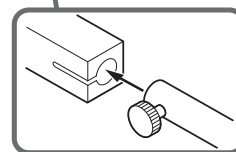
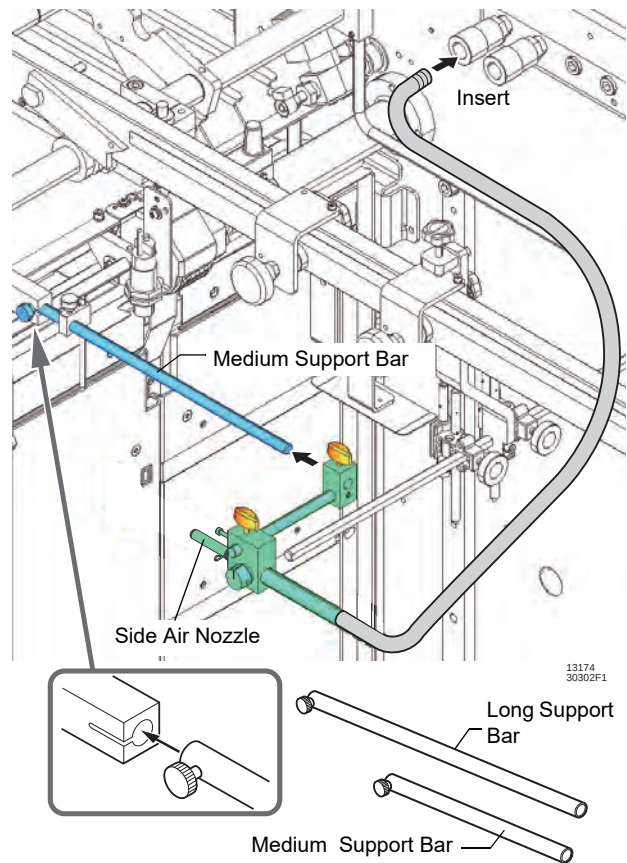
- Fit the pins against the tail edge of the stack.



6 Install the side air nozzle(s).

On the Front

- You may need to replace the support bar.
If you are installing one air nozzle on bar, use the medium support bar.
If you are installing two air nozzles on bar, use the long support bar.
- Install the side air nozzle(s) on the bar and connect the air hose(s) as shown to the right.
- Place the feeler wire on the top of the stack.

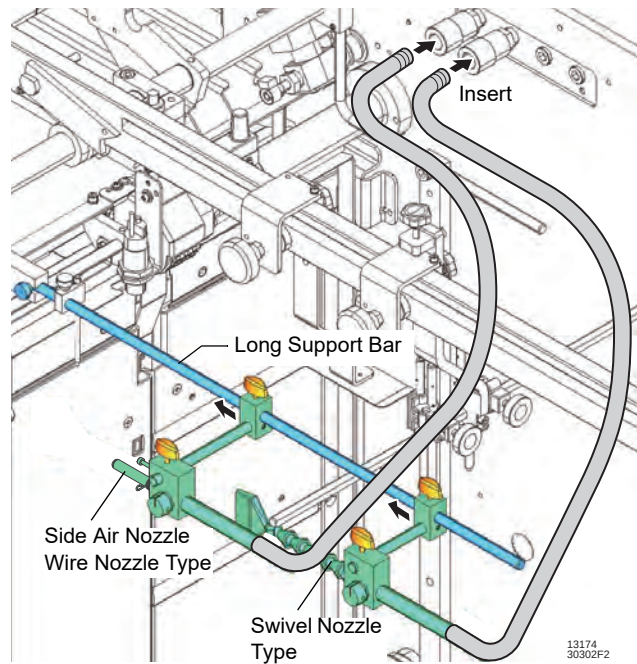


- For long sheets, install two air nozzles.



Attention

When you use small sheets and if the feeler wire of the side air nozzle is too close to the feed table height sensor, install the swivel nozzle type at the feed rotor side. Otherwise the feed table may not be raised because the feed table height sensor is activated by the feeler wire and it does not detect the top of stack properly.



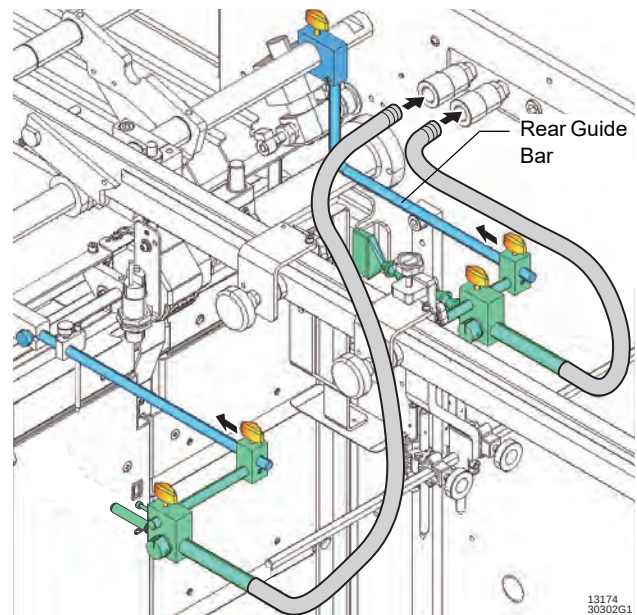
On the Rear

- When the small and thick sheets, such as coated paper, are used, the sheets might not be gripped by the feed rotor if the side air blows the sheets only from the front. If this happens, install the side air nozzle whose hose is longer on the rear.
- Install the side air nozzle on the rear guide bar as shown to the right.



Note

Longer sheets may not be gripped, or may not be gripped right away. Use the side air to help the feeder to grip the sheets. Side air is normally used with the small sheet holding unit. However, it can be also used with the suction head.



Note

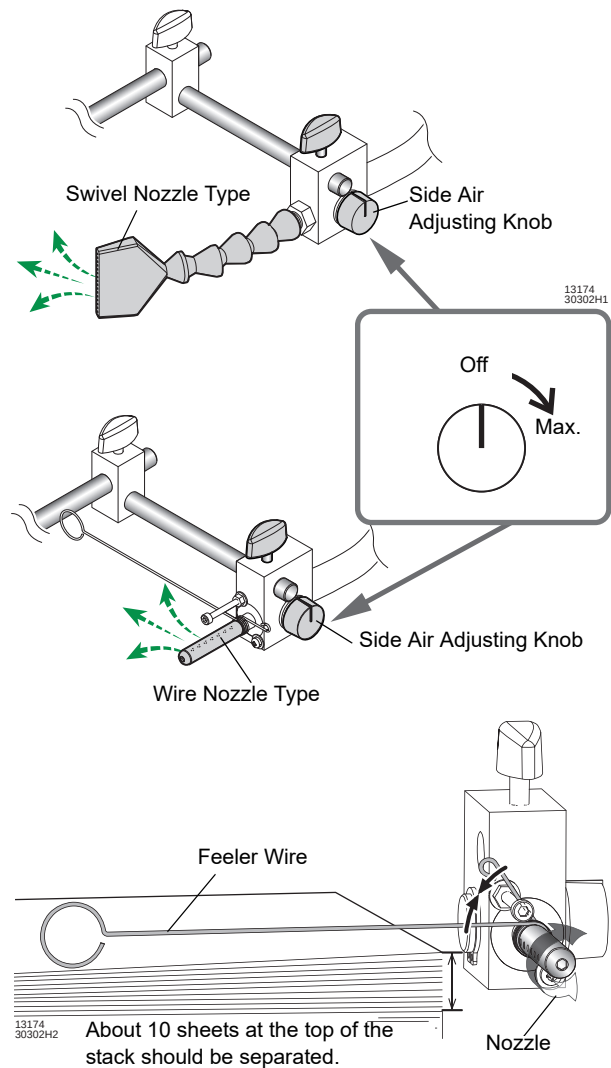
When the machine is shipped, the air coupler for connecting the side air hose is facing inside the machine. If the hose hinders you from loading the sheets, you can remove the air coupler and attach it upward. See page 246 for details.

7 Turn on the air and adjust the air pressure.

- Press the Motor/Feed Start button.

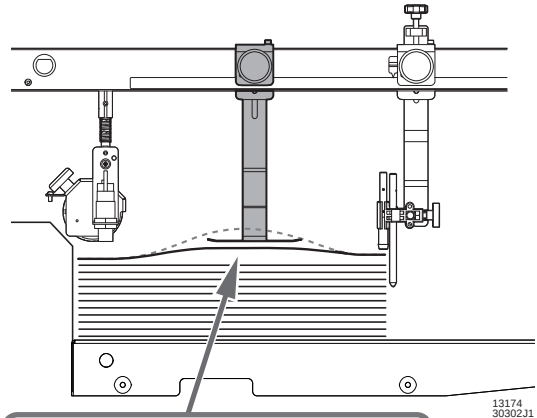
➡ The blower air will start.

1. Start with settings of low air pressure and slow belt speed. Increase the air pressure gradually so that the sheets are separated correctly even if the belt speed is increased.
2. If the sheets are not separated correctly, this can cause sheet jams and double feeding.
3. If the air pressure is too strong, this can cause double feeding.
4. If the blower air pressure is too low, the air will not be able to get between the sheets, and the sheets may stick together. This can cause double feeding.
5. Adjust the angle of nozzle so that about 10 sheets at the top of the stack are separated. When you use the wire nozzle type, turn the nozzle while you hold the feeler wire in the direction shown by the arrow to loosen the spring at the bottom.

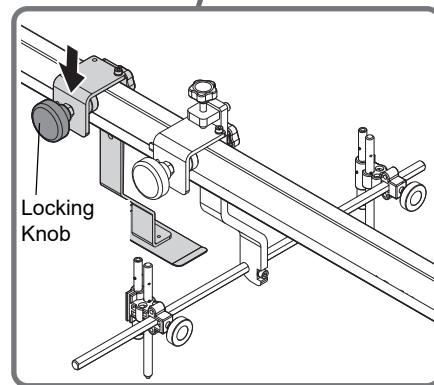


8 Install the small sheet hold-down plate when the middle of the small stack is swelled because of the air.

- If the stack is swelled, it can cause double feeding.

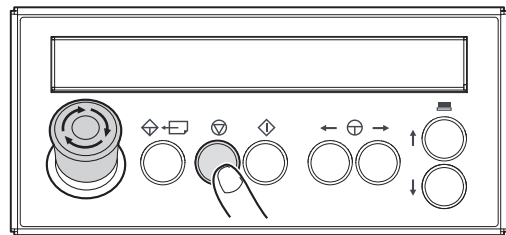


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9 Press the Motor/Feed Stop button.

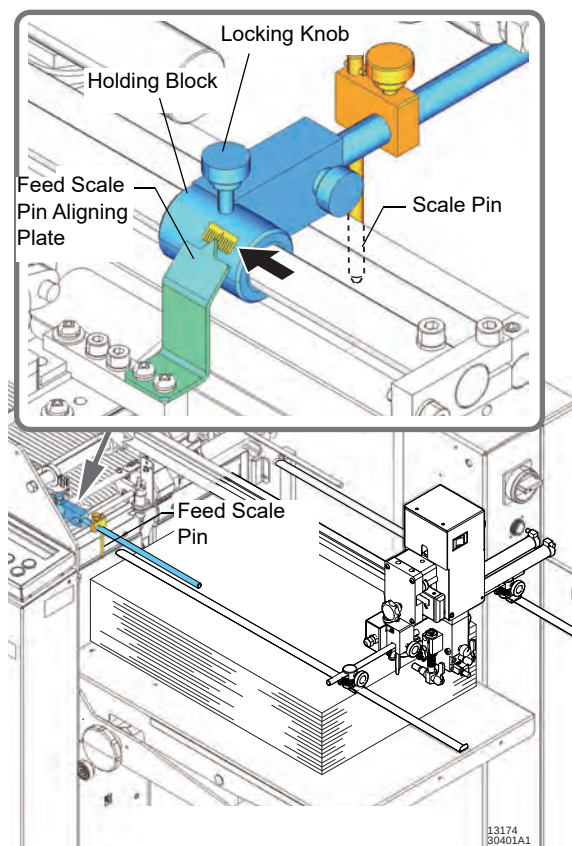
- ➔ The air will stop.



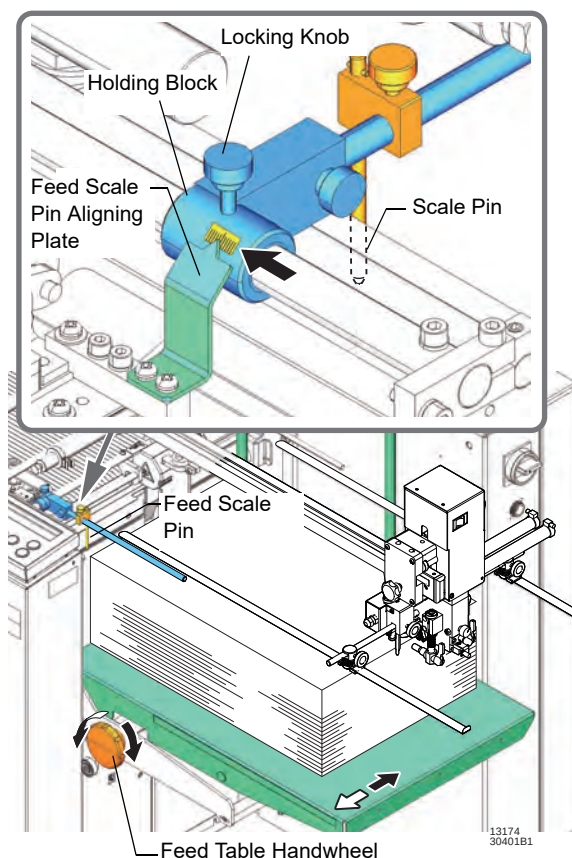
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3-4-1 Full Auto**1 Set the feed scale pin.**

- Align the scale on the guide block to the indicator.

**3-4-2 Semi Auto****1 Set the feed scale pin.**

- Align the scale on the holding block to the indicator.
- If there is gap between the sheets and the feed scale pin, adjust the position of the feed table using the feed table handwheel so that the pin sits against the stack.



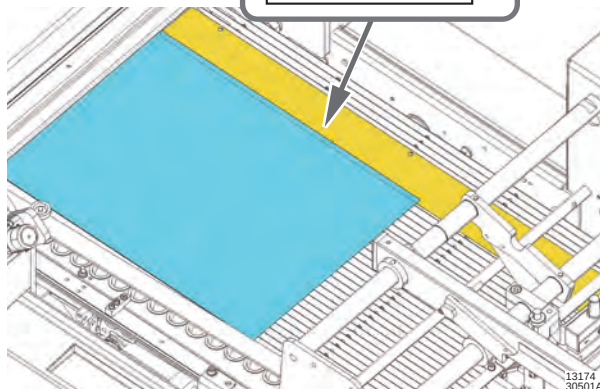
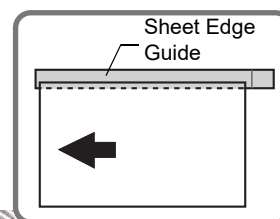
1 Set the sheet edge guide.

- Set the guide to match the far edge of the sheet.



Additional Information

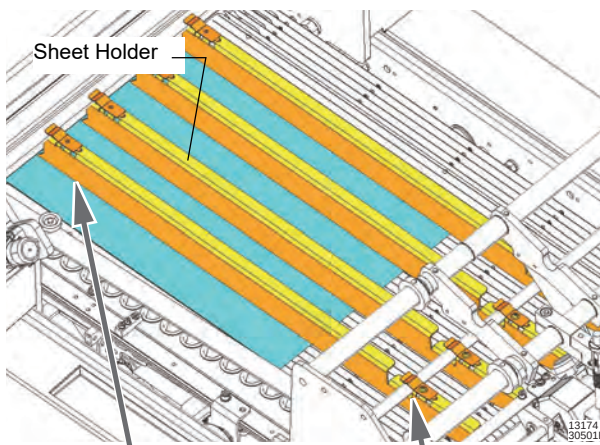
The sheet edge guide prevents the edge of a sheet from catching as it goes through the register guide section. The smaller area where a sheet covers the sheet edge, the less interference there is with the sheet transfer. This minimizes the build-up of static electricity.



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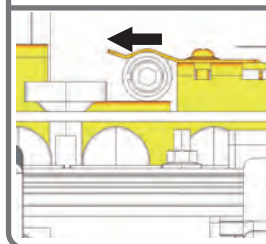
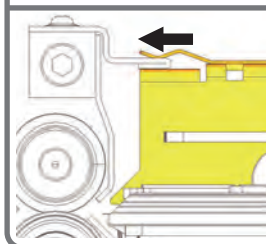
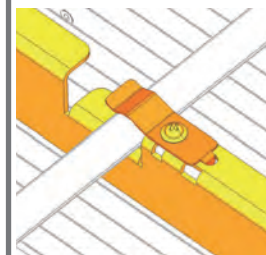
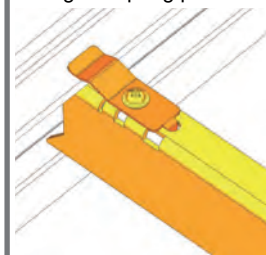
2 Position the sheet holders.

- These holders prevent the sheets from lifting. Set one sheet holder above the far edge of the sheet and position the other holders evenly across the width of the sheet.
- Slide any unnecessary holders away to the rear, or remove them.



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Lock the sheet holder using the spring plate.



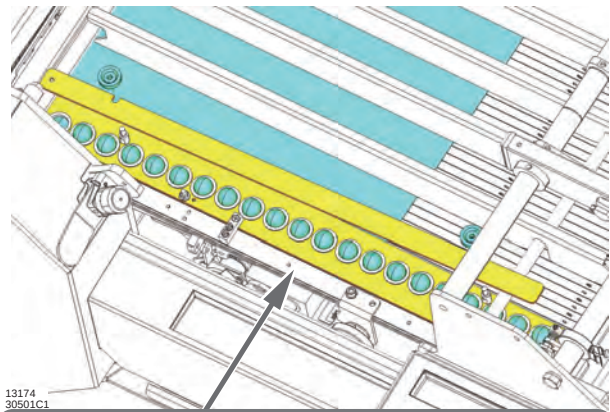
3 Set the transport balls.

- Use plastic balls in most of the holes.
- If the sheet is heavy, replace the plastic balls with steel balls.



Note

- If the sheets are hitting the register guide too hard, reduce the number of transport balls or replace them with plastic balls. The plastic balls are opaque white. If the sheets are not reaching the register guide, increase the number of transport balls.
- If the balls used are too heavy, this can cause uneven or skewed folding.
- If skewed folding still occurs, even though the roller gap, buckle chute stopper and the angle of the register guide have been adjusted correctly, use lighter balls or reduce the number of balls.



Example for the thick sheet (100 gsm or more)

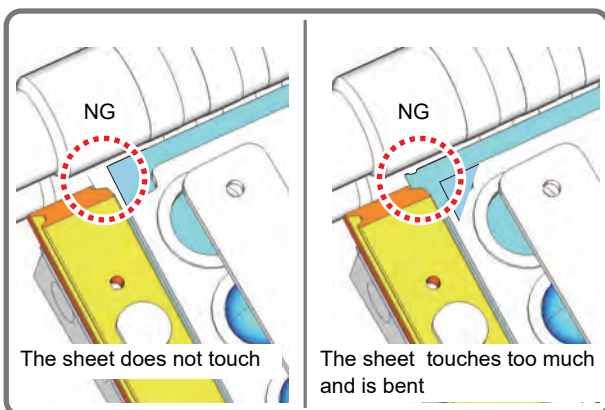
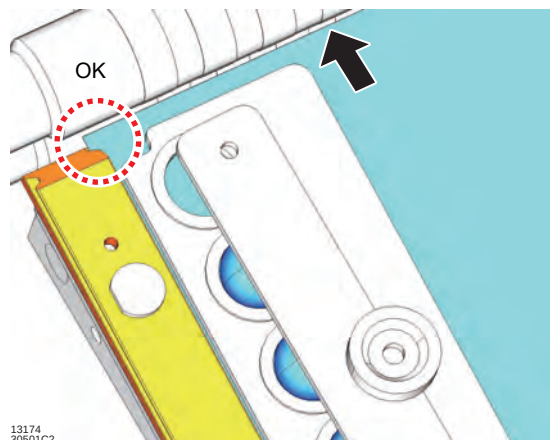
Do not put a steel ball here. →



Example for the thin sheet (50 gsm or less)



For more thinner sheet (40 gsm or less), three balls are enough.



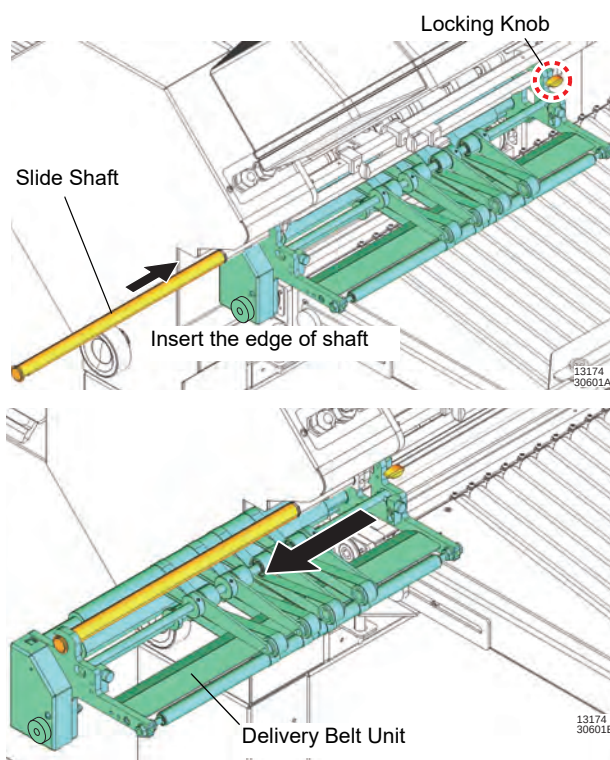
3-6

Testing the First Station Buckle Chute Fold

3-6-1 Do a test fold

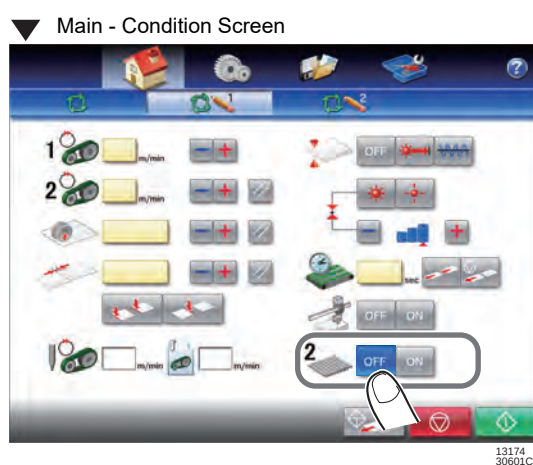
1 If the optional delivery belt unit, move it to the outside by sliding.

- Install the slide shaft.
- Loosen the locking knob.
- Slide the delivery belt unit to the outside.



2 Select Off for the second station conveyor using the Main - Condition screen.

- Do the folding test only on the first station.



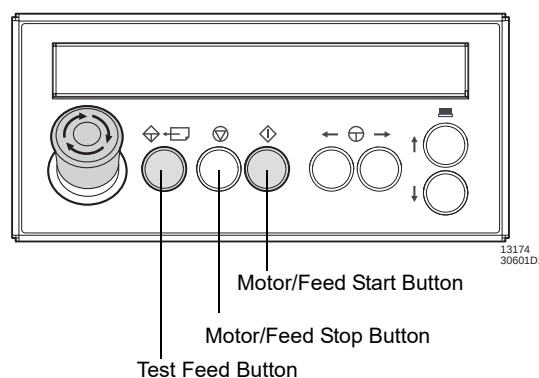
3 Press the Motor/Feed Start button.

- The motor runs, and the feed rotor and the fold rollers start to rotate.

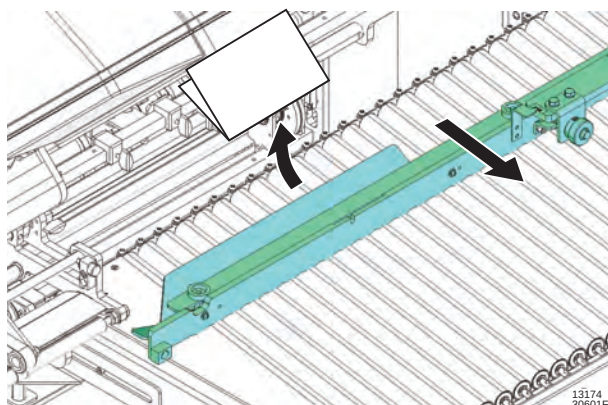
4 Press the Test Feed button once.

- One sheet is fed and folded on the first station. The folded sheet is delivered to the roller conveyor on the second station and stopped.

5 Press the Motor/Feed Stop button.



- 6** Check if the sheet is folded correctly. In case that the sheet is skewed, see the following pages.



Only for the Full Auto



Note

If the length of the fold made by the first station is too short and the sheet goes under the register guide on the second station, press the Adjusting button on the Second Station Guide Buckle Chute screen. The guide moves 100 mm wider so that you can remove the sheet easily.

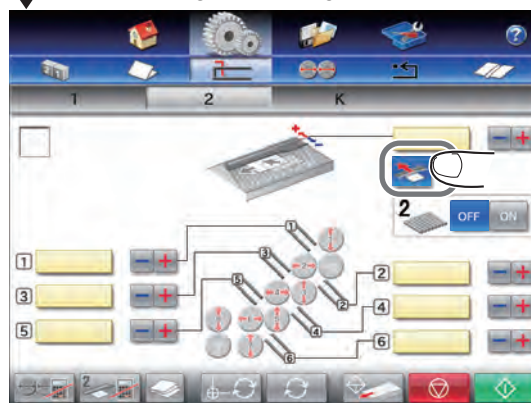
The guide moves back to the original position when you press the button again.



Attention

If you start the changeover while this button has been pressed, the register guide will not move to the set position.

Second Station Guide Buckle Chute



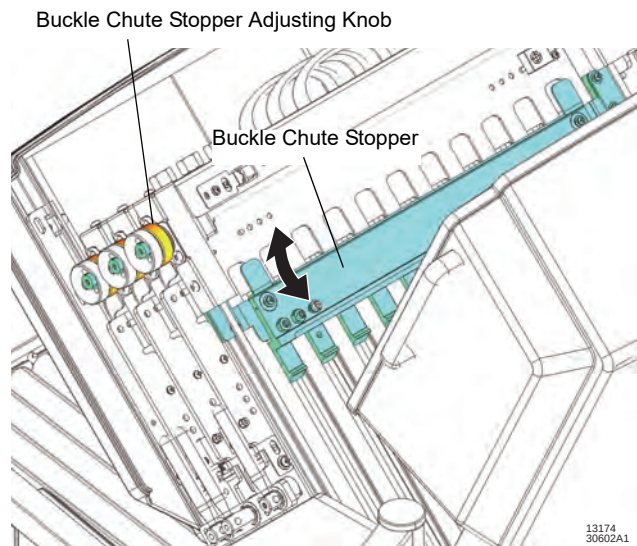
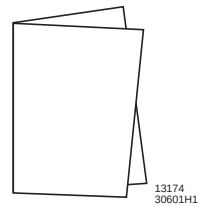
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3-6-2 Adjusting Fold Skew in Parallel Folding

If skewed folding occurs, check the following:

1 The angle of the buckle chute stopper must be adjusted correctly.

- ➔ Adjust the angle using the buckle chute stopper adjusting knob. (See page 143.)

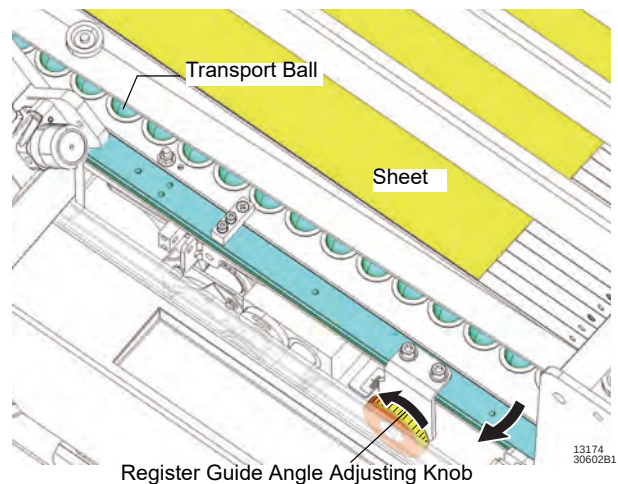


2 The angle of the register guide must be set correctly.

- ➔ Adjust the angle using the register guide angle adjusting knob.

3 The sheet must be aligned by the register guide. Make sure that the sheet is not bent by the guide.

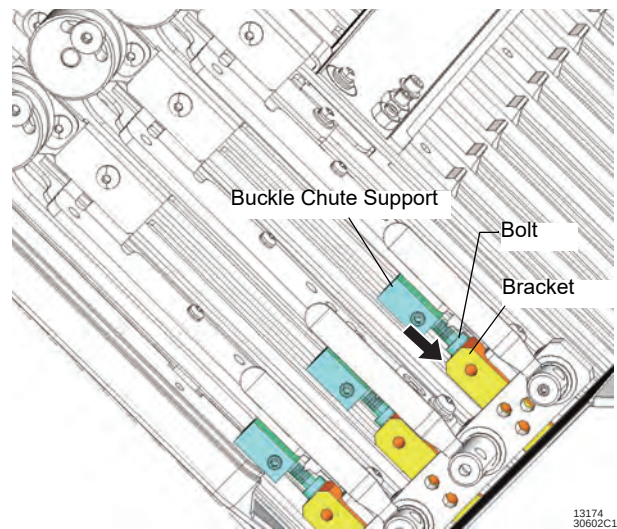
- ➔ Reinstall the transport balls in the correct positions. Balls which are too heavy can cause skewed folding.



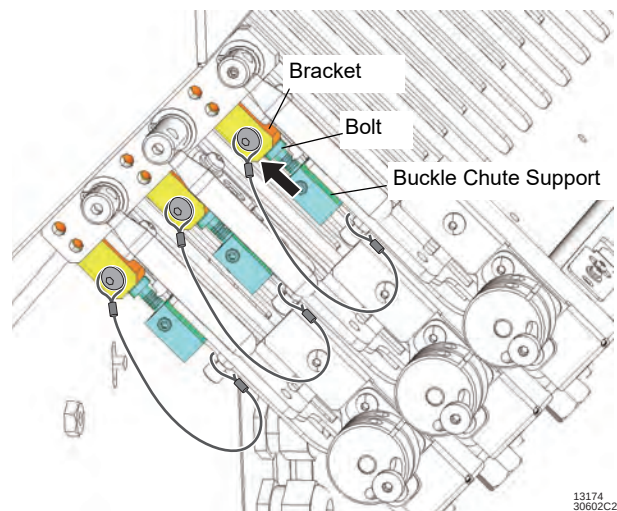
4 The buckle chutes are installed properly.

- ➔ Set the buckle chute so that the bolt on the buckle support hits against the bracket without any gap. Especially, check the second, fourth and sixth buckle chutes.

First, Third and Fifth Buckle Chutes



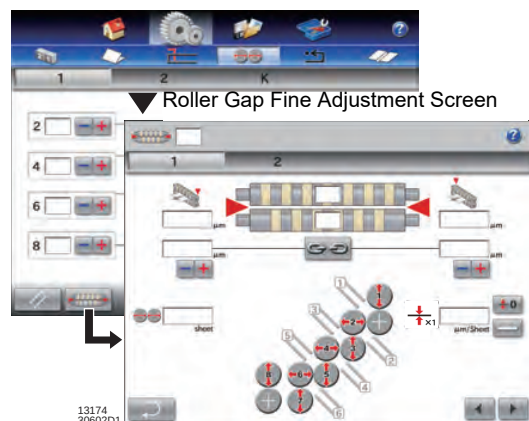
Second, Fourth and Sixth Buckle Chutes



5 The roller gaps must be adjusted correctly.

- ➔ Adjust only the one side of the roller.
(See page 147.)

▼ Roller Gap Screen



3-6-3 Adjusting Parallel Shifts in Parallel Folding

Adjusting the positions of the buckle chute stoppers separately.

If the fold position shifts by the same amount on the front and rear, adjust the buckle chute stopper position.

1 Change the value for buckle chutes 1 through 6 on the Setup - Guide and Buckle screen.



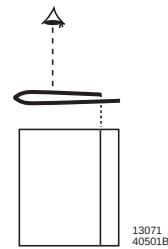
Note

Each time you press the  or  buttons, the stopper position quickly changes automatically. Once the value has been entered using the Numeric Keypad, press  to adjust all the stoppers at once.

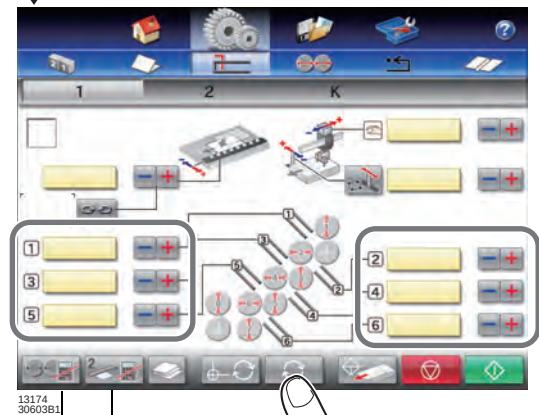


Important

When changing the setting for buckle chute stopper after the sheet number in roller gap has been changed in the Roller Gap screen, use the Fine Adjusting buttons. If the value is changed using Numeric Keypad screen, the roller gap is recalculated and the sheet number entered in Roller Gap screen may be returned to the default value. If you do not want to return to the default value, make the Roller Gap Recalculation button disabled (Gray), and use the Numeric Keypad screen. (Default Setting: Enable [Blue])



▼ Guide and Buckle Chute Screen



Second Station Conveyor Guide Recalculation Button

Roller Gap Recalculation Button



Important

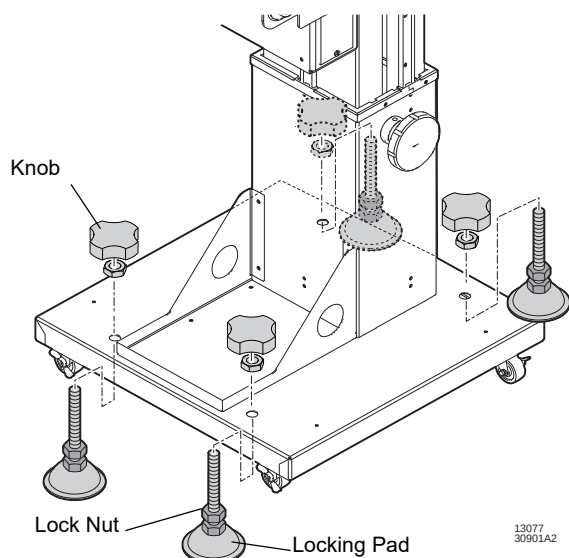
If the value for the buckle stopper is changed using the Numeric Keypad screen, the position of the register guide of the second station is recalculated automatically. In case of the T-406F: The register guide moves automatically. In case of the T-406S: The value on the Second Station Guide and Buckle Chute screen changes automatically. Set the position of the register guide manually. (See page 117.) If you do not want to recalculate the position of the register guide, turn the Second Station Conveyor Guide Recalculation button off (Gray).

This section explains how to set up the delivery conveyor.

If your machine is connected to the optional ED-40S Standing Delivery, refer to the user's manual for the ED-40S.

1 Mount the locking pads on the delivery conveyor.

- The locking pads are used to prevent the delivery conveyor from moving while it is operating.



2 Install the delivery conveyor in the position where the sheets will be delivered.

- Connect the power cable for the delivery conveyor to the power connector on the second station.



Note

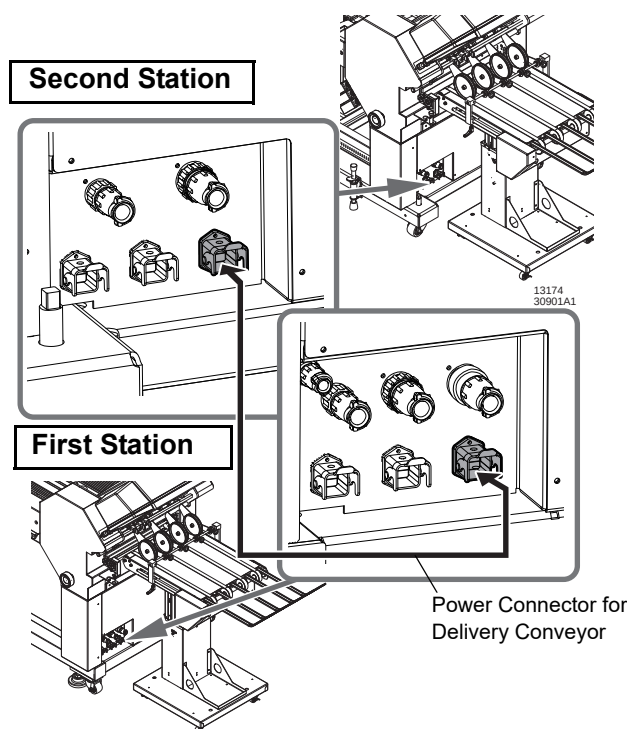
If you attach the delivery conveyor to the first station, connect the power cord to the outlet on the first station.



Attention

When you use the function of the double counter, install the optional delivery belt unit at the delivery section of 2nd station.

Without the delivery belt unit, the function of the double counter cannot be used because the sheets are not supported when they are transported under the sheet delivery sensor, therefore, the sensor becomes unstable.



3 Adjust the conveyor height and the positions of the catch rollers.

- Make the adjustments so that the delivered sheet is inserted between the catch rollers and the belts.
- If the sheets are not delivered smoothly, install the optional delivery guide.
- Loosen the conveyor height locking handle and adjust the height by pushing the conveyor table up or down. After making the adjustment, tighten the conveyor height locking handle.
- Loosen the slide arm locking levers and move the slide arms to adjust the positions of the catch rollers.



Note

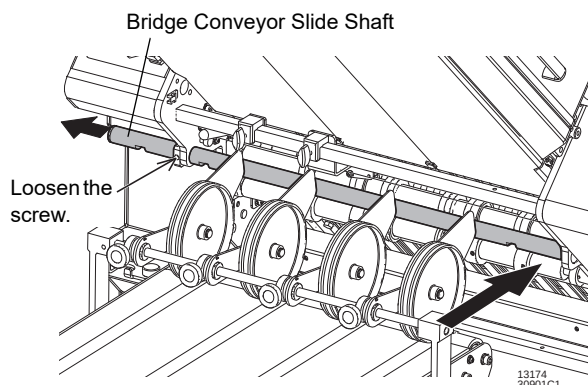
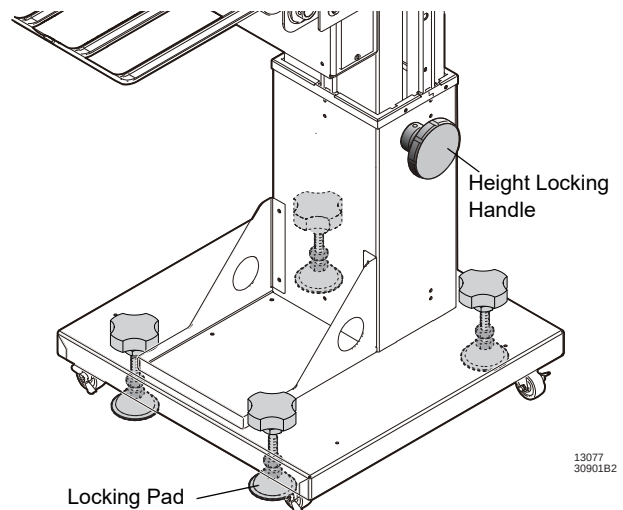
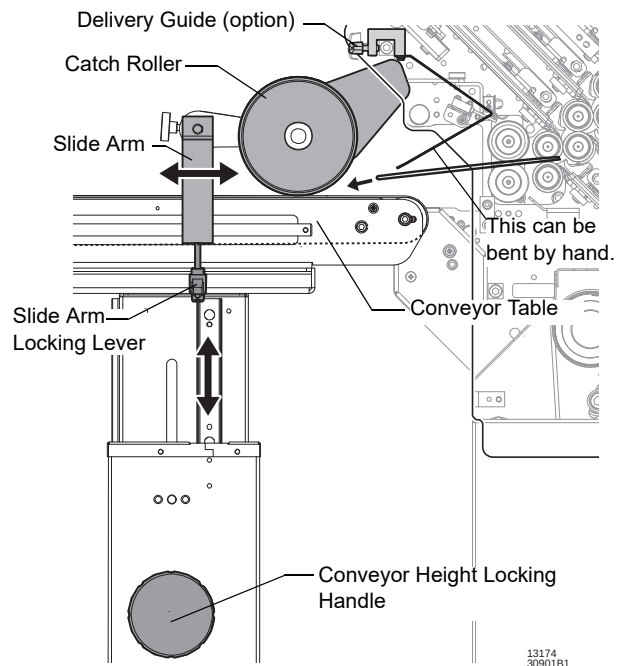
If an incoming sheet hits the sheets which are already on the conveyor and this causes a jam, lower the conveyor.

- Lower the locking pads against the floor to prevent the delivery conveyor from moving while it is operating.
- To hold each locking pad in position, turn the lock nut up (counter-clockwise) until it stops against the frame of the delivery conveyor.



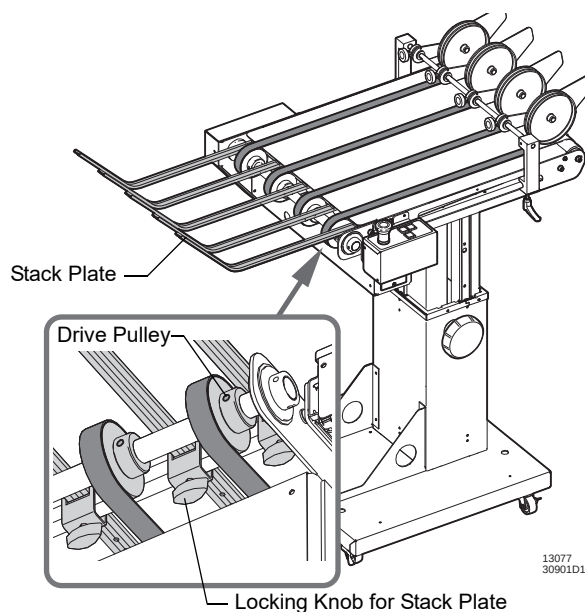
Attention

When the finished length of folded signature is 150 mm / 6.0" or shorter, remove the bridge conveyor slide shaft. If this shaft is not removed, the shaft hits the catch rollers of the delivery conveyor and the conveyor cannot be set at the position where the sheets can be delivered.



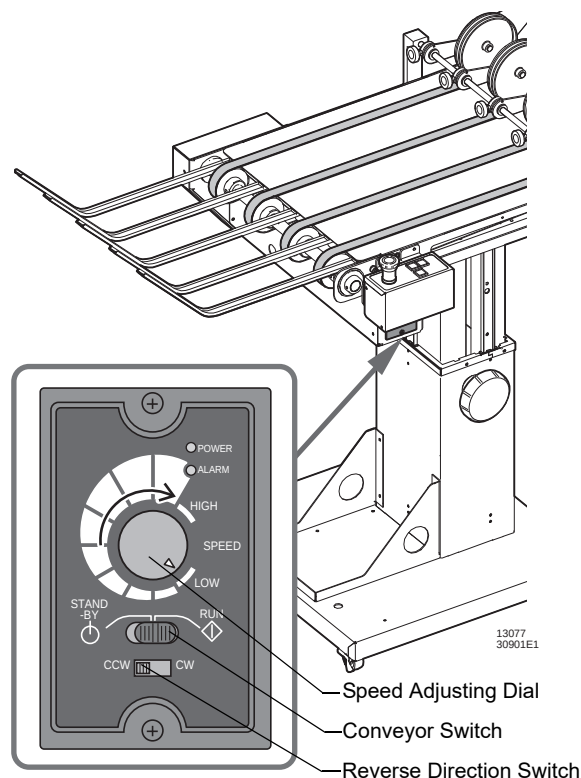
4 Adjust the belt positions if necessary.

- Change the belt positions if the edge of the delivered sheet goes under the belts.
- To adjust the position of a belt, loosen the locking screw of the drive pulley and change the position of the pulley. If you change a belt positions, change the positions of the stack plates also.



5 Set the conveyor control panel.

- Set the conveyor switch to Run.
- Adjust the speed using the speed adjusting dial. Adjust so that the sheets are delivered with even spaces between them.
- If the conveyor belts are going the wrong way, flip the "Reverse Direction Switch".



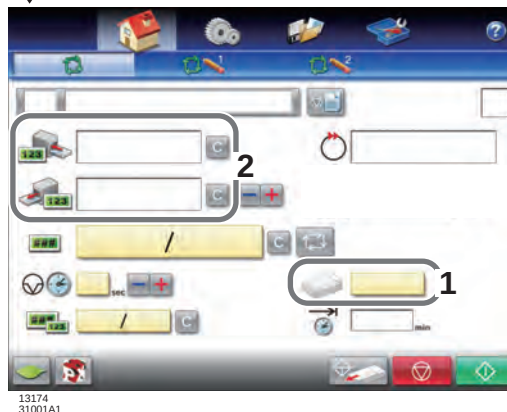
3-8-1 Setup the Function Screen

- 1** Set the number of remaining sheets only if you want to display the remaining run time.

**Additional Information**

- The remaining run time is automatically calculated depending on the production speed and the number of remaining sheets.
- Even if the number on the display goes to zero, the machine may not stop feeding.

▼ Main - Function Screen

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31001A1

- 2** If necessary, clear the feed counter and delivery counter to zero.

- As you press **C** button, the confirmation screen will be displayed.
- The counter will be cleared to zero by pressing **OK** button.
- As you press **↶** button, the counter will not be cleared and the screen goes back to the Function screen.



3-8-1 Setup the Function Screen (continued)

3 Set up the preset function.

1.  : The machine continues running sheets until the Feed Stop button is pressed. (The preset function is not used.)
-  : The machine stops and sounds the buzzer after feeding the preset number of sheets. The machine remains stopped until the Feed Start button is pressed.
-  : The machine stops and sounds the buzzer after feeding the preset number of sheets. The machine resumes running the sheets after a short preset time delay and starts feeding automatically.
-  : The machine keeps feeding until the preset number of sheets is delivered.
 - For example - if 50 is entered on the preset counter and one jam occurs, the machine will feed a total of 51 sheets. (Feeding continues until the number of sheets that are correctly delivered reaches the preset number.)

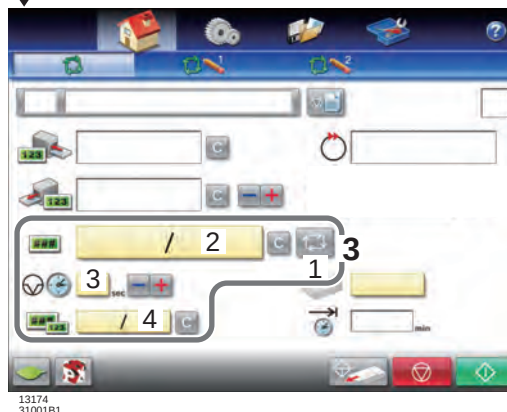


Note

If the double counter is turned on, a sheet fed for a test is also counted.

2. If  or  is selected, set the preset number.
3. If  is selected, set the pause time. The pause time can be up to 9.9 sec.
4. If  or  is selected, set the batch counter. The batch counter is the counter used to set how many batch sets with the preset number of sheets are produced. The machine stops after completing the preset number of batch sets. If you enter "0", the machine continues running the job with the pause time feature active.

▼ Main - Function Screen

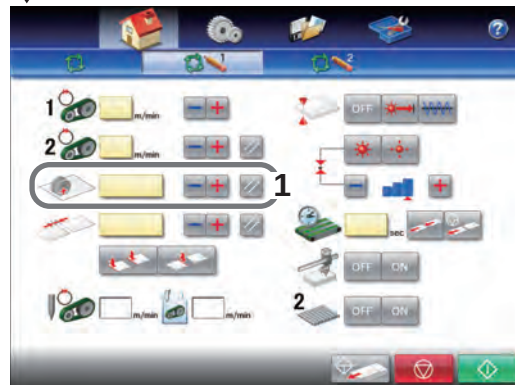


3-8-2 Set up the Condition Screen

1 Set the feed rotor suction length.

- Set the length of the area where the feed rotor vacuum grips the sheet according to the type of feeding being done.
- Make the area longer when feeding a large or heavy sheet, or make it shorter when feeding a small or light sheet.
- If  is pressed, the value is set to the standard (default) value.

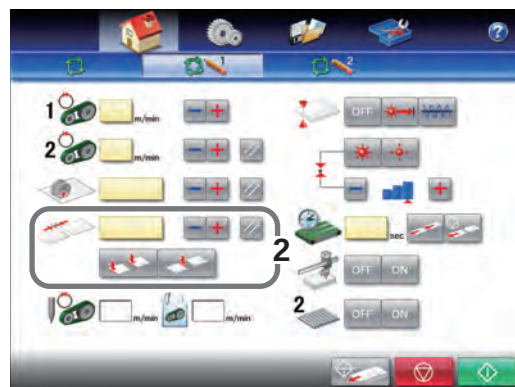
▼ Main - Condition Screen



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31002A1

2 Set the feed interval.

- Set the gap or distance between the sheets.
- If  is pressed, the value is set to the default value.

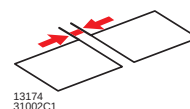


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- Initially, select . If you want to shorten the feed interval by a large amount, select . However, this may result in uneven feeding if the sheets are slippery.



: After the sensor detects the tail of one sheet, the next sheet is fed. The feed action is stable, but the feed interval cannot be shortened below a certain interval.



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: The head of each sheet is detected to trigger the feed timing. Select this function to shorten the feed interval. Since the machine does not detect the complete passage of the sheet, the feeding action may be unstable.



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31002C2

3-8-2 Set up the Condition Screen (Continued)

3 Set the double feed detection.

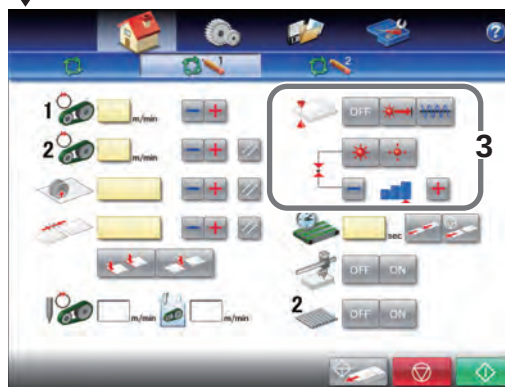
 : Double feeding detection is turned off.

 : Double feeding is detected by the photoelectric sensor.

Full Auto

 : Double feeding is detected by the ultrasonic sensor.

▼ Main - Condition Screen



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Icons below are displayed only when photoelectric detection is selected.

 /  : Set the brightness of the double feed detecting lamp. When detecting thick sheets (100 gsm or thicker) or sheets with lots of dark printing, use the brighter setting .

   : Set the sensitivity of the double feed detection. The taller the level bar, the higher the sensitivity.

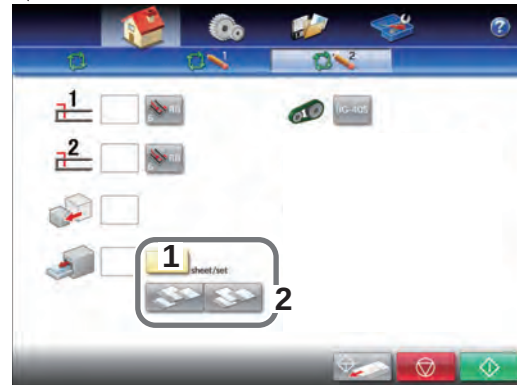
- If the sensor detects correct feeding as double feeding, decrease the sensitivity.
- If double feeding is not detected, increase the sensitivity.
- Depending on the kind of printing (color or type of ink), this sensor may incorrectly detect double feeding. If this happens, turn the detector off.

3-8-3 Set up the Options screen

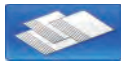
1 If the optional press stacker is used -

1. If the optional PST-40 Press Stacker is used, set the number of sheets in each set.

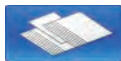
▼ Main-Options Screen



2. Select the offset mode.

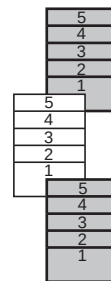


(Shift): : The stacker offsets a batch of sheets when it reaches the preset count number.

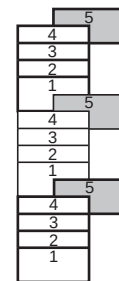


(Kick): : The stacker offsets one sheet when it reaches the preset set count number.

Shift



Kick

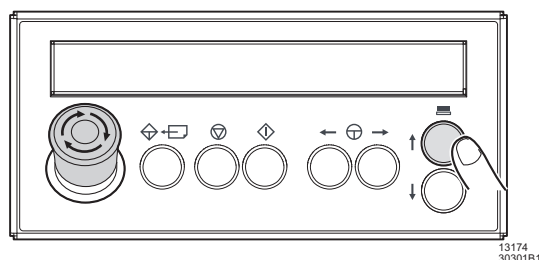


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3-8-4 Starting Folding

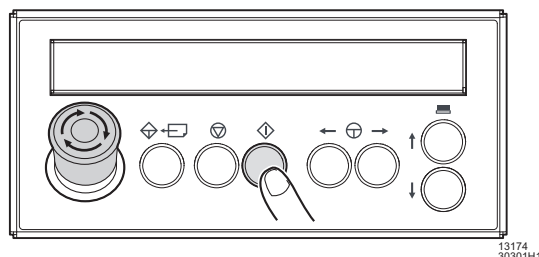
1 Check that the feed table is raised.

- If it is not raised, press the Feed Table Up button.



2 Press the Motor/Feed Start button.

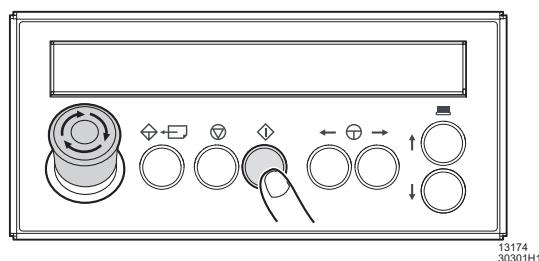
- ➔ The pump starts running, and the blower air starts blowing.
- ➔ The fold rollers and feed rotor start to run.



3 Press the Motor/Feed Start button again.

- ➔ The sheet is fed into the register guide.
- The "misfeeding" icon is displayed on the Error screen and the machine stops when the last sheet on the table is fed. Lower the table and reload the sheets on the table, and raise the table again.

Press the OK button on the Error screen and repeat the process from step 2.



▼ Error Screen



3-8-4 Starting Folding (Continued)

4 Press the Motor/Feed Stop button to stop the machine.

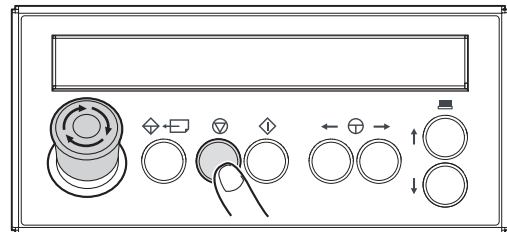
→ Feeding stops.

- Press the Feed Stop button again to stop the transport motor.



Note

If the Motor/Feed Stop button is pressed twice in a short period, the machine will stop with some sheets are left inside. Press the Stop button only after all sheets inside the machine have been delivered.



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CAUTION



To turn off the power, make sure to press the Stop button first to stop the operation, and then turn off the Power switch. Turning off the Power switch while in operation may result in incorrect counter value or damage to the machine.

5 Follow the procedures below only when the Job Name Save screen is turned on using the Administrator screen.

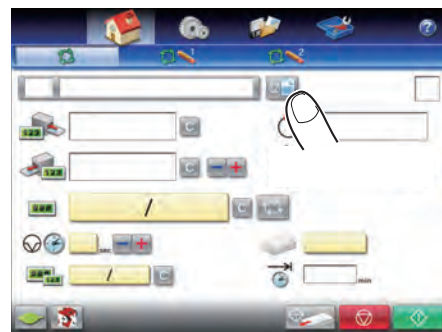
(Default Setting: Off)

- When a job has been completed, press



to finish the operation.

▼ Main - Function Screen

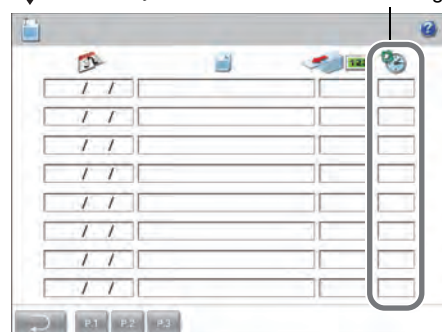


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- The working time will be displayed on the Job History screen.

▼ Job History screen

Working Time



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3-9-1 Saving a Job

The current job settings can be saved and loaded so the job can be repeated. This section explains how to save the job settings.

Before saving a job, finish the changeover and fine adjustments so that the machine is necessary to set correctly for the job you want to save.

1 Press  .

2 Press line for the job number you want to store.

- You can scroll through the screen using the

Scroll buttons   on the right side of the screen.

3 Press  .

→ The Keyboard screen is displayed.

4 Enter the job name.

- Up to 20 letters can be entered.

5 Press  .

- If the same job number has been used before, the Overwrite Confirmation screen appears.

- If you want to overwrite the old job information, press  .

- If you do not want to overwrite the job information, press  .

→ The display returns to the Memory screen. Go back to step 2 to select another job number.

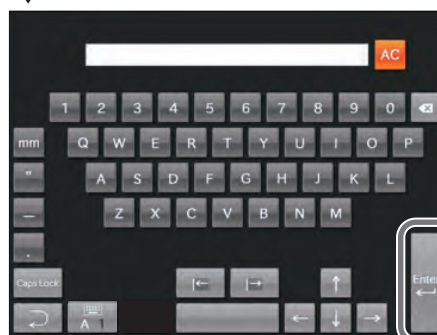
The following items are saved:

- Settings on the Main Screen
- The Unit Combination Setting
- Fold Pattern Setting
- Roller Gap Settings
- Guide - Buckle Chute Settings,
- Scoring Position Setting

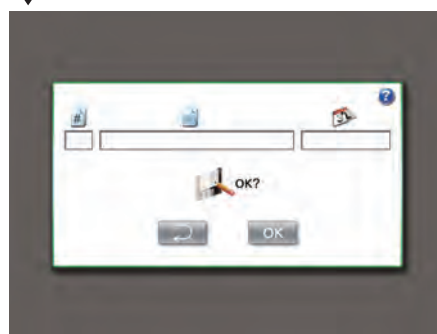
▼ Memory Screen



▼ Keyboard Screen



▼ Overwrite Confirmation Screen



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31101A1

3-9-2 Recalling a Job

1 Press  .

2 Press the job number you want to recall.

- You can scroll through the screen using the
Scroll buttons   on the right
side of the screen.

3 Press  .

→ The Recall Confirmation screen is displayed.

4 Press  .

Full Auto

→ The Sheet Insert Instruction screen is displayed.

Semi Auto

→ The Guide Buckle Chute screen is displayed.

5 Do a changeover.

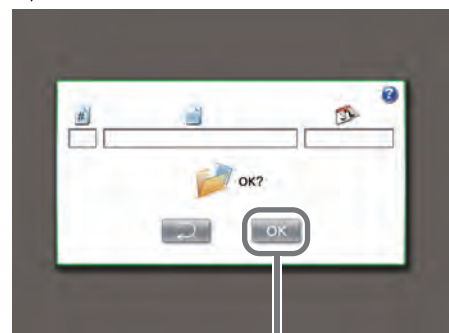
- Full Auto: See page 67 for details.

- Semi Auto: See page 71 for details.

▼ Memory Screen

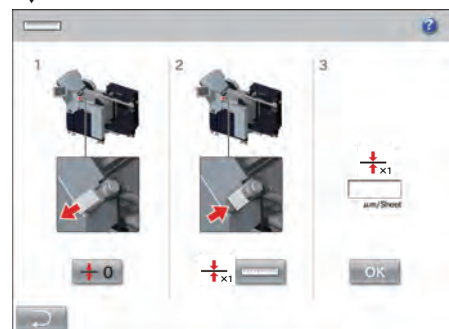


▼ Recall Confirmation Screen



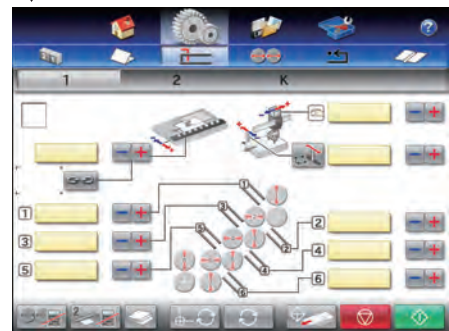
Full Auto

▼ Sheet Insert Instruction Screen



Semi Auto

▼ Guide Buckle Chute Screen



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31102A1

3-9-3 Deleting a Job

1 Press  .

2 Press the job number you want to delete.

- You can scroll through the screen using the

Scroll buttons   on the right side of the screen.

3 Press  .

→ The Delete Confirmation screen is displayed.

4 Press  .

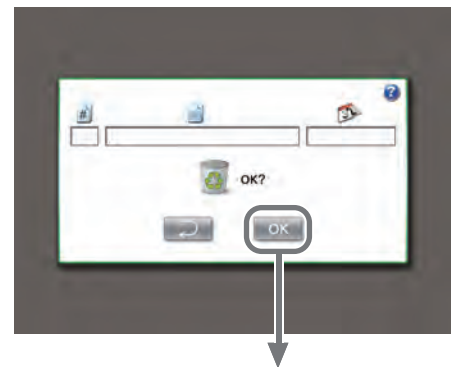
→ The Memory screen appears.

Job Number
Select the job number you want to delete.

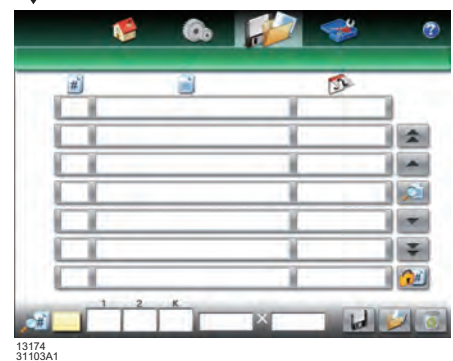
▼ Memory Screen



▼ Delete Confirmation Screen



▼ Memory Screen



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31103A1

3-9-4 Protecting a Job

For the selected job, this protects the job settings so they cannot be overwritten or deleted.

1 Press  .

2 Press the job number you want to protect.

- You can scroll through the screen using the

Scroll buttons   on the right side of the screen.



Attention

You have to save the job to protect the job.

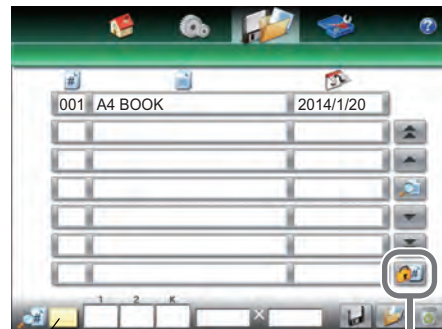
3 Press  .

→ This protection icon appears on the left of the job number.

4 To stop protecting the job, press  again.

→ The icon will go out.

▼ Memory Screen



Job Number

Protection Icon



3-9-5 Exporting Job Data

You can copy all the job data saved in the FD 2150 onto a USB thumb drive.

If you have more than one FD2150, you can export the job data from one unit and import it to another so you can run the same job on the second machine.



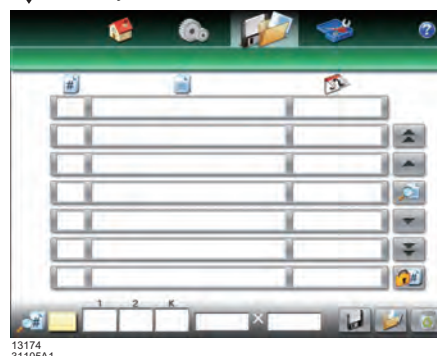
Additional Information

- Only one data can be saved in a USB thumb drive. If you save the data to the same USB thumb drive repeatedly, all of the older data will be overwritten.
- You can find the saved data in the directory "JobList/AF-406/" on the USB thumb drive.

1 Press .

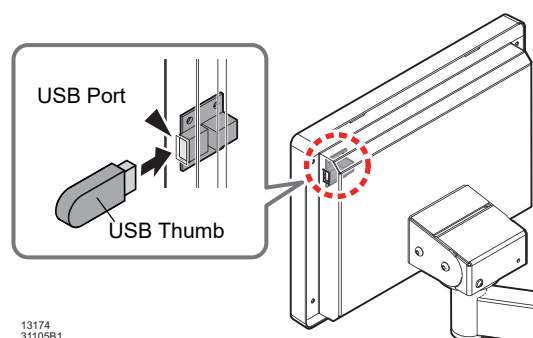
→ The Memory screen is displayed.

▼ Memory Screen



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31105A1

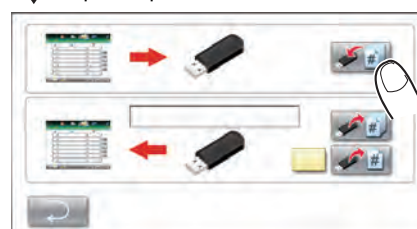
2 Plug in the USB thumb drive.



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→ Once the USB thumb drive is plugged in correctly, the Export / Import screen is displayed. It may take a few seconds to display this screen.

▼ Export/Import Screen



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3 Press .

→ The job data is copied to the USB thumb drive. Once the data has been imported, the screen returns to the Memory screen.

4 Unplug the USB thumb drive.

3-9-6 Importing Job Data

You can import exported job data from a USB thumb drive to the FD 2150.
You can import all of the job data, or just the data for a selected job.



Important

If information for another job has already been saved a particular job number, and you import new information for that job number, the old job information will be overwritten. However, the protected jobs are not overwritten.

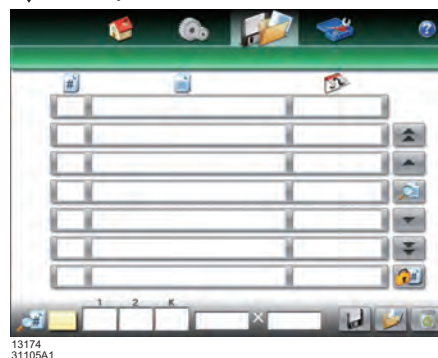
Importing all the job data

1

Press .

→ The Memory screen is displayed.

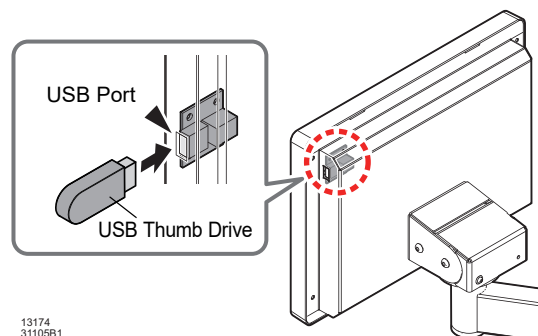
▼ Memory Screen



2

Plug in the USB thumb drive.

→ Once the USB thumb drive is plugged in correctly, the Export / Import screen is displayed. (It may take a few seconds to display this screen.) If the Date of Export is not displayed on the screen, this means that no jobs have been saved on the USB thumb drive.



3

Press .

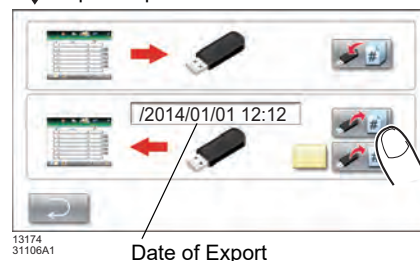
- If the same job number has been used before, the Overwrite Confirmation screen appears.
- If you want to overwrite the old job information, press the OK button.

→ The job data on the USB thumb drive is imported to the machine. Once the data has been imported, the screen returns to the Memory screen.

- If you do not want to overwrite the job information, press .

→ The screen returns to the Memory screen.

▼ Export/Import Screen



Date of Export

▼ Overwrite Confirmation Screen



Importing selected job data

1 Display the Memory screen and plug in the USB thumb drive. See steps 1 and 2 on the previous page for details.

2 Press .

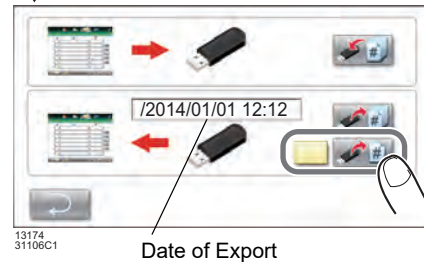
3 Enter a job number using the Numeric Keypad screen.

4 Press .

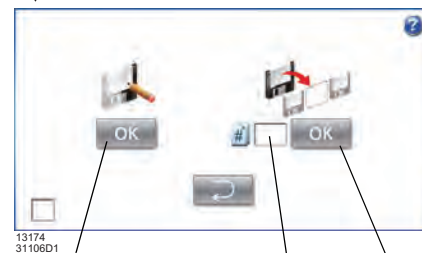
 **Additional Information**
If no data has been stored for the selected job number,  is not active.

- If the same job number has been used before, the Overwrite Confirmation screen appears.
- If you want to overwrite the old job information, press the left OK button.
- ➔ The job data on the USB thumb drive is imported to the machine. Once the data has been imported, the screen returns to the Memory screen.
- If you want to assign a new number to the imported job data, press the right OK button.
- ➔ The job data is imported to the machine and saved using the new job number. Once the data has been imported, the screen returns to the Memory screen.
- If you do not want to overwrite the job information, press .
- ➔ The screen returns to the Memory screen.

▼ Export/Import Screen



▼ Overwrite Confirmation Screen



The job data is imported to the machine overwriting the old job information.

New job number

The job data is imported to the machine and saved for the new job number.

4 Adjustments

This chapter explains how to make some adjustments which may be necessary.

4-1

Suction Point Adjustments

4-1-1 Gap adjustment between the feed rotor and the sheet

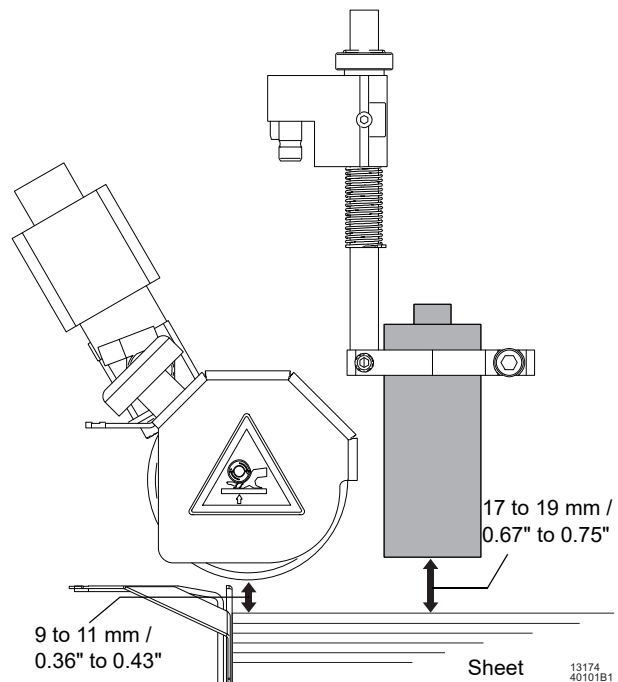
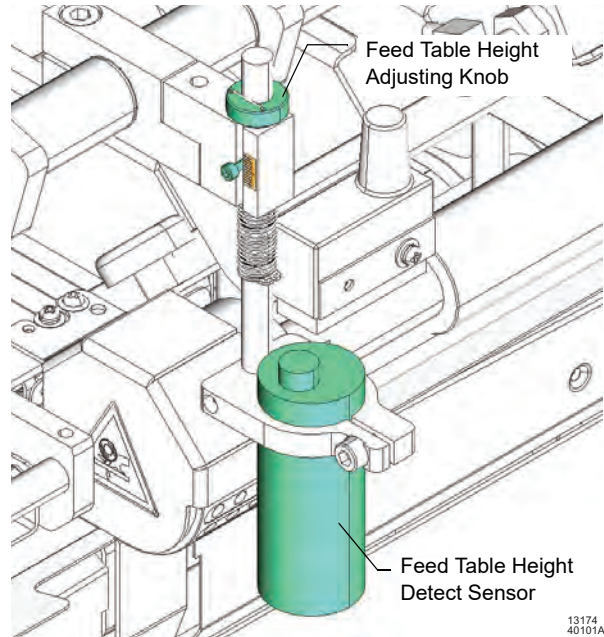


WARNING



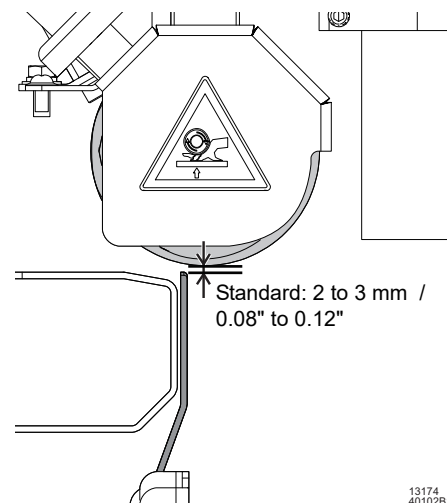
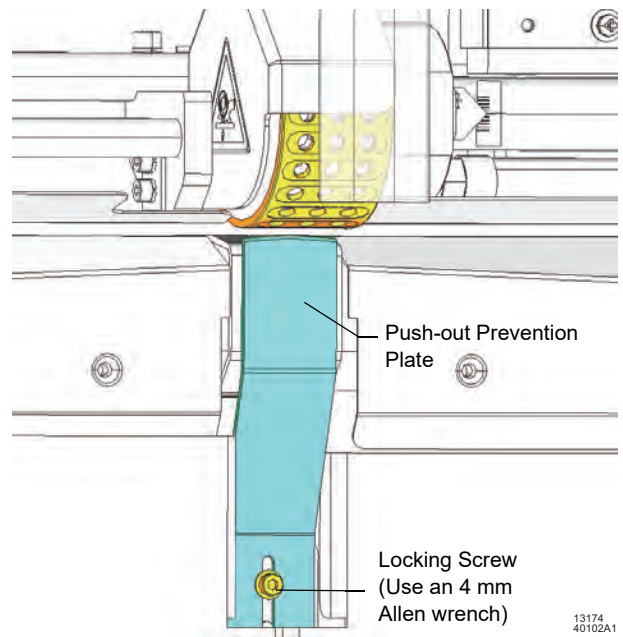
Before adjusting the feed section, stop the feed rotor completely. Otherwise, the rotating parts can cause severe personal injury.

- If large or thick sheets are loaded and the vacuum is not strong enough to separate the sheets, move the sheets closer to the feed rotor. If coarse or porous sheets are loaded, provide more space between the sheet and the feed rotor.
- Turn the feed table height adjusting knob clockwise. This lifts the sensor and reduce the space between the feed rotor and the sheet.
- In most cases, the space should be 9 to 11 mm / 0.35" to 0.43" when the feed table reaches the upper limit.



4-1-2 Adjusting the push-out prevention plate

- Only when the sheets are pushed out frequently, loosen the locking screw and raise the plate a bit.
- After making the adjustment, tighten the locking screw.



4-1-3 Suction point adjustment

- The standard position of the valve housing is as shown in the drawing to the right. If the following problems occur, adjust the valve housing angle:

- If using thin or curled down sheets:

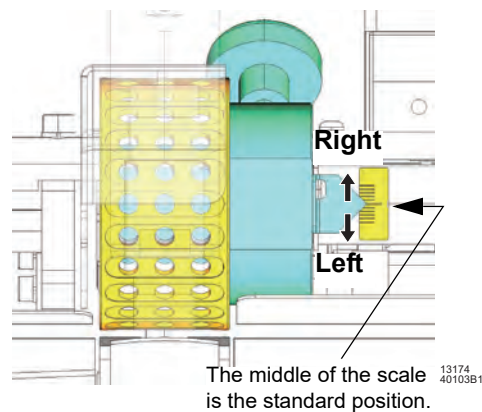
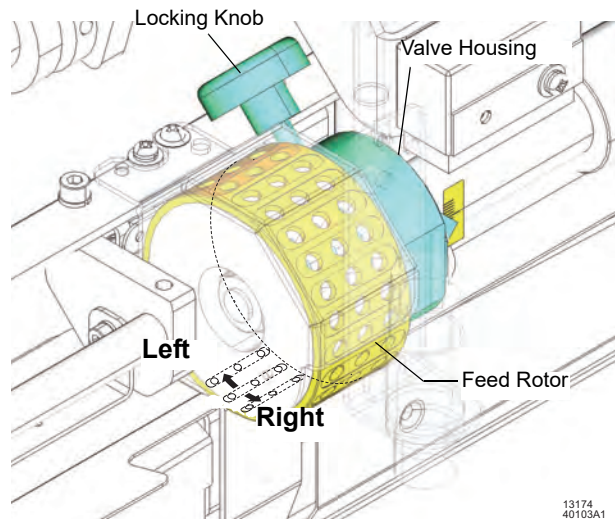
Move the suction point 2 to 3 mm / 0.08" to 0.12" to the left. This will feed the front edge so that it prevents the sheet from hitting the entrance of the register guide.

Suction point adjustment

Loosen the locking knob and turn the valve housing while holding the knob. When you set to the new position, tighten the locking knob.

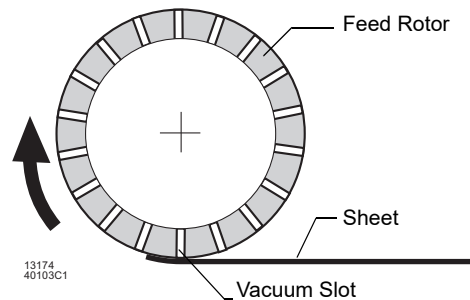
- If using thick or curled up sheets:

Move the suction point 2 to 3 mm / 0.08" to 0.12" to the right, so that the sheet is not caught by the feed rotor or taken around the rotor. The sheet should be straightened so that it will feed reliably.

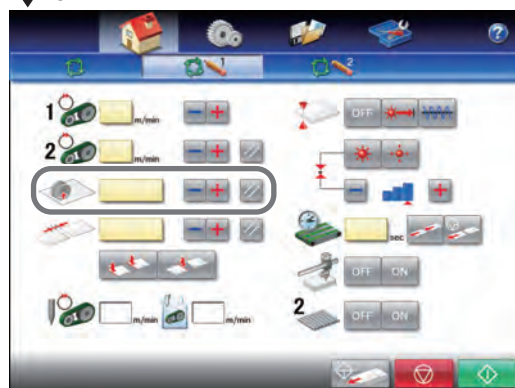


Feed Rotor Mechanism

- Air is pulled through the holes on the outside of the feed rotor, and into the slot in the center of the cylinder.
- The feed rotor turns as it feeds each sheet. The slot remains in the same position, so the vacuum is produced at the bottom of the feed rotor.
- After the sheet has moved a certain distance, the vacuum is stopped by the air cutoff valve and the sheet is released.
- Set the ratio between the "vacuum on" time and "vacuum off" time using the Feed Rotor Suction Length setting on the Main - Condition screen.



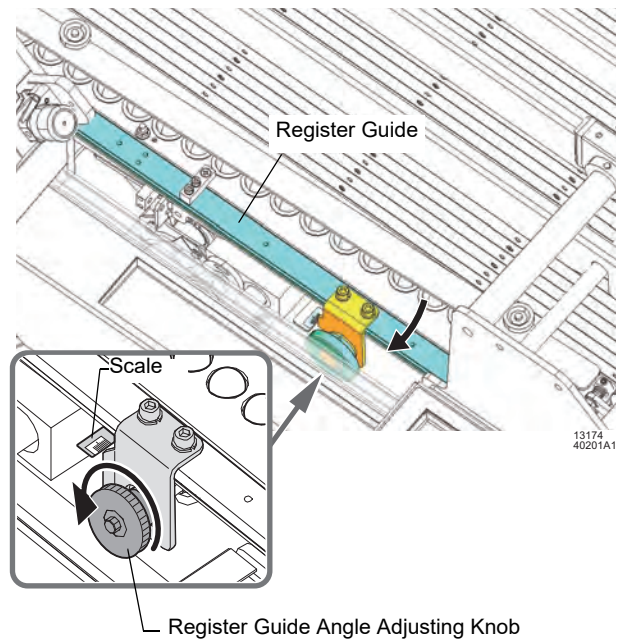
Condition Screen



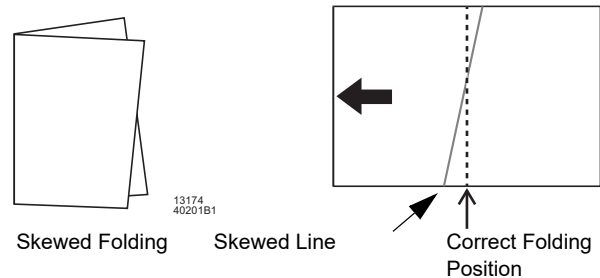
If the first fold is skewed, adjust the angle of the register guide.

1 Turn the register guide angle adjusting knob to adjust the angle.

- The angle can be checked using the scale.
- The middle of the scale is the standard position.



- If the folding is skewed as same as the drawing shows, turn the register guide angle adjusting knob counterclockwise so that the angle is changed in the direction shown by the arrow.



4-3

Buckle Chute Section Adjustment

4-3-1 Adjusting the angle of the buckle chute stopper

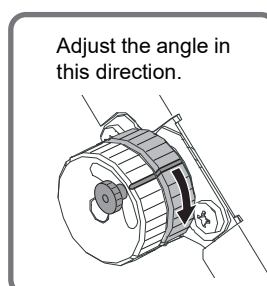
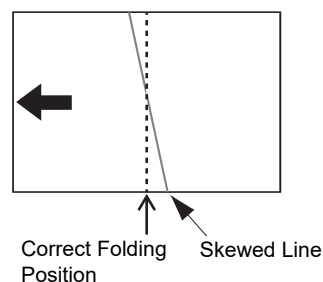
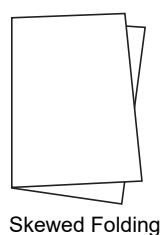
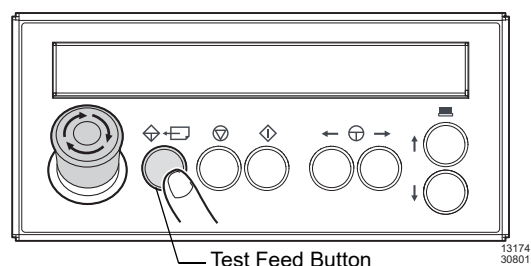
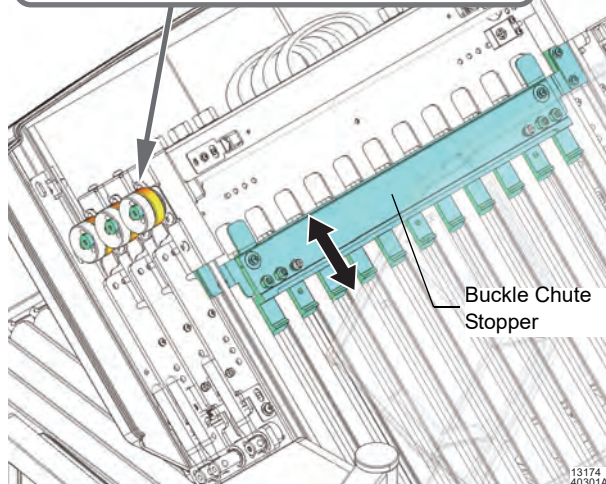
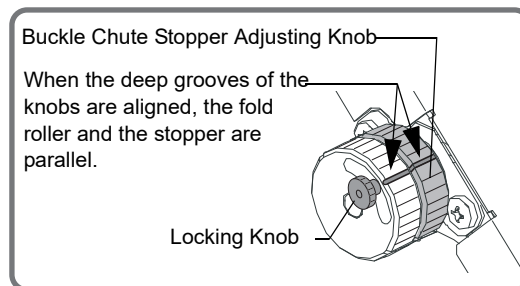
- 1 Loosen the locking screw using the supplied ball point driver (3 mm).
- 2 Turn the buckle chute stopper adjusting knob to adjust the angle of the stopper.
 - ➔ Only the stopper on the operator side moves. This will change the angle of the stopper.
- 3 After making the adjustment, tighten the locking knob by hand.
- 4 Do a test fold to check for skewed fold.

While the fold rotors and feed rotor are running,

Press the Test Feed button once.

➔ One sheet is fed, folded and delivered.

- If the folding is skewed on the second station as same as the drawing shows, adjust the angle of the buckle chute stopper in the direction shown by the arrow in the drawing to the right.



When the knob is turned by five shallow grooves, the buckle stopper moves by 2 mm.

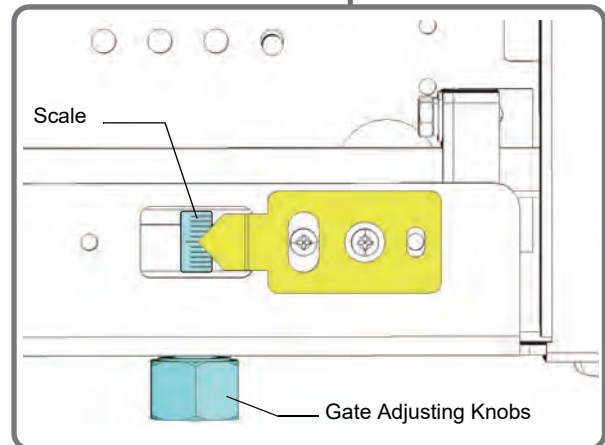
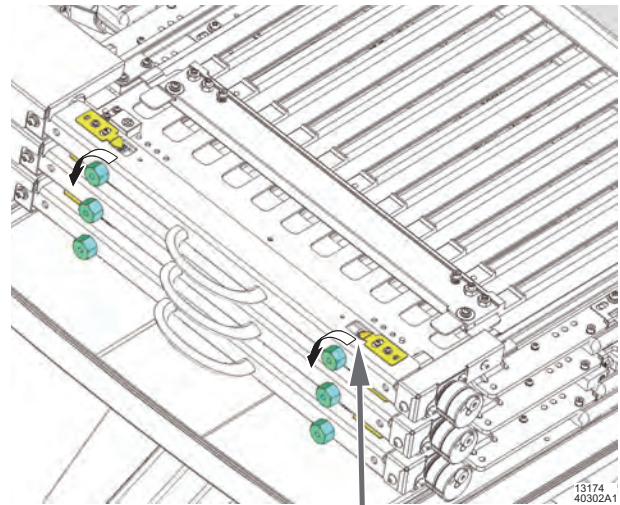
- 5 If the sheet is folded correctly, tighten the locking knob using the ball point driver (3 mm).

4-3-2 Buckle Chute Gate Adjustment

1 Turn the front and rear gate adjusting knobs evenly.

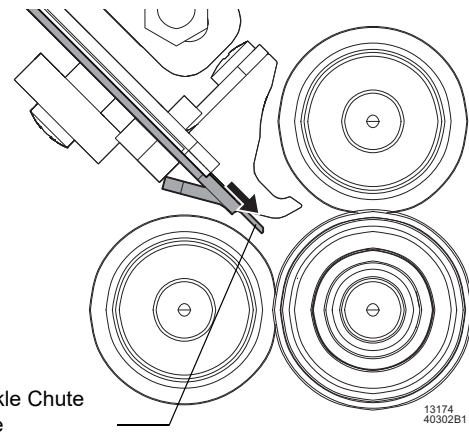
- If you turn the knob counterclockwise, the buckle gate moves forward.

- The center of the gate scale marks the standard gate position.



Important

If the gate is extended too far, it may hit the fold roller.

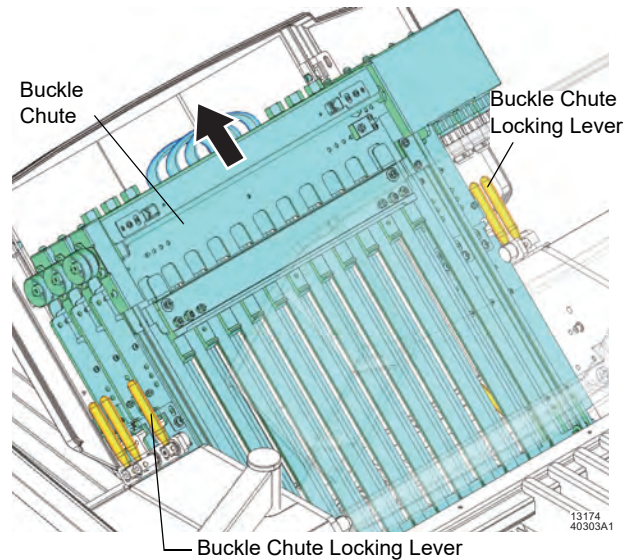


4-3-3 Gap Adjustments Between the Buckle Chutes and Fold Rollers

If the sheet cannot enter the buckle chute smoothly, reduce the gap between the entrance of the buckle chute and the fold rollers by making this adjustment. However, if you reduce the gap between the entrance and the fold rollers too much, thick sheets will not be able to come out of the buckle chute smoothly.

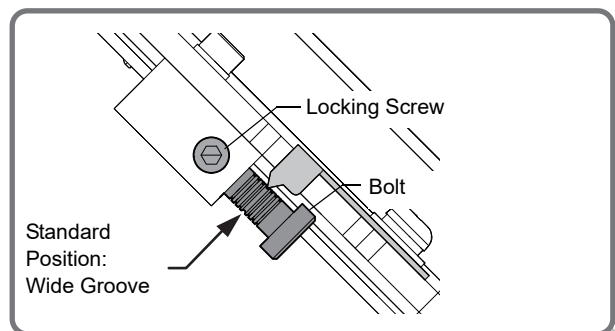
1 Release the locking levers and lift the buckle chute upward.

- There are two buckle chute locking levers.



2 Loosen the locking screw using a 3 mm ball point driver and turn the bolt.

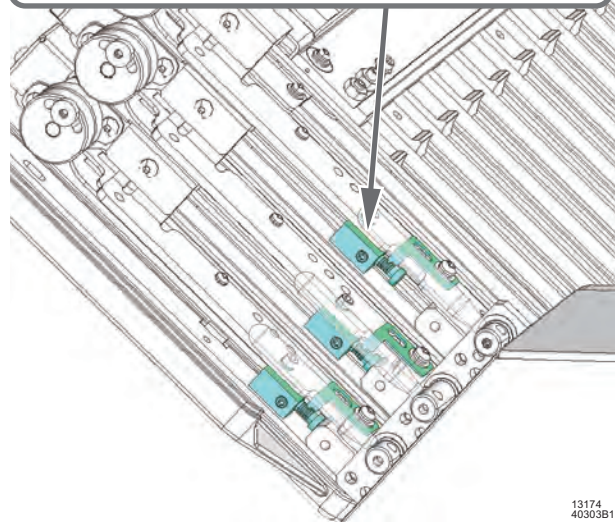
- The gap can be reduced by turning the bolt in.
- Make the same adjustment on each side. There is a scale on the bolt. The most widest groove of the scale is the standard position.



	CAUTION
	If the bolt is turned in too much, the buckle chute hits against the fold roller, and that may cause damage to the roller.

3 After making the adjustment, tighten the locking screw.

4 Return the buckle chute to the original position and lock it in place.

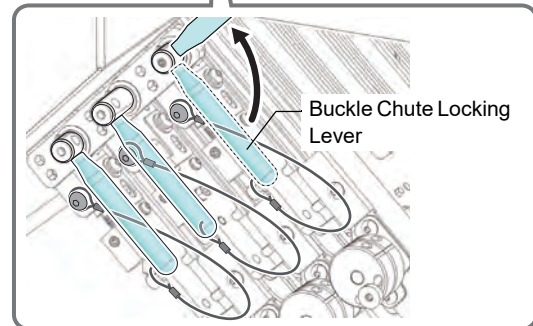
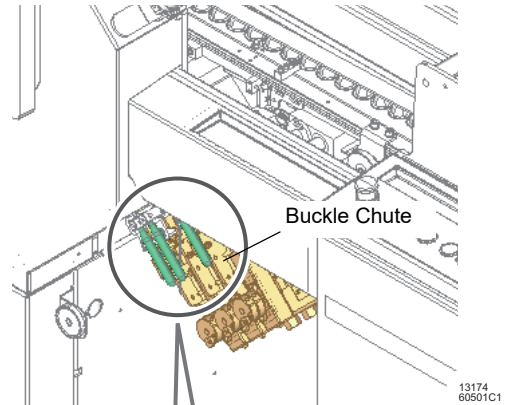


4-3-4 Buckle Chute Angle Adjustment

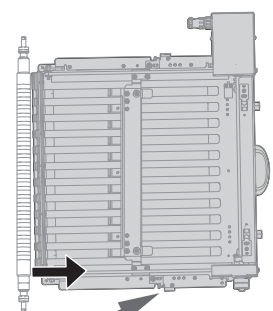
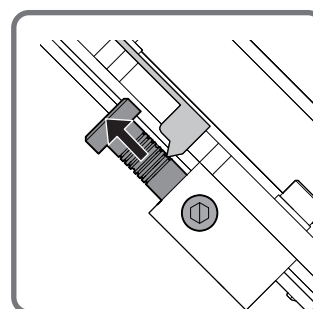
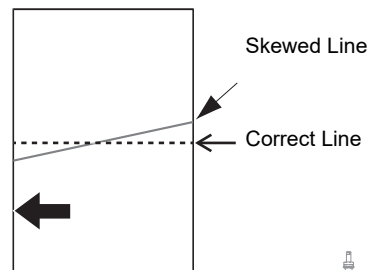
If the scoring or perforation is skewed, you can correct it by adjusting the angle of whole buckle chutes.

1 Release the locking levers and lower the buckle chute a bit and lock it.

- There are two buckle chute locking levers. Loosen both of the levers.



2 Adjust the angle of the buckle chute.



Move only the operator side of the last buckle chute away from the fold roller.

4-4

Roller Gap Adjustment

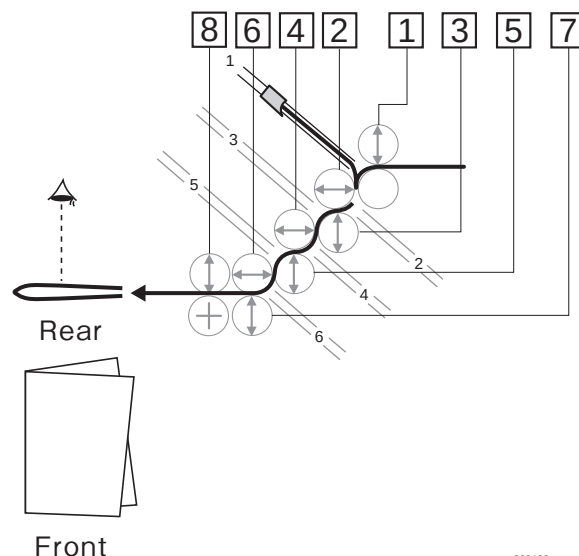
4-4-1 Full Auto

- 1 Check which side of the sheet being parallel folded is skewed.**
- 2 If the folding is skewed as shown to the right, adjust the gaps this way:**
 1. Make the first gap on the rear wider, or make the first gap on the front narrower.
 2. Make the second gap on the rear narrower, or make the second gap on the front wider.



Important

The accuracy of the parallel folding may improve as the machine runs.



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Roller Gap Adjustment

- To make a rough adjustment (adjusting the number of sheets.)

In this procedure, roller gap on both sides are adjusted evenly. To adjust the roller gap on either side only, see "To make a fine adjustment".

1. Change the number of sheets on the Setup - Roller Gap screen.

2. Press .

➔ Both ends of the roller are adjusted.

- To make a fine adjustment (adjusting by 5 μm at minimum.)

1. Press  to display the Roller Gap Fine Adjustment screen.
2. Select the roller gap to be adjusted.
 - The selected roller is displayed in blue.
 - Touch the desired roller on the screen or press  or  to select the roller gap.

3. Change the gaps.

 : Increase by 5 μm .

 : Decrease by 5 μm .

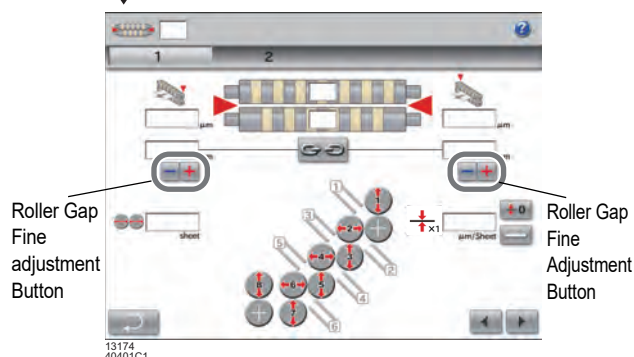
- ➔ After you press the  or  buttons, the gaps are actually adjusted a few seconds later.

▼ Roller Gap Screen



For fine adjustment

▼ Roller Gap Fine Adjustment Screen



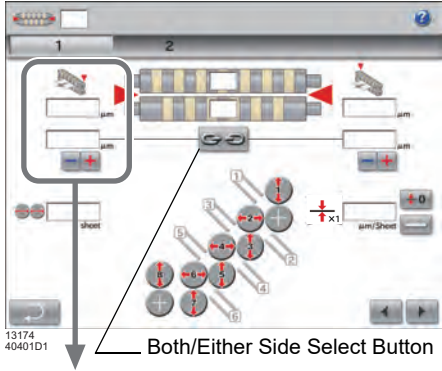
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: Adjusting one side only



: Adjusting both sides at once



Setting the Roller Gap

The roller gap is 305 μm .



The roller gap is 295 μm .



Adjusting all roller gaps at the same time

- All the roller gaps can be increased or reduced by adjusting the sheet thickness.

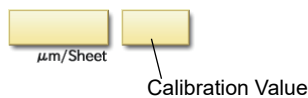
1. Display the Roller Gap Fine Adjustment screen.

2. Press the  Thickness Measuring button.

→ The Sheet Thickness Measuring screen is displayed.

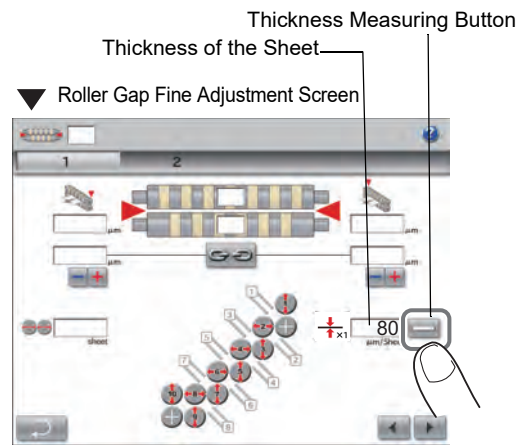
3. Enter the calibration value for the sheet thickness.

- The range of adjustment is -200 to +200 μm .

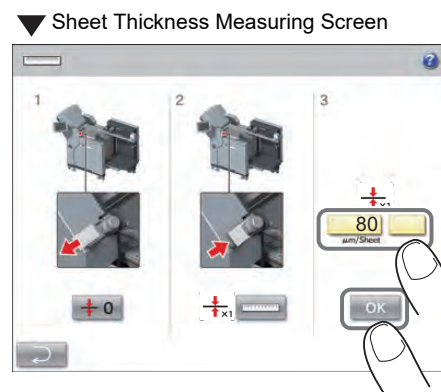


4. Press  to go back to the Roller Gap screen and press .

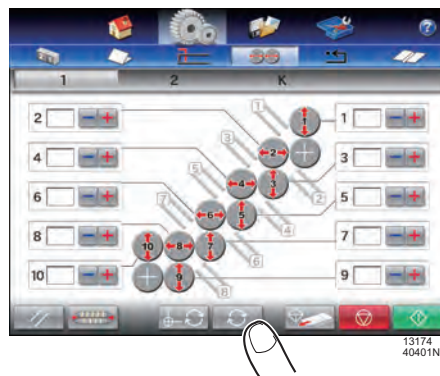
→ All of the roller gaps will be changed by the same amount.



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Roller Gap Screen



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3 Try the parallel folding again and check the folding accuracy.

- If the skewed folding still occurs, check the roller pressure on the front and rear rollers in the following procedures.

WARNING

Before checking the roller gaps, stop the machine completely.

1. Reset the "Zero" point of the roller gap.
 - Press the Thickness Zero Point Adjusting button on the Roller Gap Fine Adjustment screen without inserting a sheet into the sheet thickness detector. "Zero" point will be saved.
2. Insert one sheet of paper (52 gsm or 14 lb bond) into the sheet thickness detector.
3. Press the Thickness Measuring button on the Roller Gap Fine Adjustment screen.
4. Return to the Roller Gap screen, and change the number of the sheet to "1" on each roller.
5. Press .
 - ➔ All roller gap are set for one sheet.
6. Remove the sheet holders in the register guide section.
7. Take the same type of paper you will run, and tear it into strips. Insert one strip into the roller gap.
8. Adjust the roller gap on the screen so that the rollers turn slowly when you pull out the strip.
9. Adjust the roller gap on both sides by the same amount.



Additional Information

Here is the relationship between the sheet grain and the roller pressure:

When the sheet is thin and the sheet grain is parallel to the fold line -

The sheet may not be folded correctly because the sheet is weak. Increase the roller gap.

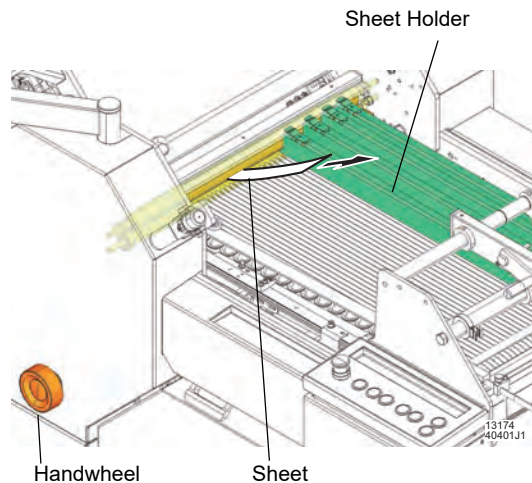
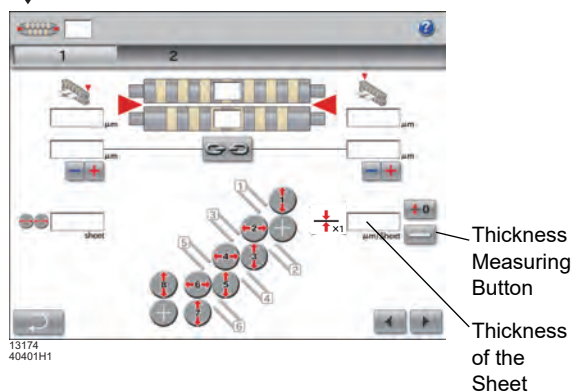
When the sheet is thick and the sheet grain is perpendicular to the fold line -

The fold line may not be stable because the sheet is strong and is not folded tightly. Decrease the roller gap.

▼ Roller Gap Screen : Example of 6 buckle chutes



▼ Roller Gap Fine Adjustment Screen





Additional Information

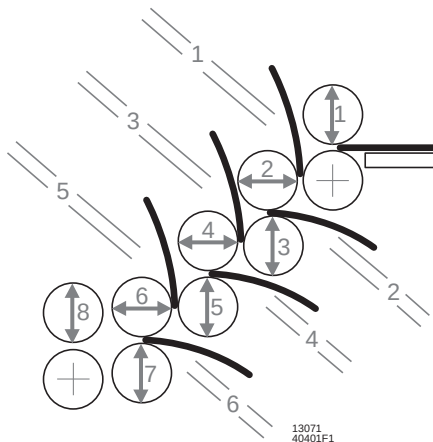
When the roller gap in the middle is wider

When gap in the middle is wider because the rollers are worn out, get the correct gap in the middle by tightening the gaps at the ends.



Note

When checking the other roller gaps, remove the buckle chute. Insert strips of paper as shown below, and check the roller gaps.



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4-4-2 Semi Auto

- 1 Check which side of the sheet being parallel folded is skewed.**
- 2 If the folding is skewed as shown to the right, adjust the gaps this way:**

1. Make the first gap on the rear wider, or make the first gap on the front narrower.
2. Make the second gap on the rear narrower, or make the second gap on the front wider.



Important

If the sheet is parallel folded for several times, start adjusting the accuracy from the first fold.

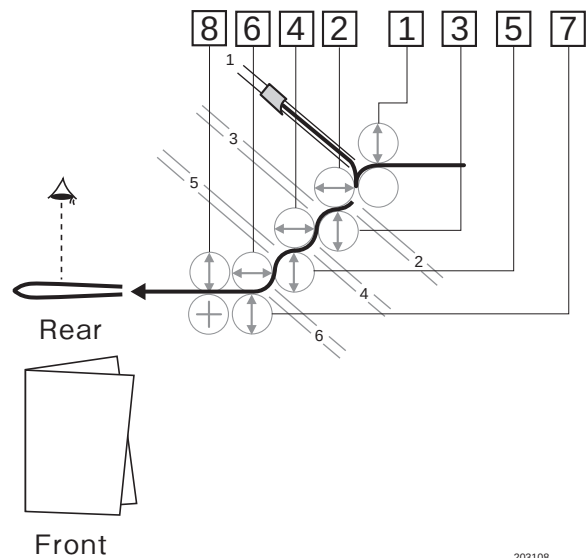
Change the number of sheets inserted into the gap adjusting lever

1. Push down the gap adjusting lever.
2. Insert the sheet into the lever.
3. Change to the number of sheets inserted into the lever on the Roller Gap screen.

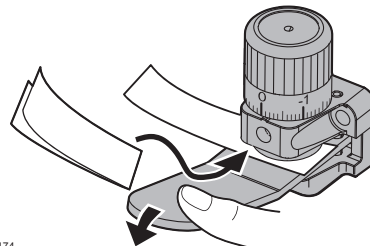


Additional Information

The correct gap is saved when memorizing.

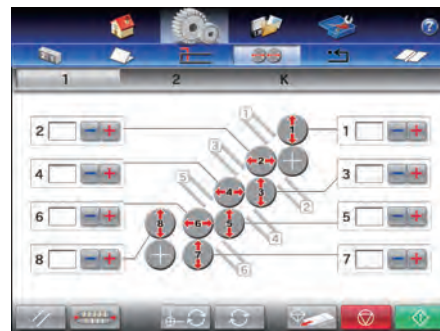


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Roller Gap Screen

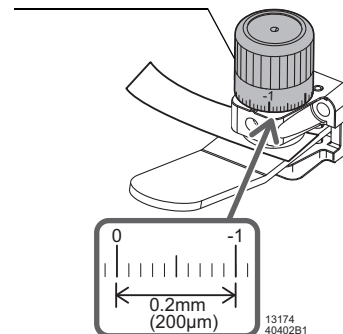


Turn the gap adjusting knob

- To make the gap wider, turn the gap adjusting knob clockwise (to the direction of minus). The roller pressure will be reduced.
- The roller gap is changed by 0.02 mm.

Turn the knob clockwise to increase the gap.

Gap Adjusting Knob



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3 Try the parallel folding again and check the folding accuracy.

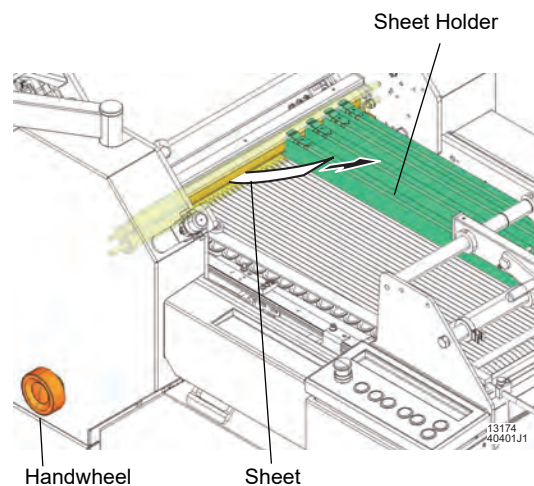
- If the skewed folding still occurs, check the roller pressure on the front and rear rollers in the following procedures.


WARNING



Before checking the roller gaps, stop the machine completely.

1. Remove the sheet holders in the register guide section.
2. Insert a paper into the gap adjusting lever.
3. Take the same type of paper you will run, and tear it into strips. Insert one strip into the roller gap.
4. Adjust the roller gap on the screen so that the rollers turn slowly when you pull out the strip.
5. Adjust the roller gap on both sides by the same amount.



Additional Information

Relationship between sheet grain and roller pressure:

See page 150 for details.

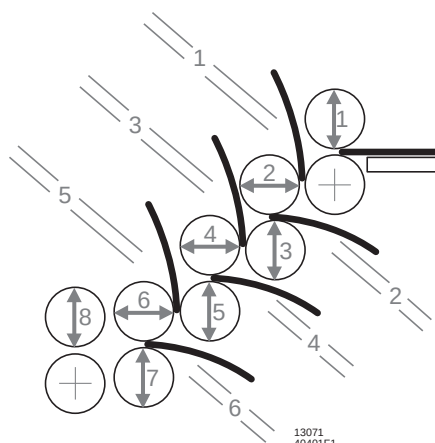
When the roller gap in the middle is wider:

See page 151 for details.



Note

When checking the other roller gaps, remove the buckle chute. Insert strips of paper as shown below, and check the roller gaps.

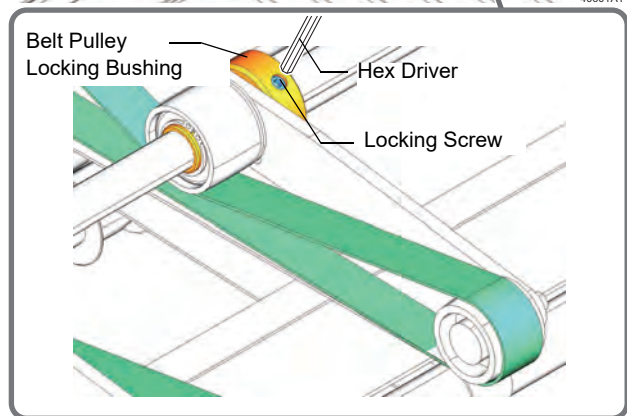
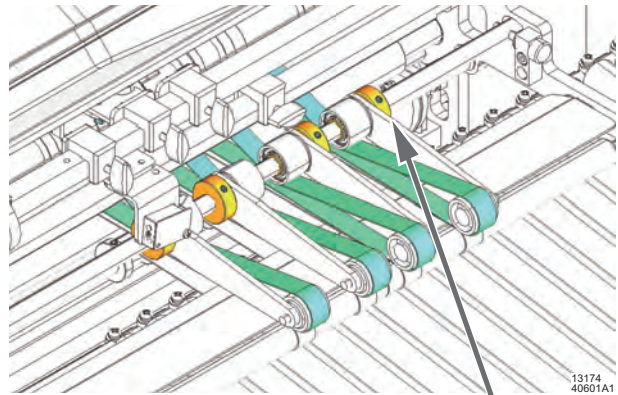


When you want to align the positions of upper and lower delivery belts, increase the gap at the entrance of the delivery belts.

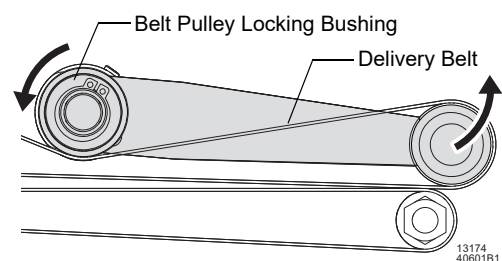
1 Press the Emergency Stop button.

2 Rotate the belt pulley locking bushing.

- Loosen the locking screw so you can rotate the belt pulley locking bushing.
- Loosen the locking screw using the supplied hex driver.



- Rotate the belt pulley locking bushing clockwise to increase the gap between the delivery rollers.
- After making the adjustment, tighten the locking screw.



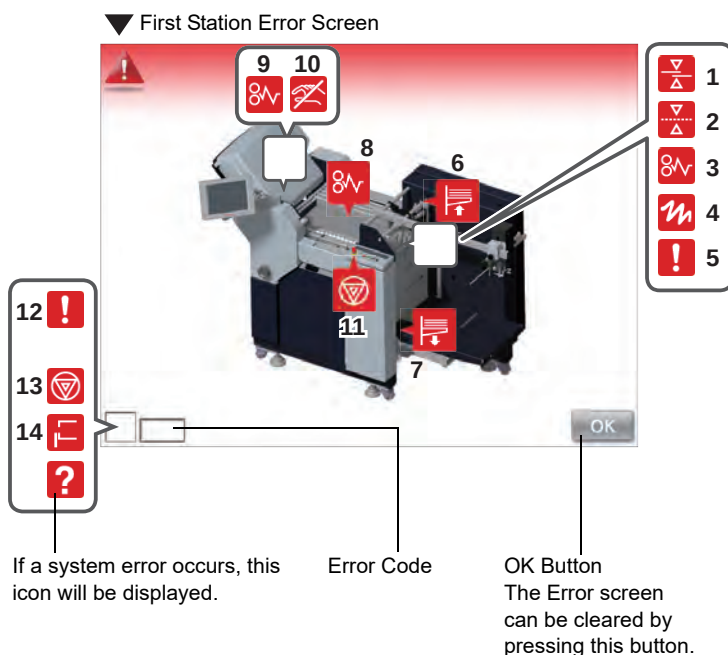
5 Troubleshooting

This chapter explains the causes and solutions for some possible problems.

5-1

If an Error Code is Displayed

If a problem occurs, one of the sensors will detect the problem and stop the machine. An icon which indicates the error status will be displayed on the touch panel. See the tables on the following pages and correct the cause of the error. Press the **OK** button to clear the Error screen. The Error screen can be cleared on the control panel and also by pressing the Motor Stop button on the remote controller.



5

Error Icons

Icon	Name	Icon	Name	Icon	Name
	Double-feeding		Misfeeding		Jam
	Double Feed Sensor Cleaning Error		Feed Table Rising Error		Feed Table Lowering Error
	Delivery Section Safety Sensor		Emergency Stop		Cover Open
	Other Problems				

Error Code	Description	Station	Cause and Solution
Error codes 100 through 999 are errors concerning jam and emergency stop.			
 111	First station delivery section jam (The sheet did not arrive at the delivery section)	First Station	After the sheet has been fed, the sheet was not detected at the delivery section within a certain period of time. If the ED-40/40S is connected, the sheets were not detected at the entrance section of the ED-40/40S. 1. A jam has occurred in the register section or buckle chute. Press the Emergency Stop button before removing the jammed sheet. If the jam is occurred frequently, see pages 197 and 201. 2. The sheet has not been detected since the bad position of the sheet delivery sensor on the first station. Install the sensor over the sheet path.
 112	First station delivery section jam	First Station	The delivery section sensor remains on for a certain period of time. 1. A jam has occurred in the delivery section of the first station. Press the Emergency Stop button before removing the jammed sheet. 2. If this error occurred even though no sheets are jammed, the sensor may detects the scoring rollers or the drive rollers. See page 102 and adjust the position of the sensor.
 113	First station delivery section jam (When the machine start running.)	First Station	The delivery section sensor on the first station is turned on when the machine starts running. Correct the problem following the same solution as above.
 133	First station delivery section safety error	First Station	The first station delivery section safety sensor is turned on. Remove any objects which block the light axis of the sensor.
 141	First station delivery section jam (The sheet did not arrive at sensor B90 on the conveyor.)	First Station	A jam has occurred between the first station and the conveyor. Remove the jammed sheet.
 150	First station emergency stop	First Station	The Emergency Stop button has been pressed. Turn the Emergency Stop button clockwise to release it.
 220	Feed table lowering error	First Station	The table lowering error detection switch was turned on while the feed table was lowering. Check that there is nothing under the feed table.
 221	Feed table down button disable error	First Station	The Feed Table Down button is pressed when the Feed Table Lower Limit switch is on. The feed table cannot be lowered any more. Check that there is nothing under the feed table.

Error Code	Description	Station	Cause and Solution
 230	Sheet sliding error	First Station	The sheets are fed during the feed standby, and the feed timing sensor turned on. Press the Emergency Stop button before removing the jammed sheets. If the same error still occurs, the separation air and the blower air are too strong and may push the sheet. Lower each pressure.
 231	Feed section jam	First Station	The feed timing sensor remains on for a certain period of time. A jam has occurred in the feed section. Press the Emergency Stop button before removing the jammed sheet. If the jam is occurred frequently, see page 197.
 232	Feed section jam (When the machine starts running.)	First Station	The feed timing sensor is turned on when the machine starts running. Press the Emergency Stop button before removing the jammed sheets.
 233	Double feed detect impossible	First Station	The double feed detect photoelectric sensor cannot detect because the sheet is too thick. If the double feed detect photoelectric sensor is dirty, clean it. Set the brightness of the sensor to  . If the same error still occurs, use the ultrasonic sensor  instead. (Only for the Full Auto)
 235	Misfeeding	First Station	Misfeeding has occurred. After the sheet has been fed, the feed timing sensor was not turned on within a certain period of time. 1. If there is no sheet on the feed table, load the sheets. 2. If the misfeeding occurs even though there are sheets loaded on the feed table, see page 190.
 236	Feed rotor up error	First Station	The machine stopped because the Feed Table Overlimit switch is turned on while the feed table was rising. (Normally, the feed table does not reach the overlimit switch. The feed table stops at the height where the feed table height detect sensor detects the sheet. Lower the position of the feed table height sensor. (See page 139.) Check if the Feed Table Overlimit Switch is not broken and if you can hear the click when you push the rotor up by finger. (See page 252.)
 237	Double feeding	First Station	Double feeding has occurred. Press the Emergency Stop button before removing the jammed sheets. If the double feeding is occurred frequently, see page 188.
238	Double feed detect photoelectric sensor error	First Station	The double feed detect photoelectric sensor remains on when the Power switch was turned on, or the sensor is dirty. See the page 229 and correct the cause of the problem.
 239	Jam at the double feed detect ultrasonic sensor (When the machine starts running)	First Station	The double feed detect ultrasonic sensor is turned on when the machine starts running. Press the Emergency Stop button before removing the jammed sheets.

Error Code	Description	Station	Cause and Solution
 240	Feed timing sensor error	First Station	The feed timing sensor was not turned on even though the sheet has been fed.
 243	Double feed detect photoelectric sensor no response	First Station	The B24 double feed detect photoelectric sensor is not activated during the test feed. Adjust the position of table guide so that the sheet passes through the sensor.
 251	Remote controller emergency stop	First Station	The Emergency Stop button on the remote controller has been pressed. Turn the Emergency Stop button clockwise to release it.
431	KTU Infeed section jam	KTU-40	After the sheet is delivered from the second station, the infeed section sensor does not turn on within a certain period of time. The sheet is not fed into the KTU-40 smoothly. Press the Emergency Stop button before removing the jammed sheets. See the user's manual for the KTU-40 for details.
432	KTU Infeed section jam	KTU-40	The infeed section sensor on the KTU-40 remains on for a certain period of time. A jam has occurred in the infeed section of the KTU-40. Press the Emergency Stop button before removing the jammed sheets. See the user's manual for the KTU-40 for details.
433	KTU fold section jam	KTU-40	After the infeed sensor has detected the sheet, the offset sensor did not turn on within a certain period of time. - A jam has occurred in the fold section of the KTU-40. Press the Emergency Stop button before removing the jammed sheets. See the user's manual for the KTU-40 for details. - The sheet has not been detected since the bad position of the offset sensor. Install the sensor over the sheet path.
434	KTU offset section jam	KTU-40	The offset sensor on the KTU-40 remains on for a certain period of time. A jam has occurred in the offset section of the KTU-40. Press the Emergency Stop button before removing the jammed sheets. See the user's manual for the KTU-40 for details.
435	KTU knife motion error	KTU-40	A sheet arrived at the infeed section before the fold knife returns to the home position. - Check that the feed interval is not too short. - Check that the knife brake switch is not turned off. See the user's manual for the KTU-40 for details.
 450	KTU knife unit emergency stop	KTU-40	The Emergency Stop button on the KTU-40 has been pressed. Turn the Emergency Stop button clockwise to release it.

Error Code	Description	Station	Cause and Solution
 451	KTU knife unit cover open	KTU-40	The cover of the KTU-40 has been opened. Close it.
 461	Sheet did not arrive at the infeed section	MKS-32	See Chapter4 of the user's manual for the MKS-32 for details.
 462	Sheet remains at the infeed section	MKS-32	See Chapter4 of the user's manual for the MKS-32 for details.
 463	Sheet did not reach the knife section	MKS-32	See Chapter4 of the user's manual for the MKS-32 for details.
 464	Sheet remains at the knife section	MKS-32	See Chapter4 of the user's manual for the MKS-32 for details.
 465	Sheet did not reach the vertical stacking section	MKS-32	See Chapter4 of the user's manual for the MKS-32 for details.
 466	Sheet remains at the vertical stacking section	MKS-32	See Chapter4 of the user's manual for the MKS-32 for details.
 467	Knife unit knife home position error	MKS-32	See Chapter4 of the user's manual for the MKS-32 for details.
 470	Knife unit emergency stop	MKS-32	See Chapter4 of the user's manual for the MKS-32 for details.
 471	Knife unit remote controller emergency stop	MKS-32	See Chapter4 of the user's manual for the MKS-32 for details.

Error Code	Description	Station	Cause and Solution
 472	Knife unit front transport cover open	MKS-32	See Chapter4 of the user's manual for the MKS-32 for details.
 473	Knife unit rear transport cover open	MKS-32	See Chapter4 of the user's manual for the MKS-32 for details.
 474	Knife unit infeed section roller abnormal open (front)	MKS-32	See Chapter4 of the user's manual for the MKS-32 for details.
 500	Downstream device connection error	First Station	Check that the connector of the downstream device is connected correctly.
 510	Downstream device error	First Station	The error has occurred on the downstream device. Correct the problem on the downstream device.
 550	Standing delivery error	First Station	- A jam has occurred in the ED-40/ED-40S standing delivery. Refer to the user's manual for the ED-40/ED-40S and clear the jam. - The transport motor on the ED-40/ED-40S is overloaded. Check that there is no sheet jam. Remove the sheet if the sheet is jammed. If this error occurs frequently, call your local dealer.
 560	PSX-56 error	First Station	The signal that forbids the start up of AF-406T6F is received from the PSX-56. Refer to the user's manual for the PSX-56 and correct the problem.
 651	PR-40S cover open	First Station	The cover of the PR-40S has been opened. Close it.

If an Error Code is Displayed

Error Code	Description	Station	Cause and Solution
Error codes 1000 through 3999 are system errors.			
1000 through 1089 First Station Main Motor Inverter Alarm			
1001	Inverter alarm(1) [oC] Overcurrent	First Station	If this error occurs frequently, call your local dealer.
1002	Inverter alarm (2) [GF] Ground fault	First Station	
1003	Inverter alarm (3) [CoF] Current offset fault	First Station	
1004	Inverter alarm (4) [ov] Overvoltage	First Station	
1005	Inverter alarm (5) [Uv1] Undervoltage	First Station	
1006	Inverter alarm (6) [Uv2] Control power supply voltage fault	First Station	
1007	Inverter alarm (7) [Uv3] Inrush prevention circuit fault	First Station	
1008	Inverter alarm (8) [PF] Main circuit voltage fault	First Station	
1009	Inverter alarm (9) [LF] Output phase loss	First Station	
1011	Inverter alarm (11) [oH] Heatsink overheat	First Station	Turn off the Power switch, wait 30 minutes, then turn it on again. If this error occurs frequently, call your local dealer.
1012	Inverter alarm (12) [oH1] Heatsink overheat	First Station	
1013	Inverter alarm (13) [oH3] Motor overheat alarm (PTC output)	First Station	
1014	Inverter alarm (14) [oH4] Motor overheat fault (PTC input)	First Station	
1015	Inverter alarm (15) [rH] Braking resistor overheat	First Station	
1016	Inverter alarm (16) [rr] Dynamic braking transistor fault	First Station	If this error occurs frequently, call your local dealer.
1017	Inverter alarm (17) [oL1] Motor overload	First Station	
1018	Inverter alarm (18) [oL2] Inverter overload	First Station	
1019	Inverter alarm (19) [oL3] Overtorque detection 1	First Station	
1020	Inverter alarm (20) [oL4] Overtorque detection 2	First Station	
1021	Inverter alarm (21) [oL5] Mechanical weakening detection 1	First Station	
1023	Inverter alarm (23) [UL3] Undertorque detection 1	First Station	

Error Code	Description	Station	Cause and Solution
1024	Inverter alarm (24) [UL4] Undertorque detection 2	First Station	If this error occurs frequently, call your local dealer.
1025	Inverter alarm (25) [UL5] Mechanical weakening detection 2	First Station	
1030	Inverter alarm (30) [CF] Control fault	First Station	
1031	Inverter alarm (31) [FbL] PID feedback loss	First Station	
1032	Inverter alarm (32) [FbH] Excessive PID feedback	First Station	
1041	Inverter alarm (41) [oPr] External digital operator connection fault	First Station	
1042	Inverter alarm (42) [CE] MEMOBUS communication error	First Station	
1044	Inverter alarm (44) [SEr] Too many speed search restarts	First Station	
1045	Inverter alarm (45) [Err] EEPROM write error	First Station	
1052	Inverter alarm (52) [CPF02] A/D conversion error	First Station	
1053	Inverter alarm (53) [CPF03] PWM data error	First Station	
1054	Inverter alarm (54) [CPF06] EEPROM data error	First Station	
1055	Inverter alarm (55) [CPF07] Terminal board communications error	First Station	
1056	Inverter alarm (56) [CPF08] EEPROM serial communication fault	First Station	
1057	Inverter alarm (57) [CPF11] RAM fault	First Station	
1058	Inverter alarm (58) [CPF12] FLASH memory fault	First Station	
1059	Inverter alarm (59) [CPF13] Watchdog circuit exception	First Station	
1060	Inverter alarm (60) [CPF14] Control circuit fault	First Station	
1061	Inverter alarm (61) [CPF16] Clock fault	First Station	
1062	Inverter alarm (62) [CPF17] Timing fault	First Station	
1063	Inverter alarm (63) [CPF18] Control circuit fault	First Station	

Error Code	Description	Station	Cause and Solution
1064	Inverter alarm (64) [CPF19] Control circuit fault	First Station	If this error occurs frequently, call your local dealer.
1065	Inverter alarm (65) [CPF21] Watchdog circuit exception, Clock error	First Station	
1066	Inverter alarm (66) [CPF22] A/D conversion error	First Station	
1067	Inverter alarm (67) [CPF23] PWM feedback fault	First Station	
1068	Inverter alarm (68) [CPF24] Drive capacity signal fault	First Station	
1078	Inverter alarm (78) Inverter no response	First Station	
1079	Inverter alarm (79) Inverter communication error	First Station	
1080	Inverter alarm (99) No error code for inverter	First Station	
1210	Upper Camera Judgement Error (Optional IC-40S)	First Station	- A scanned image and the master image do not match. Reload the sheets or register the master image again. - The motor is started while the camera is working. Take some time before starting the motor after starting the camera by pressing the "Run" button or registering the master image. - The camera is started by pressing the "Run" button or the sensor setup has been made while the motor is starting. Run the camera or set up the sensor when the motor is stopped.
1211	Upper Camera Trigger Error (Optional IC-40S)	First Station	The judgement is not processed by the time the delivery sensor on the first station turns on. Check that the trigger sensor is set correctly.
1212	Lower Camera Judgement Error (Optional IC-40S)	First Station	- A scanned image and the master image do not match. Reload the sheets or register the master image again. - The motor is started while the camera is working. Take some time before starting the motor after starting the camera by pressing the "Run" button or registering the master image. - The camera is started by pressing the "Run" button or the sensor setup has been made while the motor is starting. Run the camera or set up the sensor when the motor is stopped.
1213	Lower Camera Trigger Error	First Station	The judgement is not processed by the time the delivery sensor on the first station turns on. Check that the trigger sensor is set correctly.
1700	Inverter error (KTU main motor)	KTU-40	Inverter alarm on the KTU-40. If this error occurs frequently, call your local dealer.
1800	Inverter error (MKS-32 main motor)	MKS-32	Inverter alarm on the MKS-32. Chapter4 of the user's manual for the MKS-32 for details.
1997	Interlock contactor deposition detection	First Station	Turn off the Power switch, wait at least 5 seconds, then turn it on again. If this error occurs frequently, call your local dealer.
1999	Interlock line cutoff error	First Station	

Error Code	Description	Station	Cause and Solution
2000 through 2089 Inverter Alarm for Feed Table Up/Down Motor			
2001	Inverter alarm(1) [oC] Overcurrent	First Station	If this error occurs frequently, call your local dealer.
2002	Inverter alarm (2) [GF] Ground fault	First Station	
2003	Inverter alarm (3) [CoF] Current offset fault	First Station	
2004	Inverter alarm (4) [ov] Overvoltage	First Station	
2005	Inverter alarm (5) [Uv1] Undervoltage	First Station	
2006	Inverter alarm (6) [Uv2] Control power supply voltage fault	First Station	
2007	Inverter alarm (7) [Uv3] Inrush prevention circuit fault	First Station	
2008	Inverter alarm (8) [PF] Main circuit voltage fault	First Station	
2009	Inverter alarm (9) [LF] Output phase loss	First Station	
2011	Inverter alarm (11) [oH] Heatsink overheat	First Station	Turn off the Power switch, wait 30 minutes, then turn it on again. If this error occurs frequently, call your local dealer.
2012	Inverter alarm (12) [oH1] Heatsink overheat	First Station	
2013	Inverter alarm (13) Motor overheat alarm (PTC Output)	First Station	
2014	Inverter alarm (14) Motor overheat fault (PTC Input)	First Station	
2015	Inverter alarm (15) [rH] Braking resistor overheat	First Station	
2016	Inverter alarm (16) [rr] Dynamic braking transistor fault	First Station	If this error occurs frequently, call your local dealer.
2017	Inverter alarm (17) [oL1] Motor overload	First Station	
2018	Inverter alarm (18) [oL2] Inverter overload	First Station	
2019	Inverter alarm (19) [oL3] Overtorque detection 1	First Station	
2020	Inverter alarm (20) [oL4] Overtorque detection 2	First Station	
2021	Inverter alarm (21) [oL5] Mechanical weakening detection 1	First Station	
2023	Inverter alarm (23) [UL3] Undertorque detection 1	First Station	
2024	Inverter alarm (24) [UL4] Undertorque detection 2	First Station	

Error Code	Description	Station	Cause and Solution
2025	Inverter alarm (25) [UL5] Mechanical weakening detection 2	First Station	If this error occurs frequently, call your local dealer.
2030	Inverter alarm (30) [CF] Control fault	First Station	
2031	Inverter alarm (31) [FbL] PID feedback loss	First Station	
2032	Inverter alarm (32) [FbH] Excessive PID feedback	First Station	
2041	Inverter alarm (41) [oPr] External digital operator connection fault	First Station	
2042	Inverter alarm (42) [CE] MEMOBUS communication error	First Station	
2044	Inverter alarm (44) [SEr] Too many speed search restarts	First Station	
2045	Inverter alarm (45) [Err] EEPROM write error	First Station	
2052	Inverter alarm (52) [CPF02] A/D conversion error	First Station	
2053	Inverter alarm (53) [CPF03] PWM data error	First Station	
2054	Inverter alarm (54) [CPF06] EEPROM data error	First Station	
2055	Inverter alarm (55) [CPF07] Terminal board communications error	First Station	
2056	Inverter alarm (56) [CPF08] EEPROM serial communication fault	First Station	
2057	Inverter alarm (57) [CPF11] RAM fault	First Station	
2058	Inverter alarm (58) [CPF12] FLASH memory fault	First Station	
2059	Inverter alarm (59) [CPF13] Watchdog circuit exception	First Station	
2060	Inverter alarm (60) [CPF14] Control circuit fault	First Station	
2061	Inverter alarm (61) [CPF16] Clock fault	First Station	
2062	Inverter alarm (62) [CPF17] Timing fault	First Station	
2063	Inverter alarm (63) [CPF18] Control circuit fault	First Station	
2064	Inverter alarm (64) [CPF19] Control circuit fault	First Station	

Error Code	Description	Station	Cause and Solution
2065	Inverter alarm (65) [CPF21] Watchdog circuit exception, Clock error	First Station	If this error occurs frequently, call your local dealer.
2066	Inverter alarm (66) [CPF22] A/D conversion error	First Station	
2067	Inverter alarm (67) [CPF23] PWM feedback fault	First Station	
2068	Inverter alarm (68) [CPF24] Drive capacity signal fault	First Station	
2078	Inverter alarm (78) Inverter no response	First Station	
2079	Inverter alarm (79) Inverter communication error	First Station	
2080	Inverter alarm (99) No error code for inverter	First Station	
2200 through 2299	Feed table state machine event queue full error	First Station	Turn off the Power switch, wait at least 5 seconds, then turn it on again. If this error occurs frequently, call your local dealer.
2300 through 2399	Feed state machine event queue full error	First Station	Turn off the Power switch, wait at least 5 seconds, then turn it on again. If this error occurs frequently, call your local dealer.
2411	Preset pause timeout error	First Station	
2412	Feed timing error	First Station	It was time to start feeding the next sheet during feeding previous sheet. Lengthen the feed gap.
2413	Feed interval error	First Station	Turn off the Power switch, wait at least 5 seconds, then turn it on again. If this error occurs frequently, call your local dealer.
2471	Table rising time error	First Station	
2481	Feed table slow speed rising error	First Station	
2482	Feed table normal speed rising error	First Station	

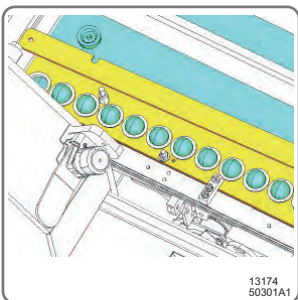
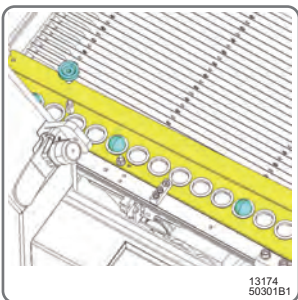
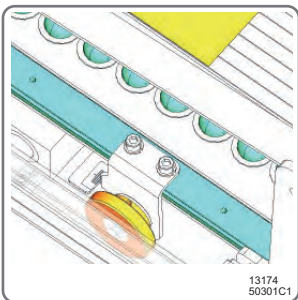
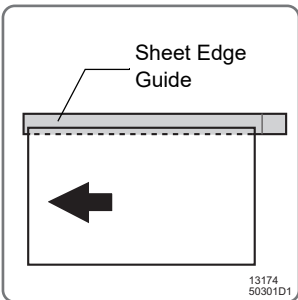
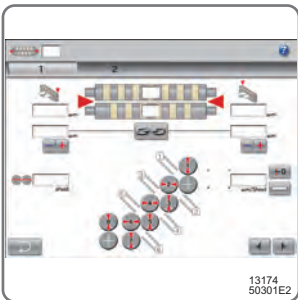
Error Code	Description	Station	Cause and Solution
Error codes 4000 through 4999 are errors concerning the changeover.			
4001	First station buckle chute 1 home positioning error	First Station	The first buckle chute stopper has not returned to the home position. Check that the buckle chute connector is properly connected. Check that nothing is preventing the first buckle chute stopper from moving to the home position.
4002	First station buckle chute 2 home positioning error	First Station	The second buckle chute stopper has not returned to the home position. Check that the buckle chute connector is properly connected. Check that nothing is preventing the second buckle chute stopper from moving to the home position.
4003	First station buckle chute 3 home positioning error	First Station	The third buckle chute stopper has not returned to the home position. Check that the buckle chute connector is properly connected. Check that nothing is preventing the third buckle chute stopper from moving to the home position.
4004	First station buckle chute 4 home positioning error	First Station	The fourth buckle chute stopper has not returned to the home position. Check that the buckle chute connector is properly connected. Check that nothing is preventing the fourth buckle chute stopper from moving to the home position.
4005	First station buckle chute 5 home positioning error	First Station	The fifth buckle chute stopper has not returned to the home position. Check that the buckle chute connector is properly connected. Check that nothing is preventing the fifth buckle chute stopper from moving to the home position.
4006	First station buckle chute 6 home positioning error	First Station	The sixth buckle chute stopper has not returned to the home position. Check that the buckle chute connector is properly connected. Check that nothing is preventing the sixth buckle chute stopper from moving to the home position.
4007	Register guide home positioning error	First Station	The register guide has not returned to the home position. Check that nothing is preventing the register guide from moving to the home position.
4008	Table guide home positioning error (Only for the Full Auto)	First Station	The table guide has not returned to the home position. Check that nothing is preventing the table guide from moving to the home position.
4009	Scoring rollers adjusting assembly home positioning error (Only for the Full Auto)	First Station	The scoring roller position aligner has not returned to the home position. Check that nothing is preventing the aligner from moving to the home position.
4011	First station buckle chute 7 home positioning error	First Station	The seventh buckle chute stopper has not returned to the home position. Check that the buckle chute connector is properly connected. Check that nothing is preventing the seventh buckle chute stopper from moving to the home position.
4012	First station buckle chute 8 home positioning error	First Station	The eighth buckle chute stopper has not returned to the home position. Check that the buckle chute connector is properly connected. Check that nothing is preventing the eighth buckle chute stopper from moving to the home position.

Error Code	Description	Station	Cause and Solution
Error codes 7000 through 7999 are communication errors.			
7000	Main control board initial communication error	Panel	Turn off the Power switch, wait at least 5 seconds, then turn it on again. If this error occurs frequently, call your local dealer.
7022	Knife unit KTU control board communication error	First Station	
Error codes 8000 through 8999 are errors concerning the board.			
8000	Touch panel initializing time out error	Panel	If this error occurs frequently, call your local dealer.
8001	Calendar error	Panel	The clock is displaying the wrong time. Enter the correct time using the Information screen. If this error occurs frequently, call your local dealer.
8020	Panel flash memory saving error	Panel	Data cannot be saved correctly to the compact flash memory on the panel control board. If this error occurs frequently, call your local dealer.
8021	Panel flash memory recall error	Panel	Data cannot be recalled correctly from the compact flash memory on the panel control board. If this error occurs frequently, call your local dealer.
8022	Previous job recall error	Panel	Data for job settings which were used before the Power switch was turned off was not recalled correctly. If this error occurs frequently, call your local dealer.
8023	Lack of memory error	Panel	The memory of the panel flash memory is running out. If this error occurs frequently, call your local dealer.

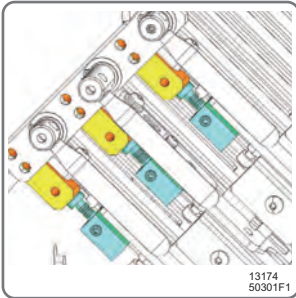
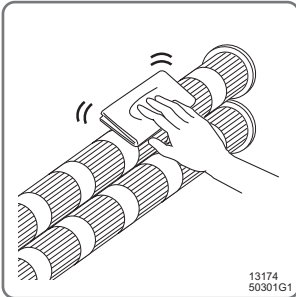
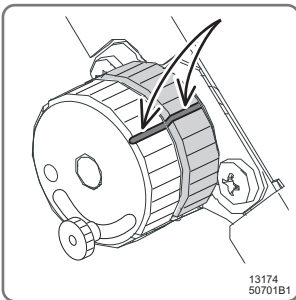
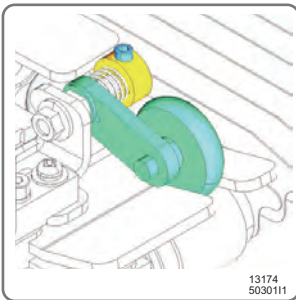
Error Code	Description	Station	Cause and Solution
8030	Counter range error (panel)	Panel	Counter data being saved on the compact flash is out of range. If this error occurs frequently, call your local dealer.
8031	Previous job recalling error	Panel	The job data being saved on the compact flash before the Power switch was turned off is out of range. If this error occurs frequently, call your local dealer.
8032	Job data range error	Panel	The job list being saved to the compact flash is out of range. Delete all the job data. Turn off the Power switch, wait at least 10 seconds, then turn it on again. If this error occurs frequently, call your local dealer.
8033	Factory setting data range error	Panel	The values for the factory default settings saved on the EEPROM board are out of range. If this error occurs frequently, call your local dealer.
8034	Panel setting range error	Panel	The values for the panel settings saved on the EEPROM board are out of range. If this error occurs frequently, call your local dealer.
8037	Parameter Setting Range Error	Panel	The service parameter settings saved on the EEPROM board are out of range. If this error occurs frequently, call your local dealer.
8038	Home position value range error	Panel	The home position values saved on the EEPROM board are out of range. If this error occurs frequently, call your local dealer.
8039	Administrator setting range error	Panel	The values for the administrator settings saved on the EEPROM board are out of range. If this error occurs frequently, call your local dealer.
8040	Input signal enable/disable setting range error	Panel	The counter setting value saved on the EEPROM board are out of range. If this error occurs frequently, call your local dealer.
8045	Counter mismatch error	Panel	The values for the counter settings saved on the EEPROM board are out of range. If this error occurs frequently, call your local dealer.
8110	First Station EEPROM Board connecting error	Panel	A problem has occurred while data was being recalled from the EEPROM board. If this error occurs frequently, call your local dealer.
8111	First Station EEPROM Board recalling error	Panel	A problem has occurred while data was being recalled from the EEPROM board. If this error occurs frequently, call your local dealer.
8112	First Station EEPROM Board saving error	Panel	A problem has occurred while data was being saved to the EEPROM board. If this error occurs frequently, call your local dealer.
8701	Knife unit PRO24V trip detection	MKS-32	If this error occurs frequently, call your local dealer.
8800	First station main control board power thermal trip	First Station	The 24V protection for the control board was operated on the first station. If this error occurs frequently, call your local dealer.

Error Code	Description	Station	Cause and Solution
8801	First station main control board watchdog timer error	First Station	Turn off the Power switch, wait at least 5 seconds, then turn it on again. If this error occurs frequently, call your local dealer.
Error codes 9000 through 9999 are other errors.			
9997	First station main control board RS485 Transmitted buffer full	First Station	Turn off the Power switch, wait at least 5 seconds, then turn it on again. If this error occurs frequently, call your local dealer.

5-2-1 Skewed folding occurs in the first station

Check	Causes and Recovery	Page
☐ The sheet does not move up against the register guide, or the sheet hits the register guide too hard.	 - If the sheet does not move up against the register guide, increase the number of steel balls. - If the sheet hits the register guide too hard, reduce the number of steel balls or replace them with plastic ones.	90
☐ Too many transport balls are put on the register guide.	 - Reduce the number of transport balls.	90
☐ The register guide angle is not adjusted correctly.	 - If the first fold made by the first station is skewed, adjust the angle of the register guide in the first station.	142
☐ The width where the sheet edge guide overlaps the sheet is too wide.	 - Move the position of sheet edge guide to the far side to reduce the width of overlap part to 5 to 10 mm / 0.2" to 0.39" .	89
☐ The gap between the fold rollers is uneven.	 - Adjust the fold roller gap. Full Auto - Adjust using the Roller Gap Fine Adjustment screen Semi Auto - Adjust using the gap adjusting knob.	Full Auto: 150 Semi Auto: 153

5-2-1 Skewed folding occurs in the first station(continued)

Check	Causes and Recovery	Page
☐ The buckle chute is not installed properly. ☐ Sheet remains inside the buckle chutes.	 13174 50301F1 - Reinstall the buckle chute. - Especially, check the second, fourth and sixth buckle chutes. - Remove any sheets that remain inside the buckle chutes.	-
☐ The fold rollers are dirty. ☐ Sheet is winding around the fold rollers.	 13174 50301G1 - Clean the fold rollers. - Remove any sheets winding around the rollers.	221 -
☐ The buckle chute stopper is angled.	 13174 50701B1 - Turn the buckle chute stopper adjusting knob to set the fold roller and stopper parallel.	143
☐ The infeed section catch roller is pressing against the sheet too much.	 13174 5030111 - Set the strength of the infeed section catch roller to the standard position. - If the catch roller pressing against the sheet too much, the sheet is angled at the entrance of the register section and cannot align to the guide.	-

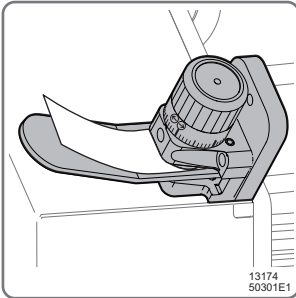
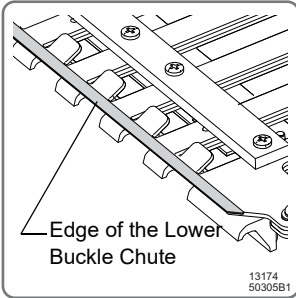
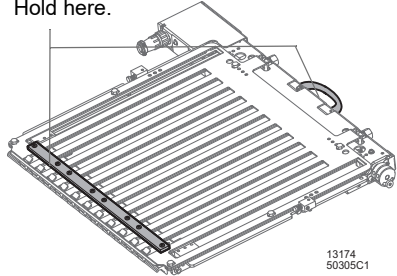
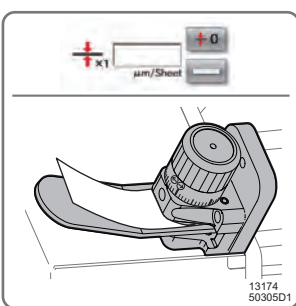
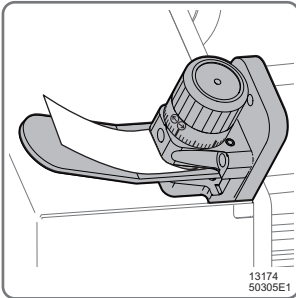
5-2-1 Skewed folding occurs in the first station(continued)

Check	Causes and Recovery	Page
☐ The end of the accordion-fold is skewed.	- If each buckle fold lengths is not even, the end fold could be skewed. Especially when processing the accordion-fold with a thick (coated) and narrow sheet using 8 buckle chutes, the fold length could be skewed on sixth, seventh, and eighth folds. - See the Section 5-2-2 and 5-2-5 to adjust each parts so that sheet are folded in correct order and length. - If skewed folding still occur, make all roller gaps narrower. In case of AF-408F/FL, enter the minus value into the correction value. However, if the gap is made too narrow, rollers may scratch sheets. See page 187 for details.	-

5-2-2 The fold position shifts by the same amount at the front and rear of the sheet in the first station

Check	Causes and Recovery	Page
☐ The positions of the buckle chute stoppers are not adjusted correctly.	 13174 50302A1 - Adjust the values for buckle chutes 1 through 6 using the Setup - First Station Guide and Buckle Chute screen. - Return each buckle to the home position before make the adjustments.	95
☐ The optional straight stopper is installed.	 13174 50302A1 - When the straight stopper is installed, the actual buckle chute fold length will be about 7 mm / 0.280" shorter than the value for the buckle chute on the Setup - Guide Buckle Chute screen for the first station. Adjust the position of the buckle chute stopper by changing the value for the buckle chute.	-

5-2-3 One of the folding lines is unstable

Check	Causes and Recovery	Page
☐ The roller pressure is too strong. Or, the roller pressure is too weak.	 13174 50301E1 - Adjust the roller gap correctly. Full Auto - All the roller gap can be increased or reduced at one time.	147
☐ The edge of the lower buckle chute is bent so that prevents the sheet from inserting.	 Edge of the Lower Buckle Chute 13174 50305B1 - Remove the buckle chute to check the edge of it. If the edge is bent, it must be replaced. Please call your local dealer. CAUTION When you hold the buckle chute, do not hold the edge of the lower buckle chute. If the part of the lower buckle chute is applied, it may be deformed. Hold here.  13174 50305C1	-
☐ The correct sheet is not inserted into the gap adjusting lever.	 13174 50305D1 - Insert the correct sheet into the gap adjusting lever. Full Auto - If the thickness of sheet is not measured correctly, the roller gap will not be adjusted correctly. Measure and set the sheet thickness again using the Roller Gap Fine Adjustment screen. - Check if the measured value using detector is correct. Standard sheet thickness is 80 μm.	Full Auto: 67 Semi Auto: 71
☐ The sheet thickness adjusting knob is turned incorrectly.	 13174 50305E1 - Return the knob to zero before you use the different sheet. Full Auto - Measure and set the sheet thickness again using the Roller Gap Fine Adjustment screen.	Full Auto: 147 Semi Auto: 152

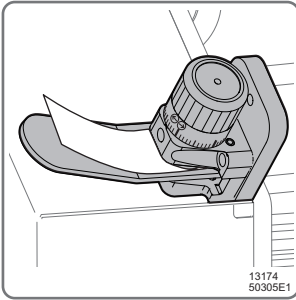
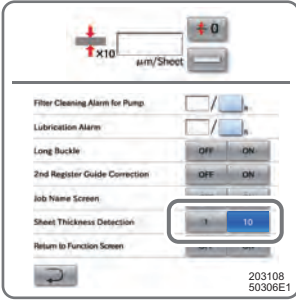
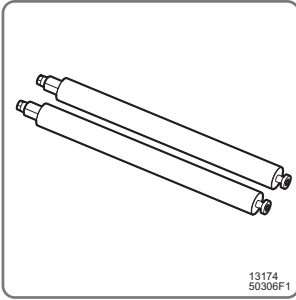
5-2-3 One of the folding lines is unstable (continued)

Check	Causes and Recovery	Page
☐ The sheet thickness has not been measured correctly.	Full Auto - The thickness of the thin or unstable sheet may not be measured correctly. Select "10" for the sheet thickness measuring mode on the Administrator - Administrator Setting screen. - Insert ten sheets into the thickness detector to measure the thickness.	60

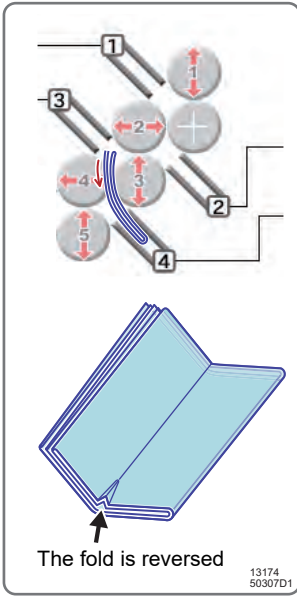
5-2-4 Sheets are wrinkled

Check	Causes and Recovery	Page
☐ The roller pressure just before the buckle chute is not correct.	- Adjust the roller gap. - If the double step folding or the Z shaped folding is occurred, see page 212.	147
☐ The sheet floats in the register guide section.	- Set the sheet holders so that they control the sheet.	89
☐ The roller gaps are too narrow.	- Increase the roller gaps where the folded sheet will pass.	147

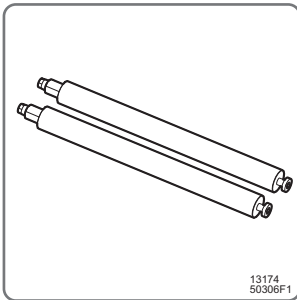
5-2-4 Sheets are wrinkled (continued)

Check	Causes and Recovery	Page
☐ The sheet thickness has not been measured correctly.	 13174 50305E1 - Return the knob to zero before you use the different sheet. Full Auto - Measure and set the sheet thickness again using the Roller Gap Fine Adjustment screen.	147
☐ The air is not pressed out correctly.	 203108 50306E1 Full Auto - If you insert just one sheet while the "10" is selected for the sheet thickness measuring mode, the roller gaps become too narrow so that the sheet gets wrinkled. Insert ten sheets into the thickness detector to measure the thickness again.	67
	 13174 50306F1 - If you press the sheet suddenly using the press roller unit, the sheet may be wrinkled. Replace the perforation shaft with the optional press roller. This pre-vents the sheet from getting wrinkled.	-

5-2-5 Only the edge of signature is folded incorrect.

Check	Causes and Recovery	Page
☐ The fold line and creasing line do not match.	- Adjust the position of the buckle chute stopper on second station to align them.	119
☐ The roller gaps are not set correctly.	 The diagram illustrates the roller assembly with five rollers numbered 1 to 5. Red arrows indicate the gaps between them: gap 1 between rollers 1 and 2, gap 2 between 2 and 3, gap 3 between 3 and 4, gap 4 between 4 and 5, and gap 5 between 5 and the next roller. Below the rollers, a blue sheet is shown with a fold line. An arrow points to the fold line with the text 'The fold is reversed'. The diagram is labeled with '13174 50307D1'. - When the roller gaps are too narrow, the sheet cannot pass move smoothly between the rollers and may be folded in reverse. Increase the roller gaps four or three and four for the amount of two sheets.	147

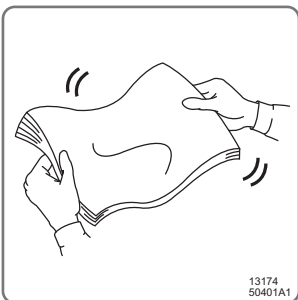
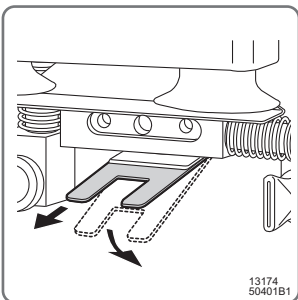
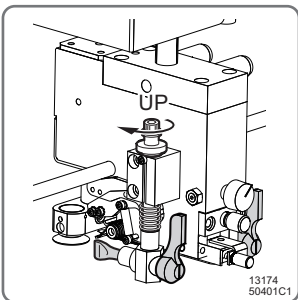
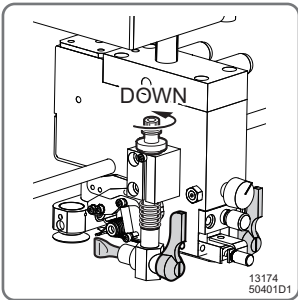
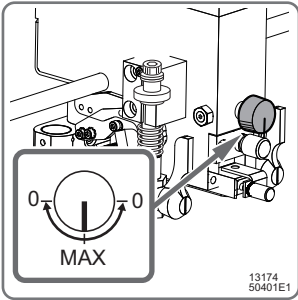
5-2-6 The folded signature is swelled.

Check	Causes and Recovery	Page
☐ The signature is not pressed.	 The diagram shows a press roller unit consisting of two parallel rollers. The diagram is labeled with '13174 50306F1'. - Replace the perforation shaft with the optional press roller. - Use the PR-40/PR40S Press Roller Unit as the downstream device.	-

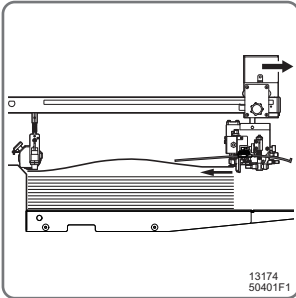
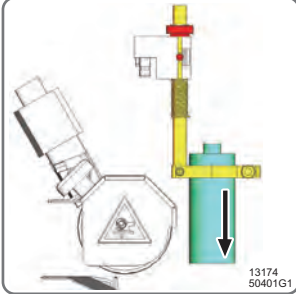
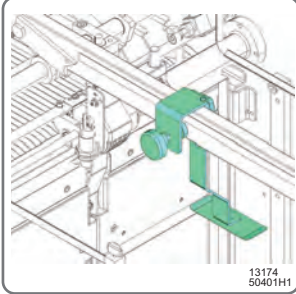
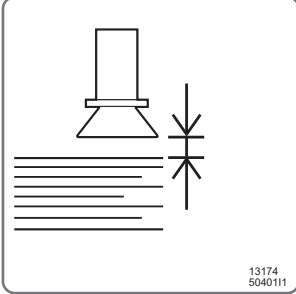
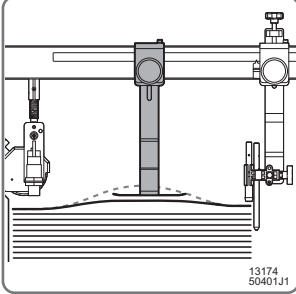
5-2-7 The Accordion-folded Sheet Is Marked By The Roller

Check	Causes and Recovery	Page
☐ Soft polyurethane foam rubber rollers are installed correctly. All of roller gaps are extremely made narrower.	13174 50211A1 - Gap for rollers, which mark sheet, should be made wider (the sixth, seventh, and eighth roller are most cases.) . Example: Make the gap double. - If the sheet width is narrow, consider the repeated patterns print. This problem could be cleared.	-

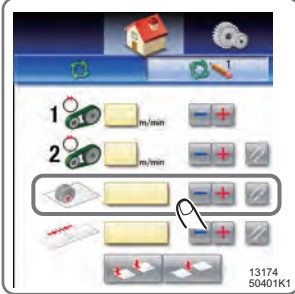
5-3-1 There is frequent double feeding

Check	Causes and Recovery	Page
☐ The sheets stick to each other.	 13174 50401A1 - Fan the sheets correctly using the suction cup height adjusting knob.	-
☐ The separator presses the sheet properly.	 13174 50401B1 - Make the grip area of the separator longer. - Set the separator at a sharper angle.	78
☐ The blower air is too strong.	 13174 50401C1 - If the air pressure is too strong, this can cause double feeding. - Decrease the amount of blower air. - Set the blower air outlet in a higher position.	80
☐ The blower air is too weak.	 13174 50401D1 - If the suction head moves down while the sheets are not separated enough, this can cause double feeding. - Increase the amount of blower air. - Set the blower air outlet in a lower position.  Additional Information Increase the feed interval on the Main - Condition screen first, and then decrease it gradually.	80
☐ The separation air is too strong.	 13174 50401E1 - If the sheet is pushed to the rotor side, it may cause double feeding. - Decrease the amount of blower air.	80

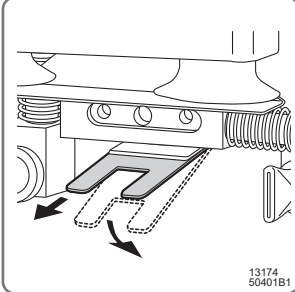
5-3-1 There is frequent double feeding (continued)

Check	Causes and Recovery	Page
☐ The separation air does not reach the feed rotor.	 - If the sheet is thin and the tail edge is reversed, it may cause double feeding. - Move the suction head a bit to the rear.	-
☐ The sheet is too close to the feed rotor.	 - Adjust the feed table height detect sensor so that the feed table is lowered.	139
☐ The sheet which are blown at the tail of feed rotor is swelled.	 - Install a sheet hold-down plate.	86
☐ The sucker vacuums more than two sheets.	 - Increase the distance between the sucker and the sheets. If the sheets are not separated by the blower air enough, the sucker vacuums more than two sheets. - Reduce the vacuum using the vacuum regulator knob.	79
☐ The sheets are swelled because of the side air.	 - If the sheets are swelled by the air, it may cause double feeding. Install a sheet hold-down plate. It is useful when the sheet width is narrow and the suction head is not used	86

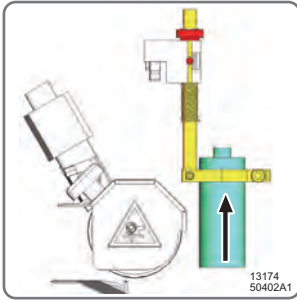
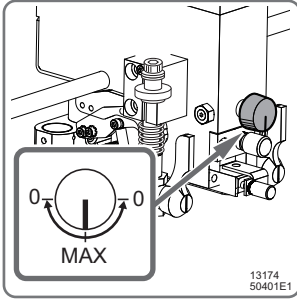
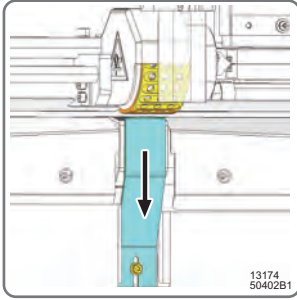
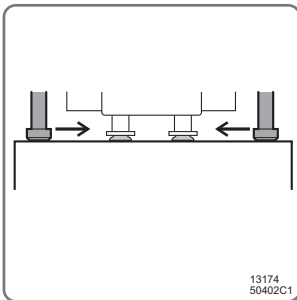
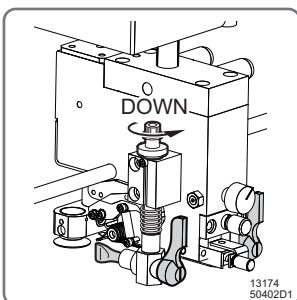
5-3-1 There is frequent double feeding (continued)

Check	Causes and Recovery	Page
☐ The suction length is too long.	 - Decrease the suction length using the Main - Condition screen.	126
☐ The sensor detects the double feeding when the double feeding is not occurred. (Photoelectric Detection)	 - Set the sensitivity of the double feed detection lower using the Main - Condition screen. Full Auto - If the same error still occurs, use the ultra-sonic sensor instead.	127

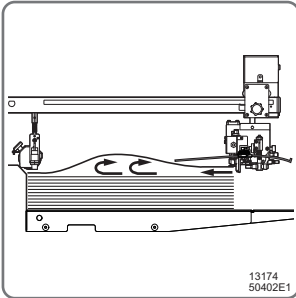
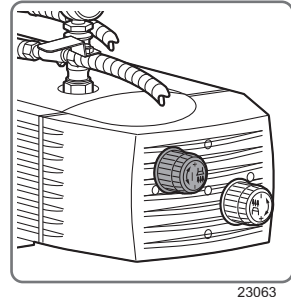
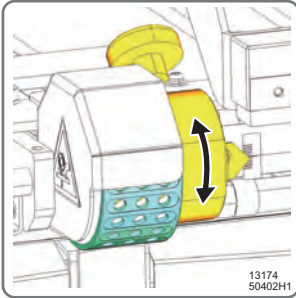
5-3-2 There is frequent misfeeding

Check	Causes and Recovery	Page
☐ The separator presses the sheet too much.	 - Make the grip area of the separator shorter. - Set the separator at a shallower angle.	78

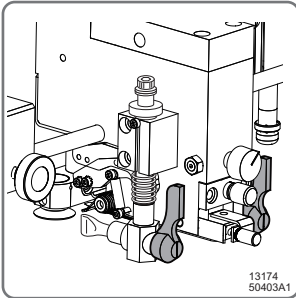
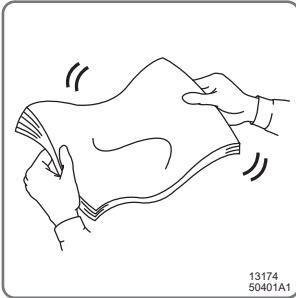
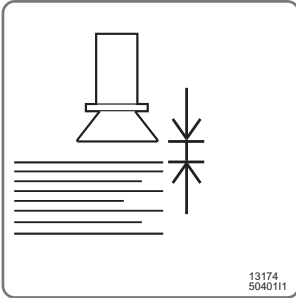
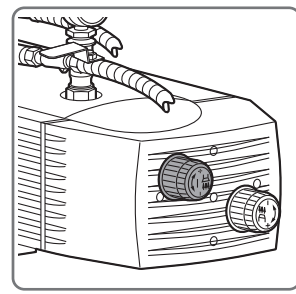
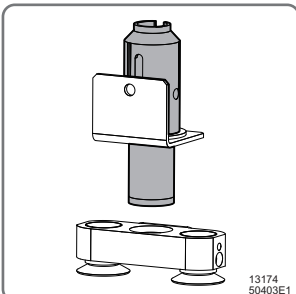
5-3-2 There is frequent misfeeding (continued)

Check	Causes and Recovery	Page
☐ The sheet is too far to the feed rotor.	 - Adjust the feed table height detect sensor so that the feed table is raised.	139
	 - Increase the separation air pressure so that a sheet which is picked up by the vacuum piston touches the feed rotor.	80
☐ The position of the push-out prevention plate is too high.	 - Place the push-out prevention plate in a lower position.	140
☐ The distance between the sheet hold-down bars is too wide.	 - Reduce the distance between the sheet hold-down bars.	78
☐ The position of the blower air outlet is too high.	 - Set the blower air outlet in a lower position.	80

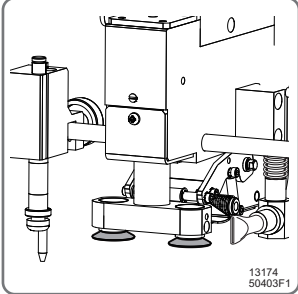
5-3-2 There is frequent misfeeding (continued)

Check	Causes and Recovery	Page
☐ The separation air does not reach the feed rotor.	 13174 50402E1  13174 50402F1 - Adjust the position and length of the air guide. - Increase the feed interval on the Main - Condition screen. This takes more time for the separation air to reach the feed rotor.	81 126
☐ The vacuum is too weak.	 23063 - Increase the vacuum using the vacuum regulator knob.	79
☐ The feed rotor does not vacuum the sheet correctly.	 13174 50402H1 - Adjust the suction point of the feed rotor. - Raise the stacked sheets using a wedge so that the left end (near the feed rotor) is higher than the right end (near the suction head).	141
☐ The sucker does not pick up the sheet correctly.	- See the next page.	

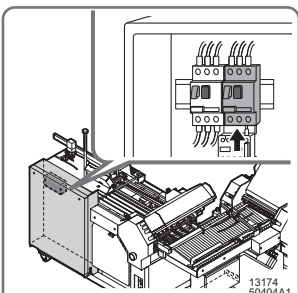
5-3-3 The suction head does not pick up the sheet

Check	Causes and Recovery	Page
☐ The blower air is too weak.	 13174 50403A1 - The sheets may not be fanned correctly. Increase the blower air using the blower air pressure adjusting knob.	80
☐ The sheets stick each other because of excess ink or incorrect trimming.	 13174 50401A1 - Fan the sheets correctly and reload them on the feed table.	-
☐ The distance between the vacuum piston and the sheets is too large.	 13174 5040111 - Reduce the distance using the vacuum piston height adjusting knob. (Standard setting: 1 mm or 0.04")	79
☐ The vacuum is too weak.	 23063 50403D4 - Increase the vacuum using the vacuum regulator knob. - Check if the suction air On/Off lever of the pump is turned so that the vacuum can pass through the hose.	79 83
☐ The cylinder of the suction head is clogged with paper dust.	 13174 50403E1 - Disassemble and clean the vacuum piston.	219

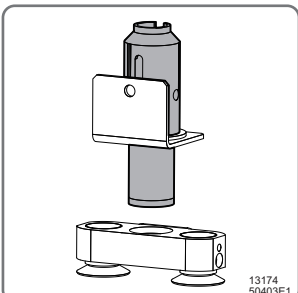
5-3-3 The suction head does not pick up the sheet (continued)

Check	Causes and Recovery	Page
☐ A suction cup is worn out.	 13174 50403F1 - Replace it with a new suction cup. - For thick sheets, use a thick suction cup.	-

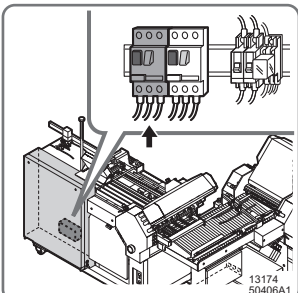
5-3-4 The feed rotor does not rotate.

Check	Causes and Recovery	Page
☐ The main motor circuit breaker (Q11) is switched off.	 13174 50404A1 - Check if the breakers are not tripped.	230

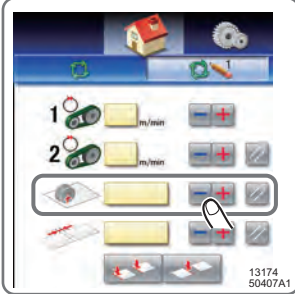
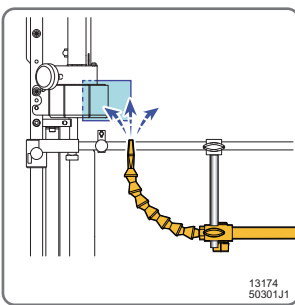
5-3-5 The vacuum piston moves slowly

Check	Causes and Recovery	Page
☐ The vacuum piston is sticking.	 13174 50403E1 - Disassemble and clean the vacuum piston. (Do not over-tighten the piston set screw.)	219

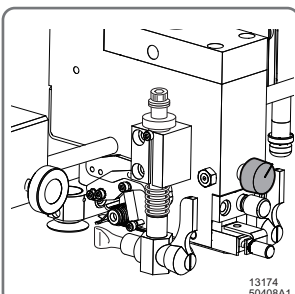
5-3-6 The feed table does not move up and down

Check	Causes and Recovery	Page
☐ The feed table motor circuit breaker (Q20) is switched off.	 13174 50406A1 - Check if the breakers are not tripped.	230

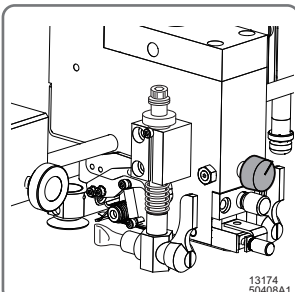
5-3-7 The tail edge of the sheet moves

Check	Causes and Recovery	Page
☐ The suction length is too short.	 13174 50407A1 - Increase the suction length using the Main - Condition screen.	126
☐ The position of the side air is not correct.	 13174 50301J1 - For example, soon after the sheet (width 50 mm x length 60 mm / 1.97" x 3.94") is separated from the feed rotor, the sheet may be pushed and angled against the transport side by the side air. Adjust the position of side air nozzle so that the air blows from the side to the tail of the sheet.	

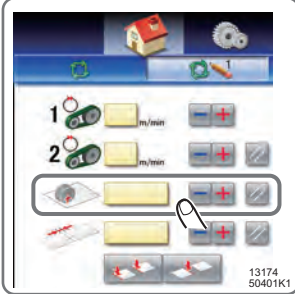
5-3-8 The machine will not feed automatically

Check	Causes and Recovery	Page
☐ The separation air is too weak.	 13174 50408A1 - First, set the separation air pressure to zero. Then, increase the air pressure gradually until the machine will feed automatically.	80

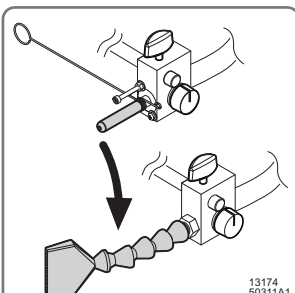
5-3-9 The sheets are fed even though the feeding is not started yet

Check	Causes and Recovery	Page
☐ The blower air or the separation air is too strong.	 13174 50408A1 - If the separation air or the blower air are too strong, the air pushes the sheets and the sheets may be sliding in. Decrease the amount of the air.	80

5-3-10 Small sheets are fed continuously

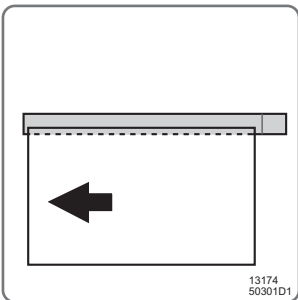
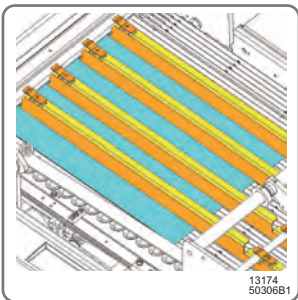
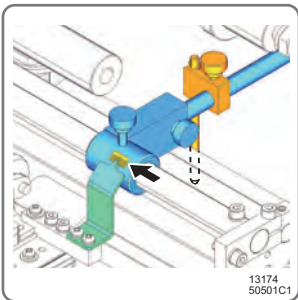
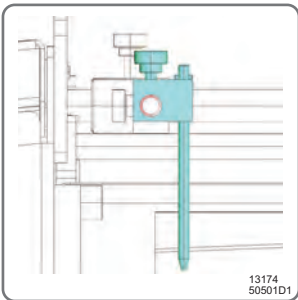
Check	Causes and Recovery	Page
☐ The suction length is not correct	 13174 50401K1 - If the suction length is not correct, the next sheet may be vacuumed. Decrease the suction length.	126

5-3-11 The feed table is raised slowly

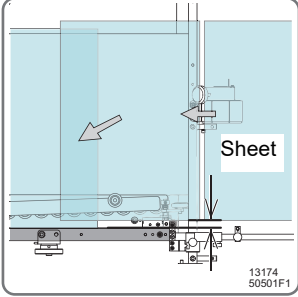
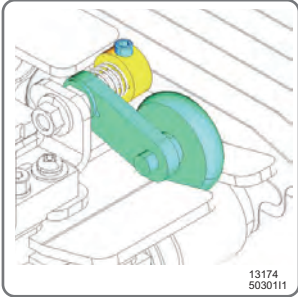
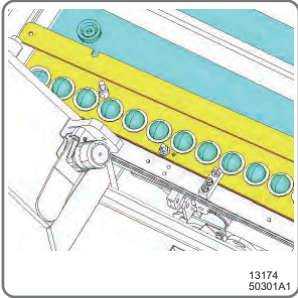
Check	Causes and Recovery	Page
☐ Sheets are small and the feeler wire of the side air nozzle is too close to the feed table height sensor.	 13174 50311A1 - The feed table height sensor is activated by the feeler wire and it does not detect the top of stack properly. Replace the side air nozzle with the swivel nozzle type that is supplied with the machine.	85

5-4-1 The sheet jams occurs frequently on the register guide section.

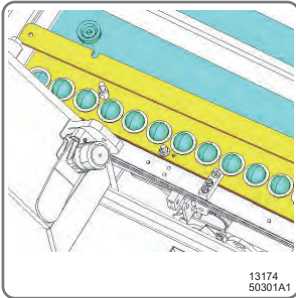
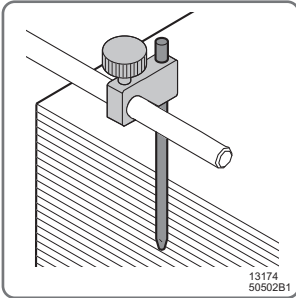
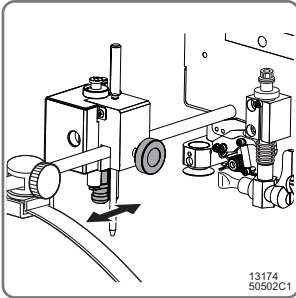
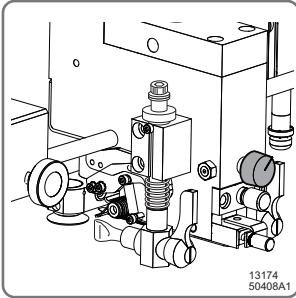
If the feed section jam (error code 231 or 232) occurs frequently, check the list below as well.

Check	Causes and Recovery		Page
☐ The sheet edge hits the side lay table while being transported.		- Adjust the sheet edge guide at the sheet edge.	89
☐ The sheet is floated while being transported.		- Set the sheet holders to match the sheet width.	89
☐ The feed scale pin is pushing against the edge of the stack.		- Check that the position of the feed scale pin is correct by checking the scale.	88
☐ The feed scale pin is angled.		- Retighten the locking screw so that the feed scale pin becomes vertical. - When you replace the register guide with the different length one, make sure to lock the feed scale pin vertically.	-
☐ The register guide is moved too much to the rear.		- Check that the register guide is set correctly to match the sheet.	-

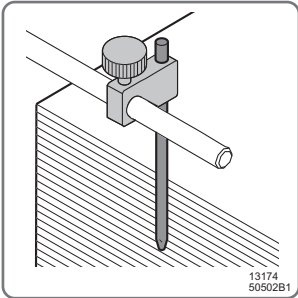
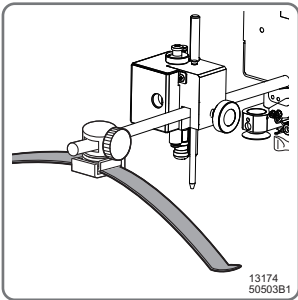
5-4-1 The sheet jams occurs frequently on the register guide section.(continued)

Check	Causes and Recovery	Page
☐ The leading edge of the sheet is hitting against the entrance of the register guide.	 13174 50501F1 - Change the position of the table guide by moving it to the far side.  Additional Information For the normal setting, the guide is adjusted so that the distance between the register guide and the operator side of the sheet becomes 5 mm. The sheet is transported to the register guide while aligning against the operator side.	-
☐ The infeed section catch roller is not pressing against the sheet.	 13174 5030111 - Check that the infeed section sheet holding roller is not lifted. The locking screw should come to the top.	-
☐ The transport balls are not set properly.	 13174 50301A1 - Place the correct type and number of transport balls in the register guide for the first station so that the sheet is transported smoothly.	90

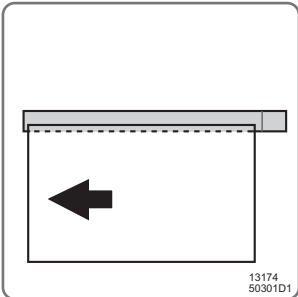
5-4-2 The sheet does not move up against the register guide, or hits the register guide too hard

Check	Causes and Recovery	Page
☐ The transport balls are not set properly.	 13174 50301A1 - If the sheet hits the register guide too hard, reduce the number of steel balls or replace them with plastic ones. - If the sheet does not move up against the register guide, increase the number of steel balls.	90
☐ The table position is set incorrectly.	 13174 50502B1 - Check that the feed scale pin just touches the stack. If necessary, adjust the position of the table guide by turning the feed table hand-wheel.	88
☐ The positions of the sheet hold-down bars are set incorrectly.	 13174 50502C1 - Adjust the positions of the sheet hold-down bars depending on the sheet type.	78
☐ The separation air is too weak. Or, the sheets are not fanned correctly.	 13174 50408A1 - Fan the sheets correctly, and increase the separation air pressure.	80

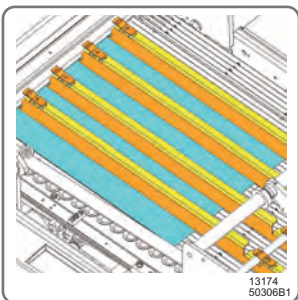
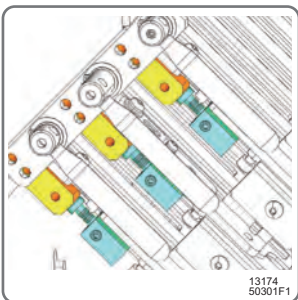
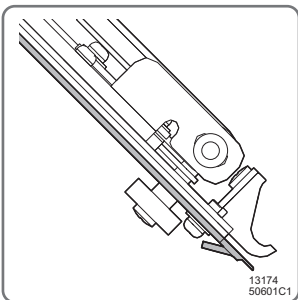
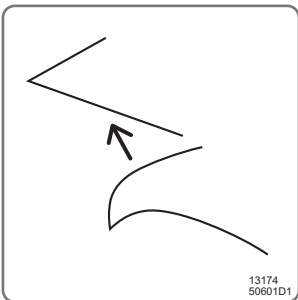
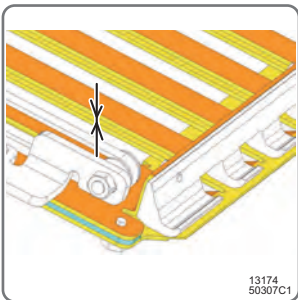
5-4-3 Large size sheets are not fed straight

Check	Causes and Recovery	Page
☐ The feed scale pin is pushing against the edge of the stack.	 - Adjust the position of the table guide by turning the feed table handwheel so that there is a space of 2 to 3 mm / 0.08" to 0.12" between the feed scale pin and the stack.	88
☐ The position of the air guide is not properly.	 - Adjust the length and the position of the air guide.	81

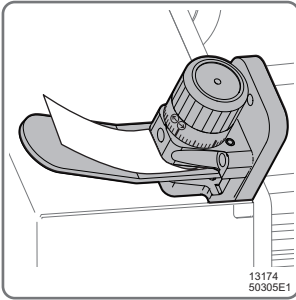
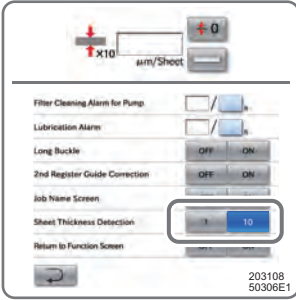
5-4-4 The sheet is angled at register guide

Check	Causes and Recovery	Page
☐ The width where the sheet edge guide overlaps the sheet is too wide.	 - Move the position of sheet edge guide to the far side to reduce the width of overlap part to 5 to 10 mm / 0.2" to 0.39".	89

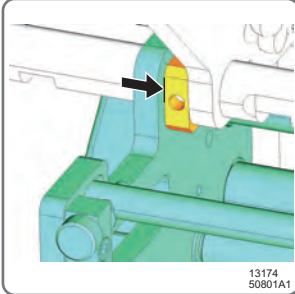
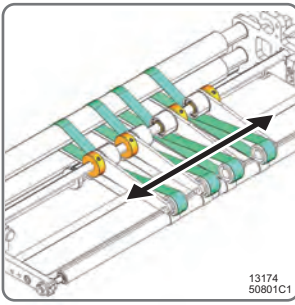
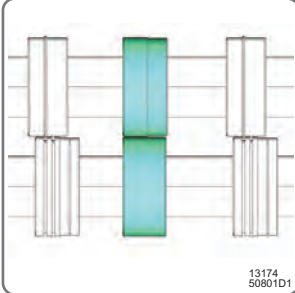
5-5-1 The sheet does not enter the buckle chute

Check	Causes and Recovery	Page
☐ The sheet floats in the register guide section.	 - Set the sheet holders so that they control the sheet.	89
☐ The buckle chute is not installed properly.	 - Reinstall the buckle chute.	-
☐ The buckle chute gate is not extended enough.	 - Extend the buckle chute gate.	144
☐ The sheet is curled.	 - Flatten out the sheets.	-
☐ The gap for the buckle chute is too narrow.	 - If the gap for the buckle chute is narrow, use the one with wider gap.	-

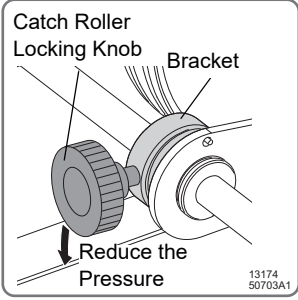
5-5-2 The sheet remains in the buckle chute.

Check	Causes and Recovery	Page
☐ The sheet thickness adjusting knob is turned incorrectly.	 13174 50305E1 - Return the knob to zero before you use the different sheet. Full Auto - Measure and set the sheet thickness again using the Roller Gap Fine Adjustment screen.	149
☐ The roller gaps are too wide.	 203108 50306E1 Full Auto - If you insert ten sheets while the "1" is selected for the sheet thickness measuring mode, the roller gaps become too wide. Insert just one sheet into the thickness detector to measure the thickness again. - Or, select "10" for the sheet thickness measuring mode on the Administrator - Administrator Setting screen to calculate the average.	67
☐ The buckle chute stoppers are not positioned properly.	 13174 50302A1 - If the position of the buckle chute stopper is too far, the sheet may stop inside the buckle chute. Check if the buckle chute stopper is positioned correctly. - If the value on the screen and the actual position is different, send all of the parts to the home positions before doing the changeover.	95

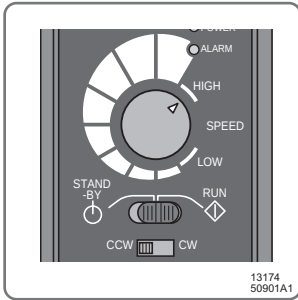
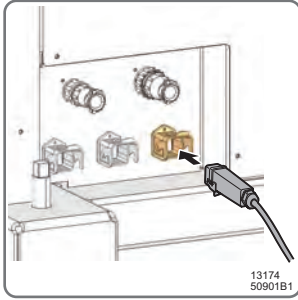
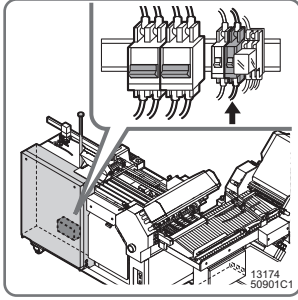
5-6-1 The sheet jam has occurred in the delivery section.

Check	Causes and Recovery	Page
☐ The delivery belt unit is not installed properly.	 13174 50801A1 - Slide the delivery belt unit until it stops. - The drive shaft of the delivery belt unit is hexagonal. Turn the handwheel if the shaft does not fit.	102
☐ The delivery belt unit is not positioned properly.	 13174 50801C1 - If the delivery belt unit is not positioned properly, the sheet may droop down and hit against the guide plate. Adjust the belt positions so that the belts transport the sheet smoothly.	104
☐ The drive rollers are not installed properly.	 13174 50801D1 - Install a drive roller between the scoring rollers to prevent the sheet from dropping.	-

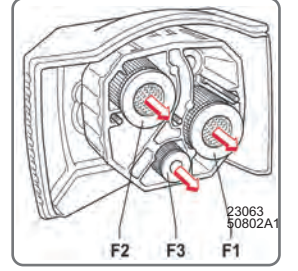
5-6-2 Delivery conveyor: sheet is wrinkled

Check	Causes and Recovery	Page
☐ Catch roller pressure is not correct.	 Catch Roller Locking Knob Bracket Reduce the Pressure 13174 50703A1 - In case the machine runs thin sheets and they are wrinkled by the catch roller, reduce the pressure. - Loosen the catch roller locking knob, turn the bracket to adjust the pressure.	35

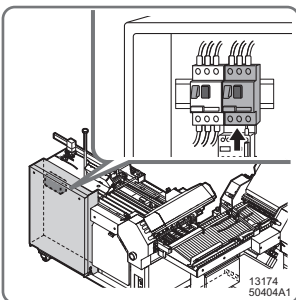
5-7-1 The delivery conveyor does not run

Check	Causes and Recovery	Page
☐ The conveyor switch is set to Standby, or the speed control knob is set to Low.	 13174 50901A1 - Set the switch to Run. - Turn the knob to High.	123
☐ The conveyor power cable is not connected.	 13174 50901B1 - Connect the power cable.	19
☐ The circuit protector for the conveyor (Q40) is switched off.	 13174 50901C1 - Check if the circuit protector is not tripped.	230

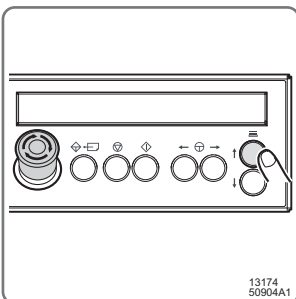
5-7-2 The air pressure does not increase when you turn the regulator knob

Check	Causes and Recovery	Page
☐ The pump filters are clogged.	 F2 F3 F1 23063 50802A1 - Clean the filters.	219

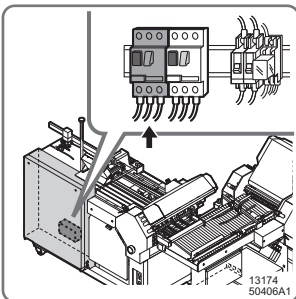
5-7-3 The pump does not run

Check	Causes and Recovery	Page
☐ The circuit breaker for the pump (Q11) is switched off.	 - Check if the breakers are not tripped.	230

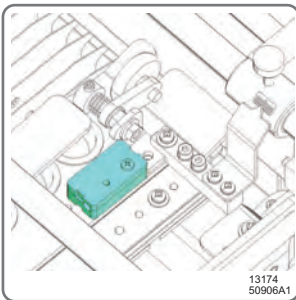
5-7-4 The motor does not run when the Start button is pressed

Check	Causes and Recovery	Page
☐ The feed table is not raised.	 - Raise the feed table.	37

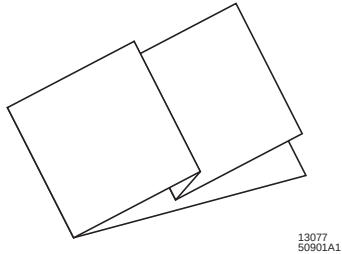
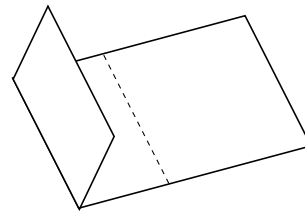
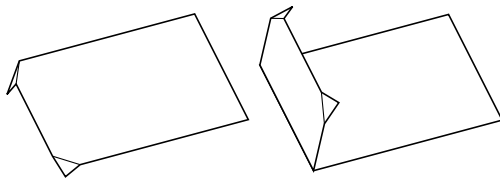
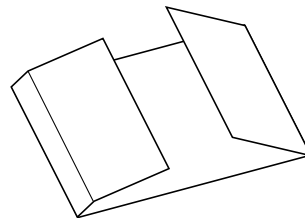
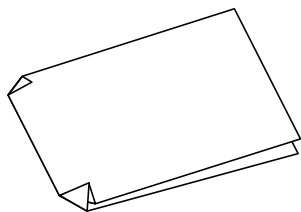
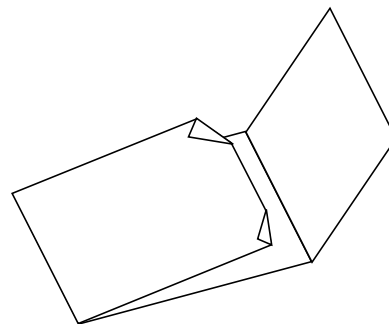
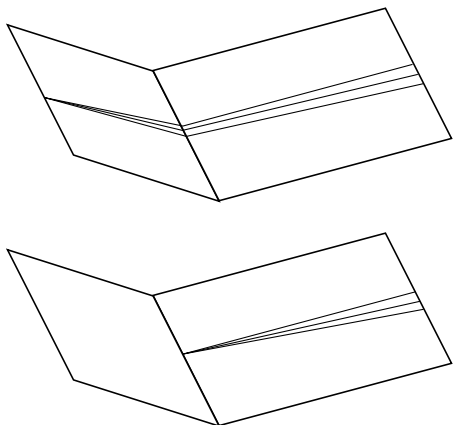
5-7-5 The display does not appear when the main power is turned on

Check	Causes and Recovery	Page
☐ The circuit breaker for the main power (Q00) is switched off.	 - Check if the breakers are not tripped.	230

5-7-6 The machine will not feed continuously

Check	Causes and Recovery	Page
☐ The double feed detect photoelectric sensor is dirty.	 - Clean the double feed detect photoelectric sensor.	229

Here are some general types of folding problems.
The solutions for these problems are explained on the following pages.

Z Shaped Folding**Midstream Folding****The sheet does not enter the buckle chute****Double Step Folding****Hitting the Deflector****Rolling****Wrinkles Crossing the Fold Line.**

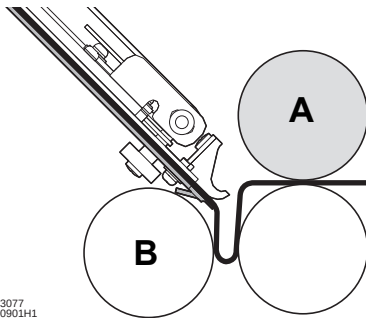
Z Shaped Folding

- 1** Clean the fold rollers.
- 2** Increase the gap at roller A, or reduce the gap at roller B.
- 3** Move the buckle chute closer to the roller by 2 mm (0.08"), or pullback the gate by 3 mm / 0.12".

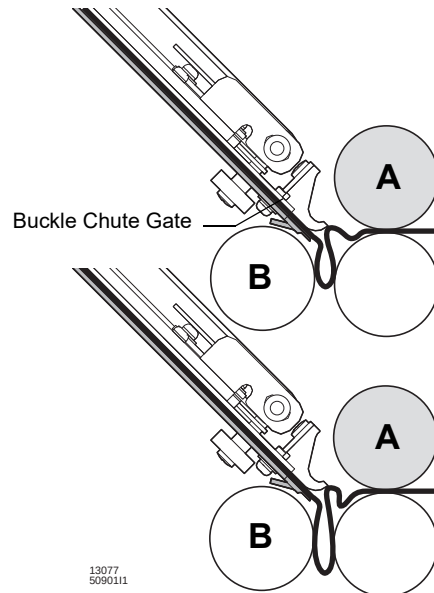


Note

When folding thick sheets, Z shaped folding might occur even if the gap at roller A is too loose.



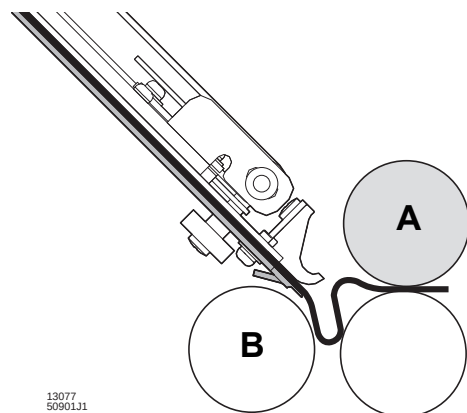
Problem:



Midstream Folding

- 1** Check that the pressure produced by roller A is not too strong.
- 2** Widen the clearance of the buckle chute.
- 3** Check to see whether there are paper chips in the buckle chute. This can prevent a sheet from entering.

Problem:

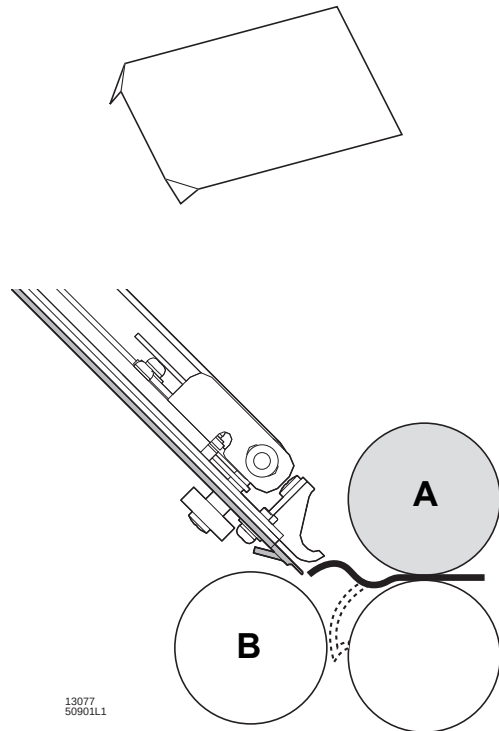


Dog Ears

If a folding problem occurs as shown in the drawing to the right

If the corners of the sheet are curled downwards or the gate is pulled back, the sheet cannot enter the clearance of the buckle chute.

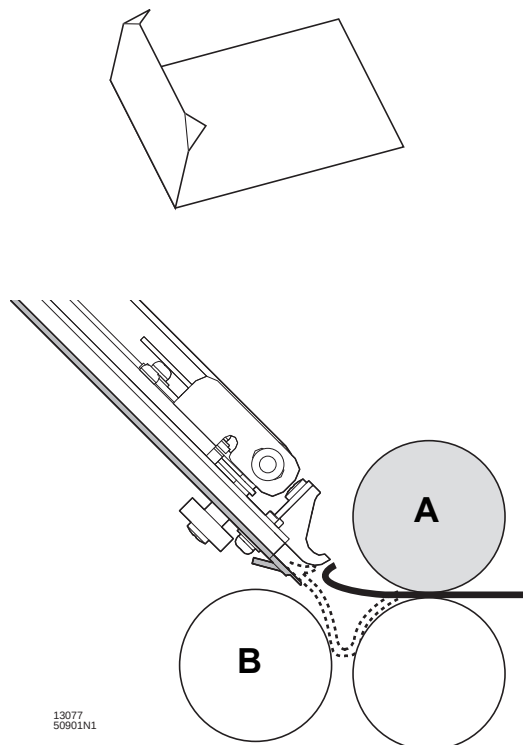
- 1 Flatten out the sheets.**
- 2 Extend the buckle chute gate.**



If a folding problem occurs as shown in the drawing to the right

If the corners of the sheet are curled upwards or the distance between the buckle chute and the roller is too narrow, the sheet hits the buckle chute, is folded up, and cannot enter the clearance of the buckle chute.

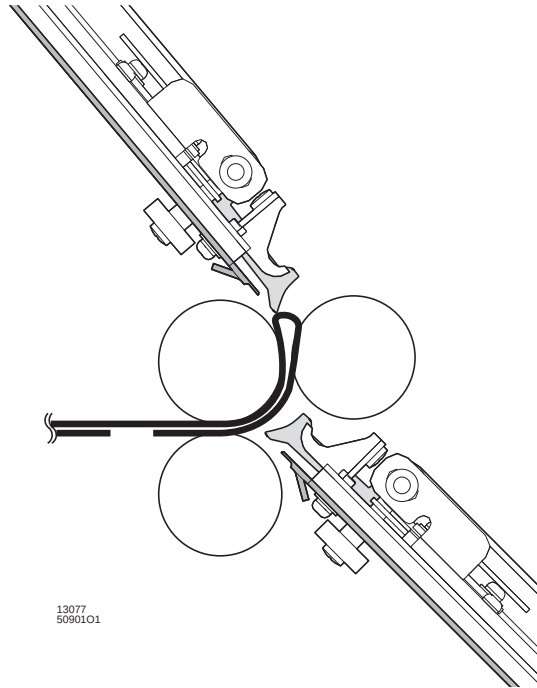
- 1 Flatten out the sheets.**
- 2 Increase the distance between the buckle chute and the roller.**
- 3 Check that the pressure produced by roller A is not too strong.**



Double Step Folding

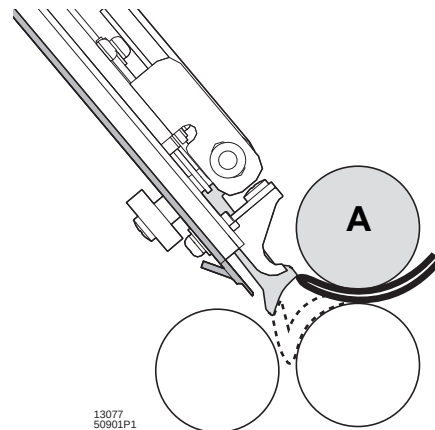
When the folded side of the sheet passes the rollers, the air in the folded area cannot escape.

- 1 Increase the roller gap so that the air can escape easily.**

Problem:**Hitting the Deflector**

The sheet hits the edge of the deflector or the sheet is caught by a scratch on the deflector surface.

- 1 Increase the gap on roller A.**
- 2 Increase the distance between the buckle chute and the roller.**
- 3 Check that the deflector is not scratched.**

Problem:

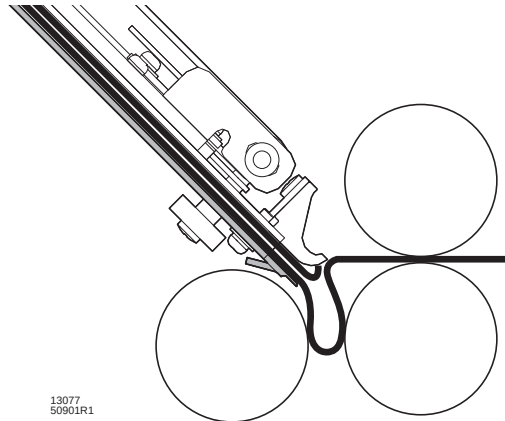
Rolling

The inner edge is bent, folded, and is pulled into the rollers.

- 1 Curl the front edge of the sheet on the feed table in the opposite direction so that the edge will not be pulled into the roller.**
- 2 Reduce the distance between the buckle chute and the roller, and pull back the buckle chute gate a little.**



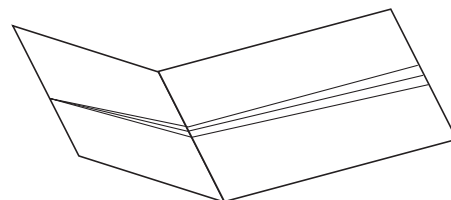
Problem:



Wrinkles Crossing the Fold Line or Wrinkles Spreading from the Fold Line

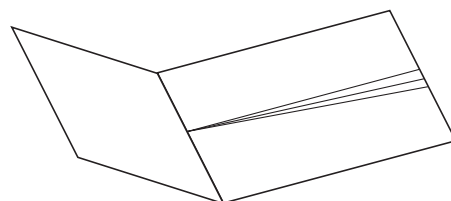
If a wrinkle occurs near the front edge of the sheet, the sheet might be opening a bit as it moves through the register guide section.

- 1 Install the sheet holders to prevent the sheet from floating.**
- 2 Reduce the number of transport balls, use lighter balls, and rearrange the balls.**

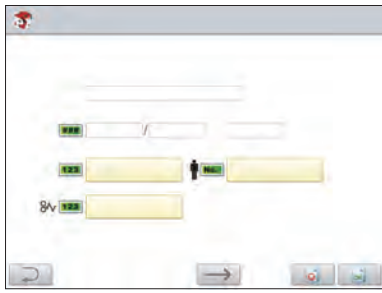


If the wrinkles spread from the fold line:

- 1 The gap pressure for the feeding roller is too strong. Increase the gap.**



Icons and Alarms	Descriptions
	Machine is not connected with the pXnet.
Gray 	Machine is connected with pXnet, but the job was not recalled yet.
Red 	The job was recalled from the pXnet.
	The Job was recalled from pXnet and ready to run. Changeover will be started after pressing OK.
	JDF does not include the set-up information for this machine. JDF needs to be double-checked. Example: A job of folding operation was recalled in the binder.
	There is no applicable job in the pXnet.
	The job cannot be recalled because the job setting is being edited. If you open the "Edit" or "Schedule" screen, please close them.

Icons and Alarms	Descriptions
	The job cannot be recalled because it is out of the specifications for the machine.
	The job which has been already recalled is recalled again from pXnet. This may appear when the same barcode is read twice during the job is ongoing. Please press OK to continue the job.
	Job Progress Screen  : Finish the Job.  : Suspend the Job.
	PC Error Check the detail in the chapter 4 Troubleshooting in Operation Manual for the pXnet.