

# iRADVC7000/9000s

- 1.Coating error
- 2.Coating failure at rear side of sleeve
- 3.Toner leaking

## [Cause]

### **A. Temperature rise inside of the machine**

The fluidity of toner inside the developing assembly deteriorates.

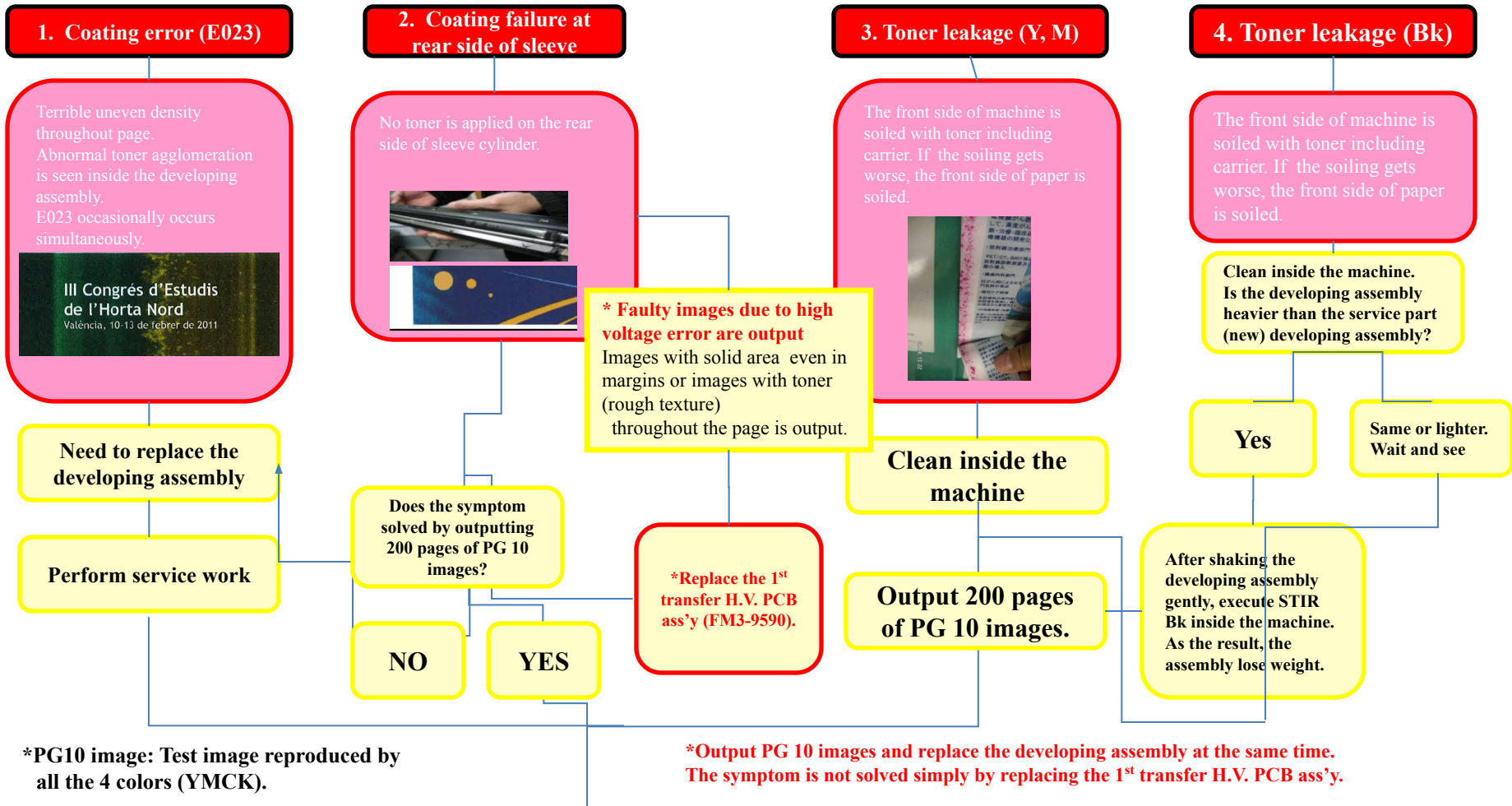
This prevents the smooth circulation of toner, and causing toner to tend to remain unmoving inside the developing assembly.

### **B. Error in servicing**

At the time of replacing the developing assembly, the initialization is performed.

But, a used developing assembly is used for this work.

# Service work: Workflow



\*PG10 image: Test image reproduced by all the 4 colors (YMCK).

**A. As the measure against the temperature rise inside the machine, place the machine far away from the wall as much as possible, and replace the 3 filters regularly.**

- Distance between the rear side of machine and the wall: preferably 10cm or more
- Filter (3 filters) replacement intervals: every 500K images

## **B. Upgrade Dcon**

Upgrade Dcon to ver59.01 or later. (The settings described in C in the next page take effect properly only with Dcon ver59.01 or later.)

## Service work: Workflow

### C. Change service mode settings

- Increase the developing assembly stop frequency: Level 1 > Copier > Option > FNC-SW > INTROT-1 > from “200” to “50.”
- Change the TD ratio limiter table: Level 2 > Copier > Adjust > DENS > LLMT-PT > from “0” to “1” (Affected color only).
- Increase toner discharge amount at time of low duty job: Level 2 > Copier > Option > IMG-DEV > DEVL-VTH > from “1” to “2.”
  - \* Pay attention to the waste toner bottle replacement intervals
  - \* If possible, turn off the environment heater (smearred image or deterioration of hue change may occur.)

Output 25 pages of CA1 chart and then let the machine execute the post rotation. Repeat this cycle 4 times.

Execute the auto gradation correction (full correction).

Relation between LLMT-PT value and T/D ratio control range

LLMT-PT	T/D ratio control range	
	Upper limit	Lower limit
-2	-1%	-1%
-1	-3%	-2%
0	Def	Def
1	-2%	-2%
2	-1%	-2%

### Notes:

1. If the value of service mode item “SIGG” has been changed, replace the developing assembly of the affected color, and then perform the initialization on the new developing assembly. This will reset the value of “SIGG” to the default and the new service mode settings described in “C” above take effect properly.  
Level1>COPIER>ADJUST>DENS>SIGG-X
2. If the main power switch is turned off immediately after a large number of pages are output, the temperature overshoot occurs, and consequently leading to the temperature rise inside the machine.

### 3 filters that needs to be replaced regularly

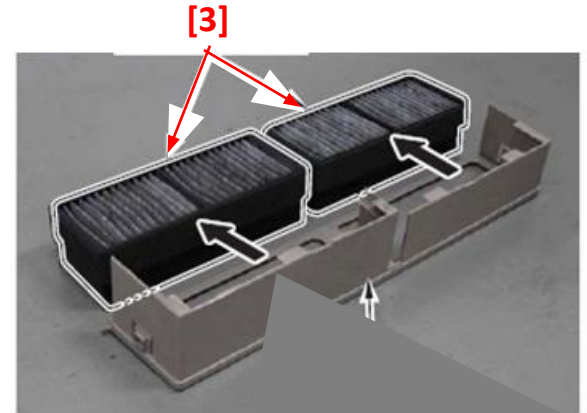
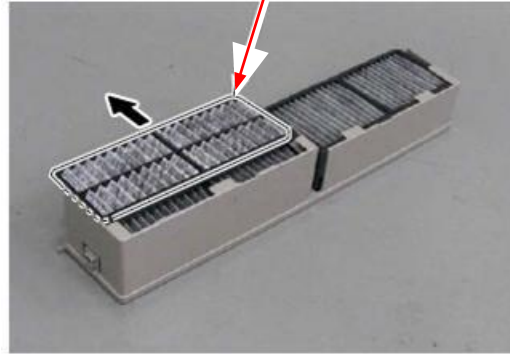


[1]

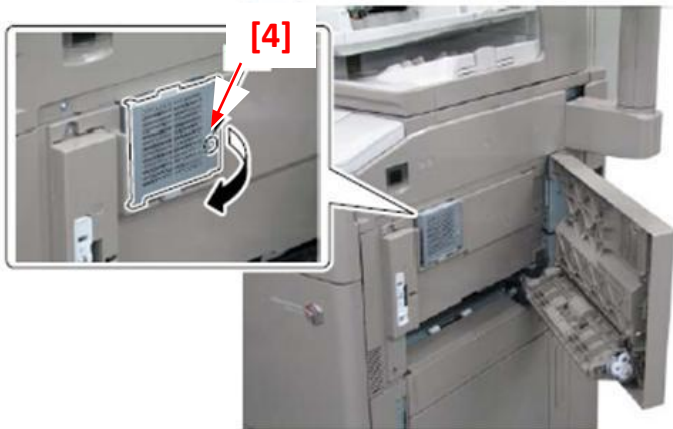
[1] Claw

[2] Dust filter (FL2-8946)

[3] Ozone filter (FL3-4101)



Replacement interval: every 500K images  
Replacement interval: every 500K images

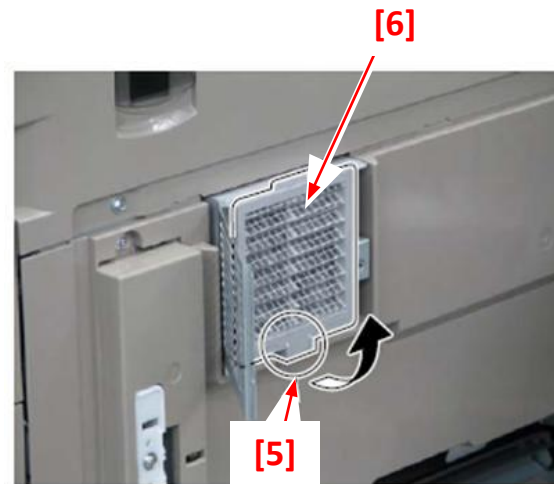


[4]

[4] Fixing screw

[5] Finger recess

[6] Dust filter (FL2-0439)



[6]

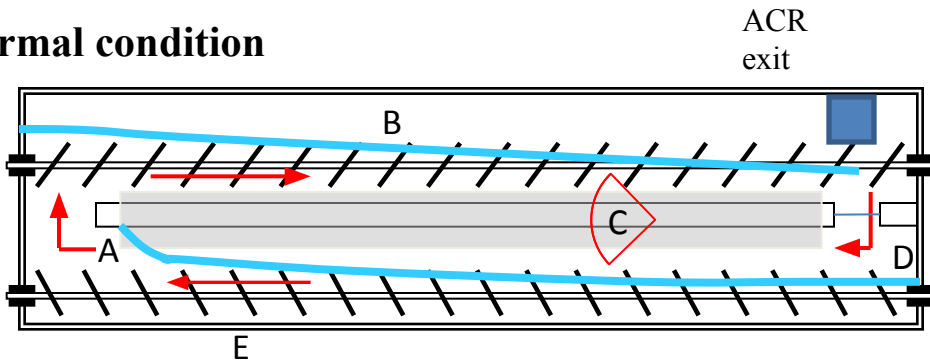
[5]

Replacement interval: every 500K images

**\* Toner circulation (fluidity)**

★ The circulation and distribution of developer both in the normal condition and at occurrence of rear side coating failure or developer leakage are explained below.

**1. Normal condition**



**If the developer circulation is normal,** the developer exists in the distribution shown in the dotted line.

Toner flows as the **arrows** show.

A: Pump from bottom up.

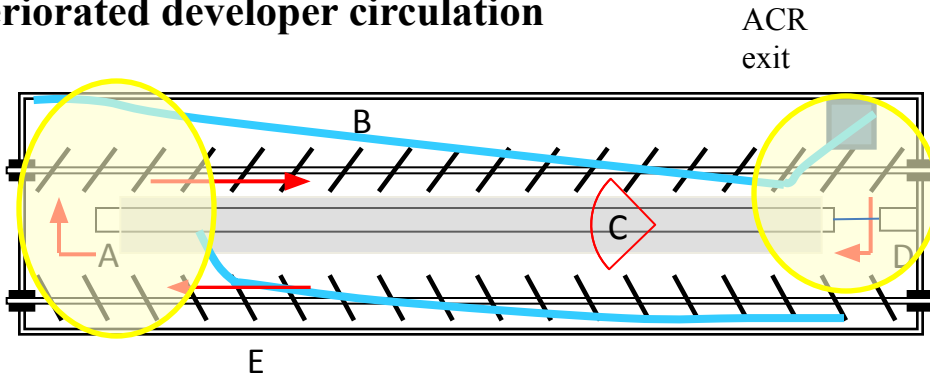
B: Being delivered from front to rear.

C: A portion drops according to the sleeve cylinder.

D: Drops.

E: Being delivered from rear to front.

**2. Deteriorated developer circulation**



**If the developer circulation is deteriorated,** the developer exists in the distribution shown in the dotted line.

Poor developer flow tends to occur at 2 points.

Front/A-B front: Developer accumulates and hardly flows.

Rear/D: Developer accumulates and hardly drops.

-If developer remains unmoving in the front/A-B front side, developer leakage at the front or developer leakage due to increased amount of toner may occur.

-If developer remains unmoving in the rear (D) side, excess developer is discharged, and the amount of toner inside the developing assembly may decrease.

# iRADVC7000/9000s

## 4. White band

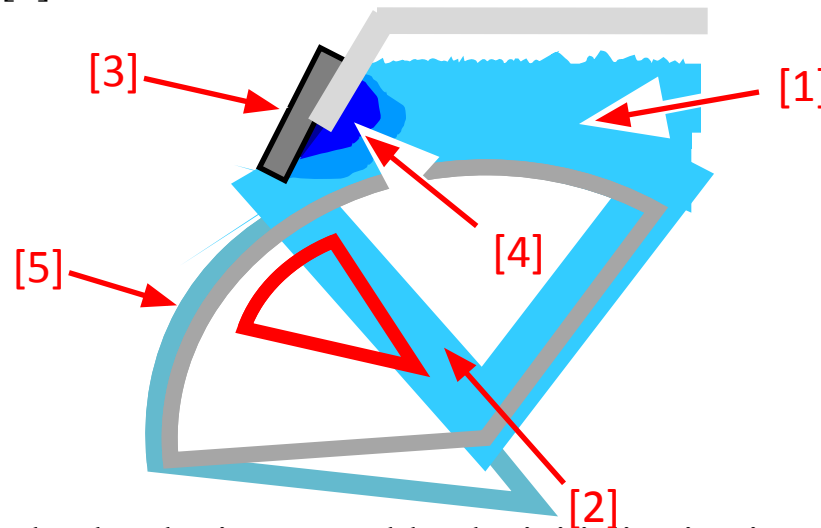
## 5. White lines

### [Causes]

**A. Mixture of foreign material into the developing assembly or leaving of toner bottle in high temperature environment**

**B. Temperature rise inside the machine**

When a large number of originals with a low density is printed, toner [1] is not consumed and turns into agglomeration [4] in a space between the developing sleeve [2] and the blade [3], consequently causing coating failure [5] on the sleeve.



**C. Error in servicing**

At the time of replacing the developing assembly, the initialization is performed. But, a used developing assembly is used for this work.

# Service work: Workflow

## 5. White band

White band of 5mm or wider appears. Magenta causes this more often than other colors.



## 6. White line

White line of 3mm or narrower appears.



- Replace the toner bottle of affected color and output 200 pages of PG10 images to discharge the toner agglomeration.
- Remove the foreign material with a special tool.

Output 10 pages of PG10 images so that the initial/post rotation will be executed.

\* PG10 image: Test image reproduced by all the 4 colors (YMCK).

Solved

NO

Need to replace the developing assembly

Perform service work

A. As the measure against the temperature rise inside the machine, place the machine far away from the wall as much as possible, and replace the 3 filters regularly.

- Distance between the rear side of machine and the wall: preferably 10cm or more
- Filter (3 filters) replacement intervals: every 500K images

### B. Upgrade Dcon

Upgrade Dcon to ver59.01 or later. (The settings described in C in the next page take effect properly only with Dcon ver59.01 or later.)

## Service work: Workflow

### C. Change service mode settings

- Increase the developing assembly stop frequency: Level 1 > Copier > Option > FNC-SW > INTROT-1 > from “200” to “50.”
- Change the TD ratio limiter table: Level 2 > Copier > Adjust > DENS > LLMT-PT > from “0” to “1” (Affected color only).
- Increase toner discharge amount at time of low duty job: Level 2 > Copier > Option > IMG-DEV > DEVL-VTH > from “1” to “2.”
  - \* Pay attention to the waste toner bottle replacement intervals
  - \* If possible, turn off the environment heater (smearred image or deterioration of hue change may occur.)

Output 25 pages of CA1 chart and then let the machine execute the post rotation. Repeat this cycle 4 times.

Execute the auto gradation correction (full correction).

Relation between LLMT-PT value and T/D ratio control range

LLMT-PT	T/D ratio control range	
	Upper limit	Lower limit
-2	-1%	-1%
-1	-3%	-2%
0	Def	Def
1	-2%	-2%
2	-1%	-2%

### Notes:

1. If the value of service mode item “SIGG” has been changed, replace the developing assembly of the affected color, and then perform the initialization on the new developing assembly. This will reset the value of “SIGG” to the default and the new service mode settings described in “C” above take effect properly.

Level1>COPIER>ADJUST>DENS>SIGG-X

2. If the main power switch is turned off immediately after a large number of pages are output, the temperature overshoot occurs, and consequently leading to the temperature rise inside the machine.



# iRADVC7000/9000s

## 6. White spots (Y,M,C)

### [Symptom]

In case of less color jobs, white spots may appear on image due to shortage of the toner amount in the color developing assemblies of Y, M and C is reduced.

### [Cause]

When there are less color jobs, the toner supply control of the color developing assembly does not operate as expected resulting in toner supply shortage.



P-1 White spots image

[A] White spots (2 - 3mm in diameter)

<Factory Measure>

Upgrading the Dcon version to v62.02 to modifies the toner supply control failure.

**Points to Note about Service Work:**

STEP 1:

Upgrade to the following software if the above symptom occurs.

Dcon v 62.02

STEP 2: Making prints/copies of solid PG image in the affected color until the white spots disappear.

\*This work allows toner to be supplied to the developing assembly.

Solid image output:

Service Mode COPIER>TEST>PG>TYPE 5>DENS-Y 255

COPIER>TEST>PG>TYPE 5>DENS-M 255

COPIER>TEST>PG>TYPE 5>DENS-C 255

Expected number of sheet feeding paper:

10 sheets of large-sized paper. (each color)