RICOH

Buffer Pass Unit



- When large volumes of coated paper get stacked, the toner on the front of the paper gets stuck to the back of the sheet that gets stacked on top.
 - When toner adhesion is severe, the image on the paper may be ruined or the paper itself may tear when separating the sheets.
- To prevent this, the Buffer Pass Unit cools the printed paper before it reaches the stacker or finisher.
- The Buffer Pass Unit contains 8 fans.

No additional notes

2. Details

Overview

Components Layout



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1. Upper cooling fans	9. Lower cooling fans
2. Upper exhaust fan	10. Front door switch
3. Transport roller	11. Transport sensor 5
4. Transport sensor 1	12. Transport sensor 6
5. Drive motor: right	13. Lower exhaust fans
6. Transport sensor 2	14. Transport sensor 7
7. Transport sensor 3	15. Drive motor: left
8. Transport sensor 4	16. Transport sensor 8

Drive Layout



1. Paper transport right knob

- 2. Timing belt: right side
- 3. Drive motor right
- 4. Drive motor left
- 5. Timing belt: left side
- 6. Paper transport left knob

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Paper Path



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A sheet of paper is fed to the entrance [A] of the buffer pass unit from the mainframe. The drive motor right [B] turns on 1.05 seconds after the mainframe has received a print job or copy job, and then drives six transport rollers [C] at the right paper path area and feeds a sheet of paper to the left paper path area.

The drive motor left [D] turns on 1.05 seconds after the drive motor right has turned on and then drives six transport rollers [E] at the left paper path area and feeds a sheet of paper to the exit.

There are eights transport sensors in the paper path. The machine stops the machine operation if one of these sensors detects a paper jam.

Paper Cooling



There two sets of exhaust fans and two sets of cooling fans in the buffer pass unit. These fans turn on in 0.1 seconds interval as follows below after the mainframe has turned on or received a printer job or copy job.

• Upper exhaust fans [A] > lower exhaust fans [B] > upper cooling fans [C] > lower cooling fans [D]

The lower cooling fans [D] draw air in the buffer pass unit from the outside, and then move air [E] to the upper area along with the outer of the paper path. This makes the outer of the paper path cooler. Finally air around the upper area is expelled to the outside by the upper exhaust fans [A].

Also the upper cooling fans [C] draw air in the buffer pass unit from the outside, and then move air [F] to the center area along with the inner of the paper path. This makes the inner of the paper path cooler. Finally air around the center area is expelled to the outside by the lower exhaust fans [B].

Two sides of the paper path guide remove heat from a sheet of paper while a sheet of paper is being transported. As a result, a sheet of paper from the exit of this unit is properly cooled.

The fan operation time after the initializing or job end can be adjusted by SP1940-008 (adjustable from 0 to 60 minutes/ default: 10 minutes).