

Model: Katana		Date:14-Jul-06	No.: RB234015
Subject: Service Manual Revision		Prepared by: S. Ishizu	
From: 2nd Tech Support Sec. Service Support Dept.			
Classification:	<input type="checkbox"/> Troubleshooting <input type="checkbox"/> Mechanical <input type="checkbox"/> Paper path <input type="checkbox"/> Product Safety	<input type="checkbox"/> Part information <input type="checkbox"/> Electrical <input type="checkbox"/> Transmit/receive <input type="checkbox"/> Other (     )	<input type="checkbox"/> Action required <input checked="" type="checkbox"/> Service manual revision <input type="checkbox"/> Retrofit information

**This document summarizes the corrections in the Service Manual for “Katana” (Machine Code: B234/235/236).**

## 1. Added new step 8 <Page: 1-30>

7.Input the following telephone numbers with SP 5812.

- Service technician telephone number: SP 5812 001
- Service technician fax number: SP 5812 002
- For ordering consumables: SP 5812 003
- Sales representative: SP 5812 004

## **8.Install the language firmware if necessary.**

## 2. Corrected the procedure <Page: 1-122>

### **Incorrect**

1. Instruct the key operator to enable the key counter with the User Tools setting:  
User Tools> System Settings> Key Counter Management> ON

### **Correct**

1. Instruct the key operator to enable the key counter with the User Tools setting:  
User Tools> System Settings> **Administrator Tools**> Key Counter Management> ON

## 3. Corrected PM table <Page: 2-8>

### **Incorrect**

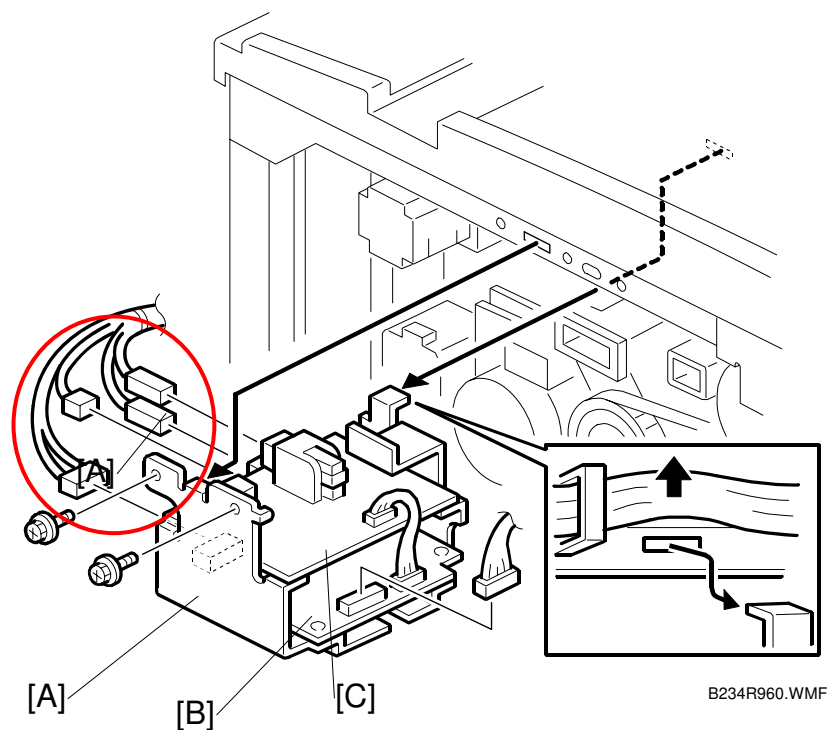
Hot roller gears	C/L			Lubricate (Barrierta 55L or SS552R)
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### **Correct**

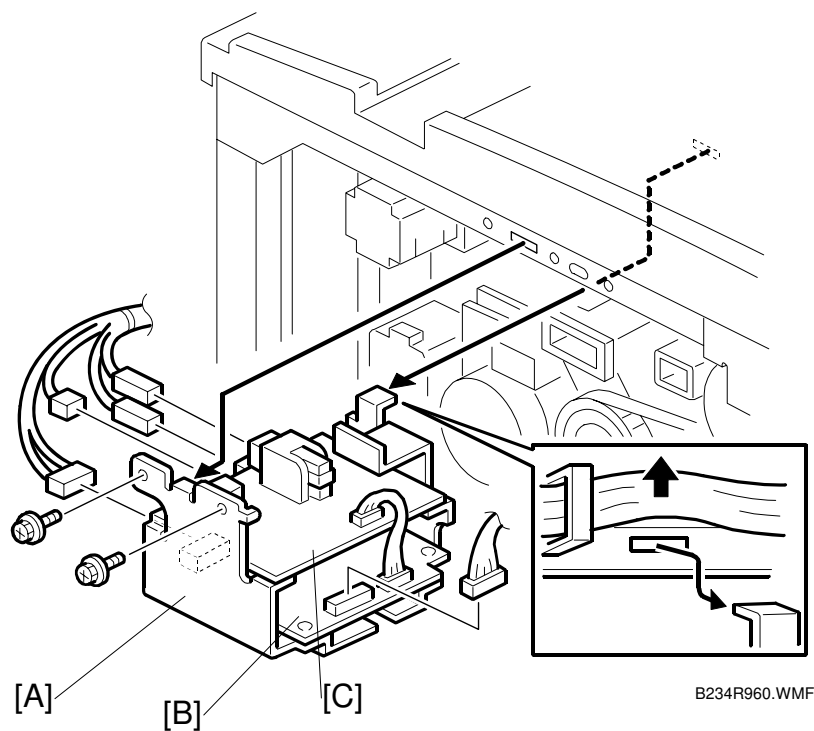
Hot roller gears	C/L			Lubricate with <b><u>Grease Barrierta – JFE5 5/2 (A2579300)</u></b>
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## 4. Corrected the Callout <Page: 3-166>

Incorrect:



Correct:



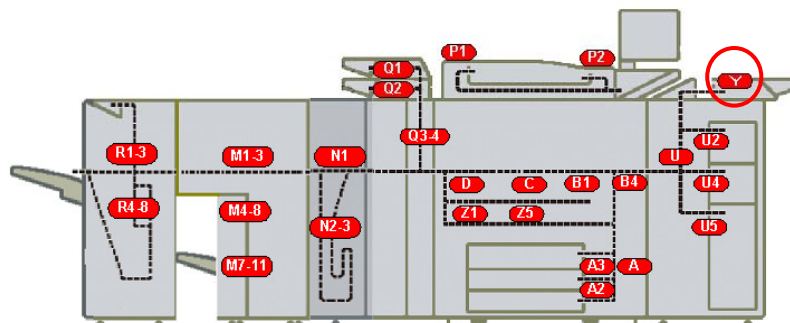
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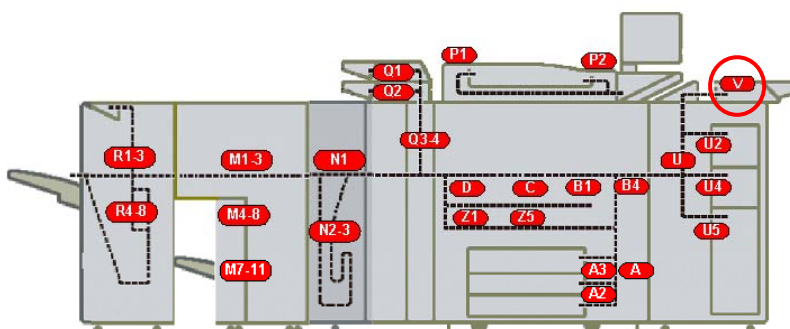
**5. Corrected the label "Y" to "V". <Page: 4-5>**

**Incorrect:**



B234T050X.WMF

**Correct:**



B234T050.WMF

Model: Katana

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## 6. Added SC876 <Page: 4-51>

<b>SC876</b>	<b>D</b>	Log Data Error The log data has been corrupted at power on, while the machine was operating, or when the machine was powered off during a print or copy cycle. The machine should never be switched off while it is printing or copying.
<b>SC876-1</b>		Log data file was corrupted at power on or while the machine was operating. <ul style="list-style-type: none"> <li>• Format the HDD with SP5832-004.</li> </ul>
<b>SC876-2</b>		The log was set for encryption without the encryption module installed: <ul style="list-style-type: none"> <li>• At power on</li> <li>• While the machine was operating</li> <li>• When the log encryption setting was changed.</li> </ul> <ul style="list-style-type: none"> <li>• Install or replace and set the encryption module.</li> <li>• Enable the log encryption setting.</li> </ul>
<b>SC876-3</b>		At power on, the log encryption key was disabled, causing an NVRAM malfunction. <ul style="list-style-type: none"> <li>• Format the disk with SP5832-004.</li> </ul>
<b>SC876-4</b>		At power on, the machine attempted log data encryption with the log encryption setting disabled (NVRAM malfunction). -or- At power on, log encryption was attempted with the log encryption setting disabled (NVRAM malfunction). <ul style="list-style-type: none"> <li>• Format the disk with SP5832-004.</li> </ul>
<b>SC876-5</b>		Error occurred at power on. Only the NVRAM was replaced with an NVRAM from another machine. -or- Only the HDD was replaced with an HDD unit from another machine. <ul style="list-style-type: none"> <li>• Replace the NVRAM with the original NVRAM.</li> <li>• Replace the HDD with the original HDD.</li> <li>• If the error persists, format the HDD with SP5832-004.</li> </ul>
<b>SC876-99</b>		Cause unknown. The error occurred at power on or while the machine was operating. <ul style="list-style-type: none"> <li>• Contact the Ricoh design section.</li> </ul>

### SC876: More

If the error persists after doing the procedure described in the table above, do this procedure.

1. Switch the machine off, remove the HDD, then switch the machine on.
2. Do SP5801-019 then switch the machine off.
3. Install the HDD again and switch the machine on.
4. Do SP5832-004.
5. Cycle the machine off/on.
6. Do SP9730-002 and set to "1" (ON).
7. Do SP9730-003 and set to "1" (ON).
8. Do SP9730-004 and set to "1" (ON).
9. Cycle the machine off/on.

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## 7. Edited title of SP5227 <Page: 5-55>

Old:

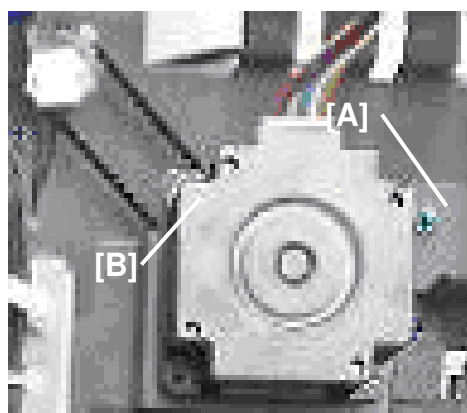
5227	Page Numbering
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New:

5227	Page Numbering ( <i><b>Bates Stamp</b></i> )
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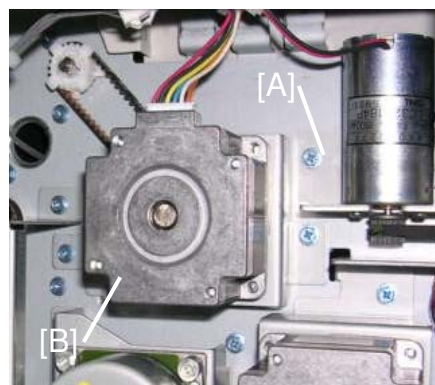
## 8. Replace with new photo <B830-34>

Old:



B830R901X.BMP

New:



B830R910.BMP

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## 9. Corrected ELECTRICAL COMPONENT SUMMARY <Page: B830-72>

### Incorrect:

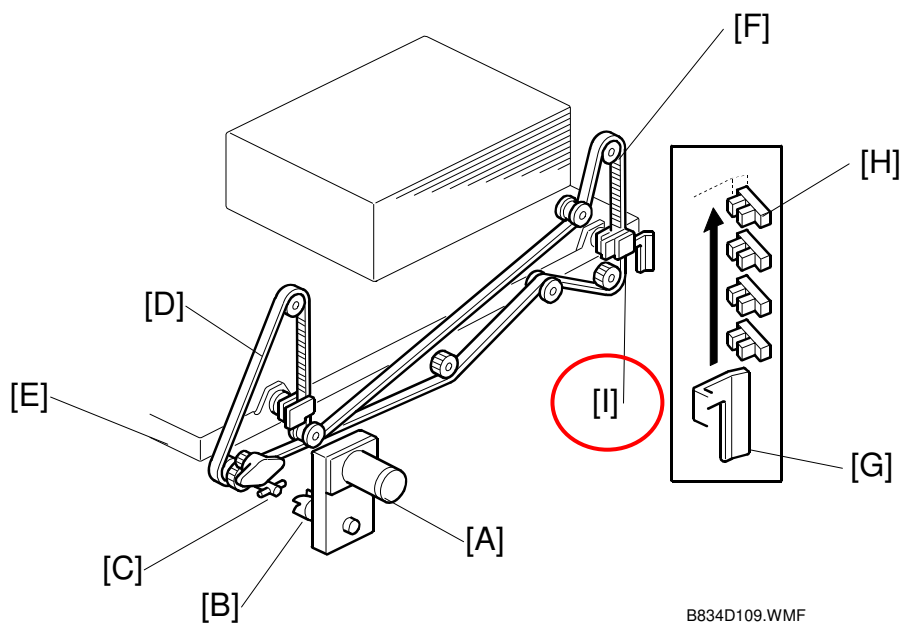
S38	Stapler Rotation Sensor 2	Paired with Stapler Rotation Sensor 1. This sensor pair controls the positioning of the corner stapler for the horizontal, 45° angle, and 75° angle stapling positions.
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### Correct:

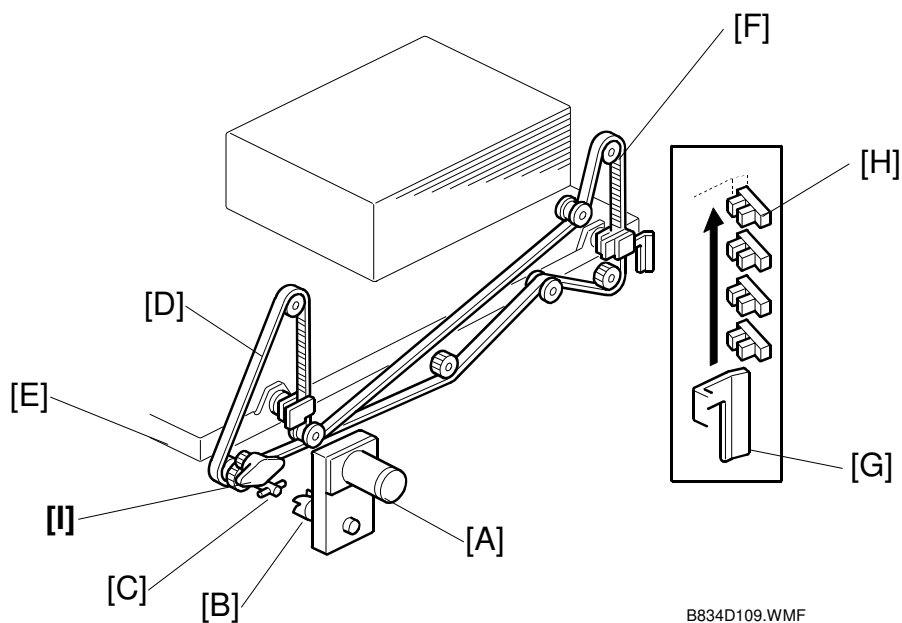
S38	Stapler Rotation Sensor 2	Paired with Stapler Rotation Sensor 1. This sensor pair controls the positioning of the corner stapler for the <b><u>horizontal and 45° angle stapling positions.</u></b>
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**10. Moved callout “[I]” to correct position. <Page: B834-24>**

**Incorrect:**



**Correct:**



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## 11. Corrected the ELECTRICAL COMPONENTS <Page: B836-22>

### Incorrect:

- |   |                                     |
|---|-------------------------------------|
| 1. Horizontal Transport Sensor          | 10. Positioning Roller Motor        |
| 2. Upper Transport Motor                | 11. Edge Pressure Plate Solenoid    |
| 3. Stapling Tray Junction Gate Solenoid | 12. Stack Tray Exit Sensor          |
| 4. Finisher Entrance Sensor             | 13. Booklet Stapler Board           |
| 5. Entrance Motor                       | 14. Booklet Output Tray Full Sensor |
| 6. Lower Transport Motor                | - Rear                              |
| 7. Booklet Pressure Roller Solenoid     | 15. Booklet Output Tray Full Sensor |
| 8. Positioning Roller Solenoid          | - Front                             |
| 9. Main Board (PCB)                     | 16. Front Door Safety Switch        |
|   | 17 Small Front Door Open Sensor     |

### Correct:

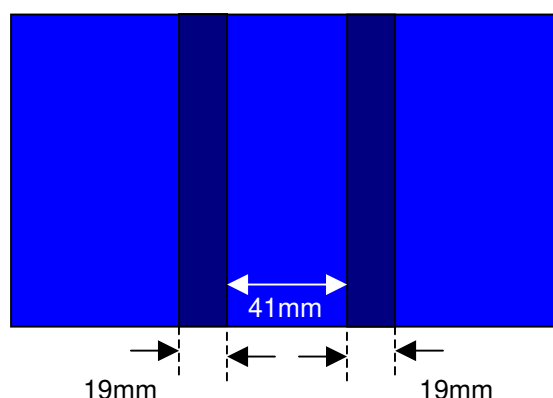
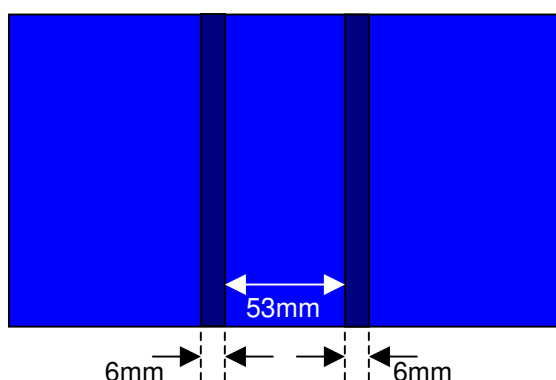
- |   |                                     |
|---|-------------------------------------|
| 1. Horizontal Transport Sensor            | 10. <b><u>Main Board (PCB)</u></b>  |
| 2. Upper Transport Motor                  | 11. Edge Pressure Plate Solenoid    |
| 3. Stapling Tray Junction Gate Solenoid   | 12. Stack Tray Exit Sensor          |
| 4. Finisher Entrance Sensor               | 13. Booklet Stapler Board           |
| 5. Entrance Motor                         | 14. Booklet Output Tray Full Sensor |
| 6. Lower Transport Motor                  | - Rear                              |
| 7. Booklet Pressure Roller Solenoid       | 15. Booklet Output Tray Full Sensor |
| 8. Positioning Roller Solenoid            | - Front                             |
| 9. <b><u>Positioning Roller Motor</u></b> | 16. Front Door Safety Switch        |
|   | 17 Small Front Door Open Sensor     |



Model: AG-P1 / C1		Date: 14-Jul-10	No.: RG178107
Subject: BK5000 Modified Exit/Driven Rollers for Roller Marks		Prepared by: Hiroaki Matsui	
From: PPBG QA/Service Planning Dept.			
Classification:	<input type="checkbox"/> Troubleshooting <input type="checkbox"/> Mechanical <input type="checkbox"/> Paper path <input type="checkbox"/> Product Safety	<input type="checkbox"/> Part information <input type="checkbox"/> Electrical <input type="checkbox"/> Transmit/receive <input type="checkbox"/> Other (     )	<input type="checkbox"/> Action required <input type="checkbox"/> Service manual revision <input checked="" type="checkbox"/> Retrofit information <input checked="" type="checkbox"/> Tier 2

## SYMPTOM

Depending on the print pattern, either of the roller marks shown below could appear when making booklets on the BK5000.

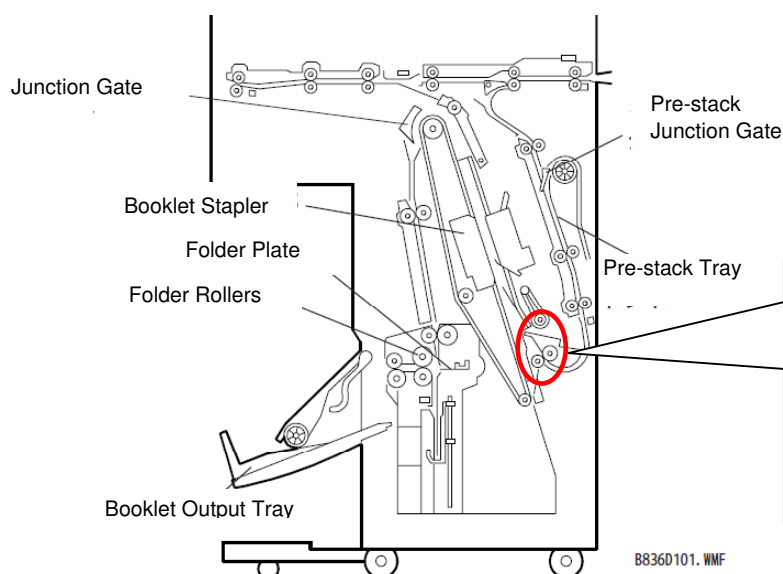


## CAUSE

The previous Exit Rollers with large ribs causes excessive pressure against the sheets.

## SOLUTION

Paper Exit Rollers and Driven Rollers have been modified as described below.



### Change

Degree of curl adjustment has been reduced for the Paper Exit Rollers.

1. Size of the ribs surrounding the two Exit Rollers has been reduced.
2. Width between the two Driven Rollers has been widened.

B836D101.WMF

Model: AG-P1 / C1

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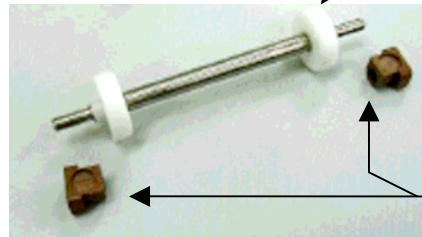
Replacement Procedures: Stapler Tray Exit Rollers & Driven Rollers

The modified parts are as follows:

B8369501: DRIVEN ROLLER x1

B8369502: BUSHING x2

B8369503: EXIT ROLLER: STAPLER TRAY x1



B8369501

B8369502



Previous



Modified: B8369503



Model: AG-P1 / C1

Date: 14-Jul-10

No.: RG178107

**Step1. Replacing the Driven Rollers****Step1-1. Open the front door, and remove the inner cover. (Screw x2)**

Tapping screws; 3x8

Inner cover

**Step1-2. Remove the “Guide Plate: Lower: Open and Close”.**

Remove the Retaining Ring.



Retaining Ring

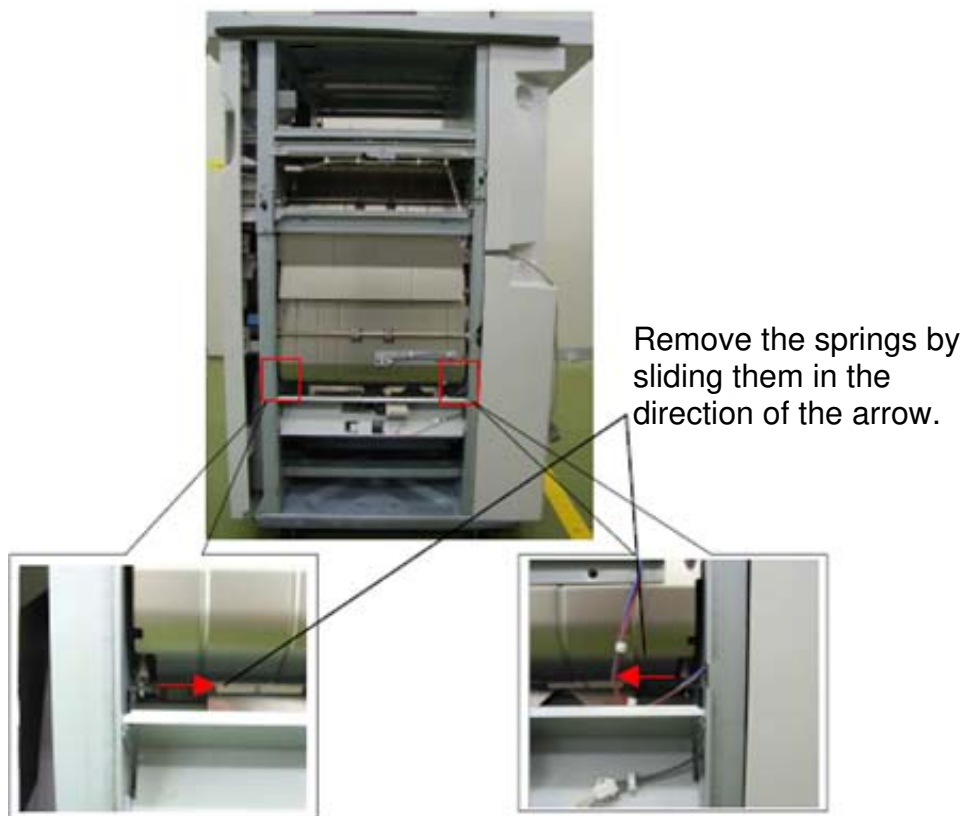


Model: AG-P1 / C1

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Step1-3. Face the unit from the upstream side, and remove the two springs.



Step1-4. Pull out the booklet stapler unit.



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Step1-5. Remove the Guide Plate while pulling up the Positioning Roller.

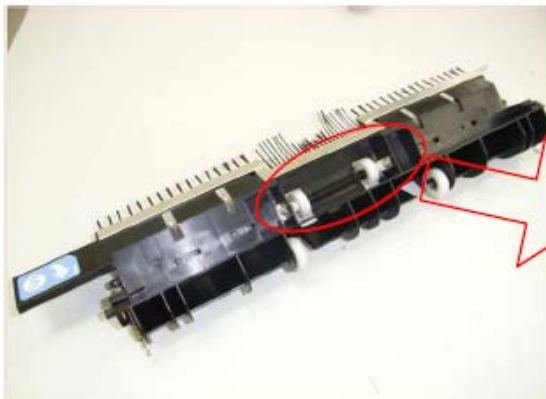


Pull up the Positioning Roller.



To remove the Guide Plate, release its shaft by pushing in and then pulling out.

Step1-6. Remove the Driven Rollers and the two Springs from the guide plate.



Step 1-7. Slide in the Booklet Stapler Unit back to its normal position.

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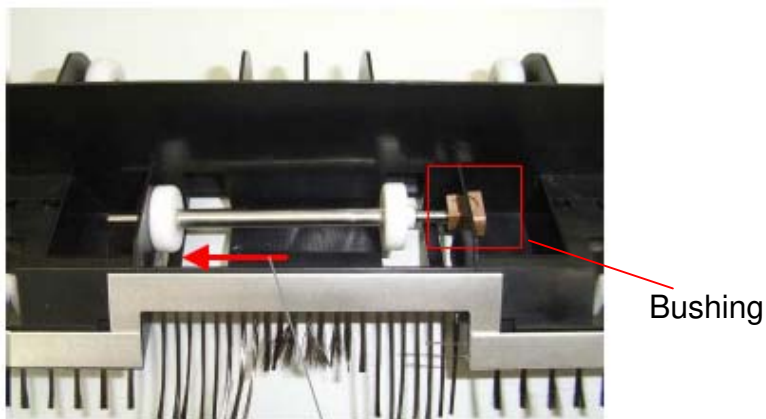
No.: RG178107

Step 1-8. Install the new Driven Rollers on the guide plate.



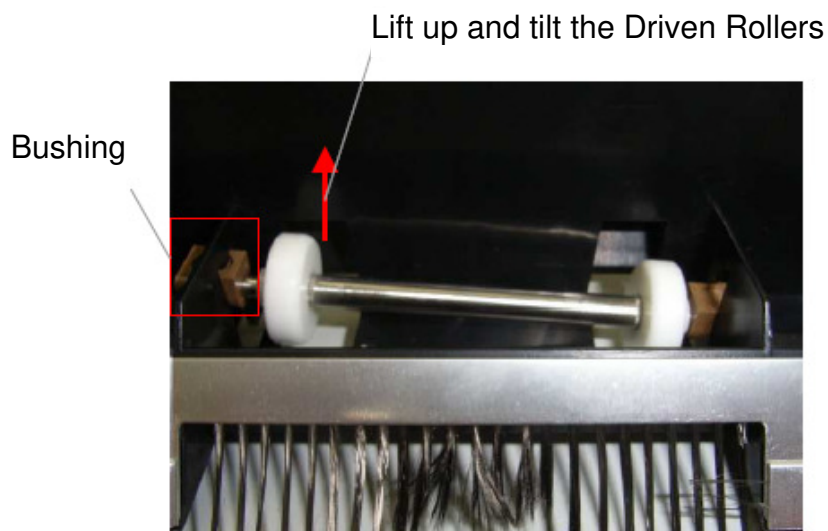
Driven Rollers

Step 1-9. Slide the Rollers in the direction of the arrow, and install the Bushing as shown in the photo below.



Sliding the Rollers

Step 1-10. Lift up the end of the Driven Rollers, and install the other Bushing as shown in the photo below.





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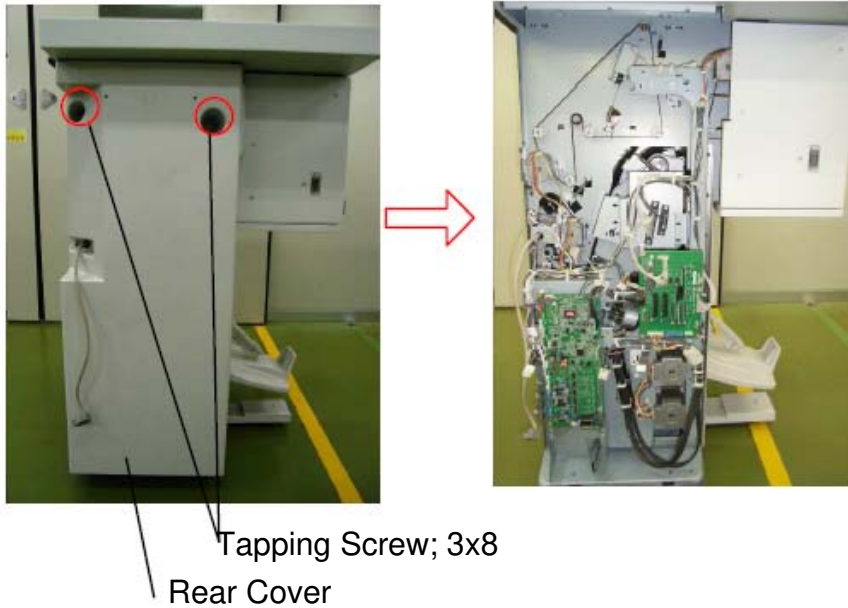
Step 1-11. Attach the two Springs removed in "Step1-6"..



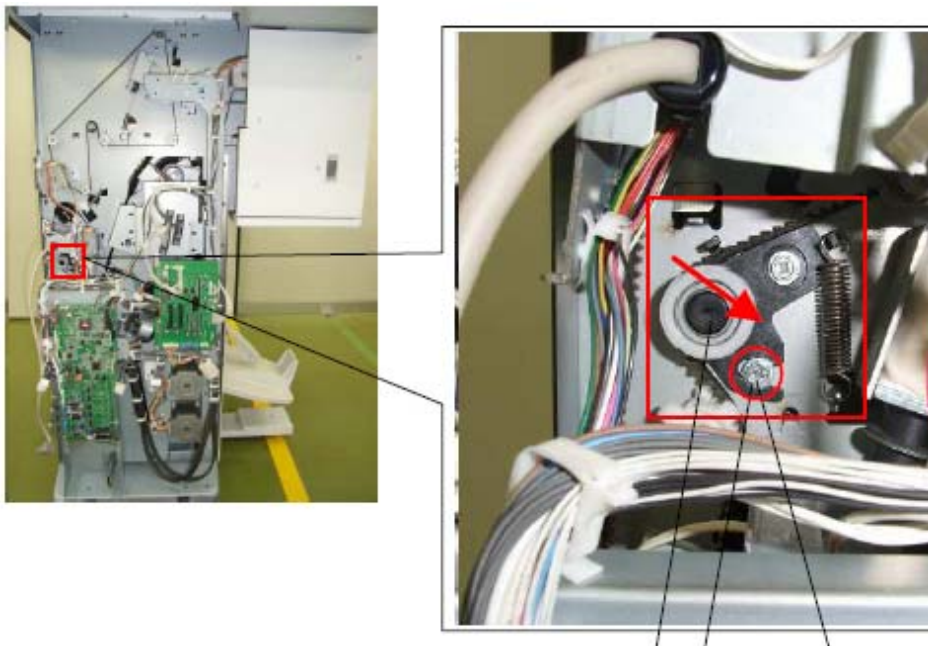
Spring x2

## Step 2. Removing the Exit Rollers

Step 2-1. Remove the Rear Cover.



Step2-2. Loosen the Belt Tensioner.



(3) Tighten the screw while the pressure is released.

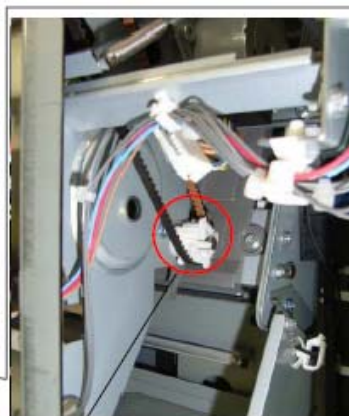


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Step2-3. Remove the Pulley and the Bushing.



(1) Remove the Pulley by releasing its snap-fit.

(2) Remove the Bushing.



Step2-4. Remove the Retaining Ring and the Bushing.



Retaining Ring / Bushing

Model: AG-P1 / C1

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Step2-5. Pull out the Booklet Stapler Unit, and remove the Exit Rollers.



Remove the Exit Rollers by pulling out horizontally, and then vertically.

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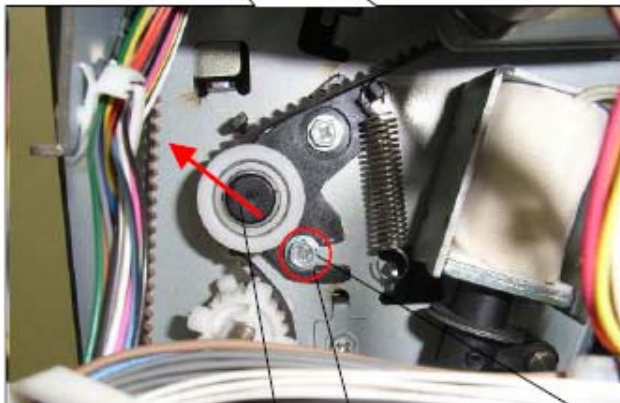
### Step 3. Installation of the New Parts and Put-back Procedures

Step 3-1. Install the new Exit Rollers and the Guide Plate installed with the new Driven Rollers.

1. Exit Rollers: Follow the steps "Step2-3" to "Step2-5" in reverse order.
2. Guide Plate: Follow "Step1-5" in reverse order.

Step 3-2. Reattach the removed parts.

1. Inner-cover, Retaining Ring, Springs: Follow the steps "Step1-1" to "Step1-3" in reverse order.
2. Set the Tensioner in its original position.

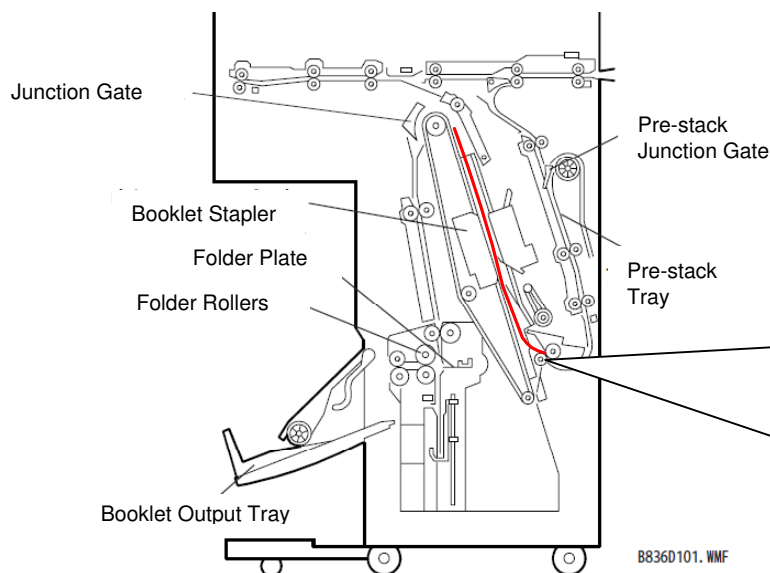


(1) Loosen this screw.

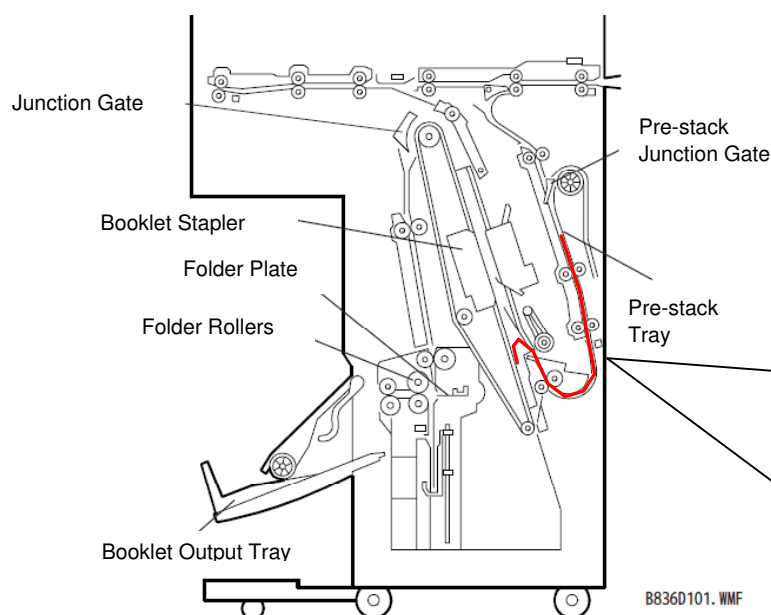
(3) Tighten the screw while the pressure is applied.

(2) Confirm that the Tensioner is pulled by the spring and pressure is applied to the Belt.

3. Attach the Rear Cover.

**IMPORTANT**
**Side Effect 1**

**Incomplete Feed-out of Trailing Edge**

The reduction of curl adjustment at the paper exit could cause the sheet to remain incompletely fed – the trailing edge stays in the Exit Roller area, which could result in incorrect folding positions or jams caused by collision with the succeeding sheet.

**Side Effect 2**

**Curls Generated at the Leading Edge**

As the sheets are fed out with the curls less adjusted, the leading edge is curled immediately after having been fed out from the exit rollers, which could result in jams. The rate of jam occurrence rises especially when feeding "thin and/or curled" sheets.

Model: Katana-C1 Booklet Finisher BK5000 (B836)		Date: 18-Nov-10	No.: RB836001
Subject: Modification to prevent false detection		Prepared by: T. Komori	
From: PP Service Planning Department 1G			
Classification:	<input type="checkbox"/> Troubleshooting <input checked="" type="checkbox"/> Part information <input type="checkbox"/> Action required <input type="checkbox"/> Mechanical <input type="checkbox"/> Electrical <input type="checkbox"/> Service manual revision <input type="checkbox"/> Paper path <input type="checkbox"/> Transmit/receive <input type="checkbox"/> Retrofit information <input type="checkbox"/> Product Safety <input type="checkbox"/> Other (      ) <input type="checkbox"/> Tier 2		

**Change:** Addition of a screw hole on the Stay and the Stapler Tray

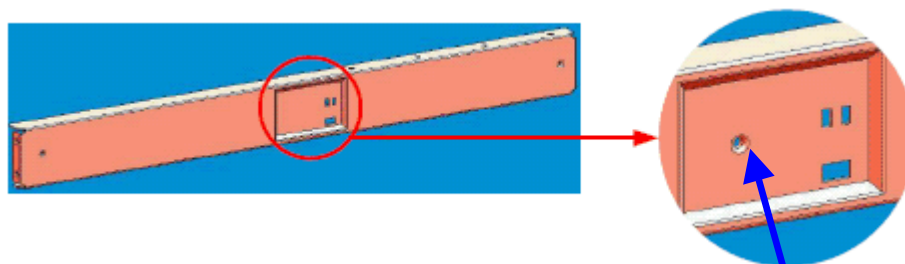
**Reason:** Higher reliability

Old Part Number	New Part Number	Description	Q'ty	Int		Page	Index
B7004167	D3734167	STAY:LOWER:POSITIONING SENSOR	1	X/X	X/O as a set	23	6
B7004185	D3734180	STAPLER TRAY	1	X/X		17	16
	04543006Q	TAPPING SCREW - M3X6	1			17	109

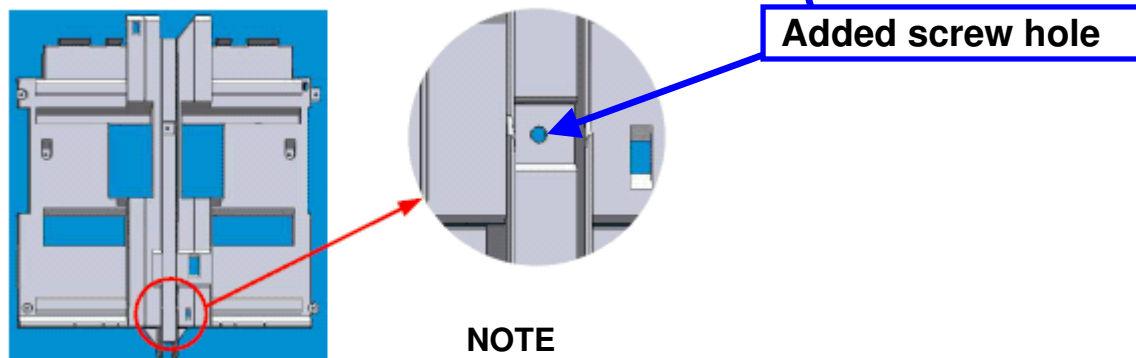
The stapler tray (B7004185) could deform over time and cause the positioning sensor (B7004167) to falsely detect an error.

To prevent the stapler tray from deforming, a new screw hole has been added to fix the tray more firmly, which will ultimately prevent the false detection.

## B7004167 → D3734167 STAY: LOWER: POSITIONING SENSOR



## B7004185 → D3734180 STAPLER TRAY



### NOTE

When fixing the stapler tray, fix the newly added screw hole first using the tapping screw (04543006Q).

Model: Katana-C1 Booklet Finisher BK5000 (B836)		Date: 25-Mar-11	No.: RB836002
Subject: Parts Catalog Correction		Prepared by: T.Mimura	
From: PP Service Planning Department 1G			
Classification:	<input type="checkbox"/> Troubleshooting <input type="checkbox"/> Mechanical <input type="checkbox"/> Paper path <input type="checkbox"/> Product Safety	<input checked="" type="checkbox"/> Part information <input type="checkbox"/> Electrical <input type="checkbox"/> Transmit/receive <input type="checkbox"/> Other (     )	<input type="checkbox"/> Action required <input type="checkbox"/> Service manual revision <input type="checkbox"/> Retrofit information <input type="checkbox"/> Tier2

**Change/Reason:** The part number has been changed.

Old part number	New part number	Description	Q'ty	Int	Page	Index	Note
B7003705	B8043705	GUIDE PLATE:PAPER EXIT SUB-UNIT:PAPER CRIMP	1	X/O As	37	5	
B7005407	B8045457	HARNESS:CONNECTING:PAPER EXIT SUB-UNIT	1	a Set	37	2	