

RICOH

V-C3 TECHNICAL TRAINING

OPTIONAL FOLDER UNIT (D454)

Slide 1

No additional notes

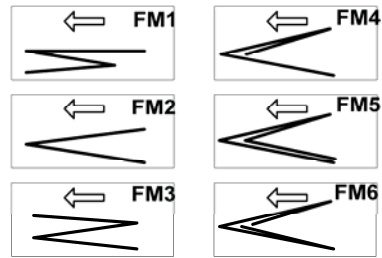
INTRODUCTION

Slide 2

No additional notes

What does the Folder do?

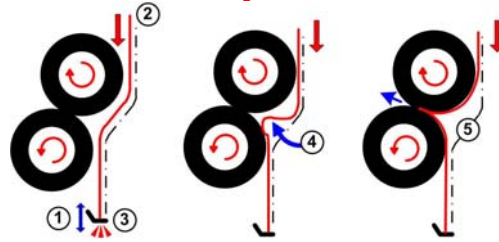
- ❑ This unit folds the printout.
- ❑ There are six types of folding.
 - ♦ FM1: Z-Fold
 - ♦ FM2: Half-fold
 - ♦ FM3: Letter Fold-out
 - ♦ FM4: Letter Fold-in
 - ♦ FM5: Double-parallel Fold
 - ♦ FM6: Gate Fold



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- ❑ The names of these fold types are the same as the names shown in the operation manual and on the display.
- ❑ The numbers FM1 to FM6 appear in the SP mode. The names (z-fold, etc) appear on the operation panel.
- ❑ Stapled sheets cannot be folded.

How is the Paper Folded? (1)

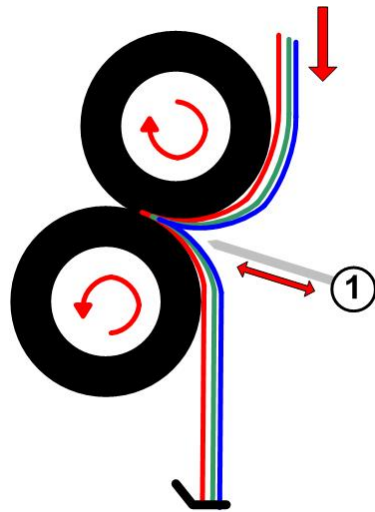


- ❑ A stopper fence (3) is raised or lowered (1) to the correct height for the size of the paper and the type of fold to be done.
- ❑ A sheet of paper (2) descends, hits the stopper and stops. However, the upstream rollers continue to rotate. This causes the paper (4) to bend toward the rotating fold rollers on the left.
- ❑ When the paper reaches the rollers, it feeds into the nip (5). The rollers catch the paper, pull it into the nip, and form the fold.
- ❑ There are three fold stoppers placed at strategic positions in the fold path. Not all the stoppers are used in each job. Only the stoppers needed for the type of folding are used.

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- ❑ This method is known as the 'flex-nip' method.
- ❑ This is a bit different from previous folders.

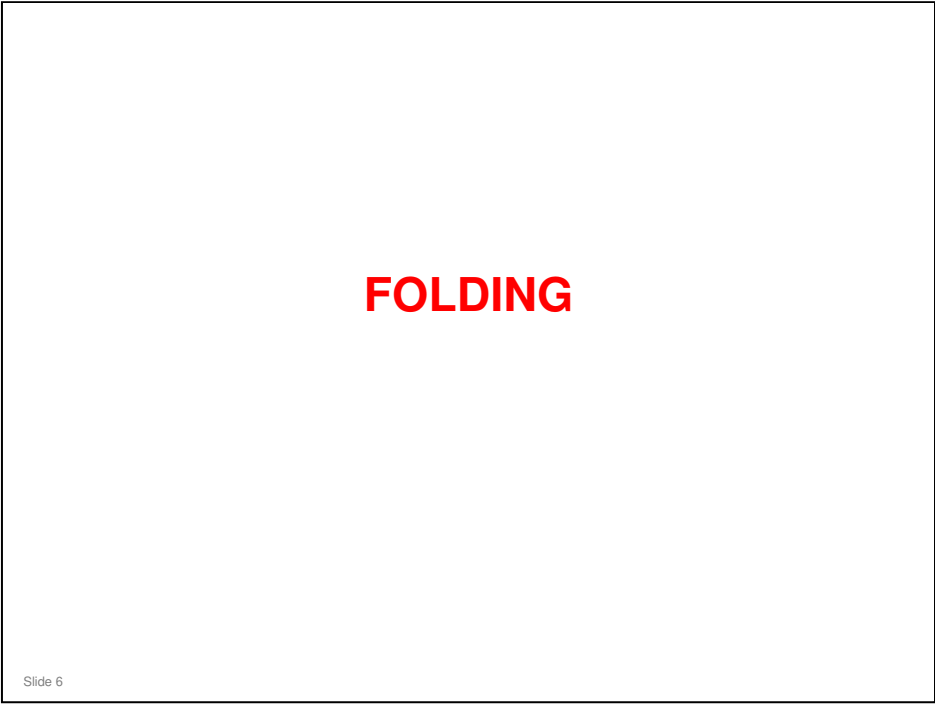
How is the Paper Folded? (2)



- ❑ When two or more sheets are fed together, a plate (1) pushes the paper toward the rotating fold rollers.
 - ◆ This plate is only present at the first fold rollers.
- ❑ The plate is used only when more than one sheet of paper is fed at a time.
- ❑ Maximum number of sheets that can be folded at one time:
 - ◆ Three (half-fold, letter fold-in, letter fold-out)
 - ◆ One (z-fold, double-parallel fold, gate fold)

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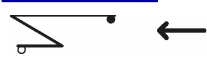
No additional notes



No additional notes


FM1: Z-Fold

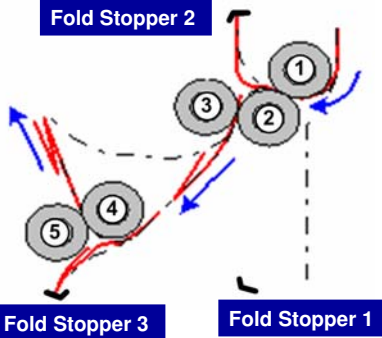
After Folding



Before Folding

Face-down

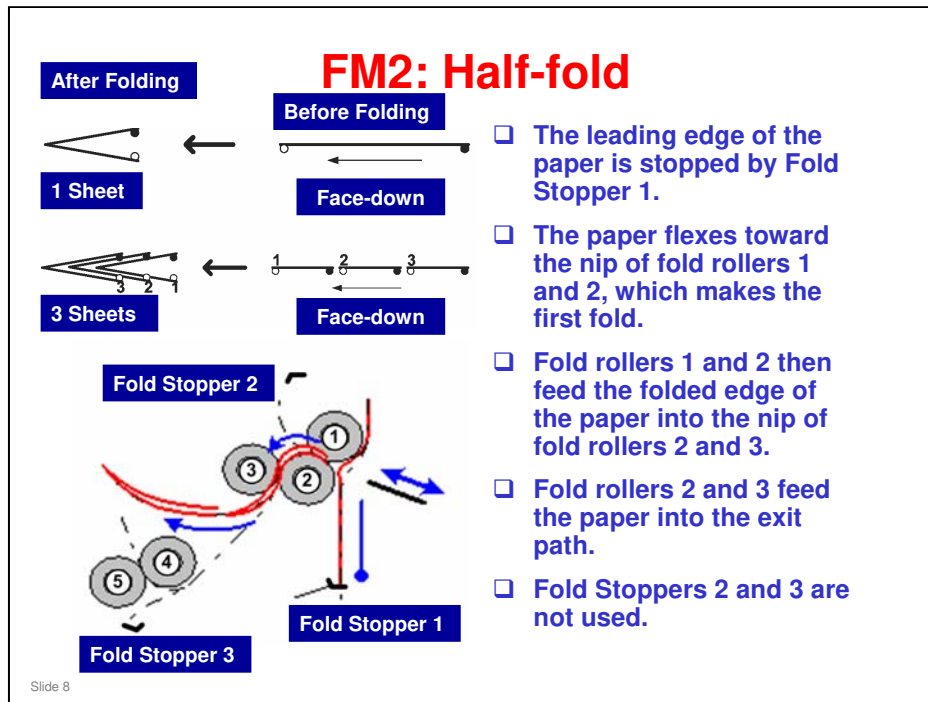




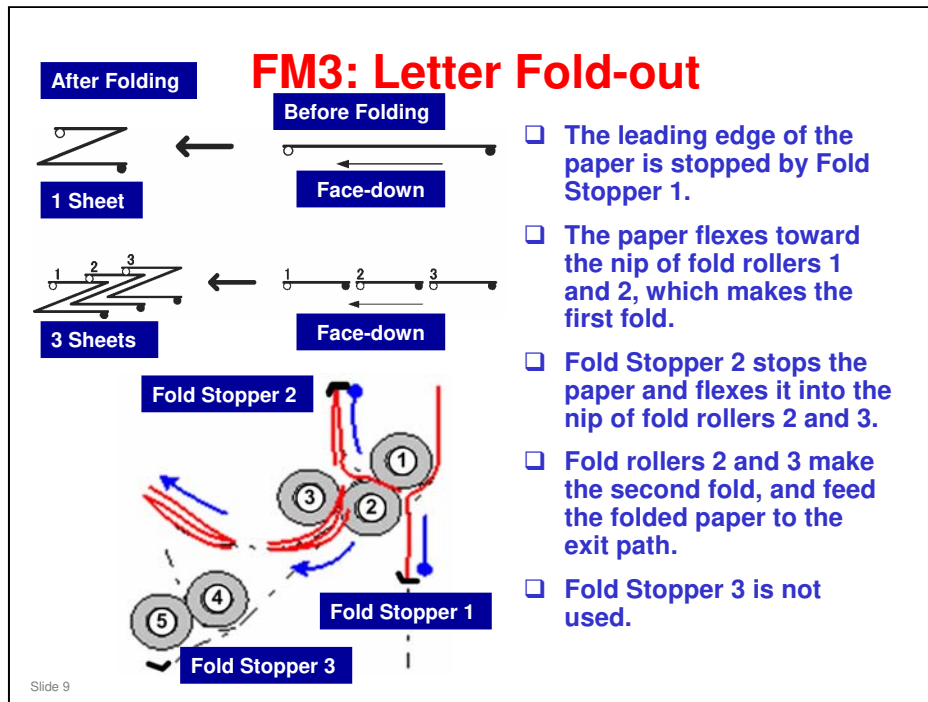
- ☐ The leading edge of the paper feeds into the nip of fold rollers 1 and 2 .
- ☐ The paper is stopped by Fold Stopper 2.
- ☐ The paper flexes toward the nip of fold rollers 2 and 3, which makes the first fold.
- ☐ Next, the paper is stopped by Fold Stopper 3.
- ☐ The paper flexes toward the nip of fold rollers 4 and 5, which makes the second fold and feeds the paper into the exit path.
- ☐ Fold Stopper 1 is not used.

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No additional notes

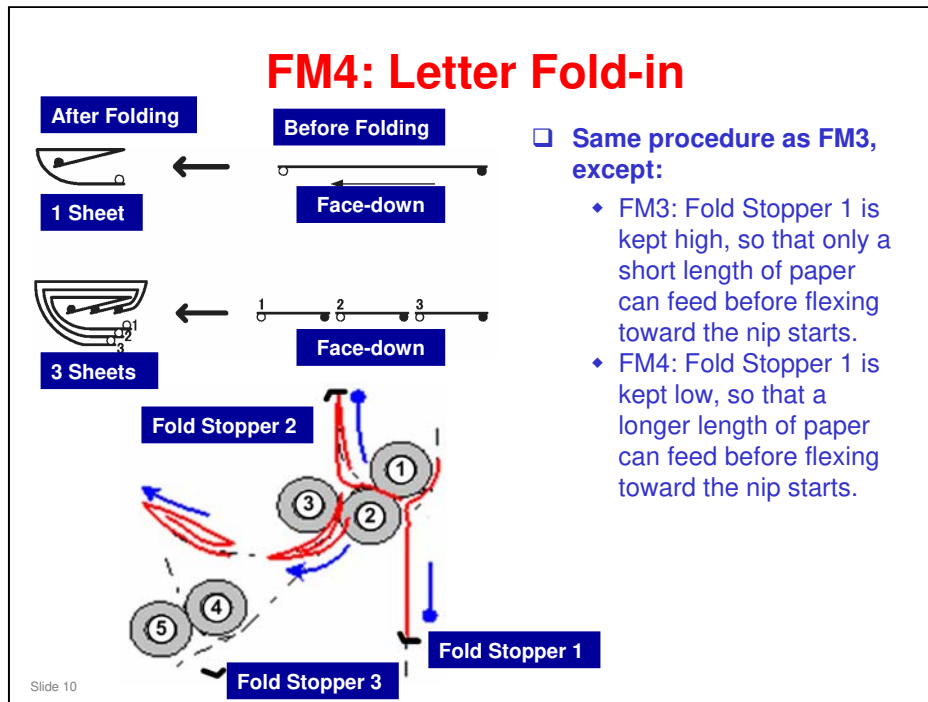


- ☐ This folds the sheet exactly in half.
- ☐ The paper does not go through fold rollers 4 and 5.



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- ☐ The paper does not go through fold rollers 4 and 5.




- ❑ Same procedure as FM3, except:
 - ♦ FM3: Fold Stopper 1 is kept high, so that only a short length of paper can feed before flexing toward the nip starts.
 - ♦ FM4: Fold Stopper 1 is kept low, so that a longer length of paper can feed before flexing toward the nip starts.

- ❑ This positioning of Fold Stopper 1 accounts for the difference in folding at the next nip.
- ❑ The paper does not go through fold rollers 4 and 5.

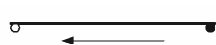
FM5: Double-parallel Fold

After Folding



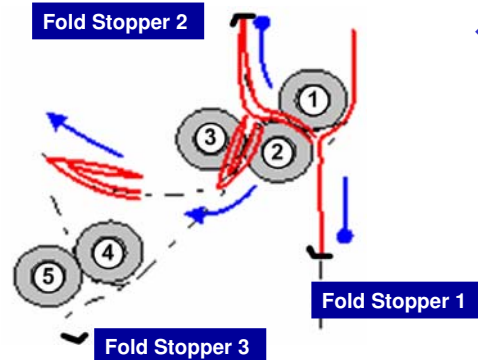
Before Folding

Face-down



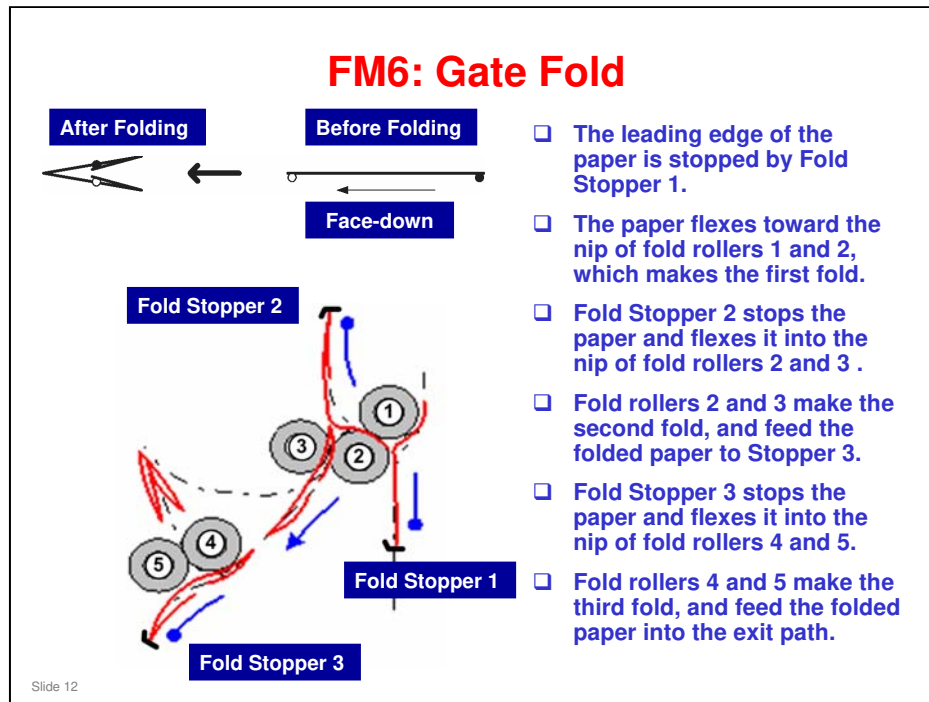
❑ Same procedure as FM3 and FM4, except:

- ♦ For FM5, Fold Stopper 1 is positioned so that the paper will fold into halves when it enters the first nip.
- ♦ This positioning of Fold Stopper 1 accounts for the difference in folding at the next nip.



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- ❑ The paper does not go through fold rollers 4 and 5.
- ❑ The drawing at the upper left does not show the double parallel fold accurately. The widths of all four segments should be the same.



- ☐ All three stoppers are used with this method.
- ☐ The drawing at the upper left does not show the gate fold accurately. The widths of all four segments should be the same.

FM6: Gate Fold

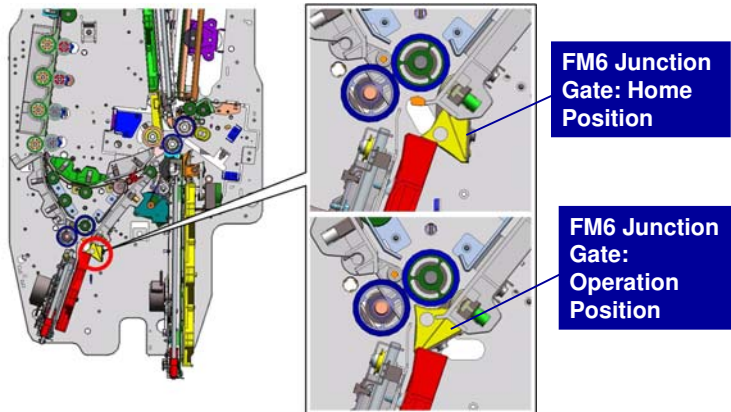


- A mechanism is provided to prevent the leading edge from catching and folding over on itself when the 3rd fold is done.

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- The paper is likely to fold over on itself at the location indicated by the red circle. The mechanism explained on the next few slides prevents this.

FM6: Gate Fold

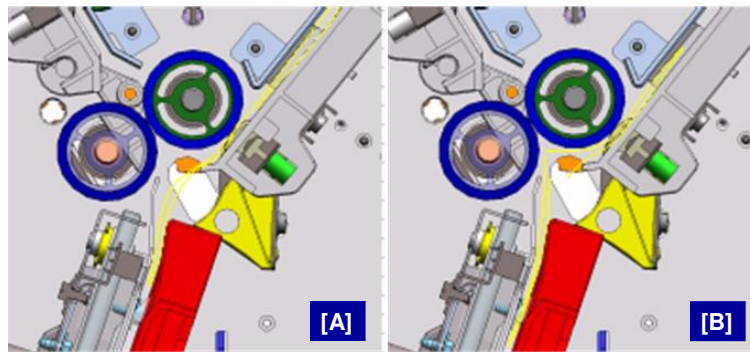


- ❑ At power on (initialization) the FM6 junction gate moves to home position.
- ❑ The FM6 stop pawl moves to the operation position.

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No additional notes

FM6: Gate Fold

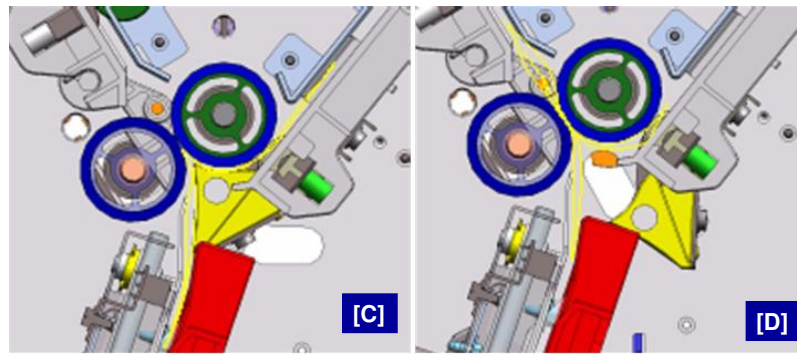


- ❑ [A]: After the 2nd fold, the sheet(s) are sent to the 3rd stopper for the last fold.
- ❑ [B]: The leading edge of the sheets(s) hit stopper 3 and the upstream rollers continue to rotate (equivalent to 18 mm of feed) to flex the paper toward the fold rollers.

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- ❑ The paper is represented by a thin yellow line, and is not easy to see.

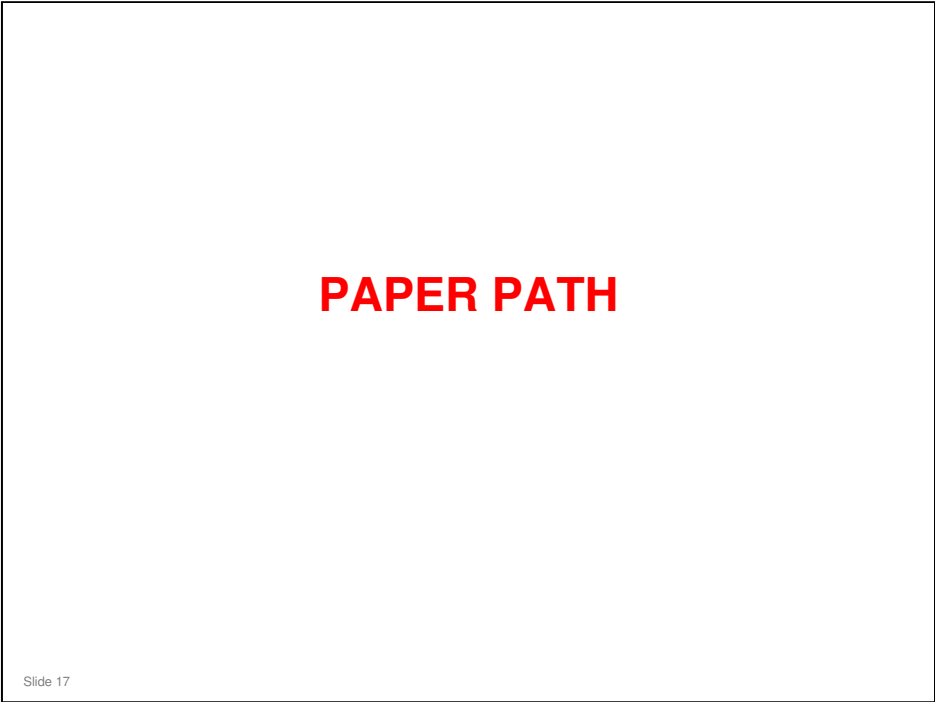
FM6: Gate Fold



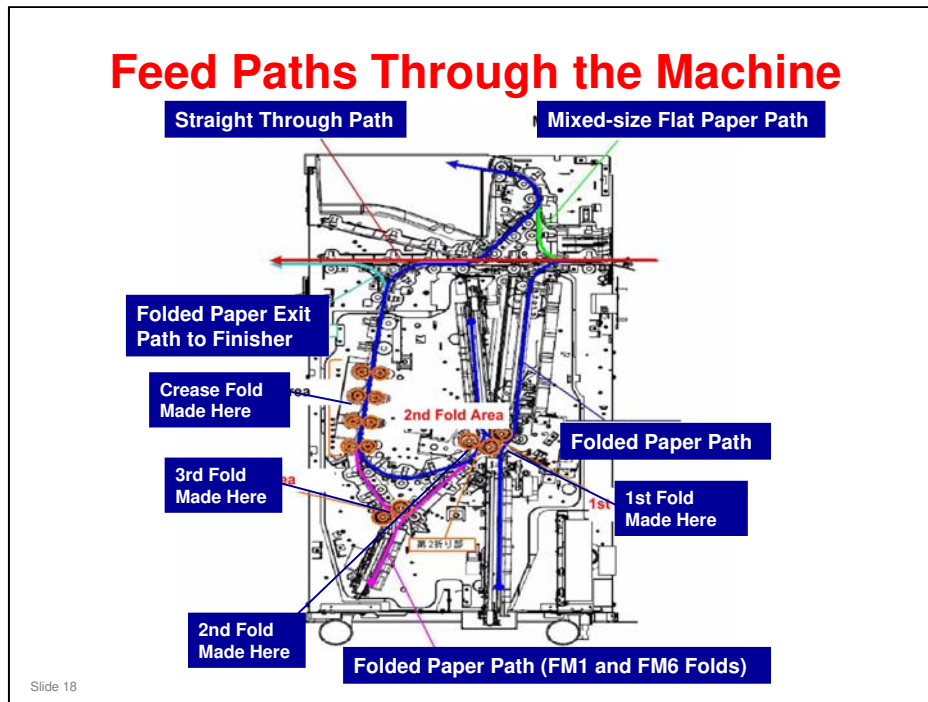
- ❑ [C]: The edge of the FM6 pawl is raised to flatten the leading edge so that it cannot bend back on itself when the paper enters the nip of the fold rollers.
- ❑ [D]: When the 3rd fold starts, the FM6 pawl returns to its home position.

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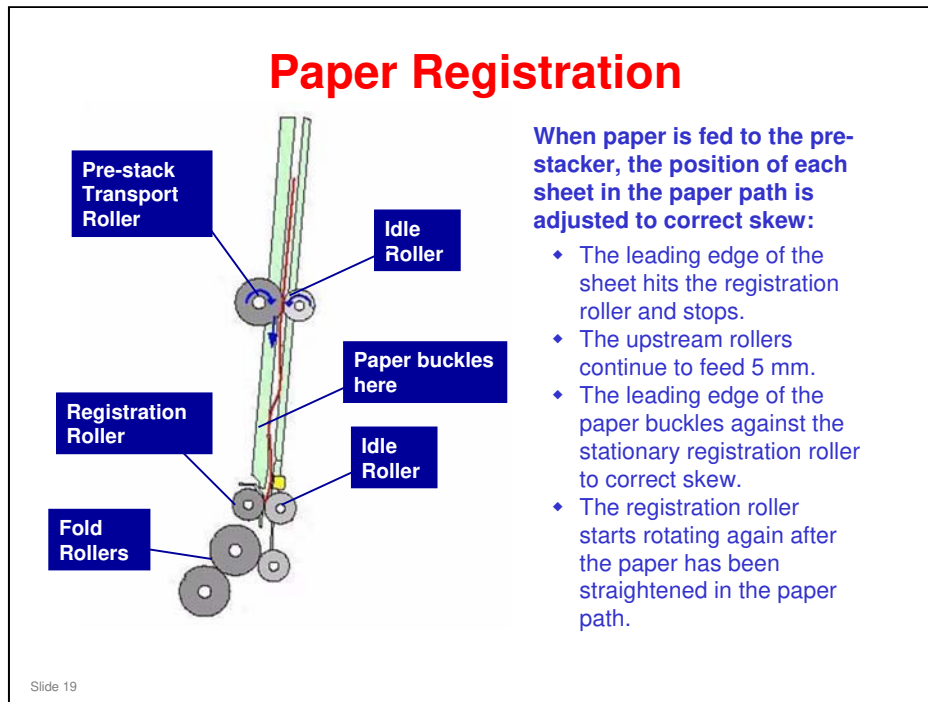
- ❑ The paper is represented by a thin yellow line, and is not easy to see.



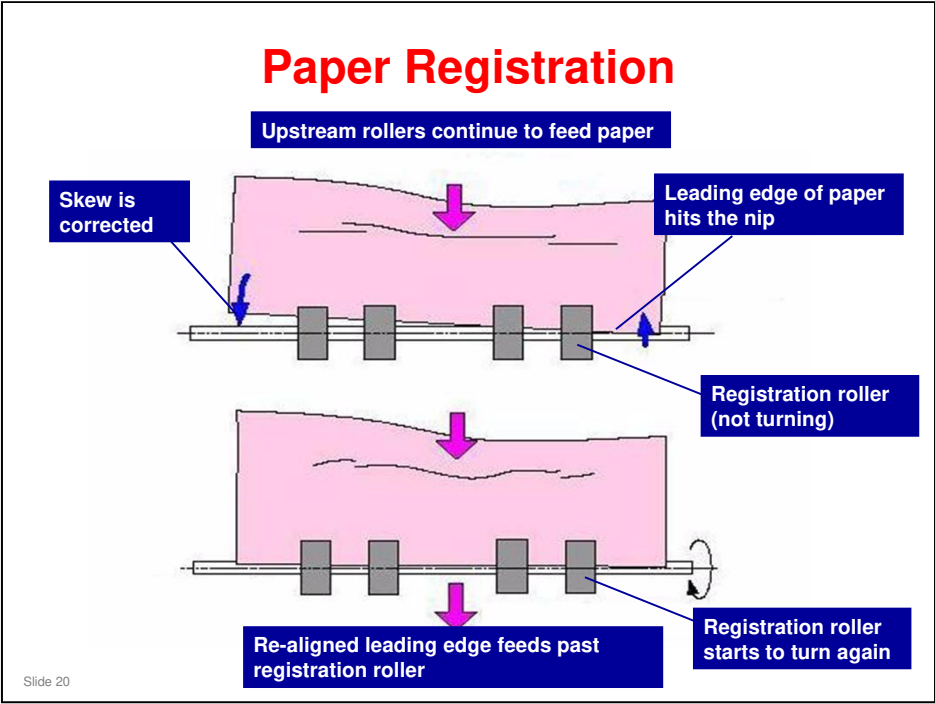
No additional notes



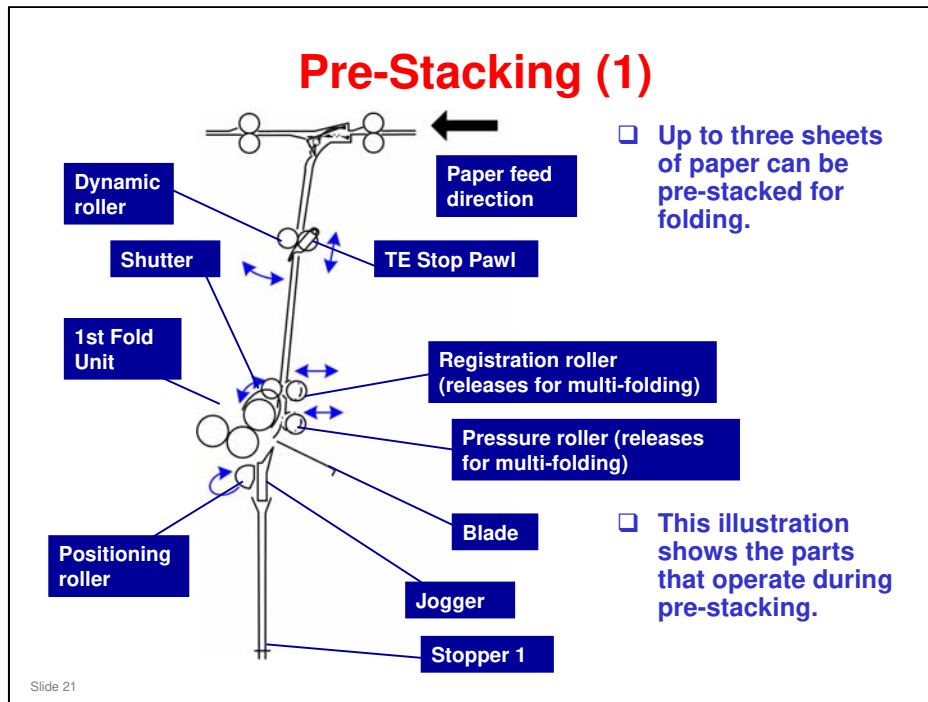
- ❑ Only FM1 (Z-fold) can be fed out of the finisher exit; other folds must be fed to the top tray.
- ❑ The capacity of the tray on the top of the folder depends on fold type, paper size, and paper weight. For details, see the specifications table in the service manual for the main machine.



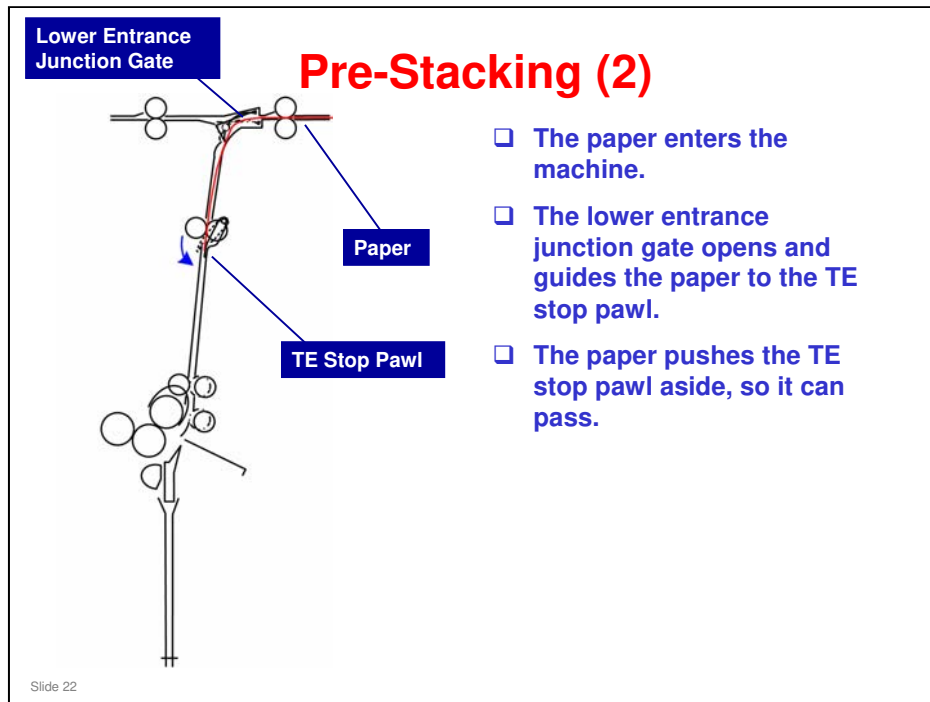
❑ In this diagram, the paper is shown in red.



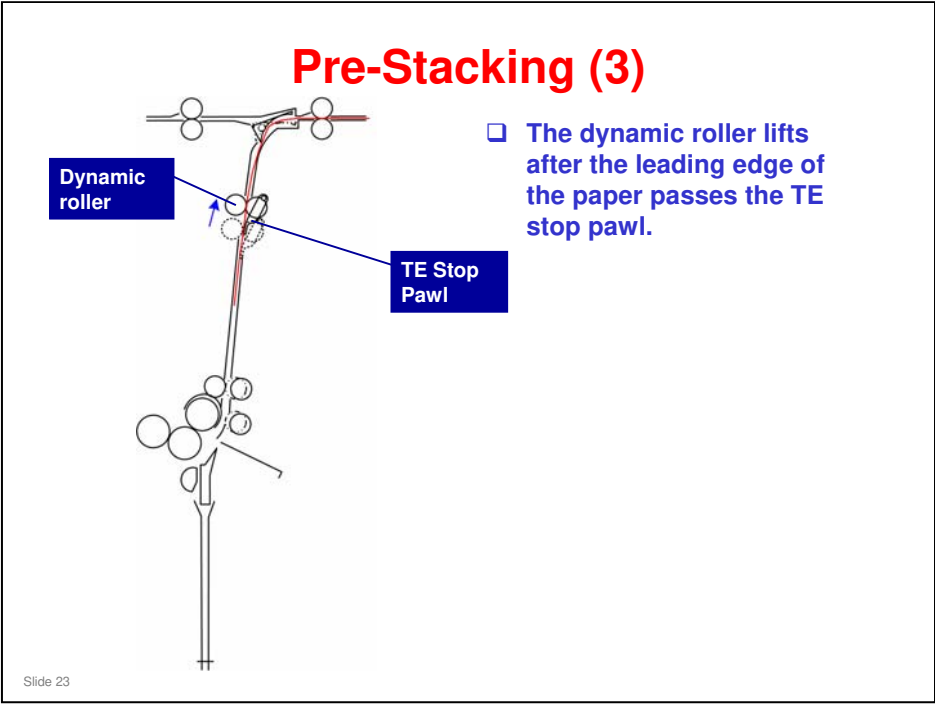
No additional notes



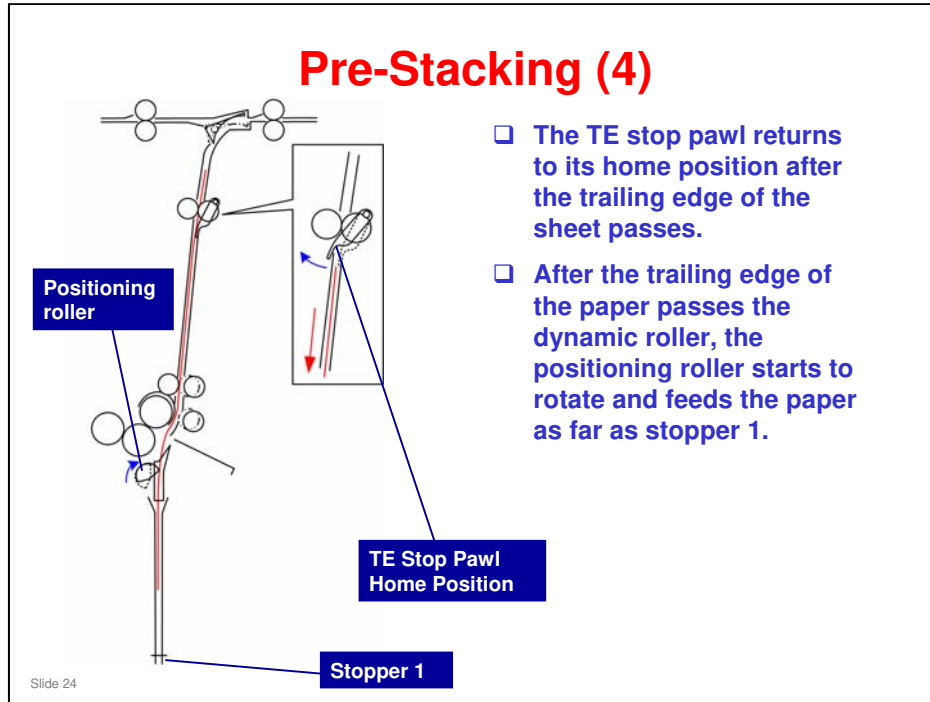
No additional notes



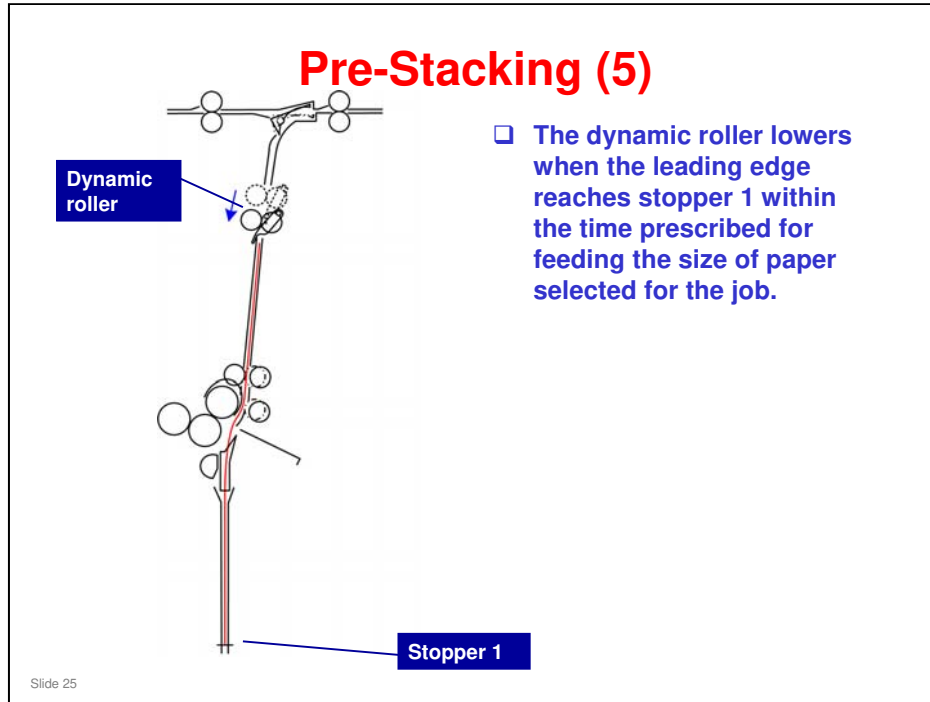
- ☐ Paper is shown in red.



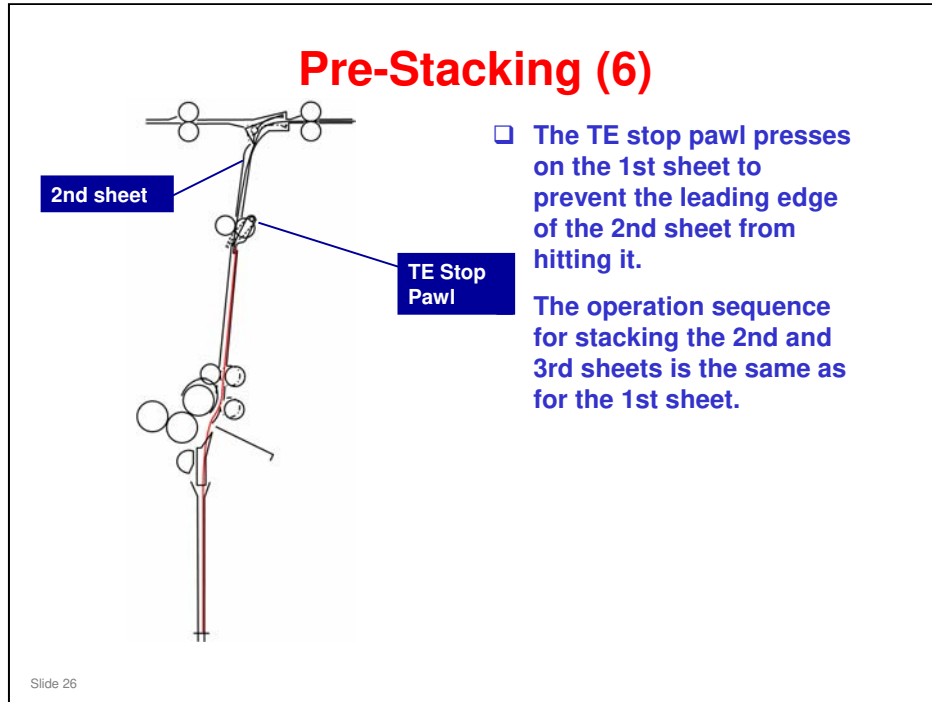
No additional notes



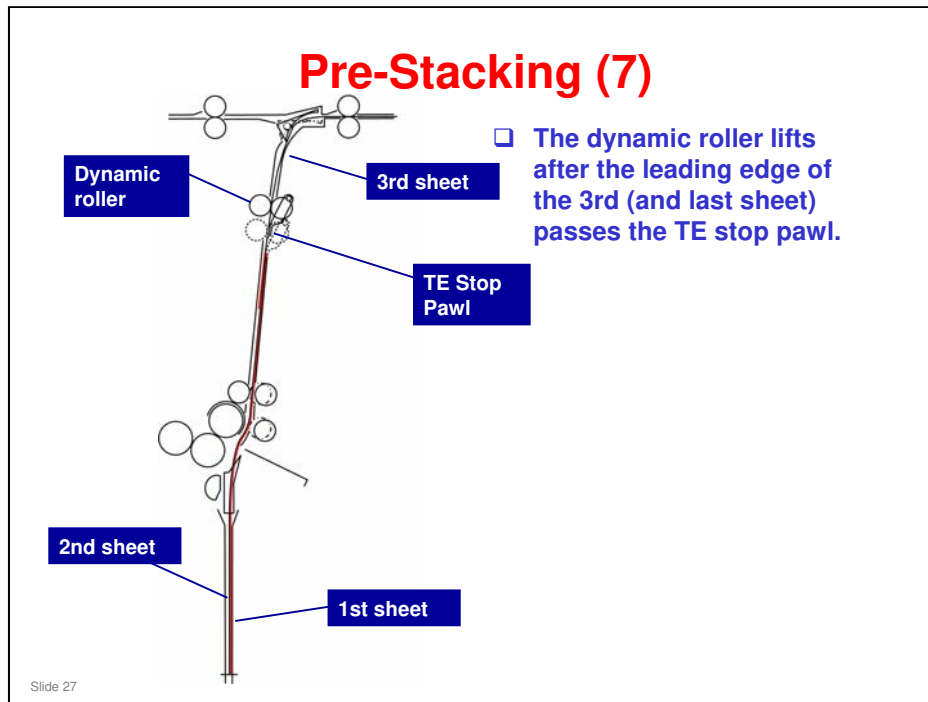
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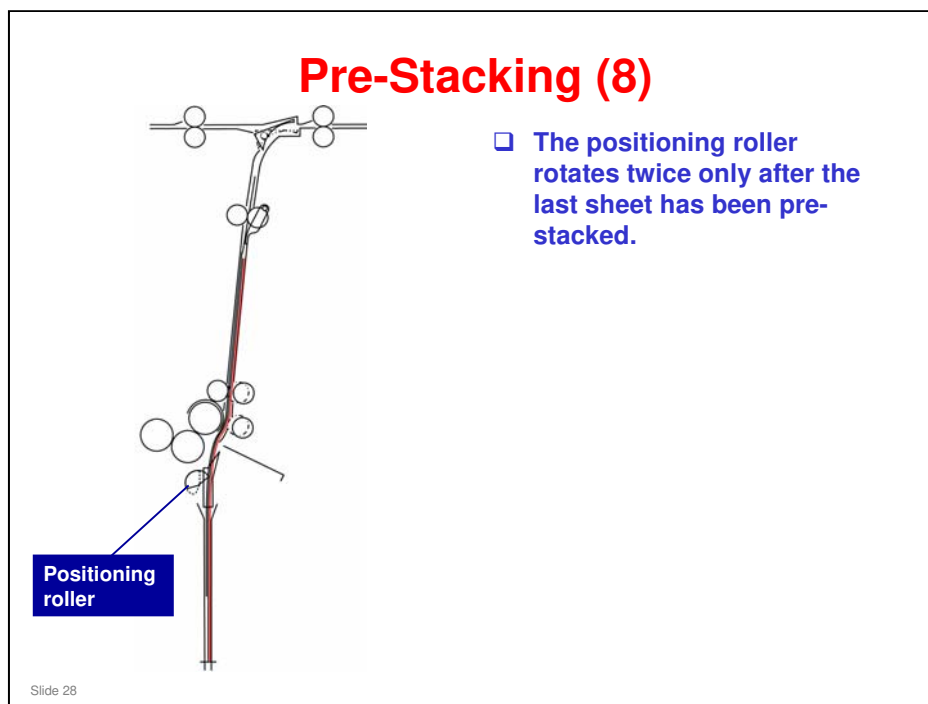
No additional notes



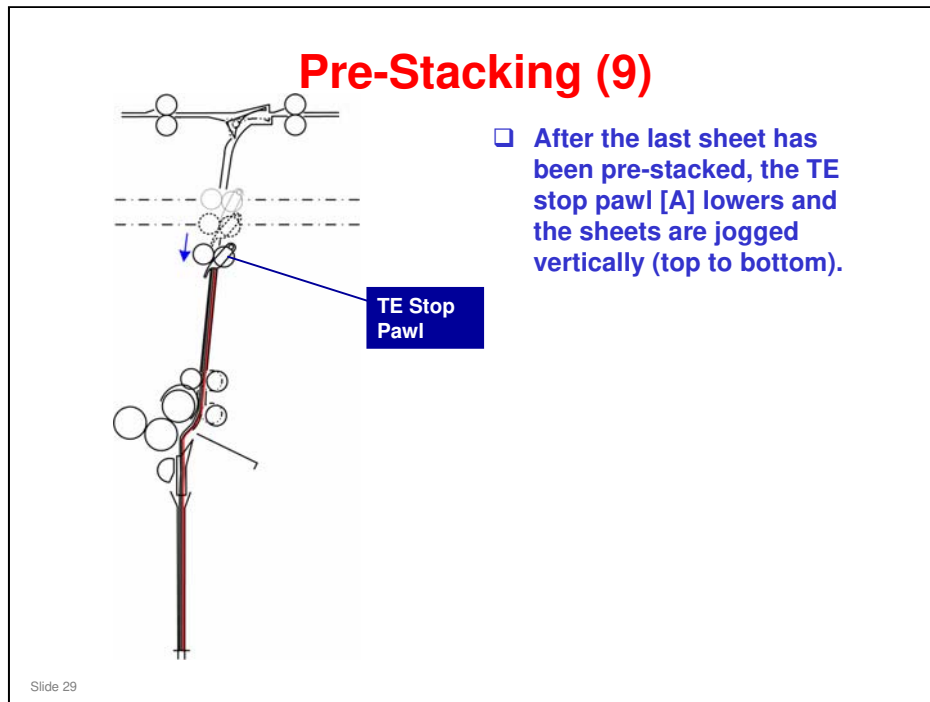
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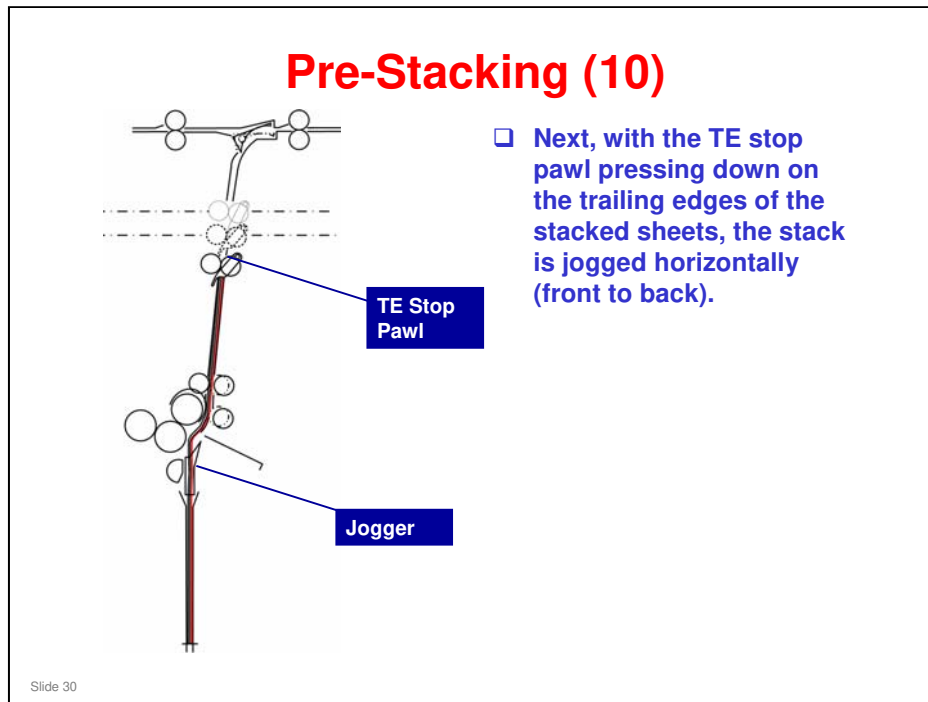
No additional notes



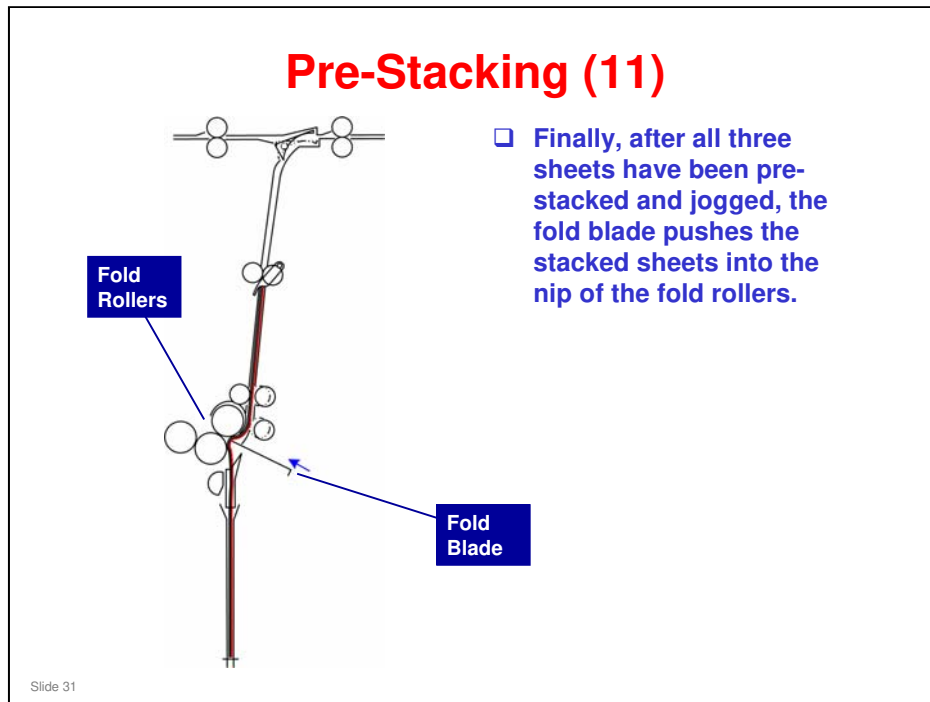
No additional notes



No additional notes

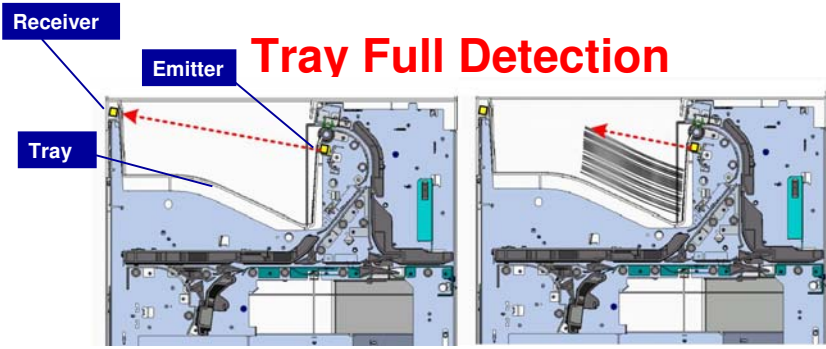


No additional notes



No additional notes

Tray Full Detection



Receiver

Emitter

Tray

- ❑ **A pair of sensors detect the tray full condition. At the start of every job:**
 - ◆ The tray full sensor (Emitter) emits a signal to the tray full sensor (Receiver).
 - ◆ As long as the signal remains unbroken, the folder will continue to operate and feed folded paper to the tray at the top of the unit.
 - ◆ When the top of the stack grows high enough to interrupt the signal between the tray full sensors, the machine will shut down.
 - ◆ After the operator removes the stack from the top tray, folding and paper exit will resume.

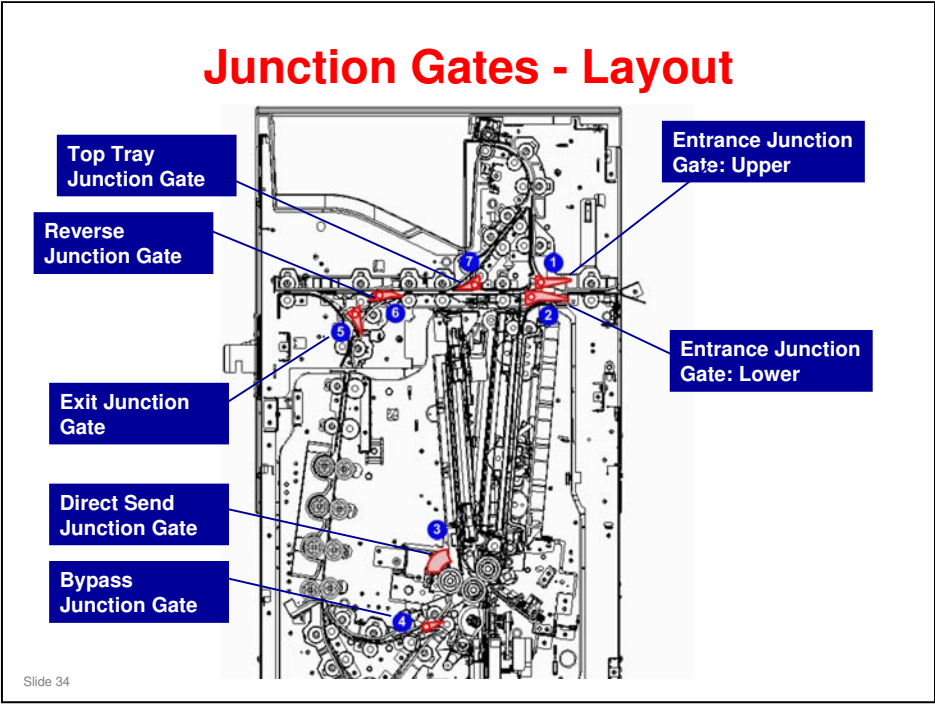
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No additional notes

JUNCTION GATES

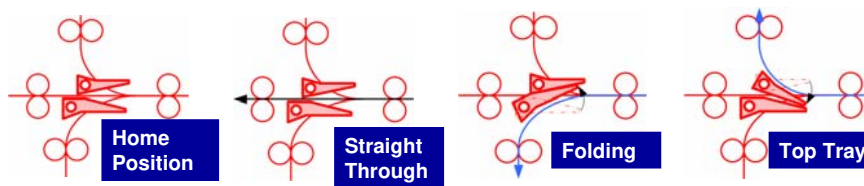
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No additional notes



No additional notes

Entrance Junction Gates



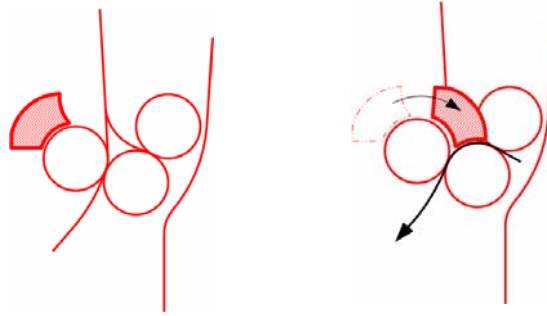
- ❑ There are two junction gates in the paper path at the entrance of the folder.
- ❑ Both junction gates remain at their home positions when paper is fed straight through the folder unit to the next unit downstream.
- ❑ When folding is selected, the lower entrance junction gate raises and guides the paper to the fold units below:
 - ♦ Upper entrance junction gate: Stays at the default position.
 - ♦ Lower junction gate: Rotates up and guides paper down.
- ❑ When draft copies are sent to the top tray:
 - ♦ Upper entrance junction gate: Rotates down.
 - ♦ Lower junction gate: Stays at the default position.

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No additional notes

Direct Send Junction Gate (1)

Home
Position

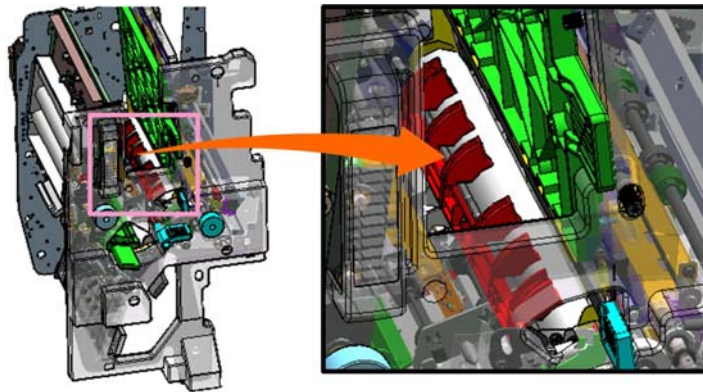


- ❑ The junction gate rotates to the right and paper is sent downstream without passing stopper 2.
- ❑ It moves down for FM2 mode only when the paper is folded into equal halves.

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No additional notes

Direct Send Junction Gate (2)

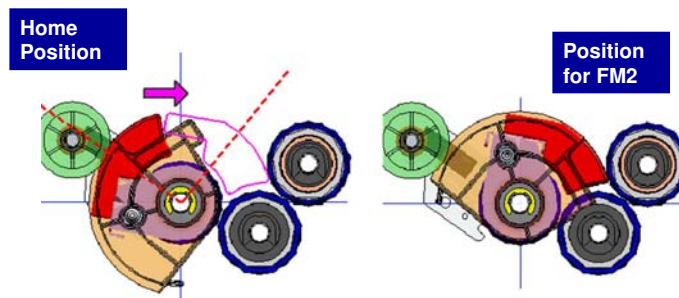


- This shows the actual location and appearance of the direct send junction gate.

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No additional notes

Direct Send Junction Gate (3)

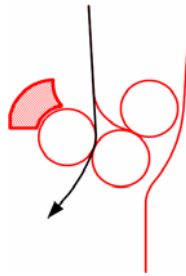


- For all fold modes other than FM2 (Half Fold), the direct send junction gate remains at its home position.
 - ♦ For FM2, the direct send junction gate motor rotates the junction gate by about 90 degrees.
 - ♦ After the job is finished, the motor rotates the junction gate back to its home position.

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No additional notes

Direct Send Junction Gate (4)

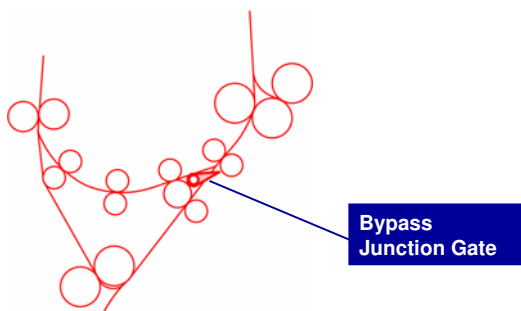


- For the other fold modes (FM1, FM3 to FM6), the junction gate remains at its home position and does not touch the paper.

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No additional notes

Bypass Junction Gate (1)

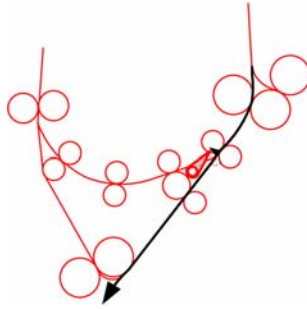


- This is the bypass junction gate at its home position.

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No additional notes

Bypass Junction Gate (2)

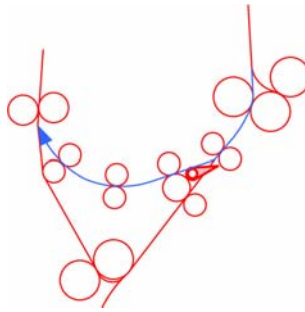


- When FM1 (Z-fold) or FM6 (Gate Fold) is selected, the bypass junction gate raises and allows paper to pass to folder unit 2.

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No additional notes

Bypass Junction Gate (3)

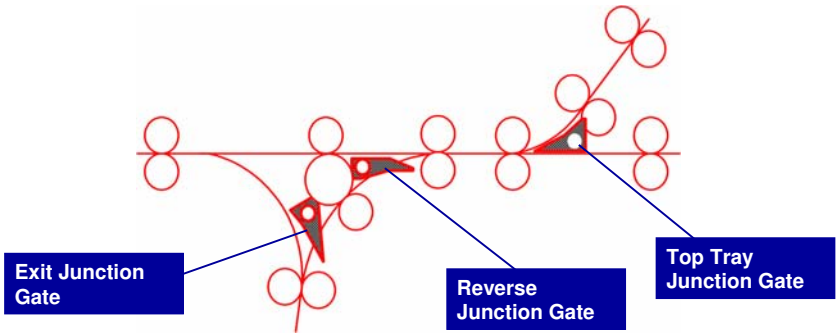


- ❑ For fold modes other than FM1 or FM6, the bypass junction gate remains at the default position.
- ❑ Paper passes over the top of the bypass junction gate and into the bypass paper path.

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No additional notes

Exit, Reverse, and Top Tray Junction Gates (1)

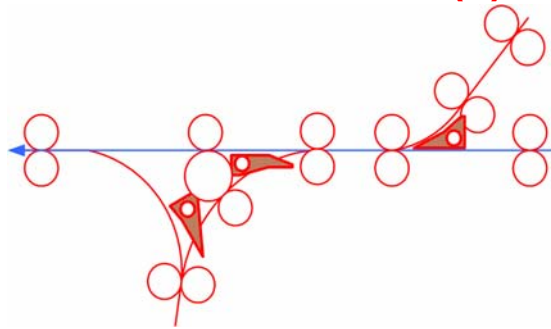


- These three junction gates are shown above at their default positions.

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No additional notes

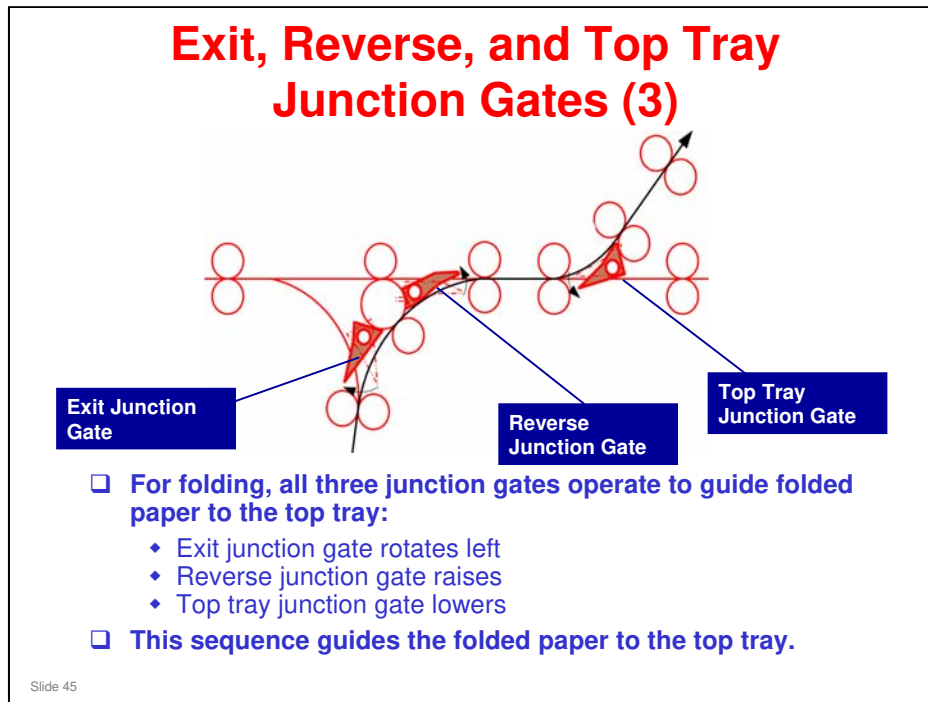
Exit, Reverse, and Top Tray Junction Gates (2)



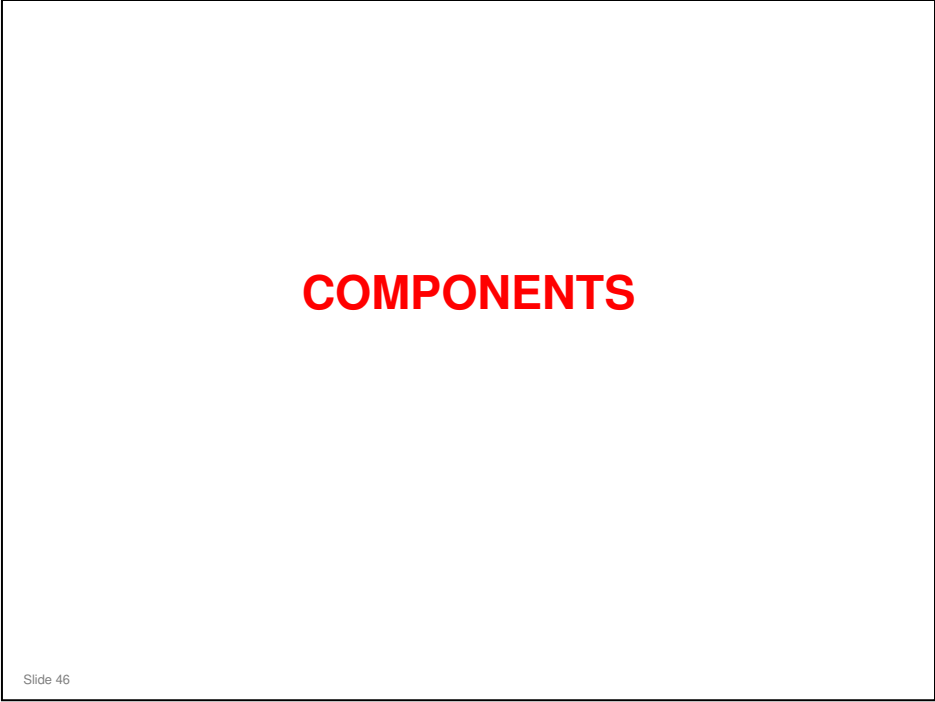
- ❑ For straight-through paper feed, the junction gates remain at their home positions.
- ❑ Paper passes straight through the folder to the next peripheral unit downstream.

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No additional notes

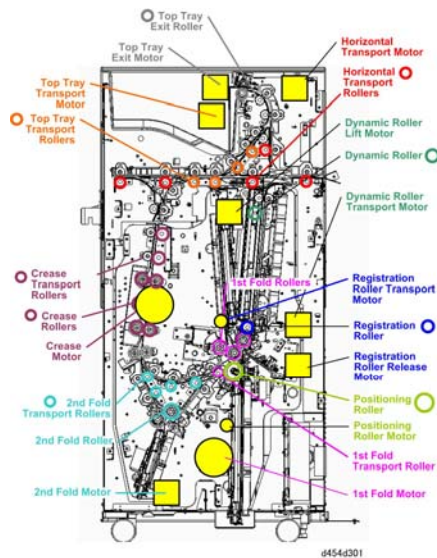


- ❑ Note: Only Z-folded paper is allowed to exit the multi-folder and pass downstream to other peripheral units. In this case, the junction gates remain at their default positions. The exit junction gate guides the paper toward the multi-folder exit above.



No additional notes

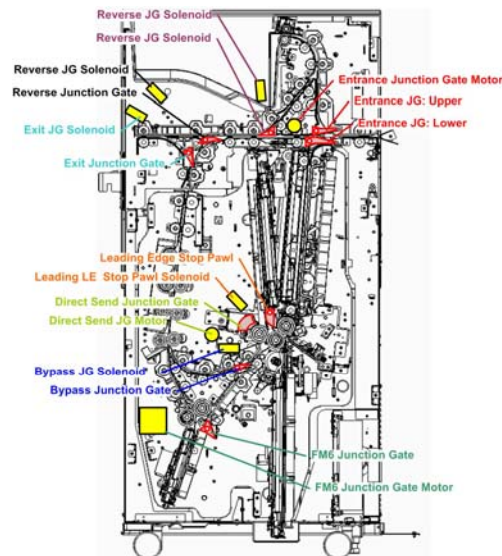
Components – Rollers and Motors



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- ❑ The illustration above shows the roller groups and their related motors.
 - For example, the motor with the name in red controls the components with the names in red.

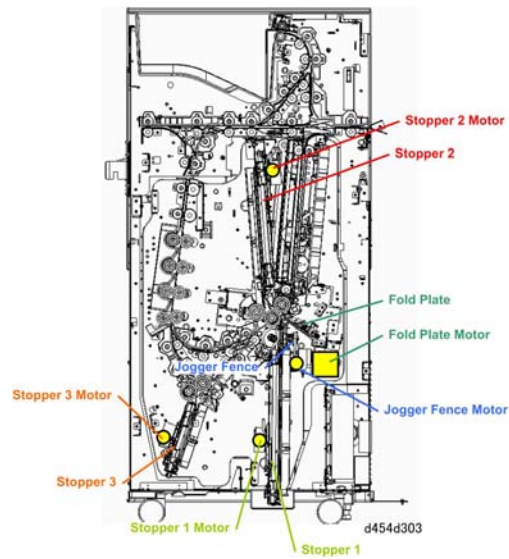
Components – Junction Gates



Slide 48

- ❑ The illustration above shows the paper path junction gates and the solenoids and motors that operate them.

Components - Stoppers



Slide 49

- ❑ The illustration above shows the stoppers and the motors that operate them.

Stopper Locations

The diagram illustrates the locations of three stoppers on a folder assembly. A central image shows the internal components with red circles highlighting the stopper locations. Three inset images provide detailed views of each stopper:

- Stopper 2:** Located at the top right, with an associated **HP Sensor** and a specified fold length **L2: Specified fold length for Stopper 2**.
- Stopper 1:** Located at the bottom right, with an associated **HP Sensor** and a specified fold length **L1: Specified fold length for Stopper 1**.
- Stopper 3:** Located at the bottom left, with an associated **HP Sensor** and a specified fold length **L3: Specified fold length for Stopper 3**.

Red arrows point from the central image to each of the three inset images. Purple double-headed arrows indicate the fold lengths L1, L2, and L3.

☐ The illustration above shows the locations of Stopper 1, Stopper 2, and Stopper 3.

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No additional notes

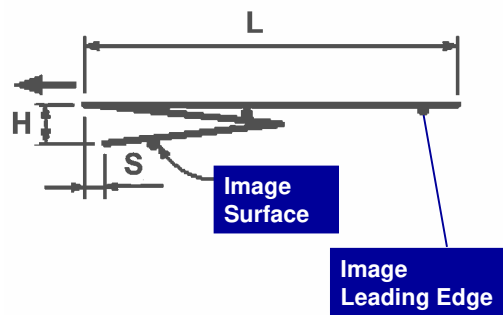
ADJUSTMENTS

User Tool and SP Mode Adjustments

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This section explains how to adjust the positions of the folds.

Fine Fold Adjustment: FM1

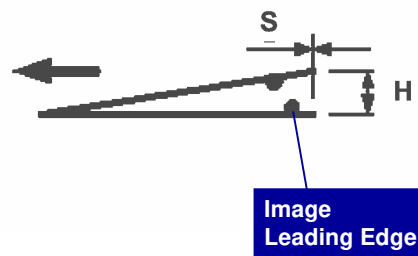


- ❑ **Standard adjustment:** The customer can adjust the length S.
 - ◆ Default: 2 mm
 - ◆ Range: 2 to 25 mm, in units of 1 mm
- ❑ **Fine Adjustment:** The technician can adjust the lengths S and L.
 - ◆ Default: 0
 - ◆ Range: ± 4 mm, in units of 0.2 mm

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- ❑ FM1: Z-folding
- ❑ For the adjustment ranges and default settings for each paper size, see the Replacement and Adjustment section of the service manual.

Fine Fold Adjustment: FM2

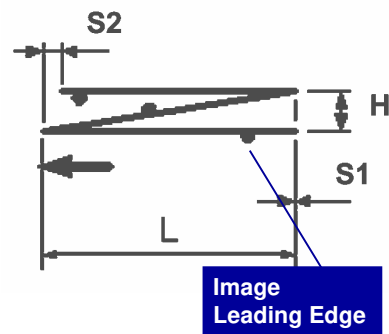


- ❑ **Standard adjustment: The customer can adjust the length S.**
 - ◆ Default: 0 mm
 - ◆ Range: Depends on the paper size (units of 1 mm)
- ❑ **Fine Adjustment: The technician can adjust the length S.**
 - ◆ Default: 0
 - ◆ Range: ± 4 mm, in units of 0.2 mm

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- ❑ FM2: Half-fold
- ❑ For the adjustment ranges and default settings for each paper size, see the Replacement and Adjustment section of the service manual.

Fine Fold Adjustment: FM3

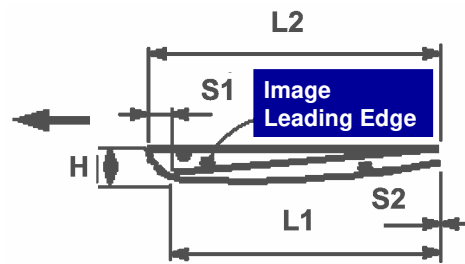


- ❑ **Standard adjustment:** The customer can adjust the length S1.
 - ◆ Default: 0 mm
 - ◆ Range: ± 10 mm, in units of 1 mm
- ❑ **Fine Adjustment:** The technician can adjust the lengths S2 and L.
 - ◆ Default: 0
 - ◆ Range: ± 4 mm, in units of 0.2 mm

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- ❑ FM3: Letter Fold-out
- ❑ For the adjustment ranges and default settings for each paper size, see the Replacement and Adjustment section of the service manual.

Fine Fold Adjustment: FM4

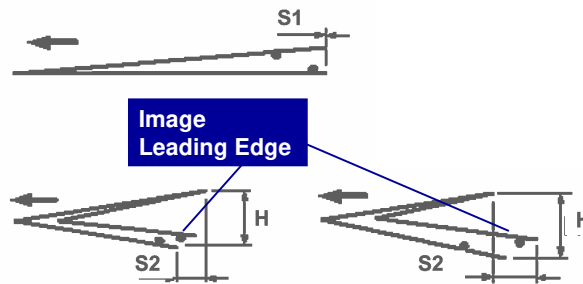


- ❑ **Standard adjustment:** The customer can adjust the length S1.
 - ♦ Default: 2 mm
 - ♦ Range: From 2 to 7 mm, in units of 1 mm
- ❑ **Fine Adjustment:** The technician can adjust the lengths L1 and L2.
 - ♦ Default: 0
 - ♦ Range: ± 4 mm, in units of 0.2 mm

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- ❑ FM4: Letter Fold-in
- ❑ For the adjustment ranges and default settings for each paper size, see the Replacement and Adjustment section of the service manual.

Fine Fold Adjustment: FM5

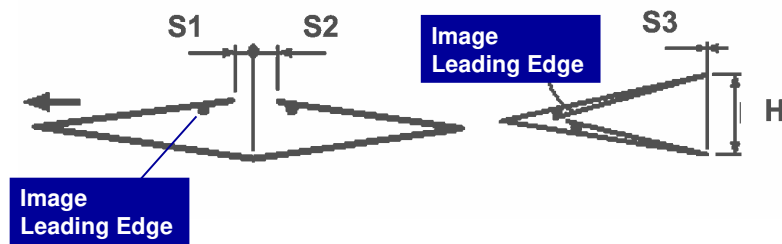


- ❑ **Standard adjustment:** The customer can adjust the lengths S1 and S2.
 - ♦ Default: 0 mm
 - ♦ Range: ± 10 mm, in units of 1 mm
- ❑ **Fine Adjustment:** The technician can adjust the lengths S1 and S2.
 - ♦ Default: 0
 - ♦ Range: ± 4 mm, in units of 0.2 mm

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- ❑ FM5: Double-parallel Fold
- ❑ For the adjustment ranges and default settings for each paper size, see the Replacement and Adjustment section of the service manual.

Fine Fold Adjustment: FM6



- ❑ **Standard adjustment:** The customer can adjust the lengths S1 and S2.
 - ◆ Default: 2 mm
 - ◆ Range: 2 to 12 mm, in units of 1 mm
- ❑ **Fine Adjustment:** The technician can adjust the lengths S1, S2, and S3.
 - ◆ Default: 0
 - ◆ Range: ± 4 mm, in units of 0.2 mm

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- ❑ FM6: Gate Fold
- ❑ For the adjustment ranges and default settings for each paper size, see the Replacement and Adjustment section of the service manual.

SP Codes for Fold Adjustments

- ❑ The fold positions can be adjusted in one of two ways
 - ◆ User Tools (System Settings – General Features)
 - ◆ Engine SP modes 6312 to 6323
- ❑ The user tool adjustment is the standard adjustment, and the SP mode is a fine adjustment.

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No additional notes

ADJUSTMENTS

Manual Adjustments

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This section explains how to adjust the machine if the folds are not straight (skewed folding).

In the specifications, tolerance for skew is within 2 mm of the paper width.

Stopper 2

Location of the Adjustments

Stopper 3

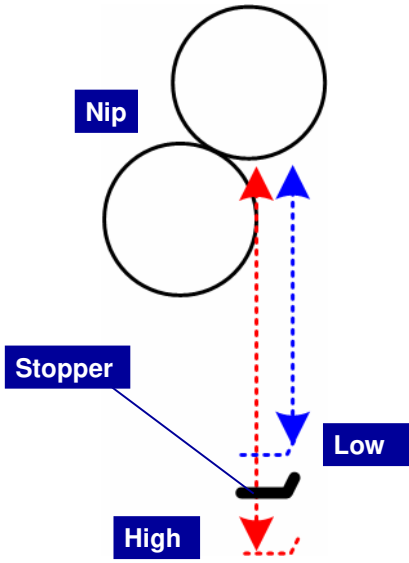
Stopper 1

- Adjustments are made with screws near the three stoppers.
- If the stoppers are not straight, skew will occur at the folds.

Slide 60

No additional notes

Terminology: 'High' and 'Low'

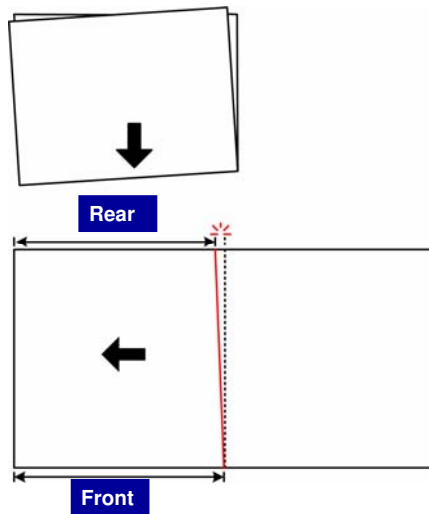


- ❑ "High": The distance from the nip of the fold rollers to the stopper is too far on one end of the fence.
- ❑ "Low": The distance from the nip of the fold roller to the stopper is too short.

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No additional notes

Terminology: 'Front' and 'Rear' (1)

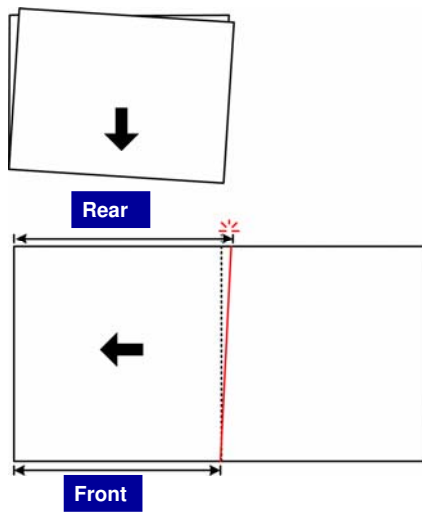


- ❑ Example 1: FM2, Stopper 1 Fence High at the Front of the Machine
- ❑ This is an example of skew caused by the front end of Stopper 1 being higher than at its rear end.
- ❑ When the folded sheet is opened, the front edge is longer than the rear edge.

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- ❑ The terms "Front" and "Rear" are critical to understanding how paper is skewing during folding.
- ❑ These terms are defined relative to the positioning of the paper in the paper path as it feeds and exits.
- ❑ Two examples are shown on the next two slides.
- ❑ The black arrow shows the direction of paper feed from right to left.

Terminology: 'Front' and 'Rear' (2)

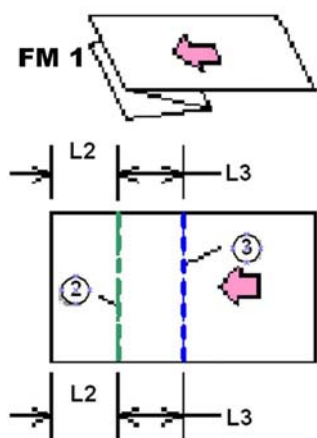


Slide 63

- ❑ Example 2: FM2, Stopper 1 Fence Low at the Front of the Machine
- ❑ This is an example of skew caused by the front end of Stopper 1 being lower than at its rear end.
- ❑ When the folded sheet is opened, the front edge is shorter than the rear edge.

- ❑ The black arrow shows the direction of paper feed from right to left.

Skew Correction Reference Diagrams (1)

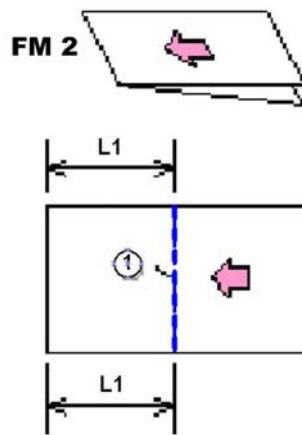


- For FM1 type folds, skew can occur at two locations.
 - ◆ ② and ③ in the diagram.
- This is because two stoppers (numbers 2 and 3) are used.
- For example, if skew occurs at location ② on the printout, adjust the screw near stopper 2.

Slide 64

- Blue line: Peak fold (points to the left)
- Green line: Valley fold (points to the right)

Skew Correction Reference Diagrams (2)

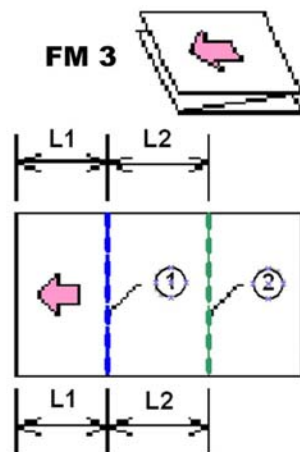


- ❑ For FM2 folds, only one stopper is used, so folds can only occur at one location.
- ❑ If skew is present, adjust stopper 1.

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- ❑ Blue line: Peak fold (points to the left)
- ❑ Green line: Valley fold (points to the right)

Skew Correction Reference Diagrams (3)

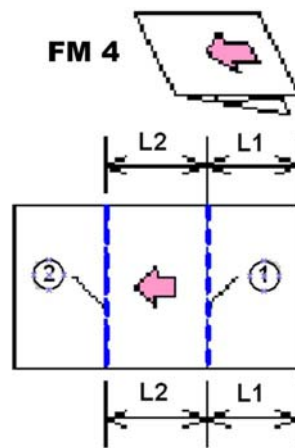


- ❑ For FM3 type folds, skew can occur at two locations.
 - ◆ ① and ② in the diagram.
- ❑ This is because two stoppers (numbers 1 and 2) are used.
- ❑ For example, if skew occurs at location ② on the printout, adjust the screw near stopper 2.

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- ❑ Blue line: Peak fold (points to the left)
- ❑ Green line: Valley fold (points to the right)

Skew Correction Reference Diagrams (4)



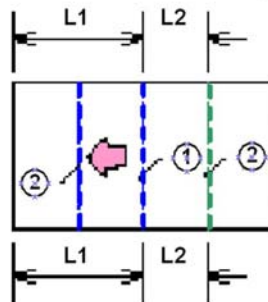
- The principle is the same as for FM3 folds.

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- Blue line: Peak fold (points to the left)
- Green line: Valley fold (points to the right)

Skew Correction Reference Diagrams (5)

FM 5

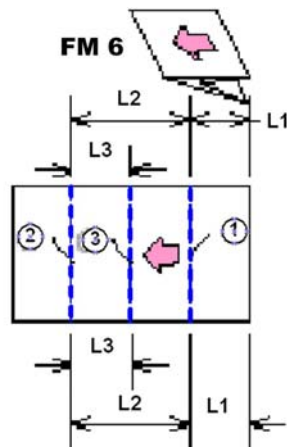


- ☐ With FM5 folding, there are three folds.
- ☐ Two folds are made with stopper 2, so if stopper 2 needs adjusting, there should be skew at two places.

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- ☐ Blue line: Peak fold (points to the left)
- ☐ Green line: Valley fold (points to the right)

Skew Correction Reference Diagrams (6)

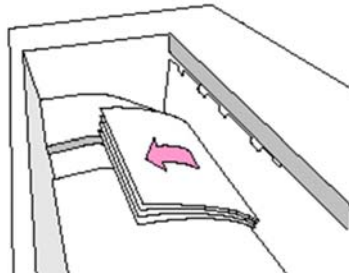


- ❑ With FM6 folding, all three stoppers are used.
- ❑ If skew occurs at one of the folds, adjust stopper 1, 2, or 3, depending on which fold is skewed.

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- ❑ Blue line: Peak fold (points to the left)
- ❑ Green line: Valley fold (points to the right)

Adjustment Procedure Overview



- ❑ 1. Retrieve the first folded paper from the top of the multi-folder. The first sheet is on the bottom of the stack.
- ❑ 2. If a fold is skewed, spread the paper out in the direction of paper feed shown in the diagrams above.
- ❑ 3. At the front and rear of the paper, measure the distances between the folds between L1, L2, L3.
- ❑ 4. Compare the Front and Rear measurements.
- ❑ 5. Determine where the paper is skewing and what type of adjustment is required (see the table on the next slide).

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- ❑ Refer to the table on the next slide to determine where the paper is skewing and what type of adjustment is required.

How to Determine the Type of Adjustment

Skew Correction Reference Table

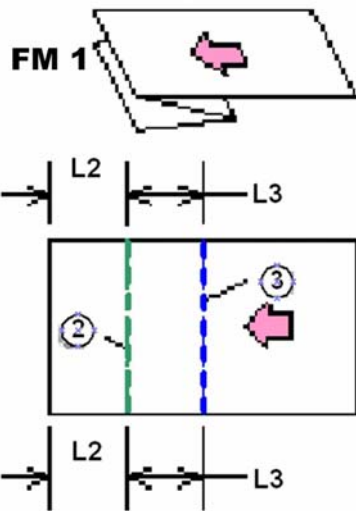
	L1	L2	L3
FM1	---	F Long Lower F on S2	F Long Raise F on S3
	---	F Short Raise F on S2	F Short Lower F on S3
FM2	F Long Raise F on S1	---	---
	F Short Lower F on S1	---	---
FM3	F Long Raise F on S1	F Long Lower F on S2	---
	F Short Lower F on S1	F Short Raise F on S2	---
FM4	F Long Raise F on S1	F Long Lower F on S2	---
	F Short Lower F on S1	F Short Raise F on S2	---
FM5	F Long Raise F on S1	F Long Lower F on S2	---
	F Short Lower F on S1	F Short Raise F on S2	---
FM6	F Long Lower F on S1	F Long Lower F on S2	F Long Raise F on S3
	F Short Raise F on S1	F Short Raise F on S2	F Short Lower F on S3

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Table Key

- ❑ You must refer to the "Skew Correction Reference Diagrams". The following abbreviations are used in the table above.
 - **F Long**: Front measurement of L1, L2, or L3 is longer than Rear.
 - **F Short**: Front measurement of L1, L2, or L3 is shorter than Rear.
 - **S1, S2, S3**: Refers to Stopper 1, Stopper 2, and Stopper 3. In the diagrams, these are annotated as: (1), (2), and (3) respectively.
 - **Raise F**: Raise the front end of the stopper fence.
 - **Lower F**: Lower the front end of the stopper fence.

Example: FM1 (Z-fold) - 1

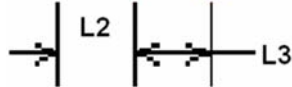
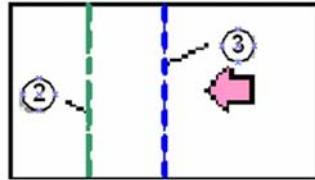
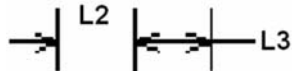


- ❑ First, compare the L2 measurements.
- ❑ In this example, imagine that L2 is longer at the front than at the rear.
- ❑ Look at the table, in the row for FM1, and the column for L2.
 - ♦ 'F Long' means Front measurement longer than Rear
 - ♦ 'F Short' means Rear measurement longer than Front
- ❑ L2 is longer at the front, so we have an 'F Long' situation.
- ❑ Then look at the next line, below 'F Long'. It says 'Lower F on S2'.
- ❑ This means you must lower the front end of stopper 2.

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No additional notes

Example: FM1 (Z-fold) - 2

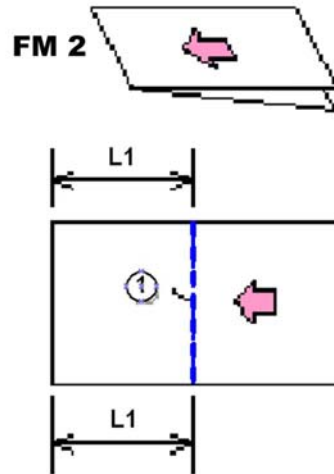


- ❑ Then, compare the L3 measurements.
- ❑ In this example, imagine that L3 is longer at the front than at the rear.
- ❑ Look at the table, in the row for FM1, and the column for L3.
 - ♦ 'F Long' means Front measurement longer than Rear
 - ♦ 'F Short' means Rear measurement longer than Front
- ❑ L3 is longer at the front, so we have an 'F Long' situation.
- ❑ Then look at the next line, below 'F Long'. It says 'Raise F on S3'.
- ❑ This means you must raise the front end of stopper 3.

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No additional notes

Example: FM2 (Half-fold)

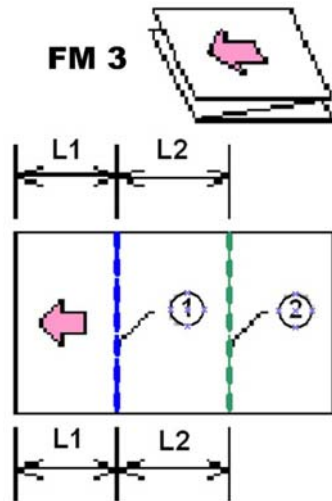


- ❑ Compare the L1 measurements.
- ❑ In this example, imagine that L1 is shorter at the front than at the rear.
- ❑ Look at the table, in the row for FM2, and the column for L1.
 - ♦ 'F Long' means Front measurement longer than Rear
 - ♦ 'F Short' means Rear measurement longer than Front
- ❑ L1 is shorter at the front, so we have an 'F Short' situation.
- ❑ Then look at the next line, below 'F Short' . It says 'Lower F on S1'.
- ❑ This means you must lower the front end of stopper 1.

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No additional notes

Example: FM3 (Letter Fold Out) - 1

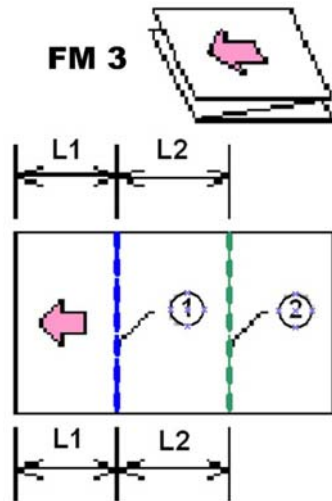


- ❑ First, compare the L1 measurements.
- ❑ In this example, imagine that L1 is longer at the front than at the rear.
- ❑ Look at the table, in the row for FM3, and the column for L1.
 - ♦ 'F Long' means Front measurement longer than Rear
 - ♦ 'F Short' means Rear measurement longer than Front
- ❑ L1 is longer at the front, so we have an 'F Long' situation.
- ❑ Then look at the next line, below 'F Long'. It says 'Raise F on S1'.
- ❑ This means you must raise the front end of stopper 1.

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No additional notes

Example: FM3 (Letter Fold Out) - 2

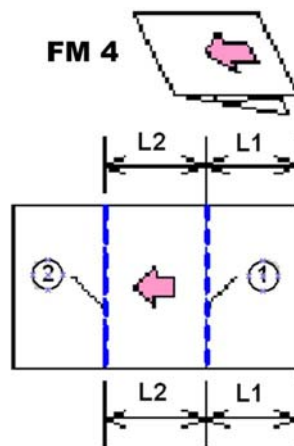


- ❑ Then, compare the L2 measurements.
- ❑ In this example, imagine that L2 is shorter at the front than at the rear.
- ❑ Look at the table, in the row for FM1, and the column for L2.
 - ♦ 'F Long' means Front measurement longer than Rear
 - ♦ 'F Short' means Rear measurement longer than Front
- ❑ L3 is shorter at the front, so we have an 'F Short' situation.
- ❑ Then look at the next line, below 'F Short'. It says 'Raise F on S2'.
- ❑ This means you must raise the front end of stopper 2.

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No additional notes

Example: FM4 (Letter Fold In)

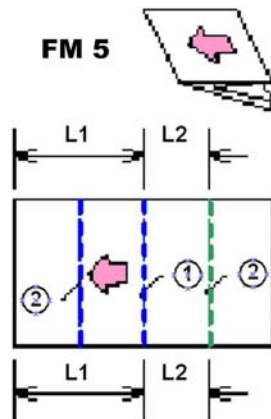


- The principle is the same as for FM3 folds, except that you use the column for FM4.

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- Blue line: Peak fold (points to the left)
- Green line: Valley fold (points to the right)

Example: FM5 (Double-Parallel Fold)

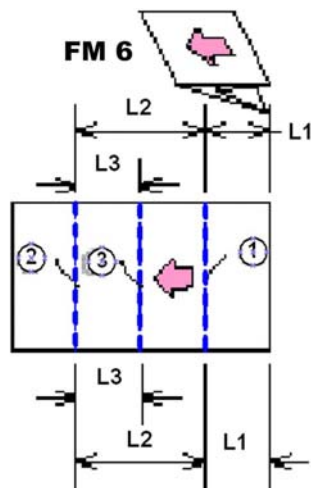


- ❑ The principle is the same as for FM3 fold, except that you use the column for FM5.
- ❑ With FM5 folding, there are three folds, and two folds are made with stopper 2.
- ❑ Measure L1 and L2 at the locations shown in the diagram.

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- ❑ Blue line: Peak fold (points to the left)
- ❑ Green line: Valley fold (points to the right)

Example: FM6 (Gate Fold) - 1

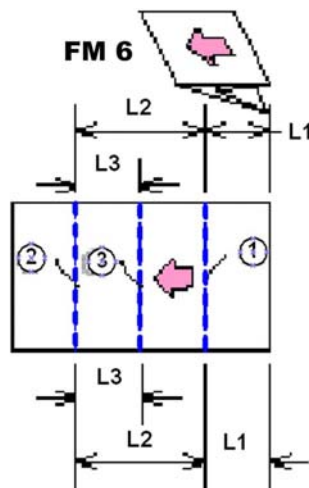


- ❑ First, compare the L1 measurements.
- ❑ In this example, imagine that L1 is longer at the front than at the rear.
- ❑ Look at the table, in the row for FM6, and the column for L1.
 - ♦ 'F Long' means Front measurement longer than Rear
 - ♦ 'F Short' means Rear measurement longer than Front
- ❑ L1 is longer at the front, so we have an 'F Long' situation.
- ❑ Then look at the next line, below 'F Long'. It says 'Lower F on S1'.
- ❑ This means you must lower the front end of stopper 1.

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- ❑ Blue line: Peak fold (points to the left)
- ❑ Green line: Valley fold (points to the right)

Example: FM6 (Gate Fold) - 2

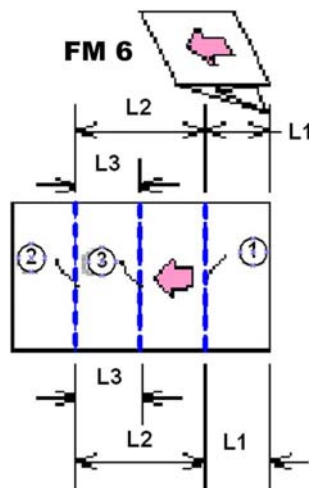


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- ❑ Then, compare the L2 measurements.
- ❑ In this example, imagine that L2 is shorter at the front than at the rear.
- ❑ Look at the table, in the row for FM6, and the column for L2.
 - ♦ 'F Long' means Front measurement longer than Rear
 - ♦ 'F Short' means Rear measurement longer than Front
- ❑ L2 is shorter at the front, so we have an 'F Short' situation.
- ❑ Then look at the next line, below 'F Short'. It says 'Raise F on S2'.
- ❑ This means you must raise the front end of stopper 2.

- ❑ Blue line: Peak fold (points to the left)
- ❑ Green line: Valley fold (points to the right)

Example: FM6 (Gate Fold) - 3



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- ❑ Then, compare the L3 measurements.
- ❑ In this example, imagine that L3 is longer at the front than at the rear.
- ❑ Look at the table, in the row for FM3, and the column for L3.
 - ♦ 'F Long' means Front measurement longer than Rear
 - ♦ 'F Short' means Rear measurement longer than Front
- ❑ L3 is longer at the front, so we have an 'F Long' situation.
- ❑ Then look at the next line, below 'F Long'. It says 'Raise F on S3'.
- ❑ This means you must raise the front end of stopper 3.

- ❑ Blue line: Peak fold (points to the left)
- ❑ Green line: Valley fold (points to the right)

Adjustment Procedure (1)

Stopper 2

Stopper 3

Stopper 1

Set Screws

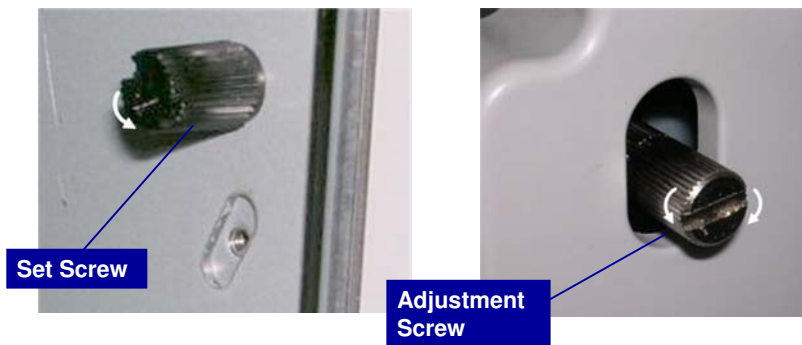
Adjustment Screws

- ❑ First, check which fold is skewed, and which stopper needs adjustment.
- ❑ Locate the stopper on the machine.
- ❑ Each stopper has two screws.
 - ♦ The black plastic screw is the 'set screw'.
 - ♦ The silver metal screw is the 'adjustment screw'.

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No additional notes

Adjustment Procedure (2)

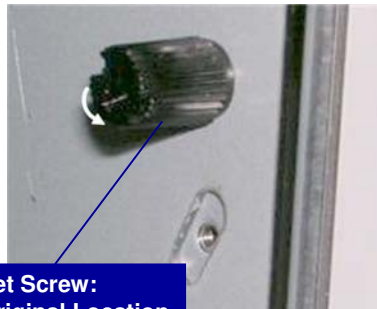


- ❑ Remove the set screw.
- ❑ Turn the adjustment screw to do the adjustment.
 - ◆ Turn the screw clockwise to raise the front end of the fence.
 - ◆ Turn the screw counter-clockwise to lower the front of the fence.

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No additional notes

Adjustment Procedure (3)



**Set Screw:
Original Location**



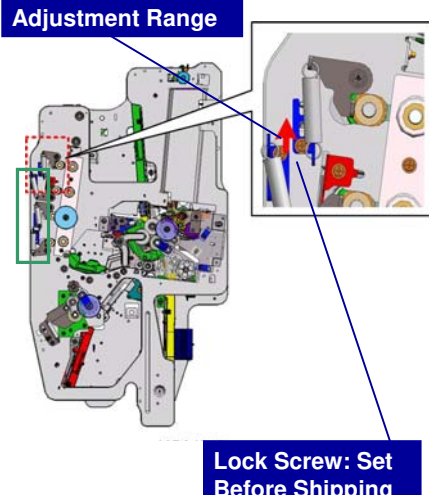
**Set Screw: Location
After Adjustment**

- ❑ **Fasten the set screw in the hole in the diagonal cutout near the hole where you removed it.**
 - ♦ The diagonal cut may be above or below the original hole, depending on which stopper you are adjusting.
 - ♦ The photo above shows the set screw for Stopper 2.
- ❑ **Tighten the set screw.**

Slide 84

No additional notes

Crease Roller Adjustment



- ☐ The amount of pressure exerted by the crease rollers can be adjusted.
- ☐ This can be done to eliminate splitting that can occur with coated paper and other types of media.
- ☐ The adjustment is a manual adjustment done on springs.
- ☐ A projection fixed in a slot and attached to a spring shortens the length that the roller can be lowered.
- ☐ There are four crease rollers. Springs at the front and rear ends of each roller can be adjusted.

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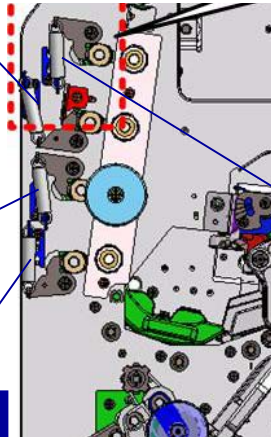
- ☐ Adjustment range: 4mm (see the red arrow in the diagram)
- ☐ The three springs are shown in the green square at the left side of the drawing. See the next slide for an expanded view.

Crease Roller Adjustment

Spring for
Crease Roller 3

Spring for
Crease Roller 2

Spring for
Crease Roller 1



- This shows the three springs that are adjustable. The other one is fixed at the factory, as explained on the previous slide.

Locked Before
Shipping

Slide 86

No additional slides