Technical Bulletin

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Model: Iris/Lilac Da			Dat	e: 30-Apr-99	No.: RA258001	
Subject: Color Controller Installation Procedure				Prepared by: Y. Sasaki		
From: Technical service Dept., GTS Division						
Classification:	Troubleshooting	Part info	ormat	tion 🗌 Action	n required	
	Mechanical Electrical		rical 🛛 🖾 Servi		ce manual revision	
Paper path Transmit		it/rec	eive 🗌 Retro	fit information		
	Other ()					

Installation Procedure

Please add the following steps after step 24 on page 3-58 of the service manual.

25. Turn on the machine.

If the machine is A259 or A260, skip the remainder of this step. For A258 machines, use SP7-801-000 to confirm that the firmware version of the main control board is v.6.43 or later. If it is not, the copier's firmware must be upgraded (to allow the controller connection).

- 26. Change SP3-125-000 from 0 (Default) to 2.
- 27. Enter SP3-126-000 then: A258: Press 1 and # A259/260: Press ON.
- 28. After doing the forced process control self check, check that the result is "1" (successful) using SP3-975. (A259/260 machines automatically display the result on the screen). If the result code is a number other than 1, consult the error code chart (see the troubleshooting section of the service manual).
- 29. Do the ACC for printer. If necessary, do the AutoCal procedure of the controller calibration.
- 30. Check SP6-910-000. The setting should be "1" for the controller.

-Explanation-

• SP3-125-000 [Potential Control] (0: Auto, 1: FIX, 2: Auto+2/3 Spd)

- 0: The machine does the process control self check only at normal speed for copier mode.
- 1: The machine does not do the process control self check. It applies fixed voltages for Vb, Vd, and VI.
- 2: The machine does the process control self check at normal speed for copier mode. The machine then confirms the process control self check information at 2/3 speed for the printer mode. Therefore it takes a little longer to finish the process control self check.

• SP6-910-000 [Printer/Scanner key setting]

When installing the E-300 controller, this should be set to 1. If the setting is 0, the Printer/Scanner key on the controller LCD panel does not work.

Technical Bulletin

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Model: Iris/Lilac			Dat	te: 31-May-99	No.: RA258002	
Subject: User tools for the printer system				Prepared by: Y. SASAKI		
From: Technical Service Dept., GTS Division						
Classification:	Troubleshooting	Part inf	orma	tion 🗌 Actior	n required	
	🗌 Mechanical	Electric	al	Servic	ce manual revision	
	Paper path Transmi		it/rec	eive 🗌 Retro	fit information	
	🖾 Other ()					

This RTB explains the user tools (system settings) which affect the copier/printer operations.

1. AOF Setting

When installation of system software is necessary, make sure that the AOF setting is OFF using the user tools.

If the AOF setting is ON, the machine might go into the sleep mode and the system software download might fail.

2. System Reset: (Default: On [60 seconds])

When the copier is in the following modes, print jobs are not accepted. The "System Reset" resets these modes when the copier is left unoperated for the selected period of time.

- Interrupt mode (The condition in which the interrupt key is pressed.)
- Sorter mode
- Duplex mode
- ADF mode (after cancelling ADF mode, the originals which are in the ADF are automatically fed out.)

Note: The above modes are not reset by the "Copy Reset".

3. Interleave Print (Default: On)

When "Interleave Print" is on, the machine accepts a print job while copying, or vice versa. The copy job and the print job are printed alternately 1 sheet at a time in normal mode, or 2 sheets at a time in double-page transfer mode (two pages at once on the transfer belt).

When the setting is off, the machine prints the first job completely, then it waits for the Function Reset interval, and the second job is started.



Model: Iris/Lilac

Date: 31-May-99

No.: RA258002

4. Interleave Priority: (Default: On) (A259/A260 only)

Do not use this user tool.

5. Function Reset (Default: On [60 seconds])

The "Function Reset" only works when "Interleave Print" is set to OFF.

Technical Bulletin

PAGE: 1/1

Model: Iris/Lilac			Dat	e: 15-Jul-99	No.: RA258003	
Subject: SC Codes				Prepared by: T. I	toh	
From: Technical Service Dept., GTS Division						
Classification:	Troubleshooting	Part inform		tion Action	1 required	
	Mechanical	Electric	al	🖂 Servio	ce manual revision	
Paper path		Transmit/receive		eive 🗌 Retro	Retrofit information	
	Other ()					

SC codes 410, 901, and 902 are missing from the service manual. Please correct your service manual.

SC Code	Item	Detection Condition	Possible Cause	Troubleshooting Procedure
SC410	Paper separation current leak	When the current leak is detected for 2 seconds while the paper separation corona is on.	 Paper separation corona unit not set properly Corona wire broken Defective high voltage supply board (T2, D) Defective I/O control board Defective main control board 	 Check to see if the separation corona unit is set properly. Replace the corona wire if it is broken. Check to see if the connectors are properly connected. Clean the receptacle. Replace the high voltage supply board (T2,D). Replace the I/O control board. Replace the main control board. Signal Check - CN227-A1 on the I/O control board
SC901 SC902	Upper total counter error Lower total counter error	 Feedback signal stays low when the main switch is turned on. Feedback signal stays low just before the trigger signal goes on. Feedback signal stays high just before the trigger signal goes off. 	Poor connection of the connectors Defective counter	 Check if the connectors are properly set. Replace the total counter.

With the current software, SC410 is detected only in the print mode. This SC code was falsely detected during the development stage, so it was temporarily deleted from the software. However, the software change was only reflected in the copy mode. The cause of the false detection was found recently and the modification will be applied. The software will be modified to reflect this SC code in the copy mode as well.

Technical Bulletin

Model: Iris/Lilac			Date: 15-Jul-99		No.: RA258004	
Subject: Handling of drum potential sensor				Prepared by: T. Itoh		
From: Technical						
Classification:	Troubleshooting	Part inf	orma	tion 🛛 Actio	on required	
	🗌 Mechanical	Electrical		Serv	ice manual revision	
Paper path		Transmit/receive		eive 🗌 Retr	Retrofit information	
	Other ()					

Please make note of the following remarks in order to prevent damage to the drum potential sensor and/or detection errors.

REMARKS

- The sensor is very sensitive. Do not drop the sensor or subject the probe [A] to shock in any way. Please handle it carefully.
- The service manual shows that the setting powder is applied to the drum in the drum unit. If the powder goes into the sensor through the window [B] or accumulates around the window, it may cause the sensor to detect the potential incorrectly. Therefore, please apply the setting powder to the drum before the drum is placed in the drum unit.
- If the potential sensor is not installed correctly in the drum unit, an error such as **20***, 41* or SC387 will result during the process control self-check.



Technical Bulletin

Model: Iris/Lilac Da			Date: 15-Jul-99		No.: RA258005
Subject: False Bk Toner end detection / Error 511 at develope initialization				Prepared by: T.	ltoh
From: Technical Service Dept., GTS Division					
Classification:	Troubleshooting	Part info	ormat	tion 🛛 Actior	n required
	Mechanical	Electric	al	Servio	ce manual revision
Paper path Transm		it/rec	eive 🗌 Retro	fit information	
	Other ()				

The following problem was reported from the field.

SYMPTOM

- 1. False Bk toner end detection during developer initialization
- 2. Developer setup error code 511 during developer initialization

CAUSE

- The toner supply motor gear [A] and toner supply gear [B] were not properly engaged. This caused the toner to be not supplied. The toner supply motor may have been incorrectly positioned and then secured in this position during the production stage. In such a case, either the motor gear [A] did not touch the toner supply gear [B] and/or the gears were engaged too tightly, causing the gear shafts [C] to bend.
- 2. The toner supply gear [B] was broken. When the drawer unit is inserted in the machine with the development unit located at the development position, the toner supply gear [B] contacts the motor gear [A]. This may cause the gear [B] to be broken.



RIGOH

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Model: Iris/Lilac

Date: 15-Jul-99

No.: RA258005

SOLUTION

	Production	Field		
1	It has been ensured that the motor was properly placed and secured in the correct position. This procedure has been reflected in production	When installing machines produced in February and March, check whether the toner supply motor is properly positioned after the drawer unit is pulled out and make sure that the plastic part (black) [A] is correctly placed in the cutout in the rear frame. (Please refer to the picture below this table.)		
	runs from April'99 onward.	If the motor is not correctly positioned, remove the motor.		
		• If the gears on the motor shaft are properly engaged, reposition the motor in the cutout properly.		
		 If the gears on the motor shaft are not properly engaged or the shafts have already been bent, replace the motor. 		
2	When inserting the drawe position so that there is su the drum. Insert the drawe	r unit into the machine, place the development unit in a ufficient distance between the development sleeve and er unit.		
	Rotate the revolver counterclockwise so that the actuator [B] is positioned inside the dotted lines as shown in the illustration.			





Technical Bulletin

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Model: Iris/Lilac Da			Dat	te: 15-Jul-99	No.: RA258006
Subject: Toner Hopper Seal			Prepared by: T. Itoh		
From: Technical Service Dept., GTS Division					
Classification:	Troubleshooting	Part inf	orma	tion 🛛 Action	n required
	Mechanical	Electric	al 🗌 Ser		ce manual revision
Paper path Trans		🗌 Transm	nit/rec	eive 🗌 Retro	fit information
	Other ()				

SYMPTOM

The toner hopper seal was damaged and peeled off as shown in the picture. This caused the fit of the toner bottle to become tight and/or the toner to leak and scatter.



CAUSE

The toner hopper seal was not firmly attached to the toner hopper. Therefore, when the toner bottle was installed, the seal became torn off.

SOLUTION

• The production procedure has been improved and the toner hopper seal was firmly attached by pressing. This modification was reflected in the production as shown below.

Model Code	
A258-17, 15, 19, 22, 26, 29, 55, 65	From the April '99 production
A258-27	From the March '99 production
A259-All, A260-All	From the first mass production

- If this problem is found in the field, replace the seal by following the procedure described below.
- 1. Remove the toner bottle.
- 2. Pull out the drawer unit.
- 3. Remove the damaged seal and clean the surface of the toner hopper where the seal is attached using alcohol.
- **NOTE:** Make sure that no parts of the torn seal fall into the toner hopper. If this happens, white lines may result.
- 4. Attach the new seal. Make sure that it is properly fixed in place by pressing firmly.

NOTE: P/N of toner hopper seal : #A2593346.

5. Remove the toner collection tray (saucer) and reattach the parts removed.



RIGOH	Technical B u	PAGE: 2/2	
Model: Iris/Lilac	D	Date: 15-Jul-99	No.: RA258006

NOTE: During the above procedure, take extra caution so that your finger does not become caught between the drawer unit and revolver.

Technical Bulletin

PAGE: 1/1

Model: Iris/Lilac Dat			e: 15-July-99	No.: RA258007		
Subject: Dirty background				Prepared by:	T. Itol	h
From: Technical Service Dept., GTS Division						
Classification:	☐ Troubleshooting	🗌 Part informa		tion 🗌 Ad	tion r	equired
	Mechanical	Electric	al	Serv		manual revision
	Paper path Transmit/		iit/rec	eive 🗌 Re	etrofit	information
	Other ()					

SYMPTOM

Dirty background faintly appears in copy mode.

CAUSE

The reproduction of highlight areas has been improved from the previous products. Therefore, the background of an original tends to come through on the copies.

SOLUTION

When receiving a complaint about the dirty background, please explain the above mentioned cause, then, provide the customer with proper instructions, depending on the mode selected as shown in the following table.

Symptom/Mode	Troubleshooting
Dirty background in FC copy mode	Instruct the user to select the Auto Image Density mode.
Back side of the original appears	
Dirty background in B&W	Instruct the user to select the Letter mode.
(See NOTE.)	The Auto Image Density mode detects the background density of an original, so it does not appear on the copy during the image processing. This mode is effective for originals that have high-density backgrounds like newspapers, but not for originals that have low-density backgrounds.

NOTE: To reduce the complaints from users, the following SP mode has been added. When this SP mode is set to 1, Text mode becomes the default setting for the B&W copy mode.

SP mode : 5-005-008

Value range :0 or 1

Default : 0

- Setting = 0 : The mode set in the User Tool (Copier Feature) is selected in the B&W copy mode.
- Setting =1 : When the B&W copy mode is selected, Text mode is automatically selected regardless of the setting in the User Tool.

Technical Bulletin

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Model: Iris/Lilac D			Date: 15-Jul-99		No.: RA258008
Subject: Dirty marks at 142mm intervals				Prepared by:	T. Itoh
From: Technical					
Classification:	Troubleshooting	Part info	orma	tion 🗌 Ac	ction required
	Mechanical	Electric	al	🗌 Se	ervice manual revision
	Paper path	🗌 Transm	it/rec	eive 🗌 Re	etrofit information
	Other ()				

SYMPTOM

Dirty marks appear at 142 mm intervals on outputs.



CAUSE

Foreign material may be attached to the transfer belt drive roller.

SOLUTION

Clean the transfer belt drive roller.

NOTE: When this problem happens and the drive roller is not cleaned, the transfer belt itself may develop a ridged deformation along its length as a result of the foreign material. This line/ridge is reflected in the copies.

Technical Bulletin

PAGE: 1/2

Model: Iris/Lilac C			Date: 15-Jul-99		No.: RA258009
Subject: Dark spots in solid areas				Prepared by: T.	ltoh
From: Technical					
Classification:	☐ Troubleshooting	Part inf	orma	tion 🗌 Actior	n required
	Mechanical	Electric	al	Servic	ce manual revision
	Paper path	🗌 Transm	iit/rec	eive 🗌 Retro	fit information
	Other ()				

SYMPTOM

In solid areas, dark spots appear as shown in the illustration.



CAUSE

- The electrical resistance of the image transfer belt has a specified tolerance. If the electrical resistance is in the lower area of the specification, the pre-fixed transfer bias becomes higher than the optimum value. In this case, toner transferred onto the belt tends to be re-attracted to the drum.
- Small carrier particles in the development unit tend to be physically attracted to the drum. The carriers transferred onto the belt create a gap between drum and belt. Toner on some parts of the transfer belt where the carriers are transferred are not re-attracted to the drum due to the gap. The result is dark spots in solid areas as shown above.
- It is known that the dark spots problem tends to appear as the development potential becomes higher. If the residual voltage detected by the drum potential sensor is 30V or less, the potential sensor is damaged and this may cause the dark spots.

SOLUTION

- 1. Check the residual voltage with SP3-111-00. If the voltage is 30V or less, replace the drum potential sensor and check whether or not the problem disappears. If not, see step 2.
- 2. Decrease the transfer belt bias with SP mode as shown below.

In Copy mode: SP2-301-01 to 04

SP Mode		Default	Step 1	Step 2	Step 3	Step 4
SP2-301-01	1st color	1700	1200	1000	800	600
SP2-301-02	2nd color	1800	1300	1000	800	600
SP2-301-03	3rd color	1900	1400	1000	800	600
SP2-301-04	4th color	2000	1500	1000	800	600



Model: Iris/Lilac

Date: 15-Jul-99

No.: RA258009

NOTE 1:

- Decrease the transfer belt bias from the 1st to 4th color by 500 volts each (Step 1) as shown in the above table. Then, check whether the dark spots have disappeared completely or partially. If the dark spots are still present on the copy, decrease the bias again as shown and check the results.
- When the transfer bias is decreased, it may cause the image in the solid area to become rough or light since there will be less toner transferred onto the belt and/or it may cause firefly spots due to a small amount of clogged toner that causes a gap between drum and belt. When the belt bias is decreased, check the level of both the dark spots and rough image/firefly spots. Select the proper bias that gives the best overall results.

SP Mode		Def	Step 1	Step 2	
		S/M	Ver. 6.43		
SP2-301-13	1st color	800	1000	800	600
SP2-301-14	2nd color	900	1100	800	600
SP2-301-15	3rd color	1000	1200	800	600
SP2-301-16	4th color	1100	1300	800	600

In Print mode (2/3 speed): SP2-301-13 to 16

NOTE 2:

- The default settings listed in the service manual has been changed in the main software (Ver. 6.43) as shown in the above table.
- Refer to the points explained in **NOTE 1**.
- 3. Do the ACC (Auto Color Calibration) after adjusting the transfer bias.

REMARKS:

When adjusting the transfer belt bias for dark spots, the image quality concerning the dark spots, rough image, and firefly spots should be checked whenever the image transfer belt is replaced. Also, if necessary, readjust the transfer belt bias.

Technical Bulletin

Model: Iris/Lilac			Date: 15-Jul-99			No.: RA258010
Subject: How to route the oil supply tube				Prepared by: T. Itoh		
From: Technical Service Dept., GTS Division						
Classification:	Troubleshooting	Part inf	orma	ation 🛛 Action		required
	Mechanical	Electric	lectrical Serv		ervic	e manual revision
	Paper path	Transm	it/rec	eive 🗌 Re	etrof	it information
	Other ()					

The following problem was reported in the Japanese market. When servicing, please make note of the following points in order to prevent these problems.

SYMPTOM

- Noise from the fusing section
- The oil supply roller does not rotate.

Good

CAUSE

Silicone oil was not supplied to the oil supply pad and the pad became dry. When the upper cover was installed, the cover pushed the oil supply tube [A] and the tube bent as shown in Picture 3.

SOLUTION

In the field

If the oil supply tube [A] is routed as shown in Pictures 1 & 2, the tube may bend when the upper cover [B] is installed as shown in Picture 3. To prevent this, the oil supply tube has to be routed as shown in Pictures 4 & 5.



Good

Good

RIGOH	
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Model: Iris/Lilac

Date: 15-Jul-99

No.: RA258010

Mass production

In order to prevent this problem, the length of the oil supply tube will be changed from 290 mm to 265 mm.

Technical Bulletin

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Model: Iris/Lilac (Controller Interface Type E)			Date: 15-Jul-99)	No.: RA258011
Subject: Remarks at Controller I/F kit installation				Prepared by: T. Itoh		
From: Technical S	Service Dept., GTS Division					
Classification:	Troubleshooting	Part inf	ormat	tion	⊠ Action	n required
	Mechanical	Electric	al	[Servic	e manual revision
	Paper path	Transm	it/rec	eive [Retrof	fit information
	☐ Other ()					

Some problems related to SC 326 or the ARDF were reported from the Japanese market. These problems were caused by mistakes during installation. Please note the remarks explained below and keep these items in mind when installing the I/F kit.

Remarks

- 1. Please remember that if the connectors are not properly connected or the shorting cable is not removed, SC326 will occur. At each step of installation, make sure that:
- (1) The 100-pin shielded cable connector [A] is properly connected.
- (2) The I/F cable connector [B] is properly connected.
- (3) The shorting cable [C] is removed.
- (4) The LD flat cable [D] is properly connected.



RIGOH	Technical B	PAGE: 2/2	
Model: Iris/Lilac (Controller Int	terface Type E)	Date: 15-Jul-99	No.: RA258011

2. Make sure that fiber optic cable connectors are correctly connected to the main control board. White marks are painted on the connectors. If the fiber optic cables are connected to the wrong connectors on the main board, the ADF will not function.

RIGORI

Model: Iris/Lilac			Date: 15-Oct99		99	No.: RA258012
Subject: Remarks at servicing (to prevent drum damage)				Prepared by: T. Itoh		
From: Technical Service Dept., GTS Division						
Classification:	Troubleshooting	Part inf	ormat	tion	Actior	n required
	Mechanical	Electric	ical 🗌 Se		Servic	e manual revision
Paper path Transmi] Transmit/receive		Retrofit information		
	Other ()					

It is explained in the service manual that the drum unit [A] should be removed and covered with a black sheet of paper or 5 or more white sheets when the drawer unit [B] is pulled out. This will prevent light fatigue, which causes darker bands.

In addition, please make note of the following items when servicing the revolver section.

- **NOTE:** When the revolver unit is rotated without removing the drum unit, the development sleeve may come in contact with the drum surface. This may damage the drum and result in dots on the copies. This is due to the fact that normally, the PG (gap between the drum and sleeve) is properly maintained when the drawer unit is in the machine. Therefore, please make sure that the drum unit is removed whenever servicing the revolver section.
- **NOTE:** Before installing the drum unit in the drawer unit, the revolver unit should be rotated so that the actuator [C] is positioned in the sensor as explained in RTB 005.
- **NOTE:** Release the transfer belt pressure whenever pulling out the drawer unit from the machine. If pulling out the drawer unit without releasing the pressure, the drum and/or belt may be damaged.



Model: Iris/Lilac			Date: 15-Oct99			No.: RA258013
Subject: Remarks during developer replacement				Prepared by:	T. It	oh
From: Technical Service Dept., GTS Division						
Classification:	Troubleshooting	Part info	ormat	tion 🛛 🖂 Ac	tion	required
	Mechanical	Electric	al 🗌 Servi		rvic	e manual revision
	Paper path	Transm	it/rec	eive 🗌 Re	etrof	it information
	Other ()					

It was reported that developer spilled out from the development unit during developer initialization at the time of machine installation. To prevent any future occurrence, please make note of the following remarks regarding developer replacement and servicing of the development unit. (Some of these are explained in the service manual, page 3-15.)

Remarks:

RIGOH

- 1. When replacing the developer, place the development unit on a flat level surface.
- 2. When attaching the developer cover [A], set the cover by pressing both sides [B] as shown below and make sure that the cover is properly positioned.

There are 3 cutouts [C] in the developer cover. When positioning the cover on the development unit, each projection [D] on the development unit should be set into each cutout properly. If the developer cover is not properly set, developer may leak from the gap between cover and development unit.





Model: Iris/Lilac Date: 15-Oct.-99 No.: RA258013 After pouring doveloper in the dovelopment unit place the dovelopment unit in the

3. After pouring developer in the development unit, place the development unit in the developer scoop-up position [A] as shown. Then, make sure that the developer brush on the sleeve [B] is properly inserted into the development unit by rotating the gear in the direction of the arrow as shown below. If the developer is not poured while the unit is on a flat level surface, the casing might be bent. This causes the developer to spill out from the development unit. If it happens, the developer should be removed and placed on a clean sheet of paper, then poured back into the unit.



4. When installing each development unit, do not hold the center part [C] of the unit. Both sides [D] of the unit should be held by hand. If the center part of the development unit is held by hand, the casing of the unit may bend. The developer may then spill onto the casing and out of the development unit. If this happens, the developer should be removed, placed onto a clean sheet of paper and poured back into the development unit.



Technical Bulletin

Model: Iris/Lilac	(Controller Interface Type E)		Dat	e: 15-Nov-99		No.: RA258014
Subject: SC326 /			Prepared by	y: T. It	oh	
From: Technical S	Service Dept., GTS Division					
Classification:	Troubleshooting	Part inf	orma	tion	Action	required
	🗌 Mechanical	Electric	al		Servic	e manual revision
	Paper path	Transm	it/rec	eive	Retrof	it information
	Other ()					

It was reported in the Japanese market that image quality problems or SC326 occur due to a defective BUSSW board in the Interface Kit. This RTB outlines the troubleshooting procedure.

SYMPTOM

- 1. Blank Image or Vertical Lines
- 2. SC326
- **NOTE:** This problem occurs in copy or scanning mode only. It does not occur during print jobs.

CAUSE

Normally, the input pins (#12 to 17) of IC18 on the BUSSW board are not used for the function of the IC18. However, due to an error in the software programmed in IC18, these pins were allocated as output pins. The resulting increase in power consumption causes the IC to heat up and malfunction.

- **NOTE:** After analysis and testing of the PCBs returned from the field, it was found that the cause explained above was a majority of the causes. The other causes are isolated cases.
- 1. Blank Image or Vertical Lines

When the IC does not renew the scanned image data due to the cause explained above, blank image or vertical lines appear on the outputs depending on the image of the first line scanned in.

- If the first line scanned in is blank, the output is blank.
- If the first line scanned in contains an image, the output will contain vertical lines.

2. SC326

When the IC does not send the LSYNC signal to the ASIC, the FGATE signal cannot be generated (causing SC326).



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Model: Iris/Lilac (Controller Interface Type E)

Date: 15-Nov-99

No.: RA258014

SOLUTION

On the production line

The BUSSW board has been modified twice as shown below. The boards thought to be causing the problem are #A8485108. The problem does not occur with the Interface Kits containing #A8485105 or #A8485112, as these boards do not use IC18.

Model Code	Modification (1)		
	Old P/N	New P/N	
A848-17, 27, 55, 65	A8485105	A8485108	
		Modification (2)	
		Old P/N	New P/N

Cut-in Serial Number

Modification (1)

Product Code	Cut-in Serial Number
A848-17	H0990300475
A848-27	H0990300944
A848-55	From first mass production
A848-65	From first mass production

NOTE: IC18 was added to the PCB for both Japanese and overseas versions since the board was used for all machines.

Modification (2)

Product Code	Cut-in Serial Number
A848-17	H0990600001
A848-27	H0990600176
A848-55	L0409060095
A848-65	L0409060180

NOTE: The same PCB was used for Japanese and overseas versions (with IC18 installed). However, since only the Japanese versions actually use IC18, it was removed from the overseas versions. The board for all overseas versions has then been given a new part number.

The action described on the following pages is required on the field machines equipped with the Interface Kits containing #A8485108. The serial numbers of these Interface Kits are listed on the next page.

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PAGE: 3/5

Model: Iris/Lilac (Controller Interface Type E)

Date: 15-Nov-99

No.: RA258014

In the field

Serial number of I/F kits thought to be causing this problem:

Product Code	From	То
A848-17	H0990300475	H0990500282
A848-27	H0990300944	H0990500512
A848-55	From first mass production	L0409050064
A848-65	From first mass production	L0409050094

[1] Troubleshoot as shown below when the problem is reported.



- **NOTE:** If the problem is related to IC18, the replaced (old) PCB can be re-used after cutting pins #12 17. If occurrences still continue after cutting the pins, the problem is being caused by another PCB component.
- **NOTE:** If the BUSSW board (IC18) causes the problem and the part is not available, cutting the pins (#12 17) of IC18 as explained in section [2] on page 5 of this RTB solves the problem.



Model: Iris/Lilac (Controller Interface Type E)

Date: 15-Nov-99

No.: RA258014

- BUSSW Board Replacement Procedure -



- 1. Turn off the main switch and unplug the power cord.
- 2. Disconnect the cable(s) from the controller.
- 3. Remove the exterior covers (used toner cover and I/F unit cover).
- 4. Remove the controller from the I/F unit (6 screws).
- 5. Remove the cover plate [A] (2 screws).
- 6. Remove the AC drive board [B] (4 screws and 2 connectors).
- 7. Remove the shielding plate [C].
- 8. Replace the BUSSW board [D] (4 screws, 1 grounding screw, and 2 connectors).



Model: Iris/Lilac (Controller Interface Type E)

Date: 15-Nov-99

No.: RA258014

[2] Do the following at installation or next visit to prevent any future occurrence.



- 1. Remove the BUSSW board by following the procedure described on the previous page.
- 2. Using small cutting pliers, cut pins #12 to 17 so that they do not touch other pins or patterns. This will prevent a short circuit.
- 3. Remove the cut pins from the board surface.
- **NOTE:** Be careful not to damage the PCB pattern or cut other pins. If pins #11 or 18 are cut, this will cause SC326.

Technical Bulletin

PAGE: 1/1

Model: Iris/Lilac		Dat	Date: 15-Nov-99		No.: RA258015	
Subject: Remarks during servicing on IPU board				Prepared by: T. Itoh		
From: Technical services Dept., GTS Division						
Classification:	Troubleshooting	Part inf	orma	tion [Action	n required
	Mechanical	Electric	al	Ľ] Servic	e manual revision
	Paper path	Transmit/rec		eive [Retrof	fit information
	Other ()					

It was reported that connector 408 [A] on the IPU board breaks easily during servicing. It seems to happen when the connector is opened by hand (e.g. using the forefinger or index finger). Please make note of the remarks below and keep this point in mind when accessing the IPU board.

Remarks

Open the connector carefully by using a small-blade screwdriver. (See the photo below.)





Revised: 15-Dec-99

Model: Iris/Lilac (Controller Interface Type E)	Date: 15-Nov-99	No.: RA258014a
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RTB Correction

The information underlined below has been added.

Subject: SC326 / Abnormal Image		Prepared by: T. Itoh		
From: Technical	Service Dept., GTS Division			
Classification:	 Troubleshooting Mechanical Paper path Other () 	Part informa Electrical Transmit/rec	tion eive	 Action required Service manual revision Retrofit information

It was reported in the Japanese market that image quality problems or SC326 occur due to a defective BUSSW board in the Interface Kit. This RTB outlines the troubleshooting procedure.

SYMPTOM

- 1. Blank Image or Vertical Lines
- 2. SC326
- **NOTE:** This problem occurs in copy or scanning mode only. It does not occur during print jobs.

CAUSE

Normally, the input pins (#12 to 17) of IC18 on the BUSSW board are not used for the function of the IC18. However, due to an error in the software programmed in IC18, these pins were allocated as output pins. The resulting increase in power consumption causes the IC to heat up and malfunction.

NOTE: After analysis and testing of the PCBs returned from the field, it was found that the cause explained above was a majority of the causes. The other causes are isolated cases.

1. Blank Image or Vertical Lines

When the IC does not renew the scanned image data due to the cause explained above, blank image or vertical lines appear on the outputs depending on the image of the first line scanned in.

- If the first line scanned in is blank, the output is blank.
- If the first line scanned in contains an image, the output will contain vertical lines.

2. SC326

When the IC does not send the LSYNC signal to the ASIC, the FGATE signal cannot be generated (causing SC326).



Revised: 15-Dec-99

	Model: Iris/Lilac (Controller Interface Type E)	Date: 15-Nov-99	No.: RA258014a
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SOLUTION

On the production line

The BUSSW board has been modified twice as shown below. The boards thought to be causing the problem are #A8485108. The problem does not occur with the Interface Kits containing #A8485105 or #A8485112, as these boards do not use IC18.

Model Code	Modification (1)		
	Old P/N	New P/N	
A848-17, 27, 55, 65	A8485105	A8485108	
		Modifica	ation (2)
		Old P/N	New P/N
		A8485108	A8485112

- Additional Information – Modification -

As shown in the picture, there are two types of BUSSW board (P/N #A8485108). Type 1 is the board on which an IC [A] has been manually soldered. Type 2 contains an IC18 soldered onto the circuit pattern by machine.

Type 1 is the board that was modified in the production (from #A8485105). This board contains one of the two ICs as shown in the picture to the right [A]. The only difference is in the size.

The function of the additional IC and IC18 is exactly the same. IC18 is soldered onto the reverse side of the Type 2 board.



Cut-in Serial Number

Modification (1)

	•
Product Code	Cut-in Serial Number
A848-17	H0990300475
A848-27	H0990300944
A848-55	From first mass production
A848-65	From first mass production

NOTE:

IC18 was added to the PCB for both Japanese and overseas versions since the board was used for all machines.

Revised: 15-Dec-99

Model: Iris/Lilac (Controller Interface Type E)	Date: 15-Nov-99	No.: RA258014a
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Modification (2)

Product Code	Cut-in Serial Number
A848-17	H0990600001
A848-27	H0990600176
A848-55	L0409060095
A848-65	L0409060180

NOTE:

The same PCB was used for Japanese and overseas versions (with IC18 installed). However, since only the Japanese versions actually use IC18, it was removed from the overseas versions. The board for all overseas versions has then been given a new part number.

- Additional Information – Cut-in Serial Number -

#A8485105 has been modified to #A8485108 by soldering an IC onto the board as explained. This special modification was not controlled at the factory. Therefore, it is not possible to specify the exact serial numbers of the I/F units that contain the modified board. The table below contains our estimation of the serial number. The modification was applied to a total of 112 boards, which means that 112 of the following 159 I/F units may contain modified boards.

	Serial number	No. of units
A848-17	H0990300648 - 0660	13 units
	H0990300692 - 0709	18 units
A848-27	H0990301002 - 1015	14 units
	H0990301188 - 1202	15 units
	H0990301248 - 1316	69 units
A848-65	L0409030014 - 0043	30 units
	Total	159 units

The action described on the following pages is required for the field machines equipped with the Interface Kits containing #A8485108. The serial numbers of these interface kits are described <u>below</u>.

In the field

Serial numbers of I/F kits thought to be causing this problem:

Product Code	From	То
A848-17	H0990300475	H0990500282
A848-27	H0990300944	H0990500512
A848-55	From first mass production	L0409050064
A848-65	From first mass production	L0409050094



Revised: 15-Dec-99

Model: Iris/Lilac (Controller Interface Type E)	Date: 15-Nov-99	No.: RA258014a

[1] Troubleshoot as shown below when the problem is reported.



- **NOTE:** If the problem is related to IC18, the replaced (old) PCB can be re-used after cutting pins #12 17. (If the PCB is Type 1, it is not repairable and therefore not re-usable.) If occurrences still continue after cutting the pins, the problem is being caused by another PCB component.
- **NOTE:** If the BUSSW board (IC18) causes the problem and the part is not available, cutting the pins (#12 17) of IC18 as explained section [2] on page <u>6</u> of this RTB solves the problem. (If the PCB is Type 1, the procedure on page 6 is not applicable.)



Revised: 15-Dec-99

Model: Iris/Lilac (Controller Interface Type E)	Date: 15-Nov-99	No.: RA258014a

- BUSSW Board Replacement Procedure -



- 1. Turn off the main switch and unplug the power cord.
- 2. Disconnect the cable(s) from the controller.
- 3. Remove the exterior covers (used toner cover and I/F unit cover).
- 4. Remove the controller from the I/F unit (6 screws).
- 5. Remove the cover plate [A] (2 screws).
- 6. Remove the AC drive board [B] (4 screws and 2 connectors).
- 7. Remove the shielding plate [C].
- 8. Replace the BUSSW board [D] (4 screws, 1 grounding screw, and 2 connectors).



Revised: 15-Dec-99

[2] Follow the procedure below at installation or next visit to prevent any future occurrence.



- 1. Remove the BUSSW board by following the procedure described on the previous page.
- 2. Using small cutting pliers, cut pins #12 to 17 so that they do not touch other pins or patterns. This will prevent a short circuit.
- 3. Remove the cut pins from the board surface.
- **NOTE:** Be careful not to damage the PCB pattern or cut other pins. If pins #11 or 18 are cut, this will cause SC326.

Model: Iris/Lilac

Technical Bulletin

Reissued: 15-Jan-00

Date: 31-Dec-99

No.: RA258016

RTB Correction

The items in bold Italics have been corrected (on pages 3/8 and 8/8).

From: Technical Service Dept., GTS Division Classification: Troubleshooting Part information Action required Machanical Floatwisel	Subject: Banding				Prepared by: T. Itoh	
Classification: Troubleshooting Part information Action required	From: Technical Service Dept., GTS Division					
Paper path Transmit/receive Retrofit information Other ()	Classification:	 Troubleshooting Mechanical Paper path Other () 	Part informa Electrical Transmit/rec	tion eive	 Action required Service manual revision Retrofit information 	

Occurrences of banding have been reported from the field (1.5-mm, 6-mm, 8-mm, and 12-mm). The causes for each type of banding are different. This RTB explains how to verify each type and apply the corresponding solution.

SYMPTOM/CAUSE/SOLUTION

No: This type of banding does not occur in this mode. Yes: This type of banding can occur in this mode.

Туре	Mo	ode	Cause	Solution	
	Сору	Print		Production	In the field
1.5- mm	No	Yes	The coupling of the drum vibrates and generates a specific frequency. This frequency causes 1.5-mm banding only in 2/3 speed mode.	The material of the coupling located in the drum shaft holder (#A2592251) has been changed from plastic to metal. P/N: #A2592251 NOTE: The part number has not been changed; but the old part was never stocked at the SPC in Japan.	 Replace the drum shaft holder. Refer to page 5/8.
6-mm	No	Yes	The rotation speed stability of the drum motor varies part by part. If the rotation speed is not constant, the image development process is affected (especially in 2/3 speed mode, causing 6-mm banding).	The rotation speed stability of the drum motor has been improved. P/N changed: #AX060162 -> #AX060197	Replace the motor. Refer to page 6/8.
8-mm	No	Yes	The AC current of the paper separation corona generates noise, which affects the paper transfer corona. The frequency of the AC current causes 8-mm pitch banding only in 2/3 speed mode.	The frequency of the AC current has been changed on the high voltage supply board (T2, D). P/N changed: #A2595055 -> #A2595058	 Replace the high voltage supply board (T2, D). If the new board is not available, rerouting the high voltage cable of the paper transfer corona may solve the problem. If not, the board should be replaced with a new one. Refer to page 6/8.
12-mm	Yes	No	The frequency generated by the gears in the drum drive unit causes 12-mm banding only in standard speed mode.	The gears have been modified to reduce the specific frequency generated when the gears rotate. P/N changed: #AB017512 -> #AB017521 #AB017477 -> #AB017520	 Replace the gears with modified ones. Refer to page 7/8 to 8/8.

Please refer to "WORKFLOW" on page 3/8 for troubleshooting procedures.

Reissued: 15-Jan-00

Model: Iris/Lilac	Date: 31-Dec-99	No.: RA258016

NOTE: If the dark spots described in RTB 009 appear on the outputs due to an inappropriate transfer bias setting, this may cause an uneven image that resembles a banding image. Please follow the procedures in RTB 009 first when dark spots appear on the outputs.

Cut-in Serial Number of Modifications

Iris (A258)

CODE	SERIAL NUMBER				
	1.5-mm	6-mm	8-mm	12-mm	
A258-15	3B39100001	3B39100001	3B39080001	3B39020066	
A258-17	H0191100001	H0191100001	H0190500091	H0190200131	
A258-19	H0191100051	H0191100051	H0190800221	H01903XXXXX	
A258-22	AY79090251	AY79100001	AY79050111	AY7903XXXX	
A258-26	3S51090001	3S51090001	3S50590041	3S5039XXXX	
A258-27	H0191000001	H0191000001	H0190500380	H01903XXXXX	
A258-29	H0191000376	H0191000376	H0190500486	From the fist mass	
A258-55	L0369100001	L0369100001	L0369060147	production	
A258-65	L0369100025	L0369100025	L0369080237		

Lilac (A259/A260)

CODE	SERIAL NUMBER			
	1.5-mm	6-mm	8-mm	12-mm
A259-15	3B4910XXXX	3B4911XXXX	3B4909XXXX	From the fist mass
A259-17	H02910XXXXX	H02911XXXXX	H02909XXXXX	production lot
A259-22	AY99090011	AY99100001	AY99060001	
A259-26	3S60990001	3S91090001	3S60690001	
A259-27	H0290900001	H0291000001	H0290600001	
A259-29	H0290900048	H0291000033	H0290600087	
A259-55	L037910XXXX	L037911XXXX	L037909XXXX	
A259-65	L0379100001	L0379100001	L0379070001	
A260-15	3B59100001	3B59100001	3B59050001	From the fist mass
A260-17	H0390900001	H0391000001	H0390500101	production lot
A260-22	AZ19090001	AZ19100001	AZ19060001	
A260-26	3S70990001	2S71090001	3S70790001	
A260-27	H03910XXXXX	H03911XXXXX	H0390600104	
A260-29	H0390900051	H0391000026	H0390600186	
A260-55	L0389090001	L0389100001	L0389060001	
A260-65	L0389100061	L0389100061	L0389060041	



Model: Iris/Lilac	Date: 31-Dec-99	No.: RA258016
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[1] How to measure the width of the banding

- 1. Print the test pattern in SP mode.
 - SP5-955-018 : Set to "11" (1-dot main scan line)
 - SP5-955-001 : Set to "90" or "128" (LD PWM value) depending on the image density on the output.
 - SP2-920-000 : Set to "1" to print the test pattern in 600 dpi mode if the problem is related to the print mode.
- 2. Switch to copy mode and select B&W and A3 (DLT) size mode. Then, print out the test pattern.
- 3. Select 5 or 10 bands [A] which are visible on the test pattern printed out and measure the value [A]. Calculate the width [B] of the banding by dividing [A] by the number of bands (5 or 10).

NOTE: The way to distinguish between 6-mm and 8-mm banding is as follows.

If the pitches are not clearly visible and it is difficult to judge whether the width is 6 or 8 mm, check if the banding disappears or is improved by disconnecting the connector [C] of the paper separation corona.

- If the banding disappears or is improved, it is 8-mm banding.
- If nothing is changed, it is 6-mm banding.

Disconnecting the connector of the paper separation corona itself is not expected to cause paper jams. However, please use a recommended type of paper if available. After the test is finished, make sure that the connector is re-connected properly.




Reissued: 15-Jan-00

160R

Model: Iris/Lilac

Date: 31-Dec-99 No.: I

No.: RA258016

[2] 1.5-mm Banding : Drum Shaft Holder Replacement Procedure

1. Pull out the drawer unit.

NOTE: Remove the drum unit and put some sheets of paper on the unit to protect it from light fatigue.

- 2. Follow steps 1-8 of the replacement procedure for 12-mm banding (see page 7/8 of this RTB.)
- 3. Remove the receptacle [A] (1 screw).
- 4. Replace the drum shaft holder [B] (6 screws).

NOTE:

A total of 4 different plates have been prepared for both sides of the drum shaft holder. The difference between [C] and [D] or between [E] and [F] is the thickness. The difference between [C] and [E] or between [D] and [F] is the shape. These differences exist so that the 4 plates can be easily distinguished.

The rear frame, where the drum shaft holder is installed, is slightly tilted. These springs are used to correct the angle of the frame.

The number of spring plates installed is different from machine to machine, depending on the angle at which the frame is tilted.

When replacing the drum shaft holder, it is also necessary to replace the plates (if present).





Reissued: 15-Jan-00

NGOR

Model: Iris/Lilac

Date: 31-Dec-99

No.: RA258016

[3] 6-mm Banding : Drum Motor Replacement Procedure

- 1. Remove the rear cover.
- 2. Remove the stay [A].
- 3. Disconnect the connector from the drum motor [B] and replace the motor.



[4] 8-mm Banding : High Voltage Supply Board - T2/D Replacement Procedure

- 1. Remove the rear cover.
- 2. Replace the high voltage supply board - T2/D [A].

NOTE:

If the part is not available, rerouting the high voltage cable [B] of the paper transfer corona sometimes improves the situation or solves the problem. If nothing changes, the high voltage supply board should be replaced.



As explained, the frequency of the AC current has been changed. The suffix of the service part number for the high-voltage power supply assembly was therefore changed from "A2595055D" to "A2595088E". For purposes of parts control in the field, the service part number has been changed from #A2595055 to #A2595058. This means that #A2595055E and A2595058 are the exact same part. The part number printed on the high voltage supply board (#A2595055E and A2595058) is #AZ320095B (the modified board).

[A]



Date: 31-Dec-99

No.: RA258016

[5] 12-mm Banding : Gear Replacement Procedure

- Remove the following parts: Rear covers / Fly-wheel [A] / Stay [B]
- 2. Remove the 3 screws securing the PSU and the 4 screws securing the I/O control board. Then, move these two parts aside to make space to remove the drum drive unit [C].
- **NOTE:** It is not necessary to remove the PSU and I/O board.
- 3. Disconnect the connector of the drum motor [D].
- Rotate the drum motor counterclockwise manually so that the screw [E] of the drum pulley [F] faces downward.
- 5. Loosen the screw [G] and remove the tension spring [H].
- 6. Remove the drum motor (4 screws) and drum pulley (1 screw)
- 7. Remove the 3 connectors from the drive unit and remove the unit (4 screws and 2 stud screws).
- 8. Remove the tension spring [I]. Then, remove the unit cover plate [J] (3 screws).

NOTE:

- (1) Before opening the drive unit, note the routing of the timing belts as well as the positioning of the pulleys. This will make it much easier to put the belts and pulleys back after the procedure.
- (2) Do not open the drive unit completely. If this is done, the timing belt and pulleys will come off the unit. Open the cover just enough for gear replacement (see the photo).
- Replace the white and black gears [K]. (The black gear is secured with 2 screws.)



Technical Bulletin

Reissued: 15-Jan-00

Model: Iris/Lilac		Date: 31-Dec-99	No.: RA258016
9	Replace the white and black gears [K]		

- Replace the white and black gears [K]. (The black gear is secured with 2 screws.)
- 10. Reinstall the upper cover plate. Make sure that the heads [A] of the studs are in position in the holes in the cover plate.

NOTE: Make sure that the timing belts [B] are properly set as shown.

- 11. Reinstall the drive unit and drum pulley by pressing the timing belt [C] down as shown.
- 12. Reinstall the drum motor [D] (4 screws).
- Connect the tension spring [E] and rotate the motor *counterclockwise* 5-6 times. Secure the screw [F].

NOTE:

Before securing the screw, the motor should be rotated after hooking the spring. If this is not done, the proper tension will not be applied to the belt, causing the timing belt to jump during operation. This may cause a partial color shift image.

14. Reinstall all other parts removed.





RIGON Te

Technical Bulletin

Model: Iris/Lilac		e: 31-[Dec-99	No.: RA2	58017		
Subject: Curved From: Technical		Prepa	ared by: T. I	toh			
Classification:	 Troubleshooting Mechanical Paper path Other () 	Part inf Electric Transm	ormat al iit/rec	tion eive	☐ Action ☐ Servio ☐ Retro	n required ce manual r fit informatio	evision on
SYMPTOM Curved dark ba	nds [A] or uneven image			5		[A]	

Curved dark bands [A] or uneven image density appears due to a dirty charge corona unit.

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\int	ſ		

CAUSE

The charge corona fan stays on while the main switch is on. Since the charge corona fan draws the air into the machine, the charge corona unit becomes dirty due to dust in the air. The problem occurrence depends on the environmental conditions where the machine is installed.

NOTE: This problem has been reported only from the Japanese market, so far. The problem occurred especially in environments where a humidifier (supersonic wave type) was used. A substance left after moisture evaporates adheres to the charge corona unit, causing this problem.

SOLUTION

As a solution to this problem, two modifications have been applied. One involves SP mode and the other is a grid cleaning pad. There are notes on how to apply the solution to the field machines depending on the environment and/or the condition of the machine. Please investigate which solution (either or both) should be applied.

Solution [1]: SP Mode

The software has been modified and the following SP mode was added.

SP No.	Item [Displayed]	Default	Value Range	Step	SP7- 902/3	Description				
03-980-00: C	03-980-00: Charge Corona Fan ON/OFF Timing Setting									
03-980-00	MCFanCtrl	0	0: Stays on 1: Turn off at specific timing			Specifies the off timing of the charge corona fan.				

When SP3-980-00 is set to "1", the fan turns off 30 seconds after the drum motor stops or when Energy Saver mode turns on. (The fan turns on again when the drum motor turns on or when Energy Saver mode turns off.) This SP mode can extend the time until the charge corona unit is considered dirty.

Technical Bulletin

Model: Ir	is/Lilac					Date	e: 31	-Dec-	.99	1	No.:	RÆ	A258	017	
	<i>c</i> .	· ·	· · ·	<u> </u>		 							• • •		

- This software change has been implemented in the main firmware (Ver. 6.621) on the Iris. (This modification has been applied from the July production run.)
- This software change has been implemented from the first mass production units on the Lilac.

NOTE: Please read the following notes when changing the setting of this SP mode.

- When activating this SP mode, the transfer belt heater should be disconnected. This is because the temperature inside the machine tends to increase since the charge corona fan turns off at the timing explained above. (Please refer to the following page for the procedure.)
- When activating this SP mode, please check the C/O (copies per original) in full color copy mode. The output signal from the ID sensor tends to fluctuate due to temperature changes inside machine. This may cause image the density to fluctuate if the C/O is 20 (20 repeat copies) or more.

Solution [2]: Grid Cleaning Pad

RIGOH

In addition to the SP mode, a grid cleaning pad (#A2592311) has been added to the upper frame of the drum unit (as shown in the picture) from the June production run onward. (Please refer to MB #18 for the Iris and #15 for the Lilac for the cut-in serial number.)

This modification enables service technicians or users to clean the grid plate. Please use this pad if the problem is reported.

NOTE: The charge corona unit is normally secured with a screw. When asking users to clean the charge corona unit, please remove the screw and instruct them to set the charge corona unit properly after cleaning it. If the charge corona unit is not set properly, this causes an SC301 or a blank image problem.

The grid cleaning pad tends to be worn away while cleaning the grid plate, and needs to be replaced after being used for cleaning around 100 times. Although this is a consumable part in this case, this part is not assigned as a PM part since the problem occurrence is very rare.

Installation Procedure:

- 1. Using alcohol, clean the upper frame of the drum unit where the grid cleaning pad is attached.
- 2. Attach the cleaning pad [A] as shown in the picture.







- 1. Remove the lower rear cover.
- 2. Remove the used toner bottle (1 connector).
- 3. Remove the high voltage supply board -T2/ D [A] (1 screw and 2 connectors).
- 4. Disconnect the connector [B] of the heater located behind the high voltage supply board.

Technical Bulletin

Model: Iris/Lilac			Dat	e: 29-Feb-00		No.: RA258018
Subject: Service	Manual	Prepared by: T. Itoh				
From: Technical	Service Dept., GTS Division					
Classification:	 Troubleshooting Mechanical Paper path Other () 	Part info Electric Transm	ormat al iit/rec	tion 🗌 Eive 🗍	Action Servic Retrof	required e manual revision it information

Please correct your service manuals as follows:

RIGOR

1. Page 2-3 (5) ACC-Run-Time Process Control Self Check

Iris/Lilac models do not have this function, so please delete the explanation from your service manual. This function is only used in the Cattleya.

2. Page 6-83 6.11.3 NV-RAM UPLOADING AND DOWNLOADING

"With SP mode, copier settings can be uploaded to a Flash ROM card from the NV-RAM inside the machine or downloaded from a flash ROM card to the NV-RAM."

This explanation is wrong. When executing the upload or download with SP5-824 or 825, *uploading* transfers the data from the NVRAM to the flash ROM on the main board and *downloading* transfers the data from the flash ROM to the NVRAM.

No settings are uploaded or downloaded from the flash ROM card (IC card). The IC card that contains the main program needs to be set in the main control board slot whenever uploading or downloading.

Date: 29-Feb-00

No.: RA258018

3. Appendix – 2 SP MODE TABLE

SP-5-114-000 Account color mode setup [Color Mode Selection : Key Card]

When the key counter has been installed or the user code mode has been enabled, it is possible to select color mode(s) which are only accessible by using the key counter or user code. The default setting for this SP mode is 15. This means that the key counter or user code is always required whenever making copies.

Black/White	Single Color	Twin Color	Full Color
Counter			
	Counter		
Counter	Counter		
		Counter	
Counter		Counter	
	Counter	Counter	
Counter	Counter	Counter	
			Counter
Counter			Counter
	Counter		Counter
Counter	Counter		Counter
		Counter	Counter
Counter		Counter	Counter
	Counter	Counter	Counter
Counter	Counter	Counter	Counter
	Black/White Counter Counter Counter Counter Counter Counter Counter	Black/WhiteSingle ColorCounter	Black/WhiteSingle ColorTwin ColorCounter

A key counter or user code is required to make copies. The number is then Counter: counted up by the key counter or the user code counter.

Copies can be made without a key counter or user code. No mark:

NOTE:

When SP-5-104-000 (A3/DLT double count) is set to 1 (double count), the mechanical total counters and electrical counters on the operation panel count each copy/development twice for A3/DLT. However, a key counter counts up only once. This is a specification carried over from the Azalea.

Technical Bulletin

Model: Iris/Lilac

Date: 29-Feb-00

No.: RA258018

• SP2-301 to 316 (except for SP2-311) - Belt transfer & Paper Transfer Bias

The default data described in the manual is incorrect. Please correct your manual.

The default value has been changed to the appropriate value in Ver. 6.43.

The default value has been changed for white lines on OHPs in Ver. 6.621.

The default value has been changed for white lines on OHPs in Ver. 6.621 (only for EU version).

SP No.	Default value in	Correct default
	service manual	value
02-301-01	1700	1700
02-301-02	1800	1800
02-301-03	1900	1900
02-301-04	2000	2000
02-301-05	1700	1700
02-301-06	1800	1800
02-301-07	1700	1700
02-301-08	1800	1800
02-301-09	1900	1900
02-301-10	1700	1700
02-301-11	1000	1700
02-301-12	1000	300
02-301-13	800	1000
02-301-14	900	1100
02-301-15	1000	1200
02-301-16	1100	1300
02-301-17	1200	1200
02-301-18	1300	1300
02-301-19	800	1100
02-301-20	900	1200
02-301-21	1000	1300
02-301-22	1200	1200
02-301-23	1700	1700
02-301-24	0	0
02-301-25	1700	1700

SP No.	Default value in	Correct default
	service manual	value
02-310-01	1	1
02-310-02	7	10
02-310-03	15	18
02-310-04	15	18
02-310-05	15	18
02-310-06	8	8
02-310-07	10	10
02-310-08	10	10
02-310-09	10	10
02-310-10	7	8
02-310-11	10	10
02-310-12	10	10
02-310-13	10	10
02-310-14	7	10
02-310-15	15	18
02-310-16	15	18
02-310-17	15	18
02-310-18	13	12
02-310-19	7	15
02-310-20	7	15
02-310-21	7	15
02-310-22	6	7
02-310-23	7	9
02-310-24	7	9
02-310-25	7	9
02-310-26	13	10
02-310-27	7	15
02-310-28	7	15
02-310-29	7	15

SP No.	Default value in	Correct default
	service manual	value
02-313-01	100	100
02-313-02	100	100
02-313-03	200	200
02-313-04	250	250
02-313-05	100	100
02-313-06	100	100
02-313-07	100	250
02-313-08	100	300
02-313-09	100	100
02-313-10	100	100
02-313-11	200	270
02-313-12	100	270

Technical Bulletin

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Model: Iris/Lilac

Date: 29-Feb-00

No.: RA258018

SP No.	Default value in	Correct default
	service manual	value
02-314-01	0	0
02-314-02	0	0
02-314-03	0	0
02-314-04	0	0
02-314-05	0	3
02-314-06	0	0
02-314-07	0	0
02-314-08	0	0
02-314-09	0	0
02-314-10	0	0
02-314-11	0	0
02-314-12	0	0
02-314-13	3	0
02-314-14	0	0
02-314-15	0	0
02-314-16	0	0
02-314-17	0	0
02-314-18	2	2
02-314-19	2	2
02-314-20	2	2
02-314-21	2	2
02-314-22	4	4
02-314-23	4	4
02-314-24	4	4
02-314-25	0	0
02-314-26	0	0
02-314-27	0	0
02-314-28	0	0

SP No.	Default value in	Correct default
	service manual	value
02-315-01	3	-1
02-315-02	0	-1
02-315-03	0	-1
02-315-04	0	-1
02-315-05	0	-1
02-315-06	0	-1
02-315-07	0	-1
02-315-08	0	-1
02-315-09	0	-1
02-315-10	0	-1
02-315-11	0	-1
02-315-12	0	-1
02-315-13	3	-1
02-315-14	0	-1
02-315-15	0	-1
02-315-16	0	-1
02-315-17	0	-1
02-315-18	0	-1
02-315-19	0	-1
02-315-20	0	-1
02-315-21	0	-1
02-315-22	0	-1
02-315-23	0	-1
02-315-24	0	-1
02-315-25	0	-1
02-315-26	0	-1
02-315-27	0	-1
02-315-28	0	-1

SP No.	Default value in	Correct default		
	service manual	value		
02-316-01	100	100		
02-316-02	89	89		
02-316-03	100	100		
02-316-04	100	100		
02-316-05	70	75		
02-316-06	80	70		
02-316-07	100	100		
02-316-08	89	89		
02-316-09	100	79		
02-316-10	87	70		
02-316-11	100	100		
02-316-12	100	100		
02-316-13	120	95		
02-316-14	87	70		
02-316-21	100	100		
02-316-22	100	100		
02-316-23	100	100		
02-316-24	100	100		

02-316-25	100	125
02-316-26	100	100
02-316-27	100	100
02-316-28	100	100
02-316-29	100	100
02-316-30	100	100
02-316-31	100	100
02-316-32	100	100
02-316-33	100	100
02-316-34	100	100

Technical Bulletin

Model: Iris/Lilac		Dat	e: 29-Feb-00	No.: RA258019	
Subject: Squeak	ing noise		Prepared by: T. Itoh		
From: Technical Service Dept., GTS Division					
Classification:	 Troubleshooting Mechanical Paper path Other () 	Part inform		tion Actio	n required ce manual revision fit information

SYMPTOM

A squeaking noise is generated in the development unit.

CAUSE

The vibration generated from the doctor blade during the development process is transferred to the upper cover. This results in a squeaking noise.

SOLUTION

To absorb the vibration, four foam rubber pads have been attached to the development cover. If the squeaking noise occurs in the field machines, please follow the procedure described below. Please refer to MB #22 (Iris) and #19 (Lilac) for the cut-in serial number information.

- 1. Make a full color copy and check when the noise occurs (i.e. at which color in the development process).
- 2. Turn off the main switch.
- 3. Pull out the drawer unit.
- 4. Remove the drum unit and place a few sheets of paper on the unit to prevent the drum from developing light fatigue.
- 5. Remove the relevant development unit(s).
- 6. Remove the development cover [A] (3 screws).
- With damp and dry cloths, clean the areas on the front and reverse sides of the development cover where the pads will be attached.



8. Attach 3 foam rubber pads [B] to the reverse side of the development cover as shown.



Date: 29-Feb-00

No.: RA258019

- 9. Reinstall the development cover and attach one foam rubber pad [C] to the front side of the cover, as shown.
- 10. Reassemble the machine.

Technical Bulletin

Model: Iris/Lilac		Dat	e: 06-Apr-00	No.: RA258020	
Subject: Bypass	Tray Modificaition		Prepared by: T.	ltoh	
From: Technical	Services Dept., GTS Division				
Classification:	Troubleshooting	Part inf	orma	tion Actio	on required
	Mechanical	Electric	Electrical		ice manual revision
	Paper path	Transmit/rec		eive 🗌 Retr	ofit information
	Other ()				

SYMPTOM

Paper jam at the by-pass tray.

CAUSE

Even if the user selects 'sideways' with the operation panel, the paper orientation is automatically reset to 'lengthwise' if the by-pass tray side fences are moved to the 12" size position. This may result in a paper jam.

SOLUTION

A stopper has been added to the front side fence so that the maximum width that can be set is A3 (11"). This stopper can be pulled out to make copies with paper larger than this size.

- Please refer to MBs, which will be issued soon, for the cut-in serial number.
- An errata sheet (see the next page) has been enclosed with the modified production units. An English version is enclosed with North American models and 5 languages are enclosed with Europe/Asia models.

To add the stopper [A], the shape of the front side fence [B] was modified. Please refer to the next page.

New parts:

#A2592972: Front Side Fence

#A2592973: Side Fence Stopper

NOTE: The part number of the by-pass feed table assembly has not changed, but the suffix has. Therefore, please order the above two parts separately to apply the modification in the field.



Date: 06-Apr-00

Errata Sheet:

NOTE: This sheet is for Europe/Asia versions. For the North America version, the paper size indicated is 11"x17", not A3.

How to Set Paper Larger Than A3 in the Bypass Tray

If you want to set paper larger than A3 in the bypass tray, carry out the following procedure.

- Open the bypass tray.
- 2 Pull up the blue tab.



3 Leaving the blue tab up, slide the paper guides until they stop.



4 Insert the copy paper into the bypass tray.

🔗 Note

Make sure that the paper guides match the paper size. Be sure to return the blue tab to its original position before you close the bypass tray. If you do not return it correctly, the bypass tray might not close properly.

A258-8557

Technical Bulletin

Model: Iris/Lilac	te: 22-Jun-00		No.: RA258021			
Subject: Dust Fil	Prepared by:	: T. It	toh			
From: Technical Services Dept., GTS Division						
Classification:	Troubleshooting	Part inf	orma	tion 🗌 A	\ction	ı required
	Mechanical	Electric	Electrical		Service manual revision	
	Paper path	Transmit/rece		eive 🗌 F	letrol	fit information
	Other ()					

The dust filter has been modified twice. This RTB explains the modification history and some notes for servicing in the field.

1st Modification (Refer to MB #21 for Iris and #18 for Lilac.)

Old part number	New part number	Description	Q'ty	Int	Remarks
A2591082	A2591047	Dust Filter	1-1	X/O	See Note 1.

NOTE 1:

The material of the filter has been modified to minimize the amount of dust exiting the machine.

2nd Modification (Refer to MB #28 for Iris and #24 for Lilac.)

Old part	New part	Description	Q'ty		Int	l	Remarks
number	number						
A2591081	AA010109	Ozone Filter	1 – 1	X/O			
A2591047	A2592337	Dust Filter	1 – 3	X/X			See Note 2-1 to
A2591083 —		Ozone Filter Case					2-3 and Note 3.
A2591085 –		Case Cover – Ozone Filter					
	L A2592334	Ozone Filter Case	1 – 1	X/X			
L	— A2592335	Upper Case Cover	1 – 1	X/X		-X/O	
	A2592336	Front Case Cover	0 – 1				
	A2592338	Seal – 5x36	0 – 1				
	A2592339	Seal – 5x76	0 – 2				
A2591317		Duct Seal – Lower Case	1 - 0				See Note 4.

NOTE 2-1:

The number of filters was increased from 1 to 3 to further minimize the amount of dust exiting the machine.

RIGON

Date: 22-Jun-00

No.: RA258021



NOTE 2-2:

If the MIF do not show any toner scattering at PM visits, you only need to replace the filter(s) which are dirty with toner and/or dust. The filters become dirty from the joint duct side [A]. Therefore, please remove the dirty filter(s) [B] first, then shift the clean filter(s) [C] toward the joint duct side. Then, insert the new filter(s) [D] as shown in the illustration. The filters should always be installed so that *the side with the tab* [*E*] faces the joint duct [A].

NOTE 2-3:

The old filter A2591047 will continue to be available as a service part.

NOTE 3:

A2591083 and A2591085 are no longer available as service parts. If <u>either</u> of them needs to be replaced in the field, please replace <u>both with the 6 parts</u> listed in the table (A2592334 - 9).

NOTE 4:

The duct seal attached to the rear cover is no longer necessary. Therefore, this part has been removed.

Technical Bulletin

Model: Iris/Lilac				Date: 22-Jun-00		No.: RA258022
Subject: Transfer belt stay installation procedure					d by: T. II	toh
From: Technical						
Classification:	Troubleshooting	Part info	orma	tion	Action	n required
	Mechanical	Electric	Electrical		Servic	ce manual revision
	Paper path	Transmit/rec		eive	Retro	fit information
	Other ()					

Please note the remarks explained below when installing the transfer belt stay [A].

REMARKS:

Install the transfer belt stay [A] while pressing portion [B]. The transfer belt unit will then be secured in the proper position by the pressure from spring [C]. If portion [B] is not pressed while the screws are fastened, the transfer belt stay will not be fixed in the proper position due to the pressure from the spring. This will cause the PG (photoconductor gap) to shift slightly.

Although a slightly shifted PG would not directly cause any machine failure, a proper PG is essential to ensure the effectiveness of measures such as troubleshooting for black toner scattering (PG seals). Please be sure to follow the above procedure when installing the transfer belt stay.

NOTE: The screws can be fastened in any order.



Technical Bulletin

Model: Iris/Lilac		Dat	e: 22-Jun-00	No.: RA258023		
Subject: Toner s	cattering inside machine (Tone	rea)	Prepared by: T. I	toh		
From: Technical Services Dept., GTS Division						
Classification:	☐ Troubleshooting	Part inf	ormat	tion 🗌 Actior	n required	
	Mechanical	Electric	Electrical		ce manual revision	
	Paper path	Transmit/rec		eive 🗌 Retro	fit information	
	Other ()					

SYMPTOM

Toner scatters around the toner hopper area and inside the machine.

CAUSE

The toner hopper seal is damaged or peeled off while the toner bottle is replaced. Toner spills out from the gap between the toner hopper seal and the toner supply opening of the toner bottle.

SOLUTION

Protective sheets [A] have been added to the toner hopper seals [B], in order to prevent the toner hopper seal from being damaged while the toner bottle is replaced.



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No.: RA258023

Model: Iris/Lilac







- 1. Pull out the drawer unit.
- 2. Remove the drum unit and place a few sheets of paper on the unit to prevent the drum from developing light fatigue. Then, remove the toner bottle.
- 3. Rotate the drawer unit so that the toner supply opening [A] faces up, then lock the position of the revolver unit by putting a cleaning cloth [B] in between the drawer unit and the development unit as shown.
- 4. Remove the stay [C] (2 screws and 1 connector).
- 5. Clean the area around the toner hopper seal [D] with a dry cloth.
- **NOTE:** Do not use alcohol. Thoroughly clean the area where the protective seal [E] is to be attached. If the toner hopper seal is already damaged or peeled off, please replace the seal.
- 6. Fold the protective sheet [E] along the dotted line and attach it to the hopper as shown. (Refer to the picture on the next page.)
- **NOTE:** Make sure that the protective sheet is properly attached, without any gap. If this is not done, the sheet may peel off when the toner bottle is replaced.
- 7. Attach the portion [F] of the seal along with the hopper and fold the end of seal and attach it as shown





- 8. Attach a piece of tape [A] to the toner supply opening before rotating the revolver so that toner will not spill out from the hopper. Turn the revolver to the setting position; then remove the tape [A] and insert the bottle.
- 9. Attach the protective sheets for the other colors.

Technical Bulletin

PAGE: 1/2

Model: Iris/Lilac Dat					00	No.: RA258024
Subject: Toner spiling over					by: T. It	toh
From: Technical Service Dept., GTS Division						
Classification:	Troubleshooting	Part inf	orma	tion	Action	required
	Mechanical	Electric	Electrical		Servic	e manual revision
	Paper path	Transmit/rece		eive	Retrof	fit information
	Other ()					

SYMPTOM

Toner spills out from the joint section [A] of the toner collection coil, and the interior of the machine at the rear becomes dirty with toner. This can cause toner spots on copies or paper jams if toner drops onto the clutches.

CAUSE

Used toner tends to lump together due to the temperature of the toner collection coil. The toner then gets clogged around the joint section. This can cause toner to spill out from the joint section.

SOLUTION

- The material of the toner collection coil has been changed from plastic to metal. This
 will prevent the temperature of the coil from rising. This modification was applied to the
 production line in July '99. Please refer to MB #05 (Iris) and #02 (Lilac) for the cut-in
 serial numbers. At the same time, in order to force the toner to drop straight down into
 the collection coil tube, the size of cutout [B] in the toner outlet cap has been changed
 as shown below.
- A seal has been added to the drawer unit to cover the joint section. This was applied to the production line in February 2000. Please refer to MB #29 (Iris) and #25 (Lilac) for the cut-in serial numbers.

If this problem occurs in the field, please replace the toner collection coil and toner outlet cap, and attach the seal.

- Toner collection coil P/N: #A2593631
- Toner outlet cap P/N: #A2593582
- Seal 14x37 P/N: #A2592396
- **NOTE:** Part number #A2593582 has not been changed. However, the P/N suffix has been changed.





Replacement Procedure



- 1. Pull out the drawer unit.
- 2. Remove the drum unit and place a few sheets of paper on the unit to prevent the drum from developing light fatigue.
- 3. With alcohol, clean the area where the seal [A] is to be attached.
- 4. Attach the seal [A] to the drawer unit as shown.
- 5. Remove the cleaning unit from the drum unit.

NOTE: Make sure that the drum is protected from light.

- 6. Remove the toner outlet cap [B] (1 screw) and spring [C].
- 7. Replace the toner outlet cap and toner collection coil [D] (snap-ring [E] and gear [F]).
- 8. Reassemble the machine.

Technical Bulletin

Model: Iris/Lilac	Date: 22-Jun-00			No.: RA258025		
Subject: SC385		Prepared by	: T. It	toh		
From: Technical						
Classification:	Troubleshooting	Part info	ormat	tion 🗌 A	Action	n required
	Mechanical	Electric	Electrical		Servic	e manual revision
	Paper path	Transmit/rec		eive 🗌 F	Retrof	fit information
	Other ()					

SYMPTOM

Black toner scatters inside the machine. Toner accumulates around the black development unit and ID sensor areas, which can sometimes cause SC385.

CAUSE

If the PG (photoconductor gap) is close to the upper limit, toner concentration tends to increase and toner may scatter inside the machine. When toner accumulates on the ID sensor, this may cause SC385.

This occurs most often with black toner due to its unique characteristics.

SOLUTION

Production line

- In order to shift the PG, a PG seal (#A2593219) has been attached to the lower development unit holder of the black development unit only. Please refer to MB #27 for Iris and #23 for Lilac.
- **NOTE:** Please do not attach the PG seals for the color development units. If this is done, a color band may appear on the outputs. This is because the narrow PG may cause the developer sleeve of a color development unit to touch the drum surface when the unit moves into the development position.
- The dust filter has been modified twice to minimize the amount of dust exiting the machine. For the first modification, refer to MB #21 (Iris) and #18 (Lilac). For the second, refer to MB #28 (Iris) and #24 (Lilac).
- The ID sensor cover has been modified to optimize the airflow to the ID sensor. This
 prevents toner from accumulating on the surface of the ID sensor. Please refer to MB
 #32 (Iris) and #28 (Lilac).
- The drum shaft supporter has been modified and an additional ball bearing has been inserted in order to prevent the PG from changing during copy runs. Please refer to MB #34 (Iris) and #30 (Lilac).
- The development unit holder has been modified twice. The first modification was done to improve the holder durability and the second was done to ensure the proper PG. Please refer to MB #33 (Iris) and #29 (Lilac).



Date: 22-Jun-00

No.: RA258025

Cut-in Serial Numbers:

	PG seal	ID sensor cover	Drum shaft	Development unit	holder
			supporter	A2593229 ->	B0173229 ->
				B0173229	A2593240
Iris					
A258-15	3B39100001	3B30040001	3B30050001	3B30030001	3B30050001
A258-17	H01910XXXXX	H0100400001	H0100500001	H0100300001	H0100500001
A258-19	H01910XXXXX	H01004XXXXX	H0100500066	H0100300086	H0100500066
A258-22	AY7910XXXX	AY70030345	AY70050001	AY70030008	AY70050001
A258-26	3S51090001	3S50400001	3S50500001	3S50400001	3S50500001
A258-27	H0191000321	H0100400101	H0100500081	H0100400101	H0100500081
A258-29	H0191000376	H0100400286	H0100500284	H0100300308	H0100500284
A258-55	L036910XXXX	L0360040001	L0360050001	L0360040001	L0360050001
A258-65	L036910XXXX	L0360040023	L0360060031	L0360040023	L0360060031
Lilac – Basic					
A259-15	3B4910XXXXX	3B40040001	3B40050001	3B40030001	3B40050001
A259-17	H02910XXXXX	H0200400001	H0200500001	H0200300001	H0200500001
A259-22	AY99100001	AY90040001	AY90050001	AY90040001	AY90050001
A259-26	3S61090001	3S60400001	3S60500001	3S60400001	3S60500001
A259-27	H0291000001	H0200400201	H0200500251	H0200400201	H0200500251
A259-29	H0291000033	H02004XXXXX	H0200500357	H02004XXXXX	H0200500357
A259-55	L037910XXXX	L037004XXXX	L037005XXXX	L037004XXXX	L03705XXXX
A259-65	L037910XXXX	L0370040001	L0370060001	L0370040001	L0370060001
Lilac – Edit					
A260-15	3B59100001	3B50040001	3B50050001	3B50030001	3B50050001
A260-17	H0391000001	H0300300094	H0300500001	H0300300001	H0300500001
A260-22	AZ19100001	AZ10040001	AZ10050001	AZ10040001	AZ10050001
A260-26	3S71090001	3S7040XXXX	3S70500001	3S7040XXXX	3S70500001
A260-27	H03910XXXXX	H0300400038	H0300500028	H0300400038	H0300500028
A260-29	H0391000026	H0300400089	H0300500040	H0300400089	H0300500040
A260-55	L038910XXXX	L0380040001	L0380050001	L0380040001	L0380050001
A260-65	L038910XXXX	L038004XXXX	L038005XXXX	L038004XXXX	L038005XXXX

Date: 22-Jun-00

No.: RA258025

Model: Iris/Lilac

In the field

The following parts need to be replaced or attached:

- Replace the drum shaft supporter. •
- Attach PG seals to the lower development unit holders. •
- Replace the development unit holders. •
- Replace the ID sensor cover. •
- Replace the dust filter.

Please refer to the following procedures for replacement or attachment.

1. Drum shaft supporter replacement



Old P/N	New P/N	Description	Page	Index
A2592462	A2592422	Front Supporter – Drum Shaft	49 (Iris) 45 (Lilac)	1

- 1. Remove the drum stay [A] (5 screws).
- 2. Replace the drum shaft supporter [B] (4 screws).
- NOTE: When reinstalling the drum stay [A], the screws should be secured while pressing portion [C] of the drum stay. Refer to RTB #22 for details.

Date: 22-Jun-00

Model: Iris/Lilac

No.: RA258025

2. PG seal attachment & development unit holder replacement procedure



6+/- 1 mm

Old P/N	New P/N	Description	Page	Index	Remarks
-	A2593219	Seal 7x10	39 (Iris) 35 (Lilac)	#13	See note.
A2593229	A2593240	Development Unit Holder	39 (Iris) 35 (Lilac)	1	See note.

- NOTE: The PG seal size has been changed from 10x14 mm to 7x10 mm to achieve the target PG. The part number was not changed through this modification, but the suffix was.
- **NOTE:** The development unit holder has been modified twice. The above part number is the latest one (A2593229 -> B0173229 -> A2593240).
- 1. Pull out the drawer unit.
- 2. Remove the drum unit and place a few sheets of paper on the unit to prevent the drum from developing light fatigue.
- 3. Clean the machine using a vacuum cleaner.
- 4. Remove the black development unit.
- 5. Clean the lower development unit holder [A] completely with damp and dry cloths.
- **NOTE:** For damp cloths, use water and not alcohol. Alcohol can deform the seal. If alcohol is used by accident, clean the holder with a dry cloth after the holder dries.
- 6. Attach a PG seal [B] to both sides of the lower development unit holder as shown.
- **NOTE:** Make sure that the seal has been attached flush against the holder and is not folded. If the seal is not properly attached, the PG will be out of specification.

The PG seal should not be attached to the development holders for other colors. If this is done, the PG will become narrow and the developer brush may contact the drum while the revolver rotates. This causes a color band to appear on the outputs.



- 7. Reinstall the development unit and install the new development unit holders [A].
- **NOTE:** If there is a foam rubber pad already attached to the development cover [C], be sure to remove it before installing the development unit. If the unit is installed with the foam rubber pad attached, the unit will be pressed by the toner cartridge case [D], causing the PG to become narrower.



Date: 22-Jun-00

Model: Iris/Lilac

Date.

3. ID sensor cover replacement



Old P/N	New P/N	Description	Page	Index
A2592475	A2592468	ID Sensor Cover	51 (Iris) 47(Lilac)	11

- 1. Loosen the screw [A] securing the charge corona fan.
- 2. Remove the ID sensor cover [B] (2 screws).
- 3. Install the new ID sensor cover (2 screws).
- **NOTE:** Make sure that the mylar [C] is in the proper position between the ID sensor cover and lower stay [D] as shown.

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Model: Iris/Lilac

Date: 22-Jun-00

No.: RA258025

4. Dust filter replacement



Old P/N	New P/N	Description	Page	Index
A2591082	A2591047	Dust Filter	81 (Iris) 85 (Lilac)	12

- 1. Remove the cover [A] (3 screws).
- 2. Replace the main exhaust fan filter [B].

5. After reassembling the machine

- 1. If toner has scattered inside the machine, the toner concentration might already be too high. Therefore, please make 5 black-and-white copies in the following mode to reduce the toner concentration.
 - Set SP5-955-018 to **6** (solid test pattern). Make sure that SP 5-955-017 (LD_PWM) is set to the default (**128**).
 - Select A3 (DLT) size.

Technical Bulletin

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Model: Iris/Lilac				te: 13-Oct-00	No.: RA258026
Subject: Firmware Modification History				Prepared by: T	Itoh
From: Technical Services Dept., GTS Division					
Classification:	Troubleshooting	Part inf	orma	tion 🗌 Acti	on required
	Mechanical	Electric	al	🗌 Ser	vice manual revision
	Paper path	Transm	it/rec	eive 🗌 Reti	ofit information
	🖾 Other ()				

This RTB will explain the firmware modification history for Iris/Lilac.

As shown in the table below, both the main and scanner firmware differ from product to product. This is why this RTB has been arranged slightly differently than usual (please see the Table of Contents below). The tables on the following page show the display languages available for each firmware.

Development Name	Product Code	Main Firmware	Scanner Firmware
Iris	A258	Unique for Iris	Common for Iris and Lilac – Basic
Lilac – Basic	A259	Unique for Lilac	
Lilac – Edit	A260		Unique for Lilac – Edit

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Display languages available for each firmware:

For Iris:

	Туре	P/N	Model Code (A258-)			Language		
1	NA	A2585197	15, 17, 55	English	French	Spanish	Brazilian	-
2	EU	A2585198	22, 26, 27, 29, 65	English	French	German	Italian	-
3	TWN	A2585199	19	Chinese	English	-	-	-
4	EU2	A2585181	Language software	Spanish	Dutch	Danish	Swedish	-
5	EU3	A2585182	Language software	English	Portuguese	Norwegian	Czech	Polish
6	EU4	A2585183	Language software	English	Russian	-	-	-

For Lilac:

	Туре	P/N	Model Code (A259/A260-)			Language		
1	NA	A2605197	15, 17, 55	English	French	Spanish	Brazilian	-
2	EU	A2605198	22, 26, 27, 29, 65	English	French	German	Italian	-
3	EU2	A2605181	Language software	Spanish	Dutch	Danish	Swedish	-
4	EU3	A2605182	Language software	English	Portuguese	Norwegian	Czech	Polish
•	Languages in boldface are default.							

1. MAIN FIRMWARE FOR IRIS

1.1. Modification History

For the USA Model (NA)

Suffix	File No.			
A2585197		Version	C.SUM	Production
В	-	6.13A	-	1st Mass Prod.
С	A2585197cv615	6.15	F3E2	Refer to Section 4.
D	A2585197dv643	6.43	FAC2	
E	A2585197ev6431	6.431	E813	
F	A2585197f 6_621na	6.621NA	025C	
G	A2585197g 6_81na	6.81NA	28BD	
Н	A2585197h 6_91na	6.91NA	58F3	
J	A2585197j 6_913na	6.913NA	B591	
K	A2585197k v7_02na	7.02NA	29C4	
L	-	7.04NA	-	
М	A2585197M	7.05NA	88FF	

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For the European Model (EU)

Suffix	File No.			
		Version	C.SUM	Production
A2585197B	-	6.13A	-	1st Mass Prod.
С	A2585197cv615	6.15	F3E2	Refer to Section 4.
D	A2585197dv643	6.43	FAC2	
E	A2585197ev6431	6.431	E813	
A2585198	A2585198 v6_621eu	6.621EU	D9A3	
A	A2585198a v6_81eu	6.81EU	D282	
В	A2585198b v6_91eu	6.91EU	DBA0	
С	A2585198c v6_913eu	6.913EU	1D4A	
D	A2585198d v7_02eu	7.02EU	F355	
E	-	7.04EU	-	
F	A2585198F	7.05EU	528F	

For the Asia Version (TWN)

Suffix	File No.			
A2585199		Version	C.SUM	Production
-	A2585199 v6_81twn	6.81TWN	1BF6	Refer to Section 4.
A	A2585199a v6_91twn	6.91TWN	2E87	
В	A2585199b v6_913twn	6.913TWN	7548	
С	A2585199c v7_02twn	7.02TWN	D441	
D	-	7.04TWM	-	
E	A2585199E	7.05TWN	3D02	

For European 2nd Language (EU2)

Suffix	File No.		
A2585181		Version	C.SUM
-	A2585181 v6_621eu2	6.621EU2	841B
A	A2585181a v6_81eu2	6.81EU2	97C1
В	A2585181b v6_91eu2	6.91EU2	BD9E
С	A2585181c v6_913eu2	6.913EU2	57EB
D	A2585181d v7_02eu2	7.02EU2	1067
E	-	7.02EU2	-
F	A2585181F	7.03EU2	8957

For European 3rd Language (EU3)

Suffix	File No.		
A2585182		Version	C.SUM
-	A2585182 v6_621eu3	6.621EU3	74BF
A	A2585182a v6_81eu3	6.81EU3	4EFF
В	A2585182b v6_91eu3	6.91EU3	DCBC
С	A2585182c v6_913eu3	6.913EU3	A7B3
D	A2585182d v7_02eu3	7.02EU3	D746
E	-	7.04EU3	-
F	A2585182F	7.05EU3	01CD



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For European 4th Language (EU4)

Suffix	File No.		
A2585183		Version	C.SUM
-	A2585183 v6_81eu4	6.81EU4	CD85
А	A2585183a v6_91eu4	6.91EU4	CB04
В	A2585183b v6_913eu4	6.913EU4	67A4
С	A2585183c v7_02eu4	7.02EU4	954E
D	-	7.04EU4	-
E	A2585183E	7.05EU4	2A48

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1.2. Modifications

1	Modifications			Remarks		
-	This version of the main firmware has been used from the first unit of mass			lass		
1	production.	mothod to be chanc	red (conv	or develo	opment counte	
'	only once in SP mode (SP7-008-000).					<i>")</i>
1	The transfer belt bias has been optimized as follows:					
1	OD Mada Numbou	- Ourrent volue	-	Newyoli		
1	SP Mode Inumber		5	New valu	le	
1	SF2-301-013 SF2-301_014	9007		11000		
1	SP2-301-014 SP2-301_015	1000		12001/		
1	SP2-301-016	1100V		1300V		
1	SP2-301-019	8001		1100V		
1	SP2-301-020	900V		1200V		
1	SP2-301-021	1000V		1300V		
l		-				
2	The following proble	m has been fixed:		,		
L_	In a certain situation to 1 mode.	i, the last original m	nay not be	fed out t	rom the ARDI	F in 1
	To prevent Toner En detection parameter	nd from being deteor r has been changeor	cted by mi	stake for 8 times.	black toner, t	he
1	The display for the c	counters has been	changed.	"Copies"	or "Developm	ients"
1	This allows us to cle	panel, depending of	IN THE COUR	ter meun	100 Selecteo. been selecter	ч
2	Symptom	any know which se	Junior me.	.nou nuc		<i>.</i>
1	Horizontal white line	es / dirty backgroun	nd at the tra	ailing edg	ge when copyi	ing
1	onto transparencies	. This occurs in all	environme	ental con	ditions except	: high
1	temperature and nu	midity.				
1	The default setting (of the following SP	mode has	been ch	anged and the	AC.
1	component of the p	aper separation cor	rona turns	ON whe	n copying onto	0
1	transparencies.	· ·			1,7 0	
1	SP Mode No.	Current Se	etting New Setting			
1	SP2-310-10	10 uA	۱	۲ -	3 UA	
1	SP2-316-5	70%			75%	
1	SP2-316-6	80%			70%	
1	SP2-316-25	100%		1	25%	
3	During evaluation te areas. To prevent th been changed (for E	sts on European pa nis problem, the set European versions	aper, white ttings of th only):	e lines ap e followir	opeared in hal	lftone have
1	SP mode No.	Current setting	New s	etting		
1	SP2-316-009	100%	79	%		
1	SP2-316-010	87%	70	%		
1	SP2-316-013	120%	95	%		
1	SP2-316-014	87%	70	%		
	- 1 1 1 1 2 1 2 3	Image: Production of the rest of th	Modific This version of the main firmware has production. Allows the counter method to be chang only once in SP mode (SP7-008-000). The transfer belt bias has been optimiz SP Mode Number Current value SP2-301-013 SP 2-301-014 900V SP2-301-015 1000V SP2-301-016 1100V SP2-301-020 900V SP2-301-021 1000V SP2-301-021 11000V SP Spread to the counters has been fixed: In a certain situation, the base changed 11 The display for	Modifications This version of the main firmware has been used production. Allows the counter method to be changed (copy only once in SP mode (SP7-008-000). The transfer belt bias has been optimized as fold SP Mode Number Current value SP2-301-013 800V SP2-301-015 1000V SP2-301-016 1100V SP2-301-016 100V SP2-301-017 1000V SP2-301-018 800V SP2-301-019 800V SP2-301-020 900V SP2-301-021 1000V 2 The following problem has been fixed: In a certain situation, the last original may not be to 1 mode. 1 1 To prevent Toner End from being detected by midetection parameter has been changed. 1 The display for the counters has been changed. 1 The display for the counters has been changed. 1 The display for the counters in all environmetemperature and humidity. Solution The default setting of the following SP mode has component of the paper separation corona turns transparencies. SP Mode No. Current Setting SP2-316-5	Modifications - This version of the main firmware has been used from the production. 1 Allows the counter method to be changed (copy or develor only once in SP mode (SP7-008-000). 1 The transfer belt bias has been optimized as follows: SP Mode Number Current value New value SP2-301-013 SP2-301-014 900V 1000V SP2-301-015 1000V 1200V SP2-301-016 1100V 1300V SP2-301-021 1000V 1200V SP2-301-021 1000V 1300V SP The following problem has been fixed: In a certain situation, the last original may not be fed out f 1 To prevent Toner End from being detected by mistake for detection parameter has been changed from 4 to 8 times. 1 To prevent toner be panel, depending on the counter meth This allows us to clearly know which counter methot has Symptom <t< td=""><td>Modifications This version of the main firmware has been used from the first unit of m production. Allows the counter method to be changed (copy or development counte only once in SP mode (SP7-008-000). The transfer belt bias has been optimized as follows: SP Mode Number Current value New value SP2-301-013 800V 1000V SP2-301-015 1000V 1200V SP2-301-016 1100V 1300V SP2-301-021 000V 1200V SP2-301-021 000V 1200V SP2-301-021 000V 1300V S0100 1000V 1300V SP2-301-02 900V 120V S01010 1000V 1000V 1000V S010100</td></t<>	Modifications This version of the main firmware has been used from the first unit of m production. Allows the counter method to be changed (copy or development counte only once in SP mode (SP7-008-000). The transfer belt bias has been optimized as follows: SP Mode Number Current value New value SP2-301-013 800V 1000V SP2-301-015 1000V 1200V SP2-301-016 1100V 1300V SP2-301-021 000V 1200V SP2-301-021 000V 1200V SP2-301-021 000V 1300V S0100 1000V 1300V SP2-301-02 900V 120V S01010 1000V 1000V 1000V S010100

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Versio	٦	Modifications	Remarks	
	4			
		Before After		
		30 seconds 5 seconds		
	5	To prevent the charge corona unit from becomin following SP mode has been added.	Refer to RTB #017 for the details.	
		SP3-980-000 "Charge corona fan ON/OFF timir		
	6	The following problem was corrected: The logging data (SP7-809-01) was not counted		
6.81	1	The following problem was fixed: An area of up to 20 mm from the trailing edge of lighter in OHP or Thick Paper mode under the fo Selected paper size is A4(LT) sideways or The amount of copies selected is an even		
	2	The following problem was fixed: In Series copy mode (Book to one-sided), halfton originals come out lighter under the following con Black-and-white copy mode The number of copies selected is 3 or more	ne areas on the right side of nditions.	
	3	After a job is finished, the Start Key will turn gree	en sooner.	
6.91	1	This firmware can support the coin-lock system. NOTE: It is not possible to use both the coin-lock system the same time.	n and User Code mode at	Do not use this version in the field. This firmware causes the control panel of the controller to appear blank.
6.913	1	A blank display problem found in the previous ve	ersion has been corrected.	
	2	To prevent by-pass tray jams when feeding the r the pick-up roller OFF timing has been changed. With this modification, the pick-up roller continue paper reaches the grip roller.	everse side of the paper, s to feed the paper until the	
RICOH

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Model: Iris/Lilac			Date: 13-Oct-00	No.: RA258026
Versior	1	Modifications		Remarks
7.02	1	 The software has been modified for the following To minimize dirty background in normal To minimize dirty background in OHP/th To prevent horizontal color bands in color 		
		- Contents of modification -		
		(1) Dirty background		
		 The development unit will stay at the development following conditions: When the OPC drum starts rotating to developming the extra transfer belt rotation (see the mode (copy/print). 	ent position under the lop the latent image. he note below) in Thick/OHF	
		To prevent toner from being attracted to the dru applied to the development sleeve. However, th worse if the drum and/or developer have deterior background, the timing of the revolver rotation a development unit have been changed.		
		lote: In Thick Paper/OHP Modes, the process speed is reduced by half after the mage is developed on the transfer belt (4-color image for full color). To properly transfer the image developed on the transfer belt onto the sheet of aper, the transfer belt makes an extra rotation.		
		(2) Horizontal color band		
		To improve image quality, the PG was slightly reproduction. However, when the PG is reduced, touch the drum surface while the revolver rotate horizontal color band on the outputs. To prevent revolver rotation has been changed so that the transferred to the image area of the transfer below.	educed from March '00 the developer brush tends to s. This may result in a t this band, the timing of the color band will not be t.	
	2	The SP modes listed below have been added so can be adjusted with more precision and finer co	o that toner concentration ontrol.	
		New SP modes: SP2-203-001 to 013 and SP2-	204-001 to 012	
	3	(Please refer to Appendix 1 for details). The software has been changed so that the key	counter counts twice for	
7 04	1	A3/DLT when SP5-104-000 is activated (A3/DL To prevent any data changes due to electrical n	T Double Count). oise, the initialization method	1
7.05		of the NVRAM has been changed.	to SD mode /refer to DTD	
7.05	1	RA258017 for details). However, since turning of temperature inside machine to increase, setting newly added to the software.	"2" below (bold) has been	
		0: Stays on 1: Turn off 2: Turn on at 30°C, turn off at 26°C * using the temp. measured by the temp/hum	idity sensor	

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Model: Iris/Lila	Model: Iris/Lilac Date: 13-Oct-00			
Version	Modific	Remarks		
2	 If the machine is continuously on, the n control self-check, causing the toner co achieve optimum image quality under t changed so that the initial process cont the following conditions are met: 12 hours has passed since the last process control self-check and 1 hour has passed since the last ti 	ter machine is continuously on, the machine will not do the initial process the machine is continuously on, the machine will not do the initial process the self-check, causing the toner concentration to be out of range. To is eve optimum image quality under this condition, the software has been inged so that the initial process control self check will be done if both of following conditions are met: 12 hours has passed since the last initial process control or forced process control self-check and		
3	When the revolver rotates, a small and development unit, causing the toner concentration (Toner does not happen unless the main switc around this, the software has been more control can be done during the interval corresponding setting (2) has been add SP3-128 Toner Density Auto Control Setting (Default : 0) 0: Execute at initial and forced 1: Not execute at any self-che 2: Execute at initial, forced, ar The following SP modes have been net Control: SP3-130: TD Auto Correction Setting Specifies the number of copies to cons correction of the initial or interval proce NOTE: Normally, it is not necessary to SP3-130-001 Initial self-check [0] SP3-130-003 Table limit setting	bound of toner can flow into the oncentration to increase. heck, the machine automatically r Density Auto Control); however, this ch is turned off and on. To work dified so that the toner density auto process control self-check. The ded to SP3-128: d process control self-check eck ad interval process control self-check wely added for Toner Density Auto sume toner for the toner density uses control self-check. adjust this SP mode in the field. djustable range / <u>Default</u> /Step] to 50 copies / <u>10</u> / 1 step] to 50 copies / <u>10</u> / 1 step]		

Model: Iris/Lilac

Date: 13-Oct-00

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2. MAIN FIRMWARE FOR LILAC

2.1 Modification History

For the USA Model (\mathbf{NA})

Suffix	File No.			
A2605197		Version	C.SUM	Production
В	a2605197b v1_694na	1.694NA	8784	1st Mass Prod.
С	a2605197c v1_728na	1.728NA	877A	Refer to Section 4.
D	a2605197d v1_734na	1.734NA	9027	
E	a2605197e v1_735na	1.735NA	D3C0	
F	A2605197f v1_771na	1.771NA	C8F9	
G	-	1.774NA	-	
Н	-	1.777NA	-	
J	A2605197J	1.778NA	4F37	

For the European Model (EU)

Suffix	File No.			
A2605198		Version	C.SUM	Production
A	a2605198a v1_694eu	1.694EU	46D3	1st Mass Prod.
В	a2605198b v1_728eu	1.728EU	28CD	Refer to Section 4.
С	a2605198c v1_734eu	1.734EU	A28C	
D	a2605198d v1_735eu	1.735EU	33D6	
E	A2605198e v1_771eu	1.771EU	83B1	
F	-	1.774EU	-	
G	-	1.777EU	-	
Н	A2605198H	1.778EU	873B	

For European 2nd Language (EU2)

Suffix	File No.		
A2605181		Version	C.SUM
-	A2605181 v1_713eu2	1.713EU2	7B4E
A	A2605181a v1_728eu2	1.728EU2	91C2
В	A2605181b v1_734eu2	1.734EU2	1A4B
С	A2605181c v1_735eu2	1.735EU2	BB65
D	A2605181d v1_771Eeu2	1.771EU2	E291
E	-	1.774EU2	-
F	-	1.777EU2	-
G	A2605181G	1.778EU2	18B8

For European 3rd Language (EU3)

Suffix	File No.		
A2605182		Version	C.SUM
A	A2605182a v1_734eu3	1.734EU3	27A4
В	A2605182b v1_735eu3	1.735EU3	5593
С	A2605182c v1_771eu3	1.771EU3	15B4
D	-	1.774EU3	-
E	-	1.777EU3	-
F	A2605182F	1.778EU3	A524

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2.2 Contents of Modification

Versior	۱	Contents of modification	Remarks
1.728	1	The display for the counters has been changed. "Copies" <u>or</u> "Developments" is displayed on the panel, depending on the counter method selected. This allows us to clearly know which counter method has been selected.	
	2	The development bias OFF timing has been optimized to prevent the following problem: Poor image transfer may happen at the trailing edge of the last sheet of even	
		pages in multi-copy mode (double image processing) with thick paper or transparencies.	
	3	The outline length of the closed loop area is extended as follows. Before Modification Total Maximum length: Up to about 2 m After modification	
		Multi-closed loop: Up to about 40 m Closed loop for 1 area: Up to about 2 m	
	4	"Area editing" and "Auto Reduce/Enlarge (ARE)" can be selected at the same time. - When selecting Save Area mode -	
		 The saved area will be enlarged/reduced to fit the designated paper size. The saved area image is aligned at the top left corner of outputs. The Centering function is selectable. When not selecting Save Area mode - 	
		Since the image area becomes A3/DLT in "Area Editing" and "ARE", the magnification ratio is automatically calculated based on A3/DLT size regardless of the original size. The magnification ratio must be selected manually if you want to specify the	
	5	magnification for the designated paper size. The following problem was corrected.	
		The printer gamma data for the printer mode, which is changed in SP mode, will not be applied to the copier until the main switch is turned off and on.	
1.734	1	The following problem found in the previous version (Ver. 1.728) was corrected.	
		The screen did not display magnification ratios greater than 255% even though the machine correctly made copies at these ratios.	
	2	The detection timing for the SC522 and SC524 error conditions was optimized. SC522: Duplex - Side fence jogger H.P. error SC524: Duplex - End fence jogger H.P. error	
	3	The following problem was corrected.	
		 Under the following conditions, the machine displays "Copy size cannot be changed" on the screen after the paper is stacked in the duplex unit. Duplex copying in the platen mode from the by-pass tray. 	
1.735	1	To prevent by-pass tray jams when feeding the reverse side of the paper, the pick-up roller OFF timing has been changed.	
		With this modification, the pick-up roller continues to feed the paper until the paper reaches the grip roller.	

Rigoh

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1.771	1	 The software has been modified for the followin To minimize dirty background in normal To minimize dirty background in OHP/th To prevent horizontal color bands in color Contents of modification - (1) Dirty background 	g reasons: paper copy/print modes lick paper copy/print modes or copy/print modes			
		 Ine development unit will stay at the development following conditions: When the OPC drum starts rotating to developming the extra transfer belt rotation (see the mode (copy/print). 	ent position under the elop the latent image. the note below) in Thick/OHF			
		To prevent toner from being attracted to the dru applied to the development sleeve. However, th worse if the drum and/or developer have deterior background, the timing of the revolver rotation a development unit have been changed.	m, a development bias is e dirty background becomes prated. To minimize the dirty and the position of the			
		Note: In Thick Paper/OHP Modes, the process speed image is developed on the transfer belt (4-color properly transfer the image developed on the tra paper, the transfer belt makes an extra rotation.	is reduced by half after the image for full color). To ansfer belt onto the sheet of			
		(2) Horizontal color band				
		To improve image quality, the PG was slightly re production. However, when the PG is reduced, touch the drum surface while the revolver rotate horizontal color band on the outputs. To preven revolver rotation has been changed so that the transferred to the image area of the transfer bel	educed from the March '00 the developer brush tends to es. This may result in a t this band, the timing of the color band will not be t.			
2		The SP modes listed below have been added so that toner concentration can be adjusted with more precision and finer control.				
		New SP modes: SP2-203-001 to 013 and SP2-	204-001 to 012			
	3	(Please refer to Appendix 1 for details).	countor counts twice for			
	5	A3/DLT when SP5-104-000 is activated (A3/DL	T Double Count).			
1.774	1	To prevent any data changes due to electrical n of the NVRAM has been changed.	oise, the initialization method	1		
1.777	1	"Charge Corona Fan ON/OFF" has been added RA258017 for details). However, since turning of temperature inside machine to increase, setting newly added to the software.	to SP mode (refer to RTB off the fan can cause the "2" below (bold) has been			
		0: Stays on 1: Turn off 2: Turn on at 30°C, turn off at 26°C * using the temp. measured by the temp/hum	idity sensor			
	2	 If the machine is continuously on, the machine we control self-check, causing the toner concentrat achieve optimum image quality under this conditionanged so that the initial process control self control the following conditions are met: 12 hours has passed since the last initial process control self-check and 1 hour has passed since the last timed process 	will not do the initial process ion to be out of range. To tion, the software has been heck will be done if both of rocess control or forced cess control self-check.			

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Model: Iris/	/Lilao	0	Date: 13-Oct-00	No.: RA258026
	3	When the revolver rotates, a small amount of toner can flow into the levelopment unit, causing the toner concentration to increase. During the initial process control self-check, the machine automatically orrects the toner concentration (Toner Density Auto Control); however, this loes not happen unless the main switch is turned off and on. To work iround this, the software has been modified so that the toner density auto ontrol can be done during the interval process control self-check. The orresponding setting (2) has been added to SP3-128:		
		 SP3-128 Toner Density Auto Control Setting (Default : 0) 0: Execute at initial and forced process 1: Not execute at any self-check 2: Execute at initial, forced, and interval 	control self-check	
		The following SP modes have been newly adde Control:	d for Toner Density Auto	
		SP3-130: TD Auto Correction Setting Specifies the number of copies to consume tone correction of the initial or interval process contro NOTE: Normally, it is not necessary to adjust th	er for the toner density I self-check. is SP mode in the field.	
		[Adjustable SP3-130-001 Initial self-check SP3-130-002 Interval self-check SP3-130-003 Table limit setting [0 or 1 / <u>0</u>] 0: Limit, 1: I	range / <u>Default</u> /Step] ies / <u>10</u> / 1 step] ies/ <u>5</u> /1 step] No limit	
1.778	1	During multi copy runs, the duplex feed motor m pulse is not generated when the interrupt pulse paper jam in the duplex unit.	alfunctions if the control is generated. This causes a	
		This problem was found during internal tests. Th about 1,500 duplex copies.	e paper jam occurred at	

Model: Iris/Lilac

Date: 13-Oct-00

No.: RA258026

3. SCANNER FIRMWARE

3.1. Modification History

For Iris & Lilac - Basic

Suffix	File No.			Produ	uction
A2595136		Version	C.SUM	Iris	Lilac - Basic
D	-	1.12	-	1st Mass Prod.	-
E	-	1.14	-	Refer to Section 4.	-
F	-	1.15	-		-
G	a2595136g v1_18	1.18	C4CB		1st Mass Prod.
Н	a2595136h v1_19	1.19	9862		Refer to Section 4.
J	a2595136j v1_20	1.20	E560		
K	A2595136K	1.21	2A7F		

For Lilac - Edit

Suffix	File No.			
A2605136		Version	C.SUM	Production
F	a2605136f v1_17	1.17	651D	1st Mass Prod.
G	a2605136g v1_18	1.18	6F97	Refer to Section 4.
Н	a2605136h v1_20	1.20	0E72	
J	A2605136J	1.21	45E9	

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Model: Iris/Lilac

Date: 13-Oct-00

No.: RA258026

3.2. Contents of Modification

3.2.1 Iris & Lilac - Basic

Version		Contents of modification	Remarks
1.12	-	This version of scanner firmware has been implemented from the first unit of mass production.	
1.14	1	To prevent a misdetection of SC191, the distance between the scanning lines has been changed.	
1.15	1	To prevent the Cyan background problem, the Auto Gain Control has been corrected.	
1.18	1	The following problem has been fixed. An abnormal image may occur after job recovery if a paper jam occurs while printing in Interleaf Mode.	This version of main firmware has been implemented from the first mass production units of Lilac - Basic.
1.20	1	 The following problem has been fixed. SC326 occurs under the following conditions: A4 lengthwise 158% SP-010 (Scanner leading edge registration): 2.0 mm When the Start key is pressed under these conditions, the exposure lamp turns on but then soon turns off. The copier keeps running. SC326 is displayed after a short while. 	
1.21	1	The following problem has been fixed. Thin lines on originals may become thinner or thicker when making copies at 93% reduction or smaller.	



Technical	B ulletin

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3.2.2 Lilac - Edit

Version		Contents of modification	Remarks
1.17	-	This version of scanner firmware has been implemented from the first unit of mass production.	
1.18	1	Mono-colored thick lines in an original comprised of two or more toner colors appear separated as two offset lines. This is due to the vibration of the scanner, which causes the scanner to detect a line in different positions each time it makes a scanning pass. The default setting for Auto Text/Photo Sensitivity has been shifted toward Text by 1 step.	
	2	The firmware for the Lilac Edit version can be installed in the Lilac Basic and Iris versions, and vice versa. If this is done, SC150 is displayed when the main switch is turned on. The firmware has been modified so that SC150 is displayed before the data is stored in the flash ROM.	
1.20	1	 The following problem has been fixed. SC326 occurs under the following conditions: A4 lengthwise 158% SP-010 (Scanner leading edge registration): 2.0 mm When the Start key is pressed under these conditions, the exposure lamp turns on but then soon turns off. The copier keeps running. SC326 is displayed after a short while. 	
1.21	1	The following problem has been fixed. Thin lines on originals may become thinner or thicker when making copies at 93% reduction or smaller.	



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4. CUT-IN SERIAL NUMBER INFORMATION

4.1 Main Firmware

4.1.1 Iris

CODE	6.13A	6.15	6.43	6.431	6.621
A258-15	1st Mass prod.	3B39040001	3B39070001	3B39070001	3B39070001
A258-17	1st Mass prod.	H0190400001	H0190500001	H0190500053	H0190700001
A258-19	1st Mass prod.	H0190800221	H0190800221	H0190800221	H0190800221
A258-22	1st Mass prod.	AY79040001	AY79050001	AY79050051	AY79070001
A258-26	1st Mass prod.	3S50490001	3S50590001	3S50590041	3S50790001
A258-27	1st Mass prod.	H0190400354	H0190400789	H0190500379	H0190700259
A258-29	1st Mass prod.	H0190401003	H0190401005	H0190500486	H0190700592
A258-55	1st Mass prod.	L0369040001	L0369040025	L0369050144	L0369080217
A258-65	1st Mass prod.	L0369040046	L0369040096	L0369070207	L0369070207

CODE	6.81	6.91	6.913	7.02	7.04
A258-15	3B39100056	Not used	3B30030001	3B30040001	3B30070010
A258-17	H0191100001	Not used	H0100300001	H0100400001	H0100700001
A258-19	H0190800221	Not used	H0100300088	H0100500075	H01008XXXXX
A258-22	AY79090262	Not used	AY70030001	AY70030510	AY70080001
A258-26	3S51090001	Not used	3S50300001	3S50400001	3S50700001
A258-27	H0191000001	Not used	H0100300106	H0100400101	H0100700129
A258-29	H0191000376	Not used	H0100300308	H0100400286	H0100700313
A258-55	L0369110001	Not used	L036030004	L0360040006	L03608XXXX
A258-65	L0369100025	Not used	L0360030031	L0360040023	L0360070078

CODE	7.05		
A258-15	3B3YMMXXXX		
A258-17	H01YMMXXXXX		
A258-19	H01YMMXXXXX		
A258-22	AY7YMMXXXX		
A258-26	3S5MMYXXXX		
A258-27	H01YMMXXXXX		
A258-29	H01YMMXXXXX		
A258-55	L036YMMXXXX		
A258-65	L036YMMXXXX		

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4.1.2 Lilac

CODE	1.694	1.728	1.734	1.735	1.771
A259-15	1st Mass prod.	3B40020001	3B40020001	3B40020001	3B440040001
A259-17	1st Mass prod.	H0200200001	H0200200001	H0200200001	H0200400001
A259-22	1st Mass prod.	AY99100001	AY90020001	AY90030001	AY90040032
A259-26	1st Mass prod.	3S61090001	3S60200001	3S60300001	3S60400001
A259-27	1st Mass prod.	H0291000001	H0200200006	H0200300201	H0200400201
A259-29	1st Mass prod.	H0291000033	H02003XXXXX	H0200500357	H0200500357
A259-55	1st Mass prod.	L037911XXXX	L037003XXXX	L037003XXXX	L037005XXXX
A259-65	1st Mass prod.	L0379100001	L0370020010	L0370030018	L0370060001
A260-15	1st Mass prod.	3B59100001	3B50020001	3B50020001	3B50040001
A260-17	1st Mass prod.	H0391000001	H0300200001	H0300200001	H0300400001
A260-22	1st Mass prod.	AZ19100001	AZ1003XXXX	AZ10030001	AZ10040001
A260-26	1st Mass prod.	3S71090001	3S70200001	3S70500001	3S70500001
A260-27	1st Mass prod.	H0300200315	H0300200315	H0300300167	H0300400038
A260-29	1st Mass prod.	H0391000026	H0300200354	H0300400089	H0300400089
A260-55	1st Mass prod.	L0389100001	L0380020014	L0380020014	L0380040007
A260-65	1st Mass prod.	L0389100061	L0380020036	L0380030051	L038005XXXX

CODE	1.774	1.777	1.778	
A259-15	3B40070001	3B4YMMXXXX	3B4YMMXXXX	
A259-17	H0200600280	H02YMMXXXXX	H02YMMXXXXX	
A259-22	AY90070001	AY9YMMXXXX	AY9YMMXXXX	
A259-26	3S60700001	3S6MMYXXXX	3S6MMYXXXX	
A259-27	H0200600537	H02YMMXXXXX	H02YMMXXXXX	
A259-29	H0200700349	H02YMMXXXXX	H02YMMXXXXX	
A259-55	L037007XXXX	L037YMMXXXX	L037YMMXXXX	
A259-65	L0370070001	L037YMMXXXX	L037YMMXXXX	
A260-15	3B50070001	3B5YMMXXXX	3B5YMMXXXX	
A260-17	H03007XXXXX	H03YMMXXXXX	H03YMMXXXXX	
A260-22	AZ10070001	AZ1YMMXXXX	AZ1YMMXXXX	
A260-26	3S70700001	3S7MMYXXXX	3S7MMYXXXX	
A260-27	H0300700001	H03YMMXXXXX	H03YMMXXXXX	
A260-29	H0300700048	H03YMMXXXXX	H03YMMXXXXX	
A260-55	L0380070001	L038YMMXXXX	L038YMMXXXX	
A260-65	L038007XXXX	L038YMMXXXX	L038YMMXXXX	

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4.2 Scanner Firmware

4.2.1 Iris & Lilac - Basic

CODE	1.12	1.14	1.15	1.18	1.19
A258-15	1st Mass prod.	3B39020066	3B39040001	3B39040038	3B39070001
A258-17	1st Mass prod.	H0190200131	H0190400001	H0190400200	H0190700001
A258-19	1st Mass prod.	H01903XXXXX	H0190800221	H0190800221	H0190800221
A258-22	1st Mass prod.	AY79020081	AY79040001	AY79040150	AY79070001
A258-26	1st Mass prod.	3S50290026	3S50490001	3S50590001	3S50790001
A258-27	1st Mass prod.	H0190200526	H0190300001	H0190500261	H0190700259
A258-29	1st Mass prod.	H0190200825	H0190401003	H0190600294	H0190700592
A258-55	1st Mass prod.	L0369040001	L0369040001	L0369050126	L036907XXXX
A258-65	1st Mass prod.	L03609040046	L0369040046	L0369040046	L0369070207
A259-15				1st Mass prod.	3B40020001
A259-17				1st Mass prod.	H0200200001
A259-22				1st Mass prod.	AY99070001
A259-26				1st Mass prod.	3S60790001
A259-27				1st Mass prod.	H0290700001
A259-29				1st Mass prod.	H0290700045
A259-55				1st Mass prod.	L037908XXXX
A259-65				1st Mass prod.	L0379070001

CODE	1.20	1.21		
A258-15	3B39090001	3B39120001		
A258-17	H0190900001	H0191200001		
A258-19	H0191100051	H0191200081		
A258-22	AY79090132	AY79120001		
A258-26	3S51090001	3S51290001		
A258-27	H0191000001	H0191200091		
A258-29	H0190900126	H0191200394		
A258-55	L0369100001	L0369120001		
A258-65	L0369090001	L0369120071		
A259-15	3B40020001	3B40020001		
A259-17	H0200200001	H0200200001		
A259-22	AY99090001	AY99120001		
A259-26	3S60990001	3S61290001		
A259-27	H0290900001	H0291200001		
A259-29	H0290900048	H0291200108		
A259-55	L037910XXXX	L037003XXXX		
A259-65	L0379090001	L0379120001		



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4.2.2 Lilac -Edit

CODE	1.17	1.18	1.20	1.21	
A260-15	1st Mass prod.	3B59070001	3B59090005	3B50010001	
A260-17	1st Mass prod.	H0390700001	H0390900001	H0391200005	
A260-22	1st Mass prod.	AZ19070001	AZ19090001	AZ1009XXXX	
A260-26	1st Mass prod.	3S70790001	3S70990001	3S70100001	
A260-27	1st Mass prod.	H0390700054	H0300200315	H0300200315	
A260-29	1st Mass prod.	H0390700076	H0390900051	H0391200156	
A260-55	1st Mass prod.	L0389070071	L0389100001	L0380010001	
A260-65	1st Mass prod.	L0389080126	L0389100061	L0389120001	

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Appendix 1: New SP mode (SP2-203 and 204) : ID sensor development potential

SP No.	Item	Default	Step	SP7-	Contents
02-203	Dev Ptnl ID Sn [ID Sense	or Develop	ment Potenti	al 1	
02-203-001	InitPotPS [TN K]	110	0 to 500		Sets the initial value of the ID sensor
02-203-002	InitPotPS [TN_C]	150	0 to 500		development potential.
02-203-003	InitPotPS [TN M]	150	0 to 500		NOTE: Do not change this setting in the field.
02-203-004	InitPotPS [TN Y]	150	0 to 500		
02-203-005	bMannVppShift [TN_K]	0	-20 to 20		Sets the correction value for the ID sensor
02-203-006	bMannVppShift [TN_C]	0	-20 to 20		development potential.
02-203-007	bMannVppShift [TN_M]	0	-20 to 20		Negative value: Increases toner concentration.
02-203-008	bMannVppShift [TN_Y]	0	-20 to 20		Positive value: Decreases toner concentration.
02-203-009	PotPS [TN_K]	-	-		Displays the ID sensor development potential
02-203-010	PotPS [TN_C]	-	-		value.
02-203-011	PotPS [TN_M]	-	-		
02-203-012	PotPS [TN_Y]	-	-		
02-203-013	PotPS	2	0: Fix		0: Deactivates the potential correction.
			1: CMP		1: Activates the potential correction based
			2: All		on the SP 2-203-001 to 004 settings.
					2. Activates the potential correction based
					on value calculated during developer
					Initialization and self-check.
00.004					NOTE: Do not change this setting in the field.
02-204	Dev Pthi Correct ID Sh []	D Sensor		i Potentia	
02-204-001	bVppGamLmt [IN_K]	1.9	0.0 to 5.0		Sets the intreshold of the development gamma
02-204-002		1.8	0.0 to 5.0		NOTE: Do not change this setting in the field
02-204-003		1.8	0.0 to 5.0		NOTE. DO NOT CHANGE THIS SETTING IN THE HEID.
02-204-004		1.8	0.0 to 5.0		
02-204-005		120	0 to 300		Sets the upper limit of the development
02-204-006		190	0 to 300		NOTE: Do not obango this softing in the field
02-204-007		190	0 to 300		NOTE. Do not change this setting in the field.
02-204-008		190	0 to 300		
02-204-009		100	0 to 300		Sets the lower limit of the development
02-204-010		160	0 to 300		NOTE: Do not obcorrection.
02-204-011		160	0 to 300		NOTE: Do not change this setting in the field.
02-204-012	bInitVppMin [TN_Y]	160	0 to 300		

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Model: Iris/Lilac			Date: 25-Jun-01		No.: RA258027
Subject: Noise from the toner collection pipe			Prepared by: M. Tsuyuki		
From: Technical Services Dept., GTS Division					
Classification:	Troubleshooting	Part inf	orma	tion Action	n required
	Mechanical	Electric	al	🗌 Servi	ce manual revision
	Paper path	Transmit/rec		eive 🗌 Retro	fit information
	Other ()				

SYMPTOM

Noise from the toner collection pipe

CAUSE

The two drive gears (A1093631 x 2) are not properly engaged. This is because sometimes the side to side movement of the drive shaft in the bracket is not smooth enough.

SOLUTION

For action in the field, add 2 washers (08074025) between the gear and snap ring when changing the gear (see the illustration).

The surface of the drive shaft has been made smoother and grease has been applied to the drive shaft from August 2000 production.



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Model: Iris/Lilac			Dat	e: 28-Feb-03	No.: RA258028	
Subject: SC452			Prepared by: M. Tsuyuki			
From: Technical Services Sec. Service Planning Dept.						
Classification:	Troubleshooting	Part informatio		tion 🗌 Ac	ion required	
	Mechanical			🗌 Se	Service manual revision	
	Paper path			eive 🗌 Re	ve Retrofit information	
	Other ()					

SYMPTOM

SC452 is triggered when the Image Transfer Belt moves past its front or rear positional limit.

CAUSE

1. The Bias Roller is not set in the correct position, deforming the hole in the Pressure Release Lever (photo below). This can happen during servicing if the Pressure Release Lever is not set correctly when installing the Image Transfer Belt Unit.



2. The side plate of the Transfer Belt Unit is bent during servicing.

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Model: Iris/Lilac		Date: 28-Feb-03	No.: RA258028

SOLUTION

- 1. Pressure release lever:
- After an occurrence, replace the Pressure Release Lever with the Lilac2 lever (B0176089) and the screw with AA143025.



• When servicing, <u>be sure to set the lever on the pin as described on pg. 3-18 of the Iris 2/Lilac 2 Service Manual</u>.

2. Side plate:

Replace the Transfer Belt Unit.