RICOH

Technical Bulletin No. RTB-001

SUBJECT: To disable ink detection circuit	DATE: Aug. 31, '93 PAGE: 1 of 1
PREPARED BY: J. Mochizuki CHECKED BY:	FROM: Copier Technical Support Section

CLASSIFICATION:

- ☐ Action Required
- ☐ Troubleshooting
- ☐ Retrofit Information
- ☐ Revision of service manual
- ■ Information only
- ☐ Other

MODEL:
Priport VT1730
Ges 5303 / Rex 1220
NSA CP303

The ink detection circuit can be disabled if the main switch is turned on while both the Auto Cycle key and the Reset key are pressed. If this mode is accessed, prints can be made even though the ink detection pin is not in contact with the ink on the ink roller. When the main switch is turned off, this condition is erased.

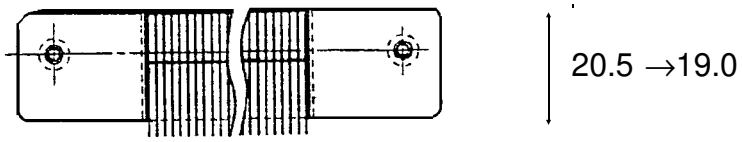
This function serves to remove the ink inside the drum.

The software of the main PCB ROM includes this function from the first mass production.

RICOH	Technical Bulletin	No. RTB-002
SUBJECT: Master Feed Jams		DATE: Aug. 31, '93 PAGE: 1 of 1
PREPARED BY: J. Mochizuki CHECKED BY:	FROM: Copier Technical Support Section	
CLASSIFICATION: ☐ Action Required ☐ Troubleshooting ☐ Retrofit Information ☐ Revision of service manual ■ Information only ☐ Other		MODEL: Priport VT1730 Ges 5303 / Rex 1220 NSA CP303

It was found that the antistatic brush sometimes interferes with master transportation and causes master feed jams. To ensure smooth master feed, the position of the antistatic brush [A] sticking on the inner cover [C] has been changed.

The sticking position is as shown below. Even if the antistatic brush does not contact the master surface, it functions to remove electrostatic charges on the master.



The cut-in serial numbers are as follows:

VT1730	USA version: C3223060020 Europe/Asis version: C3223070061
Ges5303/Rex1220/ NSACP303	USA version: 50723070001 Europe/Asis version: 50713070001

The antistatic brush assembly has been registered as a service part (C2174064). Please refer to MB No. 11.

RICOH

Technical Bulletin No. RTB-003

SUBJECT: Paper feed pressure	DATE: Aug. 31, '93 PAGE: 1 of 1
PREPARED BY: J. Mochizuki CHECKED BY:	FROM: Copier Technical Support Section

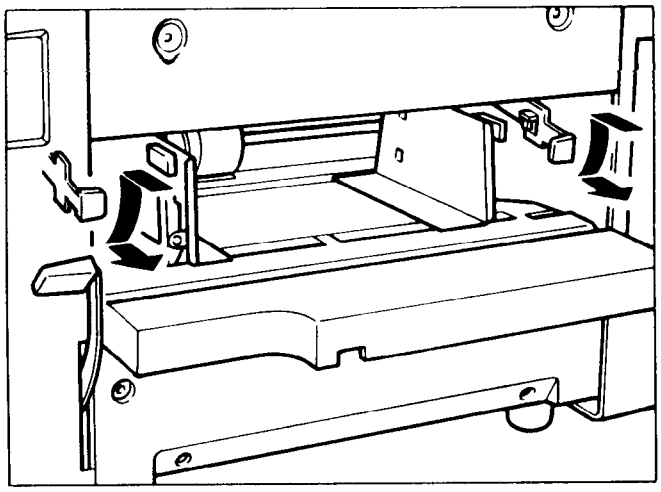
CLASSIFICATION:

- ☐ Action Required
- ■ Troubleshooting
- ☐ Retrofit Information
- ☐ Revision of service manual
- ☐ Information only
- ☐ Other

MODEL:
Priport VT1730
Ges 5303 / Rex 1220
NSA CP303

When 500 sheets of standard paper (80g/m^2) is set on the paper table, paper misfeeds would occur. This is because not enough feed roller pressure is applied due to friction between the paper stack (leading edge side) and the lower paper feed guide which guides the leading edge of the paper stack.

In this case, advise your customer to change the position of the pressure adjustment levers, as shown below, to increase paper feed pressure.



We confirmed that even if the pressure adjustment levers are in the lower position, normal paper (70g/m to 200g/m) would be fed properly. So from August '93 production, the pressure adjustment levers have been set in the lower position (stronger pressure) in the factory.

However, when paper multifeeds occur and the levers are lowered (it seems to occur very rarely) it is possible that the problem mentioned above may still occur. Therefore, as a permanent solution, we are looking for a more suitable tension for the feed pressure springs.

RICOH

Technical Bulletin No. RTB-004

SUBJECT: Master Eject Jams	DATE: June 15, '94 PAGE: 1 of 3
PREPARED BY: H. Kokubo CHECKED BY: S. Hamano	FROM: 2nd Technical Support Section

CLASSIFICATION: ☐ Action Required ■ Troubleshooting ☐ Retrofit Information	☐ Revision of service manual ☐ Information only ☐ Other	MODEL: Priport VT1730/ Ges 5303 / Rex 1220/ Nsa CP303

Symptom

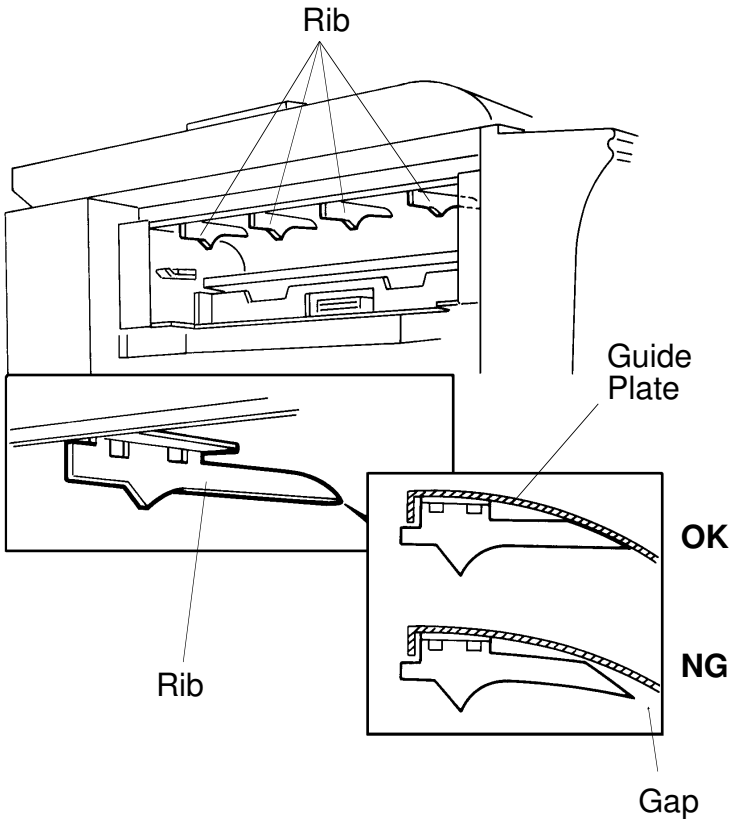
1. Frequent master eject jams at location "F".
2. The master wraps around the upper and/or lower master eject rollers.
3. "F" jam cannot be reset because the actuator (feeler) of the master eject sensor remains pushed down by the pressure plate. (The actuator comes under the pressure plate.)

Cause

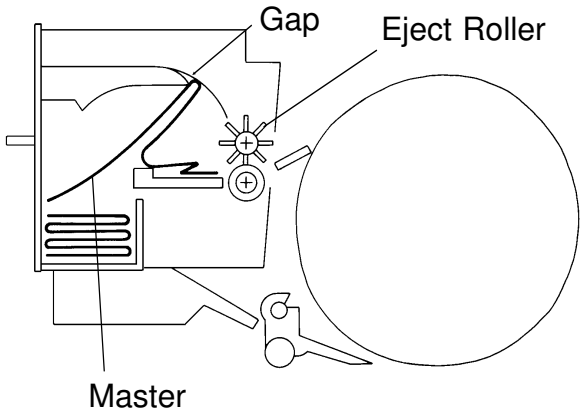
There are 4 ribs to guide the ejected master in the master eject unit. There is a small gap at the leading edge of the ribs against the guide plate.

Due to a part variation, if the gap is too big, the master tends to be caught by the ribs. A jam or other problems may occur as per the following sequence:

----- Continued ----------

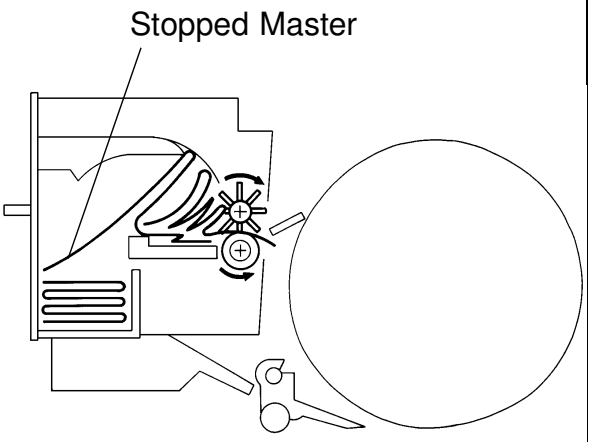


1. While the master is being removed from the drum, the leading edge of the master goes properly into the master eject unit. At this point, however, while the pressure plate moves to compress the master in the eject box, the middle part of the master tends to rub against the ribs. If there are any gaps, the master is caught by the ribs. (The master therefore remains caught by the ribs.)



2. If no jam is detected by the machine after the above situation has occurred, the machine can carry out the next master eject. However, the next ejected master interferes with the master caught by the ribs and is stopped just behind the eject rollers.

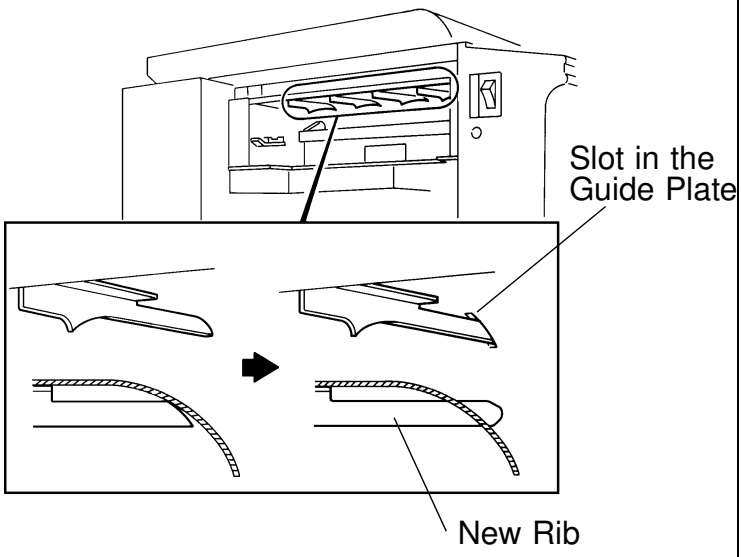
   As result, "F" jam will be indicated. Otherwise, if there is no space for the master to proceed (due to the previous master jam), the master is again caught by and wraps around the eject rollers. If the master is stopped just on the master eject sensor, the sensor feeler remains pushed down while the pressure plate is traveling. After the pressure plate returns to its home position, the sensor feeler comes under the plate. ("F" jam is then indicated and cannot be reset.)



Solution 1 (For the mass production units)

The ribs fixed (welded) to the guide plate have been changed as shown to prevent any gap at the leading edge. The part number of the guide plate (Guide Plate - Eject Unit) has been changed from #C2173565 to #C2173567.

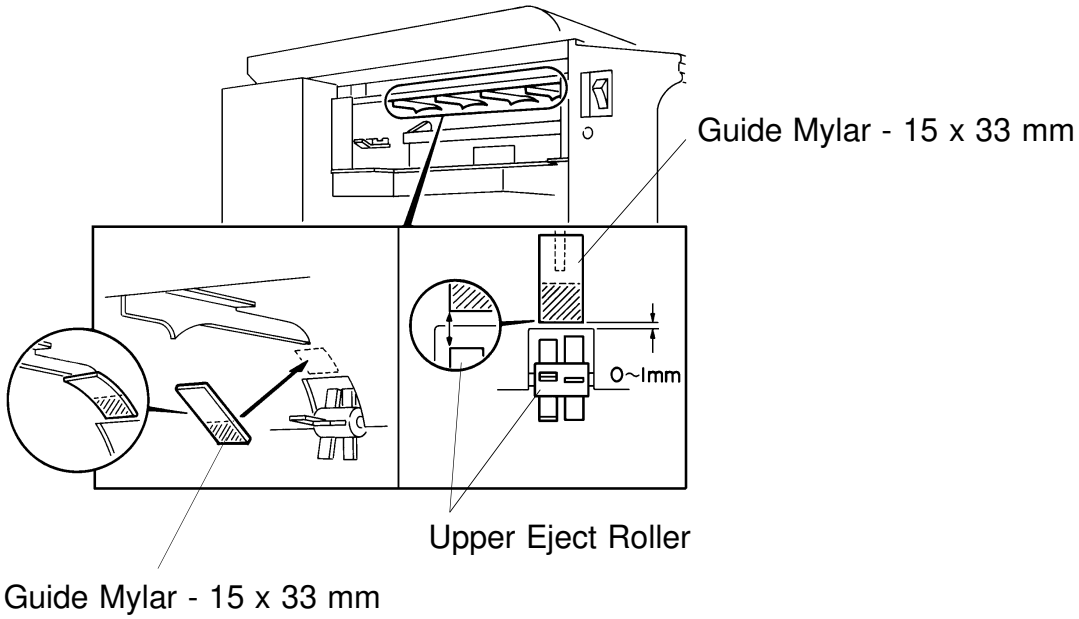
The new guide plate will be applied into the production from June 1994.



Solution 2 (For the field units)

As a solution for the field units, a mylar strip (**Guide Mylar - 15 x 33 mm: P/N C2179500**) has been registered as a service part. Install the mylar strips on the leading edge of the 4 ribs to cover the gap as shown.

NOTE: 4 mylars are required for one unit.



RICOH

Technical Bulletin No. RTB-005

SUBJECT: Ink Pump Improvement

DATE: Nov. 15, '95
PAGE: 1 of 2

PREPARED BY: H. Kokubo
CHECKED BY: M. Iwasa

FROM: 2nd Technical Support Section

CLASSIFICATION:
- ☐ Action Required
- ■ Troubleshooting
- ☐ Retrofit Information
- ☐ Revision of service manual
- ☐ Information only
- ☐ Other

MODEL:
Priport N810/N810-II

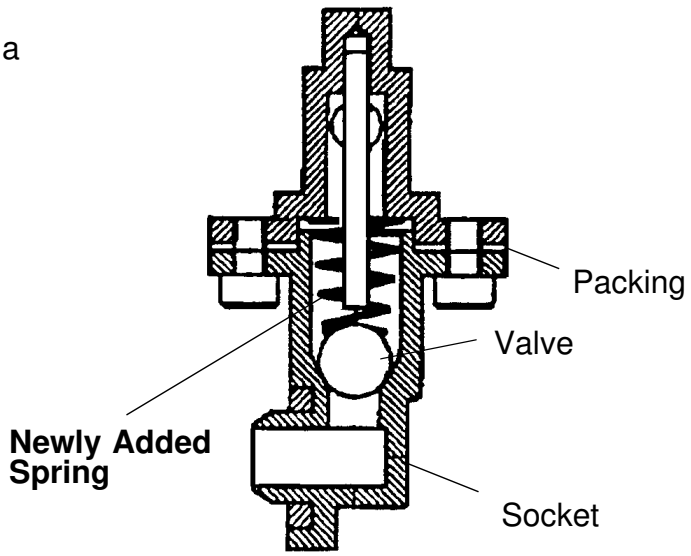
N810: Ricoh VT1730/Gestetner 5303/RexRotary 1220/nashuatec CP303/ABDICK 6120
N810-II: Ricoh VT1800/Gestetner 5304/RexRotary 1222/nashuatec CP304/ABDICK 6130

Information for the N810-II starts from this bulletin. RTB's number 1 to 4 are for the N810 only.

To ensure that all ink in the cartridge is supplied, a spring has been added inside the ink pump as shown to the right. The spring ensures that the small ball, which is used as a valve, is pushed back properly.

This modification has been applied from the September 1995 production runs of all Priport series models. The part numbers of the ink pump assemblies remain the same. (Note that the N850 and RN925 have been using the new type from the first mass production.)

There are three types of ink pump. They are the NA/NB type that can hold the 1000 cc ink cartridge, the N type that can hold the 600 cc ink cartridge only, and the N810 type for the N810 and N810-II only. See the following table for the applicable models.



Cross-section of the Bottom Part of the Ink Pump

TYPE OF INK PUMP	APPLICABLE MODELS
NA/NB	NA-2, NA-3, NB-2
N	N865, N860, N915, N935, N955, and all SS series models.
N810	N810, N810-II

There are two types of spring for these three types of the ink pump. The part numbers are:

C222 4710 (Pump Spring - 21 mm) : For the NA/NB type ink pump.

C224 4715 (Pump Spring - 13 mm) : For the N and N810 type ink pumps.

SOLUTION IN THE FIELD

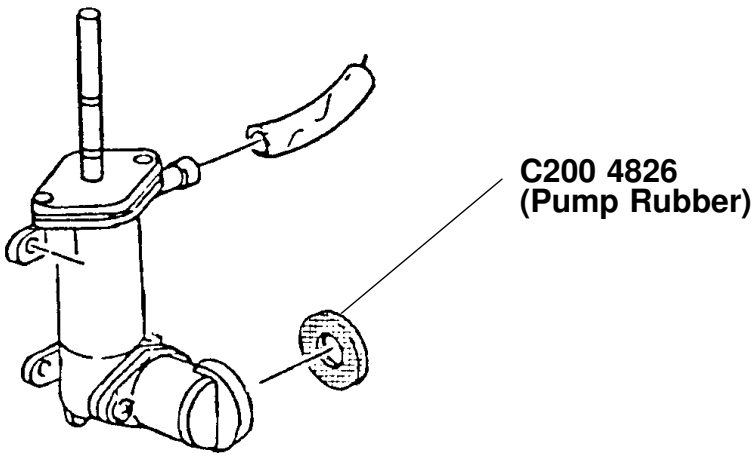
For the field machines, you can install the spring after removing the socket (with two screws). (It takes longer to replace the whole pump assembly.)

CAUTION:	When you remove the socket, ink will leak. Be sure to place absorbant material to prevent the floor from becoming dirty with ink.

NOTE: 1. There is a packing between the socket and housing (see the illustration on the previous page). If it is damaged, you may have to replace the packing at the same time. (Normally, this is not required.) The part number is:

C200 4827 (Packing - Pump Socket)

2. A rubber packing is used as shown below in order to ensure that the nozzle of the ink cartridge tightly contacts the pump socket. Check if this part is dislocated. The rubber packing used in the N810, the N865, and the other later models is adhered with glue, but it is not adhered for the other older models.



Technical Bulletin No. RTB-006

SUBJECT: Thermal Head Removal Procedure for N810-II	DATE: Mar. 31, '96 PAGE: 1 of 7
PREPARED BY: H. Kokubo CHECKED BY: M. Iwasa	FROM: 2nd Technical Support Section

CLASSIFICATION:

- ☐ Action Required
- ☐ Troubleshooting
- ☐ Retrofit Information
- ■ Revision of service manual
- ☐ Information only
- ☐ Other

MODEL:
Priport N810/N810-II
(N810-II Only)

N810: Ricoh VT1730/Gestetner 5303/RexRotary 1220/nashuatec CP303/ABDICK 6120
N810-II: Ricoh VT1800/Gestetner 5304/RexRotary 1222/nashuatec CP304/ABDICK 6130

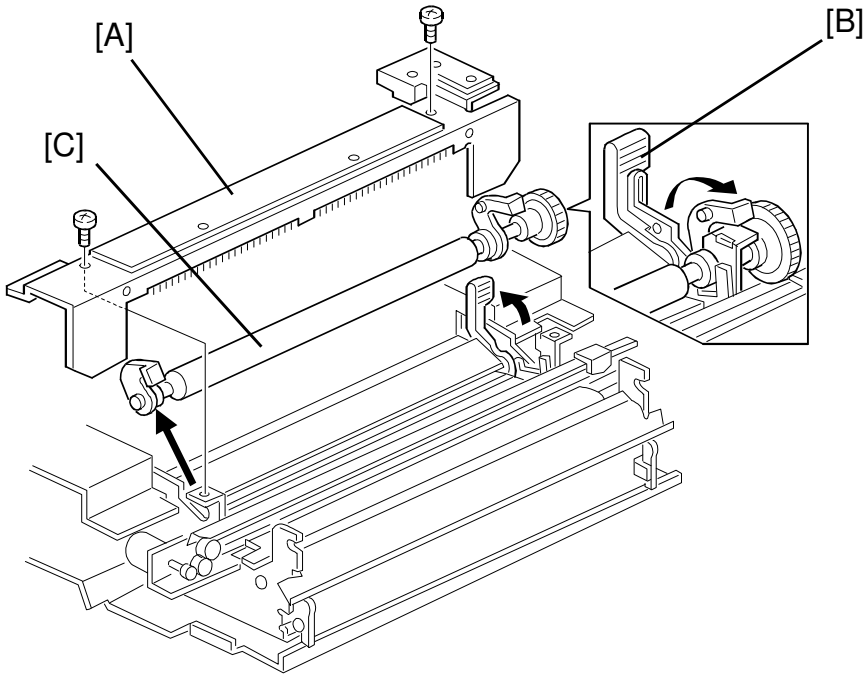
This bulletin is to inform you of the thermal head removal procedure, which is unique to the N810-II but has not been described in the service manual.

At the same time, this is to inform you that a modification will be implemented into the production to make the removal procedures easier. The details of the modification are as follows:

> A cutout has been made in the rear side (non-operation side) frame of the plotter unit. (The part number: C2174102, remains the same, but all service parts are the new type only.) This enables the removal of the thermal head (with the bracket) without having to forcibly spread out the side frames. Refer to the new thermal head removal procedure.
>
> This modification will be applied from the April 1996 production run.

Add the following pages of the new and old procedures for the thermal head removal to your service manual.

THERMAL HEAD REMOVAL PROCEDURE



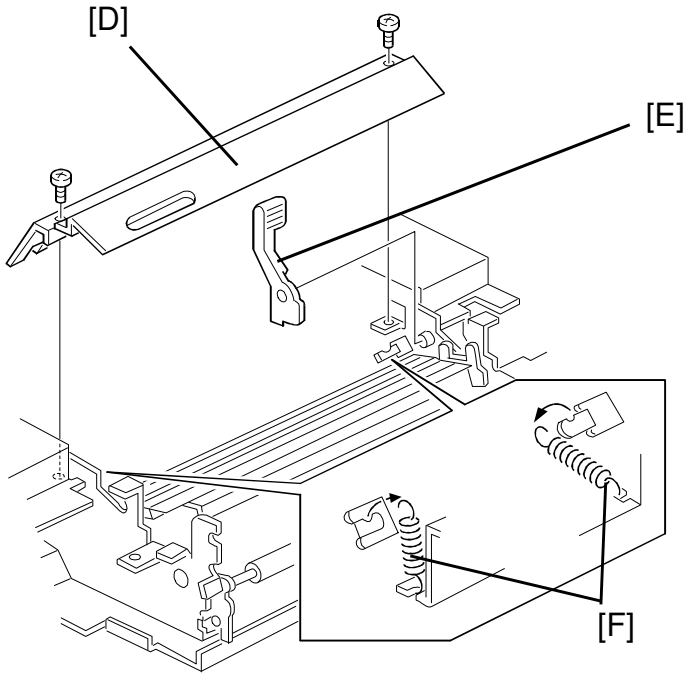
CAUTION: If the thermal head has been replaced with a new one, the input voltage must be readjusted. Follow the "THERMAL HEAD VOLTAGE ADJUSTMENT" section in the service manual.

1. Turn off the main switch and disconnect the power plug.

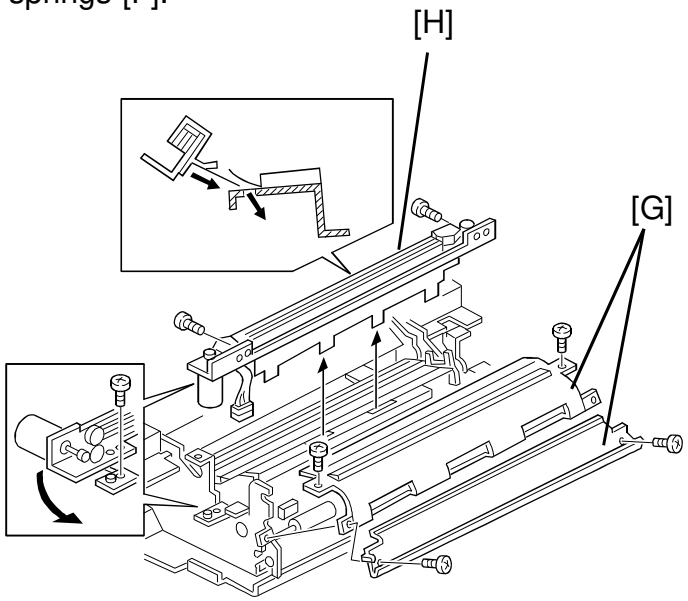
2. Remove the plotter unit. (Refer to the "PLOTTER UNIT REMOVAL" section in the service manual.)

3. Remove the platen roller cover [A].

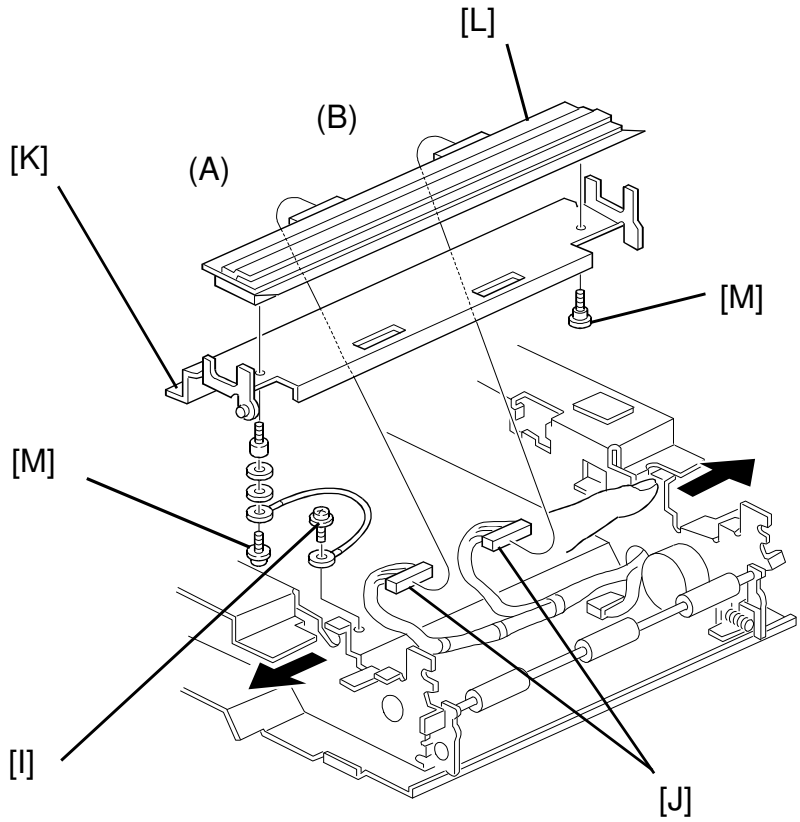
4. Lift the platen roller release lever [B] up until it locks. Then, unhook the lock levers and remove the platen roller [C].



5. Remove the thermal head cover [D], then remove the release lever [E].
6. Remove the two springs [F].



7. Remove the two guide plate [G].
8. Remove the cutter unit [H].



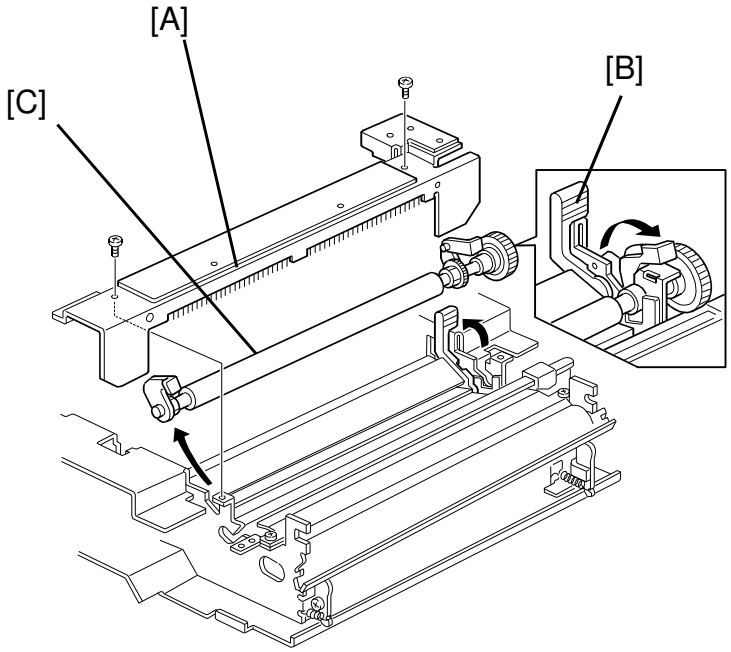
9. Remove the grounding screw [I].

10. Disconnect the connectors [J] from the thermal head.

11. While spreading the both side frames outward, unhook the pins on both sides of the thermal head bracket [K] and remove the bracket (with the thermal head).

12. Remove the two screws [M] and you can remove the thermal head [L].

THERMAL HEAD REMOVAL PROCEDURE (New Procedure)



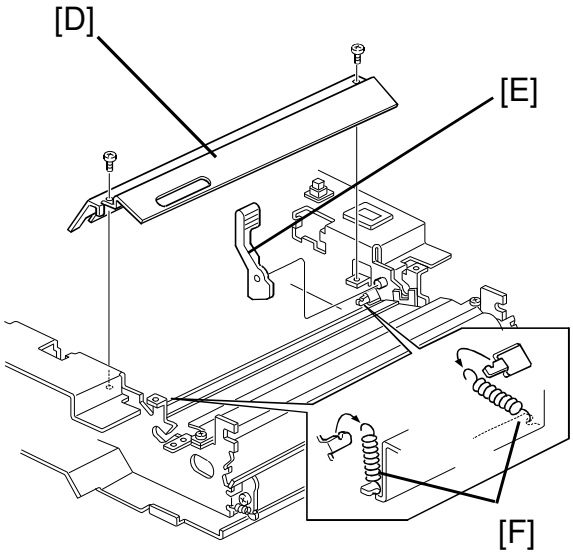
CAUTION: If the thermal head has been replaced with a new one, the input voltage must be readjusted. Follow the "THERMAL HEAD VOLTAGE ADJUSTMENT" section in the service manual.

1. Turn off the main switch and disconnect the power plug.

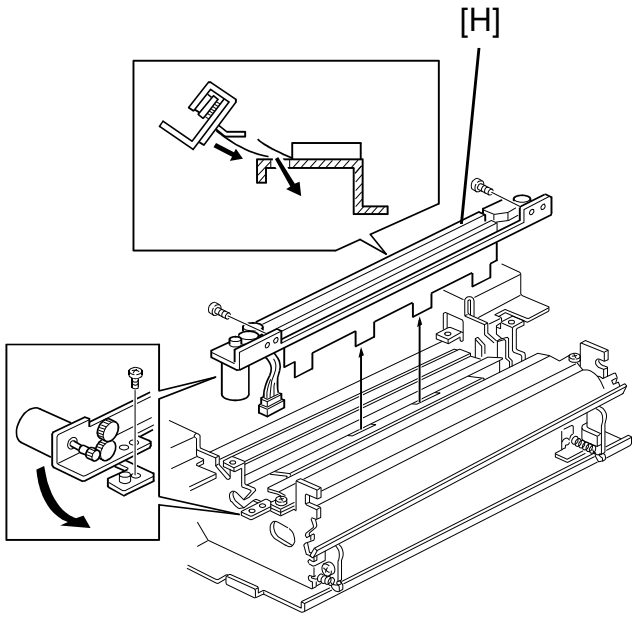
2. Open the scanner unit.

3. Remove the platen roller cover [A].

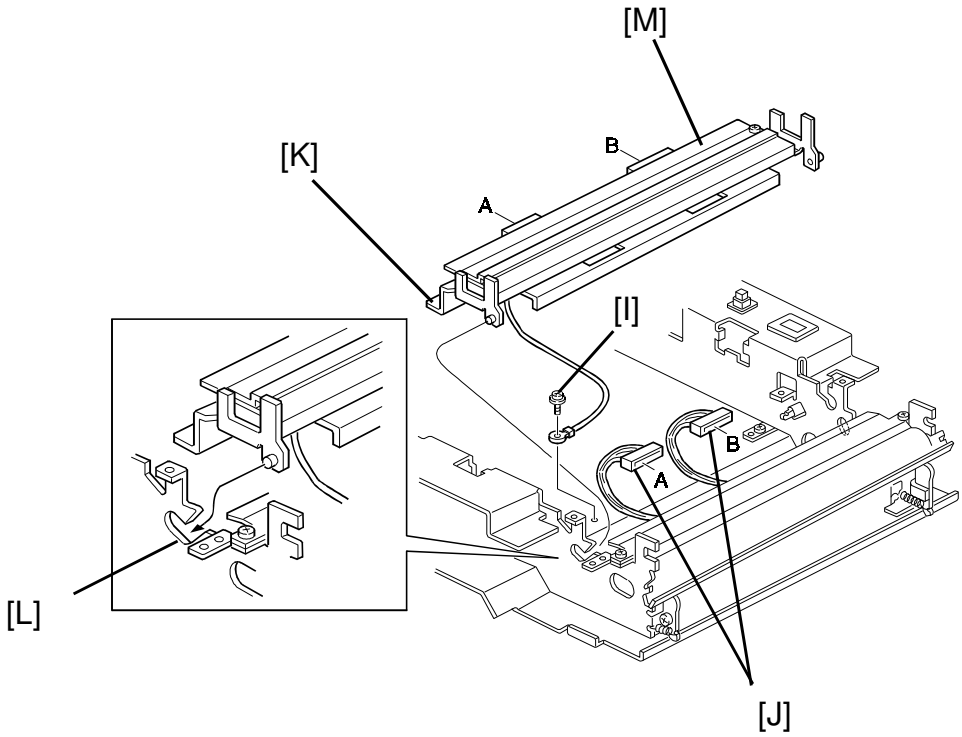
4. Lift the platen roller release lever [B] up until it locks. Then, unhook the lock levers and remove the platen roller [C].



5. Remove the thermal head cover [D], then remove the release lever [E].
6. Remove the two springs [F].



7. Remove the cutter unit [H].



8. Remove the grounding screw [I].

9. Disconnect the connectors [J] from the thermal head.

10. Unhook the pins on non-operation sides of the thermal head bracket [K] through the cutout [L] and remove the bracket (with the thermal head).

NOTE: The cutout [L] has been newly added.

11. Remove the two screws and you can remove the thermal head [M].

RICOH

Technical Bulletin No. RTB-007

SUBJECT: Paper Leading Edge Dirty with Ink

ISSUED ON: August 31, 1996

CLASSIFICATION:

- ☐ Action Required
- ■ Troubleshooting
- ☐ Retrofit Information
- ☐ Revision of service manual
- ☐ Information only
- ☐ Other

ISSUED BY:

H. Kokubo,
Priport Service Planning Section

MODEL: PRIPORT

N810: Ricoh VT1730/Gestetner 5303/RexRotary 1220/nashuatec CP303/ABDICK 6120

N810-II: Ricoh VT1800/Gestetner 5304/RexRotary 1222/nashuatec CP304/ABDICK 6130/SVN3100DNP

SYMPTOM:

During a long printing run, unwanted ink appears at the leading edge of copies. At first, it is very hard to see, but it becomes more visible as the printing continues.

CAUSE:

Due to rough edges of the paper, the master wrapped around the drum becomes damaged.

Just when the leading edge of the paper reaches under the drum, it is pressed against the drum surface, so that the master is wrapped around by the press roller. Due to this repeating action, the master's surface is gradually torn where the paper leading edge contacts it.

Also, if the paper generates a lot of paper dust, this is accumulated on the press roller surface and damages the master in the same manner.

Normally, even if the master is damaged, there is no ink around the area beneath the master where the paper leading edge contacts it (there are no holes in the metal screen). However, after a long printing run, ink leaks onto this area and is transferred to the paper through the damaged part of the master.

SOLUTION:

1. Change the paper type. Re-setting the paper on the paper feed table upside-down (so that the rough edge of the paper faces downward) may also solve the problem.
2. Change the image position on paper slightly using the IMAGE SHIFTING key before the leading edge of the paper becomes dirty with ink.

-------- Continued ----------

3. Cover the leading edge part of the cloth screen on the drum with tape, so that ink does not leak even when the master is damaged.

   Instructions and remarks for installing the tape for each PRIPORT model are as follows:

Remarks general to all models:

- It is recommended to use:

  Teflon Tape - 19 mm: P/N-A012 9112

- The position of the tape for each model has been determined to maintain the specified leading edge blank margin for copies. (The specification is 10 mm for the NA2/N915/935/955 models, 8 mm for the NA3 model, and 5 mm for the other models.)

- Even after installing the tape, the same problem may occur if the leading edge registration of copies is not adjusted properly (if the paper feed timing is delayed). At first, check that the leading edge registration of copies is OK. If it is out of specification, follow the "SECOND FEED ROLLER START TIMING" adjustment procedure in the service manual. (For the N810 and N810-II models, follow the "LEADING EDGE REGISTRATION ADJUSTMENT" procedure.)

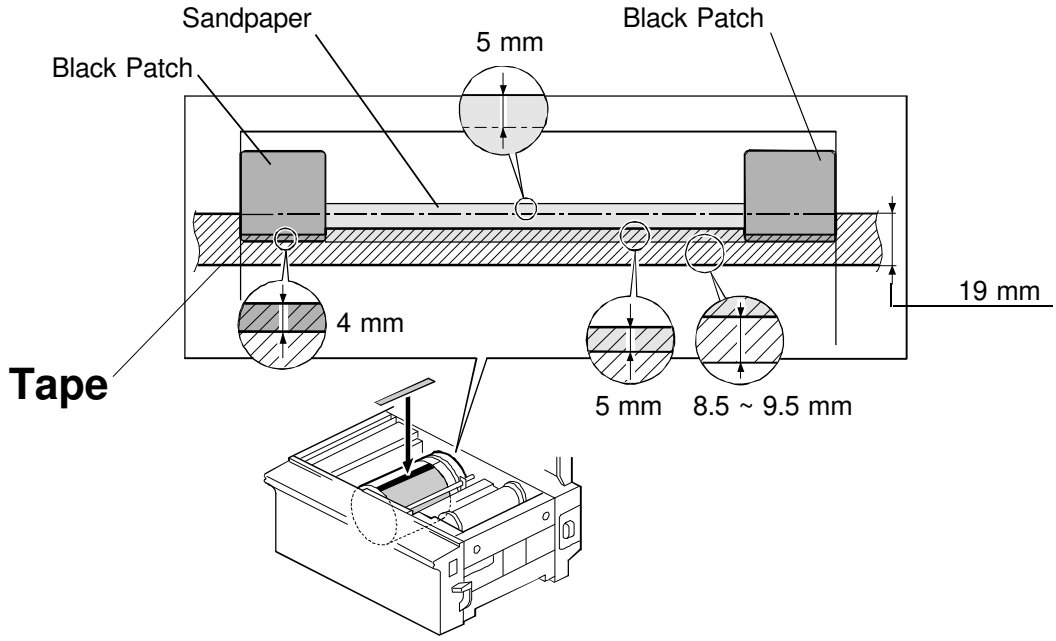
- For each model, strip(s) of sandpaper are used on the leading edge part of the cloth screen. This prevents the master wrapped around the drum from slipping out of the master clamper due to the repeating press roller on/off action. Avoid covering all the sandpaper when you install the tape. (To adhere the tape firmly, some area of the sandpaper should be covered. Details are in the instructions for each model on the following pages.)

- Even if the sandpaper is not used on the cloth screen (the old type cloth screen), install the tape at the same position by measuring the distance from the edge of the cloth screen. (Refer to the distance between the edge of the screen and the sand paper, which is shown in the following illustrations for each model.)

RICOH **Technical Bulletin** **No. RTB-007**

For N810 and N810-II Models

N810: Ricoh VT1730/Gestetner 5303/RexRotary 1220/nashuatec CP303/ABDICK 6120
N810-II: Ricoh VT1800/Gestetner 5304/RexRotary 1222/nashuatec CP304/ABDICK 6130/SVN3100DNP



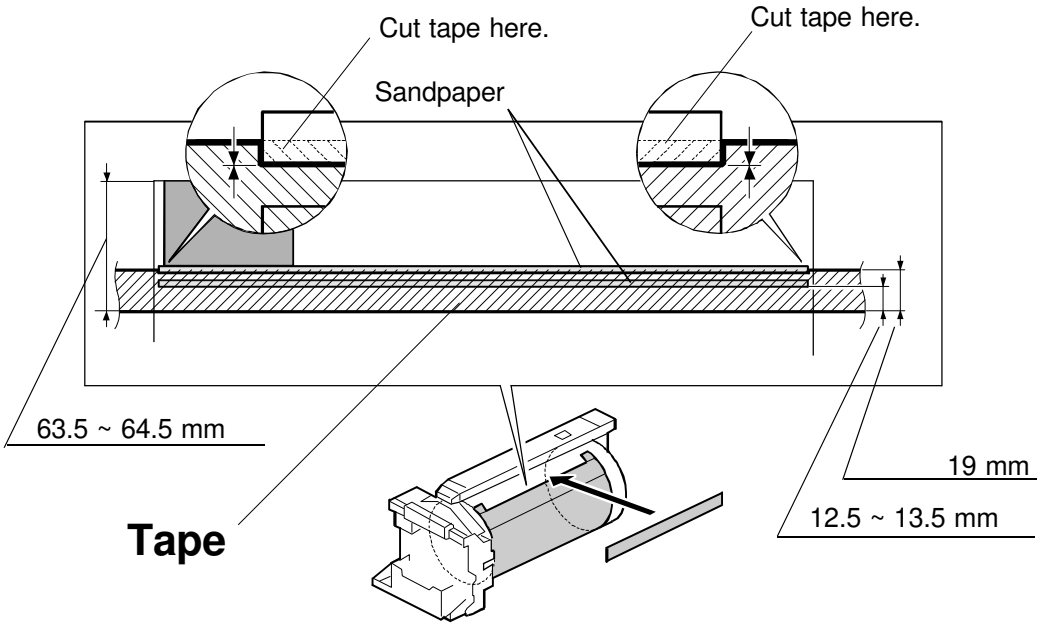
REMARKS:

- Cut the tape where it covers the sandpaper as shown. (The indicated area must be left as shown to hold the tape on the screen firmly.) Be careful not to damage the cloth screen surface.
- **Also, cut the tape where it covers the black patches (for the drum master detection sensor) as shown. It they are covered, drum master detection does not work properly.**
- Cut both edges of the tape at the edge of the metal screen. Do not let the tape ride over the drum flanges.
- Even if the sandpaper is not used on the cloth screen (the old type cloth screen), install tape at the same position by measuring the distance from the edge of the black patch to the lower edge of the tape (between 8.5 and 9.5 mm).

RICOH **Technical Bulletin** **No. RTB-007**

For NA33 model

NA33: Ricoh VT3800/Gestetner 5385/RexRotary 1290/nashuatec CP385/ABDICK 6790/SVN3300DNP



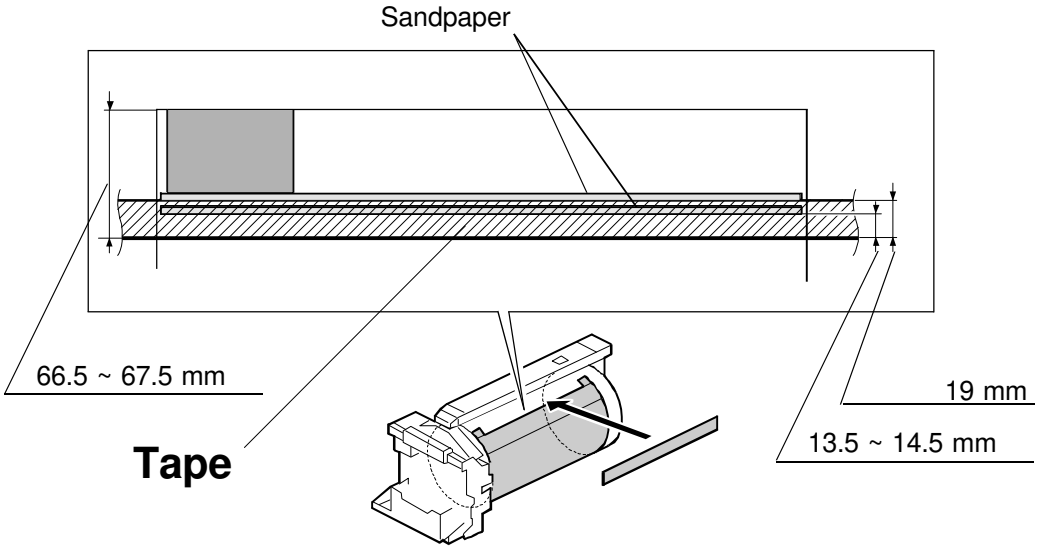
REMARKS:

- Cut the tape where it covers the upper strip of sandpaper as shown. Be careful not to damage the cloth screen surface.
- Cut both edges of the tape at the edge of the metal screen. Do not let the tape ride over the drum flanges.

RICOH **Technical Bulletin** **No. RTB-007**

For NA3 and NA2 Models

NA2: Ricoh VT3500/Gestetner 5375/RexRotary 1280/nashuatec CP375/ABDICK 6720
NA3: Ricoh VT3600/Gestetner 5380/RexRotary 1285/nashuatec CP380/ABDICK 6770



REMARKS:

- The position of the tape is slightly different from that for the NA33 model since the specification of the leading edge blank margin is different. (The position of the sandpaper is also different.) The upper edge of the tape should meet between the two strips of sandpaper. You do not have to cut the tape (unlike in the case of the NA33 model).

- Cut both edges of the tape at the edge of the metal screen. Do not let the tape ride over the drum flanges.

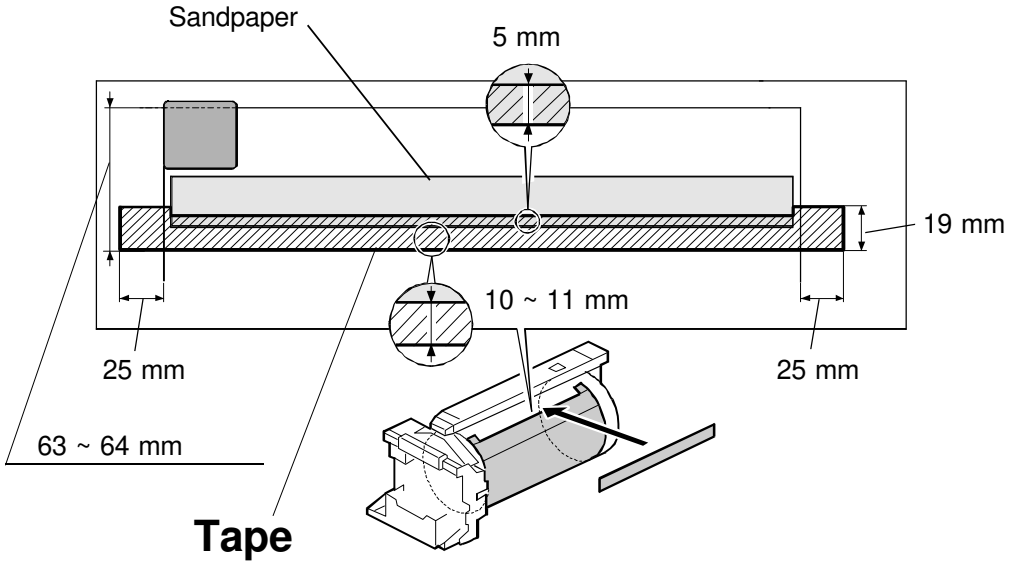
- Even if the sandpaper is not used on the cloth screen (the old type cloth screen), install the tape at the same position by measuring the distance from the edge of the cloth screen to the lower edge of the tape (between 66.5 and 67.5 mm).

- Since the specification of the leading edge blank margin for the NA2 model is 10 mm (8 mm for the NA3 model), it is permissible to install the tape 2 mm lower than the position indicated above (NA2 only).

Technical Bulletin No. RTB-007

For RN925, NB2, N850, N860, N865, N915, N935, and N955 Models

RN925: Ricoh VT2400/Gestetner 5340/RexRotary 1255/nashuatec CP340/ABDICK 6550
NB2: Ricoh VT2600/VT2630/Gestetner 5360/RexRotary 1270/nashuatec CP360
N850: Ricoh VT2200/Gestetner 5327/RexRotary 1252/nashuatec CP327/ABDICK 6530/SVN3200DNP
N860: Ricoh VT2005/Gestetner 5323/RexRotary 1245/nashuatec CP323
N865: Ricoh VT2105/Gestetner 5325/RexRotary 1250/nashuatec CP325/ABDICK 6520
N915: Ricoh VT2100/VT2130/VT2150/Gestetner 5310/5315/5320/RexRotary 1240/1241/1242/ nashuatec CP310/CP315
N935: Ricoh VT2300/Gestetner 5330/RexRotary 1260/nashuatec CP330
N955: Ricoh VT2500



REMARKS:

- Cut the tape where it covers the sandpaper as shown. (The indicated area must be left as shown to hold the tape on the screen firmly.) Be careful not to damage the cloth screen surface.
- Cut both edges of the tape as indicated.
- Even if the sandpaper is not used on the cloth screen (the old type cloth screen), install tape at the same position by measuring the distance from the edge of the cloth screen to the lower edge of the tape (between 63 and 64 mm).
- Since the specification of the leading edge blank margin for the N915/935/955 model is 10 mm (5 mm for the other models), it is permissible to install the tape 5 mm lower than the position indicated above.