

# Symptoms & Solutions

## For the imageRUNNER ADVANCE 8105 Series



A description of the **Top Service Issues** experienced by iR ADV 8105 Series service techs with an explanation of the solutions that have resolve each issue.

> Created by CINC/CUSA. Issued October 2012

## Analyzed Model Series:

imageRUNNER-ADVANCE 8105 Series

## Analysis Term:

From 5/1/2012 to 5/31/2012

## Analyzed Result of Field Visit:

The following chart shows the worst 10 symptoms as of May 2012.

Top 10 Symptoms	May-12
Smudged Image/Streaked Image/Lines	1
Fixing Jams	2
Professional Puncher Jam	3
Roller Marks Image	4
Pickup Jam / Paper Feeding Path Jam	5
E503	6
E001	7
Unable to open/close Tray (Cassette) /PD	8
Finisher Jam	9
Multi-Feeding Jam	10

## Comments for above analysis:

This Top 10 guide is created based on FAQ's related to the above worst 10 symptoms.

Symptoms and Solutions entries for "Fixing Jams" and "Unable to open/close Tray (cassette) PD" to be added at a later date once data is available.

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0CA4/1E00 Jam Code occurs with System Software earlier than version 26.03 after removing sheets of paper
from the processing tray (Staple/Booklet Finisher-D1)
112F/1F8F Jam Code (Staple/Booklet Finisher-D1)
1096/11A1/11A2/11A3 Jam codes due to the faulty finisher software SDL-STCH (Booklet Finisher-D1)
No paper in the multi-purpose tray is faultily indicated due to the faulty operation of the multi-purpose tray
paper presence sensor
E053-0001 error code
E677-0080/E315-000d error code
E583-8001/E583-8002 due to operation failure of the tray auxiliary guide (Booklet/Staple Fin-D1)
Paper delivery failure/stacking failure due to breakage in tension spring of finisher (Finisher-D1)
imageRUNNER ADVANCE 8105 Series Cleaning Location inside Machine
Hopper Assembly
Pre-Transfer Charging Assembly
Registration Assembly
Fixing Entrance Guide Assembly
Pre-Registration Guide Assembly
AP Kit (Drum Separation Claw & Guide plate)
Guide to insert AP Kit
Developing Assembly
Developing Assembly Guide Mount

## A line in the horizontal scanning direction after the ET Belt is replaced

#### Cause

Lines in the horizontal scanning direction may occur at the trailing edge of the image after replacement of ETB. **Details:** 

When a difference in the rotation speed between the ETB and the Photosensitive Drum occurs, a line approximately 55 and 63mm from the trail edge, in the main scan direction may occur.

## Solution:

1. Output a halftone image in service mode:

Service Mode > Test > PG > TYPE 6 > PG > PG-PICK

Choose either cassette 3 or 4 depending on paper source with LDR (11x17) size paper.

- 2. Check the output image for a line in the horizontal scanning direction at the trailing edge of the image.
  - If there is a line: Proceed to step 3.
  - If there is no line: End.
- 3. Measure the distance from the trailing edge of the image to the line. Perform the following service mode adjustments:

COPIER > ADJUST > FEED-ADJ > TBLT-SPD> Fine adjustment of ETB speed

- If the line is approximately 55mm from the trailing edge, increase the value by 10.
- If the line is approximately 63mm from the trailing edge, decrease the value by 10.



- 4. Output a halftone image in Step 1; check the image.
- If a line still appears: Perform step 3 again.
- If no line appears on the test page: End.

## White lines in vertical scanning direction after replacing the Developing Assembly

## **Description**:

White lines in the vertical scanning direction (uneven development) sometimes occur on a halftone image after the Developer Assembly is replaced.



#### Cause:

If toner is not spread evenly on the Lower Developer Cylinder, white lines in the vertical scanning direction may occur. This symptom can occur if toner is not stirred at installation or when a new Developer Assembly is replaced.

## Solution:

 Remove the Developing Assembly and check the Lower Cylinder for uneven an uneven coating of toner.
If the coating of toner on the Lower Cylinder is uneven, perform the following in service mode: Service Mode > COPIER > FUNCTION > DENS > DEV-AGG: By default this process will take approxitmatly10 minutes to complete.

**Note:** DEV-AGG reduces insufficient stirring by forcible performing idle rotation of the Developer Assembly. Solid black images are formed at regular intervals in order to prevent the Drum Cleaning Blade from flipping. Note: Although the default interval can be changed (5 min., 10 min., 15 min., 20 min., or 25 min.) it is important not to perform this service mode longer than necessary as this may cause the Drum Cleaning Blade to flip.

## Lead Edge Toner Contamination

## **Description:**

If the Guide Stopper of the Pre-Transfer Charging Assembly becomes deformed, toner can adhere to the leading edge of the paper.

## Cause:

The Guide Stopper [2] of the Pre-Transfer Charging Assembly [1] is deformed, causing the Pre-Transfer Guide [3] to slip out of the normal position and become closer to the ETB [a]. As a result, the toner on the surface of the ETB may adhere to the Pre-Transfer Guide and can result in the leading edge of paper to become soiled.



## Solution:

The new-type Pre-Transfer Charging Assembly (FM4-3149-010) which is the countermeasure for preventing the Guide Front Stopper from becoming deformed has been introduced.

The photo [A] shows the old type, and the photo [B] shows the new type; [a] shows the hook part of the new-type guide stopper.



## **Black Spots**

## **Description:**

Black spots can randomly occur on copies and/or prints if the Return Spring of the Pre-Transfer Corona Assembly, Dust Collection Roller is disengaged. This symptom may occur as a result of excessive build up of toner in the Pre-Transfer Corona Assembly.

#### Solution:

If the Return Spring [A] of the Pre-Transfer Corona Assembly, Dust Collection Roller should disengage from the actuator perform the following:

Reattach the Spring [A] and vacuum out the Pre-Transfer Assembly.



#### Symptom:

## White Lines after installation of the Developer Assembly

#### Cause:

If excess force is applied to the Developer Assembly the Buffer Shutter maybe opens. If this should occur the Spring of the Buffer Shutter may drop on the Developer Cylinder.





#### Solution:

- 1) Remove the Developing Assembly and mount the Spring of the Buffer Shutter.
- 2) By hand, check if the Buffer Shutter can open and close freely. To see whether the Buffer Shutter is open or closed, check the location of the Shutter Arm.



[A] Shows the Shutter Arm Closed[B] Shows the Shutter Arm Opened.

3) Replace the Developer Assembly with a new assembly. Fit the right and the left protrusions [A] of the Developing Assembly to the Rail [B] of the main body and insert the Developer Assembly along the rail [B].



#### Symptom:

## **Toner Leakage**

## **Details:**

When either removing or installing the Developer Assembly, toner material is dumped in and around the Developer Assembly creating a dirty image to occur.



## Cause:

The Spring of the Shutter Arm [A] can come off the Developer Assembly if forcibly removed. If this should occur, the left Buffer Shutter [B] can open upon detaching the Developer Assembly creating toner to leak from the Buffer Unit.



## Solution:

- 1) Remove the Developer Assembly.
- 2) Clean the Developer Assembly and the area around the Developer Assembly.
- 3) Reinstall the spring of the Buffer Shutter.
- 4) Make sure that the Buffer Shutter is closed.



[A] Shutter Arm Closed [B] Shutter Arm Open.

5) Fit the Right and the Left protrusions [A] of the Developer Assembly to the Rail [B] of the main body and insert the Developer Assembly along the rail.



## Symptom: Black Spots

## **Details:**

Black Spots can be caused by a defective Primary Charging Wire. Although the Primary Charging Wire is periodically replaced every 500k sheets, black spots can occur after 370K sheets.

## Solution:

In a high temperature / high humidity (30 degrees C/80%) environment, replacement of the Primary Charging Wire should be done at 250k sheets.

**Note:** Along with replacement of the Primary Charging Wire is it recommended to replace Primary Charging Wire Cleaner and Primary Charging Wire Cleaner Holder at the same time.

## Soil / Smear image fault due to Drum Cleaning Failure

#### Cause:

If toner adheres to the surface of the drum and is not removed by the cleaning blade, Soil / Smear image faults may occur.

#### Solution:

The service parts of the new and old type Cleaning Blades are identified by the following indicators

a) Old type (FL3-5187-000)

The lot number is written in blue, starting from "BS".

b) New type (FL3-6291-000)

The lot number for the new type Cleaning Blade can be identified by the blue lettering/numbering, with a "C" or with only "numeric numbers". Others may have a lot number written in red.

Prepare and replace a new-type Cleaning Blade (FL3-6291-000) using the following procedure:

1) Turn ON the main power switch.

2) Check the temperature inside the machine in Service Mode > Mode List > COPIER > Analog > TEMP. If the temperature inside the machine is below 10 degrees Celsius, proceed to step 3. If the temperature is not less than 10 degrees Celsius, turn OFF the main power switch and proceed to step 4.

3) Turn on the environment switch.

Note: Turn on the Drum Heater when the main power switch is OFF or during standby.

4) When the machine is ready, turn OFF the main power switch, open the inner cover, and remove the Primary Charging Assembly, the Pre-Transfer Charging Assembly, and the Process Unit.

5) Remove the Drum Cleaning Unit from the Process Unit.



Note: When installing the Drum Cleaning Unit, clean the area shown with lint-free paper moistened with alcohol.



When installing the Drum Cleaning Unit, clean the Side Seals as well.

6) Turn over the Drum Cleaning Unit, and remove the one (1) E-ring, the one (1) Plate [1], and the Drum Cleaning Unit [2].

7) Loosen the five (5) screws [3], and replace the Drum Cleaning Blade



## Note:

When installing the Drum Cleaning Blade, be sure to apply toner on the contact area (edge), on the Drum and the Drum Cleaning Blade. Be sure to apply toner on both edges of the blade.

Align the both end portions [a] of the Cleaning Blade Cover to the both end portions [b] of the Cleaning Blade, and then install it so as to push against the rear part[c].



Be sure to fit in the center position and temporarily tighten the screws following the numeric order (from 1 to 4) and then securely tighten the screws (from 5 to 9).



8) Install the parts in reverse order by performing step 6) to step 4).

9) Perform the work according to the inside temperature of the machine (step 2).

A) If the inside temperature of the machine is not less than 10 degrees Celsius proceed to step 10.

B) If the inside temperature of the machine is below 10 degrees Celsius, perform the follow procedure:

Leave the Front Covers of the machine open for 15 minutes, close the Front Cover, and proceed to step 10. Note:

If the Cleaning Blade comes into contact with the surface of the drum in the low-temperature state, the surface temperature of the Cleaning Blade is lowered.

If the Cleaning Blade has hardened, turn on the main power switch. The idle rotation of the Drum is performed and the toner will escape from the Cleaning Blade.

In order to prevent hardening of the Cleaning Blade at low temperature, the surface temperature of the Drum is increased by the Drum Heater for 15 minutes so that the surface temperature of the Cleaning Blade is increased. The Front Cover is left open is to prevent the idle rotation of the drum even if the main power switch is turned ON accidently.

10) Turn on the main power switch.

11) Make a test copy, and check whether there is no problem in the image. *Refer to Technical Publication TP11 358b for further details.* 

## Symptom:

## Soil / Smear due to incorrectly installing the Blade Retainer Plate

## Cause:

Due to backlash in the screw-tightening of the Blade Retainer Plate [1] for the Cleaning Blade, contact failure may occur between the Cleaning Blade and the Drum.

## Field Remedy:

Prepare the new type Blade Retainer (FL3-5194-020). The screw holes for installing the Cleaning Blade Retainer Plate have been changed.

**Note:** Change the old type [A] to the new type [B] as follows:

[a], change the diameter of the circular hole for the installing screw from 3mm to 4mm.

[b], change the diameter of the circular hole in the blade retainer from 5mm to 3mm.

[c], disuse the circular holes, in the new type blade retainer.

[d], change the shape of the circular hole in the blade retainer to the long hole.

[e], change the long hole for the installing screw to the circular hole.



Replace the new type Cleaning Blade Retainer Plate using the following procedure:

- 1) Turn ON the main power switch.
- 2) Check the internal machine temperature: Service Mode > Mode List > COPIER > Analog > TEMP.

If the temperature inside the machine is below 10 degrees Celsius, proceed to step 3. If the temperature is not less than 10 degrees Celsius, turn OFF the main power switch and proceed to step 5.

3) Turn ON the environment switch.

**Note:** The Drum Heater will come "ON" when the main power switch is OFF and during standby.

4) With the machine in standby, turn OFF the main power switch, open the Inner Cover, and remove the

Primary Charging Corona Assembly, the Pre-Transfer Corona Assembly, and the Process Unit.

5) Remove the Drum Cleaning Unit from the Process Unit.



Note: When installing the Drum Cleaning Unit, clean the area shown with lint-free paper, moistened with alcohol.



When installing the Drum Cleaning Unit, clean the side seals as well.

6) Turn over the Drum Cleaning Unit, and remove the E-ring, the plate [1], and the Drum Cleaning Unit [2].



7) Remove the five (5) screws [3], and remove the Blade Retainer [4] to replace it with the new type.



Note: When installing the Drum Cleaning Blade from the Blade Retainer, be sure to apply toner on the contact area (edge) of the Drum Cleaning Blade. Apply toner to the end portions[b] of the Cleaning Blade and then install it so as to push against the rear part[c].

When installing the Cleaning Blade, align both end portions [a] of the Cleaning Blade Cover.

Fit the center position, and then temporarily tighten the screws following the numeric order (from 1 to 4) and securely tighten the screws (from 5 to 9).



8) Install the parts in reverse order by performing step 6 to step 4.

9) Perform the work according to the temperature inside the machine, which is checked at step 2.

A) If the temperature inside the machine is not less than 10 degrees Celsius proceed to step 10.

B) If the temperature inside the machine is below 10 degrees Celsius, perform the work below.

Leave open the Front Cover of the machine for 15 minutes. Close the Front Cover, and proceed to step 10). **Note:** 

## If the Cleaning Blade should come into contact with the surface of the Drum in a low-temperature state, the surface temperature of the Cleaning Blade will be lowered. This can cause the Cleaning Blade to harden. If this should occur turn on the main power switch. Idle rotation of the Drum is performed allowing toner to escape from the Cleaning Blade.

In order to prevent hardening of the Cleaning Blade at low temperature, the surface temperature of the Drum is increased with the Drum Heater for 15 minutes, so that the surface temperature of the Cleaning Blade is increased.

The reason that the Front Cover is left open is to prevent the idle rotation of the Drum even if the main power switch is turned ON by accident.

10) Turn ON the main power switch.

11) Make a copy with using an NA3 test chart, and check whether there is no problem in the image. *Refer to Technical Publications: TP12 180 and TP11 358 for further details.* 

## Symptom:

## Soiled Image

## Cause:

The Tensioner [3] in the Waste Toner Feed Assembly [1] applies appropriate tension to the Timing Belt [2]. If the Tensioner [3] is deformed due to excessive force the Timing Belt [2] may come off the Tensioner [3] and consequently the Drum Cleaning Assembly becomes unable to function. This causes symptom can cause waste toner to accumulate, creating soil on the image.





## Solution:

Replace the old type Tensioner [A] with the new type tensioner [B]. For this replacement, if the original Stepped Screw (FS5-9714-000) is used, appropriate tension may not be applied to the timing belt properly. Therefore, prepare the new type stepped screw (FS1-9010-020) and replace with it at the same time.



1) Open the Controller Box assembly [4], and remove the Flywheel [5].



2) Remove the Timing Belt [2], and remove the TP Screw [6] and the Stepped Screw [7] from the Tensioner [3].3) Remove the Tension Spring [8] from the hook on the Tensioner [3] so as not to drop it inside the machine. Remove the Tensioner [3].



4) Install the new type Tensioner Assembly with the new type Stepped Screw.Note: When the Tensioner Assembly [B] is installed, the Tensioner Roller [9] can be held. Be careful not to bend the shaft inside the Tensioner Roller [9], as well as scratch on the surface of the Tensioner Roller [9].



- 5) Place the Tension Spring back in place. Be careful not to drop it inside the machine.
- 6) Temporarily tighten the TP Screw [6] to ensure movement of the Tensioner Assembly.
- 7) Turn the Tensioner Assembly in the clockwise direction until the right edge of the long hole for the TP Screw in the Tensioner Assembly touches the TP Screw [6]. Securely tighten the TP screw [6].
- 8) Put the Timing Belt [2] back in place.
- 9) Slightly loosen the TP Screw [6], so that the Tensioner Assembly is slightly turned back in a counterclockwise direction by the Tension Spring. Check that tension is applied to the timing belt [2], and tighten the TP Screw [6] again.







- 10) Put the Flywheel back in place, and close the Controller Box Assembly.
- 11) Remove and clean the Drum Cleaning Unit.
- 12) Make a copy with test chart, and check that there is no problem in the image.

Refer to Technical Publications: TP11 140a.

## Symptom:

## Stained image due to the Separation Claw contact with the ETB

## Description

Stained image can occur if the Separation Claw of the Process Unit (AP Kit) [1] comes in contact with the ET Belt [3].

## Cause

The Separation Claw [2] in the Process Unit (AP Kit) [1] which is installed to prevent paper from going into the Drum may come in contact with the ET Belt [4] upon a poor paper separation because the range of movement of the Separation Claw is wide. The toner of the transferred image is scraped off by this contact and the outcome image is stained. Also, when the ETB [4] is damaged or torn completely from the contact, the image will not be transferred or jam symptoms are induced. Figure [A] shows the contacting parts.



## Solution:

When this symptom occurs, proceed with the following procedure:

Replace the Separation Claw Holder with the new type one [C] with which the range of movement of the Separation Claw is narrowed. The photo [B] shows the old type of the separation claw holder (FC9-4860-000).



- 1) Remove the Process Unit (AP Kit) [1] from the Main Body.
- 2) Remove the Drum and Cover it with paper, etc. to protect it from exposure.
- 3) Remove the 2 E-rings attached to the Shaft [6].
- 4) Slide the Shaft [6] to the direction of the arrow [D] until it hits the far end.
- 5) Slide the Separation Claw holder [5] in the direction of the arrow [E] to pull it out from the Shaft [6].



6) Remove the three (3) Separation Claws [2] and the Torsion Spring [7] from the Separation Claw Holder.

7) Remove the Screw [8] on the side indicated with a red arrow.

Note: The other side has a same screw, but it does not have to be removed.

8) Remove the remaining parts:

- 1. 3 tension springs
- 2. The Separation Claw Plate.

At this time, check the Separation Claws visually, and if any damage is identified replace the Separation Claws as well.



9) Reattach the parts in the reverse order from the step 7) to 4).

Note: When attaching the Separation Claw Holder Assembled to the Process Unit (AP Kit), put the Shaft [6] through the 2 Torsion Springs, and then attach it so that the Torsion Springs [7] is under the Cleaner Case [9].



- 10) Move the Separation Claw Holder to check if the force of the Torsion spring is acting.
- 11) Reinstall the parts in the reverse order from the step 3).
- 12) If the ET Belt is damaged, replace it with a new one.
- 13) Make a copy with the test chart to check if the output image has no abnormality.

1F77 Jam Code

#### Cause:

A 1F77 jam code can occur if the drives of the Professional Puncher-C1 do not turn. The voltage to the drive motors can intermittently be shut off if the screws that secure the Front Door Latching mechanism of the Hook of the Front Door Latch become loose

## Solution:

1) Tightening the screws of the Front Door Latching mechanism as shown in the illustration below.



2) Tighten the screws that secure the Hook of the Front Door Latch as shown in the illustration below.



## Symptom:

## 1F77 Jam at installation of the Professional Puncher-C1.

#### Cause:

The Jumper Connector on the Punch Controller PCB was moved to the wrong position. The default position of the Jumper Connector is set for higher speed devices. Therefore for the imageRUNNER ADVANCE 8000 Series it is not necessary to move the Jumper Connector. Doing so will cause 1F77 jam to occur.

## Solution:

When observing the position of the Jumper Connector, if the furthers right pin is not exposed then the Jumper Connecter is in the wrong position for the imageRUNNER ADVANCE 8000 Series. Therefore, move the Jumper Connecter so that the furthest right pin is exposed.



## 1F77 Jam code

#### **Details:**

During punched jobs through Professional Puncher C-1 a 1F77 jam code may occur. A 1F77 jam code is a general code indicating a fault in the punch path of the Professional Puncher-C1. In one particular case it was discovered that a faulty S3 (Punch Path 2 Sensor) was the cause.

#### Solution:

Replace S-3 (FC3-3635-000).

#### Symptom:

## 1F77 jam code: Damaged Flexible Aligner Drive Shaft (Professional Puncher-C1)

#### **Details:**

When running a punch job, the first several punched sheets are skewed. The punch position may also be in the middle (deep punch) of the page. If a single sheet is punched, the paper never reaches the punch die. Any of these symptoms can cause a 1F77 jam code to occur.

#### Cause:

The Entrance Aligner Drive Belt is not rotating. All other drive belts driven by M3 (Transport Motor) are rotating normally. Closer observation will show that the Flexible Shaft (FC3-3778-000) is damaged and therefore, unable to drive the Entrance Aligner Drive Belt (green belt).

#### Solution:

Replace the Flexible Shaft (FC3-3778-000)



[C] Flexible Shaft [1] Entrance Aligner Drive Belt



[A] Flexible Drive Shaft Gear Drive[B] Flexible Shaft Location (Rear Side)

## 1F78 Jam Code

#### **Details:**

After the punch dye is inserted a1F78 jam code occurs. The casters on the Professional Puncher-C1 and the Puncher Integration Unit-A1 were not set correctly. "1F78" jam code is described as a "time out jam / error avoidance code".

#### Solution:

Ensure that both the Professional Puncher-C1 and Puncher Integration Unit-A1are leveled according to each accessories installation guide.

## Symptom:

## 1F77 jam code (Professional Puncher-C1)

#### Cause:

After replacing the Punch Controller PCB for the Professional Puncher-C1 an intermittent 1F77 code occurs; due to be a defect with the Communication Cable from the Pro-Puncher C1 to the Integration Unit-A1.

#### Solution:

Replacing the Communication Cable (FC3-6653-000).

#### Symptom:

## 1152 Inlet Sensor Stationary Jam (Professional Puncher-C1)

#### **Details:**

When running punch jobs through the Professional Puncher-C1, the machine will jam after approximately 20 to 50 punches. The main engine will indicate that an 1152 jam code has occurred. Upon inspection of the paper in the punch path, there is no damage to the paper. It is also observed that Pro Punch-C1 will hesitate when the jam occurs.

#### Solution:

Ensure that Front Door Interlock Actuator Arm is not loose. If there is play in Door Actuator when Pro Puncher-C1 is punching, the vibrations of the device can intermittently cut-off the 24VDC supply voltage. Tighten the Door Actuator so there is no play. The illustration below shows the nuts of the Actuator Bracket and door lock adjustment that require tightening.



## 11B3/11B5/11B7/1F07/1FC2/1103/1164/1165/1166/1F5E/1F77/1152 Jam Codes (Professional Puncher-C1/Professional Puncher Integration Unit-B1)

Description:

- 11B3/11B5/11B7/1F07/1FC2/1103/1164/1165/1166/1F5E/1F77/1152 Jam consecutively occurred.
- 11B3: Punch Path 1 Sensor (S2) Stationary Jam with ARCNET connection
- 11B5: Punch Path 2 Sensor (S3) Stationary Jam with ARCNET connection
- 11B7: Punch Path 3 Sensor (S4) Stationary Jam with ARCNET connection
- 1F07: Reverse Path 2 Sensor (RS3) Timing NG Jam with ARCNET connection
- 1FC2: Timing NG Jam with ARCNET connection
- 1103: Bypass 1 Sensor (RS1) Stationary Jam with ARCNET connection
- 1164: Punch Path 1 Sensor (S2) Stationary Jam with IPC connection
- 1165: Punch Path 2 Sensor (S3) Stationary Jam with IPC connection
- 1166: Punch Path 3 Sensor (S4) Stationary Jam with IPC connection
- 1F5E: Reverse Path 2 Sensor (RS3) Timing NG Jam with IPC connection
- 1F77: Timing NG Jam with IPC connection
- 1152: Bypass 1 Sensor (RS1) Stationary Jam with IPC connection



## Cause

The jam occurred due to an operational defect of the back gage caused by breakage and detachment of the brown spring [1] attached to the back gage unit.

[Reference] The same symptom occurs when the red spring [2] or the blue spring [3] is detached.



## Solution:

The surface treatment of the Brown Spring is changed to the one that Brown coating is applied on top of nickel-plating, which can make the Spring difficult to be broken.



Attach the new Brown Spring by following the steps:

1) Remove the rear cover of the Professional Puncher-C1, and free the harness [1].

- 1 Connector [2]
- 1 Wire Saddle [3]
- 1 Rubber Bush [4]



2) Remove Back Gage Assembly [1] (3 Screws [2] 2 Spacers [3])

3) Check if the spring is attached. If not, remove the spring that fell off somewhere inside the machine.

4) Apply about 1 rice grain size (about 40mg) of Super Lube Grease to the Hook [1] of the new spring and attach the spring.





## Symptom: Crepe mark

## **Details:**

Due to the rising temperature of the Upper Fixing Roller edges during continuous prints, line (crepe marks) may occur in the horizontal scanning direction.

This symptom may occur on all images, especially on halftone images with the following conditions:

When continuously printing 200 or more small-size papers (A4 size: approx. 1000 sheets)

When printing large-size papers right after continuously printing 100 or more small-size papers



## Cause

As the temperature on the edges of the Upper Fixing Roller increase during continuous print, the edges of the Pressure Roller expand and the as the feed speed of the edges accelerate. During this occurrence, as paper is pulled to the direction of both edges, the trailing edge of the image may become distorted.

## Solution:

1) Set the following in user mode settings:

Settings/Registration > Function Settings > Common > Print Settings > Thin/Plain Paper Printing Priority Settings > Quality Priority

Note: When "Quality Priority" is set, the temperature difference between the center and edges of the Fixing Roller is detected during printing, and the idle rotation is executed before the temperature rising occurs on the edges, so the temperature rising is prevented.

However, during the idle rotation, printing will be halted decreasing productivity.

2) Change the level of Quality Priority as follows:

Service Mode > COPIER > OPTION > IMG-FX > FX-IMGLV > 1

0: Text document mode (Image quality is decreased, but productivity is improved.)

1: Photo document mode (Image quality is improved, but productivity is decreased.)

2: Not used

Refer to Technical Publication: TP11 202b for further information.

Roller Marks (Finisher / Pro Puncher-C1/ Fixing Roller)

## Symptom:

## **Professional Puncher-C1/ Roller Marks**

## **Description:**

During punch operation of the Professional Puncher-C1, there may be two (2) roller marks (18mm x 2mm) on the front side of paper 50mm from its edge. The sample below is an illustration.



## Cause:

In the process of the Professional Puncher-C1 punching holes on paper, the puncher feeds the paper up to the punch area, and stops feeding once to punch holes. During the process, the drive roller was performing idle rotation on paper, and the same soil on the surface of the drive roller was found on the paper.

## Solution:

Follow the steps below to clean the soiled drive roller.

1) Open the front cover [1] of the Professional Punncher-C1to release the connection lever [2], and separate the puncher [3] from the option [4] of the main body.



2) Remove the spring [6] at the front of the idle roller assembly [5] of the Professional Puncher-C1, and dismount the bushings [7] at the front and rear sides. Be sure to pull the idle roller assembly to the front while tilting it, and remove the spring [8] at the rear of the idle roller assembly.



3) Wipe out the soil on the drive roller [9] with alcohol through the 2 holes [a] of the guide plate. Rotate the knob [10] at the front side while cleaning it. The drive roller rotates by rotating the knob.



4) Mount the idle roller assembly.

Note: When mounting the idle roller assembly, be sure to hang the spring on the flat side [b] of the roller shaft. 5) Mount the Professional Puncher-C1 to the option of the main body.

6) Make a test copy with the puncher, and ensure that there is no roller marks on the paper.



## Symptom:

## Roller marks / 143mm from the Lead Edge

## **Details:**

Soils corresponding to the width of the Registration Front Roller may occur at approximately 143mm from the lead edge of the paper.



## Cause:

The Duplex Unit has 4 Cleaning Brushes that come into contact with the Duplex Right Roller and the Duplex Outlet Roller. Contamination caused by paper dust and toner will gradually attach to the surface of the Registration Front Roller. As paper stops at the Registration Roller due to registration control, the rotating Registration Front Roller will continue to turn on the stationary sheet, creating marks corresponding to the roller width approximately 143mm from the edge of the paper.



## Solution:

Proceed with the following steps to replace the Cleaning Brushes that contact with the Duplex Right Roller and the Duplex Outlet Roller and clean the relevant portions.

- 1. Remove the Registration Unit.
- 2. Open the Duplex Path.
- 3. Remove the 2 screws and release the Claw to remove the Fixing Feed Cover 1.



- 4. Disconnect the connector, free the harness from the Wire Saddle, remove the 2 screws, and release the protrusion to remove the duct on the right.
- 5. Disconnect the connector, free the harness from the 2 Harness Guides and the Wire Saddle, and remove the 2 screws to remove the duct on the left.



6. Release the harness from the 4 Wire Saddles and the Edge Saddle, disconnect the 11 connectors, remove the

3 screws, and release the 2 claws to remove the Duplex Driver PCB and the Mounting Base.

7. Remove the 2 E-rings, Timing Belt, 2 Pulleys, and 2 Parallel Pins.





- 8. Lift the ETB Unit.
- 9. Release the 2 claws, release the 2 protrusions by sliding the Transfer High Voltage PCB Unit Upper Cover, and then lift it upwards to remove it.
- 10. Disconnect the 3 connectors, free the harness from the Wire Saddle, and remove the 2 screws.



11. Release the 2 hooks by sliding the Transfer High Voltage PCB Unit in the direction of the arrow (1), then slide it in the direction of the arrow (2) to remove it.

12. Place a sheet of paper on the Duplex Path, and remove an N-ring each from the Duplex Right Roller and the Duplex Outlet Roller.

Note: Place a sheet of paper on the Duplex Path to prevent paper dust from falling during the following steps.





13. Free the harness from the 2 Wire Saddles, disconnect the connector, and remove the screw to remove the Fan Unit.



14. Pull the Duplex Right Roller and remove the shaft at the rear.

## Note:

- Do not damage the surfaces of the Duplex Right Roller and the Duplex Outlet Roller.
- The bearing at the front and the bushing at the rear of the Duplex Right/Duplex Outlet Roller Shaft are not fixed, so be careful not to drop them.





15. Move the Duplex Right Roller toward the rear and remove the shaft from the Fixing Feed Unit Side Plate. Then, move it in the direction of the arrow and remove it through the opening on the top of the Fixing Feed Unit.

16. Remove the Duplex Outlet Roller in the same way as the Duplex Right Roller removal procedure shown in steps 13 and 14.





- 17. Remove the 4 Cleaning Brushes that contact with the Duplex Right Roller and the Duplex Outlet Roller.
- 18. Clean the four areas where the Cleaning Brushes are attached with lint-free paper moistened with alcohol.
- 19. Remove the paper placed on the Duplex Path, and clean the entire perimeter of each of the 4 rollers with lint-free paper moistened with alcohol while rotating the roller by hand.





- 20. Attach new 4 Cleaning Brushes with reference to the upper right of the plate where they are going to be attached.
- 21. Clean the four areas on the removed Duplex Right Roller and the Duplex Outlet Roller with lint-free paper moistened with alcohol.
- 22. Install all the removed parts in reverse order.
- 23. Open the Right Door and the Right Left Cover.
- 24. Clean the entire perimeter of each of the 2 rollers and Registration Front Roller with lint-free paper moistened with alcohol while rotating the roller by hand.





**Note:** When rotating the roller by hand, be sure not to touch the surface of the roller but to hold a side face.



## Symptom:

## Soiling on the back of the sheet (Staple Finisher-D1/Booklet Finisher-D1)

## **Description:**

In a machine with Staple Finisher-D1 or Booklet Finisher-D, soiling at the back of the sheet [A] may occur when shift mode or staple mode is used.



## Cause:

When shift mode or staple mode is used, paper alignment is performed in the Process Tray Assembly of the Finisher. During paper alignment, the upper paper and the lower paper rub against each other at the portion [E] sandwiched between the Stack Delivery Upper Roller [C] and the Stack Delivery Lower Roller [D], and toner on the paper on the Stack Delivery Upper Roller side stick to the lower paper.

[Reference] This symptom occurs more frequently when paper having higher friction coefficient is used. It is assumed that when a mixture of sheets of coated paper and sheets of plain paper is used, toner on the plain paper stick to the coated paper, thereby soiling the back side of the paper.



## Solution:

Change the following setting of service mode according to the type of media with this symptom.

Service mode > SORTER > Option > SLD-BCK

Setting values:

0: OFF (default)

- 1: ON (coated paper and recycled paper)
- 2: ON (coated paper and plain paper)

## Symptom:

## Roller Marks on images due to the friction of the pull roller when using Booklet/Folding function (Booklet Finisher Pro-F1)

## **Description:**

When creating a Saddle Stitch Job, roller marks may appear on the paper. The following example is an example of the roller marks [a] which appeared on the image on LTR size paper (279mm x 216mm).



## Cause:

When using the booklet function or folding function, paper is fed to the vertical path of the Saddle Stitch Assembly. As paper is sent to the Saddle tray, the Pull Rollers [1] (made of a sponge material) will touch the surface of the paper. If the pull rollers become contaminated with either paper dust or toner the contamination from the Pull Rollers will be transferred to the surface of the paper.

Illustration [A] is the Vertical Path Assembly viewed from above, illustration [B] is the view from the Saddle Stitch side.





## Solution:

When the soiling occurs, replace the two estrangement rollers.

- 1) Remove the front door, and then take the saddle handle unit out from the Booklet Finisher-D1.
- 2) Remove the four screws [1], and take out the delivery cover and the two jam release knobs [2].
- 3) Remove the five screws [1] and the delivery cover [2].
- 4) Open the saddle right guide. The picture shows that the saddle right guide opens.



5) Remove the two screws [1] and the connector cover [2].

6) Remove the connector [1].





7) Remove the two screws [1] and the saddle stapler assembly [2].8) Remove the two screws [1] of the estrangement roller.



9) Remove the retaining ring[1] placed on the front of the estrangement roller drive shaft and the bearing[2].10) Remove the retaining ring[1] placed on the rear of the estrangement roller drive shaft and the pulley guide[2].





11) Remove the estrangement rollers while sliding out the estrangement roller drive shaft toward the rear, and replace them.

## 12) Assemble them in reverse order from Step 10). FL3-2010 ROLLER, ESTRSNAGEMENT (2 pcs.)



## Symptom:

## **0115 Jam Code / Duplex Left Sensor Delay Jam Details:**

0115 Jam occurred at the entrance of the Duplex Path when duplexing.



## Cause:

The Reverse Flapper does not operate if the Torsion Spring of the Reverse Flapper comes off.



[A] Indicates the Torsion Spring removed[B] indicates a normal status.



[C] Reverse Flapper position with the Torsion Spring" removed[D] Normal position

- 1) Remove the Reverse Guide from the Fixing/Feeder Duplexing Assembly.
- 2) Hook the Torsion Spring of the Reverse Flapper on the Reverse Guide
- 3) Reattach the Reverse Guide from step 1.
- 4) Run a duplex job to make sure that jam does not reoccur.

## Symptom:

## 0101/0106 Jam Code

#### **Details:**

0101 jam code-Deck 1

0106 jam code-Deck 2.

## Solution:

Loosen the screw (as illustrated below) and slide the Deck Pressure Plate to the right (in the direction of the arrow). Check that the screw position is at the engraved mark (1) and retighten the screw.



## Symptom:

## 0105/0218 Jam code: Paper Deck Unit-C1/POD Deck Lite-A1

## **Details:**

0105 / 0218 jam code only when running paper from either the Side Paper Deck-C1/POD Deck Lite-A1. All other paper sources are fine.

Jam Code Description:

When a 0105 jam code occurs, the paper is located at just before the Registration Rollers. When a 0218 jam code occurs the jammed paper is located at the Pre Registration Roller with the trailing edge of paper still in Paper Deck.

## Cause:

Paper being fed from Paper Deck-C1/POD Deck Lite-A1 may run at a lower speed than the Pre- Registration Roller. If this should occur the paper may slip at the Pre-Registration Roller.

Replace Pre-Registration Roller (FC8-9354-000).

## Symptom:

## 0104 Jam Code (POD Deck Lite-A1)

## **Details:**

0104 jam code: Delay Jam to the Writing Guiding Sensor S28.

## Solution:

Check the Support Roller (FF6-1976-000) for Displacement. Replace if needed.



## Symptom:

## 0204/0208 Jam code

## **Details:**

0204: Write judging sensor stationary jam

0208: Duplex merging sensor stationary jam

## Cause:

Paper may not feed properly into the Pre-Registration Guide [1]. A 0204 or 0208 Jam code may occur.



When this symptom occurs, attach a Pre-Registration Guide Sheet (FE2-0547-000) onto the Pre-Registration Guide Assembly according to the following procedure:

1) Remove the Right Door Assembly [3], and the Pre-Registration Guide Assembly [1].



2) Remove the screws on the front side [4] / rear side [7] of the Pre-Registration Guide Assembly.

3) Loosen the screw on either the front side [6] or rear side [7] of the Pre-Registration Guide Assembly and remove the Crossing Guide [8].



**Note:** When handling with the Pre-Registration Guide Assembly [1], make sure that the Sheet-Metal of the Crossing Guide [8] and the Pre-Registration Guide [9] does not get deformed.

4) On the Registration Guide [9], clean the position [a], where the Pre-Registration Guide Sheet is to be attached, using a lint free cloth with alcohol.

5) Attach the Pre-Registration Guide Sheet [2] onto the Pre-Registration Guide [9] as shown on the figure on the following page:

Front-rear direction:

Match the edges of the Pre-Registration Guide Sheet [2] and the Pre-Registration Guide [9] [b].

Up-and-down direction:

Match the edges of the Double-Stick Tape [c] of the Pre-Registration Guide Sheet [2] and the Pre-Registration Guide [9] [c].

**Note:** When attaching the Pre-Registration Guide Sheet [2], against the Sheet with double-stick tape does not leave any air bubbles as this may cause the sheet to come off.

6) When attaching the Pre-Registration Guide Sheet [2] onto the Pre-Registration Guide [9] is completed, assemble the machine again in a reverse order (from step 4).

Note: When assembling the Crossing Guide [8] to the Pre-Registration Guide Assembly [1], make sure the two boss positions located on the front side [a] and the rear side[b] are fitted properly.



## Symptom: 0101/0102/0106/0107 Jam Code due to abrasion of the pickup roller

## Description

When feeding papers from the Right or Left paper deck the following jam codes may occur:

- 0101: Right Deck Pickup Sensor 1 delay jam
- 0102: Right Deck Pull Out Sensor delay jam
- 0106: Left Deck Pickup Sensor 1 delay jam
- 0107: Left Deck Pull Out Sensor delay jam

## Cause:

Because the friction coefficient was lowered due to adhesion of calcium carbonate contained in a paper; the surface of the black Pickup Roller in the Right or Left Deck pickup roller may become worn.

**Note:** Both the black Pickup Roller [A] and the Gray Pickup Roller [B] have been used on the machine's production line. Therefore, the abrasion of the Pickup Roller in machines with the Black Pickup Roller may ware out at an earlier stage.





When the symptom occurs, replace the pickup roller (FC5-2524-000). *Refer to Technical Publication TP11 070a.* 

## Symptom:

## "Delivery Setting" Error Message is displayed

#### **Details:**

"Delivery setting" error message is displayed after the Finisher is disconnected from the main body or if the Main Power Supply Switch is turned OFF/ON, and the Finisher is re-connected.

#### Cause:

Prior to System Software v41.03 the Finisher information was designed to reset after the Finisher is disconnected from the main body, and the main power supply switch is turned OFF/ON.

With the new system software, the Finisher configuration information is not initialized even after the Finisher is disconnected from the main body, and the main power supply switch is turned OFF/ON, as long as it is cleared in the service mode.

## Solution:

Upgrade the system software to ver.41.03 and later.

Note: When upgrading the system software to ver.41.03 and later, all accessories are upgraded to the appropriate firmware level.

## Symptom: E503-0041 (Professional Puncher Integration Unit-B1)

## **Details:**

E503-0041 error code may occur when the Professional Puncher Integration Unit-B1 installed.

## Solution:

Confirmed 120 VAC input voltage is present to the 24V DC Power Supply at connector J101. Fuse FU101 on the 24V DC Power Supply is open. Replacing FU101 did not fix the error code. The following images show the location of the 24V DC Power Supply, FU101 and connector J101 on the rear side of the Integration Unit.



Check if 24 VDC is missing from the 24V DC Power Supply at connector J201 pin 3. Check if 2.3 VDC is present at the 24V DC Power Supply at connector J201 pin 1. The following image shows the location of connector J201 on the 24V DC Power Supply. Replace the 24V DC Power Supply Assembly (FM3-4667-000).



## E503-0003

#### **Details:**

The E503-0003 is generated after the installation of the Professional Puncher-C1/ Integration Unit-B1.

## Solution:

Upon installation the main power switch on the Pro Punch-C1 unit is in the "OFF" position. The power switch must be in the "ON" position prior to power cycling the main engine. The power switch on the Pro Punch-C1 should remain in the "ON" position thereafter.



## Symptom: E503-0053: (Professional Puncher-C1)

## **Details:**

After servicing the Professional Puncher-C1 the error code E503-0053 occurs.

E503-0053: Error code is a communication failure between the Integration Unit-B1 Professional Puncher-C1 (Professional Puncher Integration Unit-B1)

## Solution:

While servicing the Professional Puncher-C1 the service switch was inadvertently moved to the "Service" position. The following image shows the location of the service switch in the Professional Puncher-C1.



## E001-0004/E001-0010 Fixing Sub Thermistor 2 (THM4)

#### **Details:**

E001-0004: Fixing Assembly high temperature error (hardware detection). Abnormal temperature difference among the Thermistor was detected.

E001-0010: Fixing Assembly high temperature error: Turning the main power switch OFF and then ON without clearing the error in service mode.

#### Solution:

Replace the Fixing Sub Thermistor 2 (THM4)

#### Symptom:

## 0CA4 Jam Code (Pro Booklet Finisher-F1)

#### **Description:**

0CA4 Jam occurred immediately after turning on the Main Power SW.

The following screen is displayed when turning on the Main Power SW on machine only with the Finisher's Main Power SW is OFF.

When pressing the "Continue Startup" button, the system starts up without the Finisher. Thereafter, when turning on the Finisher Main Power SW a 0CA4 jam code occurs.

0CA4: Page Complete time out jam



#### Cause:

Problem occurs with the Finisher recognizes the DC Controller PCB due to the operations in the wrong order or "Continue Startup" operation after power-on. Even though the Finisher's Main Power SW is turned ON in this condition, no proper communication between the DC Controller PCB and Finisher is performed.

#### Solution:

Turn ON the machine's Main Power SW after turning ON the Finisher's Main Power SW.

## Symptom: E503-0041/E503-0051 Error Code

## **Description:**

E503-0041 or E503-0051 error code may occur (Professional Puncher Integration Unit-B1, Professional Puncher-C1, and Booklet/Staple Finisher-D1/F1).

E503-0041: Error in communication between Professional Puncher Integration Unit-B1 and Finisher

E503-0051: Error in communication between Professional Puncher Integration Unit-B1 and Professional Puncher-C1

#### Cause:

There might have been an issue with the firmware of the PUNCH-IF (Professional Puncher Integration Unit-B1) prior to ver.11.01.

#### Solution:

Upgrade PUNCH-IF, the system of Professional Puncher Integration Unit-B1, to ver.11.01 or later. Note: When upgrading to PUNCH-IF Ver.11.01 or later, pay attention to the combination of the versions.

#### Symptom:

## 0CA4/1E00 Jam Code occurs with System Software earlier than version26.03 after removing sheets of paper from the processing tray (Staple/Booklet Finisher-D1)

## **Description:**

0CA4/1E00 Jam occurs upon removing sheets of paper [1] from the processing tray when the device had run out of paper or a jam has occurred.



0CA4: Page Complete time out jam 1E00: Finisher Sequence Error jam

## Cause:

While the processing tray was suspended, sheets of paper were removed from it. Except for jams that occur at the processing tray, there is no need to remove sheets of paper from the tray.

Instruct the user to remove sheets of paper in accordance with the instructions displayed on the LCD in case of Jam.

Note: The finisher system software Ver.26.03 (SORTER Ver.26.03) and later was modified so that it will not make the device display 0CA4/1E00 Jam even when sheets of paper are removed from the Processing Tray.

When upgrading after SORTER Ver.26.03, use the following firmware combination: MN-CONT: Ver.31.06/LANG: Ver.31.06/DC-CON: Ver.32.01/MEAP: Ver.31.05/S-LNG: Ver.30.02/Staple/Booklet Finisher-D1 SORTER: Ver.26.03

## Symptom:

## 112F/1F8F Jam Code (Staple/Booklet Finisher-D1)

Description 112F/1F8F jam code occurred continuously. 112F: Finisher Jam Error Avoidance code

1F8F: Saddle Jam Error Avoidance code

## Cause:

The device has a function to display an error code in case an error avoidance jam has occurred several times continuously. But, this function didn't work with versions of Staple/Booklet Finisher-D1 system software earlier than Ver. 29.02 (SORTER Ver 29.02).

## Solution:

Upgrade the Staple/Booklet Finisher-D1 system software to Ver. 29.02 (SORTER Ver. 29.02) or later. When a Jam/Error avoidance jam occurs several times continuously, the device displays an error code corresponding to the error state.

When upgrading after MN-CONT Ver.40.13, use the following firmware combination: MN-CONT: Ver.41.03 / LANG: Ver.41.03 / DC-CON: Ver.34.01 / R-CON: Ver.22.01 / COPY-AP: Ver.41.04 / BOX-AP: Ver.41.04 / SEND-AP: Ver.41.01 / S-LNG: Ver.30.05 / Staple/Booklet Finisher-D1 SORTER: Ver.29.02 / SDL-STCH: Ver.13.02

## 1096/11A1/11A2/11A3 Jam codes due to the faulty finisher software SDL-STCH (Booklet Finisher-D1)

Description:

1096/11A1/11A2/11A3 Jams occurred when using the booklet mode.

1096: Saddle Vertical Path Sensor delay jam

11A1: Saddle Feed Path Sensor feed stationary jam

- 11A2: Saddle Delivery Sensor feed stationary jam
- 11A3: Saddle Inlet Sensor feed stationary jam

## Cause:

Due to the bug of the finisher software SDL-STCH, the back end retaining lever does not operate while the motion of booklet mode and the first and second sheet of printing strike each other.

## Solution:

Upgrade the finisher software SDL-STCH to Ver.10.01 or later.

Note: When to upgrade to SDL-STCH Ver.10.01 or later, pay attention to the combination of the versions.

## Symptom:

## No paper in the multi-purpose tray is faultily indicated due to the faulty operation of the multi-purpose tray paper presence sensor.

## **Description:**

Despite paper being set in the multi-purpose tray, no paper was faultily indicated.

## Cause:

When paper is fed from the multi-feed pick-up assembly, the paper rubs against the metal plate of the multi-purpose tray, which results in being electrically charged. This charging caused faulty operation of the multi-purpose tray paper presence sensor to detect presence of paper on the multi-purpose tray.

## Solution:

According to the following steps, replace the multi-purpose tray paper presence sensor (photo-interrupter) with a new type.

- 1) Open the Multi-purpose Pickup Unit and release the claw at 1 location to remove the gear.
- 2) Remove 1 E-ring to remove the Bushing.





- 3) Remove the Multi-purpose Tray Pickup Guide.
- 4) Remove 2 screws and release the claw and protrusion at 6 locations to remove the Multi-purpose Tray Lower Guide.





5) Replace the Multi-Purpose Tray Paper Presence Sensor [1] with a new type part [B]:WG8-5783-000. [Reference] Old type [A]: WG8-5848-000



6) Assemble the parts in reverse order from Step 4). *Refer to Technical Publication: TP11 341c for further details.* 

## Symptom:

## E053-0001 error code

## **Description:**

E053-0001: Error in the Reverse Upper Flapper Solenoid Connection.

## Cause

Screws (M3 x 6) were installed instead of screws (M3 x 4) for mounting the Reverse Solenoid Assembly (SL5). By using the wrong screws may damage the Coil inside of the Reverse Solenoid Assembly.





Replace the Reverse Solenoid Assembly (FM4-5141-000) (SL5) and install it with screws (M3 x 4).

## Symptom:

## E677-0080/E315-000d error code

## **Description:**

E677-0080 or E315-000d error code appeared during large print job via iamgePASS-U1.

- E677-0080: Print server error: Communication error between Main Body and imagePASS-U1 at startup.

- E315-000d: Codec error

## Cause:

The symptom occurred because of a failure in system software of imagePASS-U1.

## Solution:

1) Check the version of system software of imagePASS-U1. For ver.1.0, upgrade it to ver.1.1. For ver.1.1, go to Step 2).

2) Import the patch file "1-1BMIKH.ps" into the "Direct" queue through Command Workstation.

3) Wait at least 60 seconds after the patch has been imported before proceeding.

4) From either Command Workstation or the imagePASS-U1 LCD, choose "Shut Down" then "Reboot System".

5) When the server comes to an idle state, wait at least 60 seconds then print a configuration page. Once printed, verify the "Update Information" section contains patch number "1-1BMIKH".

[Caution]

- Install this patch to the system software ver.1.1. When the system software is ver.1.0, upgrade it to ver1.1 before installing the patch file.

- This patch is exclusive. At the time of installation, this patch must be rebooted before installing any other patches. Note that this does not mean rebooting the server.

- When installing other patches, do so after having installed and rebooted this patch.

## Symptom:

## E583-8001/E583-8002 due to operation failure of the tray auxiliary guide (Booklet/Staple Fin-D1) Description:

E583-8001 occurs when the tray auxiliary guide [1] moves from the home position to the paper delivery direction [A]. Or E583-8002 occurs when the tray auxiliary guide [1] moves back to the home position [B].

- E583-8001: The tray auxiliary guide does not come off the tray auxiliary guide front/rear HP sensors when the tray auxiliary guide motor has been driven for 3 seconds.

- E583-8002: The tray auxiliary guide front/rear HP sensor does not detect the tray auxiliary guide when the tray auxiliary guide motor has been driven for 3 seconds.



## Cause

The position of the tray auxiliary guide is detected by the sub guide flag [1] and photo sensor [2]. The moving range of the sub guide flag becomes less than intended, which causes a failure to correctly detect ON/OFF by the photo sensor.



## Solution:

Prepare the two, new type sub guide flags (FC9-3081-010), and perform a replacement work by following the steps below. [A] is the old type and [B] is the new type.



Perform the steps 1) to 5) below by referring to Service Manual.

- 1) Remove the staple unit.
- 2) Remove the tray 1.
- 3) Remove the grate-shaped lower guide.
- 4) Remove the stapler drive unit.
- 5) Remove the processing tray unit.
- 6) Remove the 4 screws and then remove the dispose tray (rear).
- 7) Remove the screw [1] and then move the shaft [2] in the alignment plate to keep it away from the Bushing Plate.





8) Lift the upper sub guide [3] and then detach the boss from the connecting section [a] to remove the upper sub guide [3].

9) Remove the screw [4] that fixes the photo sensor plate to keep the photo sensor away from the plate, remove the screws [6] and [7] that fix the sub guide holder [5] found at the rear, and then remove the sub guide holder found at the rear. Remove the sub guide holder found at the front too by performing the same steps.





[Reference] The photo [C] shows the sub guide holder found at the front and the photo [D] shows the sub guide holder found at the rear.

10) Remove the spring [8] and the plate [9] from the sub guide holder, and then remove the sub guide flag [10] to replace it with the new type.





11) Restore the removed parts by following the steps in the reverse order.

Note: When mounting the shaft that was removed in the step 7), fit the shaft in place so that the hook of the alignment section is correctly hooked on the plate. The photo [E] shows the state that the hook is not hooked, while the photo [F] shows the state that the hook is correctly hooked.



Paper delivery failure/stacking failure due to breakage in tension spring of finisher (Finisher-D1)

## **Description:**

Booklet/Staple Finisher-D1 with a serial number earlier than the following serial numbers became unable to pick up the stack of paper reliably due to the breakage in the tension spring of the gripper arm assembly. This caused failure in paper delivery and stacking consecutively.

#### Cause:

While the finisher is in operation, the gripper arm assembly [2] inside the dispose assembly [1] picks up the stack of delivered sheets and carries them. At this time, depending on the direction in which the tension spring [3] of the gripper arm assembly [2] is installed, the tension spring [3] may break due to its endurance. Accordingly, the stack of paper cannot be picked reliably.



## Solution:

When the symptom occurs, prepare two sets of the level tensioner unit (FM4-4730) which is assembled, as a new part, in a direction in which less load is applied to the tension spring. Replace the tension spring and the gripper open/close lever with the level tensioner unit. [A] shows a tension spring which is assembled in a direction in which a large load is applied to the tension spring, while [B] shows a tension spring assembled in a direction in which less load is applied.



1) Remove the dispose assembly [1] from the finisher main body, and loosen the two screws[3] in the gripper arm assembly[2]. There is no need to remove the screws.

2) Rotate the gripper arm assembly to move it to the position[a]. Then, remove the gripper arm assembly.[Caution] Before removing the gripper arm assembly, be careful not to extend the tension spring (FU8-2166)[4].Be sure not to lose the tension spring since it is to be used again.



- 3) Remove the two screws [3] loosened in step 2).
- 4) Remove the two E-rings [5], and pull out the two pins[6].
- 5) Disassemble the gripper arm assembly, and replace the portion[b] with the level tensioner unit.
- 6) Reassemble the parts in reverse order from step 4).



## imageRUNNER ADVANCE 8105 Series Cleaning Location inside Machine

From analysis of the service call data on iR-ADV 8105 series, it is found that many visits have been made for the image failure due to the contamination inside the machines. By cleaning, during visit due to a call, the locations inside the machine where the toner can easily be adhered, the number of calls is reduced regarding the image soil resulting from such locations.

For this reason, clean the parts below during visit due to a call or during replacement of parts.

## **Cleaning Interval and Location:**

Clean the following nine locations during every service visit and during parts replacement work.

No	Location	Cleaning Timing
1	Hopper Assembly	During visit
2	Pre Transfer Charging Assembly	During visit
3	Registration Assembly	During visit
4	Fixing Entrance Guide Assembly	During visit
5	Pre-Registration Guide Assembly	During visit
	AP Kit	
6	(Separation Claw, Separation Claw	When AP Kit is removed and inserted
	Holder and plate)	
7	Guide to insert AP Kit	When AP Kit is removed and inserted, or at every 500
		thousand sheets
8	Developing Assembly	Every 500 thousand sheets, or when toner is accumulated
		on the top of the pre transfer charging assembly
9	Developing Assembly Guide Mount	Every 500 thousand sheets, or when toner is accumulated
		on the top of the pre transfer charging assembly

## Hopper Assembly

## **Cleaning Interval:**

Be sure to perform cleaning during the visit.

## **Cleaning Location:**

Open the upper front cover assembly. If the inner part[a] of the upper front cover assembly, the toner bottle mount area[b], and the lower front cover assembly[c] are soiled with toner, be sure to wipe off the toner.

Note: When cleaning the upper front cover assembly[a], the toner bottle mount area[b], and the lower front cover assembly[c]. Note: Be sure to check for contamination of the dustproof filter [d]. When it is contaminated, replace the dustproof filter (FC8-9564-000).





## Pre-Transfer Charging Assembly

## **Cleaning Interval:**

Be sure to perform cleaning during the visit.

## **Cleaning Location:**

Remove the pre transfer charging assembly. If toner is adhered to the upper part[a] and the lower part[b] of the pre transfer charging assembly, be sure to wipe off the toner.

## [Point]

If a large amount of toner is accumulated on the top surface of the pre transfer charging assembly, check for soil around the developing assembly, and clean the soil as needed.





## **Registration Assembly**

## **Cleaning Interval:**

Be sure to perform cleaning during the visit.

## **Cleaning Location:**

Check for toner soil on the upper part[a] of the registration assembly as well as on the magnetic sheet[b] and the plastic sheet[c] which face the surface of the ETB. If any soil is found, clean it.





## Fixing Entrance Guide Assembly

#### **Cleaning Interval:**

Be sure to perform cleaning during the visit.

## **Cleaning Location:**

Clean the area[a] of the fixing entrance guide.



## Pre-Registration Guide Assembly

## **Cleaning Interval:**

Be sure to perform cleaning during the visit.

## **Cleaning Location:**

Clean the paper feed path[a] and the registration front roller[b] in the pre-registration guide assembly. Note:

Particularly, soil adhesion tends to appear in the area[c] near the pre-registration guide assembly.



## AP Kit (Drum Separation Claw & Guide plate)

## **Cleaning Interval:**

Perform cleaning every time AP Kit is removed and inserted.

#### **Cleaning Location:**

Clean the drum separation claws[a] and the guide plate[b] in the lower part of AP Kit.

#### AP Kit Servicing:

- The drum edges are cleaned at every 250 thousand sheets.
- The entire drum surface is cleaned at every 300 thousand sheets.
- The drum cleaning blade movement is reversed at every 300 thousand sheets (1-sided).
- The drum front/rear side seals are replaced at every 500 thousand sheets.
- The drum separation claws are replaced at every 500 thousand sheets.



## Guide to insert AP Kit

## **Cleaning Interval:**

Perform cleaning every time AP Kit is removed and inserted.

## **Cleaning Location:**

Clean the vicinity[c] of each dowel[b] attached to the guide[a] on the machine side, in the area where AP Kit is to be inserted.

Note: Be careful not to drop the dowels during cleaning.

## Works related to AP Kit removal

- The drum edges are cleaned at every 250 thousand sheets.
- The entire drum surface is cleaned at every 300 thousand sheets.
- The drum cleaning blade movement is reversed at every 300 thousand sheets (1-sided).
- The drum front/rear side seals are replaced at every 500 thousand sheets.
- The drum separation claws are replaced at every 500 thousand sheets.



## **Developing Assembly**

## **Cleaning Interval:**

Perform cleaning at every 500 thousand sheets, or when toner is accumulated on the top of the pre transfer charging assembly.

## **Cleaning Location:**

Wipe off the toner adhered to the lower part[a] of the developing assembly. Particularly, soil adhesion tends to appear in the edge portions[b] of the developing assembly.

Note: When cleaning the lower part of the developing assembly, be sure to clean the developing assembly guide mount.



## **Developing Assembly Guide Mount**

## **Cleaning Interval:**

Perform cleaning at every 500 thousand sheets, or when toner is accumulated on the top of the pre transfer charging assembly.

## **Cleaning Location:**

Wipe off the toner adhered to the developing assembly guide mount[a].

Note: When cleaning the developing assembly guide mount, be sure to clean the lower part of the developing assembly, the pre transfer charging assembly, and the registration assembly as well.

