


<b>Model:</b> PRIPORT SILVER		<b>Date:</b> 31-Dec-98	<b>No:</b> 01
<b>Subject:</b> Firmware Modification History		<b>Prepared by:</b> H. Kokubo,  Priport Service Planning Section	
<b>Classification:</b>	<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"/> Other (      )		
<b>Model Name:</b> SILVER: Ricoh JP1010/1030/1045/1050, Gestetner 5306(L/b)/5000/5001, RexRotary 1224(B), nashuatec CP306(b), SVN 3150DNP			

This bulletin is to inform you of the firmware modification history of PRIPORT SILVER.

Refer to the table below for the modification history. (For the new SP modes SP18 and 19, add the information to you service manual.)

## FIRMWARE MODIFICATION HISTORY

No.	Part Numbers	Description	Month Affected	Remarks
1	ROM: C231 5105-E MPU: C231 5100-F	<ul style="list-style-type: none"> <li>SP45 'Standard Image Position at Power-on' has been changed from a customer accessible item to a non-accessible item.</li> </ul>	From the start of mass-production	This version is the mass-production release.
2	ROM : C231 5105-K MPU: C231 5100-L	<ul style="list-style-type: none"> <li>SP18 'Master Selection' has been added. This item is only for the Japanese version. (SP18 must be set at '0' for the other versions. '0' is the default.)</li> <li>SP19 has been added. By switching this item to '1,' the Edge Erase mode for B5 size originals is always selected when the Combine 2 Originals mode is used. (This erases the shadows along the edge of the original for prints in the Combine 2 Originals mode.)</li> </ul>	November '98 production	

**Model:** PRIPORT SILVER

**Date:** 31-Dec-98


**No:** 01

No.	Part Numbers	Description	Month Affected	Remarks
3	ROM: C231 5105-M MPU: C231 5100-N	<p><b>- Connectivity with the controller -</b></p> <p>When a communication error occurs between Silver and controller (the EZ-1 or CB-1), the controller sends an error signal to the main body. The Silver sometimes does not send a response signal to the controller and the controller stays in the busy condition. (The LED on the controller stays blinking until it is switched off.)</p> <p>This problem does not occur when the controller is communicating with the main body properly. However, once any communication errors occur, there is a possibility that this problem may occur.</p> <p>With the new firmware, Silver can send the response signal properly even if a communication error occurs.</p> <p><b>- Error in the User Code mode -</b></p> <p>Even when the User Code mode was enabled with SP120, the machine could not be reset (to enter the user code entry display) by pressing the keys as explained in the manual.</p> <p>The only way to reset it was to wait for the automatic reset (the Autoreset mode) or switch the machine off and on.</p> <p>This bug has been solved in this version.</p>	December '98 production	
4	<p><i>- Asian version models only -</i></p> <p>ROM: C231 5105-M ⇒ C231 5155-C MPU: C231 5100-N ⇒ C231 5150-C</p>	<ul style="list-style-type: none"> <li>This change has been implemented into the Asian versions for Ricoh and NRG (#C231-23 and -29).</li> <li>The new ROM can display Thai (in combination with the new operation panel). This language can be selected by setting SP12 to 8. Due to the limit of the ROM capacity, Japanese guidance was eliminated. ("SP12-0" was for Japanese, and it no longer functions in this version of the ROM.)</li> <li>To display Thai, the operation panel must be changed at the same time. The part number of the new operation panel assembly is #C231 1455.</li> </ul> <p>The part number of the MPU was changed for identification purposes. The function remains the same, except for the ROM.</p>	From the start of mass-production of the Asian version machines	<ul style="list-style-type: none"> <li>Suffixes 'A' and 'B' are skipped.</li> <li>The new ROM must be used in combination with the new operation panel.</li> </ul>

**Model:** PRIPORT SILVER**Date:** 31-Dec-98**No: 01****CHECK SUM OF THE NEW ROMS**

The check sums of the latest ROMs (for the Asian version and for the others) are as follows:

New Suffix (P/N)	Description	Check Sum
C231 5105-M	EPROM - 1M X8 150NS	4E39
C231 5155-C (Asian version only)	EPROM - 1M X8 150NS	ED38

<b>Model:</b> PRIPORT SILVER		<b>Date:</b> 15-Apr-99	<b>No:</b> 02
<b>Subject:</b> Controller Connectivity Problem (Firmware Update Information)		<b>Prepared by:</b> H. Kokubo,  Priport Service Planning Section	
<b>Classification:</b>	<input checked="" type="checkbox"/> Troubleshooting <input type="checkbox"/> Mechanical <input type="checkbox"/> Paper path <input type="checkbox"/> Other (      )	<input checked="" type="checkbox"/> Part information <input type="checkbox"/> Electrical <input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Action required <input type="checkbox"/> Service manual revision <input type="checkbox"/> Retrofit information
<b>Model Name:</b> SILVER: Ricoh JP1010/1030/1045/1050, Gestetner 5306(L/b)/5000/5001, RexRotary 1224(B), nashuatec CP306(b), SVN 3150DNP			

## PROBLEM

When an Elesys Controller is connected with the Silver and if the controller is turned on before the Priport is turned on, the following symptoms will sometimes occur.

- Type 1:** The LCD on the operation panel grays out.
- Type 2:** The drum starts turning. The beeper continues beeping. In this case, the Backup RAM on the MPU (for the SP mode data) is reset and all SP mode data return to their default settings.
- Type 3:** Some LED's on the operation panel start blinking or stay on.
- Type 4:** Just like Type 2, the drum starts turning and the beeper continues beeping. However, in this case the Backup RAM is NOT reset.

## CAUSE

This problem will not occur when the Priport is turned on first as explained in the controller operation manual. However, if the controller is turned on first, the communication start signal is sent and interrupts the CPU initialization process when the Priport is turned on.

There are three types of Elesys controller; i.e. CB-1 (the mid-range), EZ-1 (the low-end), and SFX (the latest and network supported). Depending on the type of controller, the behavior of the problem varies.

Our test results (the symptoms and problem occurrence ratios are on the next page. The values show the number of problems that occurred when tested 50 times for each type of problem (Types 1 to 4).

**Model:** PRIPORT SILVER

**Date:** 15-Apr-99

**No: 02**

## **Test results**

### ***1. If the Priport is turned on soon after the controller is turned on:***

Controller            0/50 (No problem occurred)  
CB-1:

Controller            0/50 (No problem occurred)  
EZ-1:

Controller            0/50 (No problem occurred)  
SFX:

### ***2. If the Priport is turned on after the controller is turned on and its initialization completes (the LED turns green):***

Controller            Type 3: 50/50  
CB-1:

Controller            Type 1: 1/50  
EZ-1:

Controller            Type 1: 6/50  
SFX:                    Type 2: 4/50

### ***3. If the Priport is turned off and back on quickly during both Priport and controller power on's:***

Controller            Type 4: 50/50  
CB-1:

Controller            0/50 (No problem occurred)  
EZ-1:

Controller            0/50 (No problem occurred)  
SFX:

**Model:** PRIPORT SILVER

**Date:** 15-Apr-99

**No: 02**

## SOLUTION

New firmware has been released to prevent this problem. The part numbers and check sums for the new EPROM's on the MPU are as follows:


Machine Destination	Old Part #	New Part #	Description	Check Sum
Asian version	C231 5155	<b>C231 5175</b>	<b>EPROM - 1M X8 150NS</b>	<b>1539</b>
Others	C231 5105	<b>C231 5165</b>	<b>EPROM - 1M X8 150NS</b>	<b>7634</b>

The suffixes for the part numbers for the MPU board has been advanced from C2315100-S to -T, and C2315150-G to -H for the Asian version. This modification will be applied from April 1999 production.

If a Type 2 problem occurs, the backup RAM on the MPU (for the SP mode data) is reset. SP modes that were changed by technicians and users will return to their default settings. All counters in the SP mode will be cleared.

The following SP modes are specially important and must be returned to the original settings if the RAM reset has occurred:

SP Number	Function	Default Setting
SP-2	ADF set	0: No
SP-3	Key Counter set	0: No
SP-12	Display type (Language)	0: Japanese
SP-13	Display size (in inch or metric)	0: Metric (mm)
SP-14	Machine type (Japan/China or others)	0: Japan/China
SP-15	Drum type (B4, A4, or Legal)	0: B4
SP-18	Master Type (Japan-made master or U.K.-made master)	0: U.K. master
SP-22	Drum home position adjustment	5
SP-23	Drum master making position	5
SP-26	Paper feed timing adjustment for the registration	3
SP-30	Magnification adjustment in sub-scan direction	0
SP-31	Image center position adjustment (side-to-side image adjustment)	0
SP-32	Scan start position adjustment	0
SP-36	Magnification adjustment in sub-scan direction for in ADF mode	0
SP-37	Image center position adjustment for in ADF mode	0

<b>Model:</b> PRIPORT SILVER		<b>Date:</b> 15-Jun-99	<b>No:</b> RC231003
<b>Subject:</b> Paper jam at the paper delivery section		<b>Prepared by:</b> H. Kokubo,  Priport Service Planning Section	
<b>Classification:</b>	<input checked="" type="checkbox"/> Troubleshooting <input type="checkbox"/> Mechanical <input type="checkbox"/> Paper path <input type="checkbox"/> Other (      )	<input type="checkbox"/> Part information <input type="checkbox"/> Electrical <input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Action required <input type="checkbox"/> Service manual revision <input type="checkbox"/> Retrofit information
<b>Model Name:</b> SILVER: Ricoh JP1010/1030/1045/1050, Gestetner 5306(L/b)/5000/5001, RexRotary 1224(B), nashuatec CP306(b), SVN 3150DNP			

## PROBLEM

The paper jam indicator is displayed due to slow timing of paper delivery. The paper delivery motor, which is an independent motor for the delivery unit only, slows down and does not feed the paper at the proper speed. (When this occurs, the delivery motor has a high temperature.)

This symptom will occur often when continuous printing many sheets.

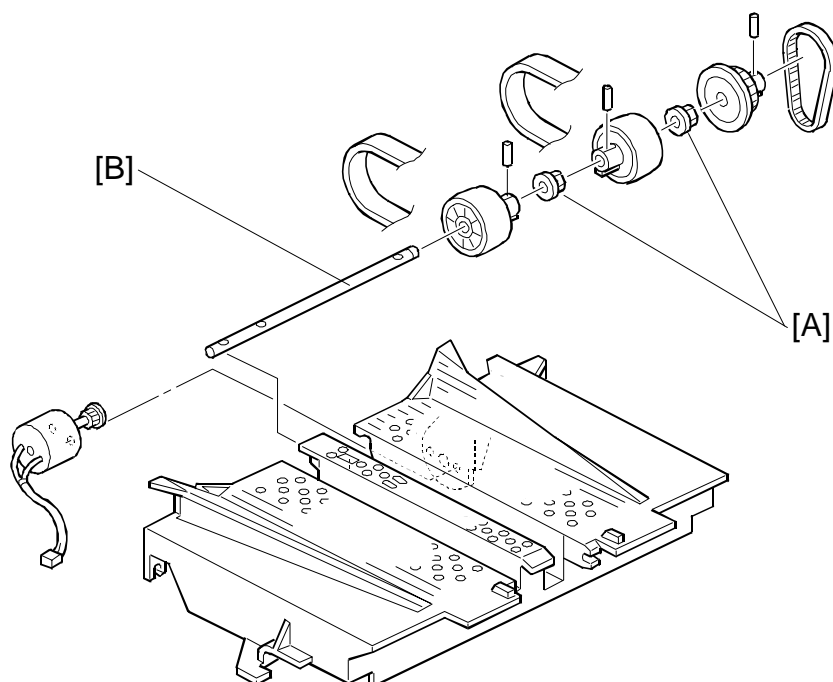
## CAUSE

The bushings and the shaft have run out of oil, so there is friction between the shaft and the bushings.

**Model:** PRIPORT SILVER**Date:** 15-Jun-99**No:** RC231003**SOLUTION**

When this problem occurs, lubricate the shaft [B] where the bushings [A] contact.

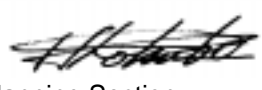
On the production line, lubrication has been added from October '98.



**Note:** See the service manual for how to disassemble the vacuum unit.





<b>Model:</b> PRIPORT SILVER		<b>Date:</b> 15-Jun-99	<b>No:</b> RC231004
<b>Subject:</b> E-01 Cutter Failure, Master Misfeed		<b>Prepared by:</b> H. Kokubo,  Priport Service Planning Section	
<b>Classification:</b>	<input checked="" type="checkbox"/> Troubleshooting <input type="checkbox"/> Mechanical <input type="checkbox"/> Paper path <input type="checkbox"/> Other (      )	<input type="checkbox"/> Part information <input type="checkbox"/> Electrical <input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Action required <input type="checkbox"/> Service manual revision <input type="checkbox"/> Retrofit information
<b>Model Name:</b> SILVER: Ricoh JP1010/1030/1045/1050, Gestetner 5306(L/b)/5000/5001, RexRotary 1224(B), nashuatec CP306(b), SVN 3150DNP			

## PROBLEMS

The following problems occur:

- E-01 (the status code for the master cutting error) is lit.
- Master jammed in the cutter unit.
- A master clamping problem during the master making process.

## CAUSE

Moving the drum to an incorrect master clamping position causes a master clamping error. This is caused when the drum turns from the home position to the master clamping position to start the master wrapping process (around the drum). Then this incorrect positioning causes the clamp to miss the master's leading edge. The master continues feeding for master making, but is not pulled while the drum turns. Consequently, the master bunches up against the cutter unit, resulting in a master cutting error.

**Model:** PRIPORT SILVER

**Date:** 15-Jun-99

**No:** RC231004

## SOLUTION

Use SP mode 23 to adjust the master clamping position of the drum. Usually, the position in SP mode is around "2." (If it is too large, a master clamping error will occur. And, if it is too small, the clamber will hit the base of the master unit when it opens.)

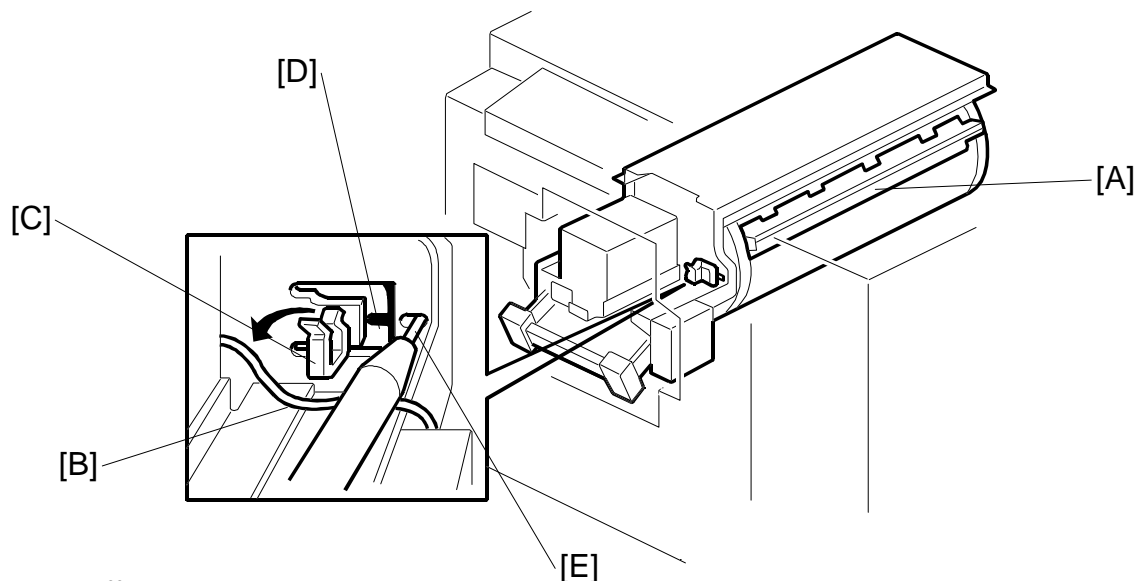
Usually, this adjustment is prohibited since it is difficult to find the exact position. The manual also states this in the SP mode table section.

When you use SP mode 23, carefully follow the adjustment procedure explained below.

The production adjustment process has been added from November '98.

To indicate the factory setting (it may vary from one machine to another), a decal will be attached behind the MPU cover from July 1999 production. The decal also indicates the factory settings for SP22, 23, 26, 30, 31, 36, 37, and 38. These SP modes are sometimes adjusted in the factory and must be checked when the MPU is replaced.

### *Adjustment procedure*

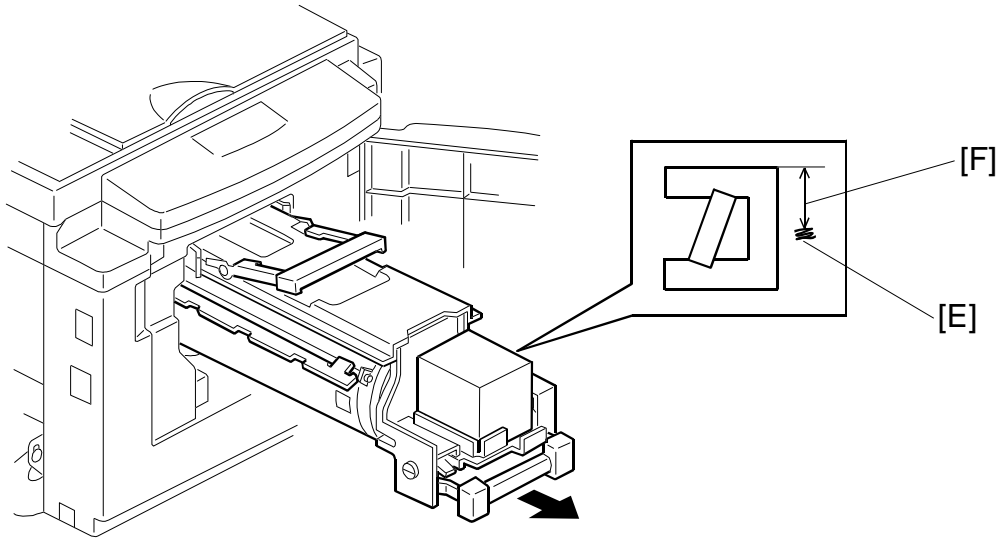


1. Turn off the main switch and unplug the power cord.
2. Remove the front cover.
3. Turn on the test switch. (To release the cover safety functions)
- NOTE:** Don't forget to return it to the normal setting after finishing this procedure.
4. Plug in the power cord and turn on the main switch.
5. Access SP131 - 28 (Output mode - Drum Plot Stop) and press the Start key.
6. After the drum turns to the clamping position [A], look at the operation side of the drum.
7. Release the cable [B] from clamp [C].
8. Look at the drum flange spoke [D] inside the U-shaped cut out.
9. Mark a line [E] next to the spoke [D].

**Model:** PRIPORT SILVER

**Date:** 15-Jun-99

**No:** RC231004



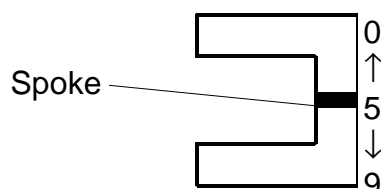
10. Pull out the drum and measure the distance [F] between the line marked in step 9 [E] and the top edge of the U-shaped cut out.
11. If the distance [F] is  $9.5 \pm 1.5$  mm, the drum stopping position is correct. If it is not, reinstall the drum and change the drum stopping position for master making by using SP23 (Plot position adjustment). Then, repeat step 5 and continue until you obtain the correct drum stop position.

### ***How to use SP23 (Plot position adjustment)***

The drum stopping position for master clamping can be changed within the range of 0 to 9 (10 steps).

Look at the drum flange's spoke, referred to in step 8 of the adjustment procedure.

- When the value is less than 5, the spoke is on the upper side.
- When the value is more than 5, the spoke is on the lower side.



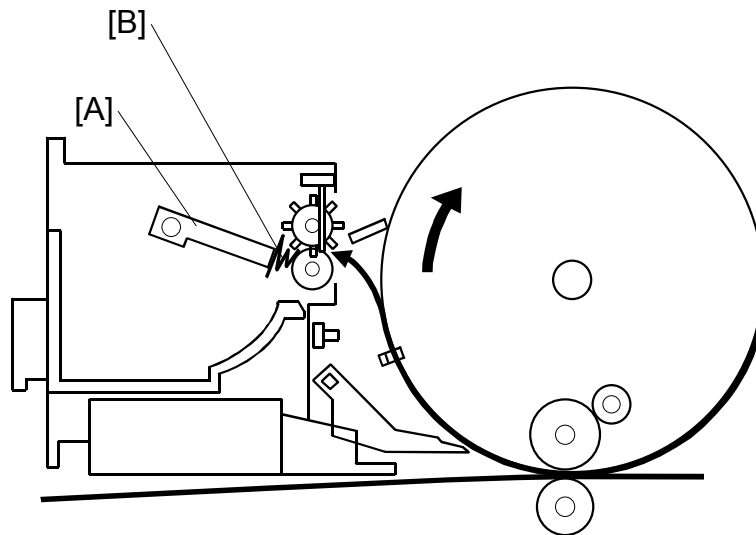
The value is calibrated in **0.5 millimeter steps**. (These are the figures that the theory predicted.)

<b>Model:</b> PRIPORT SILVER		<b>Date:</b> 18-Apr-00	<b>No:</b> R-C231-005
<b>Subject:</b> Master Eject Jams		<b>Prepared by:</b> H. Onodera, Priport Service Planning Section	
<b>Classification:</b>	<input checked="" type="checkbox"/> Troubleshooting <input type="checkbox"/> Mechanical <input type="checkbox"/> Paper path <input type="checkbox"/> Other (       )	<input type="checkbox"/> Part information <input type="checkbox"/> Electrical <input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Action required <input type="checkbox"/> Service manual revision <input type="checkbox"/> Retrofit information
<b>Model Name:</b> SILVER: Ricoh JP1010/1030/1045/1050, Gestetner 5306(L/b)/5000/5001, RexRotary 1224(B), nashuatec CP306(b), SVN 3150DNP			

## PROBLEM

Frequent master eject jams.

## CAUSE



This is because the home position of the pressure plate [A] is wrong.

If the pressure plate position is slightly lower than normal, the pressure plate [A] will interfere with the ejected master [B] as shown above, causing a jam.

**Model:** PRIORT SILVER

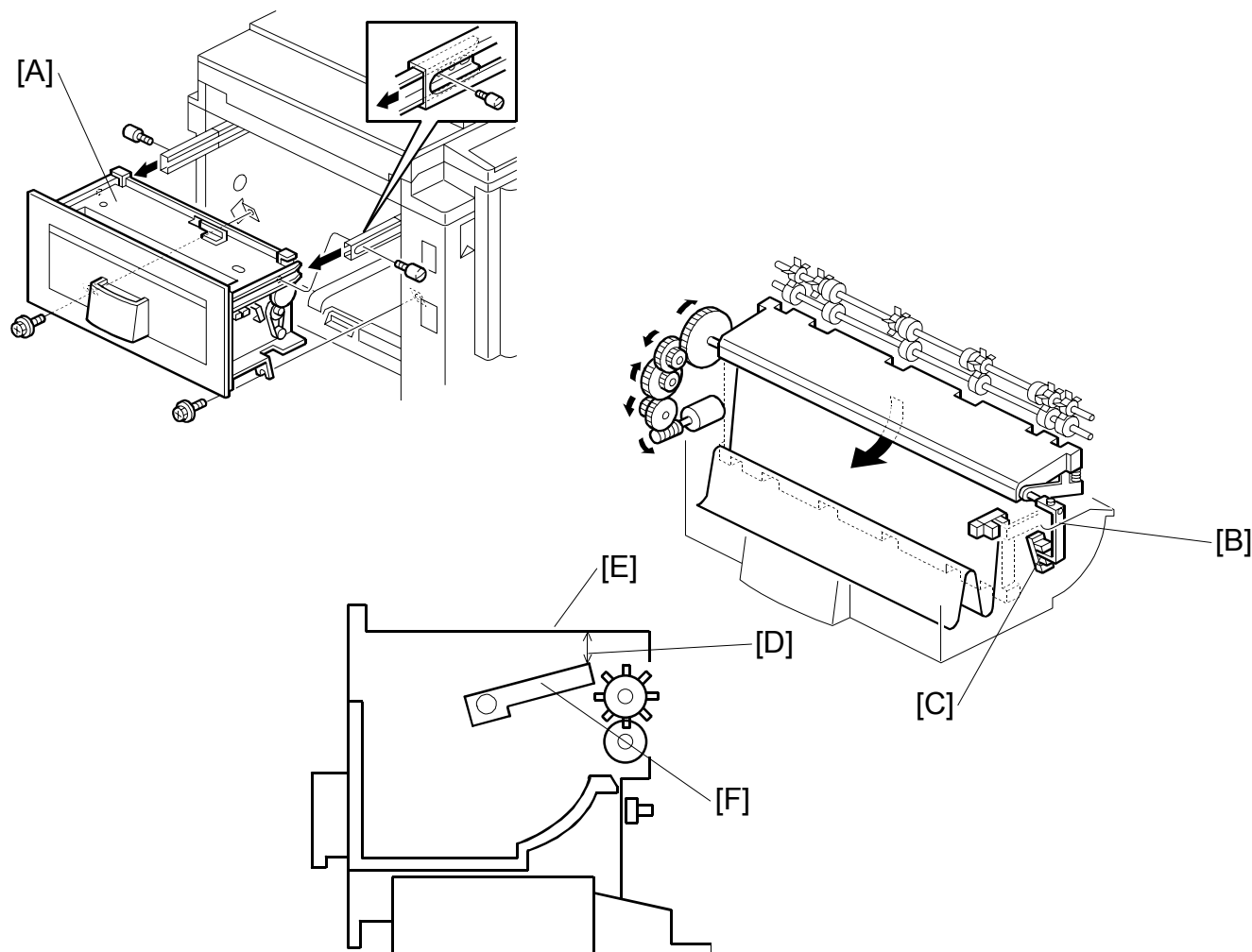
**Date:** 18-Apr-00

**No:** R-C231-005

## SOLUTION

Make sure that the stop position for the pressure plate is correct.

The pressure plate HP adjustment process has been added from the November 1999 production.

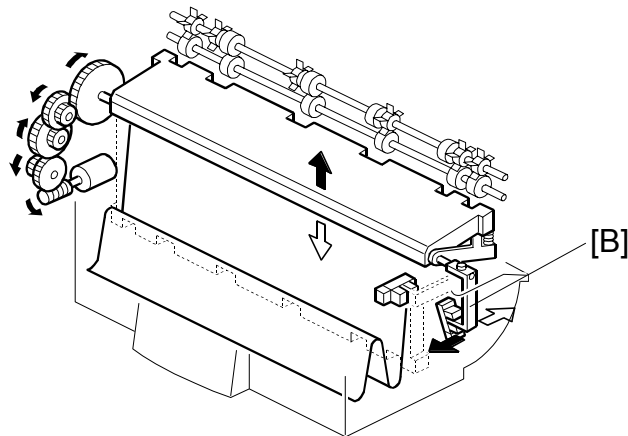


Operation side

## HOME POSITION CONFIRMATION

**Standard:**  $11.0 \pm 3.0$  mm

1. Turn the main switch on. Then, turn it off after a few seconds.
2. Remove the master eject unit [A]. (2 screws)
3. When pulling the master eject unit out (2 screws), make sure the pressure plate position feeler [B] interrupts the home position sensor [C].
4. Measure the clearance [D] between the crossbeam [E] and the surface of the pressure plate edge [F]. It should be  $11.0 \pm 3.0$  mm.



## ADJUSTMENT

1. Twist the pressure plate position feeler [B] (C231 3505), so that the plate moves closer to the correct home position. For example, if you want to shift the plate upwards (as shown by the black arrow), twist the feeler [B] clockwise.
2. After adjusting it, repeat the confirmation procedure on the previous page.

<b>Model:</b> PRIPORT SILVER		<b>Date:</b> 19-Apr-00	<b>No:</b> R-C231-006
<b>Subject:</b> Unstable machine operation due to harness damage		<b>Prepared by:</b> H. Onodera, Priport Service Planning Section	
<b>Classification:</b>	<input checked="" type="checkbox"/> Troubleshooting <input type="checkbox"/> Mechanical <input type="checkbox"/> Paper path <input type="checkbox"/> Other (      )	<input type="checkbox"/> Part information <input type="checkbox"/> Electrical <input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Action required <input type="checkbox"/> Service manual revision <input type="checkbox"/> Retrofit information
<b>Model Name:</b> SILVER: Ricoh JP1010/1030/1045/1050, Gestetner 5306(L/b)/5000/5001, RexRotary 1224(B), nashuatec CP306(b), SVN 3150DNP			

## SYMPTOM

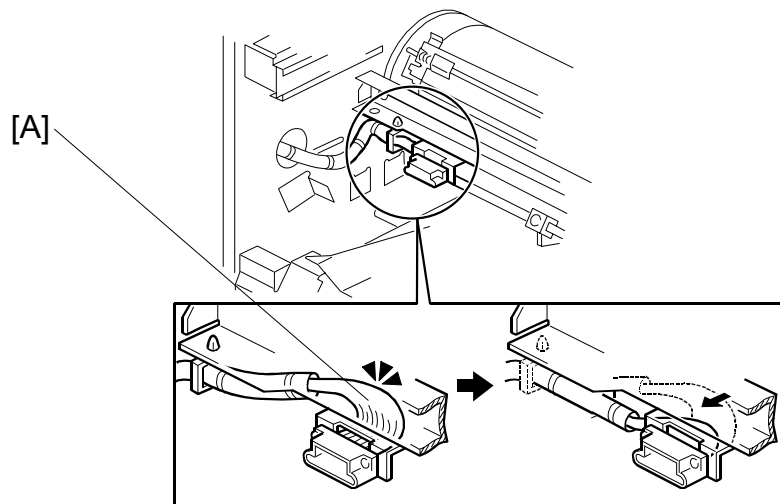
Due to damaged DC harness wires, the following problems occur:

1. The machine turns off intermittently during printing. (Thus, it causes paper feed jams)
2. Some types of SC code appear at power-on or during operation. (e.g. Display E-12 Pressure Plate Motor Failure)
3. The fuse on the MPU blows out.

## CAUSE

Damaged DC harness wires located inside the stay that hold the master eject unit can cause these problems.

The wires are damaged by the master clasper on the drum while the drum is turning. DC current (+ 5-volt going to the master eject sensor) grounded at a certain interval (synchronizing the drum rotation) during printing, causes these problems.

**Model:** PRIPORT SILVER**Date:** 19-Apr-00**No:** R-C231-006**SOLUTION**

If the DC harness wires [A] are warped, adjust them as shown above.

Inspection for correct harness positioning was added from May 1999 production.

Check if the harness (located as [A]) touches the master clasper when it comes close to the turning drum. If the harness touches the drum (and if it is already damaged), reroute the harness and firmly attach it with tape.



<b>Model:</b> PRIPORT SILVER		<b>Date:</b> 11-Jul-00	<b>No:</b> R-C231-007
<b>Subject:</b> Paper End Deteciton Malfunction		<b>Prepared by:</b> H. Onodera, Priport Service Planning Section	
<b>Classification:</b> <input checked="" type="checkbox"/> Troubleshooting <input 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"/> Other (       )			
<b>Model Name:</b> SILVER: Ricoh JP1010/1030/1045/1050/1055, Gestetner 5306(L/b)/5000/5001/5200, RexRotary 1224(B), nashuatec CP306(b), Savin 3150DNP, Standard SD300			

## SYMPTOM

The machine fails to detect that there is no paper on the paper table.

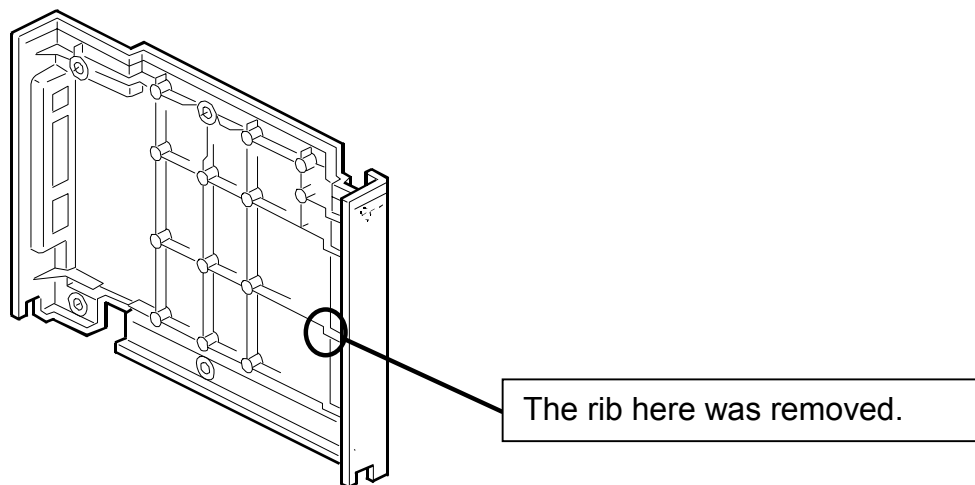
## CAUSE

There is a short relay cable that goes to the paper end sensor (from the main dc harness). The relay cable tends to be caught by the rib on the reverse of the rear exterior cover (C2311362) when the cover is installed. This will damage the relay cable wires, causing the paper end sensor to malfunction.

## SOLUTION

Take caution when you install the rear cover, so as not to damage the wires.

To make the rear cover installation easier, the rear cover has been changed. The rib where the cable wires are caught was removed (see below). This modification was applied from January 1999 production.



<b>Model:</b> PRIPORT SILVER		<b>Date:</b> 11-Jul-00	<b>No:</b> R-C231-008
<b>Subject:</b> Firmware Modification History -Part2-		<b>Prepared by:</b> H. Onodera, Priport Service Planning Section	
<b>Classification:</b>	<input type="checkbox"/> Troubleshooting <input type="checkbox"/> Mechanical <input type="checkbox"/> Paper path <input type="checkbox"/> Other (      )	<input checked="" type="checkbox"/> Part information <input type="checkbox"/> Electrical <input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Action required <input type="checkbox"/> Service manual revision <input type="checkbox"/> Retrofit information
<b>Model Name:</b> SILVER: Ricoh JP1010/1030/1045/1050/1055, Gestetner 5306(L/b)/5000/5001/5200, RexRotary 1224(B), nashuatec CP306(b), Savin 3150DNP, Standard SD300			

This bulletin is to inform you of the firmware modification history for the Main ROM (C2315165, C2315175) and Feed ROM (C2315107) of Priport Silver.

NOTE: See RTB No.RC231001 for the older history of the firmware modification.

## FIRMWARE MODIFICATION HISTORY

Part Numbers	Description	Month Affected
Main ROM: C231 5165-A MPU: C231 5100-V  - Asia - Main ROM: C231 5175-A MPU: C231 5150-J	SP46 'Set Fine Mode Default' has been added. By switching this item to '1', the fine mode is selected at power-up. '0' is the default. SP47 'Swap Start Key' has been added. By switching this item to '1', the master making key function and the print start key functions swap. '0' is the default.	May 1999 production
Feed ROM: C231 5107-C MPU: C231 5100-W  - Asia - Feed ROM: C231 5107-C MPU: C2315150-K	To ensure paper feed, about 6 mm is always added to the paper feed length.  NOTE: The main ROM remained the same.	June 1999 production

Part Numbers	Description	Month Affected
Feed ROM: C231 5107-D MPU: C231 5100-Y  - Asia- Feed ROM: C231 5107-D MPU: C2315150-M	To ensure feeding of the trial print, about 10 mm is always added to the paper feed length when feeding a trial print.  NOTE: The main ROM remained the same.	January 2000 production
Main ROM: C231 5165-C MPU: C231 5190  - Asia - Main ROM: C231 5175-C MPU: C231 5150-P	Service Calls 'E21', 'E22', 'E23' and 'E24' have been added. See the next page for details.	June 2000 production

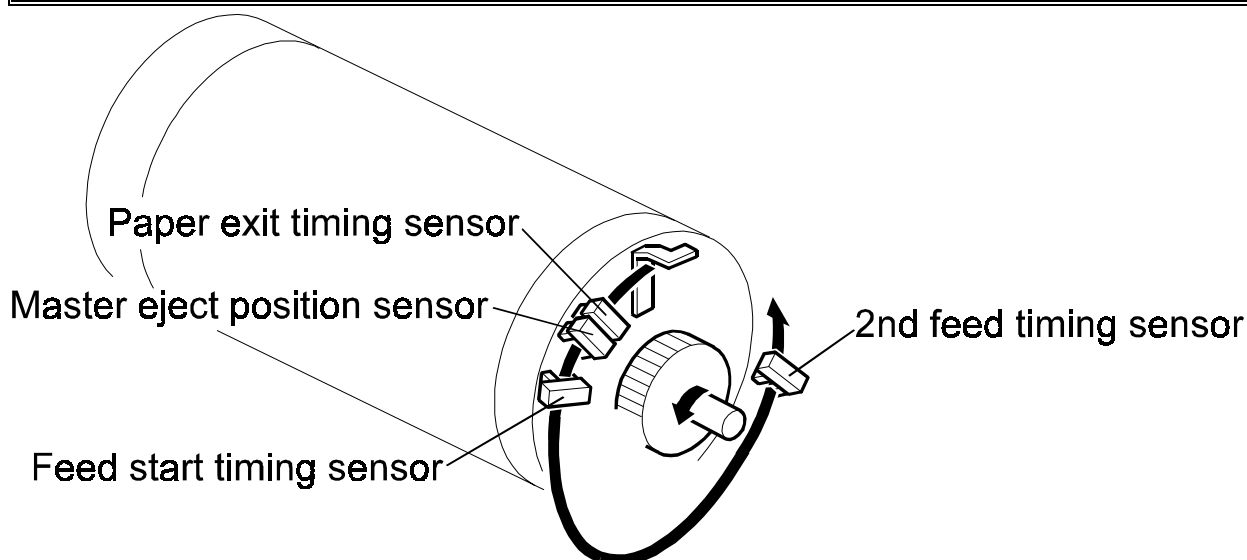
NOTE1: 'Asia' means the Ricoh and NRG Asian version models (C231-23, -29, -34, -35).

NOTE2:

- C2315100 (MPU) 'X', 'Z' are skipped.
- C2315150 (MPU for Asia) 'L', 'O' are skipped.
- C2315165 (Main ROM) 'B' is skipped.
- C2315175 (Main ROM for Asia) 'B' is skipped.

## Additional service calls

No.	Description/Definition	Points to Check
<b>E-21</b>	<u>Paper exit timing sensor remains off</u> The paper exit timing sensor does not activate before the master eject position sensor activates.	Paper exit timing sensor
<b>E-22</b>	<u>2nd feed timing sensor remains off</u> The 2nd feed timing sensor does not activate before the paper exit timing sensor activates.	2nd feed timing sensor
<b>E-23</b>	<u>Master eject position sensor remains off</u> The master eject position sensor does not activate before the feed start timing sensor activates.	Master eject position sensor
<b>E-24</b>	<u>Feed start timing sensor remains off</u> The feed start timing sensor does not activate before the 2nd feed timing sensor activates.	Feed start timing sensor



## NEW ROM CHECK SUMS

The check sums of the latest ROMs are as follows:

New Suffix (P/N)	Description	Check Sum
C231 5165 – C	Main ROM – 1M X 8 150NS	<b>EF34H</b>
C231 5175 – C (Asian version only)	Main ROM – 1M X 8 150NS	<b>8E39H</b>
C231 5107-D	Feed ROM – 512K X8 150NS	<b>3AB5H</b>

<b>Model:</b> PRIPORT SILVER	<b>Date:</b> 28-Dec-00	<b>No:</b> R-C231-009
<b>Subject:</b> Drum guide lubrication	<b>Prepared by:</b> H. Onodera, Priport Service Planning Section	
<b>Classification:</b>	<div><input checked="" type="checkbox"/> Troubleshooting</div> <div><input type="checkbox"/> Mechanical</div> <div><input type="checkbox"/> Paper path</div> <div><input type="checkbox"/> Other (        )</div> <div><input type="checkbox"/> Part information</div> <div><input type="checkbox"/> Electrical</div> <div><input type="checkbox"/> Transmit/receive</div> <div><input type="checkbox"/> Action required</div> <div><input type="checkbox"/> Service manual revision</div> <div><input type="checkbox"/> Retrofit information</div>	
<b>Model Name:</b> SILVER: Ricoh JP1010/1030/1045/1050/1055, Gestetner 5306(L/b)/5000/5001/5200, RexRotary 1224(B), nashuatec CP306(b), Savin 3150DNP, Standard SD300		

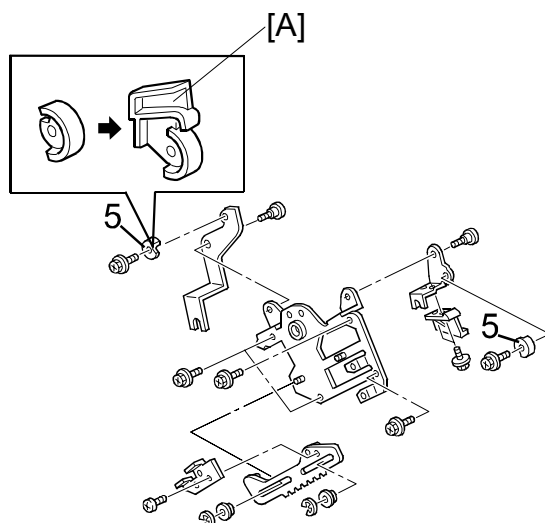
## PROBLEM

When a new drum guide (see MB #MC231007) was installed, it may be broken.

## CAUSE

1. Grease is not applied to the drum guide service parts.
2. The drum position on the master making section is not correct.

## SOLUTION



### 1. Grease

Please lubricate area [A] of the drum guide as shown above.

**NOTE:** The part number of our recommend grease is 52039502.

### 2. Adjust the drum position

Please adjust the drum position on the master making section (see RTB #RC231004).

**NOTE:** The drum guide is greased on all production units.

<b>Model:</b> PRIPORT SILVER/SILVER-V		<b>Date:</b> 08-Mar-01	<b>No:</b> R-C231-010
<b>Subject:</b> Silver-V firmware modification history		<b>Prepared by:</b> H. Onodera, Priport Service Planning Section	
<b>Classification:</b> <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"/> Other (       )			
<b>Model Name:</b> SILVER: Ricoh JP1010/1030/1045/1050/1055, Gestetner 5306(L/b)/5000/5001/5200, RexRotary 1224(B), nashuatec CP306(b), Savin 3150DNP, Standard SD300 SILVER-V: Ricoh JP1210/1230/1250, Gestetner 5308(L/b)/5300, RexRotary 1225(B), nashuatec CP308(b), Savin 3150eDNP, Standard SD330			

Information for the Silver-V begins with this bulletin. Note that this issue is related to the Silver-V only.

Firmware modification history of Priport Silver-V.

Refer to the table below for the modification history.

## FIRMWARE MODIFICATION HISTORY

No.	Part Numbers	Description	Month Affected
1	Main ROM: C237 5105-B Feed ROM: C237 5107-A MPU: C237 5100-B  - Asia - Main ROM: C237 5155-B Feed ROM: C237 5107-A MPU: C237 5150-B	This is the first mass production.	First mass production
2	Feed ROM:-B MPU:-C  - Asia - Feed ROM:-B MPU:-C	Improved the paper registration when the machine feeds paper at 130 rpm.	July 2000 production

No.	Part Numbers	Description	Month Affected
3	Main ROM:-C Feed ROM:-C MPU:-D  - Asia - Main ROM:-C Feed ROM:-C MPU:-D	Corrected the image position failure when the 'combine 2 original mode' is used. (Main ROM)  To ensure paper registration at 130 rpm, paper feed timing was changed. (Feed ROM)	August 2000 production
4	Main ROM:-D MPU:-F  - Asia - Main ROM:-D MPU:-F	Modified because the counter on the operation panel returns to the previous value when the machine stopped because of a problem (e.g. jam during a copy job).	September 2000 production
5	Main ROM:-F MPU:-J  - Asia - Main ROM:-F MPU:-J	This version causes problems and should not be used. Refer to version H history for the problem.  The specification of the 'Combine 2 original mode' for U.S. version models was changed from 'LT x LT = LG 77%' to 'LT x LT = LT 65%'. The specification of the 'Combine 2 original mode' was changed to fit between the paper centerline and the image centerline, and 5 mm at the leading edge image was cut (see Remark 1 on the next page). The motion time of the pressure plate motor has been changed from 2.8 ms to 1.8 ms, to prevent the motor in the master eject section from being loaded for too long.  This issue is related to the U.S. version models only.	October 2000 production
6	Main ROM:-H MPU:-L  - Asia - Main ROM:-H MPU:-L	The image position was fixed because 2.3 mm was cut from the image when the North America machine used 'combine 2 original mode'.  This issue is related to the U.S. version models only.	November 2000 production
7	Feed ROM:-D MPU:-N  - Asia - Feed ROM:-D MPU:-N	Added a stop command for the registration motor. When the MPU received, very rarely the registration motor does not stop in the proper manner. The copy job normally completes and then the motor stops. However noise occurs due to the unnecessary motor rotation. This symptom was due a firmware bug, and it has been solved.	November 2000 production

**NOTE1:** 'Asia' means the Ricoh and NRG Asian version models (C237-73, -79, -84, and -85).

**NOTE2:**

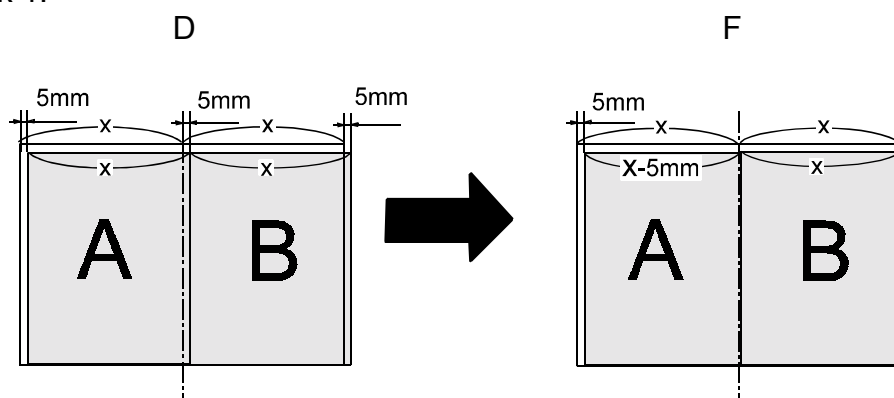
- C2375105 (Main ROM) 'E' and 'G' are skipped.
- C2375155 (Main ROM for Asia) 'E' and 'G' are skipped.
- C2375100 (MPU) 'E', 'G', 'H', 'I', 'K' and 'M' are skipped.
- C2375150 (MPU for Asia) 'E', 'G', 'H', 'I', 'K' and 'M' are skipped.

## NEW ROM CHECK SUMS

The Check Sums of the latest ROMs are as follows:

New Suffix (P/N)	Description	Check Sum
C237 5105-H	Main ROM - 1M x 8 150NS	0D1C2H
C237 5155-H (Asian version)	Main ROM - 1M x 8 150NS AA	070CBH
C237 5107-D	Feed ROM - 512K x 8 150NS	03651H

Remark 1:





<b>Model:</b> PRIPORT SILVER/SILVER-V		<b>Date:</b> 16-Aug-01	<b>No:</b> R-C231-011
<b>Subject:</b> Silver-V firmware modification history - part 2 -		<b>Prepared by:</b> H. Onodera, Priport Service Planning Section	
<b>Classification:</b>	<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"/> Other (      )		
<b>Model Name:</b> SILVER: Ricoh JP1010/1030/1045/1050/1055, Gestetner 5306(L/b)/5000/5001/5200, RexRotary 1224(B), nashuatec CP306(b), Savin 3150DNP, Standard SD300 SILVER-V: Ricoh JP1210/1230/1250, Gestetner 5308(L/b)/5300, RexRotary 1225(B), nashuatec CP308(b), Savin 3150eDNP, Standard SD330			

This bulletin is to inform you of the firmware modification history for the Main ROM (C2375105, C2375155, C2375165) of Priport Silver-V.

**NOTE:** See RTB #RC231010 for previous firmware modifications.

## FIRMWARE MODIFICATION HISTORY

No.	Part Numbers	Description	Month Affected
1	Main ROM: C2375105-J MPU: C2375100-Q  - Asia - Main ROM: C2375155-J MPU: C2375150-Q	The traveling time of the master eject pressure plate (the motor's rotation period) has been changed from 1.8 s to 2.5 s in the A4 and LG machines. When the suffix "F" main ROM was applied, the traveling time was made shorter from 2.8 s to 1.8 s. (See RTB #RC231010 for details.) Due to the change, the master eject box capacity was reduced in the A4 and LG machines. The "J" main ROM can solve this problem. <b>NOTE:</b> Two gears were changed at the same time. (See MB #MC237006.) The "J" ROM can be used without changing the gears. Note that even if the "J" ROM is used, the traveling time stays 1.8 s in the B4 machines. The new gears are not used in the B4 machines.	June 2001 production
2	-China- Main ROM: C2375165 - A Feed ROM: C2375167 MPU: C2375160 - A	We established firmware only for the China version. It includes a re-feeding function. With this function, the machine feeds in disregarding the "Jam signal" when a paper jam is detected by the registration sensor (see Silver service manual page 2-50, a ).  This function doesn't apply for other models, because it is designed only to deal with paper of the quality found in China.	July 2001 production

No.	Part Numbers	Description	Month Affected
3	Main ROM: -K MPU: -R  - Asia - Main ROM: -K MPU: -R  - China - Main ROM: -B MPU: -B	The image position was 9 mm too far towards the leading edge when using a CPIF20 or CPIF26 controller.  This problem was solved with this version of the Main ROM.	August 2001 production

**NOTE1:** 'Asia' means the Ricoh and NRG Asian version models (C237-73, -79, -84, and -85).

**NOTE2:** China means C237-70 and C237-71.

**NOTE3:**

- C2375105 (Main ROM) 'I' is skipped.
- C2375155 (Main ROM for Asia) 'I' is skipped.
- C2375100 (MPU) 'O' and 'P' are skipped.
- C2375150 (MPU for Asia) 'O' and 'P' are skipped.

## NEW ROM CHECK SUMS

The check sums of the latest ROMs are as follows:

New Suffix (P/N)	Description	Check Sum
C237 5105-K	Main ROM - 1M x 8 150NS	0D9D5H
C237 5155-K (Asian version)	Main ROM - 1M x 8 150NS AA	078DEH
C237 5165-B (China version)	Main ROM - 1M x 8 150NS CHN	0B214H
C237 5107-D	Feed ROM - 512K x 8 150NS	03651H
C237 5167 (China version)	Feed ROM - 512K x 8 150NS - CHN	03643H

<b>Model:</b> PRIPORT SILVER/SILVER-V		<b>Date:</b> 7-Nov-02	<b>No:</b> R-C231-012
<b>Subject:</b> Silver-V firmware modification history - part 3 -		<b>Prepared by:</b> H. Onodera, Priport Service Planning Section	
<b>Classification:</b>	<input type="checkbox"/> Troubleshooting <input type="checkbox"/> Mechanical <input type="checkbox"/> Paper path <input type="checkbox"/> Other (       )	<input checked="" type="checkbox"/> Part information <input type="checkbox"/> Electrical <input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Action required <input type="checkbox"/> Service manual revision <input type="checkbox"/> Retrofit information
<b>Model Name:</b> SILVER: Ricoh JP1010/1030/1045/1050/1055, Gestetner 5306(L/b)/5000/5001/5200, RexRotary 1224(B), nashuatec CP306(b), Savin 3150DNP, Standard SD300 SILVER-V: Ricoh JP1210/1230/1250, Gestetner 5308(L/b)/5300, RexRotary 1225(B), nashuatec CP308(b), Savin 3150eDNP, Standard SD330			

This bulletin is to inform you of the firmware modification history for the Main ROM (C2375105, C2375155, C2375165) of the Priport Silver-V.

**NOTE:** See RTB #RC231010 and #RC231011 for previous firmware modifications.

## FIRMWARE MODIFICATION HISTORY

No.	Part Numbers	Description	Month Affected
1	Main ROM: C2375105-L MPU: C2375100-S  - Asia - Main ROM: C2375155-L MPU: C2375150-S  - China - Main ROM: C2375165-C MPU: C2375160-C	Modified so that the machine will not enter Energy Saver Mode, i.e. ignoring the Energy Saver Mode timer, until printing is initiated following the master-making process (UC5 or UC5e controller).	August 2002 production

No.	Part Numbers	Description	Month Affected
2	Main ROM: -M MPU: -T  - Asia - Main ROM: -M MPU: -T  - China - Main ROM: -D MPU: -D	Increased the master length wrapping the drum from 463 to 470 mm (B4/LG master length of the standard is 470 mm), in order to minimize ink leaking from the trailing edge.	October 2002 production

**NOTE1:** “Asia”: Ricoh and NRG Asia version models (C237-73, -79, -84, and -85).  
 Note: The Thai language can be displayed, but Japanese cannot.

**NOTE2:** “China”: C237-70 and C237-71, which have a re-feeding system.

## NEW ROM CHECK SUMS

The check sums of the latest ROMs are as follows:

New Suffix (P/N)	Description	Check Sum
C237 5105-M	Main ROM - 1M x 8 150NS	0A0ADH
C237 5155-M (Asian version)	Main ROM - 1M x 8 150NS AA	03FB6H
C237 5165-D (China version)	Main ROM - 1M x 8 150NS CHN	09CF8H

<b>Model:</b> PRIPORT SILVER/SILVER-V/SILVER-V2		<b>Date:</b> 26-Dec-02	<b>No:</b> R-C231-013
<b>Subject:</b> New model Silver-V2 information		<b>Prepared by:</b> A. Yoshida, Priport Service Planning Section	
<b>Classification:</b>	<input type="checkbox"/> Troubleshooting <input type="checkbox"/> Mechanical <input type="checkbox"/> Paper path <input checked="" type="checkbox"/> Other (New machine information)	<input type="checkbox"/> Part information <input type="checkbox"/> Electrical <input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Action required <input type="checkbox"/> Service manual revision <input type="checkbox"/> Retrofit information
<b>Model Name:</b> SILVER: Ricoh JP1010/1030/1045/1050/1055, Gestetner 5306(L/b)/5000/5001/5200, RexRotary 1224(B), nashuatec CP306(b), Savin 3150DNP, Standard SD300 SILVER-V: Ricoh JP1210/1230/1250, Gestetner 5308(L/b)/5300, RexRotary 1225(B), nashuatec CP308(b), Savin 3150eDNP, Standard SD330 SILVER-V2: Ricoh JP1250/1215/1235/1255, Gestetner 5300/5308(+b+)/5309L, RexRotary 1225(+B+), nashuatec CP308(+b+), Savin 3160DNP, Standard SD350, Lanier LDD020			

The Silver-V2 will be released in 2003 as the successor to the Silver-V (see Silver-V2 PPLI for details on the mass-production schedule). A new model code will be assigned to the Silver-V2 (C248), as there are some parts that are not interchangeable with the Silver-V (C237).

This bulletin details all information unique to the Silver-V2 for servicing in the field. Please add the following to your Silver-V Service Manuals, and refer to MB #MC237013 for a list of the components unique to the Silver-V2.

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## 1. OVERALL INFORMATION

### 1.1 ESSENTIAL DIFFERENCES BETWEEN THE C248 AND C237 MODELS

Section	Item	Remarks
1	Overall Information	Some items changed.
2	Detailed section descriptions	Some items changed (refer to MB #MC237012).
3	Installation	(no differences)
4	Service tables	(no differences)
5	Preventive maintenance	Some items changed.
6	Replacement and adjustment	(no differences)
7	Point to point diagram	(no differences)

### 1.2 SPECIFICATIONS

The specifications are identical to those of the C237, except for the following on the China model only.

Print Paper Weight

China model.  
47.1 g/m<sup>2</sup> to 128 g/m<sup>2</sup> (12.5 lb. to 34 lb.)

<b>Model:</b> PRIPORT SILVER/SILVER-V/SILVER-V2	<b>Date:</b> 26-Dec-02	<b>No:</b> R-C231-013
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## 5. PREVENTIVE MAINTENANCE

## 5.1 MAINTENANCE TABLE

The following items should be maintained periodically. There are two sets of intervals - one based on time and the other based on print count. For maintenance items with entries in both, use whichever comes first.

C: Clean, R: Replace, L: Lubricate, A: Adjust

	Interval	Time				Print Counter					EM	NOTE
Item		6M	1Y	2Y	3Y	300K	600K	1M	1.2M	2M		
<b>Scanner/Optics</b>												
Exposure Lamp	C	C	C	C								Dry Cloth
Mirror/Reflector	C	C	C	C								Soft Cloth
Platen Cover / White Plate	C	C	C	C								Damp Cloth
Exposure Glass	C	C	C	C								Dry Cloth
<b>Master Feed</b>												
Thermal Head											C	Alcohol
Platen Roller Expected life: 6K masters	C	C	C	R								Damp cloth and water
Master Eject Rollers	C	C	C	C								Alcohol
Drum Master Sensor											C	Dry Cloth
<b>Paper Feed</b>												
Paper Pick-up Roller	C	R	R	R		R		R				Damp Cloth
Paper Feed Roller	C	R	R	R		R		R				Damp Cloth
Friction Pad	C	R	R	R		R		R				Damp Cloth
Friction Pad Guide (China only)	C	R	R	R		R		R				Damp Cloth
Press Roller	C	C	R	C				R				Alcohol
Paper Feed Clutch									R			
Feed Roller and Transport Belt Roller Bushings		L	L	L								Motor Oil (SAE #20)
Feed Drive Gears		L	L	L								Grease (Alvania #2)

**Model:** PRIPORT SILVER/SILVER-V/SILVER-V2

**Date:** 26-Dec-02

**No:** R-C231-013

Item	Interval	Time				Print Counter					EM	NOTE
		6M	1Y	2Y	3Y	300K	600K	1M	1.2M	2M		
Paper Delivery Transport Belts				R					R			
Paper End Sensor	C	C	C	C								Dry Cloth
Registration/Exit Sensors	C	C	C	C								Dry Cloth
Registration Roller	C	C	C	C								Dry Cloth
<b>Drum and Ink Supply</b>												
Cloth Screen				R					R			
Drum Drive Gears and Cam			L	L	L							Grease (Alvania #2)
Drum Flange Bushing			L	L	L							Motor Oil (SAE #20)
In/Outside of Drum	C	C	C	C								Alcohol
Ink Nozzle	C	C	C	C								Alcohol
<b>Other</b>												
Main Drive Timing Belt Tension				A								
Press Roller Release Lever Position				A								
<b>ADF (Option)</b>												
DF Pick-up, Reverse, Feed Rollers	C	C	C	C								Dry Cloth
DF R1, R2, R3 Rollers	C	C	C	C								Dry Cloth

**NOTE:** The Friction Pad Guide was added to PM Parts for China only.



<b>Model:</b> PRIPORT SILVER/SILVER-V/SILVER-V2		<b>Date:</b> 4-Aug-03	<b>No:</b> R-C231-014
<b>Subject:</b> Master wrinkle troubleshooting		<b>Prepared by:</b> M. Kanomata, Priport Service Planning Section	
<b>Classification:</b>	<input checked="" type="checkbox"/> Troubleshooting <input type="checkbox"/> Mechanical <input type="checkbox"/> Paper path <input type="checkbox"/> Other (       )	<input type="checkbox"/> Part information <input type="checkbox"/> Electrical <input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Action required <input type="checkbox"/> Service manual revision <input type="checkbox"/> Retrofit information
<b>Model Name:</b> SILVER-V: Ricoh JP1210/1230/1250, Gestetner 5308(L/b)/5300, RexRotary 1225(B), nashuatec CP308 (b), Savin 3150eDNP, Standard SD330 SILVER-V2 Ricoh JP1250/1215/1235/1255, Gestetner 5300/5308(+b+)/5309L, RexRotary 1225(+B+), nashuatec CP308 (+b+), Savin 3160DNP, Standard SD350, Lanier LDD020			

Please note that this bulletin pertains to the SILVER-V / SILVER-V2 B4 models only.  
(It does not apply to A4/LG models).

## Symptom

Wrinkles develop in the master, which can cause the ink to leak from the trailing edge and dirty the copy images.

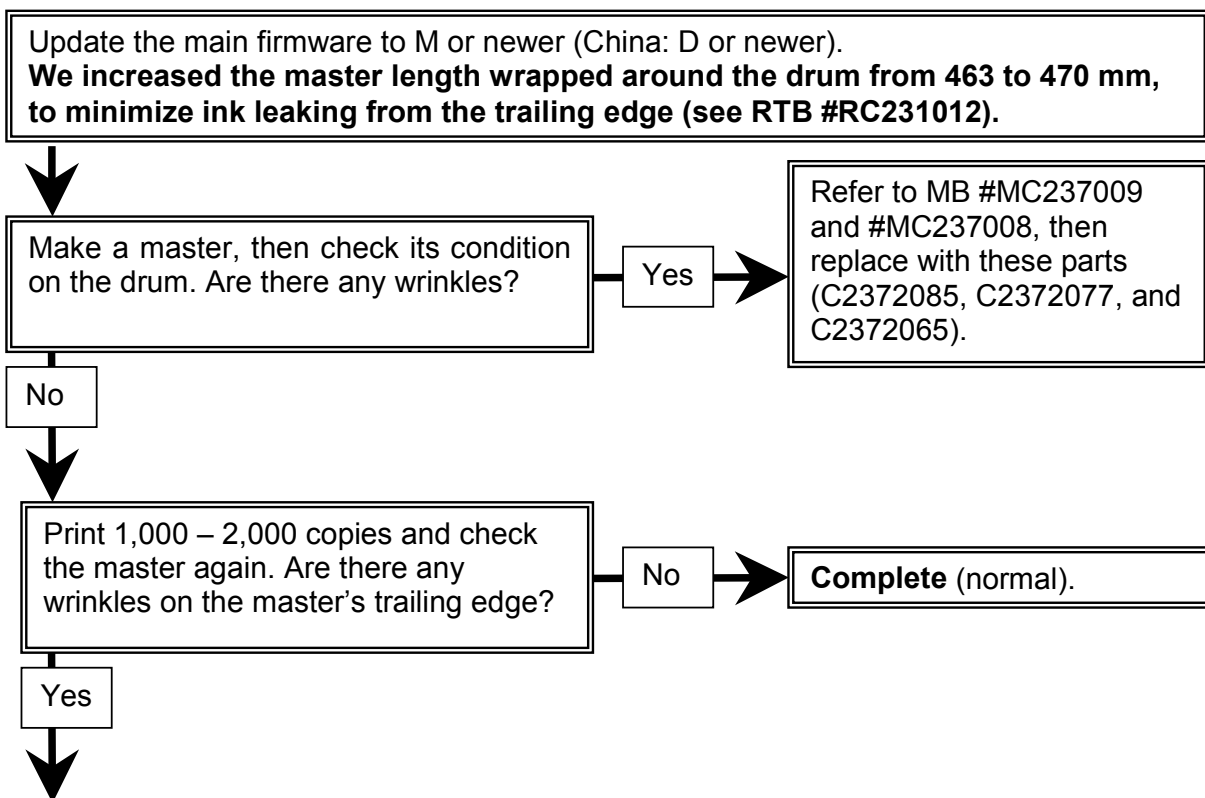
## Cause

- Non-Ricoh production ink is used, which causes the rubber layer of the pressure roller to expand.
- A non-Ricoh master roll is used.
- 2,000 or more prints are made with the same master.

## Solution

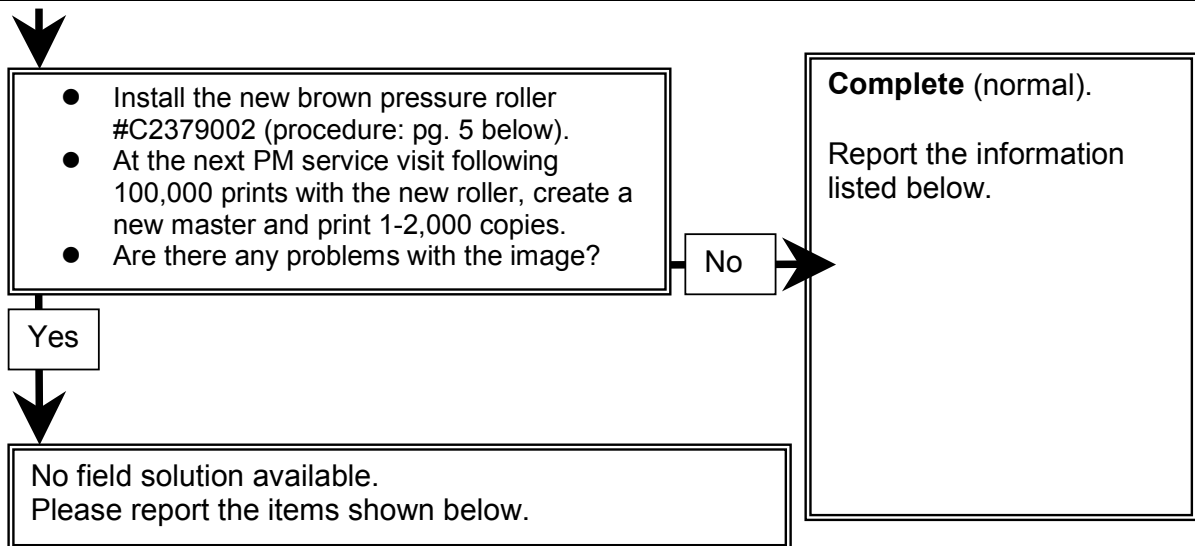
- When the symptom is reported from the field, follow the troubleshooting procedure below and install the new brown pressure roller if necessary.
  - Report the results if the roller was replaced, being sure to include the information listed at the end of the procedure below.
- Advise customers: 1) not to use non-Ricoh production ink, 2) not to use non-Ricoh master rolls, and 3) not to print more than 2,000 copies with the same master.
- Be sure to clean the roller surface using a cloth and water only. Solvents, alcohol, and other chemicals can also cause the rubber layer of the roller to expand.

## Master Wrinkling Troubleshooting Flow



**Model:** PRIORT SILVER/SILVER-V/SILVER-V2

**Date:** 4-Aug-03

**No:** R-C231-014


## Reporting the Results

Report the following information if the new pressure roller was installed.

- If roller replacement has solved the symptom, please report:
  - Serial numbers
  - Print meter reading, pressure roller meter reading
  - What effect replacing the new pressure roller had
- If roller replacement has not solved the symptom, please report the information listed in the following report sample.

**Model:** PRIPORT SILVER/SILVER-V/SILVER-V2

**Date:** 4-Aug-03

**No:** R-C231-014

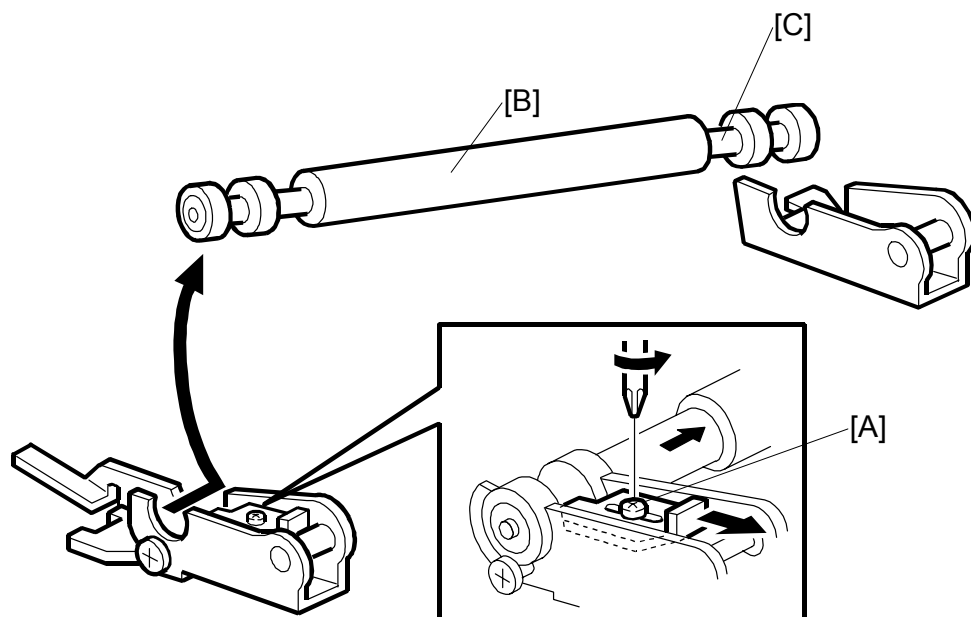
## SERVICE CALL REPORT

<b>Model name:</b> (Silver-V): JP1250, 5308(b)/5300, RexRotary 1225(B), nashuatec CP308 (b), (Silver-V2): JP1250/1255, 5300/5308(b+), RexRotary 1225(B+),nashuatec CP308(b+)		Serial number:
Tech name:	Country:	
Call date:	Master meter reading:	
Customer:	Print meter reading:	
	Pr. roller reading:	
Installation date	YY/MM/DD	
Occurrence date	YY/MM/DD	
Temperature	Degrees	
Humidity	%	
Master wrinkling condition * If possible, please include a digital photo showing the wrinkling.		
Ink lot number/color	/ Black	
Paper size, weight	,	
How many times has the roller been changed?	times	
What effect replacing the pressure roller had, other comments:		

**Model:** PRIORT SILVER/SILVER-V/SILVER-V2**Date:** 4-Aug-03**No:** R-C231- 014

## INSTALLATION PROCEDURE FOR THE BROWN PRESSURE ROLLER

**Note:** The following procedure is the same as for the previous roller (Service Manual), except that Step 7 has been newly added.



C231R526.WMF

### **⚠ CAUTION**

**Take care to avoid possible injury. If the printing pressure release arms disengage, the press roller will be pulled upwards suddenly.**

1. Turn off the main switch and disconnect the power plug.
2. Remove the drum unit.
3. Remove the front cover (4 screws).
4. Loosen the screw [A].
5. Remove the pressure roller [B].

6. Install the brown pressure roller.

**CAUTION:** The lengths of the shafts at the rear and front differs During installation, ensure that the longer shaft [C] is positioned towards the rear of the machine.

7. Tighten the screw [A].

<b>Model:</b> PRIPORT SILVER/SILVER-V/SILVER-V2/SV2P		<b>Date:</b> 30-Sep-03	<b>No:</b> R-C231-015
<b>Subject:</b> New model SV2P information (China only)		<b>Prepared by:</b> M. Ohtsubo, Priport Service Planning Section	
<b>Classification:</b>	<input type="checkbox"/> Troubleshooting <input 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 checked="" type="checkbox"/> Other (New machine information)		
<b>Model Name:</b>			
SILVER:	Ricoh JP1010/1030/1045/1050/1055, Gestetner 5306(L/b)/5000/5001/5200, RexRotary 1224(B), nashuatec CP306(b), Savin 3150DNP, Standard SD300		
SILVER-V:	Ricoh JP1210/1230/1250, Gestetner 5308(L/b)/5300, RexRotary 1225(B), nashuatec CP308(b), Savin 3150eDNP, Standard SD330		
SILVER-V2:	Ricoh JP1250/1215/1235/1255, Gestetner 5300/5308(+/b+)/5309L, RexRotary 1225(+/B+), nashuatec CP308(+/b+), Savin 3160DNP, Standard SD350, Lanier LDD020		
SV2P (China only):	Ricoh JP1260P, Gestetner 5310P		

This bulletin contains all service-related information unique to Model SV2P (C253), which is scheduled for official release in China in October 2003. Please add this information to your Silver Series Service Manuals and also refer to RTB #R-C231-013 for Silver-V2 information

**Note:** Please also see MB #M-C237-015 for a list of the components unique to the SV2P.

## 1. OVERALL INFORMATION

### 1.1 DIFFERENT SECTIONS BETWEEN THE C253 AND C248

Service Manual:

Section	Item	Remarks
1	Overall Information	Some items added.
2	Detailed section descriptions	<i>(no differences)</i>
3	Installation	<i>(no differences)</i>
4	Service tables	<i>(no differences)</i>
5	Preventive maintenance	<i>(no differences)</i>
6	Replacement and adjustment	<i>(no differences)</i>
7	Point to point diagrams	<i>(no differences)</i>
8	Printer controller unit	New documents

### 1.2 SEPECIFICATIONS

The specifications are identical to those for the C248, except that an embedded Printer Controller Unit has been added.

No.	Item	Remarks
1	Model names	Ricoh Priport JP1260P (C253-96) Gestetner 5310P (C253-82)
2	Printer controller unit	Embedded Printer Controller Unit fitted as standard
3	Printer drivers	Drivers support Chinese

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## 8. PRINTER CONTROLLER UNIT






### Trademarks

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### Symbols

This manual uses several symbols. The meanings of these symbols are as follows:

	See or Refer to
	Clip ring
	E-ring
	Screw
	Connector



**Model:** PRIPORT SILVER/SILVER-V/SILVER-V2/SV2P

**Date:** 30-Sep-03

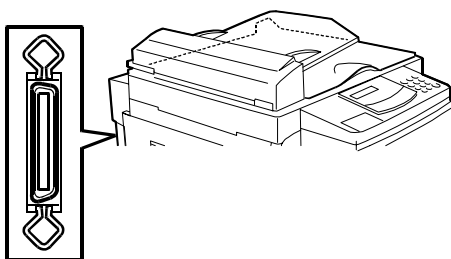
**No:** R-C231-015

## INSTALLATION

The SV2P is equipped with a standard printer controller unit and Video I/F board. Connect the printer controller unit to the host computer with a parallel cable. Then, install the printer driver in the host computer.

Host computer	IBM PC/AT compatible PC
Interface	IEEE1284B (Compatible, Nibble, ECP)
Operating Systems Supported	Windows 95/98/Me, Windows NT4.0, Windows 2000/XP
Printer Driver	Digital Duplicator B4 300 GDI

**NOTE:** The Printer drivers for Windows NT4.0 are only for the Intel x86 platform. There is no Windows NT4.0 printer driver for the PowerPC, Alpha, or MIPS platforms.



## REPLACEMENT AND ADJUSTMENT

### ⚠ CAUTION

Before removing any of the controller components, make sure to do the following:

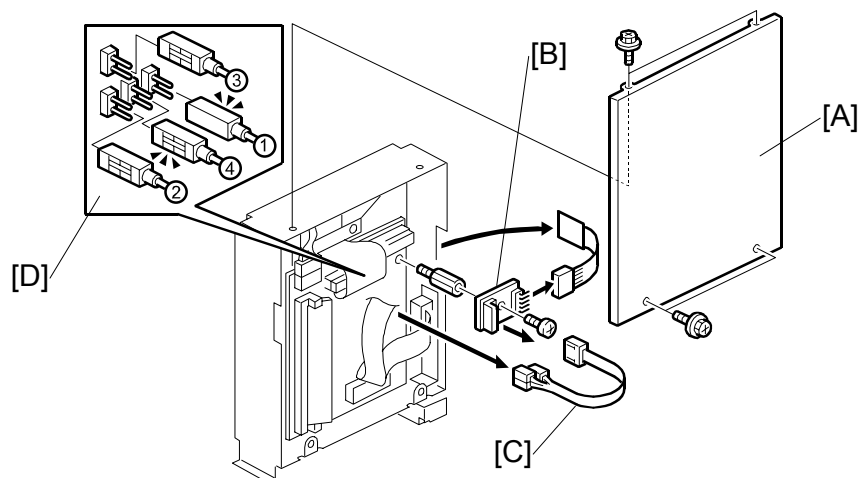
1. If the 'data-in' lamp on the operation panel is blinking or lit, wait until the document or report is printed. Then turn off the machine.
2. Turn off the main switch. Then disconnect the power cord from the outlet and the cable from the machine.

**NOTE:** This manual uses the following symbols:

Screw: 

Connector: 

## CONTROLLER BOARD MEMORY

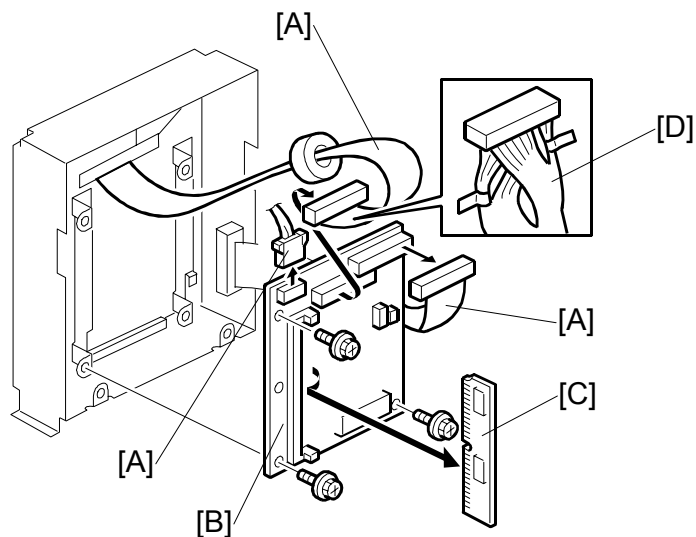


C249R951.WMF

[A]: Cover

[B]: Keypad board

**NOTE:** When you attach the connector [C] make sure to attach it in the correct direction and position [D].



C249R952.WMF

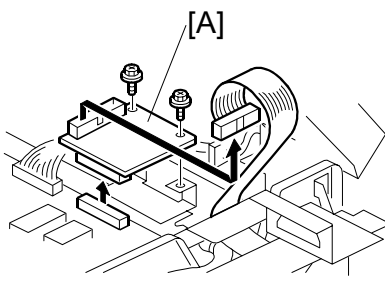
[A]: Connector

[B]: Printer controller board

[C]: SIMM module

**NOTE:** The twisted portion of the harness [D] should fit loosely and close to the controller board.

## VIDEO I/F BOARD



[A]: Video I/F Board

## LOAD PROGRAM

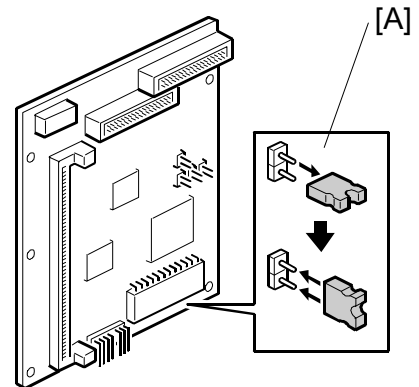
This procedure is for upgrading the system firmware for the controller.

**NOTE:** If the controller does not start up after a firmware update, try to download the firmware again. If it still does not work, you may need to replace the flash ROM on the printer controller board.

### CAUTION

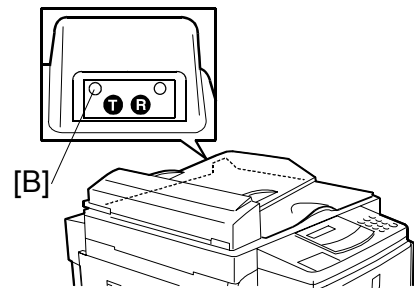
**Do not turn off the machine while downloading the firmware.**

1. Before downloading new firmware, print the test page. Then check the current version.
2. Turn off the machine.
3. Remove the rear cover and the controller cover.
4. Put the jumper next to the flash ROM into the position [A].
5. Turn on the machine.
6. Boot up the PC and access the MS-DOS prompt or Command Prompt.
7. Use the COPY command to update the flash ROM. e.g.  
"copy file\_name LPT1:" (where LPT1 is the connected port).

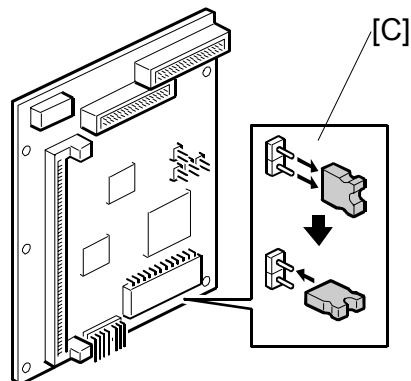


C249R957.WMF

8. While the flash ROM is updating, the left LED [B] on the control button board remains lit.



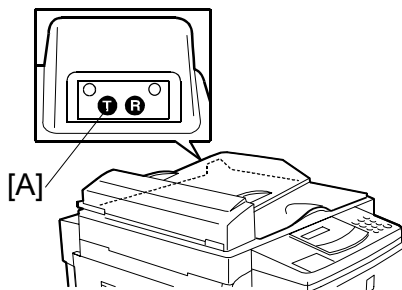
9. When the left LED flashes rapidly, the process has completed.
10. Turn off the machine.
11. Put the jumper into the off position [C] next to the flash ROM.
12. Turn on the machine and then print out the test page using the test page button. Then check the new version.



C249R958.WMF

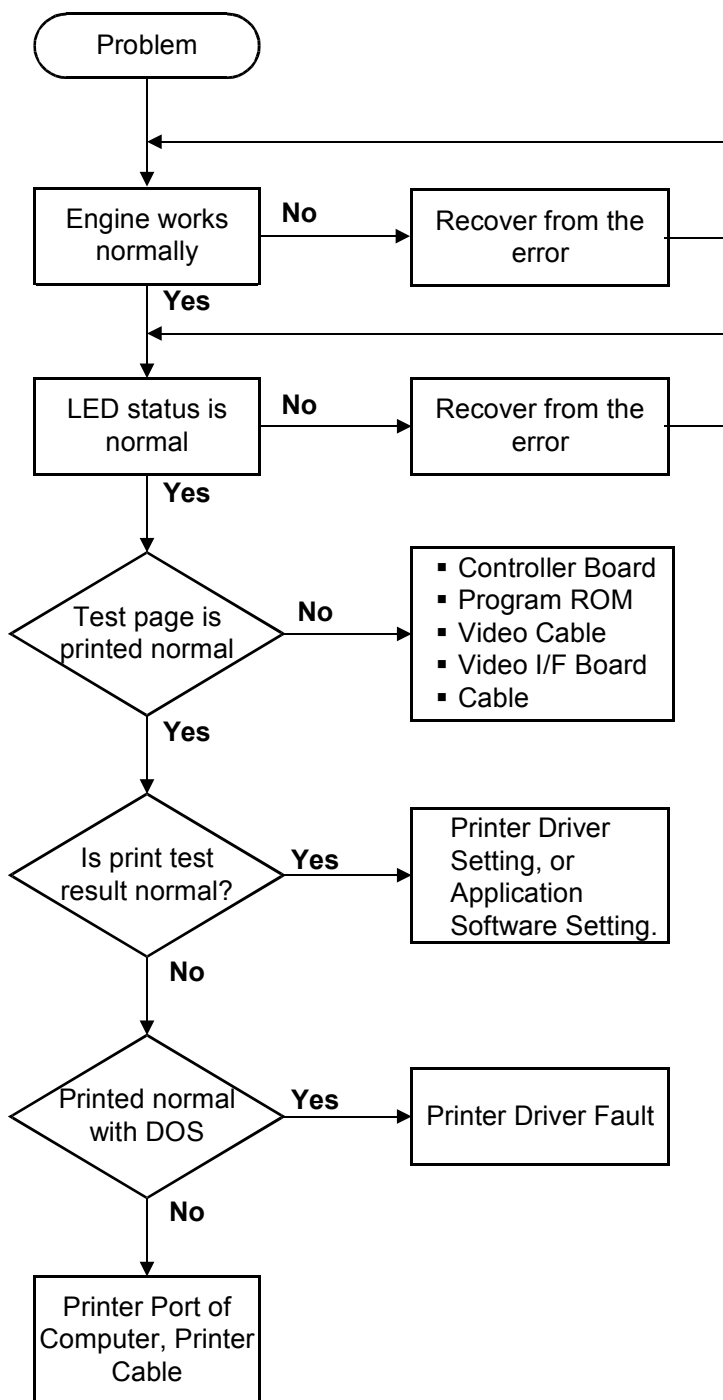
## TEST PAGE

Press the test page button [A] on the keypad board. The right LED will start to flash quickly. This indicates that the controller is in the process of creating the test page.

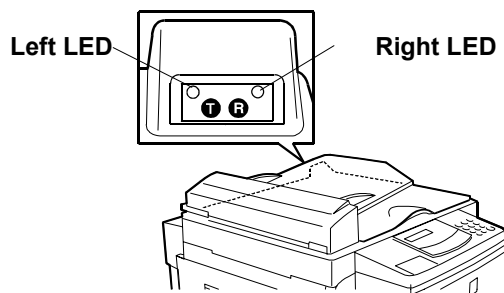


## TROUBLESHOOTING

### TROUBLESHOOTING FLOWCHART



## LED STATUS LIGHT SEQUENCE AND CONDITIONS



### *Power on and activation*

STATUS	CONTENTS	CHECK POINT
All LEDs are off	No power supply	No AC power. AC cord not properly connected. Power supply failure in the controller.
Right LED is on	Power on	-
Left LED is flashing	Self-diagnostic test before ready	-
Left LED is flashing rapidly	Receiving data	-
Left LED is on continuously	Transferring data Making a master	-
Left LED is continuously off	Idle	-
Left LED flashing slowly and evenly	Error on engine	Check message on operation panel.

**Model:** PRIPORT SILVER/SILVER-V/SILVER-V2/SV2P

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## *Test page button*

STATUS	CONTENTS	CHECK POINT
Left LED is flashing	Receiving data	-
Left LED is on	Making a master	-
Left LED continuously on	Printing	-
Left LED flashes and goes off. LED stays off.	No response from the engine.	Turn the engine Off/On. Check if the controller is properly connected to the engine. Check if the engine is online. Check if SIMM card is positioned correctly.
Left LED flashes slowly and evenly.	Engine error	Check the error message on the engine. Check if the controller is properly connected to the engine.



## PRINTER DRIVER OPERATION

If the Windows test page does not print or does not look right, check the printer driver operation using these steps:

1. Select the Details tab in the Properties menu of the printer driver.
2. Change the port connection to "File:"
3. Click the Apply button. Then select the General tab and click the Print test page button.
4. Set the file name (e.g. test.prn). Then set the disk/directory location. Save the file.
5. Click "YES" when the message pops up and asks whether the test page printed correctly.
6. Access the MS-DOS prompt or Command Prompt.
7. Check that the engine and controller are ready for printing. Then execute the following command at the MS-DOS prompt or Command Prompt. "copy /b test.prn lpt1"

**NOTE:** 1) Always input "/b" after the Copy command.

2) The above example applies if the file name saved in the step 4 is "test.prn".

3) If the controller is connected to the second PC port, replace "lpt1" with "lpt2".

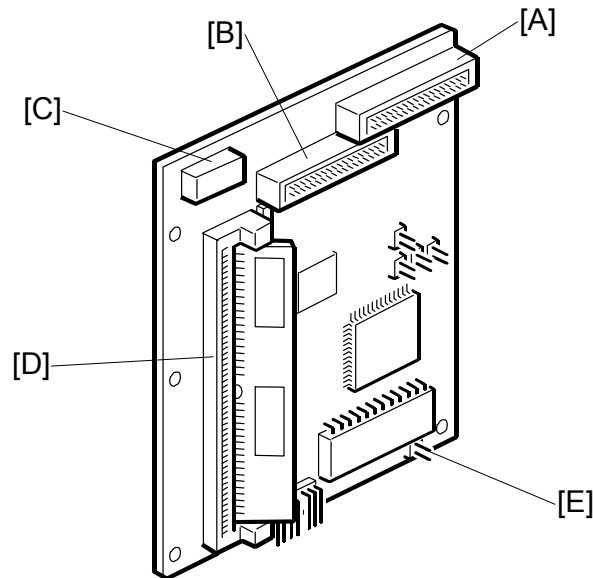
8. Input "exit". Then exit from the MS-DOS prompt or command prompt.
9. If the test page has printed correctly, change the printer driver port from "File:" back to its previous setting.

## SERVICE TABLE

There are no SP modes for the printer controller unit.

## DETAILED DESCRIPTIONS

### OVERVIEW

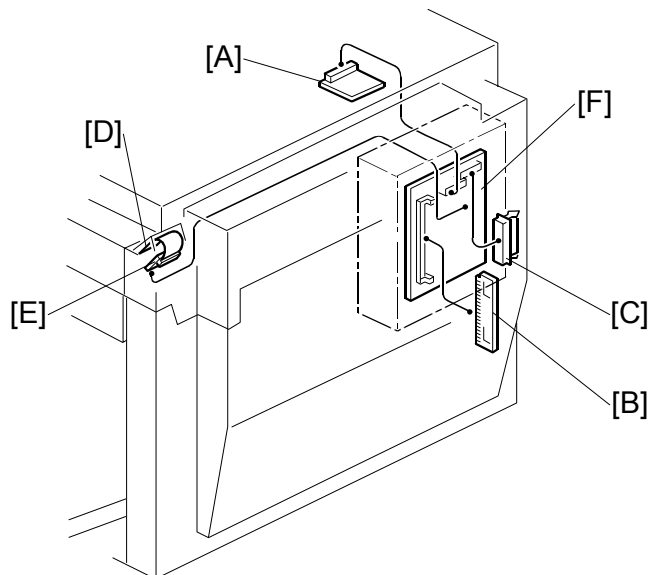


C249D950.WMF

DESCRIPTION	CONTROLLER
CPU	Analog Devices ADSP chip
RAM	16MB (SIMM)
Flash ROM	1MB EPROM

REF.	CONNECTOR		DESCRIPTION
	Name	Configuration	
A	IEEE1284 I/F	26-pin socket	To IEEE1284 Interface
B	Engine Interface	26-pin socket	To video I/F board
C	Power connector	4-pin socket	To power cable
D	SIMM Interface	72-pin SIMM	For connecting the SIMM module
E	Upgrade firmware jumper	2-pin	Upgrading controller firmware

## MACHINE LAYOUT



REF.	COMPONENT
A	Video Interface Board
B	SIMM Module
C	IEEE1284 Interface
D	Control Button Board
E	Keypad Board
F	Printer Controller Board

**Model:** PRIPORT SILVER/SILVER-V/SILVER-V2/SV2P**Date:** 30-Sep-03**No:** R-C231-015**SEPECIFICATIONS**

Controller Type	Embedded
Configuration	Internal embedded controller
Printer Language	GDI
Print Resolution	300dpi
Memory (RAM)	16MB (SIMM)
Resident Fonts	None
Host Interface	IEEE1284B (Compatible, Nibble, ECP)
Host PC	IBM PC/AT compatible PC
Operating Systems Supported	Windows 95/98/Me, Windows NT4.0 (*1), Windows 2000/XP
Printer Driver	Digital Duplicator B4 300 GDI

**NOTE:** The Printer drivers for Windows NT4.0 are only for the Intel x86 platform. There is no Windows NT4.0 printer driver for the PowerPC, Alpha, or MIPS platforms.

<b>Model:</b> PRIPORT SILVER/SILVER-V/SILVER-V2/SV2P		<b>Date:</b> 30-Sep-03	<b>No:</b> R-C231-016
<b>Subject:</b> Firmware Modification History - Printer controller unit		<b>Prepared by:</b> M. Ohtsubo, Priport Service Planning Section	
<b>Classification:</b>	<input type="checkbox"/> Troubleshooting <input 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 checked="" type="checkbox"/> Other (Firmware Modification History)		
<b>Model Name:</b>			
SILVER:	Ricoh JP1010/1030/1045/1050/1055, Gestetner 5306(L/b)/5000/5001/5200, RexRotary 1224(B), nashuatec CP306(b), Savin 3150DNP, Standard SD300		
SILVER-V:	Ricoh JP1210/1230/1250, Gestetner 5308(L/b)/5300, RexRotary 1225(B), nashuatec CP308(b), Savin 3150eDNP, Standard SD330		
SILVER-V2:	Ricoh JP1250/1215/1235/1255, Gestetner 5300/5308(+b+)/5309L, RexRotary 1225(+B+), nashuatec CP308(+b+), Savin 3160DNP, Standard SD350, Lanier LDD020		
SV2P (China only):	Ricoh JP1260P, Gestetner 5310P		

This is to inform you of the firmware history for the printer controller unit of Model SV2P. Items in ***bold italics*** have been either corrected or added.

## FIRMWARE MODIFICATION HISTORY

Version	File Name	C. SUM	Production
<b><i>V6CU</i></b>	<b><i>C6135012.bin</i></b>	<b><i>B4EB</i></b>	<b><i>1st mass production release</i></b>

**Model:** PRIPORT SILVER/SILVER-V/SILVER-V2/SV2P**Date:** 30-Sep-03**No:** R-C231-**016**

Symptom Corrected	Version
<i>(1st mass production release)</i>	<b>V6CU</b>