RIGOH	Technical E	Bulletin	No.	BRO-001
SUBJECT: Service Manual U	pdate			<b>DATE:</b> Jan 15, 1996
PREPARED BY: Y. Okunishi CHECKED BY: M. Iwasa		FROM: Qu	ality Ass	surance Center
CLASSIFICATION:			MODE	L:
Action Required     Traublachapting	Revision of servi	ice manual	B	RO, BR1
Retrofit Information	Other			

The Service Manual has been updated to comply with a software change.

[ ROM number ]			
H068 7200E	$\rightarrow$	F	(BRO: US, Asia)
H068 7201C	$\rightarrow$	D	(BRO: China)
H069 7200C	$\rightarrow$	D	(BR1: Asia)
H069 7211	$\rightarrow$	А	(BR1: China)

RD	Technical Bull	etin No.	BRO-001
SUBJECT: S	Service Manual Update		<b>DATE:</b> Jan 15, 1996
	SERVICE TABLES AND PROCEDURES SERVICE LEVEL FUNCTIONS	L	anuary 9th, 1996
	4.1.18. PULSE WIDTH ; TPH Type (Function	11)	
	1. Function 6 1 9 9 5 then immediately Yes	FUNCTION KPAD, 9 SERVICE FUNC	/NEXT FIONS
	2. 1 1 Yes	0-PATTERN 1-ME 2-PULSE	СН
	3. 2	PULSE WIDTH 1-3	HEAD 2
	4. Enter the TPH type from 1 to 3		
China model ; Enter 1 Other models; Enter 2 (Hight Pulse Width) or Enter 3 (Low Pulse Width)			
The Pulse Width is showed on the TPH.			
	5. To finish, press START		
	NOTE: Turn the power off and on, after entering the t	/pe.	

# 4.1.19. RAM Tests (Function 12)

1. Function 6 1 9 9 then immediately	5	FUNCTION KPAD/NEXT SERVICE FUNCTIONS
2. 1 2 Yes		0-SRAM 1-SAF
3. Either:		
Test the SRAM:	Press 💿 🔯	
Test the SAF:	Press 1 🔯	(Not available for the BR1)
If test is successful, ti If test is unsuccessfu	he display shows I, the display show	"OK". vs "ADDRESS=".
4. To finish: No Function		

SUBJECT: RAM Reset ( Level 1 )			<b>DATE:</b> Jan 15,1996
PREPARED BY: Y. Okunishi CHECKED BY: M. Iwasa	FROM: Qua	ality Ass	urance Center
CLASSIFICATION: Action Required Revision of servi Troubleshooting Information only Retrofit Information Other	ce manual	MODE BF	L: RO, BR1

When you reset the RAM (Level 1), please take the following action.

# [Before RAM reset]

Print the system parameter list to keep service data and user data such as quick numbers, RTI, TTI, etc.

# [After RAM reset]

- 1) Set the country code (Service Function 01, System SW 0F).
- 2) Set the country code for NCU parameters (Service Function 08).
- 3) Perform Auto shading (Service Function 10).
- 4) Select the thermal head (TPH) type (Service Function 11).

Note: If the ROM is H0687200E (BRO) or H0697200C (BR1), Service Function 11 does not work for selection of the thermal head type and one of the following RAM data must be adjusted.

RAM Address:	800349 (BRO) or 0052F8 (BR1)	
Ram Data:	Mitsubishi for China models:	01 (H)
	Kyocera with High Pulse Width:	02 (H)
	Kvocera with Low Pulse Width:	03 (H)

- \* The pluse width is
- shown on the TPH.

- 5) Turn the main power OFF and ON again.
- 6) Program the service and user data to be the same as the data on the System Parameter List which was printed before the RAM reset.
  - Note: If the ROM is H0687200E or H0697200C and if the country code is not set after the RAM reset level 1, the machine does not print the image properly on letter size and A4 size paper and Japanese is displayed on the panel. (China version with Chinese language does not show Japanese after the RAM reset.)

English will be displayed after the RAM reset from the next version ROM.

SUBJECT: RAM Reset ( Leve	el 1)			<b>DATE:</b> A: Feb.15, 1996 Jan 15,1996
PREPARED BY: Y. Okunish CHECKED BY: M. Iwasa	i	FROM: Qu	ality Ass	surance Center
CLASSIFICATION:			MODE	L:
Action Required	Revision of serv	ice manual	BI	RO, BR1
Troubleshooting	Information only			
Retrofit Information	Other			

When you reset the RAM (Level 1), please take the following action.

## [Before RAM reset]

Print the system parameter list to keep service data and user data such as quick numbers, RTI, TTI, etc.

### [After RAM reset]

- 1) Set the country code (Service Function 01, System SW 0F).
- 2) Set the country code for NCU parameters (Service Function 08).
- 3) Perform Auto shading (Service Function 10).
- 4) Select the thermal head (TPH) type (Service Function 11).
  - **Note:** If the ROM is H0687200E (BRO) or H0697200C (BR1), Service Function 11 does not work for selection of the thermal head type and one of the following RAM data must be set.

RAM Address:	800349 (BRO) or 0052F8 (BR1)		
Ram Data:	Mitsubishi for China models:	01 (H)	* The pulse width is
	Kyocera with High Pulse Width:	02 (H)	shown on the TPH.
	Kyocera with Low Pulse Width:	03 (H)	

- 5) Turn the main power off and on again.
- 6) Program the service and user data to be the same as the data on the System Parameter List which was printed before the RAM reset.

Note: If the ROM is H0687200E or H0697200C and if the country code is not set after the RAM reset level 1, the machine does not print the image properly on letter size and A4 size paper and Japanese is displayed on the panel. (The China version with Chinese language does not show Japanese after the RAM reset.)
English will be displayed after the RAM reset from the ROM version H0687200G

English will be displayed after the RAM reset from the ROM version H0687200G and H0697211E.

SUBJECT: Incomplete Cover Closing			<b>DATE:</b> Feb. 15, 1996
PREPARED BY: Y. Okunishi CHECKED BY: M. Iwasa	FRO	M: Quality As	ssurance Center
CLASSIFICATION:	·	MOD	EL:
Action Required Rev Troubleshooting Info	sion of service ma mation only er	anual E	BRO/BR1

# Symptom

The Check Display indicator is lit and CLEAR COPY is displayed.

#### Cause

The printer cover is closed incompletely and the cover open / paper end sensor detects no paper after the paper is cut.

After the paper is cut, the paper leading edge is fed back to the print position. At the time, the paper is away from the sensor actuator because the printer cover is closed incompletely and the cover does not push the paper to the sensor actuator enough.

This causes a CLEAR COPY message to appear.



When the sensor detects no paper, the cutter is stopped before returning back to the home position (left side). (The cutter stops for about 200 ms at the right side after cutting the paper, then it returns back to the home position in the normal condition.)

If the cutter stops at the right side, the user must slide it back to the home position by hand. (Once it stops half way, it does not return back to the home position automatically.) The instructions are in the operator's manual.

However, the users do not realize this and they do not slide the cutter back to the home position sometimes. This can be the cause of a service call.

## SUBJECT: Incomplete Cover Closing

**DATE:** Feb. 15, 1996

# Countermeasure for the production machines

- 1) A decal is attached on the printer cover. It instructs the user to close the cover completely. (February production)
- 2) A decal is attached on the cutter. It indicates the direction to the home position. (February production)
- 3) An errata sheet including the additional information for the cutter position is attached in the operator's manual.

(February production)

- 4) The software (ROM) is changed. (May production)
  - To keep the cutter moving for about 1.5 s after the sensor detects no paper. (In most cases, the cutter can return to the home position during this time.)
  - To display CHECK CUTTER POSITION when the cutter does not return to the home position.

## Action taken for the machines in the field

- Check the cutter position. Then, slide the cutter back to the home position if it is not at the home position.
- Instruct the user to close the cover completely and to slide the cutter back to the home position by hand if the same thing happens.
- Attach the decals to the printer cover and the cutter.



SUBJECT: Incomplete Cover Closing

DATE: Feb. 15, 1996

• Change the ROM to the new one. (For the users who do not follow the above instructions.)

The information about the new ROM will be informed in a future RTB.

### Note:

Decal - Lock

H068 4212:	H068-20, 58, 59 (BRO)
(English)	H069-50(BR1)
H068 4213:	H068-54, 55 (BRO)
(Chinese)	
H069 4213:	H069-54, 55 (BR1)
(Chinese)	

Decal - Cutter

H068 4210: BRO and BR1

SUBJECT: Printer Cover Catch	<b>DATE:</b> Feb. 15, 1996
PREPARED BY: Y. Okunishi CHECKED BY: M. Iwasa	FROM: Quality Assurance Center
CLASSIFICATION:	MODEL:
Action Required Revision of Troubleshooting Information Other	of service manual BRO/BR1 on only

## Problem

The printer cover catch (Stopper - Printer Cover) becomes detached from the printer cover.

#### Cause

The user confuses the direction for unlocking the printer cover catch and pushes the cover catch in the opposite direction (towards the front). This is because there is a decal with an arrow for setting the documents just behind the cover catch.

Once the cover catch becomes detached, it is not easy enough for the user to set the cover catch back on the printer cover without any instructions.



## Countermeasure for the production machines

 A decal with an arrow to have users push the cover catch backwards will be attached on the cover catch. (February production)



SUBJECT: Printer Cover Catch

DATE: Feb. 15, 1996

• The Cover Catch will be modified so that it will not be easy for the user to push the catch towards the front.

(The details are not fixed yet.)

• The attached errata sheet will be attached to the operator's manual. (February production)

#### Note:

Decal - Stopper

H068 4205:	H068-20, -58, -59
	H069-50, -54, -55
H068 4206:	H068-54, -55

SUBJECT: Printer Cover Catch

**DATE:** Feb. 15, 1996

# Additional Information and Errata

#### [P51] Receiving with Auto Select mode

- 1. The machine starts ringing.
- 2. You have two options:
  - Pick up the handset.

If you hear a voice then continue a normal conversation. If you hear a tone then the other end is a fax machine. Make sure the document feeder is empty, press the Start key to start receiving and replace the handset. If you do not replace the handset or press the Start key, after a few seconds the machine will automatically take the line and receive the message.

Do nothing. The machine will keep ringing. After a number of rings (the auto ring time) the machine will begin to receive a message. You can change the number of rings (the auto ring time) - see page 49.

#### [P14, 92, 93 and 95] Opening the printer cover

The printer cover catch is located in the center of the cover. To release the printer cover, you need to squeeze the catch backwards - see opposite. The cover will spring out a little. Then grasp the paper guides and raise the cower up.

**NOTE:** The catch must be squeezed backwards. If you apply too much pressure in the opposite direction the catch will become detached from the machine. If this happens, follow the instructions below.

#### Reattaching the printer cover catch

If your printer cover catch becomes detached, it can easily be fixed. While holding the printer cover open, push the catch back into position in the direction shown opposite. The catch should click into place.

#### [P95] Replacing the carriage

If you close the printer cover and "REPLACE PAPER" or "CLEAR COPY" is still displayed, please check the position of the carriage. It should be on the left side. If it is not in that position, slide it back to the left.

**NOTE:** If the carriage sticks halfway, the transparent plastic strip may be blocking it - pull it out slightly from the rear of the machine to let it pass.









Part No. H0688697

# **R**COL Technical Bulletin No. BRO-005A

cai	Bu	lietin	INO.	BRO-

SUE	SJECT: History of Software (ROM) Changes		DATE: 31.Jul,1996			
PR CH	EPARED BY: Y.Okunishi ECKED BY: S.Fujii	FROM: Qu	ality Ass	urai	nce Center	
	ASSIFICATION: Action Required Troubleshooting Retrofit Information Cther	ce manual	MODEI BF	L: RO,	BR1	
		В	RO		В	R1
NO	Description / Problem corrected	USA / Asia	China	a	Asia	China
		H068 7200	H068 7201	3 I	H069 7200	H069 7211
1	A paper cycle was done when a fax was	F	C		D	А
	received while installing a paper roll.	(Suffix)	(Suffix	x)	(Suffix)	(Suffix)
2	New function (Service Function11) Thermal Printer Head type selection	F	С		D	А
3	Communication problem with lcatel 3630 and 3650	F	С		D	А
4	Incorrect page number printed on the Communication Failure Report	F	С			
5	Wording correction for the Error Report	F	D		D	Α
6	Communication problem at 4800 bps on the test line for Chinese regulations.		E			В
7	ROM data transfer cannot be done when the printer failed.	G	F		E	С
8	High speed RDS cannot be done when the authorized Rx or the closed network function is turned on.	G	F			
9	New display CHECK CUTTER POSITION (RTB BRO - 003)	G	F		E	С
10	Change in the output level		F			С
11	Busy tone is not detected in Australia	G			E	
12	3 times pre-feeding	G	F		E	С
13	MTF turns off to reduce the number of vertical black lines	G	F		Е	С
14	Change of the cutter control when the printer cover is not completely closed. (RTB BRO - 003)	G	F		E	С
15	Language change after level 1 RAM reset (RTB BRO - 002) Japanese $\rightarrow$ English	G			E	
16	A busy tone was detected when the answering machine is working		G			
17	The buzzer did not sound at the end of reception in some cases.	Н	G		F	



\* Do not push the lower side of the tab (1), because the tab may break. Push the sloping side of the tab (2) and the tab will release.

 

 SUBJECT: Vertical Black Line
 DATE: Feb. 15, 1996

 PREPARED BY: Y. Okunishi CHECKED BY: M. Iwasa
 FROM: Quality Assurance Center

 CLASSIFICATION:
 MODEL:

 Action Required
 Revision of service manual

 Troubleshooting
 Information only

#### Symptom:

Vertical black line on the image that is transmitted or copied.

Other

#### Cause:

Dust in the image sensor or a small dot on the surface of the image sensor (CIS).

#### **Action required:**

Retrofit Information

1) Clean the surface of the CIS.

2) Switch MTF off.

#### **Explanation:**

The CIS is more sensitive than a CCD.

The CIS detects small dots on the surface of the CIS and small dust in the CIS that a CCD doesn't, and it can cause a vertical black line in the scanned image. The customer may call service because of such a black line.

So, MTF has been switched off at the factory since January 1996.

SUBJECT: Document Senso		<b>DATE:</b> Mar. 15, 1996		
PREPARED BY: Y. Okunisl CHECKED BY: M. Iwasa	hi	FROM: Qu	ality Ass	surance Center
CLASSIFICATION:			MODE	L:
Action Required	Revision of servi	ice manual	Bł	RO, BR1
Troubleshooting	Information only			
Retrofit Information	Other			

## [Symptom]

RIGOH

The Alarm LED Blinks and CLEAR ORIGINAL is displayed.

## [Problem]

· The document sensor and /or the scan line sensor electrically turn on even if there is no document in the ADF.

Refer to page 2-2 of the service manual.

# [Cause]

The circuit on the right is for both sensors.

The light from the photodiode A-K activates the photo transistor.

When a document is set, the actuator of the sensor cuts off the light and the voltage at Vout goes below the 3.6 V threshold (it should go below 1.0V normally) so that the machine detects the document. (Vout is over 4.0V normally when a document is not set.)

The power of the light from the photo diode becomes weak with time (Max.25% down in 5 years) and this makes Vout go down. When Vout becomes below 3.6V, the above problem occurs.



RICOL Technical Bulletin No. BRO-008

SUBJECT: Document Sensor Problem

DATE: Mar. 15, 1996

## [Countermeasure]

- Replace RL with the 18kΩ resistor for both the document sensor and the scan line sensor.
   H0685411 → H0685601 Operation Panel Ass'y-BRO-CHN H0685414 → H0685606 Operation Panel Ass'y-BRO-CHN2 H0685412 → H0685602 Operation Panel Ass'y-BRO-Asia H0685413 → H0685603 Operation panel Ass'y-BRO-USA H0685416 → H0685604 Operation panel Ass'y-BRO-TWN H0685415 → H0685605 Operation panel Ass'y-BRO-Ges H0695412 → H0695601 Operation panel Ass'y-BRI-CHN H0695413 → H0695606 Operation panel Ass'y-BRI-CHN2 H0695411 → H0695602 Operation panel Ass'y-BRI-CHN2 H0695611 → H0695604 Operation panel Ass'y-BRI-Asia H0695614 → H0695604 Operation panel Ass'y-BRI-TWN
- A Higher impetance resistor  $18 \text{K}\Omega$  at RL keeps Vout over 3.6v in a no document condition over 10 years. This resistor value does not affect detecting the document.

[Recommended action taken]

- Replace the OPU (Operation Panel Ass'y) for this problem at the customer site.
- Modify the replaced OPU in the workshop. See the attached OPU modification procedure.

[Others]

- The new OPU have been installed for March production in 1996.
- The OPU which is modified by hand a has red or green mark on the PCB.
- The OPU which will be made using the new resistors in the OPU factory will not have the mark but the part number of the Operation panel Ass'y will be changed as above for the service part.

## - OPU Modification Procedure-



1. Replace R101(see below) with the  $18k\Omega$  1/10w resistor.

- NOTE:1) Protect the surface of the OPU from damage and staining
  - 2) Protect the Document Sensor from the damage caused by heat from the soldering iron.
- 2. Remove the PCB boards from the OPU cover
- Replace R11with the 18kΩ 1/8w resistor. on the reverse side of the PCB-KEY.
  - PCB-KEY



 $18k\Omega \pm 5\% 1/8W$ 

Note:1)Handle the PCB-LCD and the PCB-KEY with care so as not to break the connection between them.

- 2)Carefully fit the tapping screw edge to the hole in the OPU cover and do not tighten the screw too strongly.
- 3. Mark the label of the PCB with red or green.

Fax170, MV74

RIGOH	Technical B	ulletin	No.	F/L Series-020
SUBJECT: PSTN BUSY TON	NE and PABX TONE			<b>DATE:</b> Nov. 15, 1995
PREPARED BY: T. Kimura CHECKED BY: M. Iwasa		FROM: 2nd	d T.S. Se	ection
CLASSIFICATION:			MODE	L:
Action Required	Revision of servi	ce manual	M	V310, Fax2700L,
Troubleshooting	Information only		Fa	ax3700L, Fax180,

Retrofit Information

Some value of the table for the PSTN BUSY TONE and the PABX BUSY TONE were changed.

Therefore we would like you to use the new table as attached.

Other

# Technical Bulletin No. F/L Series-020

SUBJECT: PSTN BUSY TONE and PABX TONE

DATE: Nov. 15, 1995

# PSTN BUSY TONE (807F13 - 807F14)

RIGOH

France		Germany		U.K.		
RAM Value[H]	Range(Hz)	RAM Value[H]	Range(Hz)	RAM Value[H]	Range(Hz)	
042	415-465	058	400-480	0A0	330-470	
052	410-470	068	390-485	0B0	320-460	
062	400-475	078	385-490	0C0(Default)	300-480	
072(Default)	395-480	088(Default)	380-495	0D0	290-485	
082	390-485	098	370-500	0E0	285-490	
092	380-490	0A8	365-505	0F0	275-495	
0A2	375-495	0B8	360-510	100	265-500	
0B2	465-500	0C8	350-515	110	255-505	
		0D8	345-520			

Italy		Αι	Austria		lgium
RAM Value[H]	Range(Hz)	RAM Value[H]	Range(Hz)	RAM Value[H]	Range(Hz)
030	410-440	0D8	370-555	042	405-460
040(Default)	400-450	0E8	360-560	052(Default)	400-465
050	395-455	0F8	355-565	062	395-475
060	385-460	108	345-570	072	390-480
070	380-465	118	340-575	082	380-485
080	375-470	128(Default)	330-580	092	375-490
090	365-475	138	325-585	0A2	365-495
		148	315-590		
		158	310-595		

Denmark		Ireland		No	orway
RAM Value[H]	Range(Hz)	RAM Value[H]	Range(Hz)	RAM Value[H]	Range(Hz)
036	395-450	02E	395-425	0A4	355-475
046(Default)	390-460	03E(Default)	385-435	0B4	345-490
056	385-465	04E	380-440	0C4	335-500
066	375-470	05E	370-445	0D4	325-505
076	370-475	06E	365-450	0E4	320-510
086	365-480	07E	355-455	0F4(Default)	310-515
		08E	350-465	104	305-520
				114	290-525

Sweden		Switzerland		Holland		
RAM Value[H]	Range(Hz)	RAM Value[H]	Range(Hz)	RAM Value[H]	Range(Hz)	
032(Default)	410-440	0F0	385-560	0F0	335-540	
042	400-450	100	380-565	100	325-545	
052	395-455	110	370-570	110	320-555	
062	385-460	120(Default)	365-575	120	310-560	
072	380-465	130	355-580	130	300-565	
082	375-470	140	350-585	140(Default)	295-570	
092	365-475	150	340-590	150	285-575	
		160	330-595			
		170	325-600			

# Technical Bulletin No. F/L Series-020

SUBJECT: PSTN BUSY TONE and PABX TONE

DATE: Nov. 15, 1995

# PSTN BUSY TONE (807F13 - 807F14)

RIGOH

Spain		Israel		Australia		
RAM Value[H]	Range(Hz)	RAM Value[H]	Range(Hz)	RAM Value[H]	Range(Hz)	
0A8	330-470	040	380-430	028	405-445	
0B8	320-460	050(Default)	365-435	038(Default)	415-455	
0C8	300-480	060	355-440	048	400-460	
0D8(Default)	290-485	070	350-445	058	390-465	
0E8	285-490	080	340-550	068	385-470	
0F8	275-495	090	335-555	078	380-475	
108	265-500	0A0	325-565	088	370-480	
118	255-505			098	365-485	

Por	tugal				
RAM Value[H]	Range(Hz)	RAM Value[H]	Range(Hz)	RAM Value[H]	Range(Hz)
FFFF(Default)	NO DETECTION				
070	415-515				
080	410-520				
090	405-525				
0A0	395-530				
0B0	390-535				
0C0	385-540				
0D0	380-545				

# Technical Bulletin No. F/L Series-020

SUBJECT: PSTN BUSY TONE and PABX TONE

DATE: Nov. 15, 1995

# PABX BUSY TONE (807F26 - 807F27)

RIGOH

Italy		Denmark		Switzerland		
RAM Value[H]	Range(Hz)	RAM Value[H]	Range(Hz)	RAM Value[H]	Range(Hz)	
030(Default)	410-440	030	405-445	0F0	385-560	
040	400-450	040	415-455	100	380-565	
050	395-455	050(Default)	400-460	110	370-570	
060	385-460	060	390-465	120(Default)	365-575	
070	380-465	070	385-470	130	355-580	
080	375-470	080	380-475	140	350-585	
090	365-475	090	370-480	150	340-590	
		0A0	365-485	160	330-595	

Israel		Australia			
RAM Value[H]	Range(Hz)	RAM Value[H]	Range(Hz)	RAM Value[H]	Range(Hz)
040	380-430	038(Default)	395-450		
050(Default)	365-435	048	390-460		
060	355-440	058	385-465		
070	350-445	068	375-470		
080	340-550	078	370-475		
090	335-555	088	365-480		
0A0	325-565				