Reissued: 04-Jun-13

Model: **Model AI-C1**	Date: 07-Nov-07	No.: RD009001j

RTB Reissue

The items in bold italics have been added.

Subject: Firmware Release Note: NetworkDocBox	Prepared by: T. Hirakawa
From: 2nd Tech Service Sect., MFP/Printer Tech Service Dept.	

Classification:	☐ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☒ Other ( )	☒ Tier 2

This RTB has been issued to announce the firmware release information for the **Network DocBox.**

For MS Models

Version	Program No.	Effective Date	Availability of RFU
1.13M	*D0095757N*	*May 2013 production*	*Available*
1.12M	D0095757M	July 2011 production	Available
1.11M	D0095757L	December 2010 production	Available
1.10M	D0095757K	July 2009 production	Available
1.09.3M	D0095757J	February 2009 production	Available
1.09.2M	D0095757H	December 2008 production	Available
1.09.1M	D0095757G	December 2008 production	Available
1.07M	D0095757F	July 2008 production	Available
1.06M	D0095757E	April 2008 production	Available
1.05M	D0095757D	1st Mass production (NA/EU models)	Available
1.00.1M	D0095757C	1st Mass production (Asia model)	Available

Note: Definition of Availability of RFU via @Remote
"Available": The firmware can be updated via RFU or SD card.
"Not available": The firmware can only be updated via SD card.

For CS Models

Version	Program No.	Effective Date	Availability of RFU
1.13C	*D0115757N*	*May 2013 production*	*Available*
1.12C	D0115757M	July 2011 production	Available
1.11C	D0115757L	December 2010 production	Available
1.10C	D0115757K	July 2009 production	Available
1.09.3C	D0115757J	February 2009 production	Available
1.09.2C	D0115757H	December 2008 production	Available
1.09.1C	D0115757G	December 2008 production	Available
1.07C	D0115757F	July 2008 production	Available
1.06C	D0115757E	April 2008 production	Available
1.05C	D0115757D	1st Mass production (NA/EU models)	Available
1.00.1C	D0115757C	1st Mass production (Asia model)	Available

Note: Definition of Availability of RFU via @Remote
"Available": The firmware can be updated via RFU or SD card.

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Model: **Model AI-C1**	Date: 07-Nov-07	No.: RD009001j

"Not available": The firmware can only be updated via SD card.

For MS Models

Version	Modified Points or Symptom Corrected
1.13M	***Symptom corrected:*** ***Minor bug correction***
1.12M	Symptom corrected: 1. If the Capture Priority setting is enabled (User Tools/Counter > System Settings > Administrator Tools > Capture Priority), repeated use of the MLB (Media Link Board) might result in the device stalling.
1.11M	Symptom corrected: 1. Printer might not transfer the job log or the access log to the Web SmartDeviseMonitor or the Remote Communication Gate S Pro.

1.10M	Symptom corrected:
	 1. Either of the following problems might occur if the transfering of logs from the device using Web SmartDeviceMonitor ver 2.x without the powercycle.
	   - The 404 Not Found error will be shown if the WIM document server is accessed.
	   - The device will stall if captured data is transfered to a delivery server such as ScanRouter.
	 2. Duplicate logs might be transfered to Web SmartDeviceMonitor ver 2.x.

1.09.3M	Other Changes: 1. Multiple stored jobs submitted for printing simultaneously will now be recorded individually in the Job log instead of only the first job being recorded. This change only applies to non-print jobs that have been stored. Prior to this change, the printing of stored print jobs were already recorded individually in the Job log. Note: Requires the following firmware versions (or later): System (version 1.09), Websys (version 1.57), Scanner (version 01.23), WebUapl (version 1.13.1), and either of NFA (version 1.09.3M).
1.09.2M	Symptom corrected: 1. Result column in the "Scanner: Stored File Sending" log is blank when viewed as CSV file downloaded via WebImageMonitor. 2. Result column in the "Scanner: Stored File Sending" log is blank when viewed in the Web SmartDeviceMonitor Access Log List. 3. Job names that include the "%s" character prevent Web SmartDeviceMonitor from retrieving the MFP's job list. 4. Job names that include the "%s" character prevent the Document server from being accessed by the web service. The result is that the Document Server cannot be seen from Web Image Monitor. 5. The setting that controls access to the Debug Log (SP5842-001 bit #7) has no effect.
1.09.1M	Other Changes: 1. The device is able to log the downloading (using WIM or DeskTopBinder) of scanned documents from the MFP HDD.

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Technical Bulletin

Reissued: 04-Jun-13

Model: **Model AI-C1**	Date: 07-Nov-07	No.: RD009001j

Version	Modified Points or Symptom Corrected
1.07M	Symptom corrected: 1. The web service might stall if the device settings are changed via WIM or the Operation Panel at the same time as ScanRouter is accessing the device. 2. At the @Remote installation, SC819 occur when select SP5-985-01 to "1". Note: To fix this issue, Network DocBox firmware ver.1.07M/1.07C or later WebUapl firmware ver.1.10 or later and Web Support firmware ver.1.53 needs to be applied.
1.06M	Symptom corrected: 1. Minor bug correction.
1.05M	1st Mass production (NA/EU models)
1.00.1M	1st Mass production (Asia model)

For CS Models

Version	Modified Points or Symptom Corrected
1.13C	*Symptom corrected:* *Minor bug correction*
1.12C	Symptom corrected: 1. If the Capture Priority setting is enabled (User Tools/Counter > System Settings > Administrator Tools > Capture Priority), repeated use of the MLB (Media Link Board) might result in the device stalling.
1.11C	Symptom corrected: 1. Printer might not transfer the job log or the access log to the Web SmartDeviseMonitor or the Remote Communication Gate S Pro.

1.10C	Symptom corrected:
	1. Either of the following problems might occur if the transfering of logs from the device using Web SmartDeviceMonitor ver 2.x without the powercycle.
	  - The 404 Not Found error will be shown if the WIM document server is accessed.
	  - The device will stall if captured data is transfered to a delivery server such as ScanRouter.
	2. Duplicate logs might be transfered to Web SmartDeviceMonitor ver 2.x.

1.09.3C	Other Changes: 1. Multiple stored jobs submitted for printing simultaneously will now be recorded individually in the Job log instead of only the first job being recorded. This change only applies to non-print jobs that have been stored. Prior to this change, the printing of stored print jobs were already recorded individually in the Job log. Note: Requires the following firmware versions (or later): System (version 1.09), Websys (version 1.57), Scanner (version 01.23), WebUapl (version 1.13.1), and either of NFA (version 1.09.3C).

Model: **Model AI-C1**		Date: 07-Nov-07	No.: RD009001j

Version	Modified Points or Symptom Corrected
1.09.2C	Symptom corrected: 1. Result column in the "Scanner: Stored File Sending" log is blank when viewed as CSV file downloaded via WebImageMonitor. 2. Result column in the "Scanner: Stored File Sending" log is blank when viewed in the Web SmartDeviceMonitor Access Log List. 3. Job names that include the "%s" character prevent Web SmartDeviceMonitor from retrieving the MFP's job list. 4. Job names that include the "%s" character prevent the Document server from being accessed by the web service. The result is that the Document Server cannot be seen from Web Image Monitor. 5. The setting that controls access to the Debug Log (SP5842-001 bit #7) has no effect.
1.09.1C	Other changes: 1. The device is able to log the downloading (using WIM or DeskTopBinder) of scanned documents from the MFP HDD.
1.07C	Symptom corrected: 1. The web service might stall if the device settings are changed via WIM or the Operation Panel at the same time as ScanRouter is accessing the device. 2. At the @Remote installation, SC819 occur when select SP5-985-01 to "1". Note: To fix this issue, Network DocBox firmware ver.1.07M/1.07C or later WebUapl firmware ver.1.10 or later and Web Support firmware ver.1.53 needs to be applied.
1.06C	Symptom corrected: 1. Minor bug correction.
1.05C	1st Mass production (NA/EU models)
1.00.1C	1st Mass production (Asia model)

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Reissued: 13-Apr-15

Model: **Model AI-C1**	Date: 07-Nov-07	No.: RD009002s

RTB Reissue

The items in **bold italics** have been corrected or added.

Subject: Firmware Release Note: System	Prepared by: Y. Saitoh
From: 2nd Tech Service Sect., MFP/Printer Tech Service Dept.	

Classification:	☐ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☒ Other ( )	☒ Tier 2

This RTB has been issued to announce the firmware release information for the **System**/**copy.**

For MS Models

Version	Program No.	Effective Date	Availability of RFU
1.18	*D0125752*	*March 2015 production*	*Available*
1.17	D0125751Z	May 2013 production	Available
1.16	D0125751Y	March 2012 production	Available
1.15	D0125751X	December 2011 production	Available
1.14	D0125751W	July 2011 production	Available
1.13	D0125751V	November 2010 production	Available
1.12	D0125751T	January 2010 production	Available
1.11.1	D0125751S	July 2009 production	Available
1.10	D0125751R	March 2009 production	Available
1.09	D0125751Q	February 2009 production	Available
1.08	D0125751P	January 2009 production	Available
1.07.4	D0125751N	December 2008 production	Available
1.06	D0125751M	September 2008 production	Available
1.05	D0125751L	July 2008 production	Available
1.04	D0125751K	May 2008 production	Available
1.03	D0125751J	March 2008 production	Available
1.02	D0125751H	December 2007 production	Available
1.01.1	D0125751G	1st Mass production (NA/EU models)	Available
1.00.6	D0125751F	1st Mass production (Asia model)	Available

Note: Definition of Availability of RFU via @Remote

"Available": The firmware can be updated via RFU or SD card.

"Not available": The firmware can only be updated via SD card.

Technical **B**ulletin

Reissued: 13-Apr-15

Model: **Model AI-C1**	Date: 07-Nov-07	No.: RD009002s

For CS Models

Version	Program No.	Effective Date	Availability of RFU
1.18	*D0135751Z*	*March 2015 production*	*Available*
1.17	D0135751Y	May 2013 production	Available
1.16	D0135751X	March 2012 production	Available
1.14	D0135751W	July 2011 production	Available
1.13	D0135751V	November 2010 production	Available
1.12	D0135751T	January 2010 production	Available
1.11.1	D0135751S	July 2009 production	Available
1.10	D0135751R	March 2009 production	Available
1.09	D0135751Q	February 2009 production	Available
1.08	D0135751P	January 2009 production	Available
1.07.4	D0135751N	September 2008 production	Available
1.06	D0135751M	September 2008 production	Available
1.05	D0135751L	July 2008 production	Available
1.04	D0135751K	May 2008 production	Available
1.03	D0135751J	March 2008 production	Available
1.02	D0135751H	December 2007 production	Available
1.01.1	D0135751G	1st Mass production (NA/EU models)	Available
1.00.6	D0135751F	1st Mass production (Asia model)	Available

Note: Definition of Availability of RFU via @Remote
"Available": The firmware can be updated via RFU or SD card.
"Not available": The firmware can only be updated via SD card.

Model: **Model AI-C1**	Date: 07-Nov-07	No.: RD009002s

For MS Models

Version	Modified Points or Symptom Corrected
1.18	***Symptom Corrected:*** ***SC 817, SC 819, SC 878-03 occur.***

1.17	Symptom corrected:
	 1. If the Auto Logout timer is On, there will be a memory leak occurring everytime a user logs in to the device.
	 2. Repeated failures to login with an IC card will lock the entire account instead of just locking out the access of that card (PIN lock).
	 3. The timer used for the "Access Violation" setting's time interval does not properly compensate for changes to the device timer.
	 4. If User Code authentication is enabled or if "External Optional Counter Type" != 0, accounts locked by the "Lock out" setting (SP-5413-1) are not locked out of WIM.
	 5. Although the "Logout Using Card" function of Card Authentication Package v2 is turned on, the user cannot log out when he or she swipes the card.
	 6. Cannot scan to shared folders in Mac OS X 10.7 or Mac OS X 10.8.
	  This firmware is dependent on the following firmware modules. Please be sure to update all of them:
	  Network Support firmware v7.38 or later
	 7. Cannot communicate with the @Remote Center if embedded RC Gate is enabled.

1.16	Minor change applied.
1.15	Symptom corrected: Data stored in the NAND Flash ROM on the controller board is corrupted.
1.14	Symptom corrected: 1. Stored jobs (Locked Print, Sample Print, etc.) might not be shown in the operation panel if the Data Overwrite Security Unit is installed. 2. Pressing a Function Key that has been mapped to an SDK/J application might result in an SC997. 3. SC819 occurring during use of an SDK/J application under very specific conditions. 4. After an administrator (User, Network, or File) logs in and then out, unauthenticated users are unable to configure any of the settings in "Extended Feature Settings" even if the Machine Admin is disabled. 5. If the Machine Admin logins in before Java VM has finished starting up, it will not be possible to install SDK applications until the device has been rebooted. 6. Cannot move the HDD Encryption option to another SD card.
1.13	Symptom Corrected: 1. SC817 occurs after the firmware is updated via RFU. 2. The IPU test pattern cannot be printed out using SP4417-001. 3. Minor bug corrections. 4. The MFP operation panel might go black and not return until the power is cycled. This only occurred if User Authentication was enabled or the MFP had a Device Accounting Unit such as a coin collector or charge card reader. 5. An SC991 occurs and the Scanner cannot be used if the operation panel is turned back on within 60-120 seconds after the Auto Off Timer turns it off. 6. The MFP might stall if a document is scanned to SMB, E-mail or to the Document Server in jpeg format.

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Model: **Model AI-C1**	Date: 07-Nov-07	No.: RD009002s

Version	Modified Points or Symptom Corrected
	Other changes: 1. SC842 was newly added to indicate an RFU (remote firmware update) failure and to record contents which failed to be updated, and then RFU is retried.

1.12	Symptom corrected:
	1. MFPs with no HDD, stall with a SC955 error upon receiving any of the following type of job containing at least 1 blank page:
	   - PS3 or PCL jobs with a resolution of 300dpi, fed LEF and the short edge of the LEF page is less than 173mm.
	   - Any IPDS job.
	2. Might be unable to use the printer function if the MFP that installed VM card option, ELP and MFP Browser returns from energy saver mode.
	3. If the Selective User Authentication function (SP5-420-041) and User Authentication are both enabled, unauthenticated users can directly access the urls of WIM's Printer Job History, Printer Error Log and Print Job List.
	4. Stored jobs (Locked Print, Sample Print, etc.) might not be shown in the operation panel if the DataOverwriteSecurity Unit is installed.
	5. When paper is fed from the tandem tray (LCT), the machine operation does not follow the setting of SP5-195-001: Limitless SW ("productivity" or "tray" priority).
	6. When the staples are replenished following a Staple End in the middle of a Magazine Copy job, the machine displays "Copying..." and does not resume the job.
	7. SC991 may occur if @Remote (HTTPS) communication is broken in the middle of a session.
	Note: This can be cleared by turning the machine power OFF/ON.
	8. The vendor code contained in the controller board Mac address was updated from "00-00-74" to "00-26-73" (all possible Mac addresses using the old vendor code have been exhausted).

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Version	Modified Points or Symptom Corrected

1.11.1	Symptom corrected:
	1. A problem in our implementation of AppleTalk affecting the ability of our devices to join an AppleTalk Zone through some Seed Routers.
	2. The submission of multiple jobs containing at least 50 pages each, might result in a reboot with an error message (SC990) displayed on the operation panel. This was a very infrequently occurring problem (~.01%).
	3. The printer application will stall if any of the following situations are encountered:
	   – A print job is submitted while another print job is already being processed by the device.
	   – A print job is submitted while the TWAIN driver is scanning.
	4. A scan initiated by TWAIN might fail if a print job is already being processed by the device.
	5. Jobs of more than 100 pages cannot be stored on the MFP (Locked Print, Stored Print, etc.) if another job is being stored from another source (Copier, Scanner, Fax) at the same time.
	6. Scan to NCP fails if all of the following conditions met:
	   – The destination is specified using the IP address.
	   – The Novell server and the device are in different subnets.
	   – The subnet routers filter SLP multicasts.
	Note: Requires System firmware (version 1.11.1 or later) and Scanner firmware (version 01.24 or later).
	7. Scan to NCP fails or takes long time to complete if the IPX protocol is used and there are more than 2 Novell Directory Services (NDS) servers in the network hierarchy.
	Note: Requires System firmware (version 1.11.1 or later) and Scanner firmware (version 01.24 or later).
	8. Incoming FAX documents cannot be forwarded.

1.10	Supports the use of 8K/16K paper (China).
1.09	Symptom corrected: 1. The Job log will stop recording User ID, Username or Usercode in the Printer's Job log if WIM is accessed more than 300 times using authentication. 2. The destination of a scanned job sent to a destination in the device's address book, might not be recorded in the Job log. Note: Requires System firmware (version 1.09 or later) and Scanner firmware (version 01.23 or later). 3. If both SNTP and Date/Time settings are configured in WIM, WIM might not be accessible. This happened very infrequently (about 1% of the time). Note: The fix requires that NCS firmware version 7.24 or later is applied to the device. 4. Firmware updates using an SD card might fail. This was an infrequently occurring problem and could often be overcome by simply trying the update again. 5. If a user logs in and out repeatedly to the device using an IC card (Card Authentication Package option) at the same time as the address book is being updated by a delivery server such as ScanRouter, the device might stall. Other changes: 1. Multiple stored jobs submitted for printing simultaneously will now be recorded individually in the Job log instead of only the first job being recorded. This

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Version	Modified Points or Symptom Corrected
	change only applies to non-print jobs that have been stored. Prior to this change, the printing of stored print jobs were already recorded individually in the Job log. Note: Requires the following firmware versions (or later): System (version 1.09), Websys (version 1.57), Scanner (version 01.23), WebUapl (version 1.13.1), and either of NFA (version 1.09.3M).
1.08	Symptom corrected: 1. If the machine main power is turned OFF during an RFU (remote firmware update) of the firmware, "Please Wait" is displayed when the machine is rebooted, but the condition cannot be cleared. 2. Sudden loss of wireless network connectivity with an error message on the operation panel: "Problems with the wireless card." 3. Continuous printing of IPDS jobs for 5-6 hours results in the error message "Functional problem detected." being displayed on the operation panel. This is recorded in the error log as an SC687 error. 4. If a user tries to logout at the same time as another user is trying to retrieve UserCodes via WebIMageMonitor or Web SmartDeviceMonitor V2, the device might stall with the message "Logging out.... Please wait". 5. SC819 errors, resulting in a stall, occur during printing or when the device is in Energy Saver mode. These errors occurred if the device power had not been cycled recently. 6. Firmware versions of the FAX and Finisher options are not recorded in Web Image Monitor > Access Log > "Firmware: Structure". 7. The device might stall when a large number of jobs (150 or more) are printed continuously. 8. If the login name or password used for LDAP Authentication contain extended ASCII characters (Ie. umulaut), authentication will fail. 9. If a user logs back in after their session has timed out, the device might stall with the message "Authenticating... Please wait". Other changes: 1. Global Scan NX now supports High Compression PDF files. Note: Requires Global Scan NX version 1.2 (SDK application), System firmware (version 1.08 or later), and Embedded Software Architecture SD card Ver.4.14 (SDK/J SDcard Ver.4.14 or later). 2. Global Scan NX now supports a preview function. Note: Requires Global Scan NX version 1.2 (SDK application), System firmware (version 1.08 or later), and Embedded Software Architecture SD card Ver.4.14 (SDK/J SDcard Ver.4.14 or later). 3. Scan to Email now removes trailing dots (I.e. xxxx.com.) from destination email addresses.
1.07.4	Symptom corrected: 1. If a user fails to login from the operation panel, subsequent logins/logouts might not be logged. 2. Some Lockout entries in the Access log are missing information when viewed in Web SmartDeviceMonitor Ver2. 3. The printing of any SMC report including the following will be recorded in the Access Log as "Machine Data Encryption Key Change" - Operation panel > User Tools > Administrator Tools > "Display/Print Counter" > Counter List - Operation panel > User Tools > Interface Settings > Print List

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Version	Modified Points or Symptom Corrected
	4. Mismatched Entry ID and User Name in Web Smart DeviceMonitor > Access Log > "Machine Data Encryption Key Change" log.
	5. Firmware versions of the FAX and Finisher options are not recorded in Web Image Monitor > Access Log > "Firmware: Structure".
	6. Some "File Access Privilege Change" log's entries for the CSV file that downloaded via WebImageMonitor are occurred the following phenomena. - "User Entry ID" is always displayed as "0x00000000". - "User Code /User Name" is appeared as garbage characters. Note: To fix this problem, System firmware (version 1.07.4 or later), WebUapli firmware (version 1.12 or later) needs to be applied to the device.
	7. If a new UserCode is added to the addressbook via WIM, a password change is recorded (Web Image Monitor > Access Log > "Password Change"), even though UserCodes don't have passwords. This only occurred using either UserCode Authentication or no User Authentication whatsoever.
	8. If the Password Policy is enabled, "Target User Entry ID" and "Target User Code/User Name" are not logged in the CSV file that downloaded via WebImageMonitor and in the Web Smart Device Monitor's Access Log List when a user tries and fails due to the password policy to change their password.
1.06	Symptom corrected: 1. An application might not be able to load from an SD card (Printer/Scanner unit, SDK application etc) if either of the WIM settings, Permit Firmware Update or Permit Firmware Structure Change are enabled. 2. If the device receives a large number of jobs via LPR, one of the following might happen: - The device will cancel some or all of the jobs. - The device will not be able to access the network. 3. The Scanner application will stall if the privileges of a Stored File (Scanner application function) are changed. This only occurs if the Access Log is enabled. 4. The Access Log records a password change if the Program/Change Administrator screen is opened via WIM and the OK button is pressed. 5. An admin login/logout will be logged every time the administrator accesses a new WIM page. Note: To fix this problem, System firmware (version 1.06 or later), Websys firmware (version 1.54 or later), Web Uapl firmware (version 1.11 or later) and Printer firmware (version 1.04 or later) needs to be applied to the device. 6. An admin login/logout will be logged every time an Auto Email Notification or On-demand Email Notification is sent. Note: To fix this problem, System firmware (version 1.06 or later), Websys firmware (version 1.54 or later), Web Uapl firmware (version 1.11 or later) and Printer firmware (version 1.04 or later) needs to be applied to the device. 7. Devices using an IPv6 linklocal address, might not be able to use IPsec. Other changes: 1. The speed of switching between SDK applications is faster than before. Note: To use this, "Embedded Software Architecture SD card Ver.4.08 (SDK/J SDcard Ver.4.08 or later)"and system firmware (version 1.06 or later) needs to be applied to the device. 2. The version numbers of some hardware security components called the "Ic Key" and "Ic Hdd" are displayed in the operation panel's firmware version menu.

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Version	Modified Points or Symptom Corrected
	3. The Card Authentication Package (SDK application) is now available.

1.05	Symptom corrected:
	1. When connecting to an LDAP server, the device ignores all Kerberos Realms except the first field (up to 5 can be configured). This will cause authentication to fail on any LDAP server outside the firsrt Kereberos Realm.
	2. 64 failed attempts to login to Simplified LDAP Authentication will cause all subsequent attempts to fail. This could be resolved by cycling the power.
	3. WebImageMonitor is inaccessible if SDK applications are installed.
	4. SC828 occur or machine stalls when performing the Detailed Self-diagnostic mode.
	
	Other changes:
	1. The following logs can log in Access Log in WIM.
	  - File Access Privilege Change
	  - Administrator Change
	  - Address Book Change
	Note: For displaying b~d in WIM, System firmware (ver 1.05 or later) and Websys firmware (version 1.53 or later) needs to be applied to the device.
	2. The version numbers of some hardware secuirty components called the "Ic Key" and "Ic Hdd" are displayed in the operation panel's firmware version menu.

1.04	Symptom corrected: 1. The PS option will not start if it was originally installed on the same SD-card as the Printer/Scanner option (SP5-873-001) and then the Printer/Scanner option was uninistalled (SP5-873-002). 2. Email addresses retrieved from an LDAP server cannot be saved to the local MFP Address Book using "Prg. Dest". (GFPR#RA08030001) 3. SC866 (SD Card Error 1: Confirmation) occurs when installing an SD card option. 4. Date/Time print function on copied paper does not function correctly.
1.03	Symptom corrected: 1. If the device fails Kerberos Authentication for the LDAP server, it can still login to the LDAP server via Digest Authentication. 2. If a USB device is removed while the MFP is in use, an SC 819 error will be shown on the operation panel. 3. A PictBridge error occurs with specific digital cameras. Other changes: 1. The new features of "Embedded Software Architecture SD card Ver.2.11 (SDK/J SDcard Ver.2.11)" are now supported. For the details of these features, please refer to the release notes for "Embedded Software Architecture SD card Ver.2.11 (SDK/J SDcard Ver.2.11)".
1.02	Symptom corrected: Minor bug correction in SP mode.

1.01.1	Symptom corrected:
	1. The device did not log Unauthorized Copying attempts in the Access logs.
	2. The following are not logged for SDK applications.
	  A) Access log > "Collect Encrypted Communication Logs"
	  B) Job Log > all logs

1.00.6	1st Mass production (Asia model)

Model: **Model AI-C1**	Date: 07-Nov-07	No.: RD009002s

For CS Models

Version	Modified Points or Symptom Corrected
1.18	*Symptom Corrected:* *SC 817, SC 819, SC 878-03 occur.*
1.17	Symptom corrected: 1. If the Auto Logout timer is On, there will be a memory leak occurring everytime a user logs in to the device. 2. Repeated failures to login with an IC card will lock the entire account instead of just locking out the access of that card (PIN lock). 3. The timer used for the "Access Violation" setting's time interval does not properly compensate for changes to the device timer. 4. If User Code authentication is enabled or if "External Optional Counter Type" != 0, accounts locked by the "Lock out" setting (SP-5413-1) are not locked out of WIM. 5. Although the "Logout Using Card" function of Card Authentication Package v2 is turned on, the user cannot log out when he or she swipes the card. 6. Cannot scan to shared folders in Mac OS X 10.7 or Mac OS X 10.8. This firmware is dependent on the following firmware modules. Please be sure to update all of them: Network Support firmware v7.38 or later 7. Cannot communicate with the @Remote Center if embedded RC Gate is enabled.
1.16	Minor change applied.
1.14	Symptom corrected: 1. Stored jobs (Locked Print, Sample Print, etc.) might not be shown in the operation panel if the Data Overwrite Security Unit is installed. 2. Pressing a Function Key that has been mapped to an SDK/J application might result in an SC997. 3. SC819 occurring during use of an SDK/J application under very specific conditions. 4. After an administrator (User, Network, or File) logs in and then out, unauthenticated users are unable to configure any of the settings in "Extended Feature Settings" even if the Machine Admin is disabled. 5. If the Machine Admin logins in before Java VM has finished starting up, it will not be possible to install SDK applications until the device has been rebooted. 6. Cannot move the HDD Encryption option to another SD card.
1.13	Symptom Corrected: 1. SC817 occurs after the firmware is updated via RFU. 2. The IPU test pattern cannot be printed out using SP4417-001. 3. Minor bug corrections. 4. The MFP operation panel might go black and not return until the power is cycled. This only occurred if User Authentication was enabled or the MFP had a Device Accounting Unit such as a coin collector or charge card reader. 5. An SC991 occurs and the Scanner cannot be used if the operation panel is turned back on within 60-120 seconds after the Auto Off Timer turns it off. 6. The MFP might stall if a document is scanned to SMB, E-mail or to the Document Server in jpeg format. Other changes:

Model: **Model AI-C1**	Date: 07-Nov-07	No.: RD009002s

Version	Modified Points or Symptom Corrected
	1. SC842 was newly added to indicate an RFU (remote firmware update) failure and to record contents which failed to be updated, and then RFU is retried.
1.12	Symptom corrected: 1. MFPs with no HDD, stall with a SC955 error upon receiving any of the following type of job containing at least 1 blank page: - PS3 or PCL jobs with a resolution of 300dpi, fed LEF and the short edge of the LEF page is less than 173mm. - Any IPDS job. 2. Might be unable to use the printer function if the MFP that installed VM card option, ELP and MFP Browser returns from energy saver mode. 3. If the Selective User Authentication function (SP5-420-041) and User Authentication are both enabled, unauthenticated users can directly access the urls of WIM's Printer Job History, Printer Error Log and Print Job List. 4. Stored jobs (Locked Print, Sample Print, etc.) might not be shown in the operation panel if the DataOverwriteSecurity Unit is installed. 5. When paper is fed from the tandem tray (LCT), the machine operation does not follow the setting of SP5-195-001: Limitless SW ("productivity" or "tray" priority). 6. When the staples are replenished following a Staple End in the middle of a Magazine Copy job, the machine displays "Copying..." and does not resume the job. 7. SC991 may occur if @Remote (HTTPS) communication is broken in the middle of a session. Note: This can be cleared by turning the machine power OFF/ON. 8. The vendor code contained in the controller board Mac address was updated from "00-00-74" to "00-26-73" (all possible Mac addresses using the old vendor code have been exhausted).

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Version	Modified Points or Symptom Corrected

1.11.1	Symptom corrected:
	1. A problem in our implementation of AppleTalk affecting the ability of our devices to join an AppleTalk Zone through some Seed Routers.
	2. The submission of multiple jobs containing at least 50 pages each, might result in a reboot with an error message (SC990) displayed on the operation panel. This was a very infrequently occurring problem (~.01%).
	3. The printer application will stall if any of the following situations are encountered:
	4. A print job is submitted while another print job is already being processed by the device.
	    – A print job is submitted while the TWAIN driver is scanning.
	    – A scan initiated by TWAIN might fail if a print job is already being processed by the device.
	5. Jobs of more than 100 pages cannot be stored on the MFP (Locked Print, Stored Print, etc.) if another job is being stored from another source (Copier, Scanner, Fax) at the same time.
	6. Scan to NCP fails if all of the following conditions met:
	    – The destination is specified using the IP address.
	    – The Novell server and the device are in different subnets.
	    – The subnet routers filter SLP multicasts.
	Note: Requires System firmware (version 1.11.1 or later) and Scanner firmware (version 01.24 or later).
	7. Scan to NCP fails or takes long time to complete if the IPX protocol is used and there are more than 2 Novell Directory Services (NDS) servers in the network hierarchy.
	Note: Requires System firmware (version 1.11.1 or later) and Scanner firmware (version 01.24 or later).
	8. Incoming FAX documents cannot be forwarded.

1.10	Supports the use of 8K/16K paper (China).

1.09	Symptom corrected:
	1. The Job log will stop recording User ID, Username or Usercode in the Printer's Job log if WIM is accessed more than 300 times using authentication.
	2. The destination of a scanned job sent to a destination in the device's address book, might not be recorded in the Job log.
	  Note: Requires System firmware (version 1.09 or later) and Scanner firmware (version 01.23 or later).
	3. If both SNTP and Date/Time settings are configured in WIM, WIM might not be accessible. This happened very infrequently (about 1% of the time).
	  Note: The fix requires that NCS firmware version 7.24 or later is applied to the device.
	4. Firmware updates using an SD card might fail. This was an infrequently occurring problem and could often be overcome by simply trying the update again.
	5. If a user logs in and out repeatedly to the device using an IC card (Card Authentication Package option) at the same time as the address book is being updated by a delivery server such as ScanRouter, the device might stall.
	
	Other changes:
	1. Multiple stored jobs submitted for printing simultaneously will now be recorded individually in the Job log instead of only the first job being recorded. This

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	change only applies to non-print jobs that have been stored. Prior to this change, the printing of stored print jobs were already recorded individually in the Job log. Note: Requires the following firmware versions (or later): System (version 1.09), Websys (version 1.57), Scanner (version 01.23), WebUapl (version 1.13.1), and either of NFA (version 1.09.3C).
1.08	Symptom corrected: 1. If the machine main power is turned OFF during an RFU (remote firmware update) of the firmware, "Please Wait" is displayed when the machine is rebooted, but the condition cannot be cleared. 2. Sudden loss of wireless network connectivity with an error message on the operation panel: "Problems with the wireless card." 3. Continuous printing of IPDS jobs for 5-6 hours results in the error message "Functional problem detected." being displayed on the operation panel. This is recorded in the error log as an SC687 error. 4. If a user tries to logout at the same time as another user is trying to retrieve UserCodes via WebIMageMonitor or Web SmartDeviceMonitor V2, the device might stall with the message "Logging out.... Please wait". 5. SC819 errors, resulting in a stall, occur during printing or when the device is in Energy Saver mode. These errors occurred if the device power had not been cycled recently. 6. Firmware versions of the FAX and Finisher options are not recorded in Web Image Monitor > Access Log > "Firmware: Structure". 7. The device might stall when a large number of jobs (150 or more) are printed continuously. 8. If the login name or password used for LDAP Authentication contain extended ASCII characters (Ie. umulaut), authentication will fail. 9. If a user logs back in after their session has timed out, the device might stall with the message "Authenticating... Please wait". Other changes: 1. Global Scan NX now supports High Compression PDF files. Note: Requires Global Scan NX version 1.2 (SDK application), System firmware (version 1.08 or later), and Embedded Software Architecture SD card Ver.4.14 (SDK/J SDcard Ver.4.14 or later). 2. Global Scan NX now supports a preview function. Note: Requires Global Scan NX version 1.2 (SDK application), System firmware (version 1.08 or later), and Embedded Software Architecture SD card Ver.4.14 (SDK/J SDcard Ver.4.14 or later). 3. Scan to Email now removes trailing dots (I.e. xxxx.com.) from destination email addresses.
1.07.4	Symptom corrected: 1. If a user fails to login from the operation panel, subsequent logins/logouts might not be logged. 2. Some Lockout entries in the Access log are missing information when viewed in Web SmartDeviceMonitor Ver2. 3. The printing of any SMC report including the following will be recorded in the Access Log as "Machine Data Encryption Key Change" - Operation panel > User Tools > Administrator Tools > "Display/Print Counter" > Counter List - Operation panel > User Tools > Interface Settings > Print List

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	4. Mismatched Entry ID and User Name in Web Smart DeviceMonitor > Access Log > "Machine Data Encryption Key Change" log.
	5. Firmware versions of the FAX and Finisher options are not recorded in Web Image Monitor > Access Log > "Firmware: Structure".
	6. Some "File Access Privilege Change" log's entries for the CSV file that downloaded via WebImageMonitor are occurred the following phenomena. - "User Entry ID" is always displayed as "0x00000000". - "User Code /User Name" is appeared as garbage characters. Note: To fix this problem, System firmware (version 1.07.4 or later), WebUapli firmware (version 1.12 or later) needs to be applied to the device.
	7. If a new UserCode is added to the addressbook via WIM, a password change is recorded (Web Image Monitor > Access Log > "Password Change"), even though UserCodes don't have passwords. This only occurred using either UserCode Authentication or no User Authentication whatsoever.
	8. If the Password Policy is enabled, "Target User Entry ID" and "Target User Code/User Name" are not logged in the CSV file that downloaded via WebImageMonitor and in the Web Smart Device Monitor's Access Log List when a user tries and fails due to the password policy to change their password.
1.06	Symptom corrected:
	1. An application might not be able to load from an SD card (Printer/Scanner unit, SDK application etc) if either of the WIM settings, Permit Firmware Update or Permit Firmware Structure Change are enabled.
	2. If the device receives a large number of jobs via LPR, one of the following might happen: - The device will cancel some or all of the jobs. - The device will not be able to access the network.
	3. The Scanner application will stall if the privileges of a Stored File (Scanner application function) are changed. This only occurs if the Access Log is enabled.
	4. The Access Log records a password change if the Program/Change Administrator screen is opened via WIM and the OK button is pressed.
	5. An admin login/logout will be logged every time the administrator accesses a new WIM page. Note: To fix this problem, System firmware (version 1.06 or later), Websys firmware (version 1.54 or later), Web Uapl firmware (version 1.11 or later) and Printer firmware (version 1.04 or later) needs to be applied to the device.
	6. An admin login/logout will be logged every time an Auto Email Notification or On-demand Email Notification is sent. Note: To fix this problem, System firmware (version 1.06 or later), Websys firmware (version 1.54 or later), Web Uapl firmware (version 1.11 or later) and Printer firmware (version 1.04 or later) needs to be applied to the device.
	7. Devices using an IPv6 linklocal address, might not be able to use IPsec. Other changes:
	1. The speed of switching between SDK applications is faster than before. Note: To use this, "Embedded Software Architecture SD card Ver.4.08 (SDK/J SDcard Ver.4.08 or later)"and system firmware (version 1.06 or later) needs to be applied to the device.
	2. The version numbers of some hardware security components called the "Ic Key" and "Ic Hdd" are displayed in the operation panel's firmware version menu.

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Version	Modified Points or Symptom Corrected
	3. The Card Authentication Package (SDK application) is now available.
1.05	Symptom corrected: 1. When connecting to an LDAP server, the device ignores all Kerberos Realms except the first field (up to 5 can be configured). This will cause authentication to fail on any LDAP server outside the firsrt Kereberos Realm. 2. 64 failed attempts to login to Simplified LDAP Authentication will cause all subsequent attempts to fail. This could be resolved by cycling the power. 3. WebImageMonitor is inaccessible if SDK applications are installed. 4. SC828 occur or machine stalls when performing the Detailed Self-diagnostic mode. Other changes: 1. The following logs can log in Access Log in WIM. - File Access Privilege Change - Administrator Change - Address Book Chnage Note: For displaying b~d in WIM, System firmware (ver 1.05 or later) and Websys firmware (version 1.53 or later) needs to be applied to the device. 2. The version numbers of some hardware secuirty components called the "Ic Key" and "Ic Hdd" are displayed in the operation panel's firmware version menu.
1.04	Symptom corrected: 1. The PS option will not start if it was originally installed on the same SD-card as the Printer/Scanner option (SP5-873-001) and then the Printer/Scanner option was uninstalled (SP5-873-002). 2. Email addresses retrieved from an LDAP server cannot be saved to the local MFP Address Book using "Prg. Dest". (GFPR#RA08030001) 3. SC866 (SD Card Error 1: Confirmation) occurs when installing an SD card option. 4. Date/Time print function on copied paper does not function correctly.
1.03	Symptom corrected: 1. If the device fails Kerberos Authentication for the LDAP server, it can still login to the LDAP server via Digest Authentication. 2. If a USB device is removed while the MFP is in use, an SC 819 error will be shown on the operation panel. 3. A PictBridge error occurs with specific digital cameras. Other changes: 1. The new features of "Embedded Software Architecture SD card Ver.2.11 (SDK/J SDcard Ver.2.11)" are now supported. For the details of these features, please refer to the release notes for "Embedded Software Architecture SD card Ver.2.11 (SDK/J SDcard Ver.2.11)".
1.02	Symptom corrected: Minor bug corrections in SP mode.
1.01.1	Symptom corrected: 1. The device did not log Unauthorized Copying attempts in the Access logs. 2. The following are not logged for SDK applications. A) Access log > "Collect Encrypted Communication Logs" B) Job Log > all logs

Reissued: 13-Apr-15

Model: **Model AI-C1**	Date: 07-Nov-07	No.: RD009002s

Version	Modified Points or Symptom Corrected
1.00.6	1st Mass production (Asia model)

RICOH

Technical **B**ulletin

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Reissued: 30-Jul-09

Model: **Model AI-C1**	Date: 07-Nov-07	No.: RD009003h

RTB Reissue

The items in bold italics have been added.

Subject: Firmware Release Note: WebUapl	Prepared by: K.Hamada
From: 2nd Tech. Support Sec. Service Support Dept.	
Classification: ☐ Troubleshooting ☐ Part information ☐ Action required ☐ Mechanical ☐ Electrical ☐ Service manual revision ☐ Paper path ☐ Transmit/receive ☐ Retrofit information ☒ Other ( )	

This RTB has been issued to announce the firmware release information for the **WebUapl.**

For MS Models

Version	Program No.	Effective Date
1.15	*D0095756L*	*August 2009 production*
1.14	D0095756K	March 2009 production
1.13.1	D0095756J	February 2009 production
1.12	D0095756H	November 2008 production
1.11	D0095756G	September 2008 production
1.10	D0095756F	July 2008 production
1.09	D0095756E	May 2008 production
1.08	D0095756D	1st Mass production (NA/EU models)
1.07	D0095756C	1st Mass production (Asia model)

For CS Models

Version	Program No.	Effective Date
1.15	*D0115756L*	*August 2009 production*
1.14	D0115756K	March 2009 production
1.13.1	D0115756J	February 2009 production
1.12	D0115756H	November 2008 production
1.11	D0115756G	September 2008 production
1.10	D0115756F	July 2008 production
1.09	D0115756E	May 2008 production
1.08	D0115756D	1st Mass production (NA/EU models)
1.07	D0115756C	1st Mass production (Asia model)

Model: **Model AI-C1**	Date: 07-Nov-07	No.: RD009003h

For MS Models

Version	Modified Points or Symptom Corrected
1.15	*Other changes:* *1. Authentication errors resulting from the changing of the username or password of a user currently logged into WIM are now logged.* *Note: Requires the following firmware versions (or later):* *Websys (version 1.59), Printer (version 1.11e) and WebUapl (version 1.15).*
1.14	Supports the use of 8K/16K paper (China).
1.13.1	Other changes: 1. Multiple stored jobs submitted for printing simultaneously will now be recorded individually in the Job log instead of only the first job being recorded. This change only applies to non-print jobs that have been stored. Prior to this change, the printing of stored print jobs were already recorded individually in the Job log. Note: Requires the following firmware versions (or later): System (version 1.09), Websys (version 1.57), Scanner (version 01.23), WebUapl (version 1.13.1), and either of NFA (version 1.09.3M).
1.12	Symptom corrected: 1. Some "File Access Privilege Change" log's entries for the CSV file that downloaded via WebImageMonitor are occurred the following phenomena. − "User Entry ID" is always displayed as "0x00000000". − "User Code /User Name" is appeared as garbage characters. Note: To fix this problem, System firmware (version 1.07.4 or later), WebUapli firmware (version 1.12 or later) and Scanner firmware (version 01.21 or later) needs to be applied to the device.
1.11	Symptom corrected: 1. An admin login/logout will be logged everytime the administrator accesses a new WIM page. 2. An admin login/logout will be logged everytime an Auto Email Notification or On-demand Email Notification is sent. An admin login/logout will be logged everytime the administrator accesses a new WIM page. Note: To fix these problems, System firmware (version 1.06 or later), Websys firmware (version 1.54 or later), Web Uapl firmware (version 1.11 or later) and Printer firmware (version 1.04 or later) needs to be applied to the device.
1.10	Symptom corrected: 1. At the @Remote installation, SC819 occur when select SP5-985-01 to "1". Note: To fix this issue, Network DocBox firmware ver.1.07M/1.07C or later WebUapl firmware ver.1.10 or later and Web Support firmware ver.1.53 needs to be applied.
1.09	Symptom corrected: 1. If the device is accessed from WIM and then it goes into Energy Saver Mode for at least 30 minutes, the web service might stall if the Document Server is accessed again. Note: To fix this issue, Websys firmware ver 1.09 or later, WebUapl firmware ver 1.09 or later and Printer firmware ver 1.02 or later needs to be applied.
1.08	1st Mass production (NA/EU models)
1.07	1st Mass production (Asia model)

For CS Models

Version	Modified Points or Symptom Corrected
1.15	*Other changes:* *1. Authentication errors resulting from the changing of the username or password of a user currently logged into WIM, are now logged.* *Note: Requires the following firmware versions (or later):* *Websys (version 1.59), Printer (version 1.11e) and WebUapl (version 1.15).*
1.14	Supports the use of 8K/16K paper (China).
1.13.1	Other changes: 1. Multiple stored jobs submitted for printing simultaneously will now be recorded individually in the Job log instead of only the first job being recorded. This change only applies to non-print jobs that have been stored. Prior to this change, the printing of stored print jobs were already recorded individually in the Job log. Note: Requires the following firmware versions (or later): System (version 1.09), Websys (version 1.57), Scanner (version 01.23), WebUapl (version 1.13.1), and either of NFA (version 1.09.3C).
1.12	Symptom corrected: 1. Some "File Access Privilege Change" log's entries for the CSV file that downloaded via WebImageMonitor are occurred the following phenomena. − "User Entry ID" is always displayed as "0x00000000". − "User Code /User Name" is appeared as garbage characters. Note: To fix this problem, System firmware (version 1.07.4 or later), WebUapli firmware (version 1.12 or later) and Scanner firmware (version 01.21 or later) needs to be applied to the device.
1.11	Symptom corrected: 1. An admin login/logout will be logged everytime the administrator accesses a new WIM page. 2. An admin login/logout will be logged everytime an Auto Email Notification or On-demand Email Notification is sent. An admin login/logout will be logged everytime the administrator accesses a new WIM page. Note: To fix these problems, System firmware (version 1.06 or later), Websys firmware (version 1.54 or later), Web Uapl firmware (version 1.11 or later) and Printer firmware (version 1.04 or later) needs to be applied to the device.
1.10	Symptom corrected: 1. At the @Remote installation, SC819 occur when select SP5-985-01 to "1". Note: To fix this issue, Network DocBox firmware ver.1.07M/1.07C or later WebUapl firmware ver.1.10 or later and Web Support firmware ver.1.53 needs to be applied.
1.09	Symptom corrected: 1. If the device is accessed from WIM and then it goes into Energy Saver Mode for at least 30 minutes, the web service might stall if the Document Server is accessed again. Note: To fix this issue, Websys firmware ver 1.09 or later, WebUapl firmware ver 1.09 or later and Printer firmware ver 1.02 or later needs to be applied.
1.08	1st Mass production (NA/EU models)
1.07	1st Mass production (Asia model)

Reissued: 18-Sep-14

Model: **Model AI-C1**	Date: 07-Nov-07	No.: RD009004k

RTB Reissue
The items in **bold italics** have been added.

Subject: Firmware Release Note: Network Support	Prepared by: Y. Saitoh
From: 2nd Tech Service Sect., MFP/Printer Tech Service Dept.	

Classification:	☐ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☒ Other (Firmware)	☒ Tier2

This RTB has been issued to announce the firmware release information for the **Network Support.**

Version	Program No.	Effective Date	Availability of RFU
7.38	D0135754N	May 2013 production	Not available
7.37	D0135754M	July 2011 production	Not available
7.35	D0135754L	December 2010 production	Not available
7.34	D0135754K	August 2010 production	Not available
7.30	D0135754H	January 2010 production	Available
7.26	D0135754G	July 2009 production	Available
7.23	D0135754F	December 2008 production	Available
7.17	D0135754E	August 2008 production	Available
7.12	D0135754D	May 2008 production	Available
7.05	D0135754C	1st Mass production	Available

Note: Definition of Availability of RFU via @Remote
"Available": The firmware can be updated via RFU or SD card.
"Not available": The firmware can only be updated via SD card.

Version	Modified Points or Symptom Corrected
7.38	Symptom corrected: 1. If the device's IPP Authentication setting is enabled, the driver cannot be installed on Windows 2008 R2 SP1 or 7 SP1 using an IPP port. 2. Scan to SMB fails if the both of the following conditions are met. 　- Either the device has NBT disabled or it is enabled but the device is unable to resolve the destination's NetBIOS name. 　- One or more octets in the destination's IPv4 address contain leading zeros. 3. SC991 might occur and network functions could not be used. This occurs if DHCP and DDNS are both enabled in the device and if the DHCP server distributes to the device an FQDN that is more than 127 byte in length. 4. Device applications or services that use any of port 80, 443, 7443 or 7444 could not be used. This occurs if the illegal packet is sent after SSL negotiation handshake to any of the device's TCP ports 443, 7443 or 7444. Affected applications include Web Image Monitor, IPP Printing and @Remote. 5. If "CNAME" is specified as the destination folder, ScanTo Folder will abort. 6. If NBT is disabled, the destination for Scan to Folder might not be displayed and Windows authentication might fail. 7. Cannot scan to shared folders in Windows 8 **and Windows Server 2012.** 8. Cannot scan to shared folders in Mac OS X 10.7 or Mac OS X 10.8.

Model: **Model AI-C1**	Date: 07-Nov-07	No.: RD009004k

Version	Modified Points or Symptom Corrected
	This firmware is dependent on the following firmware modules. Please be sure to update all of them: System/Copy firmware v1.17 or later.
7.37	Symptom corrected: 1. Chunk Transfer Encoding over an IPP port might results in print jobs being reset. 2. If SSDP = Active (Web ImageMonitor > Configuration > Network Security), a high load on the CPU might result in Web ImageMonitor locking up. 3. MFP with an external controller will lose network connectivity. This only occurred if the network settings were changed repeatedly and the MFP's "NetWare" setting was already "Active" (before the network settings were changed). 4. The MFP icon might not be shown in the Windows "Network" dialogue if SSDP is enabled. This affected Windows Vista, 2008/R2, and 7. 5. The device might lose network connectivity if SSDP is enabled. Network connectivity could be temporarily restored after a power cycle. 6. Under very specific combinations of IP address, Subnet Mask, and Gateway address, some of the printer's network configuration settings might revert to defaults. 7. Use of an IP address to send a Scan to SMB might result in the scanned document not being sent.
7.35	Symptom corrected: 1. An httpd timeout has been implemented to prevent Web ImageMonitor lockups that sometimes occurred when applications accessed the MFP by http. 2. Scan to SMB fails if the file submitted to the DFS folder in the destination and the file of the same name exist in the DFS folder. 3. If Windows Authentication is enabled, printing a large number of copies of a job might take longer than might typically be expected.
7.34	Symptom corrected: 1. If the MFP/LP has a statically configured IP address and domain, it always sends a HELO using just its hostname. SMTP servers that require client HELOs to include the client's FQDN will close the connection. The result of this was that the MFP/LP was unable to send emails. 2. Unable to Scan to SMB to Windows 7 or Windows Server 2008 R2 destinations that have Windows Live ID Sign-in assistant installed. 3. Trying and failing to login to a Scan destination three times might result in the Scanner application stalling. 4. Unable to Scan to SMB to Windows 98/98SE/Me/NT 4.0 destinations specified using an IP address. 5. The SMB retry function fails to retry the sending of failed SMB transfers (Scan to SMB or Fax delivery). 6. Unable to retrieve the Windows group name from a Windows 2008 R2 server during Windows Authentication. Because of this, logged in users will only be granted the "Available Functions" specified for them in the Address book. 7. The device is unable to assign group privileges to a logged in user if that group has a name consisting of more than 20 bytes. To address this issue, the supported group name length will be increased to 40 bytes. 8. The MFP's Windows Authentication function is unable to use Kerberos when being authenticated on a Windows 2008 or Windows 2008 R2 server. The MFP will still be successfully authenticated because it is able to fail back to NTLMv2. 9. After changing the MFP's DNS server address or Domain name, Scan to SMB destinations specified using a hostname might not be found.

| Model: **Model AI-C1** | Date: 07-Nov-07 | No.: RD009004k |

Version	Modified Points or Symptom Corrected
	10. The Scan to SMB "Connection Test" fails if performed on directory located directly below a DFS root. Only the "Connection Test" failed, scanning was successful and even the "Connection Test" worked if performed on any sub-directory.
	11. The device might return an SC 819 error when browsing the network using SMB. This only occurred if SMB was browsed frequently and the device was not rebooted.
	12. If the MFP's IP address is changed to an IP address of another subnet, users will not be able to browse the network (using Scan to SMB) until the MFP is rebooted.
	Other changes:
	SSL-related changes:
	Note: The new field will only appear if Web Support firmware version 1.60 or later has also been applied to the device.
	1. When the device creates a certificate request, it is now able to specify which algorithm (SHA1 or MD5) it wants used to sign the certificate. This has been implemented by adding a field "Algorithm Signature" to the certificate request form.
	2. Web Image Monitor now shows the certificate's key length in: - Configuration > Security > Device Certificate > Details
	3. Specific versions of SSL or TLS (SSLv2, SSLv3, or TLSv1) can now be enabled/disabled using Web Image Monitor. The setting can be configured from either of the following locations: - Configuration > Security > Network Security - Configuration > Security > SSL/TLS
	4. The encryption strength used for SSL can now be configured. This can be done using either of the following settings in Web Image Monitor: - Configuration > Security > Network Security - Configuration > Security > SSL/TLS
	5. Unable to Scan to SMB to a destination that is not specified using an FQDN.
	6. Unable to Scan to SMB to destinations that are using both LM Authentication and Samba v2.x.
	7. The device's SMB timeout was too short (1sec). This caused problems when being used across subnets. For this reason, it has been increased to 10 sec.
	8. For security reasons, the device will no longer accept SSL incoming, or establish outgoing, connections that use NULL or ADH ciphers.
	9. Windows Authentication fails if the username or password includes lower-case European characters.
7.30	Symptom corrected: 1. The MFP's IP address lease renewal request is incorrectly formatted and rejected by DHCP relay agents. This will result in a loss of connectivity that lasts until the MFP reinitializes the network connection (10 seconds). 2. If either of the WSD Printer or Netware functions are enabled, the following problems might occur. If these problems occur, they typically last for about 2.5 hours. (1) The network might become unresponsive. (2) User Tools can be accessed but configuration changes will not be applied.

Model: **Model AI-C1**	Date: 07-Nov-07	No.: RD009004k

Version	Modified Points or Symptom Corrected
	(3) Application buttons on the operation panel might become unresponsive. 3. (1) (ENG) Fixed: Scan to SMB is unable to send documents to a hostname containing 2byte characters. (2)(ENG) Fixed: Windows authentication might fail on a domain controller whose hostname contains 2 byte characters. 4. SDK/J applications might not be able to recognize some supported USB devices. 5. When the device IP address and DNS server location are obtained from DHCP, the domain specified by the device setting "IPv4 > Domain Name > Specify" will be overwritten by the domain obtained from DHCP. Other changes: 1. Scan to Folder destinations located on Windows 7 or Windows Server 2008 R2 can now be selected by browsing. 2. The MFP now supports CIFS, DFS and NTLM v2.
7.26	Symptom corrected: 1. When jobs are submitted to the device's lpr port repeatedly, some of the jobs might not be printed. 2. If IPP authentication is enabled, printing through an IPP port from a Windows Vista/Server 2008 client might result in printing failure. 3. Multiple Windows Vista/Server 2008 PCs might not be able to access the device through IPSec.

7.23	Other changes:
	1. Kerberos authentication support for Windows Server 2008.
	
	Symptom corrected:
	1. If the device fails to establish a WPA or WPA2 connection once, it will not try again until rebooted.
	2. The device is unable to roam between access points using different versions of the IEEE 802.11 standard (a, b, or g).
	3. LPR jobs submitted by an HP-UX, AIX or Netware 6.5 (SP6 or SP7) host will be cancelled, resulting in an error.
	   Note: This problem will not affect Netware 6.5 SP7 if the patch "iprntnw65sp7b.zip" has been installed.
	http://download.novell.com/Download?buildid=HsQQ9fMHax0~
	4. The device doesn't advertise its hostname via DHCP option 12. The DNS server might not be updated by DHCP.
	5. IPP print jobs are cancelled. This happened very infrequently.
	6. After a job consisting of a multiple of exactly 8KB (8192 bytes) is submitted via IPP, the device will no longer accept any more jobs until rebooted.
	7. If both SNTP and Date/Time settings are configured in WIM, WIM might not be accessible. This happened very infrequently (about 1% of the time).
	   Note: The fix requires that System firmware version 1.07.4 or later is applied to the device.

7.17	Symptom corrected: 1. An SC997 will be displayed on the Operation Panel of EFI controller based devices if IPv6 network settings are changed. 2. Excessive time lag when the device rejoins the network after exiting Energy

Model: **Model AI-C1**	Date: 07-Nov-07	No.: RD009004k

Version	Modified Points or Symptom Corrected
	Saver Mode. This will occur under either one of the following conditions: - The device is connected to a hub that uses the spanning tree protocol. - The device is connected via Wireless LAN. 3. If WPA2 is configured for a device, the Access Log List in WSDM ver 2.x will always show the WPA Encryption Method as TKIP and never as CCMP (AES), regardless of actual settings. 4. Jobs submitted using the IE ftp client result in an SC991 error. This only occurs using Windows XP x64. 5. Sending a PJL readback (or ustatus) will result in an SC997. This only occurs if diprint's bidirect is on from telnet. 6. SNMP events (Access Violation or Lockout) are not recorded in the Access Log. 7. If the sending of a Scan to Email using SMIME is interrupted (Ie. A job is submitted to the printer or the device application is switched before the email has been sent), an SC997 error will occur. 8. When a WSD client boots, the device's WSD service might be stopped. 9. "Date/Time" changes initiated by an SNTP server are not recorded in the Access Log. 10. The device might not be able to access the network once the Log collection tool is run (TechMail#TS080441).
7.12	Symptom corrected: 1. The device might not be able to reboot via WIM after the device's date/time is decremented to an earlier date/time using WIM. 2. An SSL2.0 client code fails to properly check for NULL (CVE-2006-4343). (TechMail#OTS-2008-185) 3. Multiple RSA implementations fail to properly handle signatures (CVE-2006-4339). (TechMail#OTS-2008-276) 4. Web SmartDeviceMonitor shows the IP addresses of TWAIN clients in reverse. Example ： 192.168.1.10 ==> 10.1.168.192 5. If an LPR job is submited to the device followed by an AppleTalk job, the device will stall. 6. An SC819 error might be shown on the operation panel if the device is accessed via IPsec repeatedly without a power cycle. Other changes: 1. The IPDS option is now available. To use this option, NCS firmware (version 7.12 or later), Websys firmware (version 1.09 or later) and Printer firmware (version 1.02 or later) needs to be applied to the device. 2. The device supports Windows server 2008 DHCPv6 server.
7.05	1st Mass production

Technical Bulletin

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Reissued: 14-Sep-10

Model: **Model AI-C1**	Date: 07-Nov-07	No.: RD009005i

RTB Reissue

The items in bold italics have been added.

Subject: Firmware Release Note: Web Support	Prepared by: K. Hamada
From: 1st Overseas Tech Support Sec., 1st PQM Dept.	

Classification:	☐ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☒ Other ( )		

This RTB has been issued to announce the firmware release information for the **Web Support.**

Version	Program No.	Effective Date
1.60	*D0135755L*	*September 2010 production*
1.59	D0135755K	August 2009 production
1.58	D0135755J	March 2009 production
1.57	D0135755H	February 2009 production
1.56	D0135755G	November 2008 production
1.54	D0135755F	September 2008 production
1.53	D0135755E	July 2008 production
1.09	D0135755D	May 2008 production
1.06	D0135755C	1st Mass production

Version	Modified Points or Symptom Corrected
1.60	*Other changes:* *SSL-related changes:* *Note: The new fields will only appear if Network Support firmware version 7.34 or later has also been applied to the device.* *No1. When the device creates a certificate request, it is now able to specify which algorithm (SHA1 or MD5) it wants used to sign the certificate. This has been implemented by adding a field "Algorithm Signature" to the certificate request form.* *No2. Web Image Monitor now shows the certificate's key length in:* *- Configuration > Security > Device Certificate > Details* *No3. Specific versions of SSL or TLS (SSLv2, SSLv3, or TLSv1) can now be enabled/disabled using Web Image Monitor. The setting can be configured from either of the following locations:* *- Configuration > Security > Network Security* *- Configuration > Security > SSL/TLS* *No4. The encryption strength used for SSL can now be configured. This can be done using either of the following settings in Web Image Monitor:*

RICOH

Model: **Model AI-C1**	Date: 07-Nov-07	No.: RD009005i

Version	Modified Points or Symptom Corrected
	- ***Configuration > Security > Network Security*** - ***Configuration > Security > SSL/TLS***
1.59	Other changes: 1. Authentication errors resulting from the changing of the username or password of a user currently logged into WIM, are now logged. Note: Requires the following firmware versions (or later): Websys (version 1.59), Printer (version 1.11e) and WebUapl (version 1.15).
1.58	Supports the use of 8K/16K paper (China). Symptom corrected: 1. If the maximum number of log entries has been reached, then logs downloaded via WIM might have some incorrect log IDs or missing fields.

1.57	Other changes:
	 1. Multiple stored jobs submitted for printing simultaneously will now be recorded individually in the Job log instead of only the first job being recorded. This change only applies to non-print jobs that have been stored. Prior to this change, the printing of stored print jobs were already recorded individually in the Job log.
	    Note: Requires the following firmware versions (or later):
	    System (version 1.09), Websys (version 1.57), Scanner (version 01.23), Webapl (version 1.13.1), and either of NFA (version 1.09.3C (Color scanner model)) or (1.09.3M(B/W scanner model)).
	 2.
	   - Unfinished jobs (ie. those in the processing state) are now recorded in logs downloaded via WIM.
	   - Log entries with future dates (as the result of a change of the device clock) are now recorded in logs downloaded via WIM.
	   - The overwriting of a log entry is now logged. Old entries are overwritten if the maximum number of entries has been reached.
	      Maximum number of entries:
	      Access Log (with HDD): 6000
	      Access Log (without HDD): 500
	      Job Log (with HDD): 2000
	      Job Log (without HDD): 500
	 3. Entries in the Result column of logs downloaded via WIM, are now worded differently.

1.56	Other changes: 1. Some new items have been added to the Access Log. Symptom corrected: 1. Some of the Device Settings menu items are not displayed correctly in WIM. Instances of WIM configured to display English and Japanese were unaffected. 2. Some specific events will cause the User Entry ID to be missing from logs downloaded via WIM. 3. Miscellaneous wording errors in logs downloaded via WIM. 4. The names of files stored in the device (File Name) are not recorded in logs downloaded from WIM. 5. Destination Addresses appears garbled in logs downloaded via WIM. This might cause all subsequently recorded fields to also exhibit problems. 6. User Entry IDs in logs downloaded via WIM are 0. This occurred if the status of the Lockout function was changed for the user associated with the User Entry ID.

Model: **Model AI-C1**	Date: 07-Nov-07	No.: RD009005i

Version	Modified Points or Symptom Corrected
1.54	Symptom corrected: 1. An admin login/logout will be logged every time the administrator accesses a new WIM page. 2. An admin login/logout will be logged every time an Auto Email Notification or On-demand Email Notification is sent. An admin login/logout will be logged every time the administrator accesses a new WIM page. Note: To fix these problems, System firmware (version 1.06 or later), Websys firmware (version 1.54 or later), Web Uapl firmware (version 1.11 or later) and Printer firmware (version 1.04 or later) needs to be applied to the device.

1.53	Symptom corrected:
	1. The web service might stall if the IPSec menu is accessed and the Encryption Algorithm setting = "Cleartext".
	2. Configuration > Security > IPsec > Encryption Key Auto Exchange Settings are not saved if configured via WIM.
	3. The web service will stall if more than 130 User Certificates are stored in the Address Book without a powercycle.
	4. At the @Remote installation, SC819 occur when select SP5-985-01 to "1".
	Note: To fix this issue, Network DocBox firmware ver.1.07M/1.07C or later WebUapl firmware ver.1.10 or later and Web Support firmware ver.1.53 needs to be applied.
	
	Other changes:
	1. Logs can be downloaded from WIM (Configuration > Download Logs).
	2. The following operations are logged in the Access log.
	    a. Web Image Monitor Auto Logout
	    b. File Access Privilege Change
	    c. Administrator Change
	    d. Address Book Change
	These can be displayed in the Access Log menu.
	Note: In order to display b-d in WIM, System firmware (ver 1.05 or later) and Websys firmware (version 1.05 or later) are required.

1.09	Symptom corrected:
	1. WebImageMonitor contained wrong wording or message.
	    – Wrong error message for S/MIME: Configuration > Security > Device Certificate
	    – (Wrong) E-mail address of certificate does not match Administrator E-mail address
	    – (Correct) E-mail address of certificate is not entered or does not match Administrator E-mail address
	    – Wrong wording for Access Log: Configuration > Device Settings > Logs
	    (Wrong) All Logs Deletion
	    (Correct) HDD format
	2. WIM displays "This device is currently in use by other functions. Please try again later". A reboot of the device is needed to use WIM again.
	3. If the device is accessed from WIM and then it goes into Energy Saver Mode for at least 30 minutes, the web service might stall if the Document Server is accessed again.
	Note: To fix this issue, Websys firmware (ver 1.09 or later), WebUapl firmware

Reissued: 14-Sep-10

Model: **Model AI-C1**	Date: 07-Nov-07	No.: RD009005i

Version	Modified Points or Symptom Corrected
	(ver 1.09 or later) and Printer firmware (ver 1.02 or later) needs to be applied. Other changes: 1. The IPDS option is now available. To use this option, NCS firmware (version 7.12 or later), Websys firmware (version 1.09 or later) and Printer firmware (version 1.02 or later) needs to be applied to the device.
1.06	1st Mass production.

RICOH

Technical Bulletin

Model: **Model AI-C1**	Date: 07-Nov-07	No.: RD009006

Subject: Firmware Release Note: Data Erase Opt		Prepared by: K.Takagi
From: 1st Tech. Support Sec. Service Support Dept.		
Classification:	☐ Troubleshooting ☐ Part information ☐ Action required ☐ Mechanical ☐ Electrical ☐ Service manual revision ☐ Paper path ☐ Transmit/receive ☐ Retrofit information ☒ Other ( )	

This RTB has been issued to announce the firmware release information for the **Data Erase Opt.**

Version	Program No.	Effective Date
1.00m	D3775912	1st Mass production.

Version	Modified Points or Symptom Corrected
1.00m	1st Mass production.

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Reissued: 06-Jul-11

Model: **Model AI-C1**	Date: 07-Nov-07	No.: RD009007f

RTB Reissue
The items in **bold italics** have been added.

Subject: Firmware Release Note: Option PCL	Prepared by: T.Hirakawa
From: 1st Overseas Tech Support Sec., 1st PQM Dept.	

Classification:	☐ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☒ Other ( )		

This RTB has been issued to announce the firmware release information for the **Option PCL.**

Version	Program No.	Effective Date	Availability of RFU
1.06	*D0125755G*	*July 2011 production*	*Available*
1.05	D0125755F	December 2010 production	Available
1.04	D0125755E	February 2010 production	Available
1.03	D0125755D	September 2009 production	Available
1.02	D0125755C	March 2009 production	Available
1.01	D0125755B	July 2008 production	Available
1.00	D0125755A	1st Mass production	Available

Note: Definition of Availability of RFU via @Remote
"Available": The firmware can be updated via RFU or SD card.
"Not available": The firmware can only be updated via SD card.

Version	Modified Points or Symptom Corrected
1.06	*Other changes:*
	1. If a PCL6 job is printed to a shift tray immediately following a PCL5 job, each page of the PCL6 job will be shifted instead of each job or copy being shifted.
	Note: This problem was reported most often in cases where a PCL6 job is printed with the Windows PCL5 Separator page (PCL.sep).
	2. The printing of documents containing more than 65,535 Bezier curves results in the device hanging up ("Printing ..." is displayed indefinitely).
	3. Characters or symbols missing from the printouts of jobs containing HP-GL/2.

Model: **Model AI-C1**		Date: 07-Nov-07	No.: RD009007f

Version	Modified Points or Symptom Corrected

1.05	Symptom corrected:
	1. PCL5e/c jobs are canceled if all of the following conditions are met:
	  - The job specifies that a custom paper size by drawn from the bypass tray.
	  -"User Tools/Counter > System Settings > Tray Paper Settings > Printer Bypass Paper Size" is something other than "Custom size"
	
	2. Every object on the page is shifted in one direction. This problem only affected HP-GL/2 jobs.
	
	3. When a page object is superimposed over top of another, the overlapping portions of the objects might be printed in black even if they were not black objects.
	
	4. PCL XL error resulting in jobs being cancelled occurring under a very specific set of circumstances.
	
	5. A macro that is only supposed to be printed on the first page of a job, might also be printed on subsequent pages.
	
	6. A device stall might occur if using a very specific combination of font types.

1.04	Other changes: PCL jobs containing images might be printed slowly.
1.03	Symptom corrected: 1. The device suddenly stops printing PCL5 macros after printing a large number of pages (500 or more) and continues to omit macros from PCL5 jobs until the device is rebooted.
1.02	Symptom corrected: 1. Part of pentagon shaped graphics not printed. 2. Single page PCL jobs containing a Vertical Cursor Positioning command are split in two and printed on 2 pieces of paper. Jobs submitted using a Windows or MacOS driver were not affected. 3. After a PCL5 job is printed, all subsequent PCL6 jobs will be output to the same tray as the PCL5 job. This continues until the device is rebooted. PCL6 jobs that used finishing options were unaffected.
1.01	Symptom corrected: 1. The PCL5 line pitch might be printed larger than the original. (GFPR#RE07120011, RC08050003) 2. The printable area of a PCL5 page might extend beyond the border on the right side. (GFPR#GFPR#RE07070010)
1.00	1st Mass production

Model: **Model AI-C1**	Date: 07-Nov-08	No.: RD009008f

RTB Reissue

The items in bold italics have been corrected or added.

Subject: Firmware Release Note: Fax	Prepared by: T. Hirakawa
From: 2nd Tech Service Sect., MFP/Printer Tech Service Dept.	

Classification:	☐ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☒ Other (Firmware)	☒ Tier 2

This RTB has been issued to announce the firmware release information for the **Fax.**

For MS Models

Version	Program No.	Effective Date
07.00.00	*D0125753J*	*December 2014 production*
06.00.00	D0125753H	February 2011 production
05.00.00	D0125753G	December 2010 production
04.00.00	D0125753F	March 2009 production
03.00.00	D0125753E	March 2008 production
02.00.00	D0125753D	1st Mass production (NA/EU models)
01.00.01	D0125753C	1st Mass production (Asia model)

For CS Models

Version	Program No.	Effective Date
07.00.00	*D0135753J*	*December 2014 production*
06.00.00	D0135753H	February 2011 production
05.00.00	D0135753G	December 2010 production
04.00.00	D0135753F	March 2009 production
03.00.00	D0135753E	March 2008 production
02.00.00	D0135753D	1st Mass production (NA/EU models)
01.00.01	D0135753C	1st Mass production (Asia model)

Model: **Model AI-C1**	Date: 07-Nov-08	No.: RD009008f

For MS Models

Version	Modified Points or Symptom Corrected
07.00.00	*Symptom corrected:* − *A stored reception document is deleted if a paper loading error (incorrect loading or tray overload) occurs when the user tries to print it out.* − *SC899 may occur on the main machine if a Remote FAX is sent from the sub machine.*
06.00.00	Symptom Corrected: If the machine receives a FAX at the same time it switches over to Off/Sleep mode, it may not be able to receive any FAXes after that.
05.00.00	Symptom corrected: Received FAX documents stored in memory cannot be printed out if the FCU is reset.
04.00.00	Minor bug correction.
03.00.00	Other changes: Supports the Confirm Address Before Sending feature.
02.00.00	1st Mass production (NA/EU models)
01.00.01	1st Mass production (Asia model)

For CS Models

Version	Modified Points or Symptom Corrected
07.00.00	*Symptom corrected:* − *A stored reception document is deleted if a paper loading error (incorrect loading or tray overload) occurs when the user tries to print it out.* − *SC899 may occur on the main machine if a Remote FAX is sent from the sub machine.*
06.00.00	Symptom Corrected: If the machine receives a FAX at the same time it switches over to Off/Sleep mode, it may not be able to receive any FAXes after that.
05.00.00	Symptom corrected: Received FAX documents stored in memory cannot be printed out if the FCU is reset.
04.00.00	Minor bug correction.
03.00.00	Other changes: Supports the Confirm Address Before Sending feature.
02.00.00	1st Mass production (NA/EU models)
01.00.01	1st Mass production (Asia model)

Reissued: 26-Nov-10

Model: **Model AI-C1**	Date: 07-Nov-07	No.: RD009009c

RTB Reissue

The items in bold italics have been added.

Subject: Firmware Release Note: RFax	Prepared by: T. Hirakawa
From: 1st Overseas Tech Support Sec., 1st PQM Dept.	

Classification:	☐ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☒ Other ( )		

This RTB has been issued to announce the firmware release information for the **RFax.**

For MS Models

Version	Program No.	Effective Date
04.00.00	*D0095752F*	*December 2010 production*
03.00.00	D0095752E	February 2009 production
02.00.00	D0095752D	1st Mass production (NA/EU models)
01.00.01	D0095752C	1st Mass production (Asia model)

For CS Models

Version	Program No.	Effective Date
04.00.00	*D0115752F*	*December 2010 production*
03.00.00	D0115752E	February 2009 production
02.00.00	D0115752D	1st Mass production (NA/EU models)
01.00.01	D0115752C	1st Mass production (Asia model)

Model: **Model AI-C1**	Date: 07-Nov-07	No.: RD009009c

For MS Models

Version	Modified Points or Symptom Corrected
04.00.00	***Symptom Corrected:*** ***Document will be stay "not transmit" for IP-FAX and IP-FAX cannot be used at all.***
03.00.00	Symptom Corrected: 1. The PC FAX job history cannot be accessed after a PC FAX transmission is sent by the FAX Transmitter.
02.00.00	1st Mass production (NA/EU models)
01.00.01	1st Mass production (Asia model)

For CS Models

Version	Modified Points or Symptom Corrected
04.00.00	***Symptom Corrected:*** ***Document will be stay "not transmit" for IP-FAX and IP-FAX cannot be used at all.***
03.00.00	Symptom Corrected: 1. The PC FAX job history cannot be accessed after a PC FAX transmission is sent by the FAX Transmitter.
02.00.00	1st Mass production (NA/EU models)
01.00.01	1st Mass production (Asia model)

Model: Model AI-C1	Date: 07-Nov-07	No.: RD009010k

RTB Reissue
The items in **bold italics** were corrected or added.

Subject: Firmware Release Note: Engine	Prepared by: T.Hirakawa
From: 1st Overseas Tech Support Sec., 1st PQM Dept.	

Classification:	☐ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☒ Other ( )		

This RTB has been issued to announce the firmware release information for the **Engine.**

Version	Program No.	Effective Date	Availability of RFU
1.07:05	D0095160K	January 2011 production	Available
1.06:05	D0095160J	December 2009 production	Available
1.05:05	D0095160H	October 2008 production	Available
1.04:05	D0095160G	August 2008 production	Available
1.031:05	D0095160F	June 2008 production	Available
1.03:05	D0095160E	March 2008 production	Available
1.02:05	D0095160D	March 2008 production	Available
1.01:05	D0095160C	1st Mass production	Available

Note: Definition of Availability of RFU
"Available": The firmware can be updated via RFU or SD card.
"Not available": The firmware can only be updated via SD card.

Version	Modified Points or Symptom Corrected
1.07:05	Other changes 1. Improve the reliability of detection of opening-closing timing of the bridge unit door. ***Jam1 (Cover open) occurs frequently in the bridge unit. Please refer to RTB#RD009052 for more details.*** 2. Improve the reliability of continuous action among printing jobs while multiple continuous printing with the staple function selected.
1.06:05	Symptom corrected: Machine indicates E-40 when a ADF firmware version older than V14 is downloaded. Note: 1. Engine firmware (AI-C1: version 1.06:05 or later) needs to be applied to fix this issue. 2. Refer to RD009046 for more details.
1.05 :05	Symptom corrected: The print speed decreases under the following conditions: - A duplex job is performed using "limitless paper feed", and - The machine switches over to another tray after running out of paper
1.04 :05	Minor bug correction.
1.031 :05	Symptom corrected: When updating the Engine firmware from Ver1.01:05/Ver1.02:05 to Ver1.03:05, the

Model: Model AI-C1	Date: 07-Nov-07	No.: RD009010k

Version	Modified Points or Symptom Corrected
	value of SP7-803-011(PM counter rotation(%): Web) sometimes changes to an abnormal value (twice the value of SP1-902-001(Cleaning Web Setting web Consumption).

1.03 :05	Important Information for when Updating the Engine Firmware from Ver1.01:05/Ver1.02:05 to Ver1.03:05
	
	Do the following when you update the Engine firmware on machines already installed in the field, from ver1.01:05 or ver1.02:05 to <u>ver1.03:05</u>.
	
	    Note:
	    - This procedure is necessary because when <u>ver1.03:05</u> is installed, the value of SP7-803-011(PM Counter Rotation(%): Web) sometimes changes to an abnormal value (twice the value of SP1-902-001(Cleaning Web Setting Setting Web Consumption)).
	    - This procedure is not necessary when you install a new machine. This is because on new machines, there is no value contained in SP7-803-011.
	
	Procedure:
	1. Perform the firmware update itself.
	2. Check the values of <u>SP7-803-011</u> and <u>SP1-902-001</u>.
	    - If the value of SP7-803-011 is <u>twice (2X)</u> the value of SP1-902-001, <u>do Steps 3-6 below.</u>
	    - If it is not, <u>do not continue with this procedure</u> (the values are normal).
	3. Write down the value of <u>SP1-902-001</u>.
	4. Execute <u>SP7-804-005</u>(PM Counter Clear Web).
	5. Access <u>SP1-902-001</u> again, and then enter the value you wrote down in Step 3.
	6. Turn the main power OFF/ON.
	7. Make sure the value of <u>SP1-902-001</u> is the same as the value you wrote down in Step 3 (or this value +1).
	   Note: This value is sometimes incremented + 1 when the power is turned ON, because the fusing Web is activated.
	8. Make sure the value of <u>SP7-803-011</u> is "<u>0</u>".
	
	Symptom corrected:
	1. An error message ("Failed") is displayed on the LCD after SP2-801 (Developer Initialization) is performed.
	2. The cleaning web sometimes reaches the End condition before the 160K PM target.
	   Note: This occurs more easily as BOTH of the following increase:
	    – The number of jobs performed per day, AND
	    – The number of times the machine enters Off Mode per day.

1.02 :05	Minor changes applied to improve reliability
1.01 :05	1st Mass production

Reissued: 31-Mar-16

Model: **Model AI-C1**	Date: 07-Nov-07	No.: RD009011h

RTB Reissue
The items in bold italics have been corrected or added.

Subject: Firmware Release Note: FCU	Prepared by: Y. Saitoh
From: 1st Tech Service Sect., MFP/Printer Tech Service Dept	

Classification:	☐ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☒ Other ( )		

This RTB has been issued to announce the firmware release information for the **FCU.**

Version	Program No.	Effective Date	Availability of RFU
09.00.00	*D3465570J*	*April 2016 production*	*Available*
08.00.00	D3465570H	January 2013 production	Available
07.00.00	D3465570G	April 2011 production	Available
06.00.00	D3465570F	January 2010 production	Available
05.00.00	D3465570E	October 2008 production	Available
04.00.00	D3465570D	September 2008 production	Available
03.00.00	D3465570C	August 2008 production	Available
02.00.00	D3465570B	December 2007 production	Available
01.00.00	D3465570A	1st Mass production	Available

Note: Definition of Availability of RFU via @Remote
"Available": The firmware can be updated via RFU or SD card.
"Not available": The firmware can only be updated via SD card.

Version	Modified Points or Symptom Corrected
09.00.00	*Symptom corrected:* *If an error, for example, 14-30 occurs while sending folders, the machine may not recover from the error nor report the error.*
08.00.00	Symptom corrected. 1. An NMI error may occur (triggered by a watchdog reset error) if a large amount of electrical noise occurs when sending a PDF image to a folder using the G3 line. 2. Minor bug corrections were applied.
07.00.00	Symptom corrected: A line interrupt error occurs when receiving a FAX from a specific FAX server due to an RTC misdetection.
06.00.00	Symptom corrected: FAXes cannot be received while the machine is in Auto Off mode.
05.00.00	Minor bug correction.
04.00.00	Minor bug correction

Model: **Model AI-C1**	Date: 07-Nov-07	No.: RD009011h

Version	Modified Points or Symptom Corrected
03.00.00	1. "Transmission Result by E-mail" does not function. 2. When V34 is received, the communication is disconnected and prints the Power Failure Report. 3. Error 6-21 occurs when receive the PC-Fax data. 4. On-hook transmission may not be done. 5. When transferring the memory, the memory is transferred always with PDF format even though the TIFF format is selected.
02.00.00	Other changes: The firmware was modified to work with the Japanese domestic model as well.
01.00.00	1st Mass production

RICOH   **T**echnical **B**ulletin

Model: **Model AI-C1** / **AI-C1.5**	Date: 07-Nov-07	No.: RD009012c

RTB Reissue

The items in bold italics have been added.

Subject: Firmware Release Note: LCDC	Prepared by: K.Hamada
From: 1st Overseas Tech Support Sec., 1st PQM Dept.	

Classification:	☐ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☒ Other ( )		

This RTB has been issued to announce the firmware release information for the **LCDC.**

For US Models

Version	Program No.	Effective Date
1.08	D0091491C	December 2009 production
1.07	D0091491B	April 2008 production
1.01	D0091491A	1st Mass production

For EU Models

Version	Program No.	Effective Date
1.08	D0091492C	December 2009 production
1.07	D0091492B	April 2008 production
1.01	D0091492A	1st Mass production

For ASI_TWN Models

Version	Program No.	Effective Date
1.08	D0091493B	December 2009 production
1.07	D0091493A	April 2008 production
1.01	D0091493	1st Mass production

For CHN Models

Version	Program No.	Effective Date
1.09	***D0091457B***	***November 2010 production***
1.08	D0091457A	December 2009 production
1.07	D0091457	1st Mass production

For KOR Models (AI-C1 only)

Version	Program No.	Effective Date
1.08	D0091459A	December 2009 production
1.07	D0091459	1st Mass production

Model: **Model AI-C1** / **AI-C1.5**	Date: 07-Nov-07	No.: RD009012c

For US Models

Version	Modified Points or Symptom Corrected
1.08	Symptom corrected: When the machine recovers from energy saver or Off/Sleep mode, LCD may not display anymore.
1.07	Symptom corrected: Wording error in the toner bottle replacement message ("right" was corrected to "left").
1.01	1st Mass production

For EU Models

Version	Modified Points or Symptom Corrected
1.08	Symptom corrected: When the machine recovers from energy saver or Off/Sleep mode, LCD may not display anymore.
1.07	Symptom corrected: Wording error in the toner bottle replacement message ("right" was corrected to "left").
1.01	1st Mass production

For ASI_TWN Models

Version	Modified Points or Symptom Corrected
1.08	Symptom corrected: When the machine recovers from energy saver or Off/Sleep mode, LCD may not display anymore.
1.07	Symptom corrected: Wording error in the toner bottle replacement message ("right" was corrected to "left").
1.01	1st Mass production

For CHN Models

Version	Modified Points or Symptom Corrected
1.09	*Other changes:* *Supports Chinese font GB18030.*
1.08	Symptom corrected: When the machine recovers from energy saver or Off/Sleep mode, LCD may not display anymore.
1.07	1st Mass production

For KOR Models (AI-C1 only)

Version	Modified Points or Symptom Corrected

RICOH   **T**echnical **B**ulletin

Model: **Model AI-C1 / AI-C1.5**	Date: 07-Nov-07	No.: RD009012c

Version	Modified Points or Symptom Corrected
1.08	Symptom corrected: When the machine recovers from energy saver or Off/Sleep mode, LCD may not display anymore.
1.07	1st Mass production

Reissued: 01-Sep-11

Model: **AI-C1**/**AI-C1.5**	Date: 07-Nov-07	No.: RD009013f

RTB Reissue

The items in bold italics have been added.

Subject: Firmware Release Note: PS3/PDF	Prepared by: T. Hirakawa
From: 1st Overseas Tech Support Sec., 1st PQM Dept.	

Classification:	☐ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☒ Other ( )		

This RTB has been issued to announce the firmware release information for the **PS3**/**PDF.**

Version	Program No.	Effective Date	Availability of RFU
1.07	*D0125754E*	*October 2011 production*	*Available*
1.06	D0125754D	March 2011 production	Available
1.05	D0125754C	November 2009 production	Available
1.02	D0125754B	June 2009 production	Available
1.01	D0125754A	1st Mass production	Available

Note: Definition of Availability of RFU via @Remote

"Available": The firmware can be updated via RFU or SD card.

"Not available": The firmware can only be updated via SD card.

Version	Modified Points or Symptom Corrected
1.07	***Symptom corrected:*** ***1. PDF Direct jobs containing a mask that was created using tiling will be reset. (GFPR#OS11070002)*** ***2. Images in PDF Direct jobs might be missing or out of place.***
1.06	Symptom corrected: 1. If printing a PDF Direct job containing embedded fonts that have the same name but are actually different fonts, characters will be garbled. 2. If printing a PDF Direct job containing multiple embedded "CIDFontType2 (TrueType)" fonts, characters will be garbled and/or missing. 3. If printing a PDF Direct job that calls a "download font" from the hard disk (or Ram disk), one of the other resident fonts might be used instead.
1.05	Symptom corrected: 1. Batch printing of PDF documents results in a memory overflow and all jobs being cancelled. 2. Pressing job cancel immediately after submitting a PDF Direct Print job will result in the MFP stalling.
1.02	Symptom corrected: 1. PDF Direct Printing of PDFs containing multiple images might result in the PS error "limitcheck" being printed.
1.01	1st Mass production

Reissued: 19-Sep-12

Model: **Model AI-C1**	Date: 07-Nov-07	No.: RD009014r

RTB Reissue
The items in **_bold italics_** have been added.

Subject: Firmware Release Note: Printer		Prepared by: T.Hirakawa	
From: 1st Tech Service Sect., MFP/Printer Tech Service Dept			
Classification:	☐ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☒ Other ( )	☒ Tier 2

This RTB has been issued to announce the firmware release information for the **Printer.**

Version	Program No.	Effective Date	Availability of RFU
_1.15e_	**_D0135758V_**	**_September 2012 production_**	**_Not available_**
1.14e	D0135758T	July 2011 production	Not available
1.13e	D0135758S	December 2010 production	Not available
1.12.2e	D0135758R	October 2010 production	Not available
1.12.1e	D0135758Q	March 2010 production	Not available
1.12e	D0135758P	February 2010 production	Not available
1.11.1e	D0135758N	September 2009 production	Not available
1.11e	D0135758M	July 2009 production	Not available
1.10e	D0135758L	March 2009 production	Not available
1.09e	D0135758K	February 2009 production	Not available
1.08	D0135758J	December 2008 production	Not available
1.07	D0135758H	November 2008 production	Not available
1.06	D0135758G	December 2008 production	Not available
1.04	D0135758F	September 2008 production	Not available
1.03	D0135758E	July 2008 production	Not available
1.02	D0135758D	May 2008 production	Not available
1.01.1	D0135758C	1st Mass production (NA/EU models)	Available
1.00.5	D0135758B	1st Mass production (Asia model)	Available

Note: Definition of Availability of RFU via @Remote
"Available": The firmware can be updated via RFU or SD card.
"Not available": The firmware can only be updated via SD card.

Version	Modified Points or Symptom Corrected
1.15e	***Symptom corrected:*** ***Remote configuration of the device using tools such as Web ImageMonitor to "Reset Current Job" when there is no current job, results in the printer stalling.***
1.14e	Symptom corrected: 1. PS jobs with a large number of images might be unexpectedly reset. 2. If IPDS fonts are reset (Menu button > Maintenance > HD Management > Reset IPDS Fonts), users might not be able to logout from the operation panel. 3. An IPDS Form can be created with unsupported dimensions using Web Image Monitor (Configuration > IPDS Form List > Media Size = Custom Size > Cross Feed Dimension/Feed Dimension). Once created it can be selected using the IPDS Form Allocation setting. Note: Supported dimensions for this model are: Cross Feed Dimension: 182.0 - 297.0 mm Feed Dimension: 210.0 - 432.0 mm
1.13e	Other Changes: ~~When multiple collated copies are printed, the device no longer responds to PJL USTATUS with the number of pages in the current copy. Instead the device now returns the total number of pages for all copies.~~ A new BitSwitch#6-7 has been added. When set to '1', if multiple collated copies are printed, the device no longer responds to PJL USTATUS with the number of pages in the current copy. Instead the device will return the total number of pages for all copies. Symptom corrected: 1. Multiple jobs that are released (printed from the hard disk) by the same user might result in some of the jobs being recorded in the device's Job History as being printed by "---". This only affects the use of the following Job Types and only occurs if User Authentication is enabled: - Sample Print - Hold Print - Locked Print - Stored Print 2. Jobs not containing any PJL commands are held by the device and not printed until another job is submitted or a button is pressed on the device. This occurred if the device entered in energy saver mode immediately after printing a diagnostics page (List/Test Print, etc.).
1.12.2e	Symptom corrected: - IPDS print jobs will be counted by the External Charge Unit (coin collector or charge card reader) if all of the following conditions are met: 1. Counter Interface Unit Type A is installed 2. User Tools >System Settings >Administrator Tools >Key Counter Management = Printer 3. User Tools >System Settings >Administrator Tools > "External Charge Unit Management" or "Enhanced External Charge Unit Management" = Printer - When printing IPDS jobs an alert will be shown and nothing will be printed if all of

Model: **Model AI-C1**	Date: 07-Nov-07	No.: RD009014r

Version	Modified Points or Symptom Corrected
	the following conditions are met: 1. Counter Interface Unit Type A is not installed 2. User Tools >System Settings >Administrator Tools >Key Counter Management = Printer 3. User Tools >System Settings >Administrator Tools > "External Charge Unit Management" or "Enhanced External Charge Unit Management" = Printer
1.12.1e	Symptom corrected: 1. If SP4-305-001 = "0", "1" or "2", and the Job Type is one of the below, "Paper size and type are mismatched" might be displayed in the operation panel, even though the job and paper in the tray are not mismatched. - Hold Print - Locked Print - Stored Print - Store and Print
1.12e	Symptom corrected: 1. The use of SDK applications that access the GPS Filter (such as the PDL filter) might result in slow printing. 2. If all of the following conditions are met, the MFP stalls, displaying "Resetting Job...": - The job currently being printed is not IPDS. - There is an IPDS job in the queue. - A paper out or paper misfeed occurs. - The user tries to cancel all jobs. It is not possible to cancel jobs via WIM or SmartDeviceMonitor for Client/Admin during printing of an IPDS job. 3. The device becomes unresponsive displaying "Waiting for Print data..." if any of the following settings are changed while the device has an active IPDS session. - Printer Features - System Settings - Tray Paper Settings - Adjustment Settings for Operators Note: The printer status returned to Ready after the IPDS session timed out. 4. If the Selective User Authentication function (SP5-420-041) and User Authentication are both enabled, unauthenticated users can directly access the urls of WIM's Printer Job History, Printer Error Log and Print Job List.
1.11.1e	Symptom corrected: 1. Jobs smaller than 2Kb cause slow printing if the Printer Language is AUTO. 2. If the Auto Continue setting is "Immediate" and the source tray runs out of paper, the device will stall. This only occured if the paper ran out after several small jobs (30 or 40) were submitted back to back. 3. If printing of an IPDS job is interrupted by an error requiring operator attention (paper jam, cover open, etc.), an alert is sent to the host after the error state has been recovered, instead of when the device first enters the error state. 4. If any non-IPDS job in the print queue is deleted while receiving an IPDS job, the device will stall. WIM: Job > Current/Waiting Jobs > Delete Reservation Operation Panel: Job List > Delete Reservation 5. If printing of the IPDS Font List encounters certain recoverable errors (paper out, no paper, paper mismatch) and then the Clear/Stop button is pressed, the device will lockup. If this happened, printing was not possible until the device was

Model: **Model AI-C1**	Date: 07-Nov-07	No.: RD009014r

Version	Modified Points or Symptom Corrected

	rebooted.
	
	Other changes:
	1. IPDS jobs can no longer be deleted from the print queue.
	    WIM: Job > Current/Waiting Jobs > Delete Reservation
	    Operation Panel: Job List > Delete Reservation
	Note: This change was made because deleting IPDS jobs from the print queue stalled the device.

1.11e	Symptom corrected: 1. The device might stall if an IPDS job draws pages from both the interposer and an MFP tray, and a jam occurs. 2. Jobs including the "@PJL DEFAULT" environment variable RESOLUTION or BITSPERDOT result in an SC997 error. 3. If the device receives a non-IPDS job while it is processing an IPDS job, the device will stall. Other changes: 1. Authentication errors resulting from the changing of the username or password of a user currently logged into WIM, are now logged. Note: Requires the following firmware versions (or later): Websys (version 1.59), Printer (version 1.11e) and WebUapl (version 1.15).
1.10e	Supports the use of 8K/16K paper (China). Symptom corrected: 1. A jam or other minor error affecting an IPDS job might cause the device to stall. 2. Single page PCL jobs containing a Vertical Cursor Positioning command are split in two and printed on 2 pieces of paper. Jobs submitted using a Windows or MacOS driver were not affected. 3. After a PCL5 job is printed, all subsequent PCL6 jobs will be output to the same tray as the PCL5 job. This continues until the device is rebooted. PCL6 jobs that used finishing options were unaffected. 4. Part of pentagon shaped graphics not printed.
1.09e	Symptom corrected: 1. Minor bug correction.
1.08	Symptom corrected: 1. The value of "Characters Per Inch" in the IPDS menu on the operation panel is displayed as 10 times the actual value. This was a display issue only and did not affect printing.
1.07	Symptom corrected: 1. When a stored job is deleted, an incorrect User Entry ID will be recorded in the access log. 2. The administrator's user name will not be recorded in the job log when the administrator generates a Print Configuration page. Other changes: 1. - Using SmartDeviceMonitor for Client, only authenticated users can stop, reset or restart any other user's jobs. - PCL fonts and forms cannot be downloaded to devices that have "Permit Firmware Structure Change" disabled.

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Model: **Model AI-C1**	Date: 07-Nov-07	No.: RD009014r

Version	Modified Points or Symptom Corrected
1.06	Saving a print job to an SD card ("Printer SP-1001 bit#4 -> 1") will fail with the error message "No memory" displayed on the operation panel.
1.04	Symptom corrected: 1. If 10 or more IPDS jobs are automatically reset by IPDS due to paper jams, the device might stall. 2. If a job is automatically reset by IPDS due to a paper jam and the next job sent to the printer prints has different print settings (source tray, paper type, paper size, etc.) than the reset job, the device will stall. 3. Storing a large number of jobs to the device HDD might cause the device to stall. If User Authentication is enabled, all job types that store jobs on the HDD contribute to this problem. Otherwise, only Document Server jobs contribute to the problem. 4. An admin login/logout will be logged every time the administrator accesses a new WIM page. Note: To fix this problem, System firmware (version 1.06 or later), Websys firmware (version 1.54 or later), Web Uapl firmware (version 1.11 or later) and Printer firmware (version 1.04 or later) needs to be applied to the device. 5. An admin login/logout will be logged every time an Auto Email Notification or On-demand Email Notification is sent. Note: To fix this problem, System firmware (version 1.06 or later), Websys firmware (version 1.54 or later), Web Uapl firmware (version 1.11 or later) and Printer firmware (version 1.04 or later) needs to be applied to the device. 6. If a media type is disabled using SP5-047-001, this media type will be selected from WIM's IPDS Form List. 7. IPDS jobs that use a media type that doesn't support duplex might cause the device to stall.
1.03	Symptom corrected: 1. IPDS jobs with both duplex and blank pages will appear to stall if a jam occurs.
1.02	Symptom corrected: 1. If the device is accessed from WIM and then it goes into Energy Saver Mode for at least 30 minutes, the web service might stall if the Document Server is accessed again. Note: To fix this issue, Websys firmware (ver 1.09 or later), WebUapl firmware (ver 1.09 or later) and Printer firmware (ver 1.02 or later) needs to be applied. Other changes: 1. The IPDS option is now available. To use this option, NCS firmware (version 7.12 or later), Websys firmware (version 1.09 or later) and Printer firmware (version 1.02 or later) needs to be applied to the device.
1.01.1	1st Mass production (NA/EU models)
1.00.5	1st Mass production (Asia model)

RICOH

Model: **Model AI-C1**	Date: 15-Nov-07	No.: RD009015

Subject: Firmware Release Note: Font Exp			Prepared by: K.Takagi
From: 2nd Tech. Support Sec. Service Support Dept.			
Classification:	☐ Troubleshooting ☐ Mechanical ☐ Paper path ☒ Other ( )	☐ Part information ☐ Electrical ☐ Transmit/receive	☐ Action required ☐ Service manual revision ☐ Retrofit information

This RTB has been issued to announce the firmware release information for the **Font Exp.**

Version	Program No.	Effective Date
1.02	D0135759A	1st Mass production.

Version	Modified Points or Symptom Corrected
1.02	1st Mass production.

Technical **B**ulletin

Reissued: 16-Mar-11

Model: **Option PCL Font**	Date: 04-Dec-07	No.: RD009016a

RTB Reissue

The items in ***bold italics*** have been added.

Subject: Firmware Release Note: Option PCL Font	Prepared by: T.Hirakawa
From: 1st Overseas Tech Support Sec., 1st PQM Dept.	

Classification:	☐ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☒ Other ( )		

This RTB has been issued to announce the firmware release information for the **Option PCL Font.**

Version	**Program No.**	**Effective Date**
1.01	D0125761A	1st Mass production.

Version	**Modified Points or Symptom Corrected**
1.01	1st Mass production.

Model: AI-C1	Date: 13-Dec-07	No.: RD009017

Subject: Service Manual Correction		Prepared by: K.Takagi
From: 1st Tech. Support Sec. Service Support Dept.		
Classification:	☐ Troubleshooting ☐ Part information ☐ Action required ☐ Mechanical ☐ Electrical ☒ Service manual revision ☐ Paper path ☐ Transmit/receive ☐ Retrofit information ☐ Other ( )	

The installation section for the **DataOverwriteSecurity Unit Type I [D362-11]** in the Service Manual was corrected as follows:

Check the accessories and their quantities against the table below.

1. P98

   Add the following descriptions:

   Accessory Check
   Check the accessories and their quantities against the table below.

Description	Q'ty
1. Data Overwrite Security SD Card	1
2. Operating Instructions CD-ROM	1
3. Comments Sheet (17 languages)	2

2. P98: Before You Begin the Procedure

   DELETE the following descriptions:

   - If you install any version other than "Type I", you will have to replace the NVRAM and do this installation procedure again.

3. P99: Seal Check and Removal
   The illustration of the package has been corrected.
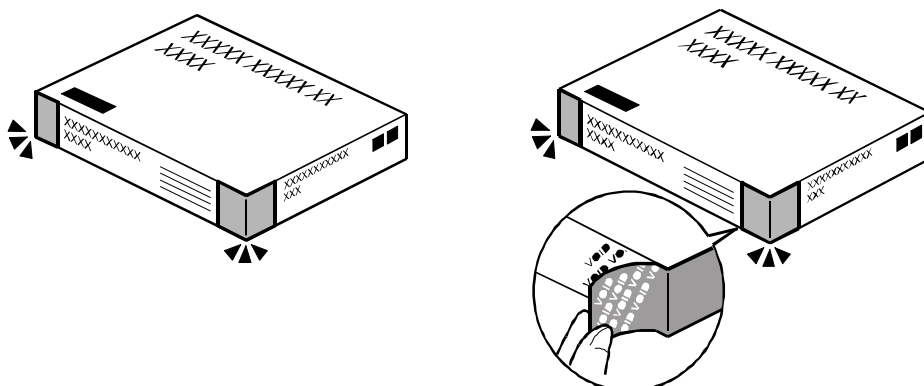
   Incorrect:

Model: AI-C1	Date: 13-Dec-07	No.: RD009017

Correct:
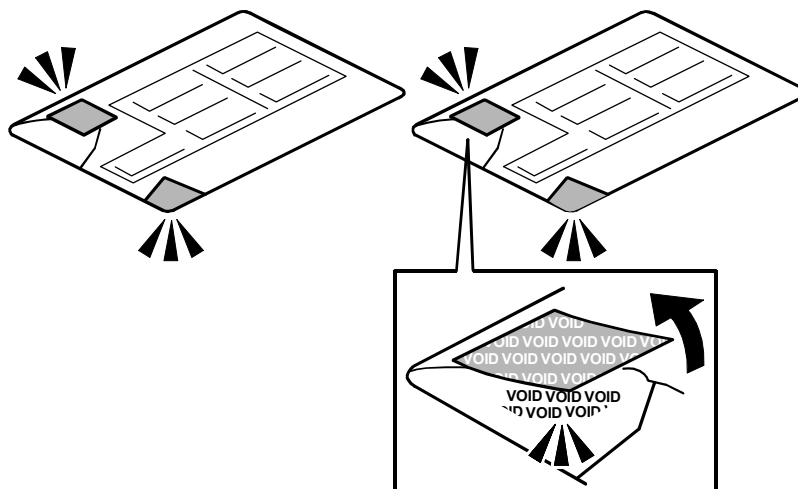
4. P100: Installation Procedure

   Incorrect:
   - [a]: "ROM Number/Firmware Version" – "HDD Format Option"
   - [b]: "Loading Program" - "GW**2**a_zoffy**"**

Diagnostic Report:	"ROM No. / Firmware Version" [a]	"Loading Program" [b]
DataOverwriteSecurity Unit	HDD Format Option: **D3775912 / 1.00m**	**GW2a_zoffy: D3775912 / 1.00m**

   Correct:
   - [a]: "ROM Number/Firmware Version" – "HDD Format Option"
   - [b]: "Loading Program" - "GW**5**a_zoffy**m"**

Diagnostic Report:	"ROM No. / Firmware Version" [a]	"Loading Program" [b]
DataOverwriteSecurity Unit	HDD Format Option: **D3775912A / 1.01m**	**GW5a_zoffym: D3775912A / 1.01m**

5. P101: Installation Procedure

   DELETE the following descriptions:

   - The ROM number and firmware version number change when the firmware is upgraded. However, the important thing is to make sure the numbers in [a] are the same as the numbers in [b].
   - If the ROM numbers are not the same, or the version numbers are not the same, this means the unit was not installed correctly.

   If this happens:

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Make sure of the unit type (must be Type I).

If they do not match:
1) Replace the NV-RAM on the controller.
2) Replace the DataOverwriteSecurity Unit" (SD card) with the correct type
3) Do the installation procedure in this procedure again, from Step 1.

6. P101: Installation Procedure

The display image has been corrected.

Incorrect:

d386i903

Correct:

d386i903

RICOH

Technical **B**ulletin
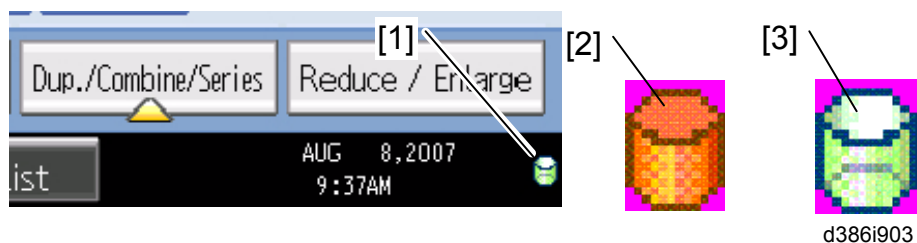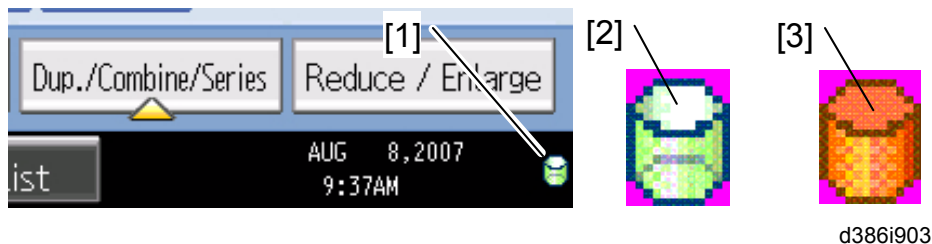
Reissued: 06-Apr-11

Model: **Model AI-C1/AI-C1.5**	Date: 25-Dec-07	No.: RD009018b

RTB Reissue

The items in ***bold italics*** have been added.

Subject: Firmware Release Note: (Language)	Prepared by: T.Hirakawa
From: 1st Overseas Tech Support Sec., 1st PQM Dept.	

Classification:	☐ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☒ Other ( )		

This RTB has been issued to announce the software release information for the **Language.**

Version	Program No.	Effective Date
1.07	*D0091496A*	*April 2008 production*
1.06	D0091496	1st Mass production.

Version	Modified Points or Symptom Corrected
1.07	*Symptom corrected:* *Wording error in the toner bottle replacement message ("right" was corrected to "left").*
1.06	1st Mass production.

RICOH   Technical Bulletin   **PAGE: 1/1**

Model: Model AI-C1	Date: 25-Jan-08	No.: RD009019

Subject: Developer initialization failed (SP2-801)	Prepared by: K. Takagi
From: 1st Tech. Support Sec. Service Support Dept.	

Classification:	☒ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	

SYMPTOM

An error message ("Failed") is displayed on the LCD after SP2-801 (Developer Initialization) is performed when using Engine firmware **ver 1.01.5**.

CAUSE

Firmware bug with Engine ver 1.01.5

SOLUTION

Ignore the error message and continue with the installation process (SP2-805). Do not do SP2-801 again. (Developer initialization was completed normally.)

Model: Model AI-C1	Date: 25-Jan-08	No.: RD009020

Subject: Gear - 31Z Comes Off	Prepared by: K. Takagi
From: 1st Tech. Support Sec. Service Support Dept.	

Classification:	☒ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	

SYMPTOM

If the Gear - 31Z (transfer unit drive gear) is held by hand when the transfer unit is removed/reattached, the gear comes off the drive shaft. Sometimes, the pin also comes off the shaft and falls into the machine.
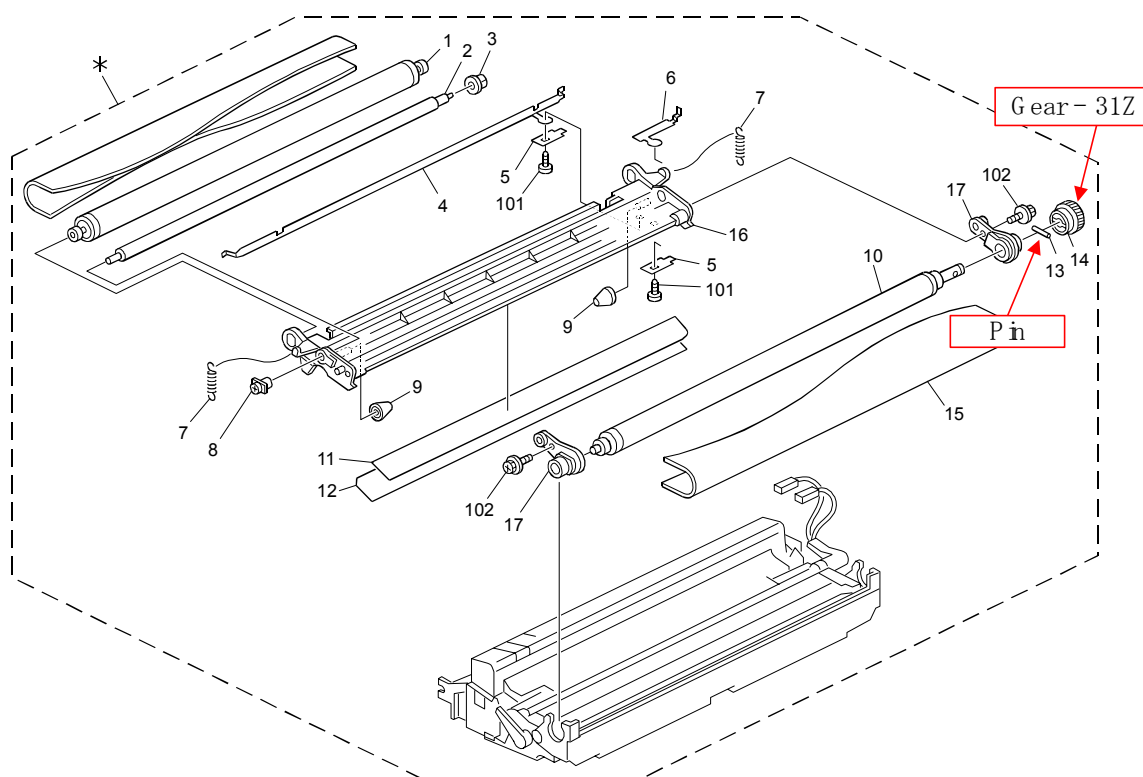
CAUSE

Under these conditions, the stopper mechanism inside the gear cannot hold the gear tightly enough to the transfer unit.

SOLUTION

When you remove/reattach the transfer unit, do not hold this gear. Also, do not remove this gear when servicing the transfer unit if it is not necessary.

Model: Model AI-C1	Date: 25-Jan-08	No.: RD009021

Subject: Waste Toner Almost Full	Prepared by: K. Takagi
From: 1st Tech. Support Sec. Service Support Dept.	

Classification:	☒ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	

SYMPTOM

"Waste Toner Almost Full" is displayed, even when the waste toner tank (inside the transfer unit) is not in the near-full condition.

CAUSE

Poor connection between the waste toner sensor terminals of the transfer unit and mainframe

SOLUTION

Clean the waste toner sensor terminals of the mainframe (D0093874) with alcohol.

Important:
- Clean the entire surface of all five terminals.
- Make sure that the cloth fibers do not stick to the terminals.
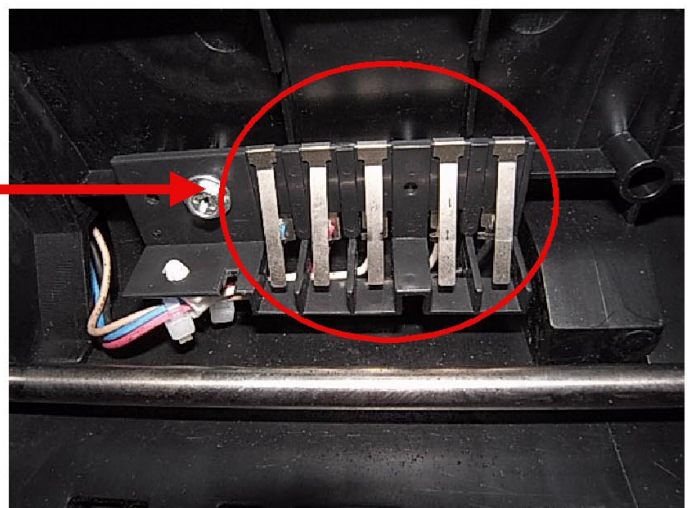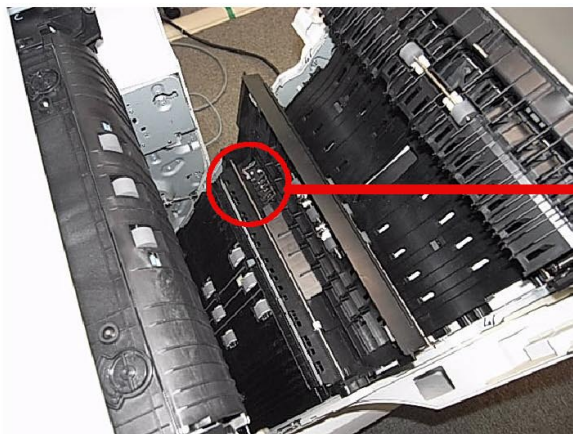
Reissued: 15-Feb-11

Model: **Model AI-C1/AI-C1.5**	Date: 26-Feb-08	No.: RD009022g

RTB Reissue
The items in **bold italics** have been added.

Subject: Firmware Release Note: Scanner	Prepared by: T.Hirakawa
From: 1st Overseas Tech Support Sec.,1stPQM Dept	

Classification:	☐ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☒ Other ( )	☒ Tier 2

This RTB has been issued to announce the firmware release information for the **Scanner.**

For MS Models

Version	Program No.	Effective Date	Availability of RFU
01.25	*D0095751K*	*December 2010 production*	*Available*
01.24	D0095751J	July 2009 production	Available
01.23	D0095751H	February 2009 production	Available
01.22	D0095751G	January 2009 production	Available
01.21	D0095751F	December 2008 production	Available
1.20	D0095751E	March 2008 production	Available
1.19	D0095751D	1st Mass production.	Available

Note: Definition of Availability of RFU
"Available": The firmware can be updated via RFU or SD card.
"Not available": The firmware can only be updated via SD card.

For CS Models

Version	Program No.	Effective Date	Availability of RFU
01.25	*D0115751K*	*December 2010 production*	*Available*
01.24	D0115751J	July 2009 production	Available
01.23	D0115751H	February 2009 production	Available
01.22	D0115751G	January 2009 production	Available
01.21	D0115751F	December 2008 production	Available
1.20	D0115751E	March 2008 production	Available
1.19	D0115751D	1st Mass production.	Available

Note: Definition of Availability of RFU
"Available": The firmware can be updated via RFU or SD card.
"Not available": The firmware can only be updated via SD card.

For MS Models

Version	Modified Points or Symptom Corrected
01.25	*Symptom corrected:* 1. *The MFP operation panel might go black and not return until the power is cycled. This only occurred if User Authentication was enabled or the MFP had a Device Accounting Unit such as a coin collector or charge card reader.* 2. *A scan configured to output a Multi-page TIFF might have actually output a PDF. This only occurred if both of the following conditions were met:* 　- *Scanner operation panel > Send Settings > Compression (Gray Scale/Full Color) > OFF* 　- *Scanner operation panel > Scan Settings > Scan Type > Auto Color Select* 3. *The scanner will stall and "Updating the destination List. Please wait..." will be displayed on the operation panel. This occurs if the device's address book is updated via ScanRouter while the device is in Sleep Mode.*
01.24	Symptom corrected: 　Scan to NCP fails if all of the following conditions met: 　The destination is specified using the IP address. 　The Novell server and the device are in different subnets. 　The subnet routers filter SLP multicasts. Note: Requires System firmware (version 1.11.1 or later) and Scanner firmware (version 01.24 or later). 　Scan to NCP fails or takes long time to complete if the IPX protocol is used and there are more than 2 Novell Directory Services (NDS) servers in the network hierarchy. Note: Requires System firmware (version 1.11.1 or later) and Scanner firmware (version 01.24 or later).
01.23	Symptom corrected: 　The destination of a scanned job sent to a destination in the device's address book, might not be recorded in the Job log. Note: To fix this problem, System firmware (version 1.09 or later) and Scanner firmware (version 01.23 or later) needs to be applied to the device. Other changes: 　Multiple stored jobs submitted for printing simultaneously will now be recorded individually in the Job log instead of only the first job being recorded. This change only applies to non-print jobs that have been stored. Prior to this change, the printing of stored print jobs were already recorded individually in the Job log. Note: Requires the following firmware versions (or later): System (version 1.09), Websys (version 1.57), Scanner (version 01.23), WebUapl (version 1.13.1), and either of NFA (version 1.09.3M).

Model: **Model AI-C1/AI-C1.5**	Date: 26-Feb-08	No.: RD009022g

01.22	Symptom corrected:
	    Job log CSV file contains the wrong "User Entry ID" for scanner jobs that were sent from the document server. This only occurred using either UserCode Authentication or Basic Authentication.
	    The Job log displayed by WSDM contains the wrong "User Code/User Name", "User Entry ID" and "User display name" for scanner jobs that were sent from the document server. This only occurred using either UserCode Authentication or Basic Authentication.

01.21	Symptom corrected:
	    Some "File Access Privilege Change" log's entries for the CSV file that downloaded via WebImageMonitor are occurred the following phenomena.
	    "User Entry ID" is always displayed as "0x00000000".
	    "User Code /User Name" is appeared as garbage characters.
	Note: To fix this problem, System firmware (version 1.07.4 or later), WebUapli firmware (version 1.12 or later) and Scanner firmware (version 01.21 or later) needs to be applied to the device.

1.20	Other changes: The message "Processing...Please wait." will be displayed on the operation panel if it takes time to process the Scan to E-mail functions using S/MIME.
1.19	1st Mass production.

For CS Models

Version	Modified Points or Symptom Corrected

01.25	*Symptom corrected:*
	1. The MFP operation panel might go black and not return until the power is cycled. This only occurred if User Authentication was enabled or the MFP had a Device Accounting Unit such as a coin collector or charge card reader.
	2. A scan configured to output a Multi-page TIFF might have actually output a PDF. This only occurred if both of the following conditions were met:
	    - Scanner operation panel > Send Settings > Compression (Gray Scale/Full Color) > OFF
	    - Scanner operation panel > Scan Settings > Scan Type > Auto Color Select
	3. The scanner will stall "Updating the destination List. Please wait..." will be displayed on the operation panel. This occurs if the device's address book is updated via ScanRouter while the device is in Sleep Mode.

Model: **Model AI-C1/AI-C1.5**	Date: 26-Feb-08	No.: RD009022g

Version	Modified Points or Symptom Corrected

01.24	Symptom corrected:
	Scan to NCP fails if all of the following conditions met:
	  The destination is specified using the IP address.
	  The Novell server and the device are in different subnets.
	  The subnet routers filter SLP multicasts.
	Note: Requires System firmware (version 1.11.1 or later) and Scanner firmware (version 01.24 or later).
	Scan to NCP fails or takes long time to complete if the IPX protocol is used and there are more than 2 Novell Directory Services (NDS) servers in the network hierarchy.
	Note: Requires System firmware (version 1.11.1 or later) and Scanner firmware (version 01.24 or later).

01.23	Symptom corrected: The destination of a scanned job sent to a destination in the device's address book, might not be recorded in the Job log. Note: To fix this problem, System firmware (version 1.09 or later) and Scanner firmware (version 01.23 or later) needs to be applied to the device. Other changes: Multiple stored jobs submitted for printing simultaneously will now be recorded individually in the Job log instead of only the first job being recorded. This change only applies to non-print jobs that have been stored. Prior to this change, the printing of stored print jobs were already recorded individually in the Job log. Note: Requires the following firmware versions (or later): System (version 1.09), Websys (version 1.57), Scanner (version 01.23), WebUapl (version 1.13.1), and either of NFA (version 1.09.3C).
01.22	Symptom corrected: Job log CSV file contains the wrong "User Entry ID" for scanner jobs that were sent from the document server. This only occurred using either UserCode Authentication or Basic Authentication. The Job log displayed by WSDM contains the wrong "User Code/User Name", "User Entry ID" and "User display name" for scanner jobs that were sent from the document server. This only occurred using either UserCode Authentication or Basic Authentication.

01.21	Symptom corrected:
	Some "File Access Privilege Change" log's entries for the CSV file that downloaded via WebImageMonitor are occurred the following phenomena.
	  "User Entry ID" is always displayed as "0x00000000".
	  "User Code /User Name" is appeared as garbage characters.
	Note: To fix this problem, System firmware (version 1.07.4 or later), WebUapl firmware (version 1.12 or later) and Scanner firmware (version 01.21 or later) needs to be applied to the device.

1.20	Other changes: The message "Processing...Please wait." will be displayed on the operation panel if it takes time to process the Scan to E-mail functions using S/MIME.
1.19	1st Mass production.

RICOH

Reissued: 28-May-12

Model: **Model AI-C1**	Date: 17-Apr-08	No.: RD009023h

RTB Reissue
 The items in bold italics have been added.

Subject: Firmware Release Note: Option IPDS	Prepared by: T.Hirakawa
From: 1st Tech Service Sect., MFP/Printer Tech Service Dept	

Classification:	☐ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☒ Other ( )		☒ Tier 2

This RTB has been issued to announce the firmware release information for the
Option IPDS.

Version	Program No.	Effective Date	Availability of RFU
4.751	D0125756E	April 2012 production	Available
4.746	D0125756D	September 2010 production	Available
4.744	D0125756C	December 2009 production	Available
4.739	D0125756B	August 2009 production	Available
4.732	D0125756A	September 2008 production	Available
4.731	D0125756	1st Mass production	Available

Note: Definition of Availability of RFU via @Remote
"Available": The firmware can be updated via RFU or SD card.
"Not available": The firmware can only be updated via SD card.

Version	Modified Points or Symptom Corrected
4.751	Symptom corrected: 1. Barcode "CODE 128" might be printed with the wrong dimensions. 2. If a job contains 2 different fonts of the same name, characters might be unexpectedly printed in bold or italics, or in some cases might be garbled. 3. Jobs that contain large images and use soft fonts might be cancelled. 4. Intermittent NACK(0595..11) resulting in jobs being cancelled.
4.746	Symptom corrected: 1. Duplex IPDS jobs are printed simplex if the MFP is powered up while a tray is open. Specifically, the tray that is open during power up must be the one specified in the Duplex IPDS job. 2. ~~IPDS jobs containing images might cause the device to stall with the error "Internal Error 0x3414" displayed on the operation panel.~~ 3. Gray patterns consisting of hatching might not be shown in the printout. Instead the gray pattern was just a black box. 4. If a host prematurely terminates an IPDS session with the MFP, subsequent IPDS jobs cannot be printed. The data-in LED will just blink. Though any premature termination of an IPDS session could cause the problem, testing has shown that the problem was most likely to occur if the IPDS session was terminated mid-job.
4.744	Symptom corrected: 1. Any font that is not in CFF "Compact Font Format", will not be printed in IPDS jobs.

Model: **Model AI-C1**		Date: 17-Apr-08	No.: RD009023h

Version	Modified Points or Symptom Corrected

	2. If the machine jams while printing the IPDS font list, it can be made to stall by either of the following operations:
	   - Try to print the IPDS font list again.
	   - Try to print any IPDS job.
	
	Other changes:
	The following functions are now supported.
	- DBCS (Double Byte Character Sets)
	- IMB (IntelligentMail Barcodes)

4.739	Symptom corrected:
	1. The simplex pages of mixed simplex/duplex IPDS jobs will be printed on the wrong side of the page.
	 This problem has been fixed by adding a new printer bit switch: Bit Switch#4-3
	   - Bit Switch#4-3 = 1: Simplex pages of IPDS jobs will be printed on the front side of the page.
	   - Bit Switch#4-3 = 0: Simplex pages of IPDS jobs will be printed on the back side of the page.
	2. IPDS jobs that contain the PFC (Presentation Fidelity Control) command cannot be stapled.
	3. *Barcode "CODE 128" might be printed with the wrong dimensions.*
	4. *If a job contains 2 different fonts of the same name, characters might be unexpectedly printed in bold or italics, or in some cases might be garbled.*
	5. *Jobs that contain large images and use soft fonts might be cancelled.*
	6. *Intermittent NACK(0595..11) resulting in jobs being cancelled.*
	7. *The IPDS printing process does not terminate correctly. The device would then stall if a job of another PDL was submitted.*

4.732	Symptom Correction SC997 is generated when paper jam occur.
4.731	1st Mass production

Model: Model AI-C1	Date: 23-Apr-08	No.: RD009024a

Subject: Dirty Background Image		Prepared by: S. Tomoe
From: 2nd Tech Support Sec. Service Support Dept.		

Classification:	☒ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☒ Tier 2

RTB Reissue
The items in *bold italics* were added.

SYMPTOM

Dirty background image sometimes appears under certain conditions which are mentioned in "Cause" below.

CAUSE

The TC (toner concentration) in the development unit is too high.
   The factors of this condition are as follows:
   - It may occur easier in low humidity and low temperature conditions.
   - It may occur easier when the print volume is high.
   - It may occur easier when a lot of one-to-one prints are made.
   - It may occur easier when there is a lot of paper dust in the recycled toner.
   - It may occur easier when printing with high image coverage.

The process that the problem occurs is as follows:
   TC becomes high caused by the above factors => Accelerates the "Toner Filming" on the development roller => Toner over toning, dirty background.

TEMPORARY SOLUTION

To reduce the TC in the development unit and to cause the generation time of this problem to be delayed, change the development bias as follows:
 - Increase the development bias for the ID sensor pattern to reduce the toner concentration.
 - Increase the development bias to increase the image density.

REQUIRED ACTION IN THE FIELD

When this issue occurs, please do the following procedure.
1. Before changing the development bias,
   - Replace the Developer
   - Clean the development roller surface
   - Clean the recycled toner pathway in the PCU. (Refer to the following procedure for more detail)

2. Make the following SP mode changes:
    - SP2201-01 (Development Bias): From 550 to 660
    - SP2201-02 (Development Bias for ID sensor pattern): From 400 to 500

- SP2001-01 (Charge Roller Bias): Increase the setting by 100

Note: For cases in which you have already performed the first two SP changes (SP2201-01, -02), you do not need to make a special site visit to perform the third SP change (SP2001-01). Perform this change at the next site visit (PM visit or other).

Remarks

1. The above procedure is not a final solution. Even if you perform this temporary solution, the generation time of this problem will be delayed, but this problem may occur under the following conditions.

    1) The conditions listed above, which are mentioned in the Limitation List for AI-C1 as follows.
        - Low temperature (10 degrees C) and low humidity (15%)
        - Printing volume that exceeds the maximum CV of 30k/month

      Note: This tends to occur often when the machine is used for the first time in the morning, following a day of high-volume printing.

    2) Conditions related to user operations (when two or more of the conditions as explained in "Cause" are met simultaneously)

Cleaning Procedure for the recycled toner pathway in the PCU

These procedures are for cleaning out the recycled toner (location shown in the following photo).

1. Remove the green handle.

Model: Model AI-C1	Date: 23-Apr-08	No.: RD009024a

2. Remove 4 screws and 1 spring.
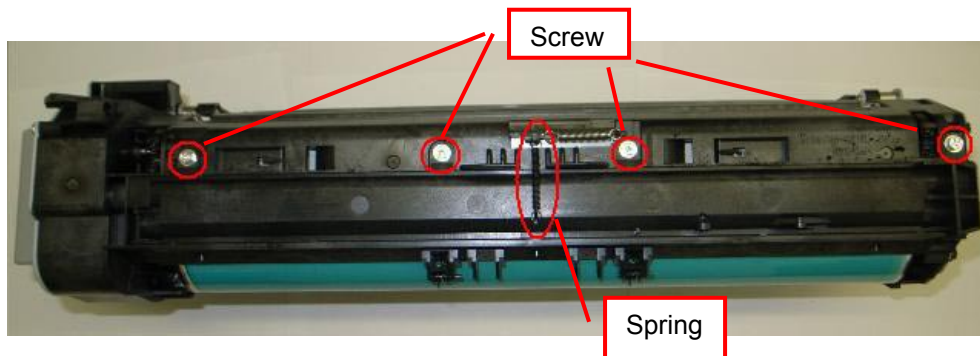
3. Remove the upper cover, then clean out the recycled toner using a vacuum cleaner.
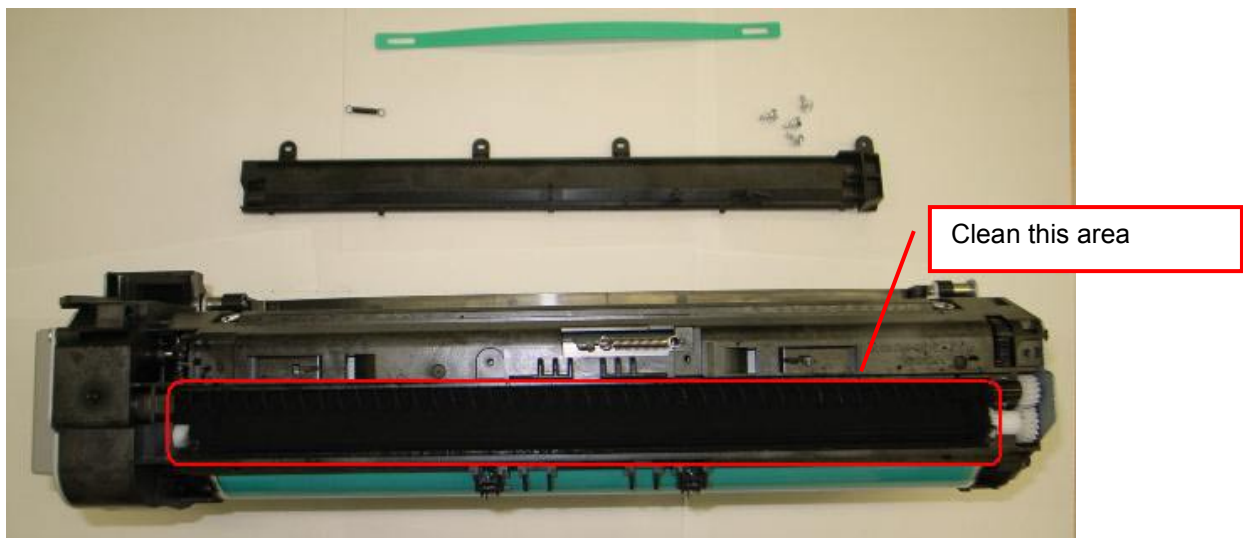
4. Re-attach all removed parts.

FINAL SOLUTION

We are still investigating the final solution and we will let you know as soon as it is fixed. Please give us more time to provide the final solution, because we must review the entire copy process. In the meantime, please perform the temporary solution as shown above if this problem occurs.

RICOH

Technical Bulletin

Model: Alex-C1	Date: 19-May-08	No.: RD009025

Subject: Shorter Yield of Fusing Cleaning Web	Prepared by: K. Hamada
From: 2nd Tech Support Sec. Service Support Dept.	

Classification:	☒ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☒ Tier 2

SYMPTOM

The cleaning web sometimes reaches its End condition before the 160K PM target.

When the following condition occurs, the possibility of occurrence increases:
The more jobs are performed per day, and the more times the machine enters Off Mode per day.

Note:

The machine will enter Off Mode whenever there is a one-minute interval (by default) between jobs.

CAUSE

Web control specifications on this model call for the web to be wound every time the machine recovers from Off Mode. (Web winding every time the main switch is turned ON and every 5 prints is correct specification).

SOLUTION

The firmware will be changed to correct this symptom.
The firmware containing the fusing web countermeasure was released on April 2008.
(New engine firmware version is 1.03:05)

RICOH

Technical **B**ulletin

Model: Alex-C1	Date: 19-May-08	No.: RD009026

Subject: Important information for when updating the Engine Firmware	Prepared by: K. Hamada
From: 2nd Tech Support Sec. Service Support Dept.	

Classification:	☒ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☒ Tier 2

Important Information for when Updating the Engine Firmware from Ver1.01:05/Ver1.02:05 to Ver1.03:05

Do the following when you update the Engine firmware on machines **already installed in the field**, from **ver1.01:05 or ver1.02:05** to **ver1.03:05**.

Note:

➢ This procedure is necessary because when **ver1.03:05** is installed, the value of SP7-803-011(PM Counter Rotation(%): Web) sometimes changes to an abnormal value (twice the value of SP1-902-001(Cleaning Web Setting Setting Web Consumption)).

➢ This procedure is not necessary when you install a new machine. This is because on new machines, there is no value contained in SP7-803-011.

Procedure:

1. Perform the firmware update itself.

2. Check the values of **SP7-803-011** and **SP1-902-001**.

   ● If the value of SP7-803-011 is **twice (2X)** the value of SP1-902-001, **do Steps 3-6 below.**

   ● If it is not, **do not continue with this procedure** (the values are normal).

3. Write down the value of **SP1-902-001**.

4. Execute **SP7-804-005(PM Counter Clear Web)**.

5. Access **SP1-902-001** again, and then enter the value you wrote down in Step 3.

6. Turn the main power OFF/ON.

7. Make sure the value of **SP1-902-001** is the same as the value you wrote down in Step 3 (or this value +1).

   Note: This value is sometimes incremented + 1 when the power is turned ON, because the fusing Web is activated.

8. Make sure the value of **SP7-803-011** is "**0**".

Reissued:13-Feb-09
Reissued: 26-Jun-08

Model: Model AI-C1	Date: 21-May-08	No.: RD009027b

RTB Reissue
The items in **bold italics** were added.

Subject: IPDS Option Release	Prepared by: K. Hamada
From: 2nd Tech Support Sec. Service Support Dept.	

Classification:	☐ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☒ Other ( )	☒ Tier 2

This RTB contains the installation procedure for the IPDS option when used on the Model AL-C1.

The IPDS option will be released in May 2008. The installation procedure for this option on the Model AL-C1 is shown below.

IPDS OPTION

Accessories

Description	Q'ty
1. IPDS Emulation SD Card	1
2. Decal	1

Important: Only one slot 1 is available for SD cards that contain applications. If you want to use more than one application, merge all applications into one SD card (SP5873-001).

Installation

1. Check the software version.

    Make sure the following versions are installed:

Firmware Name	Version	Firmware Number
NCS	V7.12 or later	D0135754D
Websys	V1.09 or later	D0135755D
Printer	**V1.05 or later**	**D0135758G**
System/Copy (For CS model)	**V1.08 or later**	**D0135751P**
System/Copy (For MS model)	**V1.08 or later**	**D0125751P**
IPDS	**V4.732 or later**	**D0125756A**

Model: Model AI-C1	Date: 21-May-08	No.: RD009027b

2. If necessary, update the firmware to the version(s) listed above.

3. Turn OFF the main switch.

4. Remove the slot cover [A](✏ x 1).

5. Insert the IPDS SD Card [B] into Slot **1**.
   If Slot 1 is occupied, insert it in to Slot **2**, then merge
   this application into the SD card in Slot 1.

   NOTE: Pushing in the SD Card releases it for removal.
   Make sure the SD Card is inserted and locked in place.
   If it is partially out of the slot, push it in gently until it
   locks in place.

6. Reassemble the cover and turn ON the main switch.

7. Do the following setting "A" or "B" to enable the IPDS
   function.

   A. [Enable the IPDS function via telnet]
   1. Connect the machine via telnet.
   2. Execute the following commands:

   msh> **set ipds up**
   ***If you want to stop the function.
   msh> **set ipds down**

   B. [Enable the IPDS option via WebImageMonitor]
   1. Log in to WebImageMonitor.
   2. Change the setting to enable IPDS.

[B]   [A]
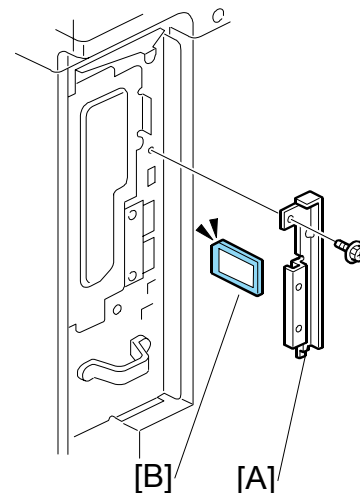
Model: Model AI-C1	Date: 21-May-08	No.: RD009027b

8.   Attach the decal as shown in the photo below.

10mm
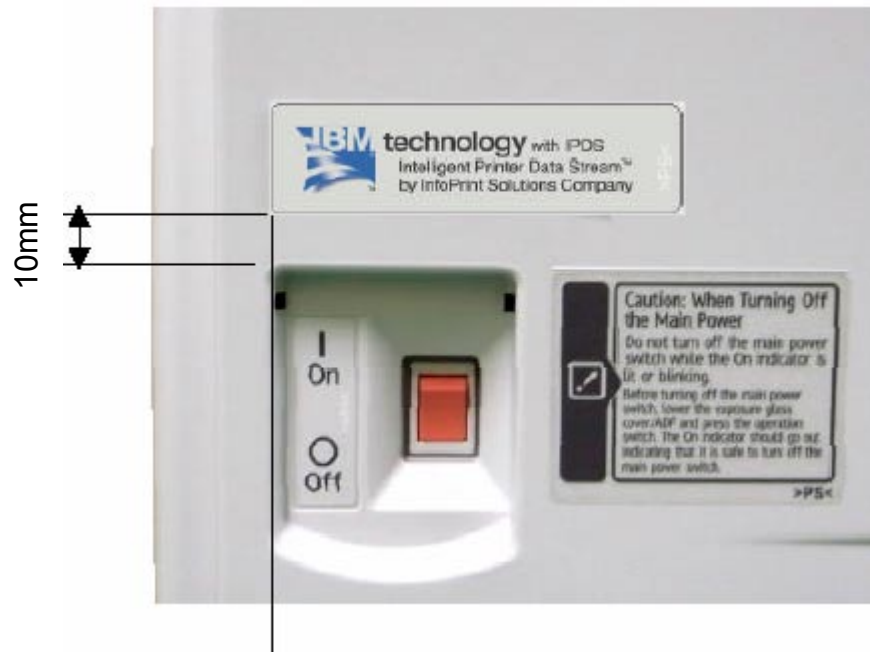
Line up the left side of the decal with the
left edge of the main power switch.

Model: Model AI-C1	Date: 2-Jun-08	No.: RD009028

Subject: SC866(SD card error 1)	Prepared by: K. Hamada
From: 2nd Tech Support Sec. Service Support Dept.	

Classification:	☒ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☐ Tier 2

SYMPTOM

SC866 (SD Card Error 1: Confirmation) occurs when installing an SD card option if the System/Copy firmware is older than Ver1.04.

CAUSE

Due to a firmware bug (System/Copy), the machine cannot authenticate the SD card.

> **Note:** There is nothing wrong with the SD card or application itself. The problem is with the System/Copy firmware.

SOLUTION

If you want to install an SD card option, and there is a blue circle on the option box (see below), update the System/Copy firmware to **Ver1.04 (For MS model:D0125751K/ For CS model: D0135751K)** or later before you install the option.

(If, for some reason, the symptom occurs with options that do not have a blue circle on the option box, try the same action. Update to Ver1.04 or later).

Model: Model Al-C1	Date: 2-Jun-08	No.: RD009028

Blue circle mark on option boxes:

SD Card Options

The symptom may occur when you install any of the following options on machines that contain System/Copy firmware older than Ver1.04.

Option Name	Code
RPCS Printer Unit Type 5000	D381-01/02/03/04/06/08/09/10
Printer Unit Type 5000	D381-21/22/23/24/26/28/29/30
Printer/Scanner Unit Type 5000	D381-41/42/43/44/46/48/49/50
Printer Enhance Option Type 5000	D381-61/62/63
Scanner Enhance Option Type 5000	D381-66/67/68
PostScript 3 Unit Type 5000	D381-71/72/73
IPDS Unit Type 5000	D381-76/77/78
DataOverwritesecurity Unit Type I	D362-11
Browser Unit type Type D	D377-08/17/18
VM Card Type F	D377-10/11/12
HDD Encryption Unit Type A	D377-16

Model: Alex-C1	Date: 2-Jul-08	No.: RD009029

Subject: VM Card	Prepared by: K. Hamada
From: 2nd Tech Support Sec. Service Support Dept.	

Classification:	☐ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☒ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☐ Tier 2

Information was added to the Service Manual as follows.

VM Card Type F (D377)

Accessories

Check the accessories and their quantities against the table below.

Description	Q'ty
1. VM SD Card	1
2. Decal	1

Installation

d381i104a
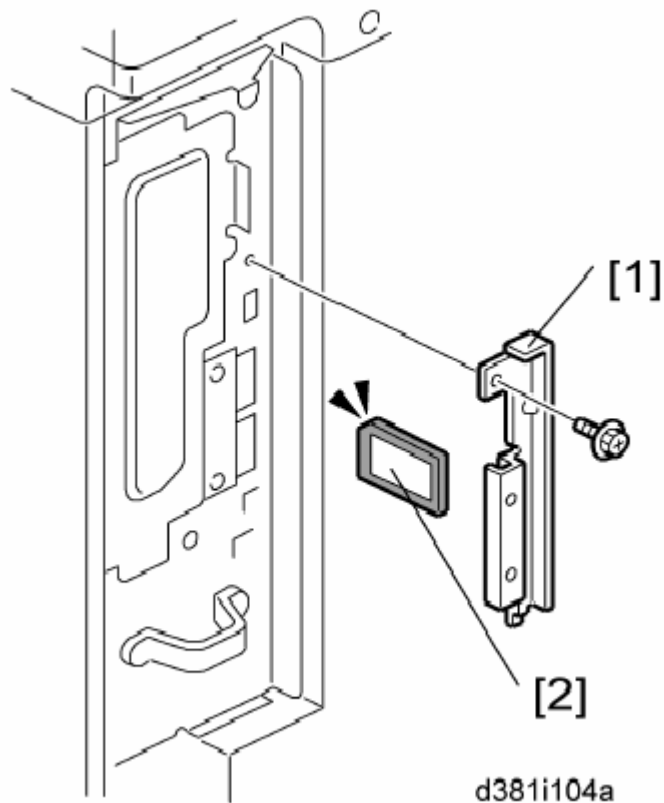
1. Switch the machine off.

2. Remove the SD card slot cover [1] (Screw ×1)

3. Turn the SD Card label face [2] to the rear of the machine. Then push it slowly into slot 2 until you hear a click.

   Important

   - This SD Card must be installed into Slot 2, the lower slot.

Model: Alex-C1	Date: 27-Aug-08	No.: RD009030

Subject: Waste toner near full		Prepared by: K. Hamada
From: 2nd Tech Support Sec. Service Support Dept.		

Classification:	☒ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☒ Tier 2

SYMPTOM

The "Waste toner bottle full" message is displayed at the wrong time.

CAUSE

Electrical noise generated by the bias roller and bias terminal (transfer unit) causes the waste toner end sensor to malfunction.

SOLUTION

1. First, try the following:

   - Turn the main power Off/On

   - Open/close the front door

   - Let the machine recover from Energy Saver mode

2. If the symptom still occurs, do the following:

   - Replace the transfer unit (P/N: D0093804) or,

   - Replace the bias terminal and transfer belt frame (P/N: D0093934 and D0093883).

Model: Alex-C1	Date: 2-Sep-08	No.: RD009031

Subject: Service manual correction(SP4991)	Prepared by: K. Hamada
From: 2nd Tech Support Sec. Service Support Dept.	

Classification:	☐ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☒ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☐ Tier 2

The following information was added to the service manual.

5. Service Tables

SP 4991

4991	IPU Image Pass[Path] Selection (RGB Frame Memory)	
	Selects the image path. Enter the number to be selected using the 10-Key pad. [0 to 11/ 2/ 1]	
	0	Scanner input RGB images
	1	Scanner I/F RGB images
	2	RGB images done by shading correction (shading ON, Black offset ON)
	3	Shading data
	4	Inner pattern data: Gray scale
	5	RGB images done by Line skipping correction
	6	RGB images done by Digital AE
	7	RGB images done by Vertical line correction
	8	RGB images done by Scanner gamma correction
	9	RGB images done by Filtering correction
	10	RGB images done by Full color ADS
	11	RGB image done by Color correction

RICOH

Technical **B**ulletin

PAGE: 1/1

Model: Alex-C1	Date: 10-Nov-08	No.: RD009032

Subject: Vertical White Line(VWL)	Prepared by: K. Hamada
From: 2nd Tech Support Sec. Service Support Dept.	

Classification:	☒ Troubleshooting	☒ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☒ Tier 2

SYMPTOM

Vertical white lines

CAUSE

Foreign material sometimes gets stuck in between the OPC and 2nd cleaning blade, which scratches the surface of the OPC.

SOLUTION

Production line:

The 2nd cleaning blade was deleted from the PCU.

Machines in the field:

For both newly-installed machines and machines already in the field, remove the 2nd cleaning blade (P/N: AD041105) at the next PM visit for the 2nd cleaning blade.

   Note: When the 2nd cleaning blade is removed, the following parts must also be removed.

   - Snap Ring (P/N: G0652681)

   - Bushing (P/N: 52031852)

   - Spring (P/N: AA062258)

Model: Alex-C1b MS		Date: 22-Dec-08	No.: RD009033

Subject: The cap in the dev. unit		Prepared by: K. Hamada
From: 2nd Tech Support Sec. Service Support Dept.		

Classification:	☒ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☒ Tier 2

SYMPTOM

- The paper stack edge is dirty

- The developer leaks

CAUSE

The three development unit caps (P/N D0093102) are not attached to the development unit (P/N D0093010, D0093011), causing developer to leak through the holes.

> **Note:** This applies to **the service parts development unit only**. The units installed in the machine on the production line contain the caps.

SOLUTION

Three caps were added to the areas shown below.

> New P/N for the development unit: **D0092301**

> P/N for the caps: **D0093102**

In the field

● Do the following at the next service visit:

1. Check whether or not the three caps are attached to the development unit already in the machine.

> **Note:** If you can see the surface of the drum from below the PDCU (see the photos), this means the caps are not attached.

Model: Alex-C1b MS	Date: 22-Dec-08	No.: RD009033
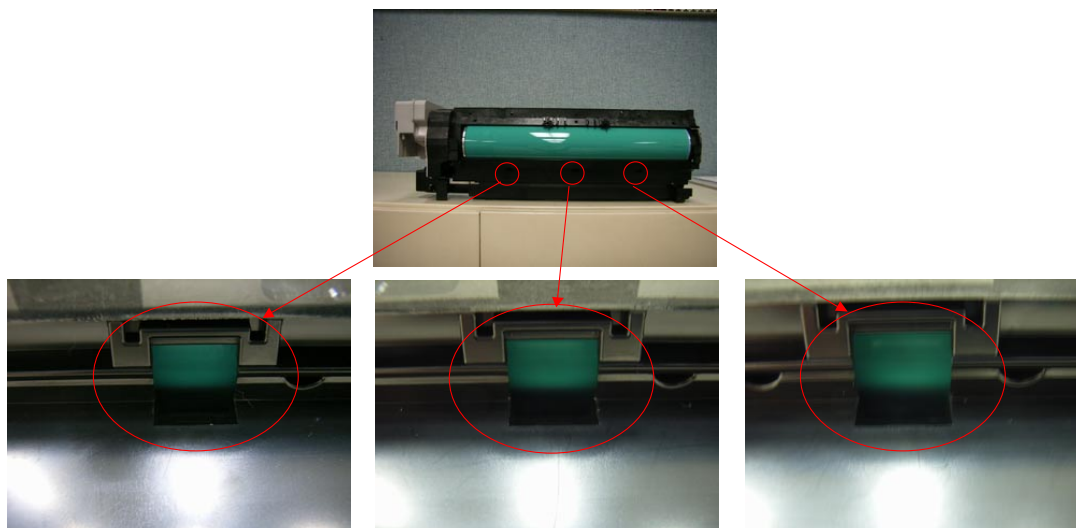
2. If the caps are not attached to the development unit inside the machine, either install the three caps (P/N D0093102) or replace the development unit with one that already has the caps (D0092301).

   See the procedure below for installing the caps

● Do the following the next time you replace the development unit:

   If you are replacing a unit that has the caps (already inside the machine) with a unit that **does not** have the caps, remove the caps from the unit inside the machine and attach them to the unit you are installing.

Installing the three caps

1. Open the PCDU
2. Remove the development cover [A].
3. Remove the development filter [B].

d009r064
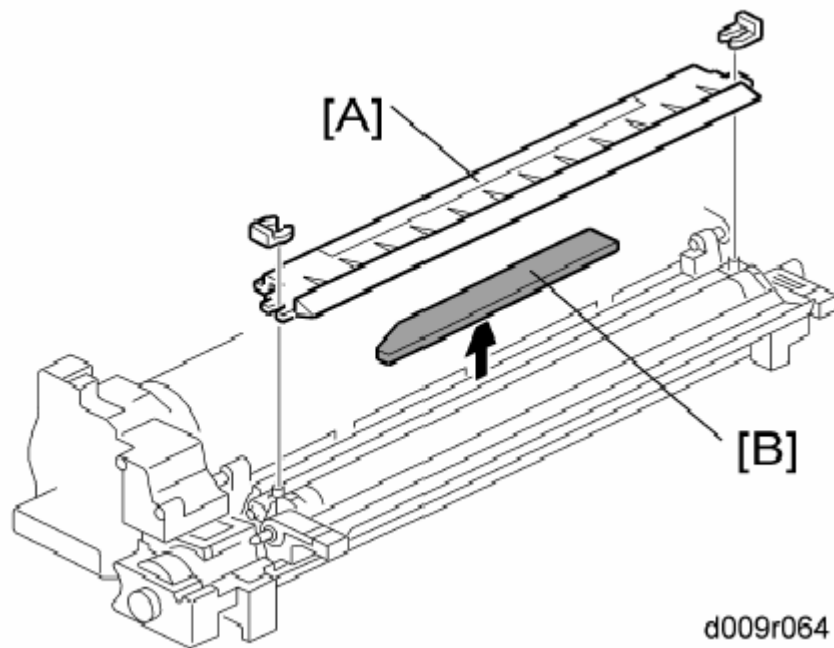
4. Hold the development roller at both ends in the areas shown in the illustration below, and then rotate the development roller **up**. (Rotate in the direction shown by "a" in the illustration below).

   Important: Rotate both sides of the roller together.
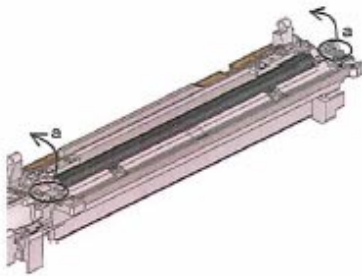
5. Attach the three caps.
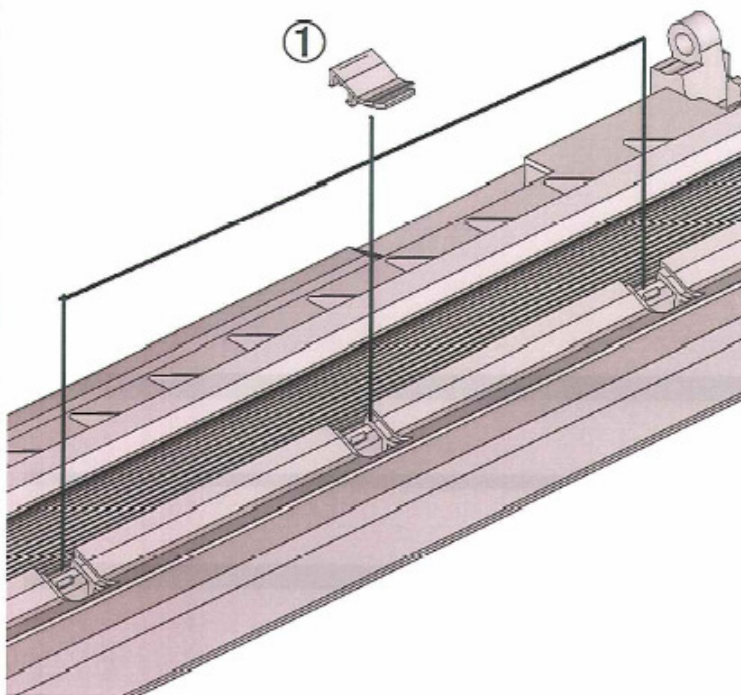
6. Hold the development roller at both ends in the areas shown in the illustration below, and then rotate the development roller **back down.** (Rotate in the direction shown by "b" in the illustration below).

   Important: As with Step 4, rotate both sides of the roller together.
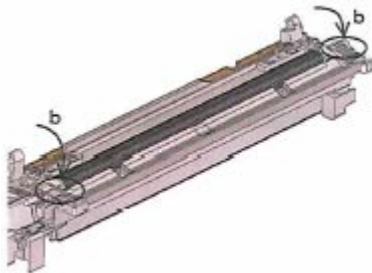
7. Reattach the development filter [B].

8. Reattach the development cover [A].

9. Close the PCDU.

Model: Alex-C1b MS	Date: 20-Jan-09	No.: RD009034

Subject: Downloading NVRAM data	Prepared by: K. Hamada
From: 2nd Tech Support Sec. Service Support Dept.	

Classification:	☐ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☒ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☐ Tier 2

Please correct your Service Manuals as follows.

Downloading NVRAM Data (SP5-825)

The following data are not downloaded from the SD card.

- ➢ Total counter
- ➢ C/O, P/O Counter
- ➢ Duplex, A3/DLT/Over 420mm, Staple and scanner application scanning counters (system setting)
- ➢ Engine SP data

1. Output the SMC data (SP5-990-001)
2. Turn off the main switch.
3. Remove the SD card cover
4. Plug the SD card into SD card slot 2.
5. Turn on the main switch
6. Execute SP5-825
7. Press to start downloading the NVRAM data.
8. Enter Engine SP data (if you do Engine NVRAM clear (SP5-801-002))

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Technical Bulletin

Model: Alex-C1b MS	Date: 10-Feb-09	No.: RD009035

Subject: Service manual correction	Prepared by: K. Hamada
From: 2nd Tech Support Sec. Service Support Dept.	

Classification:	☐ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☒ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☐ Tier 2

Please correct your Service Manuals as follows.

SC table

220	D	Laser synchronizing detection error: start position LD0
		The laser synchronizing detection signal for the start position of the LDB is not output for two seconds after LDB unit turns on while the polygon motor is rotating normally.
		- Worn out LD - Disconnected or broken harness of the LD - IPU defective

221	D	Laser synchronizing detection error: start position LD1
		The laser synchronizing detection signal for the start position of the LDB is not output for two seconds after LDB unit turns on while the polygon motor is rotating normally.
		- Worn out LD - IPU defective

Model: Alex-C1b MS	Date: 12-Feb-09	No.: RD009036a

RTB   Reissue
The items in **bold italics** were corrected or added.

Subject: SC819/SC870/SC878	Prepared by: K. Hamada
From: 1st Overseas Tech Support Sec., 1st PQM Dept.	

Classification:	☐ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☒ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☒ Tier 2

SYMPTOM

SC819 **[Sub code: 554C]**, SC870,or SC878 occurs if the main power switch is turned OFF after the **Alex-C1 B/W Scanner (MS)** boots up and reaches the Ready condition.

CAUSE

When the machine reaches the Ready condition after boot-up, the operator turns off the main power switch without first pressing the operation switch. As a result, the NAND flash memory on the controller board is damaged, triggering the SC.
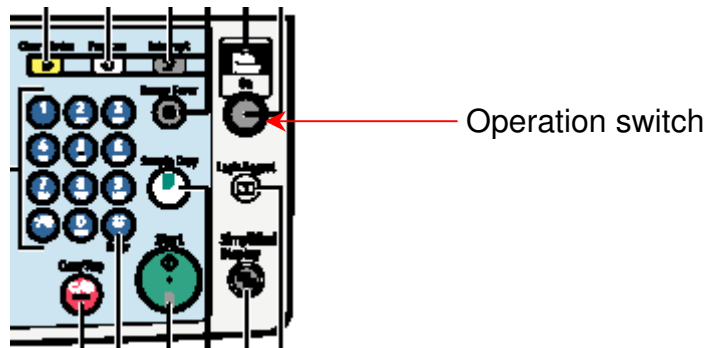
Operation switch

SOLUTION

1. Please make machine users aware of the following:

    Before you turn off the machine main power, always **make sure that the operation switch LED is not lit or blinking.** If you turn the main power off while the LED is still lit or blinking, this can cause damage to the hard disk or memory.

    Note: Cautionary notes explaining this point are already contained in the Operating Instructions (About this machine pg. 44) and on the decal next to the main power switch.

2. If the symptom is reported from the field, replace the controller board.

RICOH

Technical **B**ulletin

Reissued: 31-Mar-09

Model: DF 3010	Date: 29-Sep-06	No.: RB222016a

RTB Reissue
The items in bold italics have been corrected.

Subject: Firmware Release Note: ADF		Prepared by: M. Kumagai
From: 2nd Tech. Support Sec. Service Support Dept.		
Classification:	☐ Troubleshooting ☐ Part information ☐ Action required ☐ Mechanical ☐ Electrical ☐ Service manual revision ☐ Paper path ☐ Transmit/receive ☐ Retrofit information ☒ Other ( )	

This RTB has been issued to announce the firmware release information for the ARDF.

Version	Program No.	Effective Date
11.05	*B8025602A*	*July 2007 production.*
10.00	B8025602	1st Mass production.

Version	Modified Points or Symptom Corrected
11.05	*Other changes:* *Supports the Alex-C1.* *Important: To use the DF3010 on the Alex-C1, make sure to install this firmware or a newer version.*
10.00	1st Mass production.

RICOH

Model: Model AI-C1	Date: 20-Apr-09	No.: RD009037

Subject: Dirty Background	Prepared by: K. Hamada
From: 2nd Tech Support Sec. Service Support Dept.	

Classification:	☒ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☐ Tier 2

SYMPTOM

Dirty background sometimes appears.

CAUSE

When one of the following conditions is met, the chargeability of the toner is decreased, and the machine responds by increasing the toner concentration (TC). As a result, toner filming on the development roller is accelerated, and poorly-charged toner is easily transferred onto the non-image areas of the OPC surface.

- Low humidity and low temperature conditions
- High print volume
- High one-to-one print jobs
- High image coverage
- High paper dust content in recycled toner

SOLUTION

Production:

The toner was modified to minimize the decrease in chargeability under the conditions listed above.

> **Note:** The modified toner has a lot number that ends in **suffix A**, or has one of the following **new EDP codes**.

Model Code	**EDP Code**	Model Name:	Effective from (2009):
B90726	**841346**	Toner Type MP 4500/8045e/LD345	April production
B90722	**841347**	Toner MP 4500E	May production
B90723	**841348**	Toner MP 4500	May production
B90724	**841349**	Toner Black IS 2445/I	May production
B90721	**841350**	Toner MP 4500S	April production
B90719	**841351**	Black Toner for LD335/LD345	April production
B90720	**841352**	Toner MP 4500	April production
B90725	**841353**	Toner MP 4500C	March production

Action In The Field:

If the symptom is reported, do the following four procedures.

I. Cleaning the pathway for recycled toner inside the PCDU

1. Turn the machine main power OFF.
2. Remove the PCDU.
3. Remove the green handle.
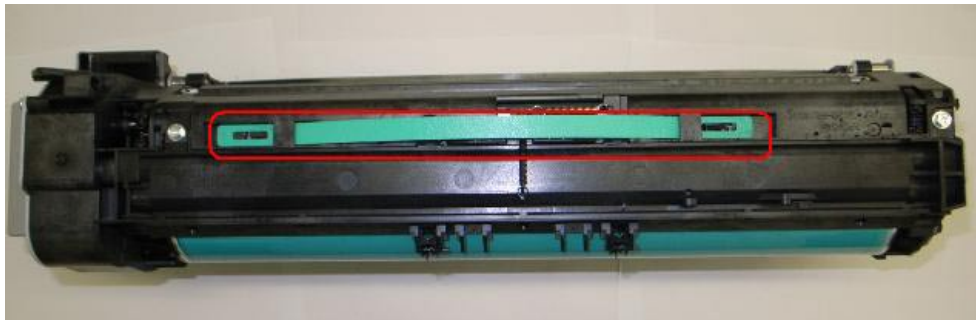
4. Remove 4 screws and 1 spring.

Screw

Spring
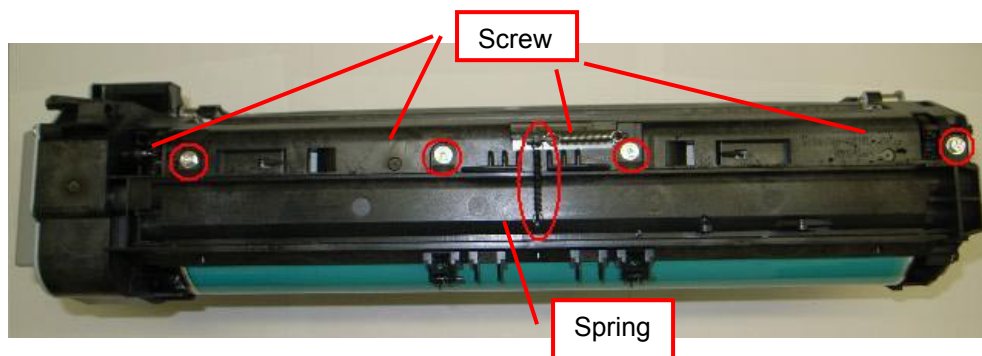
5. Remove the upper cover, then clean out the recycled toner with a vacuum cleaner.

Clean this area

6. Re-attach all removed parts.

II. Cleaning the development roller surface

IMPORTANT: You do not need to replace the development roller. This symptom can be solved by performing the four procedures in this RTB.

1. Remove the two screws and open the PCDU as shown below.
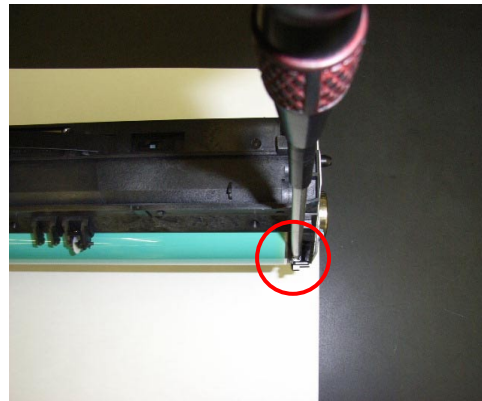
2. Remove the entrance sheet (Clip x 2).

Entrance Sheet
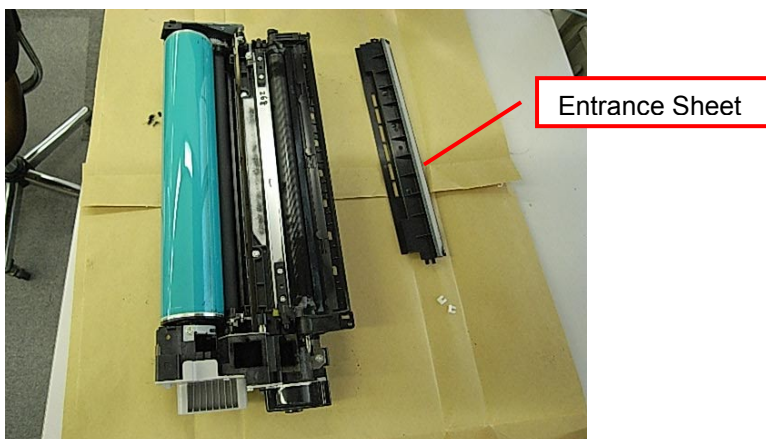
3. Fold up a sheet of copy paper to fit the width of the uncovered area of the development roller, as shown below.

4. Slide the paper along the length of the roller to clean the toner off the surface.
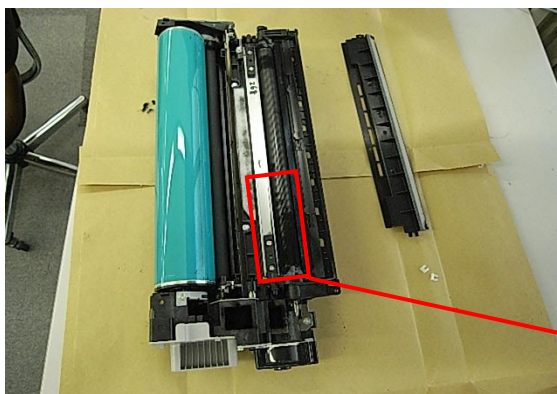
5. Rotate the development roller in the direction of the arrow until the section you cleaned is no longer visible. Repeat Step 2 for this section of the roller surface.

6. Repeat Steps 2 and 3 until you have cleaned the entire surface of the roller.
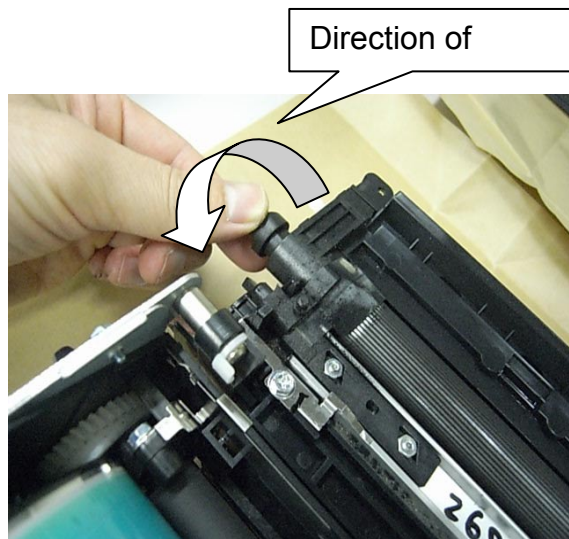
Direction of

7. Reassemble the PCDU and install the PCDU in the machine.

III. Removing toner from the toner supply unit

1. Remove the toner supply unit.
2. Lift the shutter [A] up and turn the inner plastic parts [B] in the direction as shown below until all toner comes out from the unit.
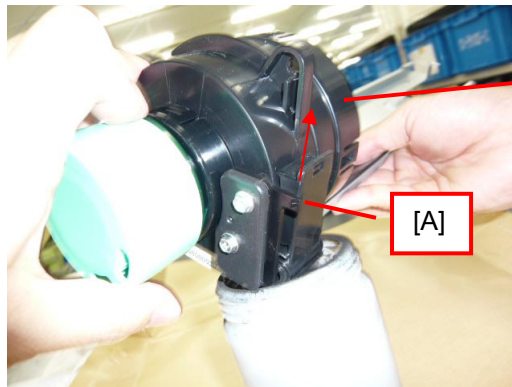
3. Re-install the toner supply unit and set the new toner bottle.
4. Turn the main switch on.

Model: Model AI-C1	Date: 20-Apr-09	No.: RD009037

IV. Set the following SP modes to the values shown.

Important: Do this for machines that have already had the temporary countermeasure applied as well.

SP Mode: Set to this value:

SP 2201-01 (Development Bias):   **560**
SP 2201-02 (Development Bias for ID sensor pattern):   **400**

   Note: For high-CV users (ACV: 30K or more), set this SP to a value of **460**.

SP 2001-01 (Charge Roller Bias):   **1500**

Model: AL-C1 MS	Date: 9-Jun-09	No.: RD009038

Subject: A, B, C Jam indicated together but there is no jam	Prepared by: K. Hamada
From: 2nd Tech Support Sec. Service Support Dept.	

Classification:	☒ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☒ Tier 2

SYMPTOM

The machine indicates A, B, C Jam all together continually or at two or three paper ejection intervals, but there is no jam (paper is resting inside the machine, but is not jammed).

Note: This symptom does not occur when the machine turns on; it occurs after the machine has been running continuously.

CAUSE

A specific lot of the Paper Exit Sensor is faulty.

Some parts of the sensor fall off if the machine is running continuously and the temperature of the fusing unit rises.

As the result of the above, the sensor detects a "No paper" condition continuously even if there is paper in the paper feed path.

Therefore, when the machine expects to detect paper at the sensor (based on the paper feed timing), paper is not detected, and the machine indicates an A, B, and C Jam.
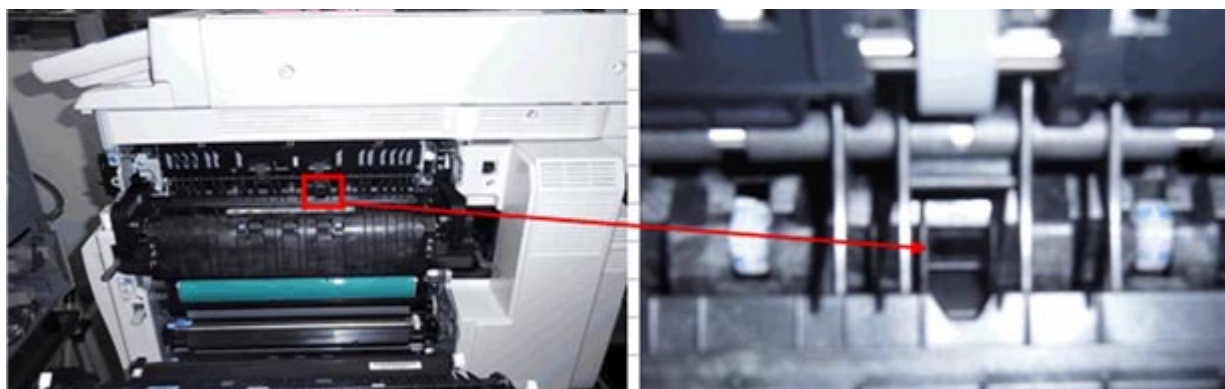
Model: AL-C1 MS	Date: 9-Jun-09	No.: RD009038

Affected Units

This problem affects the following serial numbers of Al-C1.

Model Name	Code	Serial Number
AI-C1 MS (40CPM)	D009-29	M5496230029 – M5496230033
	D009-27	M5492700396 – M5492700450
AI-C1 CS (40 CPM)	D011-29	M5596230091 – M5596230214
	D011-27	M5592700557 – M5592800420
AI-C1 MS (50 CPM)	D012-29	M5696230061 – M5696230104
	D012-27	M5692700091 – M5692700161
AI-C1 CS (50 CPM)	D013-29	M5796230085 – M5796230243
	D013-27	M5792700454 – M5792800040

SOLUTION

Production line

  ➢ After the March 2009 production, the factory started a new method of sensor testing.

Action required in the field

  ➢ Replace the Paper Exit Sensor (AW010127) if the following SP input value is not correct.

Note: 1) The parts stock at the local SPC is already changed to correctly-working parts.
        2) You must check if the sensor is faulty or not with the following procedure.

Checking procedure for a faulty sensor

Important: Check this if A, B, and C Jams all occurred together.

1. Open the duplex unit.
2. Enter SP5803-026.
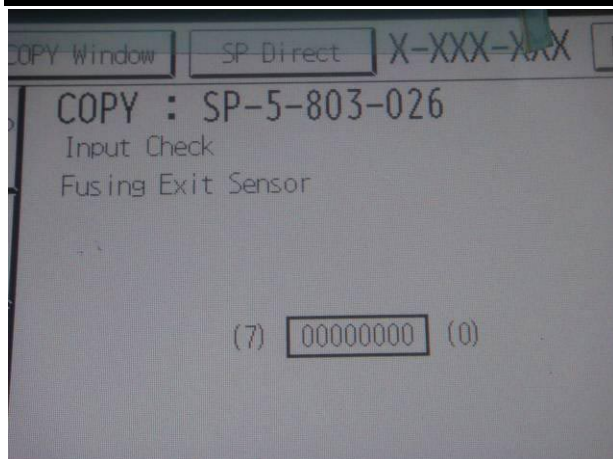
3. Check the input value with and without paper.
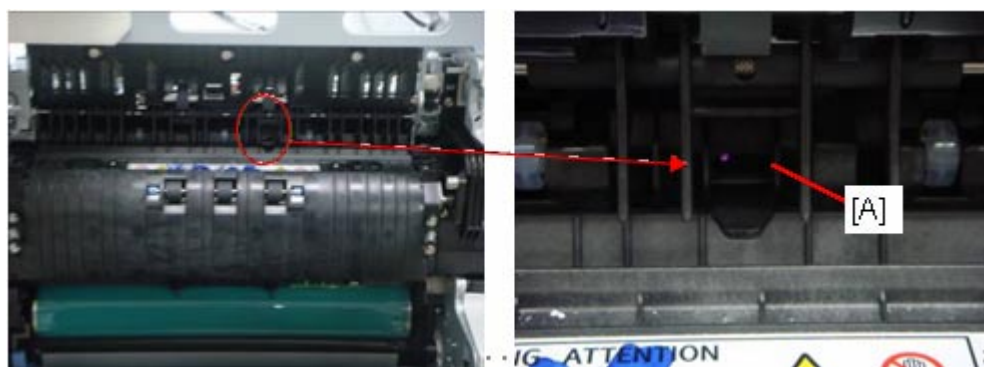
Sensor check condition	SP5803-026 Input Check value	
	Normal Sensor	**Faulty Sensor**
(a). If the paper exit sensor [A] is covered with paper	00000001	**00000000**
(b).If the paper exit sensor [A] is not covered with paper	00000000	**00000000**

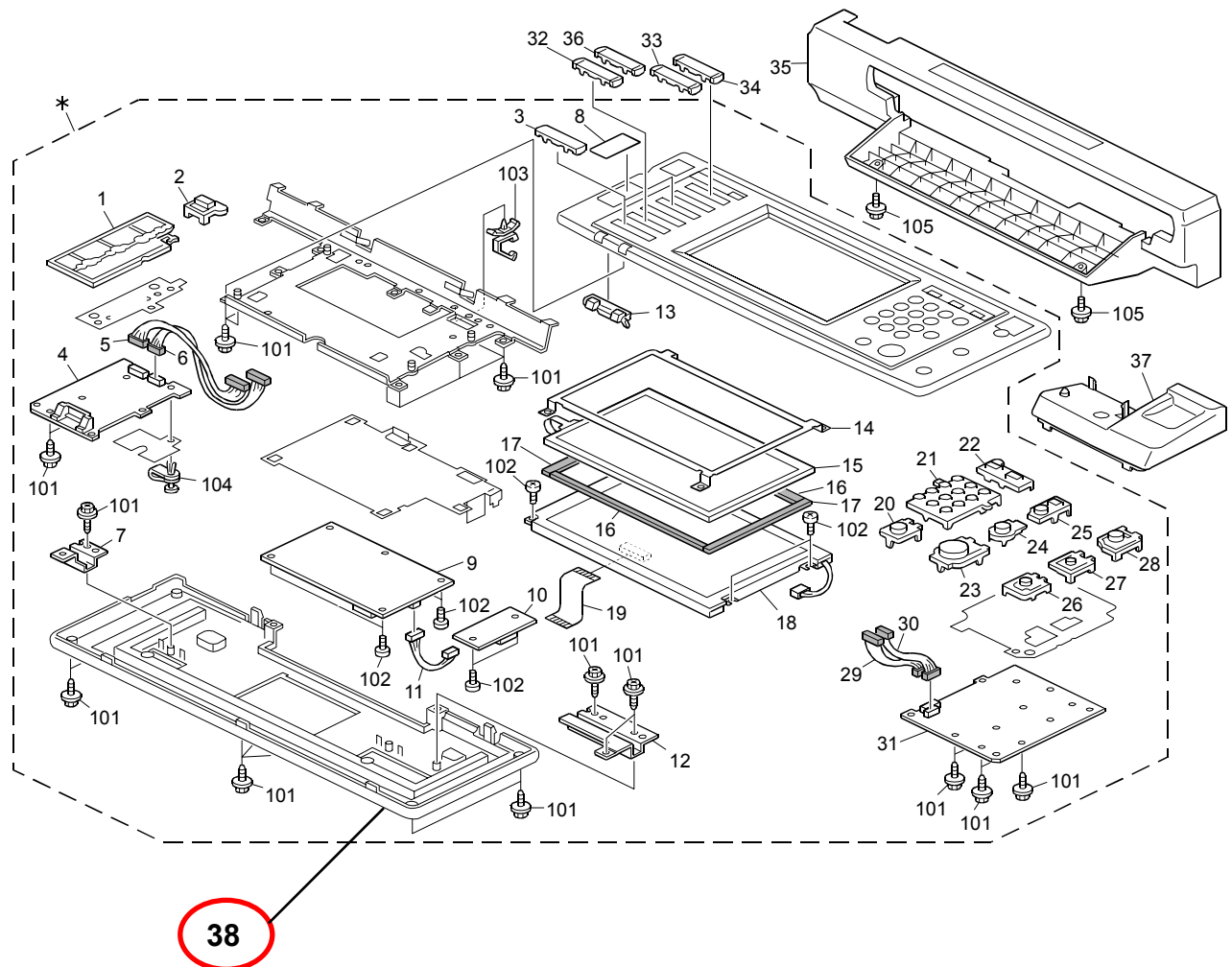4. Replace the paper exit sensor if the value is "**00000000**" in condition **(a)**.

Note: The paper exit sensor is not faulty if the value is "00000001" in condition **(a)**.

Model: AL-C1 MS		Date: 19-Aug-09	No.: RD009039

Subject: Parts information		Prepared by: K. Hamada
From: 2nd Tech Support Sec. Service Support Dept.		

Classification:	☐ Troubleshooting	☒ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☐ Tier 2

Old part number	New part number	Description	Q'ty	Int	Page	Index	Note
	D0091502	Cover Lower	0-1	-	17	38	

Change: The part in the table was added.
Reason: To meet requests received from the field.

Model: AL-C1 MS	Date: 24-Aug-09	No.: RD009040

Subject: CC-CERTIFIED IN JUNE, 2009 Machine	Prepared by: K. Hamada
From: 2nd Tech Support Sec. Service Support Dept.	

Classification:	☐ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☒ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☐ Tier 2

Important Information on Installing the Al-C1 as a CC-CERTIFIED Machine

Do the following if you want to install the Al-C1 as a **CC-CERTIFIED MACHINE.**
  Note: Machines in production are CC-certified beginning in June 2009.

1. Make sure the customer has received the English language Operating Instructions (O/I).
    Important: For installations in the EU market, make sure this is the Ricoh-genuine O/I.

2. Make sure the machine contains the correct firmware.

   ● If the customer wants to install the machine in the **same condition** as when CC Certification was first attained (same as the June 2009 machines), install **the exact versions** shown in the table below.

   ● If the customer want to install the machine as an equivalent of the June 2009 machines, install the versions shown in the table below **or later**.

   If you are not sure which one the customer is requesting, **contact your sales department.**

3. Make sure that the **HDD Encryption Unit Type A** is installed.

Firmware versions with which the AI-C1 first achieved CC-CERTIFICATION:
(June 2009)

Firmware Name:	Version:	Firmware Number:
System/Copy	**V1.09**	D0135751Q
FAX	**V03.00.00**	D0135753E
Scanner	**V01.23**	D0115751H
Web support	**V1.57**	D0135755H
Printer	**V1.09e**	D0135758K
Network Doc Box	**V1.09.3C**	D0115757J
Web Uapl	**V1.13.1**	D0115756J
Network Support	**V7.23**	D0135754F

Ic key and Ic Hdd versions with which the AI-C1 first achieved CC-CERTIFICATION:
(June 2009)

Hardware:	Version:
Ic Key	**1100**
Ic Hdd	**01**

    Note: You can check the Ic key and Ic Hdd versions in the following screen.

        (User Tools/Counter → System settings → Administrator Tools → Firmware Version)

System Settings — Exit

Firmware Version — Exit

Current versions are displayed below.

Module Name	Version	Part Number	Module Name	Version	Part Number
PS3/PDF	1.01	D0125754A	ADF	12.00	B8025603
PS3 Font	1.04	D3775915A	Finisher	02.010:14	B8045552F
GWFCU3-10(WW)	02.00.00	D3465570B	Ic Key	1100	
Engine	1.05:05	D0095160H	Ic Hdd	01	
OpePanel	1.07	D0091492B			
LANG0	1.07	D0091496A			
LANG1	1.07	D0091496A			

2/2

133.139.166.102   System Status   Job List   14 MAY 2009 22:18

RICOH **T**echnical **B**ulletin

Model: AL-C1 MS	Date: 8-Sep-09	No.: RD009041

Subject: Duplex jam or Z-fold jam	Prepared by: K. Hamada
From: 2nd Tech Support Sec. Service Support Dept.	

Classification:	☒ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☒ Tier 2

This RTB applies only to the **Model Al-C1c (50CPM).**

SYMPTOM

A duplex jam or Z-fold jam may occur if a duplex print job is performed

Note:

- This symptom only occurs on the Model Al-C1c (50cpm model).
- This symptom has a greater tendency to occur under low-temperature conditions.
- Once the symptom occurs, it will continue to occur.

CAUSE

The motor torque of duplex bypass motors from a specific lot was higher than the specification maximum. This increased the level of vibration during motor rotation, which led to resonance when the vibration reached a certain frequency. Eventually, this caused the motor to disengage and rotate in idle.

SOLUTION

Production line

The following changes were made from June 2009 production of the Model Al-C1c mainframes:

1. Wheels were added to the motor pulley to minimize resonance as provisional countermeasure.
2. An extra check was added to further ensure that the motor torque does not exceed the specification maximum and change to the new parts number as a permanent countermeasure.

Note: The motor after the above additional check does not contain additional wheel mentioned in note 1.

Action requirement in the field

Replace the duplex bypass motor with the following new part: **P/N B2232745**

Model: AL-C1 MS	Date: 8-Sep-09	No.: RD009041

Affected Units

This issue affects the following Model Al-C1c mainframes:

Model Name	Code	Serial Number
Al-C1c (CS)	D013-17	M5795300863 to M5795301028
	D013-19	**(No affected units)**
	D013-26	**(No affected units)**
	D013-27	**(No affected units)**
	D013-28	**(No affected units)**
	D013-29	M5796530001 to M5796630012
Al-C1c (MS)	D012-17	**(No affected units)**
	D012-19	**(No affected units)**
	D012-26	**(No affected units)**
	D012-27	**(No affected units)**
	D012-28	**(No affected units)**
	D012-29	**(No affected units)**

RICOH

Technical Bulletin

Model: AL-C1 MS	Date: 8-Sep-09	No.: RD009042

Subject: Joint	Prepared by: K. Hamada
From: 2nd Tech Support Sec. Service Support Dept.	

Classification:	☐ Troubleshooting	☒ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☐ Tier 2

Old part number	New part number	Description	Q'ty	Int	Page	Index	Note
	D0093124	Joint: development sleeve	0-1	-	63	41	

Change: The part in the table was added.
Reason: To meet requests received from the field.

Model: S-C4, K-C3, PR-C1, R-C5, Al-C1, Di-C1, AT-C2, AP-C2	Date: 18-Nov-09	No.: RGene036

Subject: Recommended Eco Mode setting (for Europe/Middle East/Africa only)	Prepared by: F.Noguchi
From: 2nd Overseas Tech Support Sec., 2nd PQM Dept.	

Classification:	☐ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☒ Other ( )	☐ Tier 2

1. Recommended Ricoh Eco Mode settings

Ricoh products are designed to help our customers to reduce their power consumption.
The following table shows Ricoh recommended setting values for Panel off timer, Energy saver timer and Auto off timer for energy saving.

	Model	Panel Off Timer		Energy Saver Timer		Auto Off Timer		Reduction ratio for power consumption
		Recommend Setting (10 sec ~ 240 min)	Recovery time	Recommend Setting (1 ~ 240 min)	Recovery time	Recommend setting (1 ~ 240 min)	Recovery time	
B&W	S-C4	-	-	1 min (Factory default)	10 sec	1 min (Factory default)	10sec (C4/C4SPF) 7 sec (C4F)	77%~86%
	K-C3	-	-		10 sec		10 sec	74%~85%
	PR-C1	-	-		10 sec		10 sec	83%
	R-C5	1 min (Factory default)	0 sec	-	-		10 sec	72%~81%
	Al-C1		0 sec	-	-		10 sec	66%
B2C	Di-C1	• 1 min • Level2 (Factory default)	5.9 sec	-	-	20min(Di-C1a/C1La) 30min(Di-C1c/C1Lc) (Factory default)	25 sec (C1a/C1La/C1Lc) 26 sec(C1c)	38%~42%
	AT-C2	• 1 min (Factory default) • Change from Level1 (default) to Level2 See Note	7sec	15 min (Factory default)	17sec	30 min (Factory default)	24 sec	35%~37%
	AP-C2	• 1 min • Level1 (Factory default)	5.4 sec	Change from 15 min (default) to 1 min See Note	5.5 sec	45 min (Factory default)	31 sec(C1c) 49 sec(C1d)	24%

Note: We cannot change the default settings to be the recommended settings, because we already took the Energy Star certification with the default settings.

Fig1: Power consumption diagram
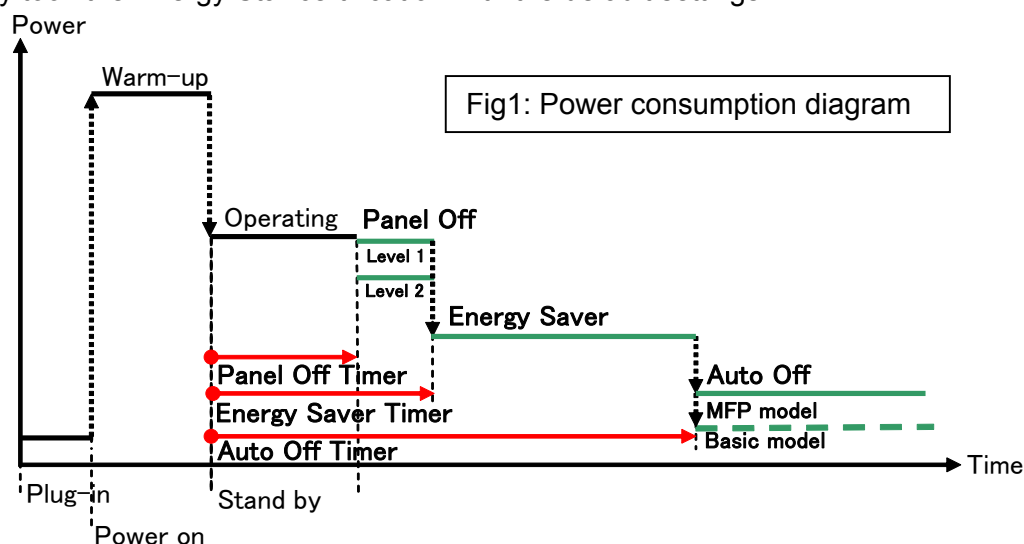
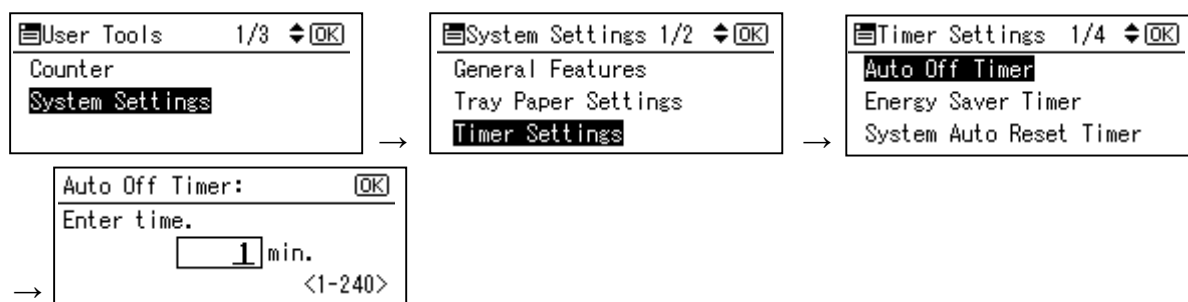| Model: S-C4, K-C3, PR-C1, R-C5, Al-C1, Di-C1, AT-C2, AP-C2	Date: 18-Nov-09	No.: RGene036

2. Eco Mode setting procedure

2.1 B/W models
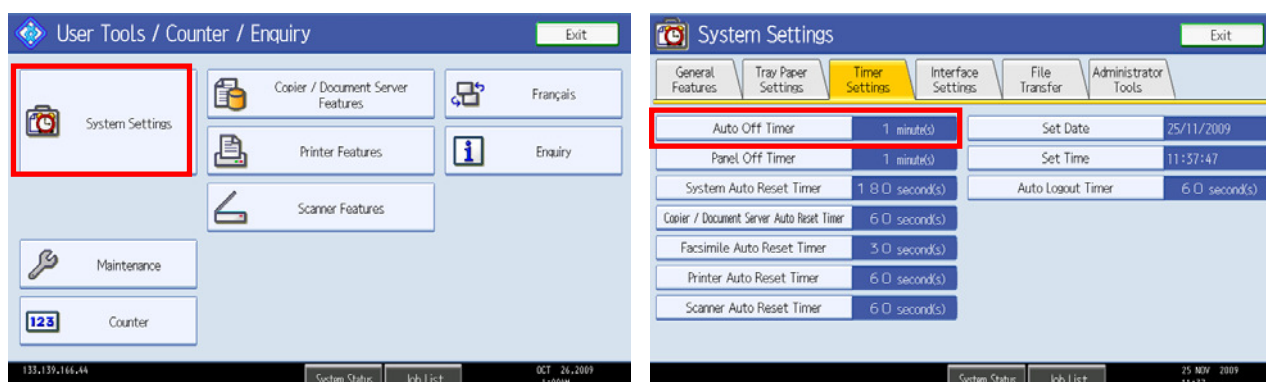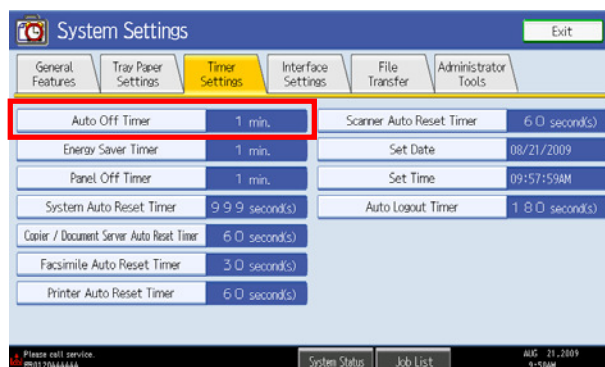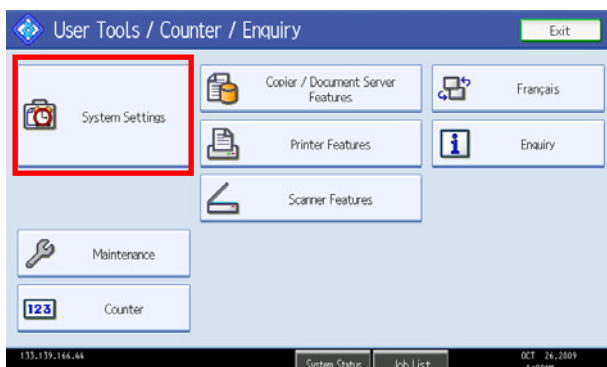
Model S-C4, K-C3, PR-C1

■ Timer Setting Procedure:

1) Check the current setting on Auto Off timer setting.

2) If Auto Off Timer is not set to 1 minute, change the setting to 1 minute (as default setting).

User Tools/Counter → System Settings → Timer Settings → Auto Off Timer1 min. (Default)

Model R-C5

■ Timer Setting Procedure:

1) Check the current setting on Auto Off timer setting.

2) If Auto Off Timer is not set to 1 minute, change the setting to 1 minute (as default setting).

User Tools/Counter → System Settings → Timer Settings → Auto Off Timer1 min. (Default)

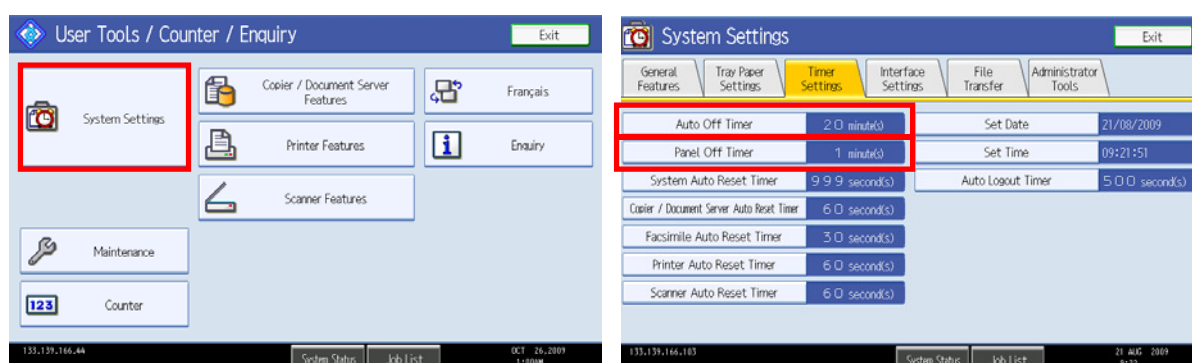| Model: S-C4, K-C3, PR-C1, R-C5, Al-C1, Di-C1, AT-C2, AP-C2	Date: 18-Nov-09	No.: RGene036

Model AL-C1

■ Timer Setting Procedure:

1) Check the current setting on Auto Off timer setting.

2) If Auto Off Timer is not set to 1 minute, change the setting to 1 minute (as default setting).

User Tools/Counter → System Settings → Timer Settings → Auto Off Timer1 min. (Default)

2.2 Color models

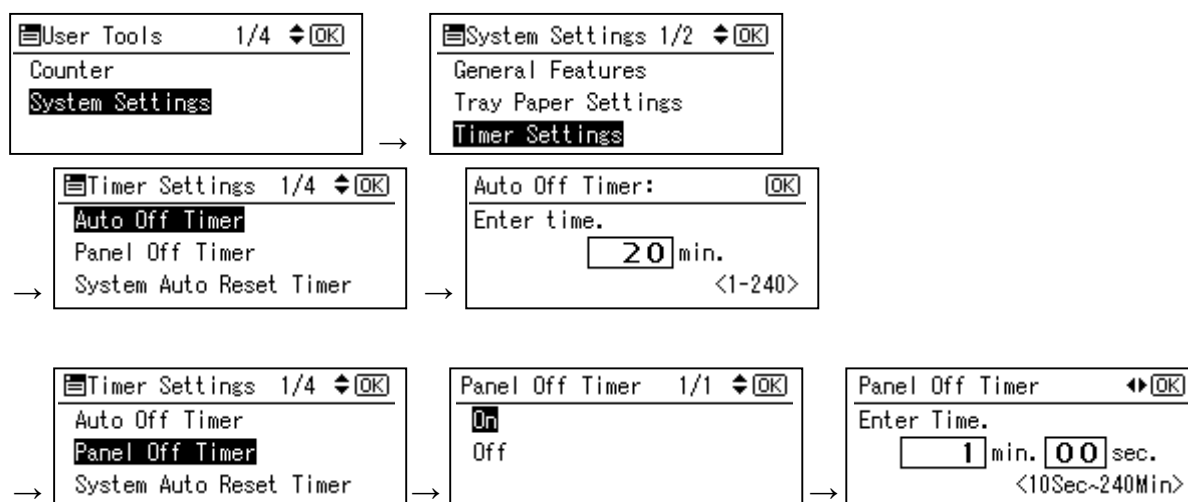**Model Di-C1**

■ Timer Setting Procedure:

User Tools/Counter → System Settings → Timer Settings

1) Check the current setting on Panel Off and Auto Off timer setting.

2) If these settings are not at the default settings, return them to their default settings. (Refer to table on page 1/9)

   Note: If the user requests the Auto Off Timer setting be changed, please change to a value between 60 to 120 minutes.

■ Panel Off timer (Energy Saver Level) on setting Procedure:

User Tools/Counter →System Settings
   → Administrator Tools → Energy Saver Level

1) Check the current setting.

2) If it is not Level 2, change the setting to Level 2 (factory default setting).
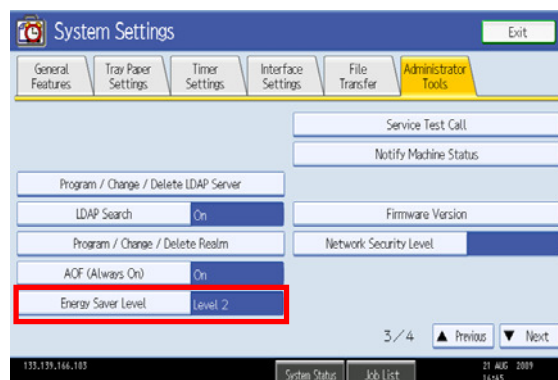
Model Di-C1L

■ Timer Setting Procedure:

User Tools/Counter → System Settings → Timer Settings

1) Check the current setting on Panel Off and Auto Off timer setting.

2) If these settings are not at the default settings, return them to their default settings.

    Note: If the user requests the Auto Off Timer setting be changed, please change to a value between 60 to 120 minutes.

■ Panel Off timer (Energy Saver Level) on setting Procedure:

User Tools/Counter → System Settings → Administrator Tools → Energy Saver Level

1) Check the current setting.

2) If it is not Level 2, change the setting to Level 2.
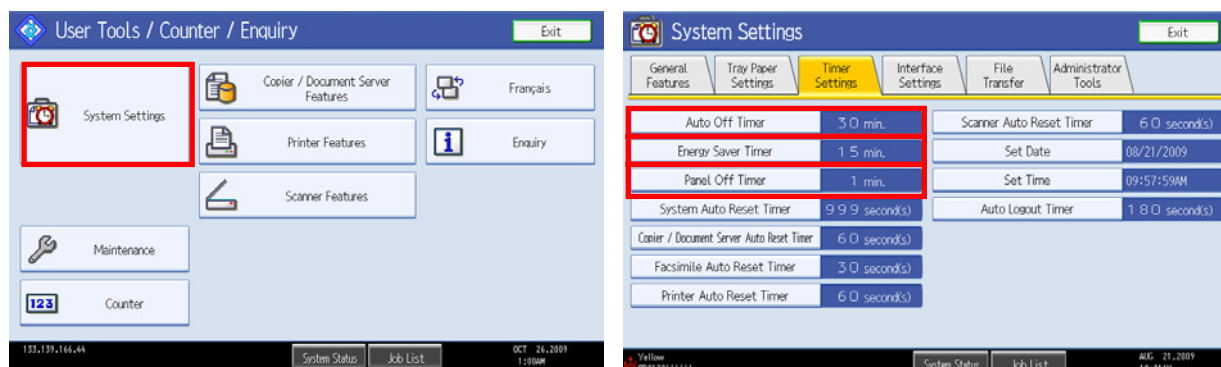
Model AT-C2

■ Timer Setting Procedure:

User Tools/Counter → System Settings → Timer Settings

1) Check the current setting on Panel Off, Energy Saver and Auto Off timer setting.

2) If these settings are not at the recommended settings, return them to their recommended settings. (Refer to the table on page 1/9)
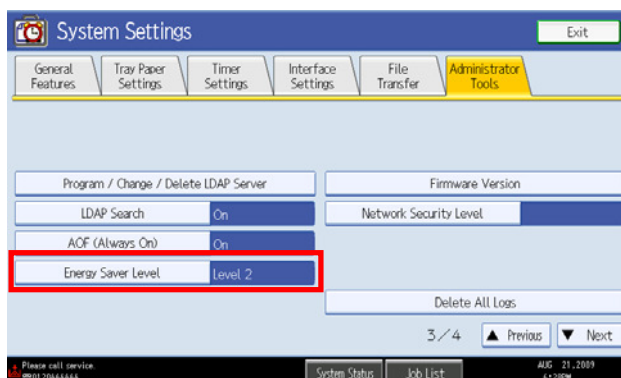
> **Note:** If the user requests the Auto Off Timer setting be changed, please change to a value between 60 to 120 minutes.

■ Panel Off timer (Energy Saver Level) on setting Procedure:

User Tools/Counter → System Settings → Administrator Tools → Energy Saver Level

1) Check the current setting.

2) If it is not Level 2, change the setting to Level 2.

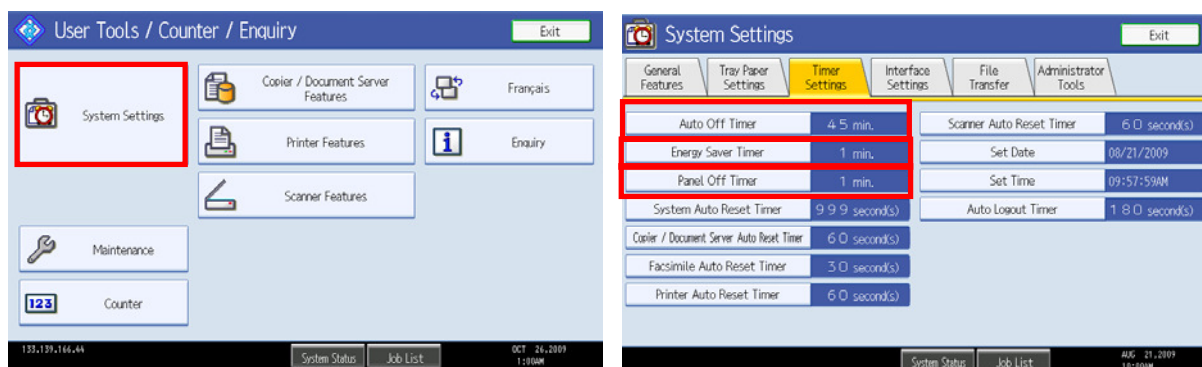| Model: S-C4, K-C3, PR-C1, R-C5, Al-C1, Di-C1, AT-C2, AP-C2	Date: 18-Nov-09	No.: RGene036

Model AP-C2

■ Timer Setting Procedure:

User Tools/Counter → System Settings → Timer Settings

1) Check the current setting on Panel Off, Energy Saver and Auto Off timer setting.

2) If these settings are not the recommended settings, return them to their recommended settings. (Refer to the table on page 1/9)
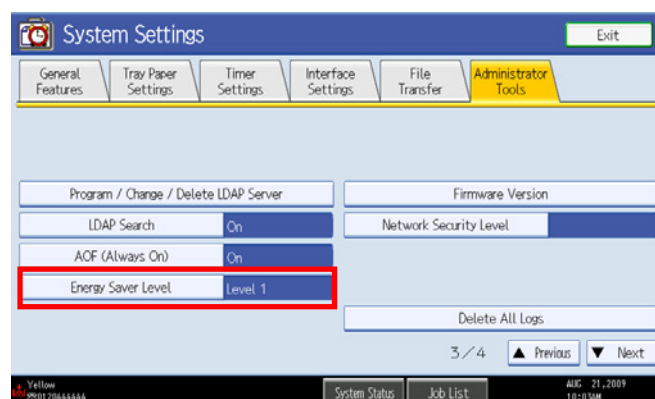
> **Note:** If the user requests the Auto Off Timer setting be changed, please change to a value between 60 to 120 minutes.

■ Panel Off timer (Energy Saver Level) on setting Procedure:

User Tools/Counter → System Settings → Administrator Tools → Energy Saver Level

1) Check the current setting.

2) If it is not Level 1, change the setting to Level 1 (factory default setting).

Model: S-C4, K-C3, PR-C1, R-C5, Al-C1, Di-C1, AT-C2, AP-C2	Date: 18-Nov-09	No.: RGene036

3. Power consumption

Model Name	Panel Off Timer					Energy Saver Timer			Auto Off Timer			Reduction ratio for Power consumption (%) *See Note1
	Default Setting		Recommendation	Default Setting		Recommendation		Default Setting		Recommendation	
	Time (m)	Power consumption (W)	Time (W)	Time (m)	Power consumption (W)	Time (W)		Time (m)	Power consumption (W)	Time (W)	
S-C4				1	21.6	Keep Factory Default		1	0.6	Keep Factory Default	86
S-C4 F				1	30.2			1	4.8		77
S-C4 SPF				1	25.5			1	5.0		77
K-C3a				1	40			1	1.0		85
K-C3b				1	40			1	1.0		85
K-C3cd				1	40			1	0.7		74
PR-C1				1	34.3			1	0.7		83
R-C5b CS	1	161	Keep Factory Default					1	5.6		77
R-C5c CS	1	161						1	5.6		72
R-C5b	1	154						1	1.1		81
R-C5c	1	154						1	1.1		76
Al-C1b	1	143						1	5.7		66

Model Name	Pannel Off Timer					Energy saver Timer			Auto Off Timer			Reduction ratio for Power consumption (%) *See Note1
	Default Setting			Recommendation		Default Setting		Recommendation	Default Setting		Recommendation	
	Lavel	Time (min)	Power consumption (W)	Level	Time (min)	Time (min)	Power consumption (W)	Time (min)	Time (min)	Power consumption (W)	Time (min)	
Di-C1La	2	1	126	Keep Factory Default					20	4.7	Keep Factory Default	40
Di-C1Lc	*2*	*1*	*126*						*30*	*4.7*		*38*
Di-C1a	2	1	131						20	5.2		42
Di-C1c	2	1	131						30	5.2		41

Model: S-C4, K-C3, PR-C1, R-C5, Al-C1, Di-C1, AT-C2, AP-C2	Date: 18-Nov-09	No.: RGene036

Model Name	Panel Off Timer						Energy Saver Timer			Auto Off Timer			Reduction ratio for Power consumption (%) *See Note1
	Default Setting			Recommendation			Default Setting		Recommendation	Default Setting		Recommendation	
	Level	Time (min)	Power consumption (W)	Level	Time (min)	Power consumption (W)	Time (min)	Power consumption (W)	Time (min)	Time (min)	Power consumption (W)	Time (min)	
AT-C2a	1	1	210	Change to Level2	Keep Factory Default	173	15	106	Keep Factory Default	30	4.3	Keep Factory Default	35
AT-C2b	1	1	216	Change to Level2		171	15	104		30	4.3		37

Model Name	Panel Off Timer					Energy Saver Timer			Auto Off Timer			Reduction ratio for Power consumption (%) *See Note1
	Default Setting			Recommendation		Default Setting		Recommendation	Default Setting		Recommendation	
	Level	Time (min)	Power consumption (W)	Level	Time (min)	Time (min)	Power consumption (W)	Time (min)	Time (min)	Power consumption (W)	Time (min)	
AP-C2c	1	1	141	Keep Factory Default	Keep Factory Default	15	135	Change to 1 min	45	2.9	Keep Factory Default	24
AP-C2d	1	1	141			15	135		45	2.9		24

Note 1: Percentage reduction in power consumption when using the recommended settings, compared with the maximum setting of 240 minutes.
The actual reduction in power consumption will vary depending on the customer's usage conditions (e.g. ACV, P/J, option configuration, etc.) and installation environment (e.g. temperature and humidity conditions).

RICOH

Technical Bulletin

Reissued: 08-Jun-10

Model: DF 3010	Date: 29-Sep-06	No.: RB222016d

RTB Reissue
The items in **bold italics** have been corrected.

Subject: Firmware Release Note: ADF	Prepared by: M. Kumagai
From: 1st Overseas Tech Support Sec., 1st PQM Dept.	

Classification:	☐ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☒ Other ( )		

This RTB has been issued to announce the firmware release information for the **ARDF**.

Version	Program No.	Effective Date
15.000:15	B8025603B	November 2009 production
12.00	B8025603	July 2007 production
11.05	B8025602A	July 2007 production.
10.00	B8025602	1st Mass production

Version	Modified Points or Symptom Corrected
15.000:15	Symptom corrected: Machine indicates E-40 when a firmware version older than V14 is downloaded. ***Important: Must refer to RTB#RD029046 or RTB#RD009046 before updating this firmware if the ARDF is installed on the AP-C2 and AI-C1.*** Note: 1).Engine firmware (AP-C2: version 1.53:09 / AI-C1: version 1.06:05 or later) needs to be applied to fix this issue. ***2).This problem does not occur on the AP-C1***
12.00	Other change: Minor bug correction
11.05	Other changes: Supports the Alex-C1. Important: To use the DF3010 on the Alex-C1, make sure to install this firmware or a newer version.
10.00	1st Mass production

RICOH

Technical Bulletin

Model: AL-C1	Date: 12-Jan-10	No.: RD009043

Subject: SC141/142	Prepared by: K. Hamada
From: 1st Overseas Tech Support Sec., 1st PQM Dept.	

Classification:	☒ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☐ Tier 2

SYMPTOM

SC141/SC142 (Black Level detection error/ White Level detection error) occur if the Copier or Scanner is used after the machine recovers from Off/Sleep mode.

Note; These only occur on the Model Al-C1 Color Scanner machines.

CAUSE

Circuit Failure on the BICU board

SOLUTION

The board was modified. The service parts P/N change information is as follows.

Old P/N:	New P/N	
D0115146	D0115156	; For 50 CPM machines
D0115147	D0115157	; For 40 CPM machines

Production line

The modified board was applied in the beginning of October 2009 Production.

Action in the field

If these symptoms occur, please replace the BICU with a BICU that has the new P/N.

RICOH   **T**echnical **B**ulletin   **PAGE: 1/1**

Model: AL-C1 MS	Date: 12-Feb-10	No.: RD009044

Subject: LCD panel does not indicate	Prepared by: K. Hamada
From: 1st Overseas Tech Support Sec., 1st PQM Dept.	

Classification:	☒ Troubleshooting	☐ Part information	☒ Action required
	☒ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☒ Tier 2

SYMPTOM

The LCD may remain blank when the machine recovers from Energy Saver or Off/Sleep Mode.

CAUSE

A bug in the LCDC firmware control program causes a fuse mounted on the operation panel LCD board to short out.

SOLUTION

Production line:

The LCDC firmware was modified to correct the bug.

Applied from: December 2009 production.

In the field:

Proactive measures

Update the LCDC firmware to the following versions or later at the next site visit.

Region	Version	Program No.	Pre-installed from:
US Models	1.08	D0091491C	December 2009 production
EU Models	1.08	D0091492C	December 2009 production
ASI_TWN Models	1.08	D0091493B	December 2009 production
CHN Models	1.08	D0091457A	December 2009 production
KOR Models	1.08	D0091459A	December 2009 production

If the symptom is reported:

1. Replace the operation panel LCD board.

2. If the LCDC firmware is older than the versions listed in the table above, install the new version.

   Note: When you update the firmware, you may need to re-install the language firmware as well.

Affected units

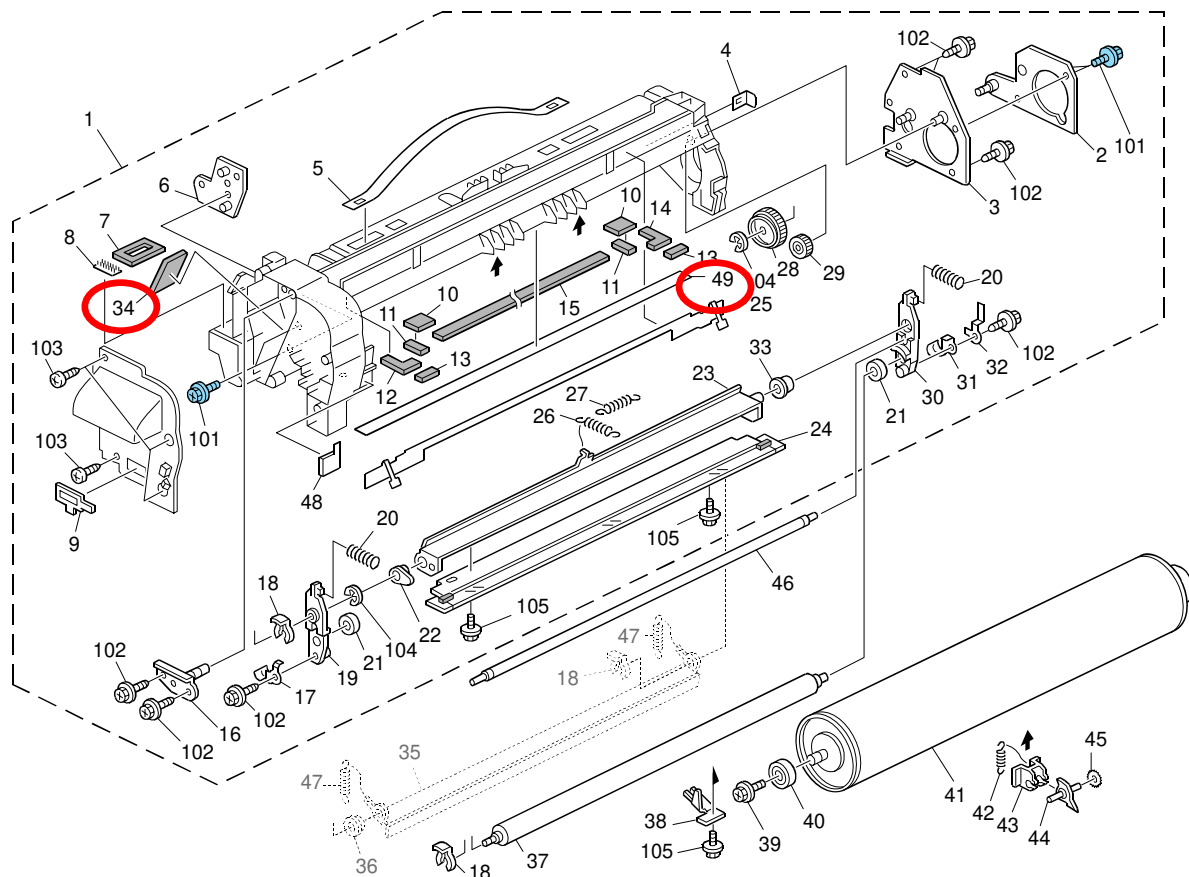From the beginning of mass production through the end of November 2009 production

RICOH

Technical Bulletin

PAGE: 1/1

Model: AL-C1 MS	Date: 17-Mar-10	No.: RD009045

Subject: Parts catalog correction		Prepared by: K. Hamada
From: 1st Overseas Tech Support Sec., 1st PQM Dept.		

Classification:	☐ Troubleshooting	☒ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☐ Tier 2

Old part number	New part number	Description	Q'ty	Int	Page	Index	Note
	D0092214	Separation Plate: Case: Blade: Upper	0-1	-	65	49	

Change:

1) The part shown in the table was added.
2) Index #34(D0092426: Seal-24.5x68.5) was added to the illustration.

Reason: This information was missing from the Parts Catalog.

Model: AL-C1 MS	Date: 19-Mar-10	No.: RD009046

Subject: Important notice about firmware update	Prepared by: K. Hamada
From: 1st Overseas Tech Support Sec., 1st PQM Dept.	

Classification:	☒ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☐ Tier 2

SYMPTOM

The "E-40" error occurs when the ADF firmware is updated to V14 (B8025603A).

Note:

- This symptom does not occur on units that already have V14 pre-installed. It only occurs when updating to V14 in the field.
- V14 was released on the firmware download site, but it was immediately removed when this issue was discovered.

CAUSE

Firmware bug with V14

SOLUTION

Update the firmware to **V15** using the procedure below.

Procedure for Updating to V15

Important: Before you begin this procedure, make sure to install the following **Engine** firmware.
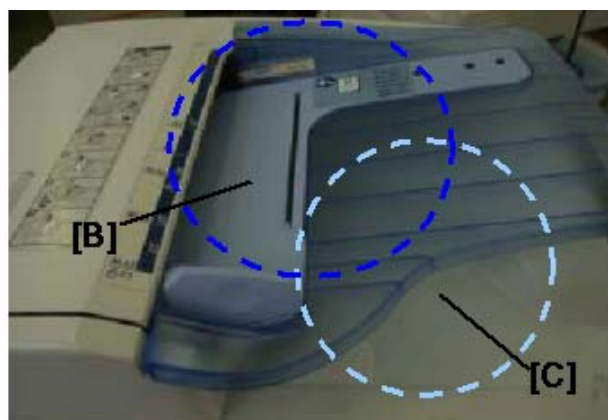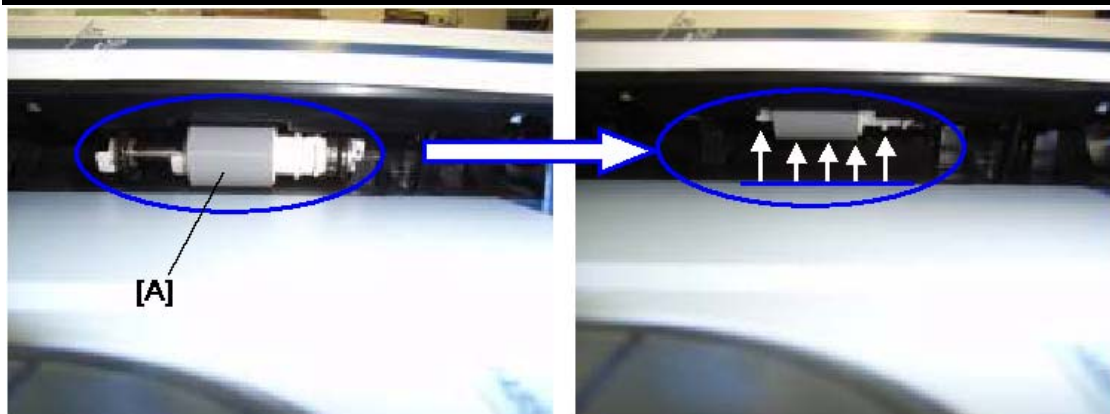
AL-C1:   **V1.06:05** or later

1. If the pick-up roller is in the lower position shown in the left photo [A], open and close the left cover to raise the roller to the upper position.
2. Make sure there is no paper inside the ADF, on the original feed table [B], or on the original exit table [C].
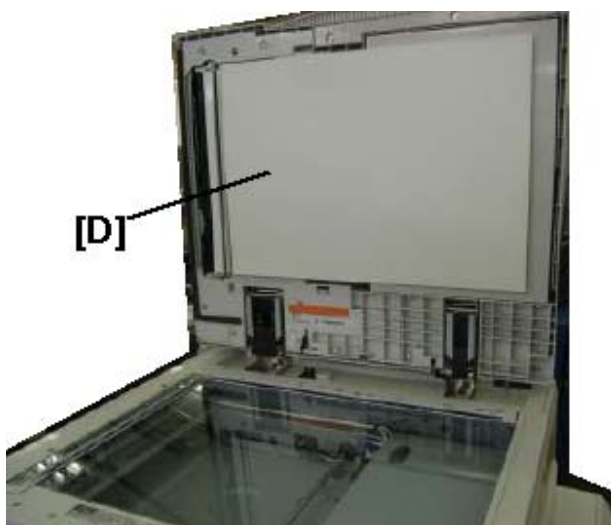
3. Open the ADF main cover [D] as shown below, and leave it open while you update the firmware in Step 4.

4. Update the firmware to V15.

RICOH

Technical **B**ulletin

Model: AL-C1 MS	Date: 16-Jun-10	No.: RD009047

Subject:: Multiple Network Support Firmware issues affecting: Scan to SMB Windows Authentication	Prepared by: K.Hamada	
From: 1st Overseas Tech Support Sec, 1 st PQM Dept		

Classification:	☒ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Other ()		

Symptom

There are some issues related to the network support firmware for Windows 7. Currently, there are 2 Network firmware modules to choose from and each has its own problems.

Version	Program No.	Effective Date
7.30	D0135754H	January 2010 production
7.26	D0135754G	July 2009 production

Firmware v7.30 is affected by the following 6 issues:

Problem 1. Unable to Scan to SMB to Windows 7 and 2008.

Conditions of occurrence: The destination is Windows 7 or 2008 and the Windows Online ID provider is installed. http://windows.microsoft.com/en-US/windows7/online-id-providers

Cause: Firmware A was not designed to handle the extra information included by Windows Online ID provider.

Workaround: None.

Problem 2. Unable to Scan to SMB to Windows 98/98SE/Me/NT 4.0 Workstation/NT4.0 Server.

Conditions of occurrence: The destination is Windows 98/98SE/Me/NT 4.0 Workstation/NT4.0 Server and is specified using an IP address instead of a hostname.

Cause: These operating systems don't allow SMB connections via IP address. The device should fail over to a hostname, but it doesn't.

Workaround: Specify destinations using a hostname.

Problem 3. Unable to Scan to SMB when the domain name is not an FQDN.

Conditions of occurrence:
The username is something like "username@example", not "username@example.com"

Cause: The Ricoh MFP doesn't adhere to the NTLMv2 specification which doesn't allow the use of usernames in formats other than FQDN.

Workaround: Use FQDNs when specifying a user name.

Model: AL-C1 MS	Date: 16-Jun-10	No.: RD009047

Problem 4. Scan to SMB authentication error results in an SC 899 and device stall.
Conditions of occurrence: The device tries and fails to login to a Windows scan destination 3 times. This is intermittent, occurring about 20% of the time that these conditions are met.

Cause: Invalid memory access.

Workaround: None. Please reboot.

Problem 5. Windows Authentication fails if the username/password includes European characters.
Conditions of occurrence: The username/password contains European characters

Cause: The character table used by the MFP for Windows authentication doesn't include these characters.

Workaround: None.

Problem 6. Unable to retrieve the Windows group name from a Windows 2008 R2 server, during Windows Authentication.
Conditions of occurrence: The authenticating server is Windows 2008 R2.

Cause: The group request used by GW devices is no longer supported by Windows Server 2008 R2.

Workaround: None.

Firmware v7.26 is affected by the following issue:

Problem. Scan to Folder destinations cannot be selected by browsing. When a user attempts to select a destination by browsing, an error is displayed.
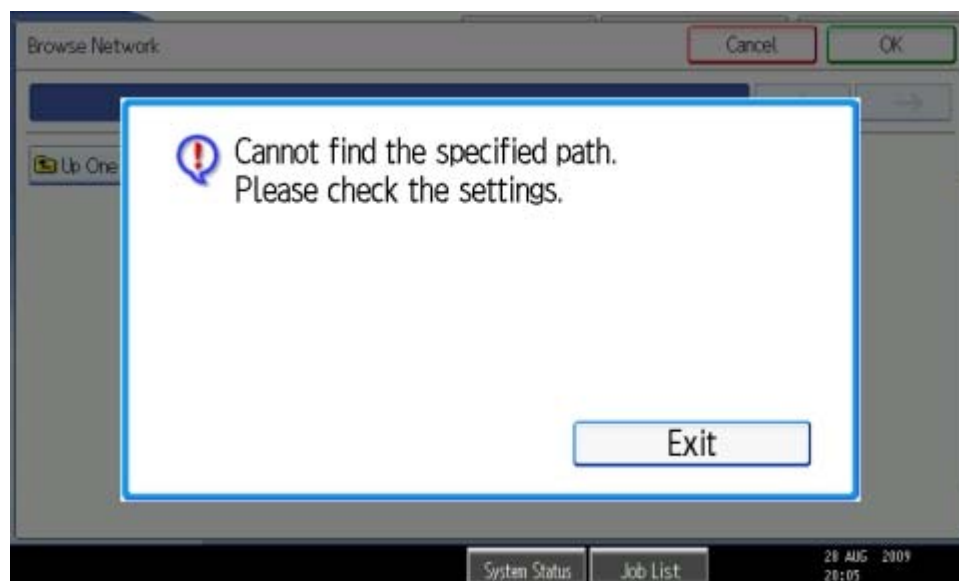
Conditions of occurrence: The destination is Windows 7 or Windows Server 2008 R2.

Model: AL-C1 MS	Date: 16-Jun-10	No.: RD009047

Cause: As of Windows 7/Windows Server 2008 R2, Samba 3.0.23 or later is required in order to establish an smb connection. Current GWs have older versions of Samba.

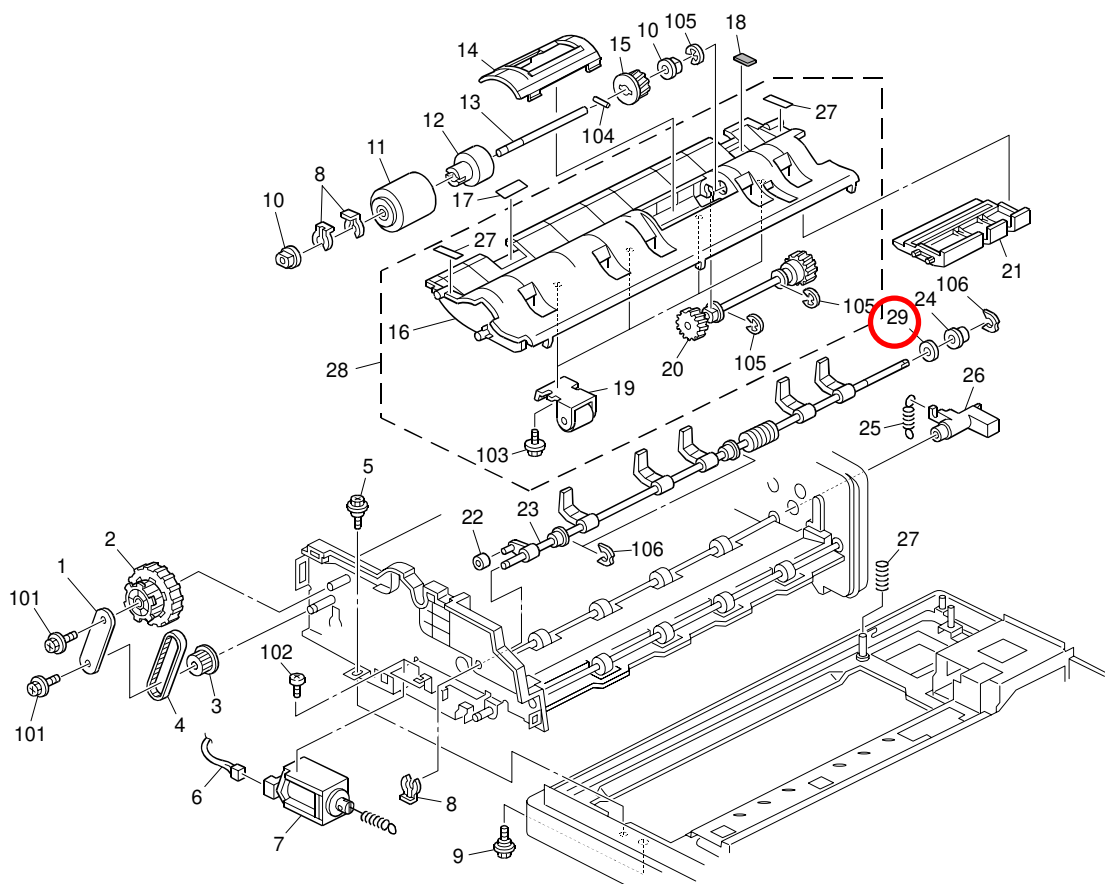Workaround: None. Users will have to manually enter the paths to their destinations.

Action

These problems are going to be fixed in the Network firmware version to be released at the beginning of September 2010. For now, please just select whichever best meets your customers' needs.

Model: AL-C1 MS		Date: 21-Jun-10	No.: RD009048

Subject: Spacer	Prepared by: K. Hamada
From: 1st Overseas Tech Support Sec., 1st PQM Dept.	

Classification:	☐ Troubleshooting	☒ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☐ Tier 2

Old part number	New part number	Description	Q'ty	Int	Page	Index	Note
	AA132024	Spacer	0-1	-	25	29	

Change: The part in the table was added.
Reason: To further improve the movement of the guide (B8022226).

Model: AL-C1 MS	Date: 22-Nov-10	No.: RD009049

Subject: MAC Address Change Notification	Prepared by: T.Hirakawa
From: 1st Overseas Tech Support Sec., 1st PQM Dept.	

Classification:	☐ Troubleshooting	☒ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	

MAC Address Change Notification

Overview:
- The number of available MAC address codes used on Ricoh MFP/LPs has been depleted. Therefore, a new vendor code has been assigned to all affected models.

- The part number of the PCB used on the D009/D011/D012/D013 was changed as follows:

Old Part Number	New Part Number	Description	I/C
D0125723	D0125734	Controller:PCB for D009	X/O
D0135723	D0135734	Controller:PCB for D011	X/O
D0125731	D0125733	Controller:PCB for D012	X/O
D0135713	D0135733	Controller:PCB for D013	X/O

New Mac address affected:

Model	Code	Production Line
AL-C1b/c MS,CS	D009/D011/D012/D013-17	Jan/2010 at REI
AL-C1b/c MS,CS	D009/D011/D012-27,26 D013-27,26,19	Jan/2010 at RPL
AL-C1b/c MS,CS	D009/D012-29,28,21,19 D011/D013-29,28,19	Jan/2010 at RAI

Connection issues and solutions:
- MFP/LPs that use the new MAC address have connection issues with the following Ricoh software products:

SmartDeviceMonitor for Admin/SmartDeviceMonitor for Admin V8/Accounting Report Package
1. The User Management Tool and the Addressbook Management Tool do not work.
2. Printing jobs and machine status cannot be reset.
3. The MFP/LP's NIB password cannot be changed.
4. The NIB Setting Tool does not work.

SmartDeviceMonitor for Client / DeskTopBinder SmartDeviceMonitor for Client

Automatic protocol/port number specification does not work when adding the SmartDeviceMonitor port.

Web Smart DeviceMonitor

The device is detected as another vendor's product.

RC Gate S

The device is detected as another vendor's product.

- The issues described above have been resolved by the following update versions, which have already been released to the field. If any of these issues occur, update to the following version(s) or newer:

Product Name	Version	Web Release date *
SmartDeviceMonitor for Admin V7	V7.4.3.0	Oct. 23, 2009
DeskTopBinder SmartDeviceMonitor for Client	V8.7.5.0	Oct. 23, 2009
DeskTopBinder lite	V5.4.1.1	Nov. 06, 2009
Web SmartDeviceMonitor	V02.07.00-04	Dec. 25, 2009
RC Gate S	V01.01.03	Dec. 10, 2009
SmartDeviceMonitor for Admin V8	V8.1.1.0	Nov. 06, 2009
SmartDeviceMonitor Accounting Report Package	V1.1.1.0	Nov. 06, 2009

Other important notes:

- The controller firmware was also modified in order to support both the old and new MAC addresses. Firmware version **1.12** and newer support the MAC addresses, but an SC error may occur if the old firmware is installed on a PCB with the new MAC address.

- PCBs that contain the old MAC address will still be available under the following P/N , but the quantities are **very limited.** Therefore, only order this board **if the customer needs to continue using the old firmware** (such as a customized version of firmware) when the PCB breaks.

Model	Part Number	Description
Alex-C1b MS	D0125714	Controller: PCB for D009
Alex-C1b CS	D0135704	Controller: PCB for D011
Alex-C1c MS	D0125713	Controller: PCB for D012
Alex-C1c CS	D0135703	Controller: PCB for D013

For regular parts replacement, please order the board containing the new MAC address, and advise the customer to update the utility as necessary.

RICOH

Technical Bulletin

Model: AL-C1 MS	Date: 08-Dec-10	No.: RD009050

Subject: SC636	Prepared by: T.Hirakawa
From: 1st Overseas Tech Support Sec., 1st PQM Dept.	

Classification:	☐ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☒ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Other ( )		

The following information has been added to the service manual on page 49.

No.		Symptom	Possible Cause/Countermeasure
636		SD Card Error	
-001	B	Expanded authentication module error	
		1. There is no expanded authentication module in the machine. 2. The SD card or the expanded authentication module file is broken. 3. There is no DESS module in the machine.	1. Install the correct SD card or expanded authentication module file. 2. Install the DESS module.
-002	B	Version error	
		1. The version of the expanded authentication module is not correct.	1. Install the correct expanded authentication module file.

Model: AL-C1	Date: 05-Jan-11	No.: RD009051

Subject: Printer Service Mode	Prepared by: T.Hirakawa
From: 1st Overseas Tech Support Sec., 1st PQM Dept.	

| Classification:	☐ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☒ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Other ( )		

Service Manual Revision

The areas in **bold** were corrected.

Appendices "4.Appendix: Service Program Mode Tables" of D009/D011/D012/D013 Service Manual (pg.292-293).

1001	Bit Switch			
006	Bit Switch 6		0	1
	bit0 to 5	DFU	-	-
	bit6	PDL Auto Detection timeout of jobs submitted via USB or Parallel Port(IEEE 1284)	0:Disable (Immediately)	1:Enable (10 seconds)
		To be used if PDL auto- detection fails. A failure of PDL auto-detection doesn't necessarily mean that the job can't be printed. This bit switch tells the device whether to time-out immediately (default) upon failure or to wait 10 seconds.		
	bit7	**Timing of the PJL Status ReadBack (JOB END) when printing multiple collated copies**	**0:Disable**	**1:Enable**
		This bit switch determines the timing of the PJL USTATUS JOB END sent when multiple collated copies are being printed. **0 (default): JOB END is sent by the device to the client after the first copy has completed printing. This causes the page counter to be incremented after the first copy and then again at the end of the job.** **1: JOB END is sent by the device to the client after the last copy has finished printing. This causes the page counter to be incremented at the end of each job.**		

Technical **B**ulletin

RICOH

Model: AL-C1		Date: 25-Jan-11	No.: RD009052

Subject: Jam 1 (Cover open) in the bridge unit		Prepared by: T.Hirakawa
From: 1st Overseas Tech Support Sec., 1st PQM Dept.		

Classification:	☒ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☒ Tier 2

Symptom

Jam 1 (Cover open) occurs frequently in the BU3030 Bridge unit.
If you replace the push switch in the red circle below, this symptom occurs again.
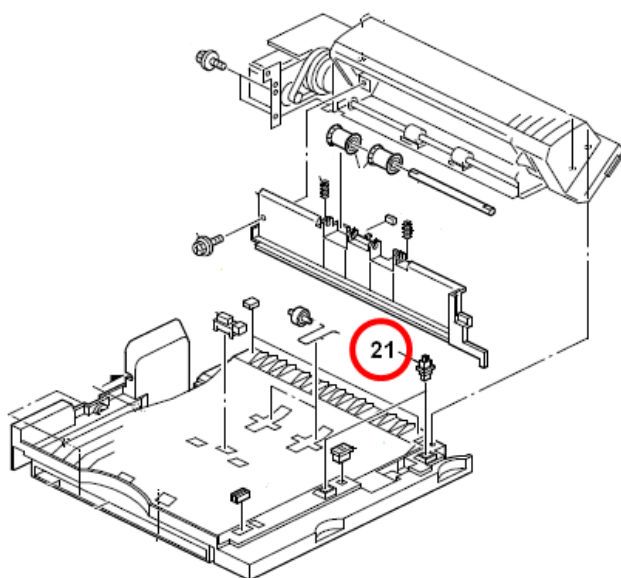
Cause

Because of the following two reasons, the push switch mistakenly detects a "cover open" when paper exits
1) The contact finish on the push switch wears with time, causing an unstable signal from the sensor, and this causes most of the false detection errors during continuous paper feed.
2). Detection timing of the push switch was designed to be very short and strict, because of the situation described above in cause 1).

Solution

Install the following **Engine Firmware** version or later, in which the push switch detection timing is changed.

Model	Version	Program No.	Effective Date
AL-C1	1.07:05	D0095160K	January 2011 production
AL-C1.5	1.01:01	D0915160B	January 2011 production

RICOH

Technical **B**ulletin

Model: AL-C1	Date: 08-Feb-11	No.: RD009053

Subject: SC997			Prepared by: Takuya Hirakawa
From: 1st Overseas Tech Support Sec, 1 st PQM Dept			
Classification:	☒ Troubleshooting	☐ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Other ()		

SYMPTOM

SC997 occurs when sending a scanning job to a delivery server, or to another destination via Scan-to-Email or Scan-to-Folder, if the destination was selected from the mainframe Address Book.

CAUSE

The wrong combination of System/Copy and Scanner firmware is installed.

Alex-C1 (MS model):
Note: On this model, the Scanner is an option.
- System/Copy **01.08 or earlier** and Scanner firmware **ver01.23 or later** are installed.
- System/Copy **01.08 or earlier** was already installed, and the Scanner firmware was updated to **ver01.23 or later.**

Alex-C1 (CS model):
Note: On this model, the Scanner is a standard feature.
- System/Copy **01.08 or earlier** was already installed, and the Scanner firmware was updated to **ver01.23 or later.**

ACTION

Update the System/Copy and Scanner firmware to the following versions or newer.

	Scanner type	Application	Program No.	F/W Version
A	**M/S**	**System/Copy**	D0125751	Version **01.09 or later**
		Scanner	D0095751	Version **01.23 or later**
B	**C/S**	**System/Copy**	D0135751	Version **01.09 or later**
		Scanner	D0115751	Version **01.23 or later**

RICOH

Technical Bulletin

PAGE: 1/1

Model: Alex-C1	Date: 02-Mar-11	No.: RD009054

Subject: Parts information		Prepared by: T.Hirakawa
From: 1st Overseas Tech Support Sec., 1st PQM Dept.		

Classification:	☐ Troubleshooting	☒ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☐ Tier 2

Old parts number	New parts number	Description	Q'ty	Int	Page	Index
B8022226	**B8022228**	GUIDE : REVERSE : OPEN AND CLOSE	1/1	X/O As a Set / -	25	16
AA132024	-	SPACER - M6	1/0		25	29

Change: The shape of the guide was changed (see below), and the M6 spacer was deleted.

Reason: To strengthen the guide and to improve serviceability.

Note: When you install the new guide, you do not need to install the M6 spacer.

The thickness of this area was increased

Technical **B**ulletin

PAGE: 1/1

Model: AL-C1	Date: 18-Mar-11	No.: RD009055

Subject: Service manual correction		Prepared by: T.Hirakawa
From: 1st Overseas Tech Support Sec., 1st PQM Dept.		
Classification:	☐ Troubleshooting ☐ Part information ☐ Action required ☐ Mechanical ☐ Electrical ☒ Service manual revision ☐ Paper path ☐ Transmit/receive ☐ Retrofit information ☐ Other ( )	

Service Manual Revision

The areas ~~crossed out~~ were **deleted.**

> **Important:** If the development sleeve needs to be replaced, replace the entire development unit. This is because the PG (photoconductor gap) is a very precise adjustment that requires factory precision.
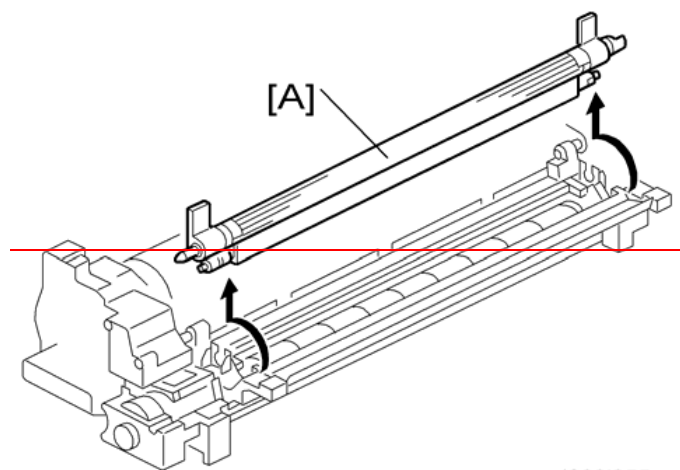
4. Replacement and Adjustment"
pg.191-192

Service Manual (pg.191-192)

~~Development Roller~~

~~1. PCDU (p.183)~~

~~2. Open the PCDU. (p.183)~~

~~3. Upper development cover (p.191)~~

d009i255a

~~4. Development roller [A]~~

~~·   Work carefully to avoid scratching or nicking the development roller.~~

RICOH **T**echnical **B**ulletin

Model: AL-C1	Date: 20-Apr-11	No.: RD009056

Subject: Parts information	Prepared by: T.Hirakawa
From: 1st Overseas Tech Support Sec., 1st PQM Dept.	

Classification:	☐ Troubleshooting	☒ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☐ Tier 2

Change: Some circuit elements on the PCB (PSU) were changed.

Reason: To improve reliability.

Old parts number	**New parts number**	Description	Q'ty	Int	Page	Index
AZ240141	**AZ240191**	POWER SUPPLY UNIT -230V	1/1	**O/O**	105	21

Target model codes:

AL-C1.5(EU): D029-92

AL-C1.5(AA): D091-29, D092-29

AL-C1.5 (CHN) - D091-21, D092-21

AL-C1(EU): D012-92, D013-92

AL-C1 (AA): D009-29, D011-29, D012-29, D013-29

AL-C1 (CHN): D009-21, D009-61, D012-21, D012-61

AL-C1 (KRE) - D009-28, D011-28, D012-28, D013-28

AL-P1 (EU): G179-22, G179-27

RICOH

Technical Bulletin

Model: AL-C1	Date: 12-May-11	No.: RD009057

Subject: Part catalog correction	Prepared by: T.Hirakawa
From: 1st Overseas Tech Support Sec., 1st PQM Dept.	

Classification:	☐ Troubleshooting	☒ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☐ Tier 2

Old part number	New part number	Description	Q'ty	Int	Page	Index	Note
D0099590	D0099593	NV-RAM	1-1	O/O	107	23	

Change/Reason: Parts Catalog correction

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Technical Bulletin

Model: AL-C1	Date: 12-May-11	No.: RD009058

Subject: Part Catalog Correction	Prepared by: T.Hirakawa
From: 1st Overseas Tech Support Sec., 1st PQM Dept.	

Classification:	☐ Troubleshooting	☒ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☐ Tier 2

Old part number	New part number	Description	Q'ty	Int	Page	Index	Note
-	D0091501	COVER:UPPER	0-1		17	40	

Change/**Reason**:

As per field request, the following part was newly added as a service part.

Model: AL-C1	Date: 11-Jul-11	No.: RD009059

Subject: Part Information	Prepared by: T.Hirakawa
From: 1st Overseas Tech Support Sec., 1st PQM Dept.	

Classification:	☐ Troubleshooting	☒ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☐ Tier 2

Old part number	New part number	Description	Q'ty	Int	Page	Index	Note
-	**11026257**	RELAY CONNECTOR - 14P	0-1		105	111	
-	**11026271**	CONNECTOR:53358-1442	0-1		105	112	

Change/**Reason**:

As per field request, these parts were newly added as service parts.

Model: AL-C1	Date: 22-Jul-11	No.: RD009060

Subject: Parts catalog correction	Prepared by: T.Hirakawa
From: 1st Overseas Tech Support Sec., 1st PQM Dept.	

Classification:	☐ Troubleshooting	☒ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☐ Tier 2

Change/Reason: The illustration shown below was corrected.

Note:
- The area enclosed by the red box is the correct outline for P/N D0092105 (index #1).
- The rear side plate (index #2) is registered separately as an individual service part.

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Technical Bulletin

PAGE: 1/1
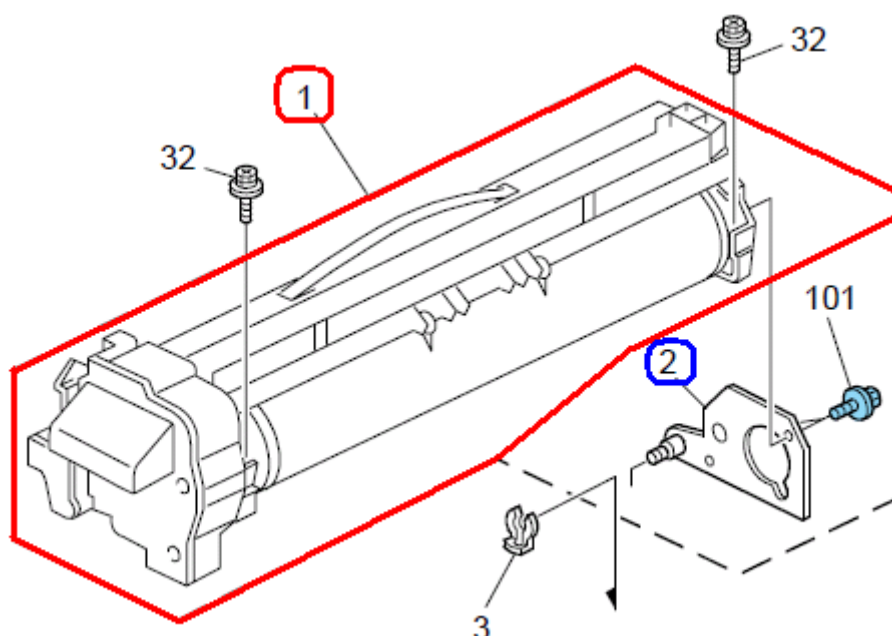
Model: Model AL-C1	Date: 07-Nov-11	No.: RD009061

Subject: Part information		Prepared by: Takuya Hirakawa	
From: 1st Tech Service Sect., MFP/P Tech Service Dept.			
Classification:	☐ Troubleshooting	☒ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Other ( )		

Old part number	New part number	Description	Q'ty	Int	Note
D0091356	D0091358	SPONGE:DUCT:EXHAUST:1	2-2	X/O	-
-	D0091359	SPONGE:DUCT:EXHAUST:2	0-2	As a set	-

Change: The duct sponge was divided into two service parts.
Reason: Vendor change

Before modification:

After modification:

RICOH   **T**echnical **B**ulletin   **PAGE: 1/1**
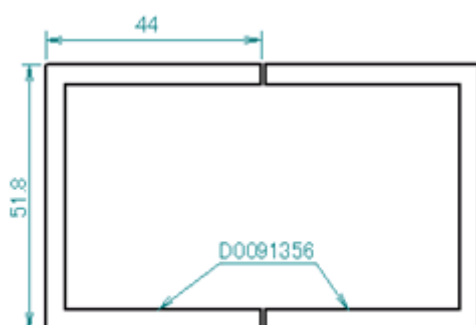
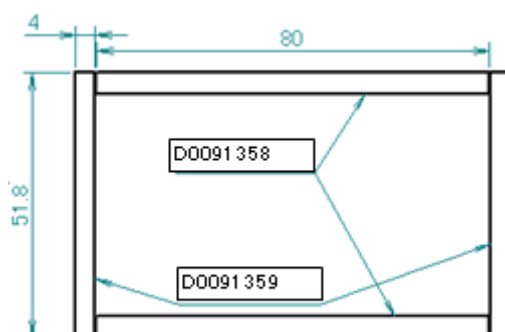| Model: Model AL-C1	Date: 14-Dec-11	No.: RD009062

Subject: Part information			Prepared by: Takuya Hirakawa		
From: 1st Tech Service Sect., MFP/P Tech Service Dept.					
Classification:	☐ Troubleshooting	☒ Part information	☐ Action required		
	☐ Mechanical	☐ Electrical	☐ Service manual revision		
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information		
	☐ Other ( )				

Old part number	New part number	Description	Q'ty	Int	Note
D0092105	D0092110	PCU:ALEX-C1:EXP:SERVICE:ASS'Y	1-1	O/O	-

Change: The color of the inner cover was changed to black.
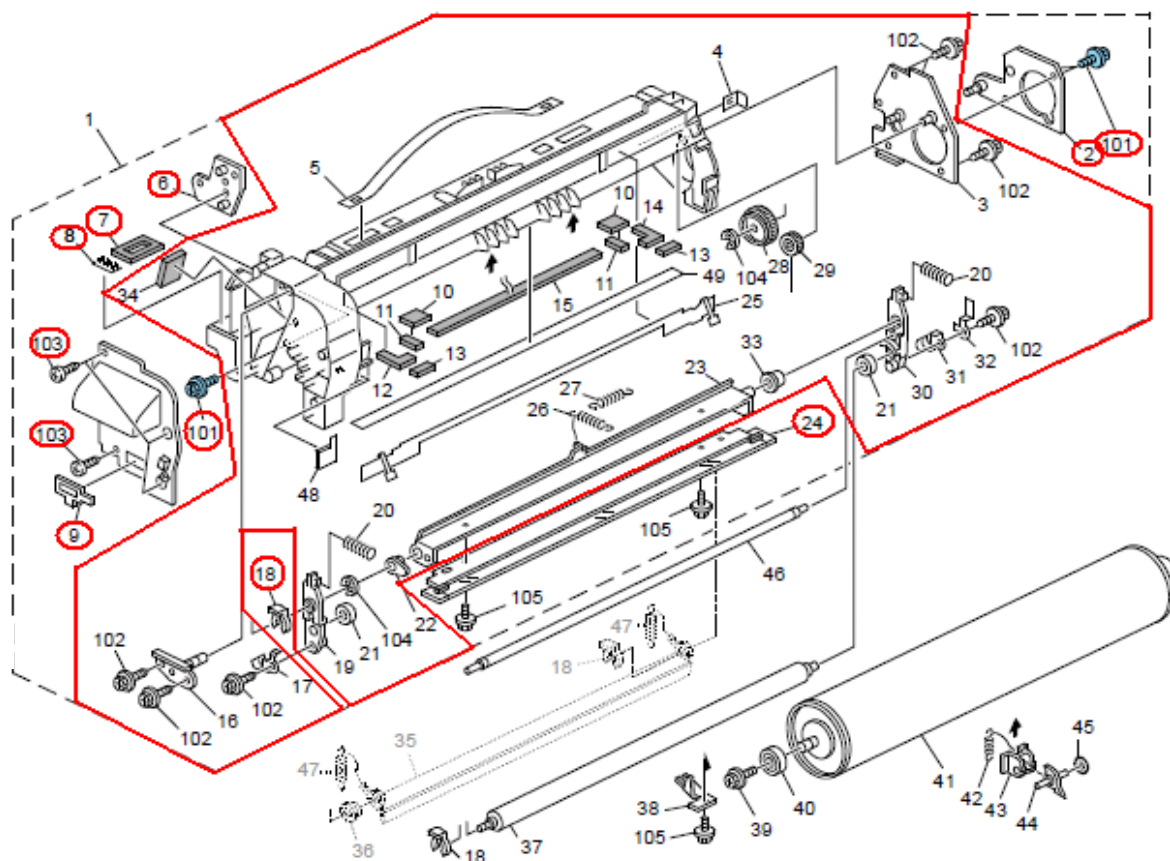
There is **no difference** in machine function or performance.

Model: AL-C1	Date: 13-Mar-12	No.: RD009063

Subject: Parts catalog correction	Prepared by: T.Hirakawa
From: 1st Tech Service Sect., MFP/P Tech Service Dept.	

Classification:	☐ Troubleshooting	☒ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☐ Tier 2

Change/Reason: The illustration shown below was corrected.
- The area enclosed by the red box is the correct outline for P/N GD1292212 (index #1).
- The parts circled in red (index#2, #6, #7, #8, #9, #18, #24, #101, and #103) below are included in P/N D1292110 (PCU).

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27.PCDU 2 (D009/D011/D012/D013/D091/D092)

RICOH

Model: Model AL-C1	Date: 19-Apr-12	No.: RD009064

Subject: Part information		Prepared by: Takuya Hirakawa
From: 1st Tech Service Sect., MFP/P Tech Service Dept.		
Classification:	☐ Troubleshooting ☐ Mechanical ☐ Paper path ☐ Other ( )	☒ Part information ☐ Electrical ☐ Transmit/receive	☐ Action required ☐ Service manual revision ☐ Retrofit information

Old part number	**New part number**	Description	Q'ty	Int	Note
-	**D0911361**	DUCT:RIGHT REAR SIDEWAYS:ALEX:ASS'Y	1		-
-	**D0911362**	DUCT:REAR:ALEX:ASS'Y	1		-

Change: Deodorizing filters were newly added as service parts for the AL-C1/AL-C1.5/AL-C2/AL-P1.

Reason: To meet the requests of customers who may report strange odors on these models.
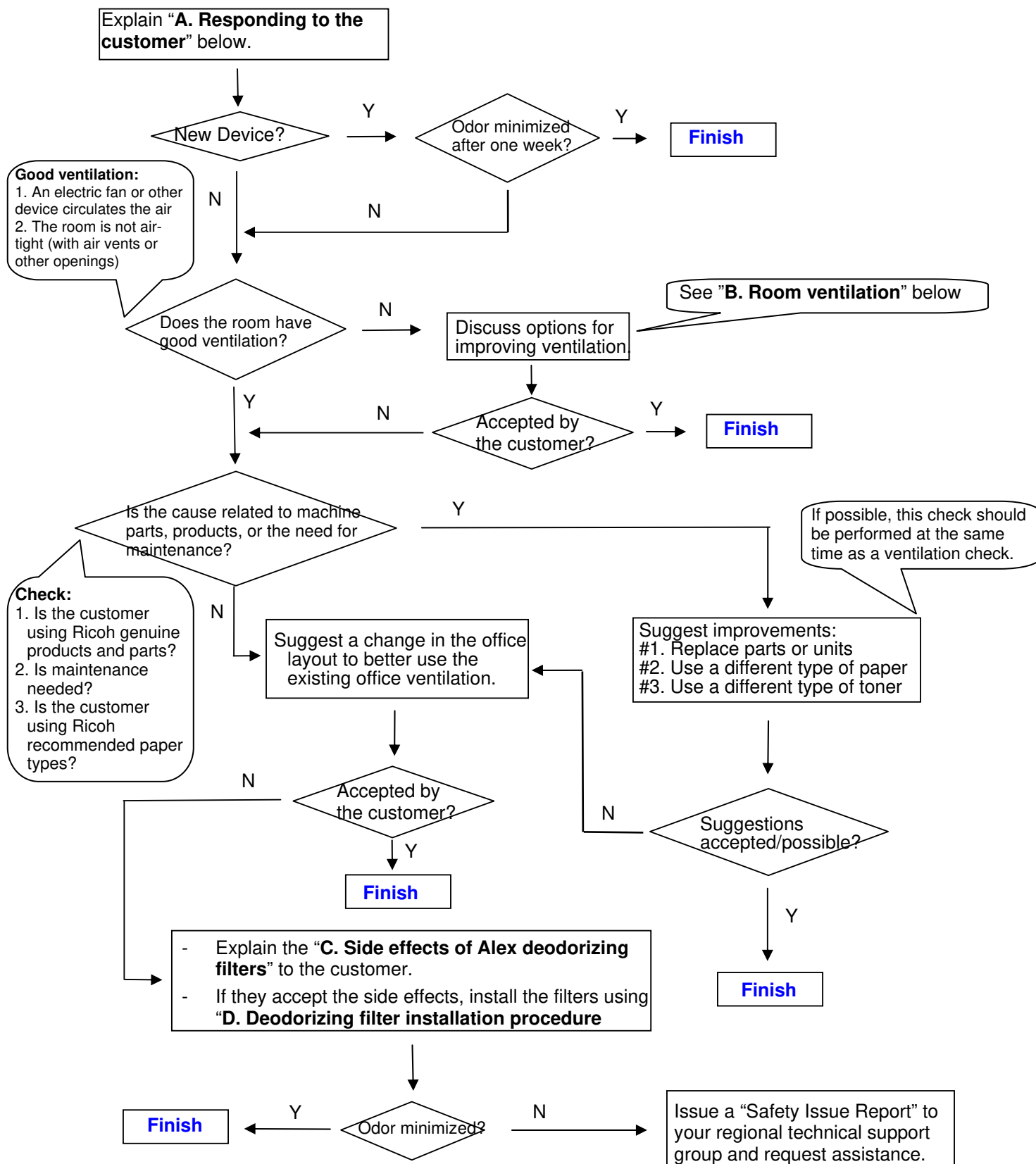
Note:

- In certain installation environments, come customers may have a relatively high sensitivity (low tolerance) to odors.
- The installation procedure and limitations of these filters are included below, as part of the **ACTION IN THE FIELD**.
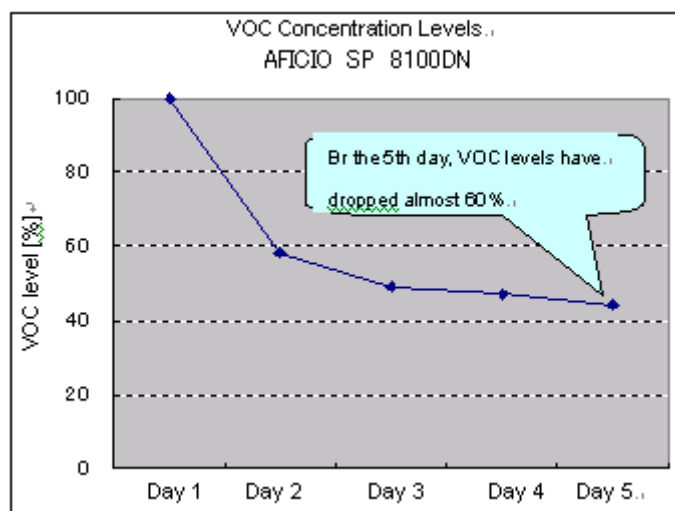
ACTION IN THE FIELD

If a customer reports a strange odor from the machine, use the **flowchart below** to take the appropriate action.

Flowchart

Explain "**A. Responding to the customer**" below.

New Device? — Y → Odor minimized after one week? — Y → **Finish**

Good ventilation:
1. An electric fan or other device circulates the air
2. The room is not air-tight (with air vents or other openings)

New Device? → N

Odor minimized after one week? → N

Does the room have good ventilation? — N → Discuss options for improving ventilation.

See "**B. Room ventilation**" below

Accepted by the customer? — N → (back to Discuss options)

Accepted by the customer? — Y → **Finish**

Does the room have good ventilation? → Y

Is the cause related to machine parts, products, or the need for maintenance? — Y →

Check:
1. Is the customer using Ricoh genuine products and parts?
2. Is maintenance needed?
3. Is the customer using Ricoh recommended paper types?

If possible, this check should be performed at the same time as a ventilation check.

Is the cause related to machine parts, products, or the need for maintenance? → N

Suggest a change in the office layout to better use the existing office ventilation.

Suggest improvements:
#1. Replace parts or units
#2. Use a different type of paper
#3. Use a different type of toner

Accepted by the customer? — N →

Accepted by the customer? — Y → **Finish**

Suggestions accepted/possible? — N → (back to Suggest a change in the office layout)

Suggestions accepted/possible? — Y → **Finish**

- Explain the "**C. Side effects of Alex deodorizing filters**" to the customer.
- If they accept the side effects, install the filters using "**D. Deodorizing filter installation procedure**"

Finish ← Y — Odor minimized? — N → Issue a "Safety Issue Report" to your regional technical support group and request assistance.

Model: Model AL-C1	Date: 19-Apr-12	No.: RD009064

Action referenced in the Flowchart above:

A. Responding to the Customer

1. The first step in handling an inquiry about Ricoh device odor is to explain the following to the customer:

   ● Ricoh takes our customers' health and the health of our planet very seriously. This is highlighted by the fact that Ricoh products receive the German "Blue Angel" and Japanese "Eco Mark" certifications. This level of dedication is standard at Ricoh.

   ● This means that a properly used and maintained Ricoh product should never be the source of problem in the office environment, including those related to employee health. However, keeping the device in a small, improperly ventilated space or sitting directly in the path of the exhaust fumes has been reported to cause unpleasant odors, head and throat pain, and general discomfort. Therefore, we strongly urge customers to make sure that their devices are placed in areas with proper ventilation, and that the exhaust is pointed safely away from anyone sitting nearby. Ideally, this should be done during initial installation, but working with existing customers to improve the quality of their office environment should be done whenever possible.

   ● However, brand new devices have a particularly strong odor that might worry some customers. This odor is significantly reduced by the end of the **first week of use**, so please ask for the customer's patience. See Figure 1 below for an example using the Aficio SP 8100DN.

   ● Volatile Organic Compounds (VOC) are particles of the component materials (glues, plastics, chemicals, etc.) that Ricoh devices are built with. VOC are the primary source of the odors produced by Ricoh devices, so tracking VOC levels produced by Ricoh devices is a good indicator of the strength of the odors. Figure 1 shows the VOC levels of a brand new Aficio SP 8100DN during the first 5 days of use. As the graph shows, the amount of VOC has dropped by almost 60%.

Fig. 1

*1: Measurement was performed using a ppbRAE3000 from RAE Systems.
*2: "VOC Level (%)" shows the VOC level on a given day as a percentage of the first day's level. Mathematically, this is expressed as [Level detected on a given day] / [First day's level]

2. After the customer understands the above, work with the customer to ensure that there is enough ventilation and that the Ricoh devices are installed in a safe and proper manner.

B. Room ventilation

While Ricoh devices are certified as safe, ventilation in some offices can allow even the safe levels of *VOC produced by Ricoh devices to build to levels that produce strong odors and health effects. In such cases, it is necessary to improve the ventilation of the immediate environment in which the Ricoh device is installed, in order to reduce particle concentration levels.
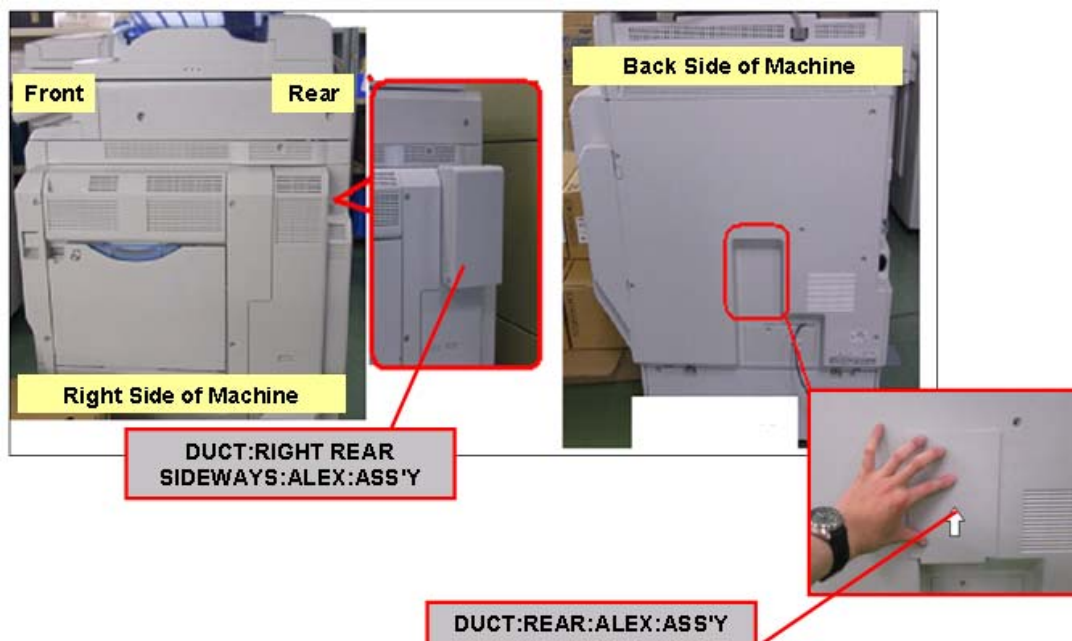
> *VOC: **V**olatile **O**rganic **C**ompounds are particles of the component materials (glues, plastics, chemicals, etc.) that Ricoh devices are built with.

C. Deodorizing filter installation procedure

Locations of rear filter and fusing exhaust filter:

| DUCT:REAR:ALEX:ASS'Y | DUCT:RIGHT REAR SIDEWAYS:ALEX:ASS'Y |

Model: Model AL-C1	Date: 19-Apr-12	No.: RD009064

Attaching the rear filter:

1. Clean the exterior cover around the rear exhaust area using a cloth.
    Important: Make sure to thoroughly clean the contact area for the double-sided tape.

2. Attach the rear deodorizing filter as shown in the photo below.

Model: Model AL-C1	Date: 19-Apr-12	No.: RD009064

Attaching the fusing exhaust deodorizing filter:

3. Clean the exterior cover around the fusing exhaust area using a cloth.
    Important: Make sure to thoroughly clean the contact area for the double-sided tape.

4. Attach the fusing exhaust deodorizing filter as shown in the photo below.

Model: Model AL-C1	Date: 19-Apr-12	No.: RD009064

D. Limitations of the deodorizing filters

The following limitations exist with these filters:

If the temperature of the installation environment is **29C (84.2F) or higher:**

- Continuous printing/copying should be limited to a maximum of 38 minutes
- The Auto Off Timer should be set to its default value (60 minutes)

This is because when the temperature is this high, the properties and behavior of the toner change, and image quality issues begin to occur.

Model: Model AL-C1	Date: 20-Jun-12	No.: RD009065

| Subject: Part information			Prepared by: Takuya Hirakawa
From: 1st Tech Service Sect., MFP/P Tech Service Dept.			
Classification:	☐ Troubleshooting ☐ Mechanical ☐ Paper path ☐ Other ( )	☒ Part information ☐ Electrical ☐ Transmit/receive	☐ Action required ☐ Service manual revision ☐ Retrofit information

SYMPTOM

A paper jam may occur.

CAUSE

The frame is damaged by the pin (circled in red below) when P/N B8023553 [A] is replaced.

9.Original Transfer 1 (D129/D130)
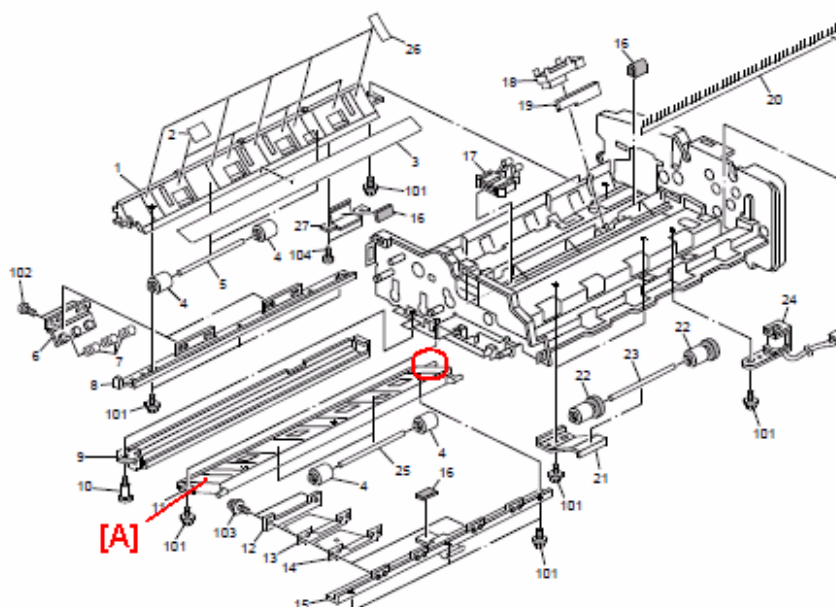
SOLUTION

Install the following hook (See procedure below).

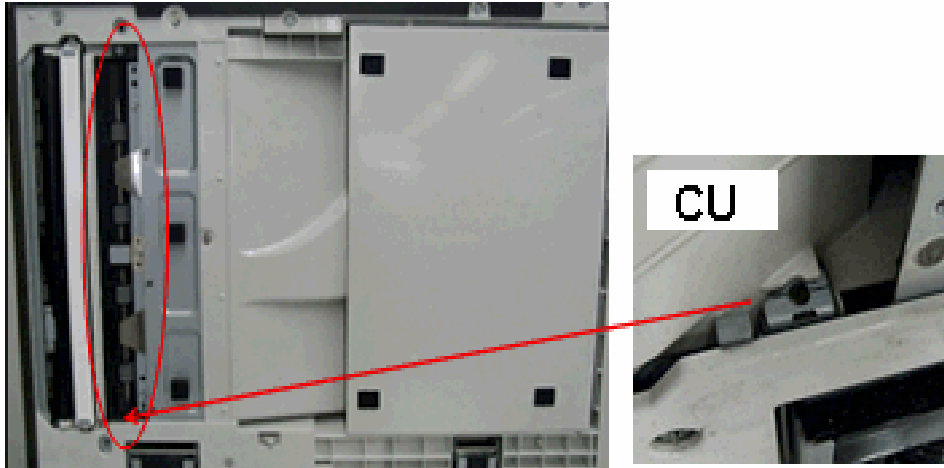| Old part number	New part number	Description	Q'ty	Int	Note
-	**B8029002**	HOOK:SCANNING:EXIT	1		

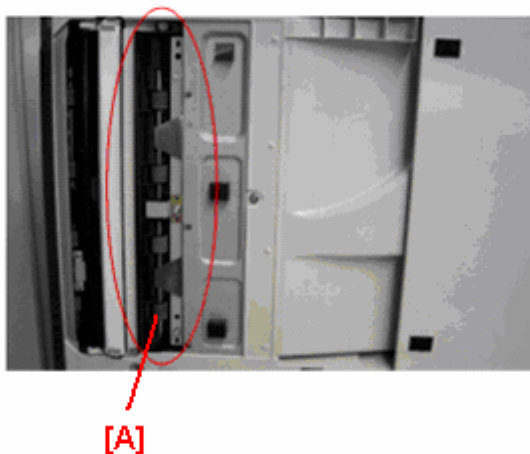| Model: Model AL-C1	Date: 20-Jun-12	No.: RD009065

Installation Procedure for the B8029002 Hook

1. Open the ARDF 3010 and remove the pressure plate.

2. Remove the guide [A].

[A]

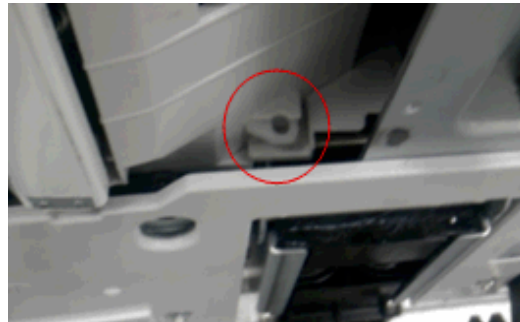3. Grasp the hook with a pair of needle-nose pliers.

4. Insert the hook between the tabs of the guide plate, as shown below (the area circled in red), so that the tips lock into the holes.

   Important: Once the tips lock into the holes, push the hook all the way up using a pair of needle-nose pliers (until it locks completely in place).
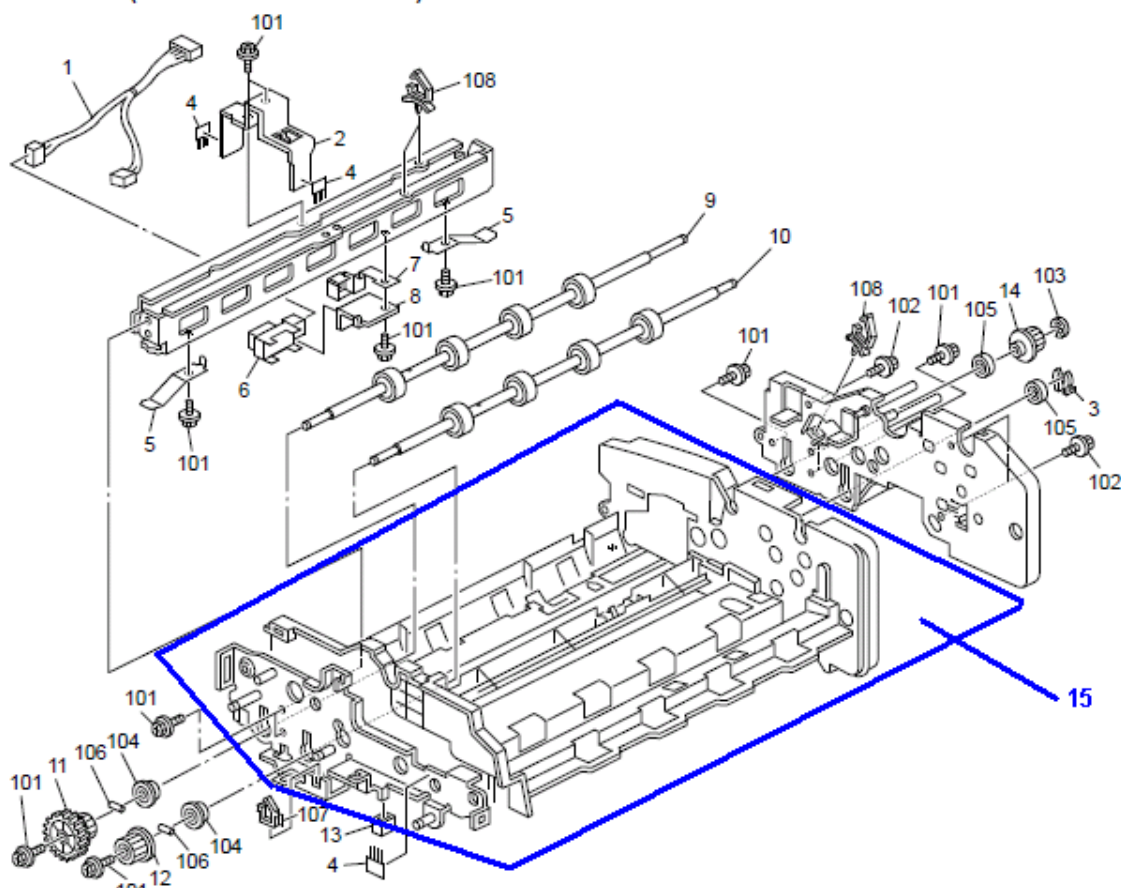
Model: AL-C1	Date: 17-May-13	No.: RD009066

Subject: Part Catalog Correction		Prepared by: T.Hirakawa
From: 2nd Tech Service Sect., MFP/P Tech Service Dept.		

Classification:	☐ Troubleshooting	☒ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☐ Tier 2

Old part number	New part number	Description	Q'ty	Int	Page	Index	Note
-	B8023112	FRAME:TRANSPORT	0-1		31	15	

Change/Reason:

As per field request, the following part was newly added as a service part.
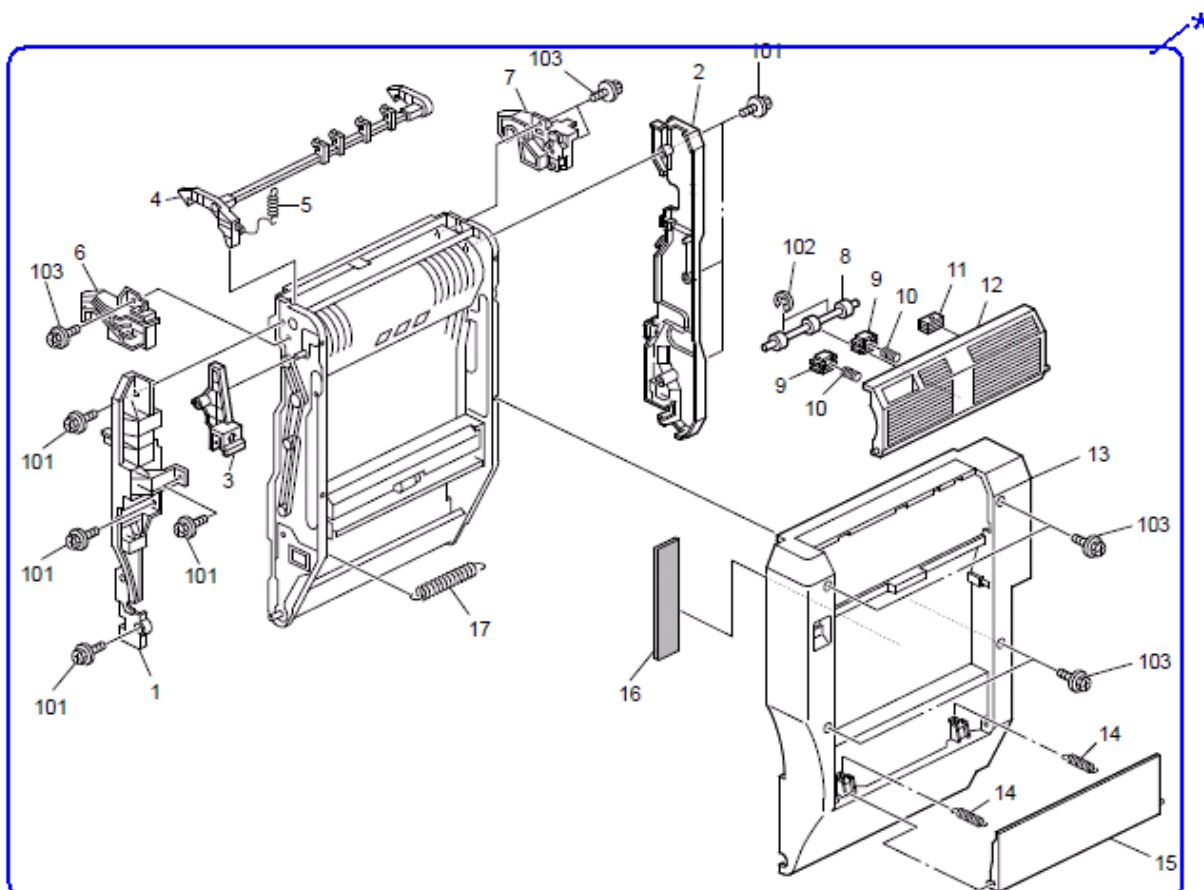
9.Original Transfer 2 (D009/D011/D012/D013)

Model: AL-C1	Date: 17-May-13	No.: RD009067

Subject: Part Catalog Correction	Prepared by: T.Hirakawa
From: 2nd Tech Service Sect., MFP/P Tech Service Dept.	

Classification:	☐ Troubleshooting	☒ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☐ Tier 2

Old part number	New part number	Description	Q'ty	Int	Page	Index	Note
-	D0094581	DUPLEX UNIT:DUPLEX SECTION:ASS'Y	0-1		79	*	

Change/Reason:

As per field request, the following part was newly added as a service part.
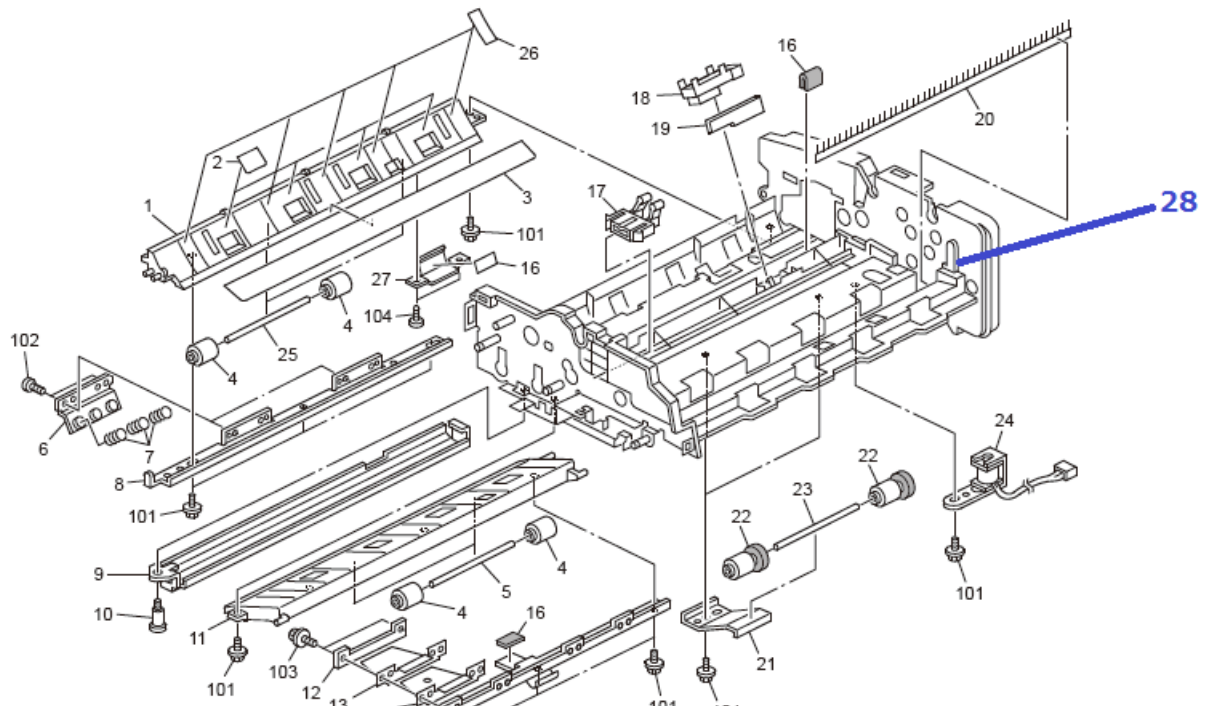
33.Duplex Unit 1 (D009/D011/D012/D013/D091/D092)

RICOH   **T**echnical **B**ulletin   **PAGE: 1/1**

Model: AL-C1	Date: 16-Jul-13	No.: RD009068

Subject: Part Catalog Correction	Prepared by: T.Hirakawa
From: 2nd Tech Service Sect., MFP/P Tech Service Dept.	

Classification:	☐ Troubleshooting	☒ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☐ Tier 2

Old part number	New part number	Description	Q'ty	Int	Page	Index	Note
-	B8023112	FRAME:TRANSPORT	0-1		29	28	-

Change/Reason:

As per field request, the following part was newly added as a service part.

8.Original Transfer 1 (D009/D011/D012/D013)

Model: AL-C1	Date: 17-Jul-13	No.: RD009069

Subject: Part Catalog Correction		Prepared by: T.Hirakawa
From: 2nd Tech Service Sect., MFP/P Tech Service Dept.		

Classification:	☐ Troubleshooting	☒ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☐ Tier 2

Old part number	New part number	Description	Q'ty	Int	Page	Index	Note
-	B2232760	HOUSING:PAPER FEED UNIT	0-1		55	40	-
	B2232800	STAY:SEPARATE:ASS'Y	0-1		55	41	

Change/**Reason**:

As per field request, the following part was newly added as a service part.

21.Paper Feed Section (D009/D011/D012/D013)

Model: AL-C1	Date: 19-Jul-13	No.: RD009070

Subject: Part Catalog Correction	Prepared by: T.Hirakawa
From: 2nd Tech Service Sect., MFP/P Tech Service Dept.	

Classification:	☐ Troubleshooting	☒ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☐ Tier 2

New part number	Description	Q'ty	Int	Page	Index	Note
D0094581	DUPLEX UNIT:DUPLEX SECTION:ASS'Y	0-1		57/59/79/81/ 83/85/87	*	-

Change: The part in the table was added.

Reason: As per a request from the field.

Note:

- The duplex unit (**D0094581)** is an assembly that includes the following parts.

  - By-pass Feed Section (22.By-pass Feed Section 1 and 23.By-pass Feed Section 2)

  - Duplex Unit (From 33.Duplex Unit 1 to 37.Duplex Unit 5).

- The transfer belt unit is not included in this part.

- The following two decals on the bypass feed unit are not included in this part.

Part number	Description	Q'ty	Int	Page	Index	Note
B2232729	Decal:Paper Set Direction:Manual Feed:EXP	1		57	6	-
B2232644	Decal:Scale	1		57	8	

22.By-pass Feed Section 1 (D009/D011/D012/D013)

RICOH

Technical Bulletin

Model: AL-C2	Date: 05-Mar-14	No.: RD129048

Subject: Part Catalog Correction		Prepared by: M.Yoneda
From: 2nd Tech Service Sect., MFP/P Tech Service Dept.		

Classification:	☐ Troubleshooting	☒ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☐ Tier 2

Old part number	New part number	Description	Q'ty	Int	Page	Index	Note
-D0092617	D1292617	GUIDEPLATE:REGISTRATION:UPPER	0-1	X/O	14	3	

Change: The method for attaching the COVER-PAPER DUST REMOVAL & GUIDPLATE:REGISTRATION:UPPER was changed. **See details below.**

Reason: To further strengthen the integrity of the connection.

Current method:
The guide plate is fixed by mounting the ends of the shaft and fixing it in place with spring pressure.

New method:
- Co-fastening ribs were added to the guide plate (index #3 below).
- This guide plate and registration lower guide plate (index #12) are fastened to each other using a screw (after the shaft is attached).
- The length of this fastening screw was increased from 6mm to 8mm (index #102)

RAI (China) Production

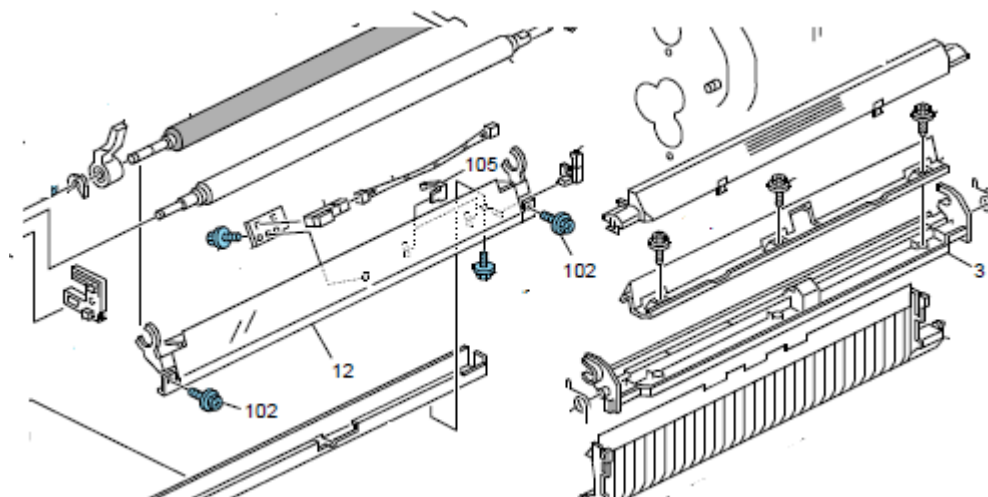| Name	Destination	Product Code	Serial #
Aficio MP 4002	Asia	D129-29	W523MC40001～
Gestetner MP 4002			
Lanier MP 4002			
Aficio MP 4002	Taiwan	D129-19	W524M100001～
Gestetner MP 4002			
Aficio MP 4002	China	D129-21	W523MC10001～
Gestetner: DSm940		D129-25	W523MC20001～
Aficio MP 4002SP	Asia	D129-69	W523MC50001～
Gestetner MP 4002SP			
Lanier MP 4002SP			
Aficio MP 4002SP	Taiwan	D129-59	W523MC00001～
Gestetner MP 4002SP			
Aficio MP 4002SP	China	D129-61	W523MC30001～
Aficio MP 5002	Asia	D130-29	W533MC40001～
Gestetner MP 5002			
Lanier MP 5002			
Aficio MP 5002	Taiwan	D130-19	W534M100001～
Gestetner MP 5002			
Aficio MP 5002	China	D130-21	W533MC10001～
Aficio MP 5002SP	Asia	D130-69	W533MC50001～
Gestetner MP 5002SP			
Lanier MP 5002SP			
Aficio MP 5002SP	Taiwan	D130-59	W533MC00001～
Gestetner MP 5002SP			
Aficio MP 5002SP	China	D130-61	W533MC70001～

Model: AL-C2b	Date: 14-Mar-14	No.: RD129049a

RTB Reissue

The items in **bold italics** were corrected or added.

Subject: Parts change and addition information.	Prepared by: Y.Saitoh
From: 2nd Tech Service Sect., MFP/P Tech Service Dept.	

Classification:	☐ Troubleshooting	☒ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☐ Tier 2

Change/**Reason**: To prevent the cleaning web coming loose, the following parts are changed and newly added to the fusing unit.

[1] Addition of a variable brake on the cleaning web.

[2] Changed the one-way clutch method to ratchet method on the holder roller.

Old part number	New part number	Description	Q'ty	Int	Page	Index	Set	Note
D1294305	D1294304	CLEANING UNIT:ASS'Y	1	X/O	76	*		
AE040099	AE040100	ROLLER: PLATE	1	X/X	76	9	B	
-	D1294331	FLAT NUT:BRAKE	1		76	24**	A	Please refer to [A] for [1]
-	D1294332	BRAKE:WEB	1		76	25**	A	Please refer to [B] for [1]
D0094355	-	ROLLER CLUTCH			76	8		Deleted, please refer to [C]
-	D1294359	BUSHING: ROLLER:PLATE: FRONT	2	X/X	76	26**	B	Please refer to [D] for [2]
-	B0654211	PRESSURE ROLLER GEAR	1		76	27**	B	Please refer to [E] for [2]
-	B1404209	BRACKET: STOPPER:ASS'Y	1		76	28**	B	Please refer to [F] for [2]
-	**D1294309**	**BRAKE:WEB:ASS'Y**	**1**		**76**	**29****		
-	**D0094321**	**STAY:UPPER**	**1**		**76**	**30****		

・**Part number of Fusing Unit doesn't change.**

**: New Index

Model: AL-C2b	Date: 14-Mar-14	No.: RD129049a

33.Fusing Unit 3 (D129/D130)

29** is added.

30** is added.

Part number is changed

Part number is changed

This is deleted.
Instead, 26** and 27** and 28** are added for [2].

24** and 25** are added for [1].
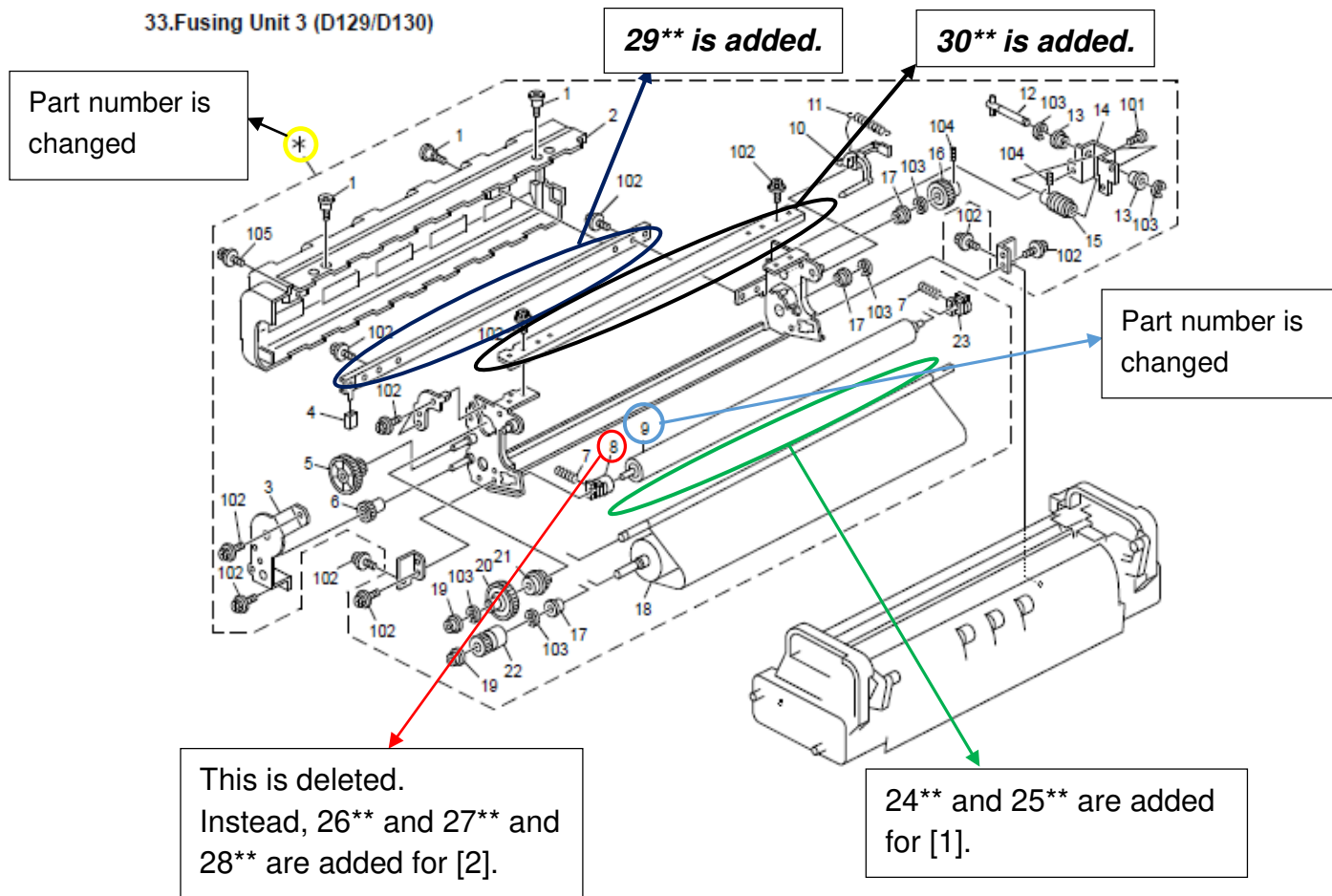
Model: AL-C2b	Date: 14-Mar-14	No.: RD129049a

For details of [1], please refer to the following pictures.

[A] and [B] are the variable brake.
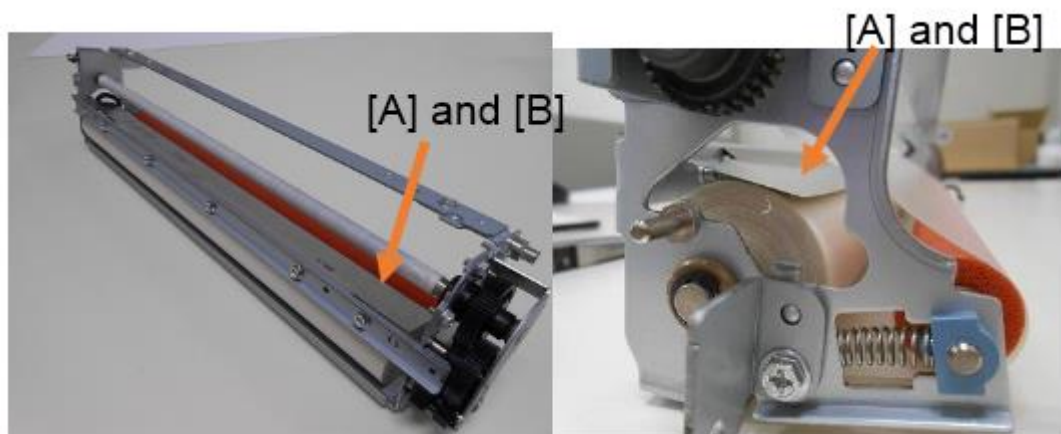
For details of [2], please refer to the following picture.

One-way clutch method was used before.   Ratchet method is used after.

               <One-way clutch method>   <Ratchet method>
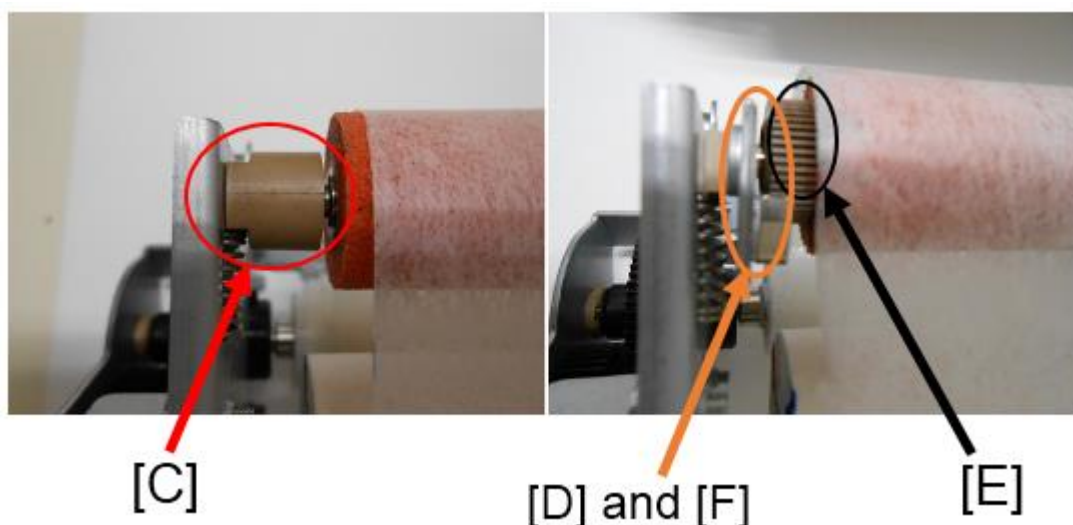
For correspondence on MIF:

Please install a new cleaning unit (p/n: D1294304) when the cleaning web issue occurs, because individual parts are not compatible due to changing of the frame of the fusing unit. After that, individual parts can be replaced.

Model: AL-C2b	Date: 14-Mar-14	No.: RD129049a

RAI (China) Production

Name	Destination	Product Code	Serial #
Aficio MP 4002	Asia	D129-29	W524M140023~
Gestetner MP 4002			
Lanier MP 4002			
Aficio MP 4002	Taiwan	D129-19	W524M100001~
Gestetner MP 4002			
Aficio MP 4002	China	D129-21	W523MC10116~
Gestetner: DSm940		D129-25	W524M120001~
Aficio MP 4002SP	Asia	D129-69	W523MC50142~
Gestetner MP 4002SP			
Lanier MP 4002SP			
Aficio MP 4002SP	Taiwan	D129-59	W524M100010~
Gestetner MP 4002SP			
Aficio MP 4002SP	China	D129-61	W523MC30203~
Aficio MP 5002	Asia	D130-29	W534M140007~
Gestetner MP 5002			
Lanier MP 5002			
Aficio MP 5002	Taiwan	D130-19	W534M100001~
Gestetner MP 5002			
Aficio MP 5002	China	D130-21	W533MC10011~
Aficio MP 5002SP	Asia	D130-69	W534M150001~
Gestetner MP 5002SP			
Lanier MP 5002SP			
Aficio MP 5002SP	Taiwan	D130-59	W534M100002~
Gestetner MP 5002SP			
Aficio MP 5002SP	China	D130-61	W533MC70061~
Ricoh: Aficio MP 5002	NA	D130-91	W533MC22811~
Savin: MP 5002			
Lanier: MP 5002			
Ricoh: Aficio SP 8200DN	NA	M132-17	T424M110004~
Ricoh: Aficio SP 8200DN	EU/Asia	M132-27	T424M130006~
Lanier:SP 8200DN			

Model: AL-C1	Date: 28-Oct-14	No.: RD009071

Subject: Part Catalog Correction	Prepared by: T.Hirakawa
From: 2nd Tech Service Sect., MFP/P Tech Service Dept.	

Classification:	☐ Troubleshooting	☒ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☐ Tier 2

Change/Reason: The index shown below was corrected.

48.Electrical Section 5 (D009/D011/D012/D013)

Model: AL-C1	Date: 27-Jan-15	No.: RD009072

Subject: Parts change and addition information.		Prepared by: A.Ishida
From: 2nd Tech Service Sect., MFP/P Tech Service Dept.		

Classification:	☐ Troubleshooting	☒ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☐ Tier 2

Change/Reason: To prevent the cleaning web from coming loose, the following parts are changed or newly added to the fusing unit.

[1] The addition of a variable brake to the cleaning web.

[2] Changed the one-way clutch method on the holder roller to ratchet method.

Old part number	New part number	Description	Q'ty	Int	Page	Index	Set	Note
D1294305	D1294304	CLEANING UNIT:ASS'Y	1	X/O	76	*		
AE040099	AE040100	ROLLER: PLATE	1	X/X	76	9	B	
-	D1294331	FLAT NUT:BRAKE	1		76	24**	A	Please refer to [A] for [1]
-	D1294332	BRAKE:WEB	1		76	25**	A	Please refer to [B] for [1]
D0094355	-	ROLLER CLUTCH			76	8		Deleted, please refer to [C]
-	D1294359	BUSHING: ROLLER:PLATE: FRONT	2	X/X	76	26**	B	Please refer to [D] for [2]
-	B0654211	PRESSURE ROLLER GEAR	1		76	27**	B	Please refer to [E] for [2]
-	B1404209	BRACKET: STOPPER:ASS'Y	1		76	28**	B	Please refer to [F] for [2]
-	D1294309	BRAKE:WEB:ASS'Y	1		76	29**		
-	D0094321	STAY:UPPER	1		76	30**		

・**Part number of the Fusing Unit does not change.**

**: New Index

Model: AL-C1	Date: 27-Jan-15	No.: RD009072

33.Fusing Unit 3 (D129/D130)
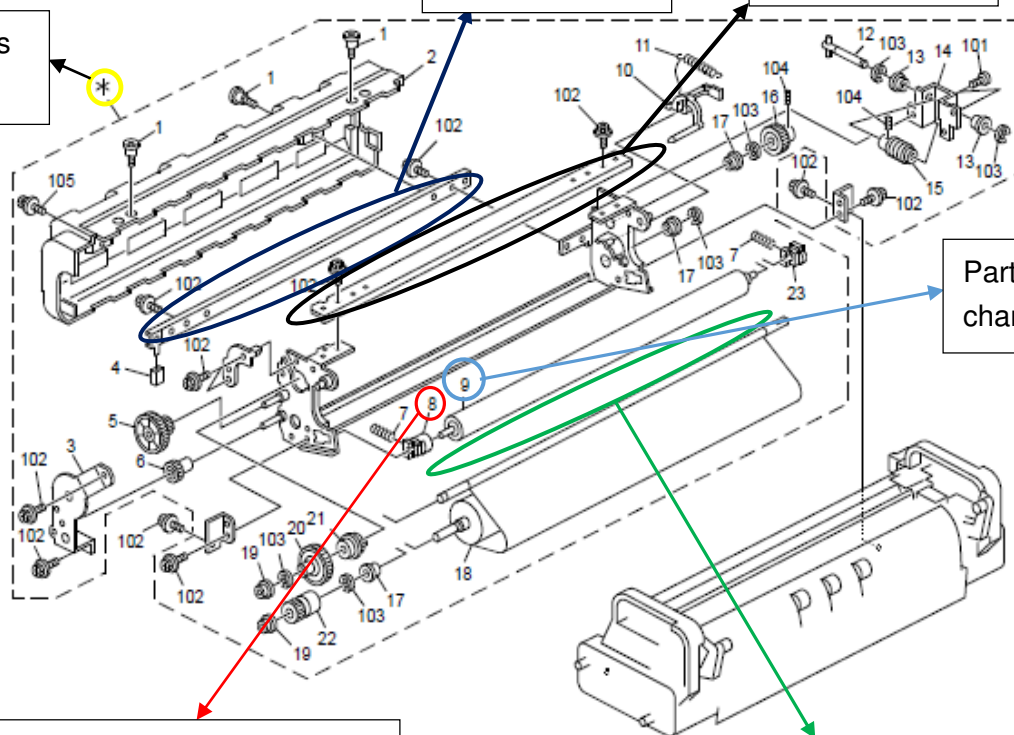
29** is added.

30** is added.

Part number is changed

Part number is changed

This is deleted.
Instead, 26** and 27** and 28** are added for [2].

24** and 25** are added for [1].

[1] Variable brake

[A] and [B] are the variable brake.
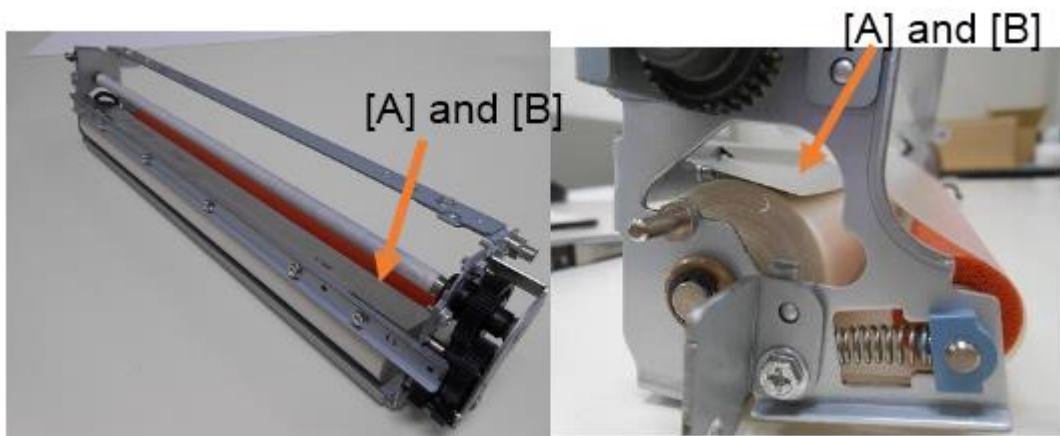
[2]: One way clutch method

One-way clutch method is before.　　Ratchet method is after.

　　　One-way clutch method　　　　　　　Ratchet method

[C]　　　　[D] and [F]　　　[E]
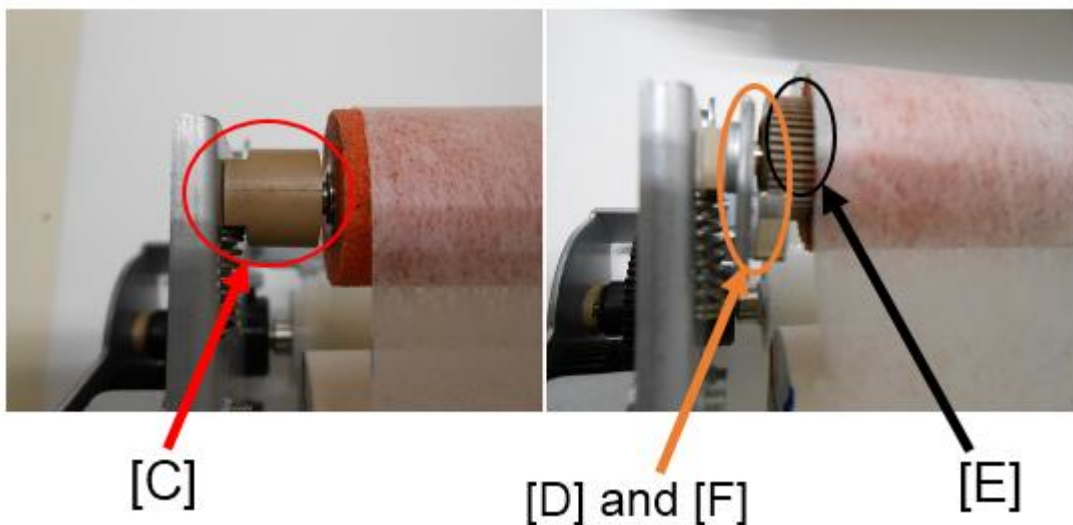
Action to take on MIF:

Please install a new cleaning unit (p/n: D1294304) when a cleaning web issue occurs, because individual parts are not compatible due to modification of a frame on the fusing unit. After that, individual parts can be replaced.

Model: AL-C1	Date: 27-Jan-15	No.: RD009072

RAI (China) Production

Name	Destination	Product Code	Serial #
Aficio MP 4002	Asia	D129-29	W524M140023~
Gestetner MP 4002			
Lanier MP 4002			
Aficio MP 4002	Taiwan	D129-19	W524M100001~
Gestetner MP 4002			
Aficio MP 4002	China	D129-21	W523MC10116~
Gestetner: DSm940		D129-25	W524M120001~
Aficio MP 4002SP	Asia	D129-69	W523MC50142~
Gestetner MP 4002SP			
Lanier MP 4002SP			
Aficio MP 4002SP	Taiwan	D129-59	W524M100010~
Gestetner MP 4002SP			
Aficio MP 4002SP	China	D129-61	W523MC30203~
Aficio MP 5002	Asia	D130-29	W534M140007~
Gestetner MP 5002			
Lanier MP 5002			
Aficio MP 5002	Taiwan	D130-19	W534M100001~
Gestetner MP 5002			
Aficio MP 5002	China	D130-21	W533MC10011~
Aficio MP 5002SP	Asia	D130-69	W534M150001~
Gestetner MP 5002SP			
Lanier MP 5002SP			
Aficio MP 5002SP	Taiwan	D130-59	W534M100002~
Gestetner MP 5002SP			
Aficio MP 5002SP	China	D130-61	W533MC70061~
Ricoh: Aficio MP 5002	NA	D130-91	W533MC22811~
Savin: MP 5002			
Lanier: MP 5002			
Ricoh: Aficio SP 8300DN	NA	M132-17	T424M110004~
Ricoh: Aficio SP 8300DN	EU/Asia	M132-27	T424M130006~
Lanier:SP 8300DN			

Model: AL-C1	Date: 27-Jan-15	No.: RD009073

Subject: Part Catalog Correction	Prepared by: A.Ishida
From: 2nd Tech Service Sect., MFP/P Tech Service Dept.	

Classification:	☐ Troubleshooting	☒ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Product Safety	☐ Other ( )	☐ Tier 2

Change: The part crossed out in the table was deleted.
Reason: The Paper Tray No. 2 Assembly was mentioned twice in the catalog.

Old part number	New part number	Description
B2232901	**D0292900**	PAPER TRAY:NO.2:ASS'Y

20.Paper Tray (D009/D011/D012/D013/D091/D092)

Index No.	Part No.	Description	Q'ty Per Assembly
*	~~B223 2901~~	~~Paper Tray:No.2:Ass'y~~	~~1~~
*	D029 2900	Paper Tray:No.2:Ass'y	1
1	B223 2910	Link - Paper Size Sensor	1
2	B223 2911	Spacer	1
3	B238 2523	Decal - Paper Set Direction No.2	1

Model: AL-P2	Date: 29-Jun -17	No.: RM132023

Subject: Part information	Prepared by: Takuya Hirakawa
From: 1st Tech Service Sect., MFP/P Tech Service Dept.	

Classification:	☐ Troubleshooting	☒ Part information	☐ Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receive	☐ Retrofit information
	☐ Other ( )		

Old part number	New part number	Description	Q'ty	Int	Note
-	**D0911361**	DUCT:RIGHT REAR SIDEWAYS:ALEX:ASS'Y	1		-
-	**D0911362**	DUCT:REAR:ALEX:ASS'Y	1		-

Change: Deodorizing filters were newly added as service parts for the AL-C1/AL-C1.5/AL-C2/AL-P1/AL-P2.

Reason: To meet the requests of customers who may report strange odors on these models.
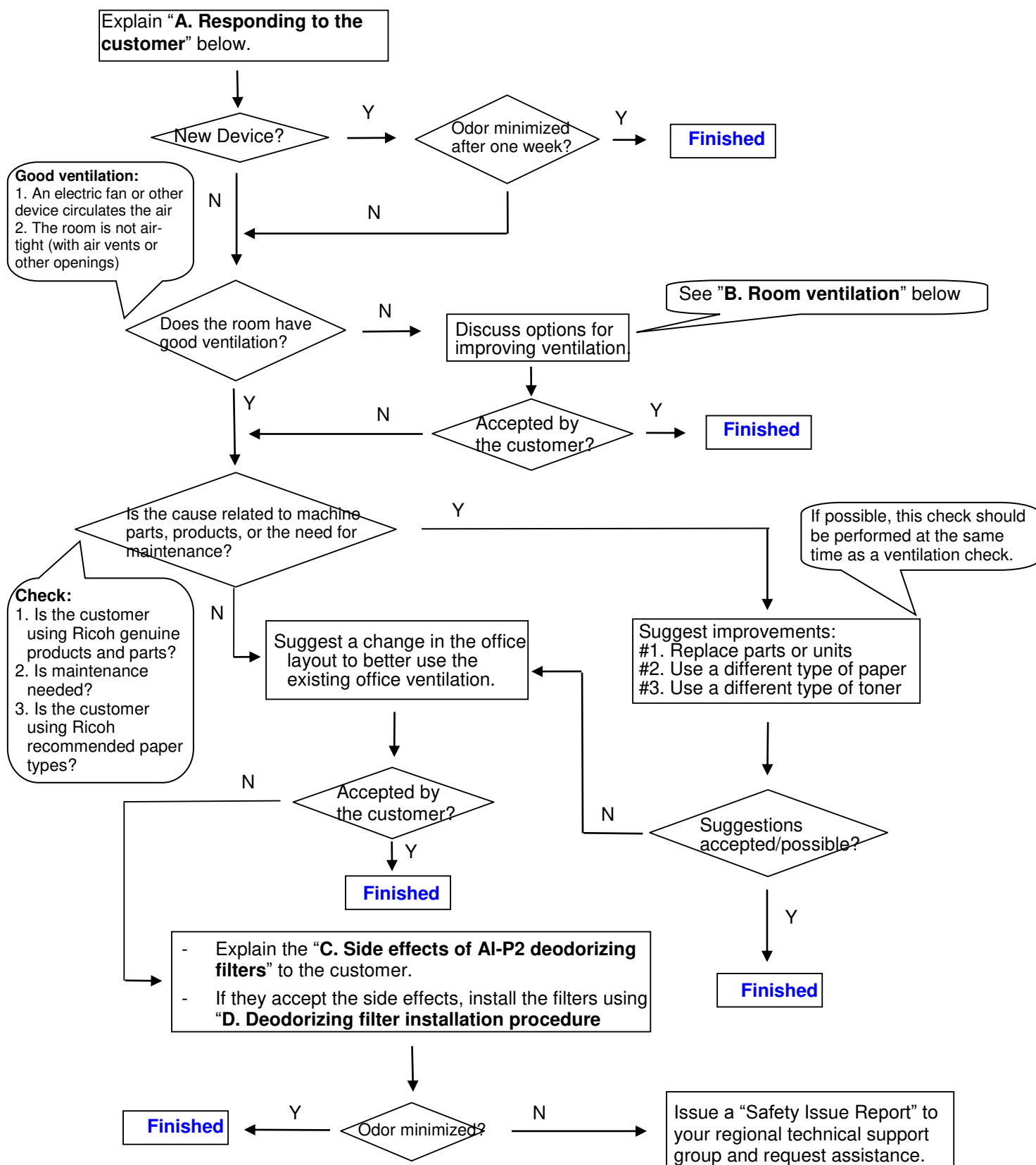
Note:

- In certain installation environments, some customers may have a relatively high sensitivity (low tolerance) to odors.
- The installation procedure and limitations of these filters are included below, as part of the **ACTION IN THE FIELD**.

ACTION IN THE FIELD

If a customer reports a strange odor on the machine, use the **flowchart below** to take the appropriate action.

Flowchart

Explain "**A. Responding to the customer**" below.

New Device? — Y → Odor minimized after one week? — Y → **Finished**

N ↓ / N ↓

Good ventilation:
1. An electric fan or other device circulates the air
2. The room is not air-tight (with air vents or other openings)

Does the room have good ventilation? — N → Discuss options for improving ventilation.

See "**B. Room ventilation**" below

Accepted by the customer? — Y → **Finished**

N / Y

Is the cause related to machine parts, products, or the need for maintenance? — Y →

If possible, this check should be performed at the same time as a ventilation check.

Check:
1. Is the customer using Ricoh genuine products and parts?
2. Is maintenance needed?
3. Is the customer using Ricoh recommended paper types?

N ↓

Suggest a change in the office layout to better use the existing office ventilation.

Suggest improvements:
#1. Replace parts or units
#2. Use a different type of paper
#3. Use a different type of toner

Accepted by the customer? — N / Y → **Finished**

Suggestions accepted/possible? — N / Y → **Finished**

- Explain the "**C. Side effects of Al-P2 deodorizing filters**" to the customer.
- If they accept the side effects, install the filters using "**D. Deodorizing filter installation procedure**

Finished ← Y — Odor minimized? — N → Issue a "Safety Issue Report" to your regional technical support group and request assistance.

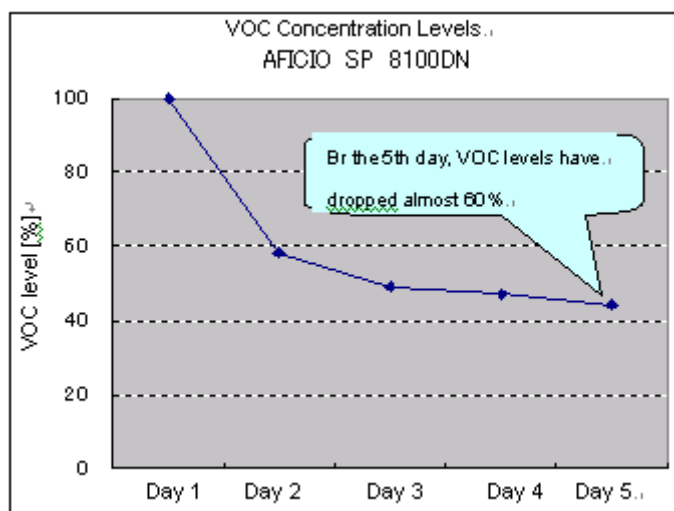| Model: AL-P2	Date: 29-Jun -17	No.: RM132023

Action referenced in the Flowchart above:

A. Responding to the Customer

1. The first step in handling an inquiry about Ricoh device odor is to explain the following to the customer:

   ● Ricoh takes our customers' health and the health of our planet very seriously. This is highlighted by the fact that Ricoh products receive the German "Blue Angel" and Japanese "Eco Mark" certifications. This level of dedication is standard at Ricoh.

   ● This means that a properly used and maintained Ricoh product should never be the source of problems in the office environment, including those related to employee health. However, keeping the device in a small, improperly ventilated space or sitting directly in the path of the exhaust fumes has been reported to cause unpleasant odors, head and throat pain, and general discomfort. Therefore, we strongly urge customers to make sure that their devices are placed in areas with proper ventilation, and that the exhaust is pointed safely away from anyone sitting nearby. Ideally, this should be done during initial installation, but working with existing customers to improve the quality of their office environment should be done whenever possible.

   ● However, brand new devices have a particularly strong odor that might worry some customers. This odor is significantly reduced by the end of the **first week of use**, so please ask for the customer's patience. See Figure 1 below for an example using the Aficio SP 8100DN.

   ● Volatile Organic Compounds (VOC) are particles of the component materials (glues, plastics, chemicals, etc.) that Ricoh devices are built with. VOC are the primary source of the odors produced by Ricoh devices, so tracking VOC levels produced by Ricoh devices is a good indicator of the strength of the odors. Figure 1 shows the VOC levels of a brand new Aficio SP 8100DN during the first 5 days of use. As the graph shows, the amount of VOC has dropped by almost 60%.

Fig. 1

*1: Measurement was performed using a ppbRAE3000 from RAE Systems.
*2: "VOC Level (%)" shows the VOC level on a given day as a percentage of the first day's level. Mathematically, this is expressed as [Level detected on a given day] / [First day's level]

2. After the customer understands the above, work with the customer to ensure that there is enough ventilation and that the Ricoh devices are installed in a safe and proper manner.

Model: AL-P2	Date: 29-Jun -17	No.: RM132023

B. Room ventilation

While Ricoh devices are certified as safe, ventilation in some offices can allow even the safe levels of *VOC produced by Ricoh devices to build to levels that produce strong odors and health effects. In such cases, it is necessary to improve the ventilation of the immediate environment in which the Ricoh device is installed, in order to reduce particle concentration levels.
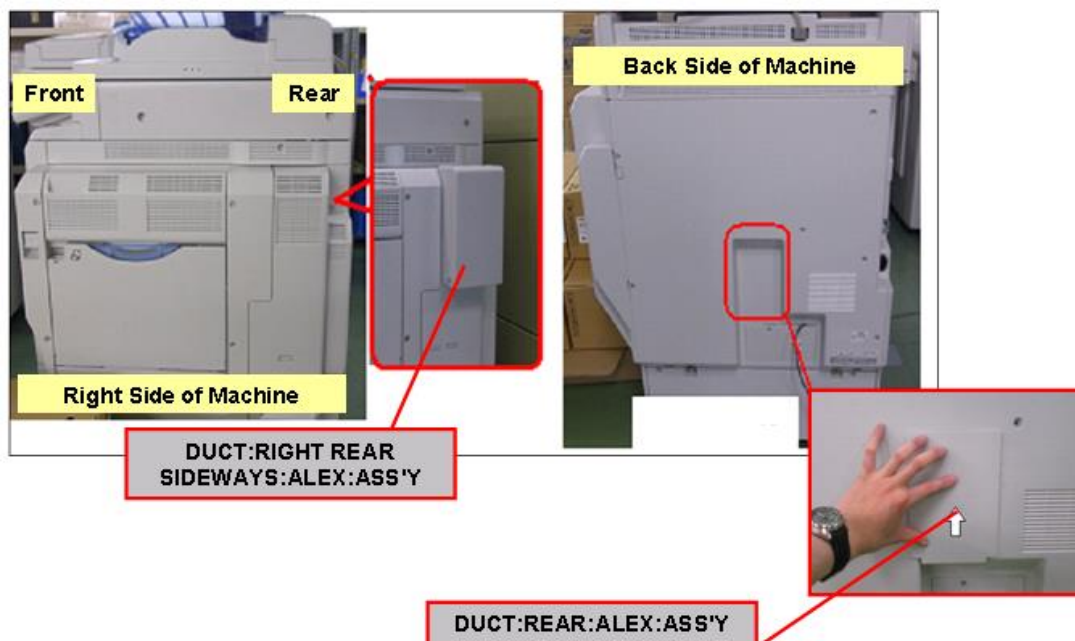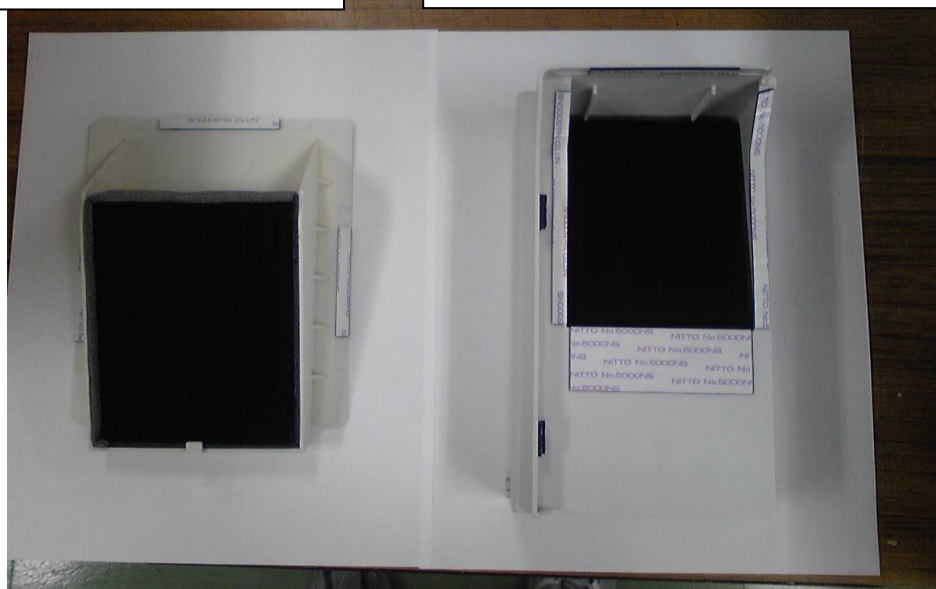
*VOC: **V**olatile **O**rganic **C**ompounds are particles of the component materials (glues, plastics, chemicals, etc.) that Ricoh devices are built with.

C. Deodorizing filter installation procedure

Locations of rear filter and fusing exhaust filter:

DUCT:REAR:ALEX:ASS'Y	DUCT:RIGHT REAR SIDEWAYS:ALEX:ASS'Y

Model: AL-P2	Date: 29-Jun -17	No.: RM132023

Attaching the rear filter:

1. Clean the exterior cover around the rear exhaust area using a cloth.
   Important: Make sure to thoroughly clean the contact area for the double-sided tape.

2. Attach the rear deodorizing filter as shown in the photo below.

Model: AL-P2	Date: 29-Jun -17	No.: RM132023

Attaching the fusing exhaust deodorizing filter:

3. Clean the exterior cover around the fusing exhaust area using a cloth.
   Important: Make sure to thoroughly clean the contact area for the double-sided tape.

4. Attach the fusing exhaust deodorizing filter as shown in the photo below.

D. Limitations of the deodorizing filters

The following limitations exist with these filters:

If the temperature of the installation environment is **29C (84.2F) or higher:**
- Continuous printing/copying should be limited to a maximum of 38 minutes
- The Auto Off Timer should be set to its default value (60 minutes)

This is because when the temperature is this high, the properties and behavior of the toner change, and image quality issues begin to occur.