RICOH

Technical Bulletin No. RTB-006

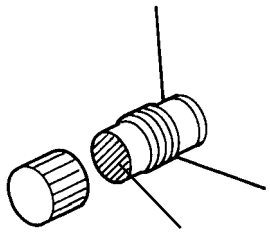
SUBJECT: Ink Cartridge Seal	DATE: Nov.30 1990 PAGE: 1 of 1
PREPARED BY: S.Asai CHECKED BY:	FROM: Copier Technical Support Section

CLASSIFICATION:

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

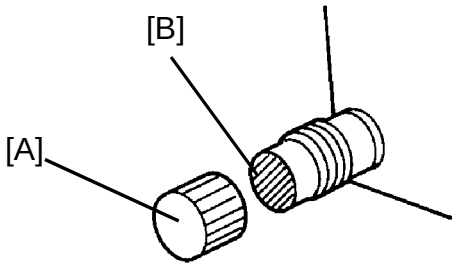
MODEL:
SS935/955
Ges 5230/5270
Rex 1160/1170

A transparent seal will be added to the exit of the ink cartridge (all colors) to prevent ink from being spilled on the floor during cartridge installation. It is not necessary to remove this seal; a projection on the ink pump inlet breaks this seal when the cartridge is set into the drum cartridge holder.



Transparent Seal

This modification will be implemented in the December production run. The following illustration and instructions will be printed on all ink cartridges early next year. This instructs the customers not to remove the seal at installation.



Handlin
Remov **f ink.**
Do not
Set ink

RICOH

Technical Bulletin **No. RTB-000**

RICOH

Technical Bulletin No. RTB-007

SUBJECT: Drum Retrofit to prevent Ink Leakage (Refer to M/B No. 21)	DATE: Jan.31.1991 PAGE: 1 of 3
PREPARED BY: S.Asai CHECKED BY:	FROM: Copier Technical Support Section

CLASSIFICATION:

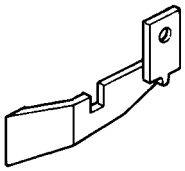
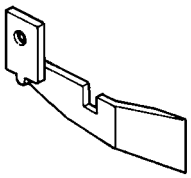
- ☐ Action Required
- ☐ Troubleshooting
- ■ Retrofit Information
- ☐ Revision of service manual
- ☐ Information only
- ☐ Other

MODEL:
SS935/955
Ges 5230/5270
Rex 1160/1170

A drum blades kit has been registered as a spare part. With this retrofit kit, technicians can quickly and easily correct the drum ink leakage problem in the field.
Note that all machines produced since November 1990 have been modified at the factory to correct this problem. (See the cut-in serial numbers in M/B No. 21.)

Drum Blades Kit: P/N C2079011

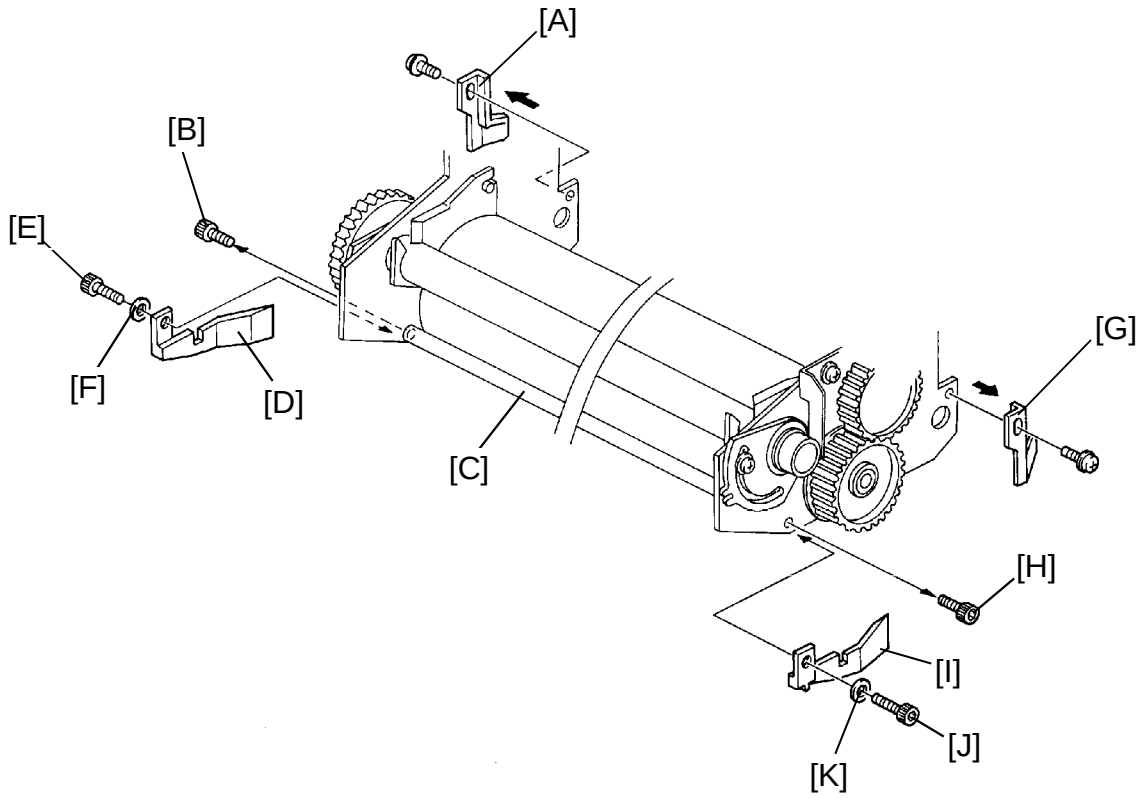
P/N C2079011 consists of the following parts.

No	Part Number	Part Description	Qt'y	Part Illustration
1	C2074745	Front Drum Blade	1	
2	C2074746	Rear Drum Blade	1	
3	05940080E	Internal Hexagon Head Screw--M4 x 8	2	
4	07010040Z	Flat Washer--M4	2	

Installation Procedure for the Drum Blades Kit:

1. Remove the drum clamper assembly.
2. Remove the tetron screens from the drum.
3. Remove the stainless steel screen from the drum.
4. Remove the old front drum blade (C2004745) [A] (1 screw).
5. Remove the internal hexagon head screw (M4 x 6) [B] securing the ink roller shaft stay [C], then install the new front drum blade (C2074745) [D] and secure it with the internal hexagon head screw (M4 x 8) [E] and the flat washer [F].
6. Remove the old rear drum blade (C2004746) [G] (1 screw).
7. Remove the internal hexagon head screw (M4 x 6) [H] securing the ink roller shaft stay [C], then install the new rear drum blade (C2074746) [I] and secure it with the internal hexagon head screw (M4 x 8) [J] and the flat washer [K].
8. Reverse the procedure to reassemble.

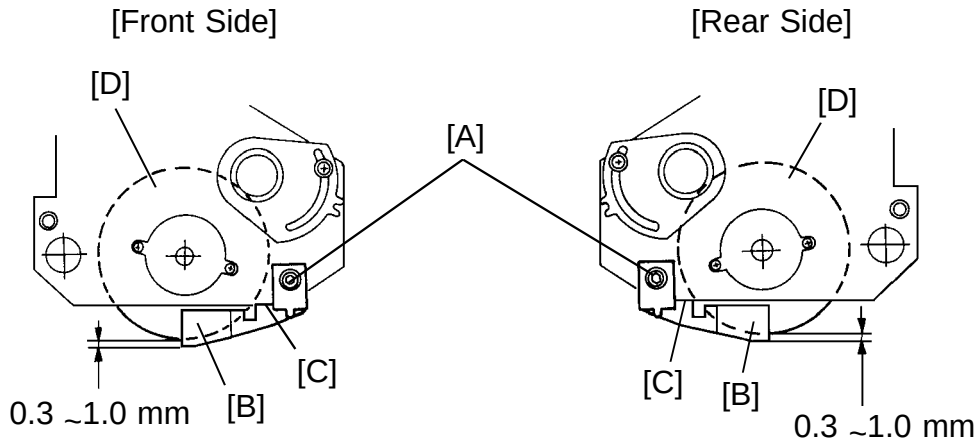
Note: Do not re-use the old front and rear drum blades.



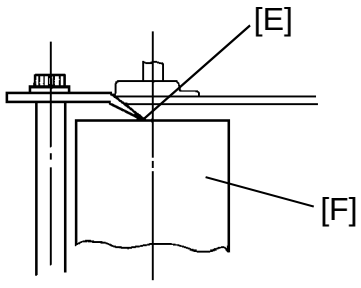
Adjustment Procedure:

1. Tighten each (front and rear) internal hexagon head screw [A] so that the drum blade [B] contacts the lower edge [C] of the side plate.

Note 1: Make sure that the clearance between the ink roller [D] and the drum blade [B] is 0.3 to 1.0 mm.



Note 2: Make sure that the drum blade edge [E] contacts the ink roller [F].



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Technical Bulletin No. RTB-008

SUBJECT: Thermal Head Cleaner Cap	DATE: Jan.31th '91 PAGE: 1 of 2
PREPARED BY: S.Asai CHECKED BY:	FROM: Copier Technical Support Section

CLASSIFICATION:

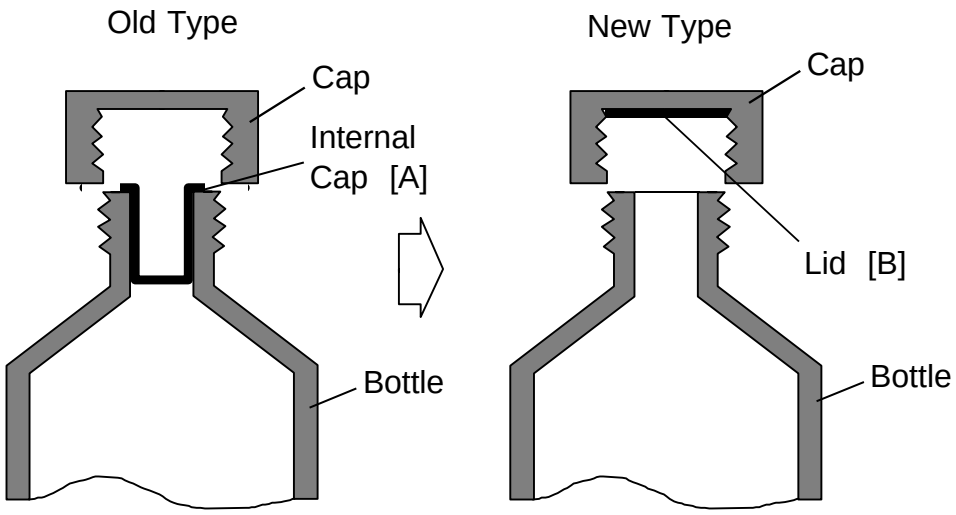
- ☐ Action Required
- ☐ Troubleshooting
- ☐ Retrofit Information
- ☐ Revision of service manual
- ■ Information only
- ☐ Other

MODEL:
SS 935/955
Ges 5230/5270
Rex 1160/1170

[Contents]:

There has been a problem with the internal cap [A] getting stuck inside the thermal head cleaner bottle and it is difficult to pull it out.
The internal cap has been changed to a lid [B] as illustrated below:

This modification has been implemented since the November '90 production run.
Please note that the part number of the thermal head cleaner remains the same.



*After the cap is removed, the internal cap must be pulled out.

* The lid remains inside the cap

[Cut-in Serial Numbers]:

SS935: S/N 2640110001-
SS955: S/N 2650110001-

Ges 5230: S/N	USA version: SI52303634-	Europe version: 523012133-
	Taiwan version: From December '90	
Ges 5270: S/N	USA version: SI52707378-	Europe version: 527012716-
	Taiwan version: From December '90	
Rex 1160: S/N	Europe version: 116051243-	Canada version: 116088024-
	Taiwan version: From December '90	
Rex 1170: S/N	Europe version: 117051373-	Canada version: From December '90
	Taiwan version: From December '90	

RICOH

Technical Bulletin No. RTB-009

SUBJECT: Separation Plate (P/N: 55076055)	DATE: Mar.15 '91 PAGE: 1 of 1
PREPARED BY: S.Asai CHECKED BY:	FROM: Copier Technical Support Section

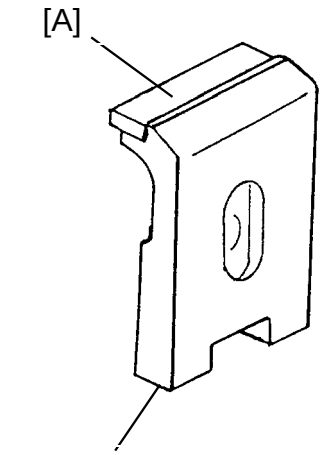
CLASSIFICATION:

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

MODEL:
SS 935/955
Ges 5230/5270
Rex 1160/1170

There have been reports in the field of the rubber separation pad [A] easily coming off the separation plate (P/N: 55076055) [B]. This occurred with separation plates that had been supplied as spare parts.

When installing a new separation plate, check the bond between the pad and the plate. If the bond is not sufficiently strong, apply a strong adhesive (super glue).



Separation Plate (P/N: 55076055)

NOTE: We have checked all the parts currently stored at Ricoh Atsugi SPC.

RICOH

Technical Bulletin No. RTB-010

SUBJECT: Paper jams caused when one-way clutch slips	DATE: Mar. 30 '91 PAGE: 1 of 1
PREPARED BY: S.Asai CHECKED BY:	FROM: Copier Technical Support Section

CLASSIFICATION:

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

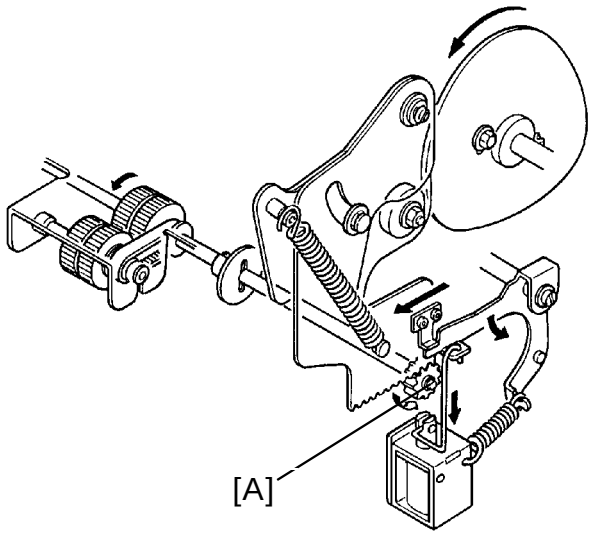
MODEL:
SS 935/955
Ges 5230/5270
Rex 1160/1170

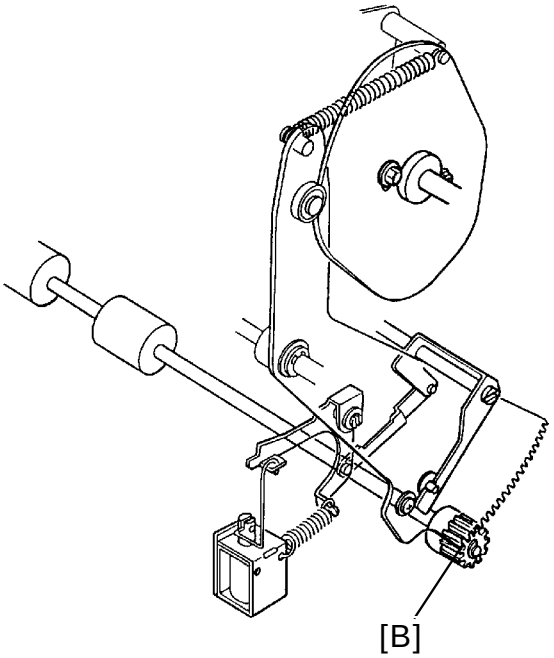
[Phenomenon]:

The one-way clutches inside the paper feed and second feed roller gears have worn the roller shafts smooth. The clutch slips and paper jams or is not fed. This tends to occur during high speed printing and is more likely to occur on machines that exceed the recommended monthly copy volume. When the feed mechanism is manually operated to check the paper feed, paper feeds correctly.

[Countermeasure]:

1. Remove the paper feed roller gear [A] and the second feed roller gear [B].
2. With fine sandpaper, lightly sand the roller shaft surface at the point where it comes into contact with the one-way clutch. This increases the coefficient of friction.
3. If paper jams continue to occur, replace the one- way clutch.
4. If paper jams continue to occur, replace the roller shaft together with the one-way clutch.





RICOH

Technical Bulletin No. RTB-011

SUBJECT: Ink Cartridge "O" Ring and Rubber Pad	DATE: April.30.'91 PAGE: 1 of 2
PREPARED BY: S. Asai CHECKED BY:	FROM: Copier Technical Support Section

CLASSIFICATION:

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

MODEL:
SS935/955
Ges 5230/5270
Rex 1160/1170

[**Phenomenon 1]:**

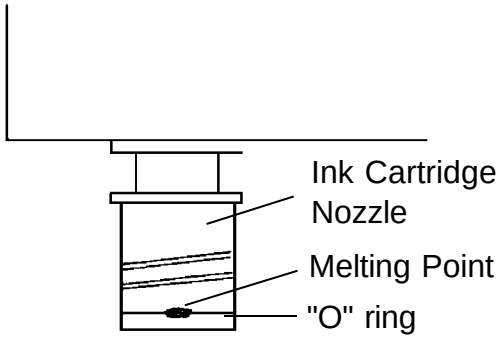
There has been a problem with the "O" ring inside the ink cartridge nozzle. The "O" ring comes off and remains on the nozzle of the ink pump when the ink cartridge is replaced, or it comes off and stays in the cartridge cap when the cap is removed. This occurs when the temperature changes radically making the "O" ring contract.

[Countermeasure 1]:

Instruct customers on how to replace the ink cartridge. Have them follow this procedure:

1. Make sure that the "O" ring does not stay on the nozzle of the ink pump before a new ink cartridge is installed.
   If it remains on the nozzle, remove it; otherwise the new ink cartridge cannot be set properly.

2. Make sure that the "O" ring does not stay in the cartridge cap when the cap is removed from the ink cartridge nozzle.
   If the "O" ring stays in the cartridge cap, remove the "O" ring from the cartridge cap and install it inside the cartridge nozzle.



Note: To prevent the "O" ring from coming off, more than 2 points between the "O" ring and the ink cartridge nozzle were soldered as shown above.
This melting process has been implemented since the March '91 production run.
For a mark of the melting process, a black circle has been stamped on the end of the lot number. (Example: Lot No. 1911932 ⁰)

[Phenomenon 2]:

There has been a problem with the rubber pad located on the ink pump nozzle. It comes off when the ink cartridge is removed. When no rubber pad remains on the ink pump nozzle, ink inside the cartridge may not be pumped to the drum even if a new ink cartridge is installed. This problem does not happen very often.

[**Countermeasure 2]:**

Apply a strong adhesive (super glue) as follows:

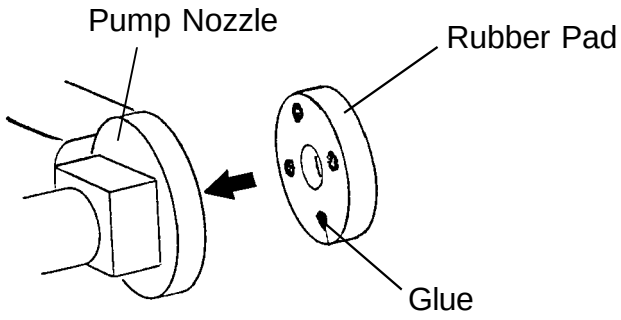
1. Remove the rubber pad with a small screwdriver.

2. Clean the rubber pad and the ink pump nozzle (contacting place of the rubber pad) with cloth. If stains remain, clean them off with the thermal head cleaner.

3. Apply a little super glue to the 4 points on the rubber pad as shown.

Note: Do not apply too much glue. This is because the rubber pad cannot be inserted correctly if there is too much glue.

4. Insert the rubber pad into the pump nozzle.



Note: The above countermeasure has been implemented beginning with the March '91 production run.

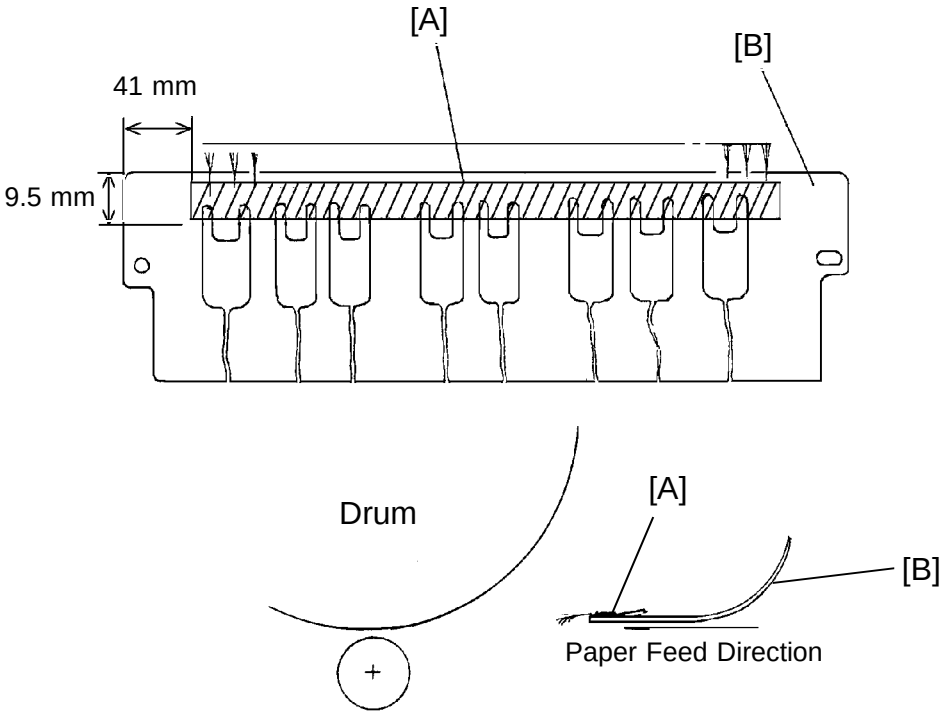
RICOH	Technical Bulletin	No. RTB-012
SUBJECT: Paper jamming around the drum		DATE:June 15 '91 PAGE: 1 of 1
PREPARED BY: S.Asai CHECKED BY:	FROM: Copier Technical Support Section	
CLASSIFICATION: ☐ Action Required ■ Troubleshooting ☐ Retrofit Information	☐ Revision of service manual ☐ Information only ☐ Other	MODEL: SS935/955 Ges 5230/5270 Rex 1160/1170

[Phenomenon]:

Paper jamming occurs around the drum because of static electricity when the machine is used under low humidity conditions. Heavy static charges will build up around the master during the printing run. This happens particularly when thin paper is being used at high speed rotations. This also happens if the original (and therefore the master on the drum) is changed.

[Countermeasure]:

Stick the antistatic brush (P/N: C2079010) [A] on the upper second feed roller guide plate [B] as illustrated below: (The antistatic brush has been registered as a spare part.)



Note: Depending on the type of paper and/or the environment, paper might still jam even though the antistatic brush was installed on the guide plate.
The occurrence ratio varies according to the environment. If possible, improve the environmental conditions or move the machine to a better place.

RICOH

Technical Bulletin No. RTB-013

SUBJECT: Ink setoff	DATE: July 31 '91 PAGE: 1 of 1
PREPARED BY: S.Asai CHECKED BY:	FROM: Copier Technical Support Section

CLASSIFICATION:		MODEL:
☐ Action Required ■ Troubleshooting ☐ Retrofit Information	☐ Revision of service manual ☐ Information only ☐ Other	SS935/955 (SS915/930/950) Ges 5230/5270 (Ges 5210/5130/5170) Rex 1160/1170 (Rex 1140/1060/1070)

In order to reduce the ink setoff on the SS900 (16 dot) series, we have registered a special tetron mesh screen **(P/N C2079006)** as a spare part. Install this screen instead of the current drum screen originally installed on the drum.

Characteristic of the special tetron mesh screen:

1. This screen consists of three fine mesh screens to reduce the amount of ink transferred from the drum to the paper.
2. The special tetron mesh screen is effective in combination with type 905 (Ges 5200, Rex 1100) master.

Note: This screen must be used when the customer requires less ink setoff than the image density. This is because the image density is slightly lighter when the special tetron mesh screen is used.

With the special tetron mesh screen, the ink setoff is reduced but does not disappear completely even though the special screen is used with type 905 (Ges 5200, Rex 1100) master.

Place an additional order for the special screen after you confirm its performance on the machine.

If the special screen is used on the 800 (12 dot) series with type 800 (12 dot) master, the image density will be lower than that of the 900 (16 dot) series.

RICOH

Technical Bulletin No. RTB-014

SUBJECT: Paper exit pawl air pump	DATE: July 31 '91 PAGE: 1 of 5
PREPARED BY: S.Asai CHECKED BY:	FROM: Copier Technical Support Section

CLASSIFICATION: ☐ Action Required ■ Troubleshooting ☐ Retrofit Information	☐ Revision of service manual ☐ Information only ☐ Other	MODEL: SS935/955 (SS915/930/950) Ges 5230/5270 (Ges 5210/5130/5170) Rex 1160/1170 (Rex 1140/1060/1070)

To ease paper separation from the drum, we have registered the air pump kit **(P/N C2119001)** as a spare part so that the paper exit pawl air pump mechanism such as that of the VT3500 (Ges 5375, Rex 1280, NSA CP375) can be installed on the other models listed above. This kit can be also installed on the SS 800 (12 dot) machines.

Note: When the blank area at the leading edge of copy is too narrow and/or the original has a large solid image, paper might still jam around the drum even though the air pump kit was installed on the machine.

Paper exit pawl air pump mechanism:

The paper exit pawl air pump produces a jet of air when the paper exit pawl comes near the drum surface. This jet of air helps push down on the paper and separate it from the drum.

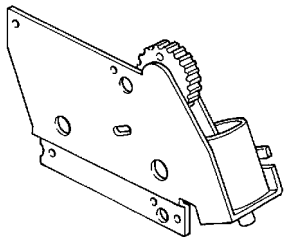
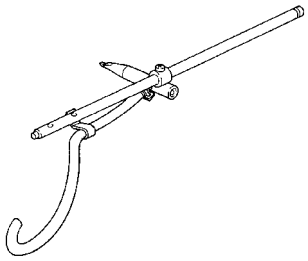
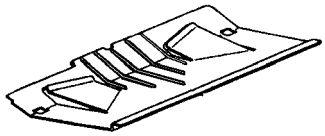
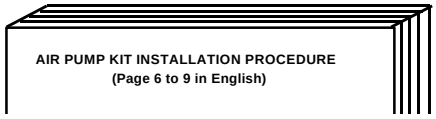
Air pump kit installation procedure:

Part check list and installation procedure follow this page.

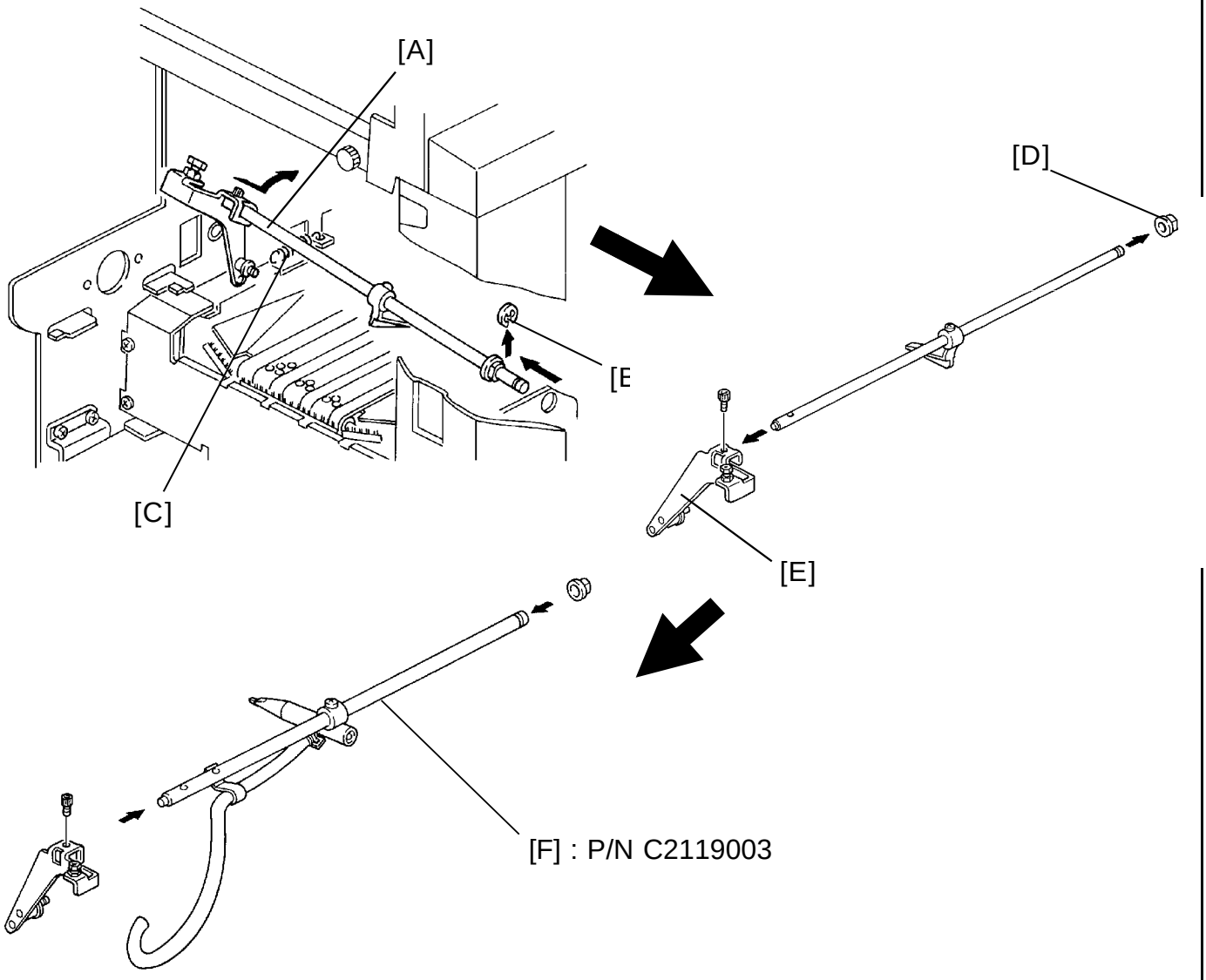
1. PART CHECK

Make sure that you have all the parts listed below.

* The air pump kit (P/N C2119001) consists of the following parts.

No	Part Number	Description	Qty	Shape
1	C2119002	Air Pump Assembly	1	
2	C2119003	Exit Pawl Assembly	1	
3	C2136201	Shelter Plate	1	
4	C2094711	Hose Band	1	
5	55066073	Stopper Screw	1	
6	C2119004	Installation Procedure	1	

2. INSTALLATION PROCEDURE

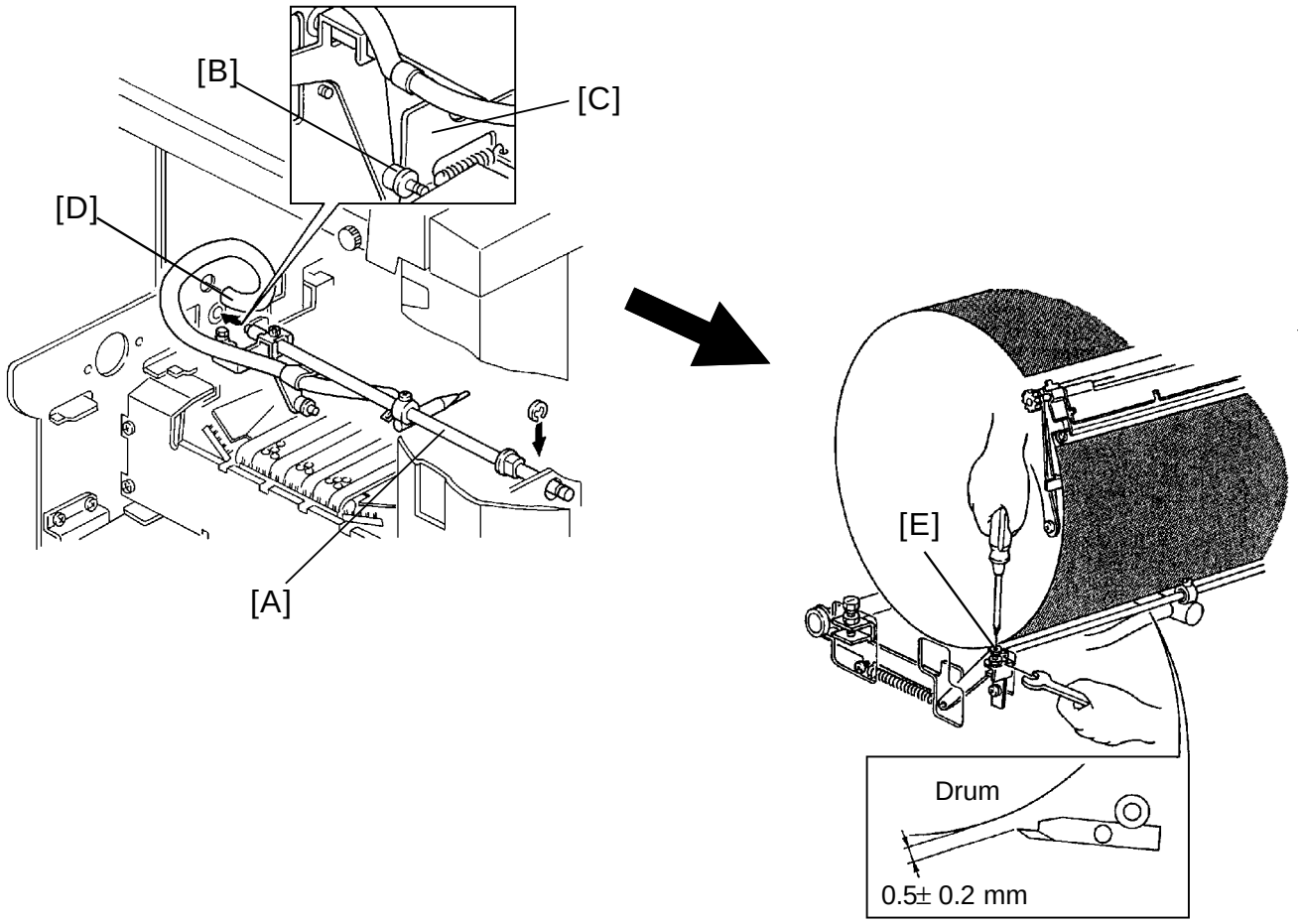


Note: Before installing the air pump unit, remove the drum, the rear cover, and the shelter plate.

1. Open the master eject unit and remove the exit pawl assembly [A] (1 E-ring [B] and 1 spring [C]) from the machine .

2. Remove the bushing [D] and the exit pawl lever [E] (1 Allen screw) from the shaft.

3. Mount the above exit pawl lever on the new exit pawl shaft [F] (1 Allen screw used on the previous shaft) and insert the bushing onto the shaft.



4. Install the new exit pawl unit [A] (assembled on the previous page) to the machine (1 E-ring and 1 spring).

Note: Make sure that the collar [B] on the exit pawl lever is correctly placed on the exit pawl drive cam [C].

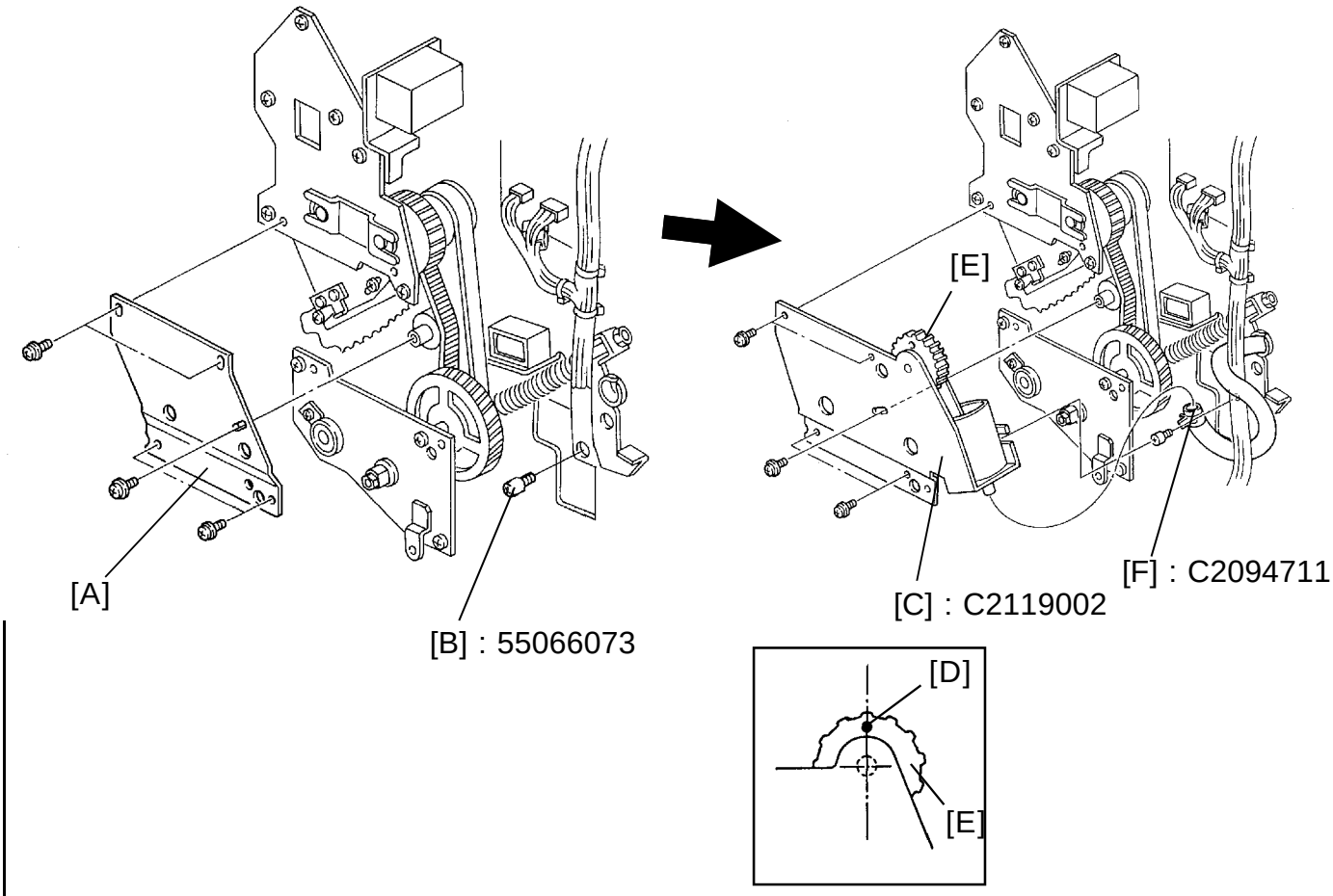
5. Insert the edge of the vinyl hose [D] into the hole on the rear side plate as shown.

- EXIT PAWL CLEARANCE ADJUSTMENT -

6. Manually turn on the paper feed and printing pressure solenoids. Using a spanner (10 mm), gradually rotate the drum rotation shaft counterclockwise to move the exit pawl to the drum.

7. When the printing pressure is applied, adjust the clearance between the drum and the exit pawl by turning the screw [E]so that it is 0.5± 0.2 mm.

Note: Make sure that the exit pawl does not contact the drum surface and the master clamper several times when the printing pressure is applied.



Note: Make sure that the drum stops at its home position. Then, perform the following procedure.

8. Remove the center support plate [A] originally installed on the machine (5 screws).
9. Install the stopper screw [B] on the rear side plate as shown.
10. Install the new center support plate [C] together with the air pump unit (5 screws).

Note: When installing the air pump unit, make sure that the mark [D] on the air pump drive gear [E] is located at the top position and that the drum stops at its home position. Otherwise, the air does not blow from the exit pawl edge at the correct timing.

11. Lay the vinyl hose as shown and install the hose end to the air pump exit with the hose band [F].
12. Install the new shelter plate (P/N C2136201) on the vacuum unit.
13. Re-install the rear cover (6 screws).

RICOH

Technical Bulletin No. RTB-015

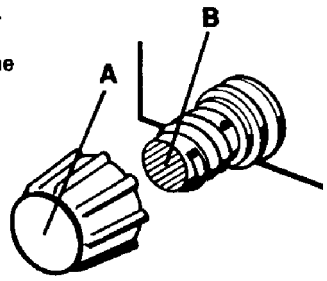
SUBJECT: Black Ink Cartridge Seal	DATE: Sep. 30,'91 PAGE: 1 of 1
PREPARED BY: S.Asai CHECKED BY:	FROM: Copier Technical Support Section

CLASSIFICATION: ☐ Action Required ☐ Troubleshooting ☐ Retrofit Information	☐ Revision of service manual ■ Information only ☐ Other	MODEL: SS935/955 Ges 5230/5270 Rex 1160/1170

To increase ink production, the transparent seal will be removed from the exit of the black ink cartridge (500cc). For the color inks, the transparent seal remains because the color inks are more fluid than the black ink.
Due to this change, the instructions printed on the black ink cartridge will be changed as shown below.

OLD

Handling Instructions
Remove the Cap A from a new cartridge of ink. Do not remove the Seal B. Set ink cartridge.
Manuel d'Instruction
Retirer le bouchon de la nouvelle cartouche d'encre. Ne pas retirer le joint B. Mettre en place la cartouche d'encre.
Bedienungshinweise
Kappe a von neuer farbpatrone entfernen! Dichtung B nicht entfernen.Farbpatrone einsetzen.
Instrucciones de manejo
Extraiga la tapa A del nvevo cartucho de tinta.
No extraiga el precinto B.
Coloque el cartucho de tinta.
Modo di impiego
Rimuovere il coperchio A dalla nuova cartuccia di inchiostro.
Non rimuovere il sigillo B.
Posizionare la cartuccia di inchiostro.



NEW

Handling Instructions
■Set the ink in the machine immediately after the cap is removed to prevent entry of air.

Handhabung
■Den Farbbehalter sofort nach dem Offnen in die Maschine einsetzen, um Eindringen von Luft zu verhindern.

Instructions d'emploi
■Placer l'encre dans l'appareil des que son bouchon a ete ouvert afin d'eviter que l'air ne penetre.

Instrucciones
■Para evitar la entrada de aire, la tinta se debe colocar en la maquina inmediatamente despues de abrir.

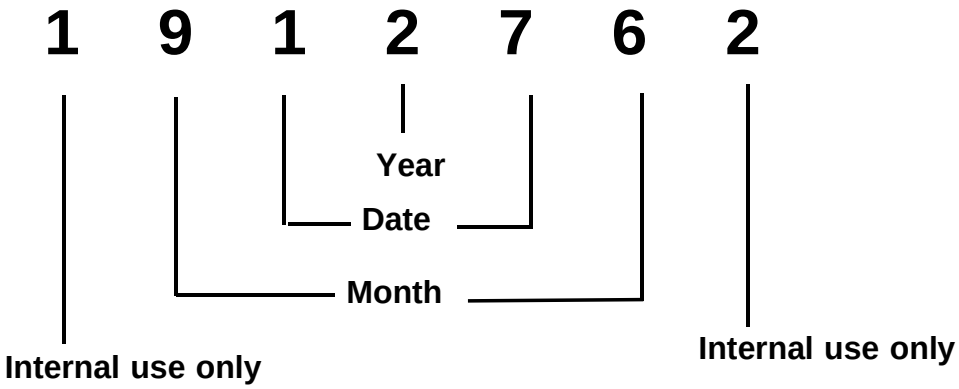
Istruzioni per l'uso
■Mettere l'inchiostro nella macchina subito dopo aver tolto il tappo, per evitare che entri aria.

This modification will be implemented from the October '91 production run for the 500cc ink cartridge.

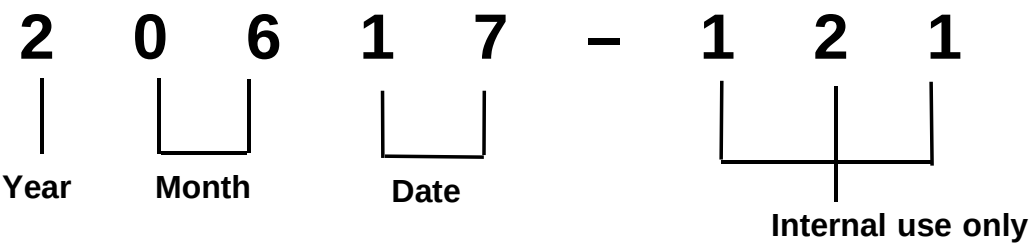
RICOH	Technical Bulletin	No. RTB-016
SUBJECT: Priport Ink Lot Number		DATE: Aug. 15, '92 PAGE: 1 of 2
PREPARED BY: J. Mochizuki CHECKED BY:	FROM: Copier Technical Support Section	
CLASSIFICATION: ☐ Action Required ☐ Troubleshooting ☐ Retrofit Information	☐ Revision of service manual ■ Information only ☐ Other	MODEL: SS935/955 Ges 5230/5270 Rex 1160/1170

To clarify the ink production dating, the method of lot numbering has been changed as follows:

Old method



New method



The above lot number means that the ink is produced on **June 17, '92**

The table below shows the new lot numbering start date.

Type of ink	New lot numbering start date
Black 800cc	July 13, '92
Black 500cc	July 13, '92
Color Red 500cc	July 13, '92
Color Blue 500cc	July 16, '92
Color Green 500cc	July 14, '92
Color Brown 500cc	July 16, '92