Aries Trouble Shooting

Index

Image Quality

Main Scan Direction line/ banding

Sub Scan Direction lines

Stain

Other Quality Issue

SC / JAM

Peripherals

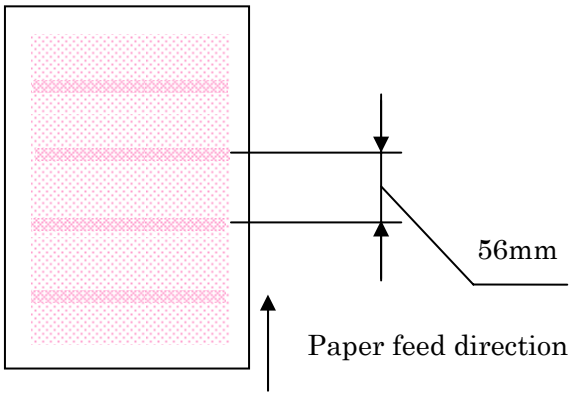
Others

56mm pitch banding

56mm pitch banding occurs. The banding is clearly seen on the halftone image.

Cause

The machine was not used for a long time, the place where the drum cleaning brush roller contacts the drum; the creases are left in the brush roller.
The load changes at the creases, which creates the banding.



Step 1: Print out 2 dot independent (SP 2-109-002) and check if 56mm pitch bandings are occurring.

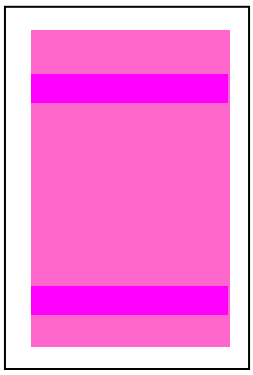
If no bandings are occurring, this trouble shooting will not solve the issue.
If the 56mm pitch bandings are occurring, go to Step 2.

Step 2: Replace the drum cleaning brush roller of that specific color
Refer to "Drum Cleaning Brush Roller" under Replacement and Adjustment in the service manual.

Paper feed direction

314mm pitch 40mm width dark band

If the machine has left for long time, 40mm width bandings appear on 314 mm pitch



Cause

Compound created from the corona charger, NOx, adheres on the drum under the corona, which changes the properties of the drum and causes the darker area..

Step 1:

Replace the drum and the corona charger.

Step 2: To prevent the dark banding, one of the following measure can be done if the customer accept doing it.

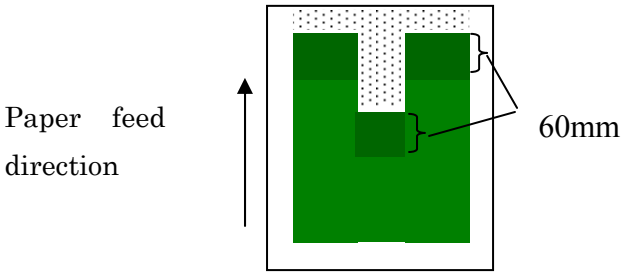
1. Turn on the fan when the machine's main switch in on
2. By using the external power source, rotate the fan
3. Remove the corona charger, end of the day.

Ghosting

60mm from the leading edge appears darker compare to other.

Cause

Toner accumulates on the surface of the development rollers, which extra toner adhere onto the ITB, when processing the image.



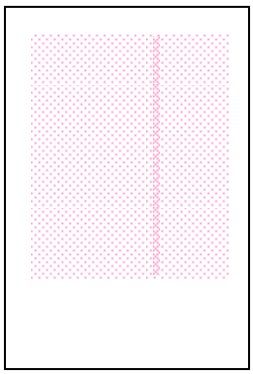
Step 1: Click on the "Rotate 180" in CWS
If the ghosting still appears, go to Step 2.
Step 2: Check the Image coverage rate using SP 2-281 for each color.
Step 3: Print out solid image, A3/DLT 200 sheets of color that ghosting occurring or the color that the coverage is more than 40%.
If the customer is not satisfied, go to Step4.
Step 4: execute "density adjustment" SP3-820-002 then print out A3/ DLT 200 sheets of solid color.
If the customer is not satisfied, go to Step5.
Step 5
Replace the developer that the ghosting appears, or the coverage rate is more than 40%.

Streaks on Halftone Images (Stained Corona Charger)

Streaks of 5-6mm wide appear on halftone images.

Cause

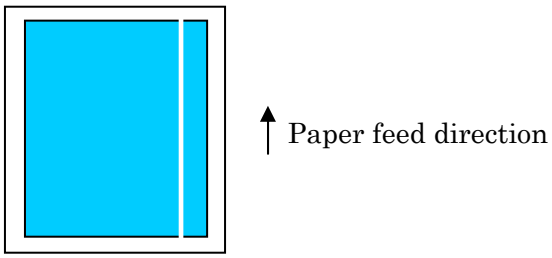
One of the charges in stained.



Step 1: Print three full page A3 /DLT halftone image for each color (SP 2-109-002-16)
Step 2: In the Adjustment Settings for Skilled Operators menu, select "0210: Execute Charger Cleaning" for color affected by streaks.
If the streaks still occurring, go to Step 3.
Step 3: Replace the corona charger for the color affected by streaks.

White line(s)

White line appears on sub scan direction.



Cause

The white line could be caused by one of the following.

1. Dirty dust shield glass.
2. Dirty corona charge or the corona charge reaches to the life time.
3. Contamination inside the developer unit.

Step 1: Print out solid image (A3/DLT 3 sheets) for each color ,YMCK, and check the following points

- White line appears from the leading edge to the trailing edge.
- White line appears at the same position through out 3 sheets.
- White line appears on the specific color

If all the above features are matches to the white line, go to Step 2.

If not, this trouble shooting will not solve the issue.

Step 2: Clean the dust shield glass for the specific color.

If the white line disappeared, the trouble shooting is done.

If not, go to Step 3

Step 3: Exchange the corona charger with different color station where there is no white line.

If the white line appeared at the color where the white line did not appeared originally, clean or replace the corona charger.

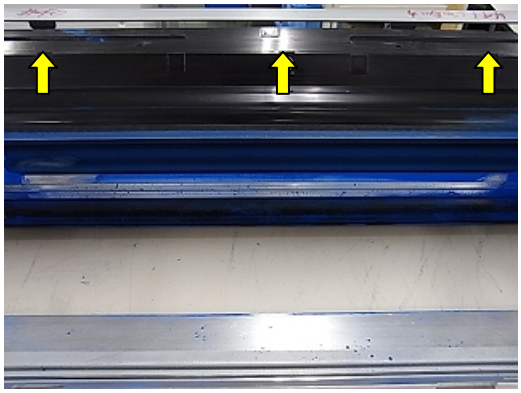
If the white line appears at the same color as before, go to Step 4

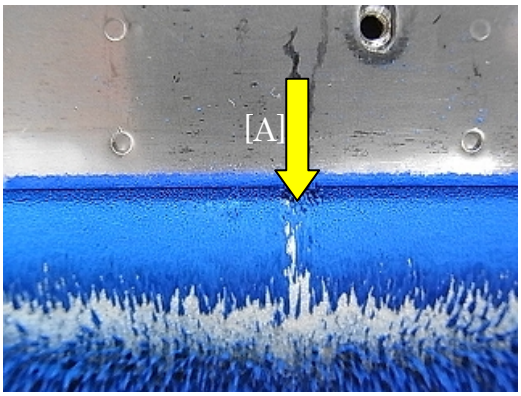
Step 4: open the top cover of the development unit where white line appears. 3 screws

Rotate the auger and see if the developer is missing in some areas.

If no, there is no other trouble shooting.

If yes, go to step 5.





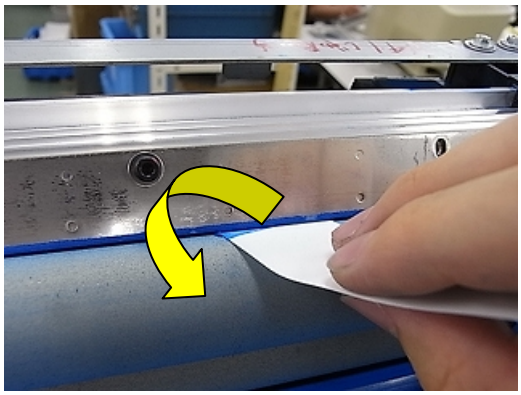
[A] developer is missing

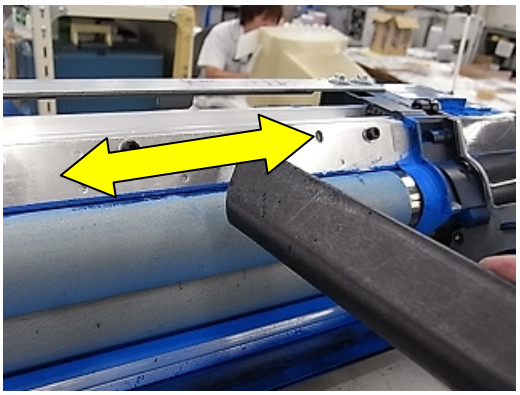
Step 5: Rotate the auger until there is no developer on the auger, then insert a piece of paper between the upper developer roller and shaft, try to remove the developer and vacuum it.

Note: Do not damage the Development Rollers

If the white line disappears, the trouble shooting is done.

If the white line still appears, go to step 6.





Step 6:. Exhaust the developer, and repeat Step 5. Then fill in with the new developer.

If the white line disappears, the trouble shooting is done.

If the white line still appears, go to step 7

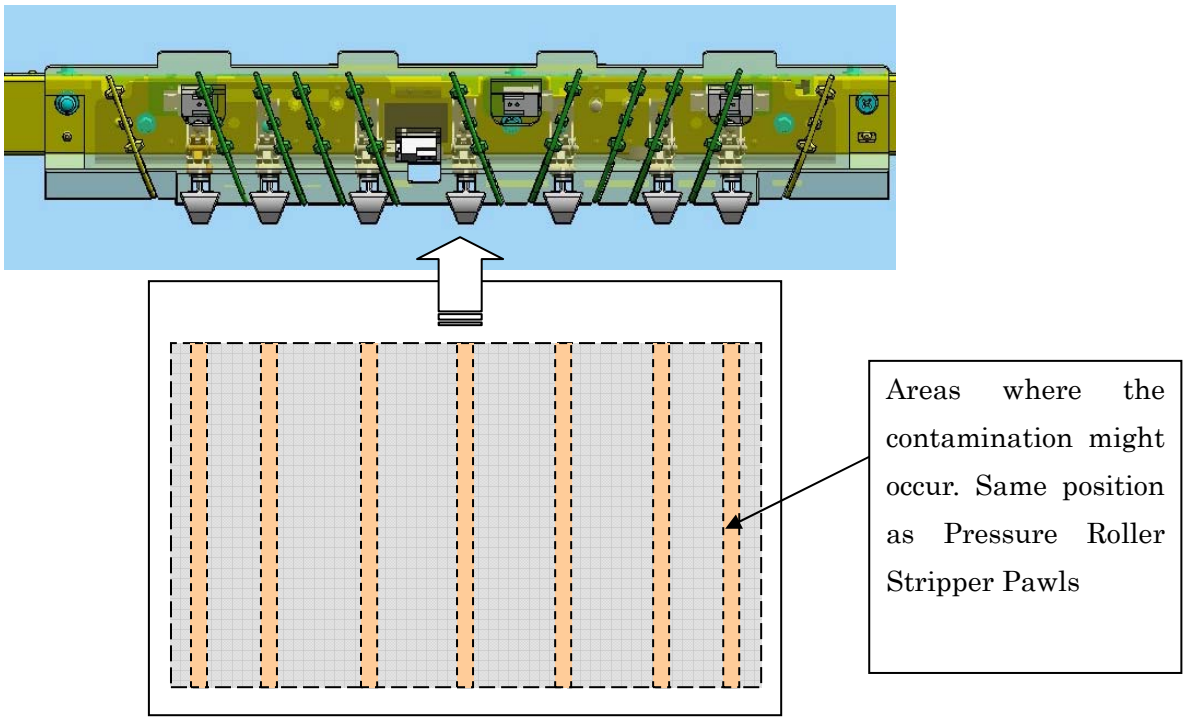
Step 7: Replace the development unit

If the white line disappears, the trouble shooting is done.

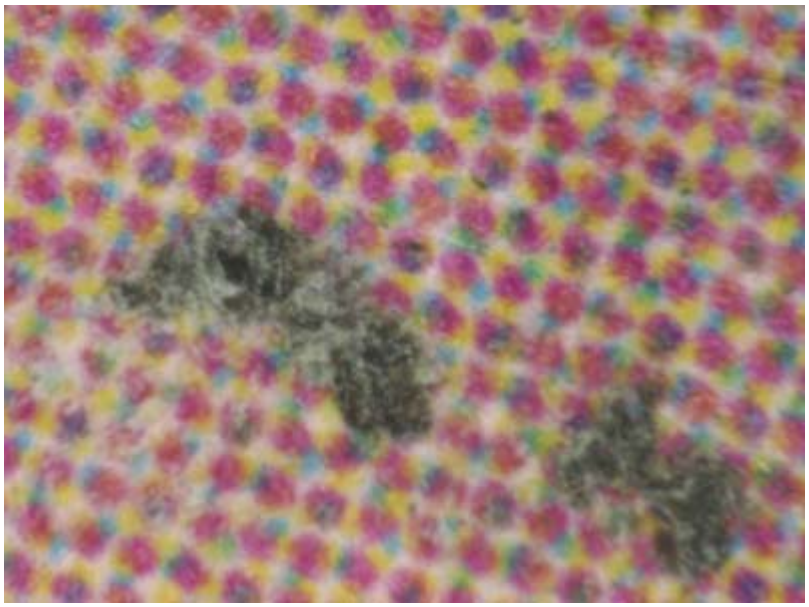
If the white line still appears, there is no other trouble shooting

. **Contamination at Pressure Roller Stripper Pawl Unit Position**

Paper dusts adhere on to first five papers, especially on the second side of duplex.



Sample of contamination



Cause

When using paper contains paper dusts, the paper dust accumulate on the Pressure Roller Stripper Pawls.

The paper with back curl picks up the paper dust on the Pressure Roller Stripper Pawls, and pressed by the roller on the downstream peripherals.

Solution

Step 1: Remove the paper dust accumulated on the Pressure Roller Stripper Pawls using cloth.

Step 2: Print the following duplex image.

Solid image on the fist side, white page on the second side

*solid image will pick up the paper dust on the Pressure Roller Stripper Pawls.

Step 3: Remove the Pressure Roller Stripper Pawls Unit from Fuser Unit, and clean the Stripper Pawls Unit.

Dirty Cooling Belt

Cooling belt becomes dirty with toner and; therefore, the paper gets dirty.

Cause

If the JAM 39 occurred machine stops printing. When using the paper larger than A3 /DLT some images close to the trailing edge has not been fused yet. By following the instruction displayed on the panel to remove the JAM, unfused images pass through the Cooling pipe. The toner on the cooling pipe adhere onto the Cooling belt

Solution

Clean the Cooling pipe and the Cooling belt with wet cloth.

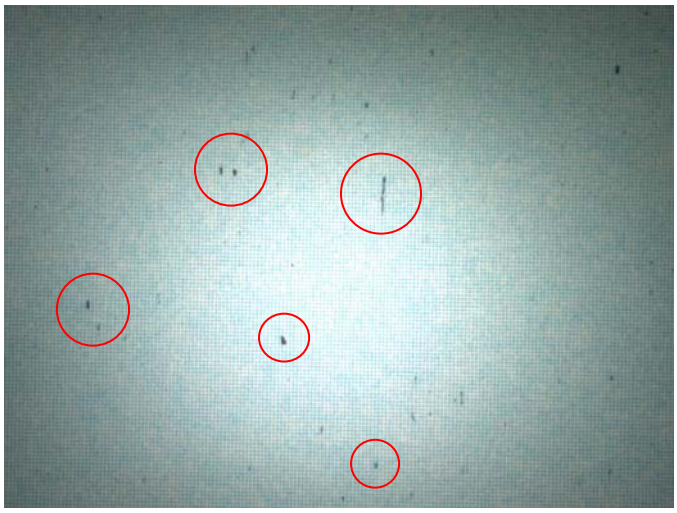
Dirty stack phase
Stack phase of the paper is dirty

Cause
Toner adheres onto the roller, and re-adheres onto the paper.

Step 1: Check the pitch and width of dirty area.
If the dirty area appears at 66mm pitch with 14mm width → clean the Drive/ driven roller and robber roller of main frame and buffer unit
If the dirty areas are not 66mm pitch and 14mm width, → clean the roller of PTR, Cooling belt, Guide plate, Peripherals
If the stack phase is still dirty, go to Step 2
Step 2: Increase the heat roller temperature 5 degrees

Waste toner adheres to the paper

The waste toner slipped through the cleaning web and adheres onto the paper.
0.5 to 1mm solids (dots and lines) adheres onto the paper.



Cause
Toner particles have slipped through the cleaning web.
This may occur in any of the following cases:
Duplex printing, printing on uncoated (especially rough-textured) paper, or printing halftone images

Step 1:
Add few pages* of waste paper after the main job.
*On duplex mode, waste toner adheres on the last few pages; therefore, add few pages at the last of the job.
4papers: if the length of paper is less than A4 /letter seize
3papers: if the length of paper is less than A3 / DLT
2 papers: if the length of paper is more than A3/DLT
If the waste toner still adheres on the paper, go to step 2.
Step 2: Increase the heat roller temperature by 5 degrees, maximum 10 degrees. If the gloss strips or Jam occurred, set back the heating roller temperature.
SP1-104-xxx
If the waste toner still adheres on the paper, go to step 3.
Step 3: Set [41: Adjust Cleaning Web Motor Interval] to 0.01 in [Advanced Settings] for the custom paper in use.

Toner lump

Toner lumps adhere onto the paper.

Cause

After the machine has been left for long time, under high temperature and high humidity, toner creates the lumps and adheres to the paper.

Step 1: Print out the solid image of the color of the lumps (A3/ DLT 400 sheets).
If the customer is satisfied, the troubleshooting is done.
If not, go to Step 2.
Step 2: Replace the sub hopper, of the color of the lumps
If the customer is satisfied, the troubleshooting is done.
If not, go to Step 3
Step 3: Replace the toner bottle, of the color of the lumps, and print out the solid image of the color of lumps (A3/DLT 400sheets)
If the customer is satisfied, the troubleshooting is done.
If not, go to Step 4
Step 4: Replace the development unit of the color of the lump.
If the customer is satisfied, the trouble shooting is done.
If still the color lumps appears, there are no other trouble shooting

Black appears less dense in FC mode

If the letters are printed next to the Black solid image, along the main scan direction, Black solid might appeared less dense.

Cause

Since the **b**lack station is located at very last, the black image contains less charge compare to other colors.

On full color mode, PTR bias is set to higher than black and white mode; therefore, high electrical bias apply to black toner (less electrical charge), which might makes the black appears less dense.

Step 1: Adjust the FC ITB bias for black. Set the bias to set value + 10 μA

If the black appears less dense in all paper, adjust SP 2-408-001

If the black appear less dense on specific paper, first register the paper then adjust SP 2-963-xxx

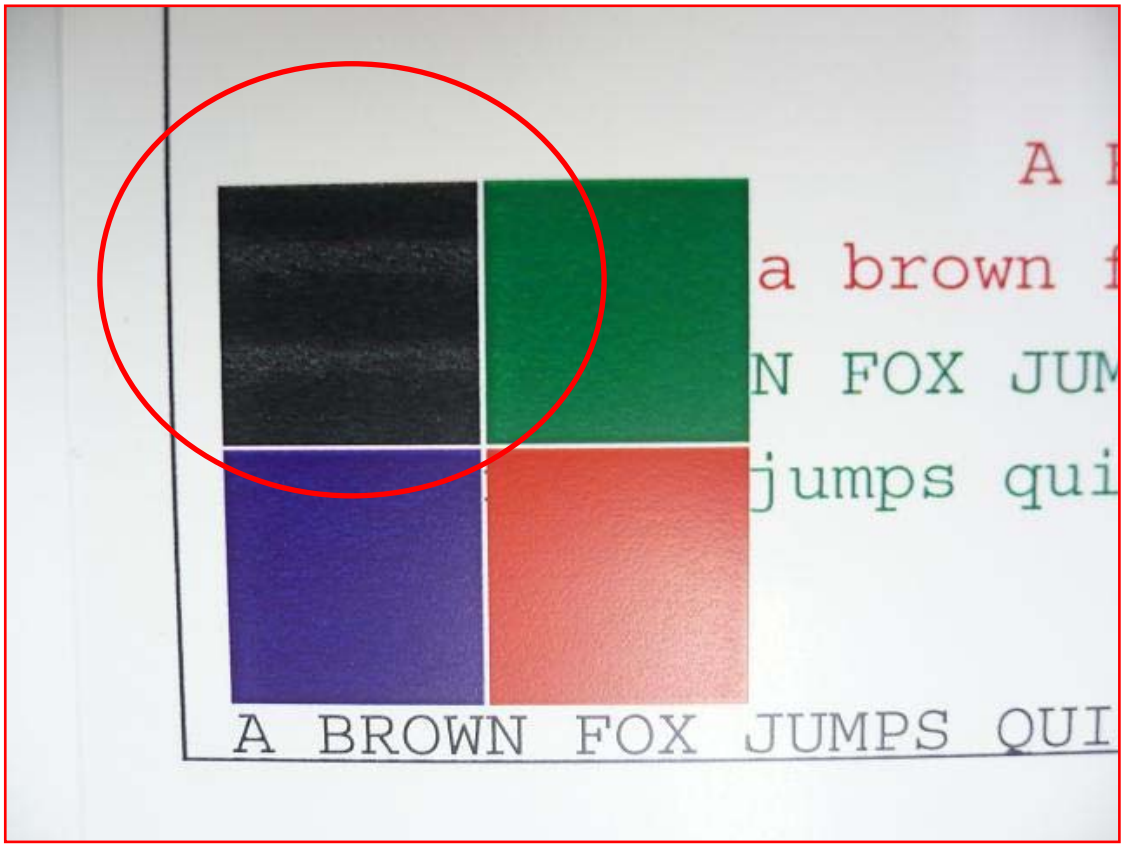
Step 2: If the customer is not satisfied with the printing quality adjust the bias to + 5 μA.

If the customer is not satisfied with the printing quality, keep increasing the bias.

If any quality issue occurred at other color, do not increase the bias anymore. Go to step 3.

Step 3: If the customer is using colorwise off, apply any profile.

If the customer is using single color black, under the tag “black and gray” use normal

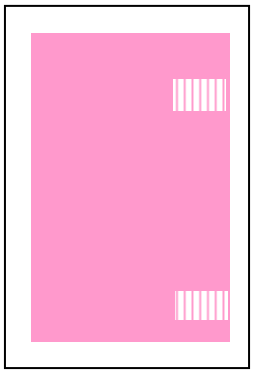

A
a brown
N FOX JUM
jumps qui
A BROWN FOX JUMPS QUI

Blurred Image

The image is blurred and it appears on the 314mm pitch.

Cause

Compound created by the corona charger, adheres and reacts with lubricant on the surface of the drum, which causes the unevenness bias on the drum. This uneven bias causes the blurred image.



Step 1: Print out the halftone image for all color to check the blurred image occurs at the 314mm pitch. (SP 2-109-002-16)
Step 2: If it was the blurred image, execute “Clear Blurred Image” (SP 2-810-001).

DPI: 1200dpi

プリンタテストパターン1200dpi(2by2)

Machine:

others:

Poor fusing

Toner comes out due to poor fusing ability.

Cause

The fusing temperature setting was not enough to transfer the heat to adhere toner onto the media.

Step 1: Register the media that the customer is using into the Paper Library.
Step 2: Increase the heat roller temperature setting by 5 degrees. SP 1104-xxx
Step 3: Check the fusing ability using the customer's job.
If the fusing ability is poor, repeat Step 2 and 3.
Note maximum temperature is 185 degrees. If the jam happens do not increase the temperature any more.
If the fusing ability improved, the trouble shooting is done. If not, go to Step 4.
Step 4: If the adjusting the temperature is not enough for improving the fusing ability and using "colorwise OFF", ask customer for the permission to use any profile.
If the fusing ability improved, the trouble shooting is done. If not, go to Step 5.
Step 5: Ask customer for the permission to turn on the" toner reduction" and turn on it.
If the fusing ability improved, the trouble shooting is done. If not, go to Step 6.
Step 6: Ask customer for permission to drop the productivity.
If no, there is no other trouble shooting.
If yes change the "Process line speed" SP 1161-xxx to slowdown.

By changing the speed line, if the fusing ability improved, the trouble shooting is done. If not, there is no other trouble shooting.

White spots (Medaka)

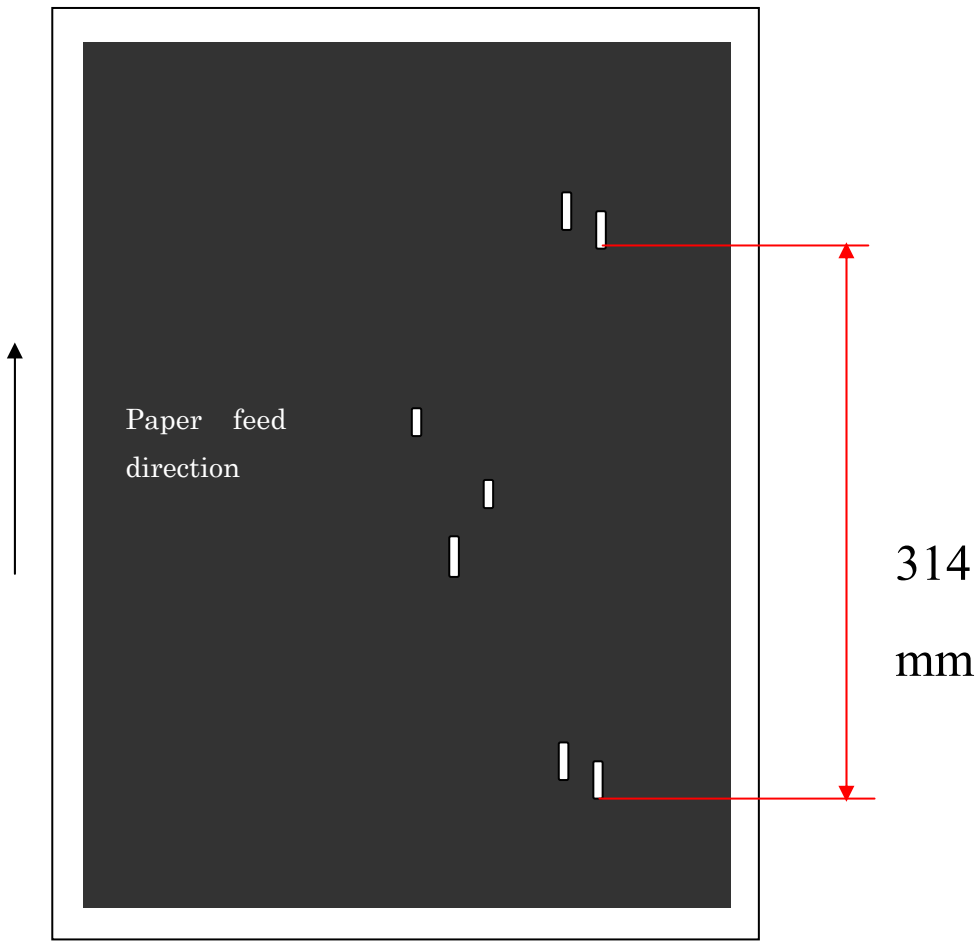
White spots 1 to 2 mm occur at the 314mm pitch

Cause

By continuously printing the high coverage job, the ability to spread the lubricant decreases and the toner and lubricants adhere onto the drum.
Lubricant/ drums scratches the drum or adheres on the drum; therefore, white spot appears on the drum pitch.

Solution

Step 1: Clean the surface of the drum using the cloth.
Is white spot disappeared?
Yes: Go to Step 2
No: Replace the affected drum and finish
Step 2: Did the white spots appear again?
Yes: Clean the surface of drum and activate the interval mode
Adjustment Settings for skilled operators→ Interval Mode
Execute page: 100pages
Idling time 15second
No: Finish
Step 3: Did the white spots appear again
Yes: Clean the surface of drum and replace the drum cleaning unit and finish
No: Advise the customer to use the interval mode when printing high coverage job and finish


Paper feed direction
314
mm

JAM 039

Exit junction timing sensor does not detect paper.

Solution

1

Remove the paper from purge tray at the paper exit tray.

2.

Rotate the knob C1 counterclockwise, 18 to 25 times.

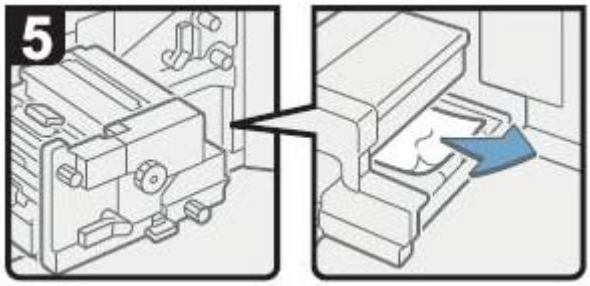
3.

Rotate the knob Z3 counterclockwise, 18 to 25 times.

4.

Turn the C2 lever and pull out the fusing unit drawer.

5.



Remove the paper from the fusing unit

6.

Open Z1 paper path, and remove the paper.

7. Put all units back to the original position.

SC 410 – 413

The machine usage condition has change sharply, ID sensor error, SC 41x, occurs.

Cause

The machine saves the usage condition of the last process control. If the last time process control was done under HH, image process ability is high; therefore, toner density and electric bias have set to low value. Then when the process control runs under LL, ID sensor could not obtain enough data to adjust the toner density. Vise versa.

Solution

The usage condition has changed to LL, changed the following SP, LD Power Control.
SP 3-581-001 to 004: 70.0%→ 100.0%
The usage condition has changed to LL, changed the following SP, LD Power Control.
SP 3-581-001 to 004: 70.0%→ 60.0%

Reboot the machine

SC 746 on SR 5000 / SR 5020

After closing the front door, SC 746 occurs

Cause

Staple Unit was not set properly, and the front door was closed.
First JAM 114 occurs, and if the JAM 114 occurs continuously twice, SC 746 occurs.

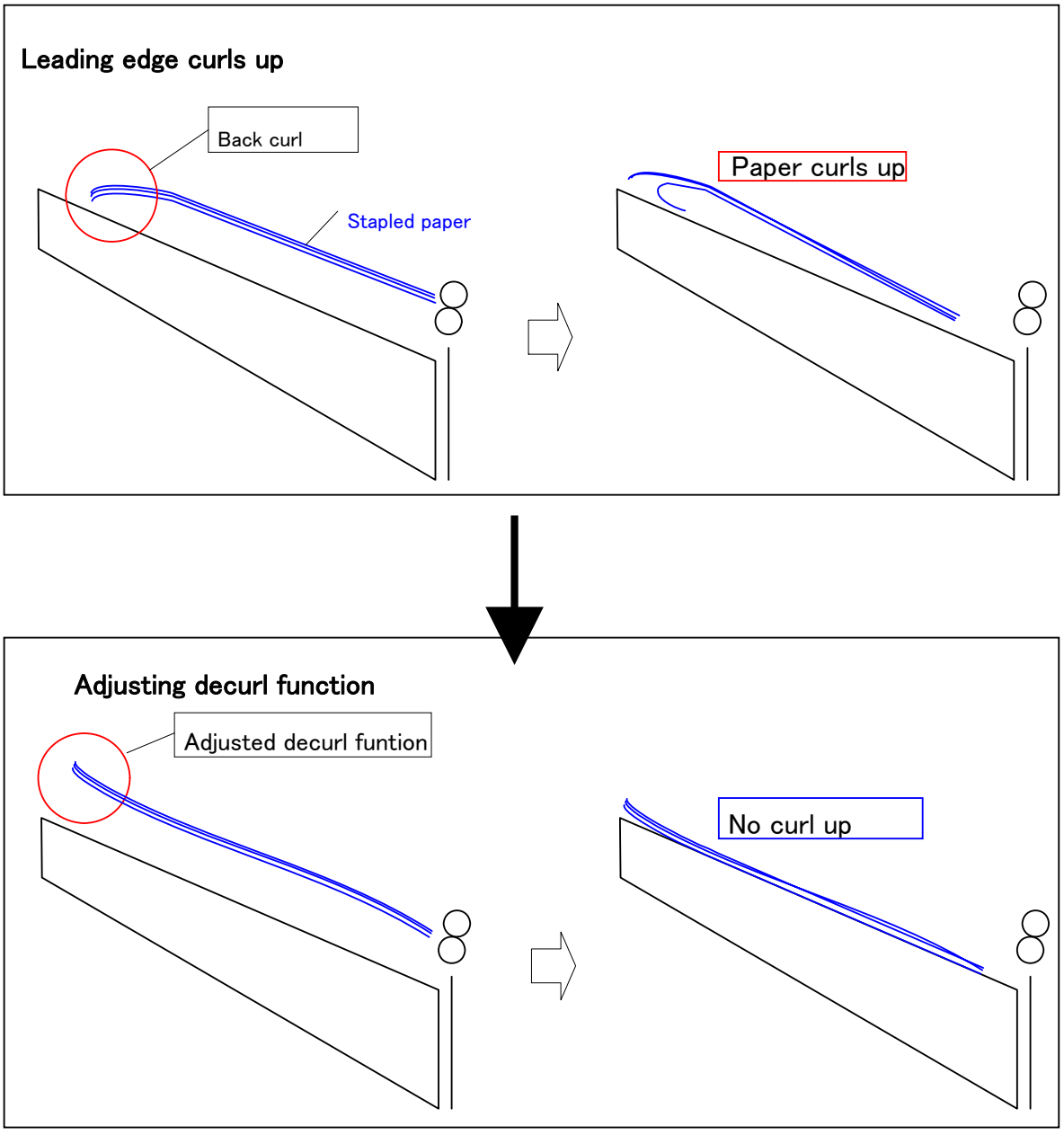
Step 1: Check whether JAM 114 occurred.
If no this trouble shooting will not solve the issue.
Step 2: Open the front door and reset the staple unit properly.
Step 3: Turn Off and On the main power.

Stapled paper stuck curled up on the tray

The stapled paper stuck curled up when it exit from the finisher.

Cause

When the stapled paper stuck is exit from the finisher, if the paper is back curl, the leading edge of the papers contacts the shift tray and curled up.



Solution

Step 1: Check whether the paper is back curl, and if the Decurler Unit (DU5000) is attached.

If the paper is face curl and/or no Decurler Unit, this trouble shooting will not solve the issue.

Step 2: In the skilled operator adjustment, under “Adjust paper curl” select "Adjust ⌒ Curl Weak"

If the curl is not fixed go to step 3.

Step 3: In the skilled operator adjustment, under “Adjust paper curl” select "Adjust ⌒ Curl Strong"

Coated paper not stacked properly in the stacker

The paper in the stacker is not stacked properly

Cause

For the coated paper, (more than 280 gsm and larger than A3/DLT), if it is released as flat paper to the shift tray, the resistance between the paper become large enough; therefore, the paddle can not pull back the paper to the proper position.

This trouble shooting will not work if the paper is released to shift tray and/ or paper less then 280 gsm

Step 1: In the skilled operator adjustment, under “Adjust paper curl” select "Adjust ⌒ Curl Weak"

If the curl is not fixed go to step 2.

Step 2: In the skilled operator adjustment, under “Adjust paper curl” select "Adjust ⌒ Curl Strong"

Coated paper curled up in SK 5010

Paper curled up inside the stacker.

Cause

For the coated paper, (less than 135 gsm and larger than A4/Letter), if it is exited as back curl, the resistance between the stacked paper and the exited paper becomes large enough; therefore, rather than transferring the paper, paper curled up.

Step 1: Check the registration of paper, if the registration is not correct; adjust the position of paper guide.
Step 2: In the skilled operator adjustment, under “Adjust paper curl” select "Adjust ⌒ Curl Weak"
If the curl is not fixed go to step 3.
Step 3: In the skilled operator adjustment, under “Adjust paper curl” select "Adjust ⌒ Curl Strong"

Smell (like chemical)

Smell likes chemical from the back of the machine, or from the printed paper. Some customers might feel as a bad smell.

Cause

The machine is filled with the substances used for coating, for coated paper, especially during the machine is off. When turning on the machine, customer might feel some unpleasant smell, due to lack of ventilation

Solution

While machine is not used, always keep the main switch on; therefore, the coated substance can be exhaust out side the machine.

When installing the machine, please give an attention to the exhaust air from the machine, so that the exhausted air does not directly hit the customer.