

Reissued: 01-Dec-15

Model: M-G1a	Date: 25-May-09	No.: RJ017001j
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RTB Reissue

The items in bold italics have been corrected.

Subject: Firmware Release Note: Engine/Controller		Prepared by: Y. Gaman	
From: 1st Tech Service Sect., MFP/Printer Tech Service Dept.			
Classification:	<input type="checkbox"/> Troubleshooting <input type="checkbox"/> Mechanical <input type="checkbox"/> Paper path <input type="checkbox"/> Product Safety	<input type="checkbox"/> Part information <input type="checkbox"/> Electrical <input type="checkbox"/> Transmit/receive <input checked="" type="checkbox"/> Other ()	<input type="checkbox"/> Action required <input type="checkbox"/> Service manual revision <input type="checkbox"/> Retrofit information <input checked="" type="checkbox"/> Tier 2

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

Version	Program No.	Effective Date	Availability of RFU
1.18	J0175622E	July 2015 production	Not available
1.16	J0175622D	March 2012 production	Not available
1.15	J0175622C	August 2011 production	Not available
1.12	J0175622B	March 2011 production	Not available
1.11	J0175622A	January 2011 production	Not available
1.10	J0175622	September 2010 production	Not available
1.06	J0175628D	May 2010 production	Not available
1.05	J0175628C_ce001	January 2010 production	Not available
1.04	J0175628C	December 2009 production	Not available
1.03	J0175628B	November 2009 production	Not available
1.02	J0175628A	July 2009 production	Not available
1.01	J0175628	March 2009 production	Not available
1.00	J0175625	1st Mass production	Not 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
1.18	Symptom corrected: <ul style="list-style-type: none"> - Supports update of the mainframe firmware from Windows 8 and Windows Server 2012. - The notification email may not show the destination addresses depending on the mailer software. - SC974 may occur while printing.
1.16	Other changes: The amount of ink consumed during the automatic maintenance following ink cartridge replacement has been further reduced.
1.15	Symptom corrected: <ol style="list-style-type: none"> 1. Abnormal image is printed out if ink is adhered on the transfer belt and the 1st registration sensor misreads the adhered ink as a paper edge. 2. Under the following conditions, the "Maintenance in process" message does not clear, and the user is unable to use the machine. <ul style="list-style-type: none"> - An ink cartridge is replaced

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Version	Modified Points or Symptom Corrected
	<p>- Then, during the ink cleaning/flushing process, the other color which shares the same print head runs out</p> <ol style="list-style-type: none"> The OS of the PC might notify its error if the printer is connected to the PC via a common USB hub which connects other devices too. The printer cannot be rebooted if the power plug is removed within the first three seconds of "Overwriting" process of firmware update. The printer may not restart printing even after removing the jammed paper. Network connectivity might occasionally fail after power-up. <p>Other changes:</p> <ol style="list-style-type: none"> A new BitSwitch (1-6) has been added. When set to "1", "Auto tray select" will search for a tray by just paper size if it is unable to find a match after searching by both paper size and type.
1.12	<p>Symptom corrected:</p> <ol style="list-style-type: none"> The printer might lose network connectivity until it is rebooted upon reception of non-standard length (too long) DHCP, DNS or LPD messages. Slow or (apparently) stopped printing may occur as a result of the printer failing network autonegotiation when the printer is turned on, after network settings are changed, or at some other timing. The image is not printed onto the paper correctly, due to ink stains on the transport belt (which cause a paper width misdetection). Sometimes after the online key has been pressed, processing message will not disappear even though the machine stopped. An unnecessary message ("or form feed") is displayed when the paper runs out. <p>Other changes:</p> <ol style="list-style-type: none"> To further ensure that proper image quality is maintained, a new auto-maintenance procedure will be performed if the temperature drops 10C or more while the machine is in idle.
1.11	<p>Symptom corrected:</p> <ol style="list-style-type: none"> Printing will not start if the print job is received at the moment the printer shifts to the "Energy Saver" mode. The issue will occur when printing via network or via USB. Printing will not restart until the user opens and closes a cover of the printer. If the driver establishes a connection to a printer within a few minutes of the printer first being turned on (right out of the box), a message telling the user to configure printer Accessories will be displayed and the user will not be able to print until the PC is rebooted. This problem only affected printers connected via USB. In some cases, the "Open Front Cover. Replace Ink Ctrg" display is not cleared after the appropriate cartridge is replaced. If certain SP modes are programmed to a certain value or higher, the machine displays this value incorrectly or does not apply the value. The tenth digit of the date description for SP5200 is displayed incorrectly in the Service Summary report. In some cases, the modified SP default values are not written to the NV-RAM when the firmware is updated. In some cases, the machine can not be fed from paper tray after the paper is

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Version	Modified Points or Symptom Corrected
	<p>running out from manual bypass tray.</p> <ol style="list-style-type: none"> The machine will stops or be jammed frequently after power-on if it is connected to a PC by USB cable which is turned on and proceed more than 2 jobs. SC-973 sometimes occurs during the normal operation. Minor bug fixed. <p>Other changes:</p> <ol style="list-style-type: none"> Presetting mode has been added, so that printer settings can be accessed while error occurred. The error message has been changed when the paper is running out from manual bypass tray. "Paper misfeed Bypass Tray" --> "No paper or misfeed: Bypass " The format of the date used in SP7400, -7401, -7402, -7422, -7423, and -7424, that appears on the Service Summary Report was changed as follows: YY:MM:DD --> YY/MM/DD. The accuracy of the machine clock was further increased. The default for paper feed from the multi bypass tray in cases where there is no paper in the standard and option paper trays was changed to OFF.
1.10	<p>Changed:</p> <ol style="list-style-type: none"> The timing of the ink sending sequence was changed from 30 days of idling to 45 days of idling since the last print job. <p>Symptom corrected:</p> <ol style="list-style-type: none"> The waiting time between jobs increases (sometimes as long as 21 seconds) if the machine receives a new print job just after it finishes the current job. If the machine remains idle for more than one and a half months, and there is not enough ink to perform ink purge, the machine starts printing without performing ink purge, causing poor print quality. In some cases, the main power cannot be turned off after the machine enters Energy Saver mode. In some cases, the machine stalls when the user tries to print A4 sized data onto Monarch or smaller sized paper fed from the multi-bypass tray. <p>Other changes:</p> <ol style="list-style-type: none"> DHCP Option12 will be sent to the DHCP server regardless of whether DDNS is enabled or not. New sections named "Ethernet Link Log" and "Ethernet Link Count" will be added to the "Service Summary" and "System Summary". <ul style="list-style-type: none"> The "Ethernet Link Log" will record instances (in the form of dates) of the ethernet link going down > up. The "Ethernet Link Count" will record the number of times the ethernet link goes down > up Any time the ethernet link goes down > up, the printer will send a gratuitous ARP. Using BitSw 1-5, the printer can be configured to send a Gratuitous ARP every 60 seconds. <ul style="list-style-type: none"> BitSw 1-5 = 0 (default): Inactive BitSw 1-5 = 1: Active

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Model: M-G1a		Date: 25-May-09	No.: RJ017001j
Version	Modified Points or Symptom Corrected		
1.06	<p>Symptoms corrected:</p> <ol style="list-style-type: none"> 1. If the ink end and paper end conditions occur at the same time, the machine will not restart printing even after the ink cartridge and paper are replaced. 2. The machine's automatic maintenance cannot clear the ink tube sticking inside, and SC991 (Ink Pump Time-out Error) occurs. 3. In the case that turning the power off after SC999 (Maintenance Stepping Motor Out of Home Position) occurs, the carriage head continues to crash into the maintenance unit, resulting in a carriage jam. 4. "Energy Saver" is displayed during initial tank filling if the ink cover is already open when the power is turned on and then closed after five minutes or more. 5. SC974, RTC (Real Time Clock) Abnormal, occurs if something metallic or someone touches the parts on the controller board that control the RTC. 6. "Notify by Email" does not work when an SC error occurs. 		
1.05	<p>Symptom corrected:</p> <p>White lines may appear on the printout if a print job is received while the printer is performing belt correction.</p> <p>Note: Belt correction is performed in cases where the machine has gone unused for 10 hours, it removes the "memory" (bending) that develops in the belt itself from staying in the same position for so long.</p>		
1.04	<p>Symptom corrected:</p> <p>The machine unnecessarily performs maintenance if the operator always shuts off the machine without using the main power button, which in turn shortens the yields of the ink cartridge and ink collector unit.</p>		
1.03	<p>Other changes:</p> <p>The term "Level" has changed to "Economy" as follows:</p> <p>Web Image Monitor</p> <ul style="list-style-type: none"> - Level Color -> Economy Color - Black & White/Level Color Total -> Black & White/Economy Color <p>Total</p> <p>Mainframe operation panel</p> <p>"LevClr" -> "EconClr".</p> <p>Page Counter</p> <ul style="list-style-type: none"> - Total Level Color -> Total Economy Color - Total Mono+Level Color -> Total Mono+Economy Color - Level Color Coverage -> Economy Color Coverage - Mono+Level Color Coverage -> Mono+Economy Color Cover. 		
1.02	<p>Symptom corrected:</p> <p>The printer may not respond under the following conditions:</p> <ul style="list-style-type: none"> - A job is sent after the PC recovers from the standby condition - The printer and PC are connected via a USB connection 		
1.01	<p>Symptom corrected:</p> <ol style="list-style-type: none"> 1. The driver configuration settings are not automatically set (the driver configuration screen is displayed as the driver is booting up). 2. The firmware version and counter values cannot be obtained using the version information displayed in the driver screen. 		
1.00	1st Mass production		

Reissued: 28-Feb-12

Model: M-G1b	Date: 25-May-09	No.: RJ017002j
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RTB Reissue

The items in bold italics have been corrected.

Subject: Firmware Release Note: Engine/Controller		Prepared by: Y. Murata	
From: 3rd Tech Service Sect., MFP/Printer Tech Service Dept.			
Classification:	<input type="checkbox"/> Troubleshooting	<input type="checkbox"/> Part information	<input type="checkbox"/> Action required
	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Electrical	<input type="checkbox"/> Service manual revision
	<input type="checkbox"/> Paper path	<input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Retrofit information
	<input type="checkbox"/> Product Safety	<input checked="" type="checkbox"/> Other ()	<input checked="" type="checkbox"/> Tier 2

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

Version	Program No.	Effective Date	Availability of RFU
1.24	J0195628E	March 2012 production	Not available
1.23	J0195628D	August 2011 production	Not available
1.22	J0195628C	April 2011 production	Not available
1.21	J0195628B	January 2011 production	Not available
1.20	J0195628A	October 2010 production	Not available
1.18	J0195628	September 2010 production	Not available
1.16	J0195626D	May 2010 production	Not available
1.15	J0195626C_ce001	January 2010 production	Not available
1.13	J0195626C	December 2009 production	Not available
1.12	J0195626B	November 2009 production	Not available
1.11	J0195626A	July 2009 production	Not available
1.00	J0195624A	1st Mass production	Not 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
1.24	<i>Other changes:</i> <i>The amount of ink consumed during the automatic maintenance following ink cartridge replacement has been further reduced.</i>
1.23	Symptoms corrected: The power requirements displayed in the Properties window for the Windows USB route hub were corrected (incorrect: 100ma, correct: 2ma). If a print job is initiated while the machine is still recovering from Energy Saver mode, the machine displays "Processing..." and immediately stops. If the power plug is removed from the outlet/machine during a firmware update, the machine cannot boot up next time. The machine performs the same auto maintenance several times (it should only be performed once) after the cartridge is replaced. The printer suddenly stops in the middle of a job, and the job cannot be

Reissued: 28-Feb-12

Model: M-G1b	Date: 25-May-09	No.: RJ017002j
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Version	Modified Points or Symptom Corrected
	resumed.
1.22	<p>Symptom corrected:</p> <ol style="list-style-type: none"> 1. The printer might be out of service after firmware update failure. 2. Sometimes after the online key has been pressed, Processing message will not disappear even though the machine stopped. 3. The image is not printed onto the paper correctly, due to ink stains on the transport belt (which cause a paper width misdetection). <p>Other changes:</p> <ol style="list-style-type: none"> 1. An unnecessary message ("or form feed") is displayed when the paper runs out. 2. To further ensure that proper image quality is maintained, a new auto-maintenance procedure will be performed if the temperature drops 10C or more while the machine is in idle.
1.21	<p>Symptom corrected:</p> <ol style="list-style-type: none"> 1. In some cases, the machine can not be fed from paper tray after the paper is running out from manual bypass tray. 2. The machine will stops or be jammed frequently after power-on if it is connected to a PC by USB cable which is turned on and proceed more than 2 jobs. 3. SC-973 sometimes occurs during the normal operation. 4. Minor bug fixed. <p>Other changes:</p> <ol style="list-style-type: none"> 1. Presetting mode has been added, so that printer settings can be accessed while error occurred. 2. The error message has been changed when the paper is running out from manual bypass tray. "Paper misfeed Bypass Tray" --> "No paper or misfeed: Bypass"
1.20	<p>Symptom corrected:</p> <ol style="list-style-type: none"> 1. Printing will not start if the print job is received at the moment the printer shifts to the "Energy Saver" mode. The issue will occur when printing via network or via USB. Printing will not restart until the user opens and closes a cover of the printer. 2. Jobs without any PjL commands might cause the device to stall. Before this stall, part of the document is printed containing random anomalies. 3. The printer stalls if it receives 256 PCL jobs in a row without a power cycle or without receiving a job of another PDL. 4. If the driver establishes a connection to a printer within a few minutes of the printer first being turned on (right out of the box), a message telling the user to configure printer Accessories will be displayed and the user will not be able to print until the PC is rebooted. This problem only affected printers connected via USB. 5. In some cases, the "Open Front Cover. Replace Ink Ctrg" display is not cleared after the appropriate cartridge is replaced. 6. If certain SP modes are programmed to a certain value or higher, the machine displays this value incorrectly or does not apply the value. 7. The tenth digit of the date description for SP5200 is displayed incorrectly in the Service Summary report.

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Model: M-G1b			Date: 25-May-09	No.: RJ017002j
Version	Modified Points or Symptom Corrected			
	<p>8. In some cases, the modified SP default values are not written to the NV-RAM when the firmware is updated.</p> <p>Other changes:</p> <ol style="list-style-type: none"> 1. The format of the date used in SP7400, -7401, -7402, -7422, -7423, and -7424, that appears on the Service Summary Report was changed as follows:YY:MM:DD --> YY/MM/DD. 2. The accuracy of the machine clock was further increased. 3. The default for paper feed from the multi bypass tray in cases where there is no paper in the standard and option paper trays was changed to OFF. 			
1.18	<p>Changed:</p> <ol style="list-style-type: none"> 1. The timing of the ink sending sequence was changed from 30 days of idling to 45 days of idling since the last print job. <p>Symptom corrected:</p> <ol style="list-style-type: none"> 1. The waiting time between jobs increases (sometimes as long as 21 seconds) if the machine receives a new print job just after it finishes the current job. 2. If the ink runs out in the middle of a job, the machine may not resume printing after the ink cartridge is replaced. 3. If the machine remains idle for more than one and a half months, and there is not enough ink to perform ink purge, the machine starts printing without performing ink purge, causing poor print quality. 4. If a jam and other error (cover open or unit unset) occur simultaneously, the jam error may not be cleared even after the jammed paper is removed. 5. In some cases, the main power cannot be turned off after the machine enters Energy Saver mode. <p>Other changes:</p> <ol style="list-style-type: none"> 1. New sections named "Ethernet Link Log" and "Ethernet Link Count" will be added to the "Service Summary" and "System Summary". <ul style="list-style-type: none"> - The "Ethernet Link Log" will record instances (in the form of dates) of the ethernet link going down > up. - The "Ethernet Link Count" will record the number of times the ethernet link goes down > up 2. Using BitSw 1-5, the printer can be configured to send a Gratuitous ARP every 60 seconds. <ul style="list-style-type: none"> - BitSw 1-5 = 0 (default): Inactive - BitSw 1-5 = 1: Active 			
1.16	<p>Symptom corrected:</p> <ol style="list-style-type: none"> 1. SC974, RTC (Real Time Clock) Abnormal, occurs if something metallic or someone touches the parts on the controller board that control the RTC. 2. If the ink end and paper end conditions occur at the same time, the machine will not restart printing even after the ink cartridge and paper are replaced. 3. The machine's automatic maintenance cannot clear the ink tube sticking inside, and SC991 (Ink Pump Time-out Error) occurs. 4. In the case that turning the power off after SC999 (Maintenance Stepping Motor Out of Home Position) occurs, the carriage head continues to crash into the maintenance unit, resulting in a carriage jam. 5. "Energy Saver" is displayed during initial tank filling if the ink cover is already open when the power is turned on and then closed after five minutes or 			

Reissued: 28-Feb-12

Model: M-G1b	Date: 25-May-09	No.: RJ017002j
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Version	Modified Points or Symptom Corrected
	more.
1.15	<p>Symptom corrected: White lines may appear on the printout if a print job is received while the printer is performing belt correction.</p> <p>Note: Belt correction is performed in cases where the machine has gone unused for 10 hours, it removes the "memory" (bending) that develops in the belt itself from staying in the same position for so long.</p>
1.13	<p>Symptom corrected: The machine unnecessarily performs maintenance if the operator always shuts off the machine without using the main power button, which in turn shortens the yields of the ink cartridge and ink collector unit.</p>
1.12	<p>Symptom corrected: 1. The printer stalls if network connectivity is lost during printing (for example if the LAN cable is unplugged).</p> <p>Other changes: The term "Level" has changed to "Economy" as follows: Web Image Monitor <ul style="list-style-type: none"> - Level Color -> Economy Color - Black & White/Level Color Total -> Black & White/Economy Color Total Mainframe operation panel "LevClr" -> "EconClr". Page Counter <ul style="list-style-type: none"> - Total Level Color -> Total Economy Color - Total Mono+Level Color -> Total Mono+Economy Color - Level Color Coverage -> Economy Color Coverage - Mono+Level Color Coverage -> Mono+Economy Color Cover. </p>
1.11	<p>Symptom corrected:</p> <p>The printer may not respond under the following conditions: <ul style="list-style-type: none"> - A job is sent after the PC recovers from the standby condition - The printer and PC are connected via a USB connection </p>
1.00	1st Mass production

Model: M-G1a/M-G1b		Date: 27-Jul-09	No.: RJ017003
Subject: "Printing does not start with USB connection"		Prepared by: Y. Murata	
From: 1st Tech. Support Sec. Service Support Dept.			
Classification:	<input checked="" type="checkbox"/> Troubleshooting <input type="checkbox"/> Mechanical <input type="checkbox"/> Paper path <input type="checkbox"/> Other ()	<input type="checkbox"/> Part information <input type="checkbox"/> Electrical <input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Action required <input type="checkbox"/> Service manual revision <input type="checkbox"/> Retrofit information <input checked="" type="checkbox"/> Tier2

Symptom

The printer may not respond under the following conditions:

- A job is sent after the PC recovers from the standby condition.
- The printer and PC are connected via a USB connection

Cause

Software bug

Solution

Production line:

The firmware has been modified and applied to machines in production.

Modified firmware:

Model M-G1a: **V1.02**

Model M-G1b: **V1.11**

In the field:

Printing will begin after you do any one of the following actions:

- Remove/re-insert the USB cable
- Turn the printer main power off/on.
- Reboot the computer.

Cut-in serial numbers

Model Code	Model Name	Product Name	Cut-in Serial Number
J017-17	M-G1a	GX e3300N (NA_Ricoh)	R5198000001~
J017-22	M-G1a	GX e3300N (EU_Others)	R5197900061~
J017-27	M-G1a	GX e3300N (EU_Ricoh)	R5197900150~
J019-17	M-G1b	GX e3350N (NA_Ricoh)	R5298000001~
J019-22	M-G1b	GX e3350N (EU_Others)	R5297900099~
J019-27	M-G1b	GX e3350N (EU_Ricoh)	R5297900221~

Reissued:26-Aug-09

Model: M-G1	Date: 6-Aug-09	No.: RJ017004a
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RTB Reissue

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

Subject: NV-RAM cannot be replaced		Prepared by: Y. Murata	
From: 1st Tech. Support Sec. Service Support Dept.			
Classification:	<input checked="" type="checkbox"/> Troubleshooting <input type="checkbox"/> Mechanical <input type="checkbox"/> Paper path <input type="checkbox"/> Other ()	<input type="checkbox"/> Part information <input type="checkbox"/> Electrical <input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Action required <input type="checkbox"/> Service manual revision <input type="checkbox"/> Retrofit information <input checked="" type="checkbox"/> Tier2

Important Note Regarding the NV-RAM on GelSprinter Models

- On GelSprinter models, the NV-RAM on the main board **cannot be replaced individually** in the field. If the NV-RAM is defective, **replace the entire printer.**

Reason:

The "Plug and Play" value cannot be set in the field (this can only be done at the factory).

Note: If you replace the NV-RAM individually, the Japanese model name will appear on the System Summary Sheet.

- **Delete** the NV-RAM replacement procedure (pg. 95 - 97) from the Service Manual.

Reissued:02-Jul-10

Model: M-G1	Date: 29-Jan-10	No.: RJ017005a
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RTB Reissue

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

Subject: Unnecessary Ink Purge		Prepared by: K. Nakano	
From: 2nd Overseas Tech. Support Sec., 2nd PQM Dept.			
Classification:	<input checked="" type="checkbox"/> Troubleshooting	<input type="checkbox"/> Part information	<input type="checkbox"/> Action required
	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Electrical	<input type="checkbox"/> Service manual revision
	<input type="checkbox"/> Paper path	<input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Retrofit information
	<input type="checkbox"/> Other ()		<input checked="" type="checkbox"/> Tier2

SYMPTOM

The machine unnecessarily performs "ink purge*" if the operator always shuts off the machine without using the main power button, which in turn shortens the yields of the ink cartridge and ink collector unit.

This symptom occurs only on model M-G1 and does not occur on other GelSprinter models.

*Ink purge: Since the ink tube is not perfectly air-tight, the longer that the ink is left to stagnate inside the tube, the greater tendency there is for air bubbles to form in the ink, which in turn leads to ink leakage. To clear out these air bubbles, the machine pumps new ink through the lines, pushing the air bubbles into the head tank, a sequence known as "ink purge". Each time ink is purged this way, approximately 10% of the ink in an M-sized cartridge is consumed, and 10% of the capacity of the ink collector unit is used.

CAUSE

Unnecessary ink purge is caused by incorrect way of turning off the printer (e.g., the operator turns the power tree/switched outlet off).

The firmware was designed to perform ink purge if the ink supply pump has been idling for more than 30 days. Idling period of the ink supply pump is calculated as follows.

1) When the power is ON:

- Machine refers to its internal clock.
- Machine resets the ink supply pump period when the ink supply tank is rotated due to printing or/and maintenance.

2) When the power is OFF:

1. Machine stores the ink supply pump period to NV-RAM.
2. Power off period is calculated from "Power on date" and "Power off date (stored to NV-RAM when power is off)" at next power on.
3. Power off period is added to ink supply tank idling period at next power on.

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Model: M-G1

Date: 29-Jan-10

No.: RJ017005a

However, if the machine loses power in any way other than the operator turning the main power switch off, "power off date" is not stored in the NV-RAM. In these cases, the last date that was successfully stored in the NV-RAM is used as the starting point. As a result, ink purge is performed every time the machine is turned on if the ink supply pump idling period is more than 30 days.

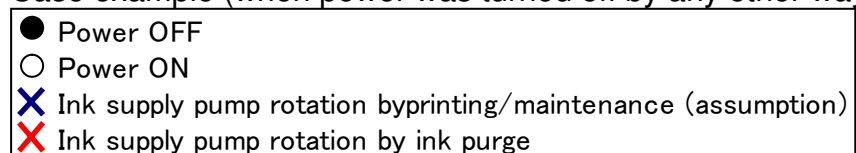
SOLUTION

Changed the calculation formula of the power off period as follows.

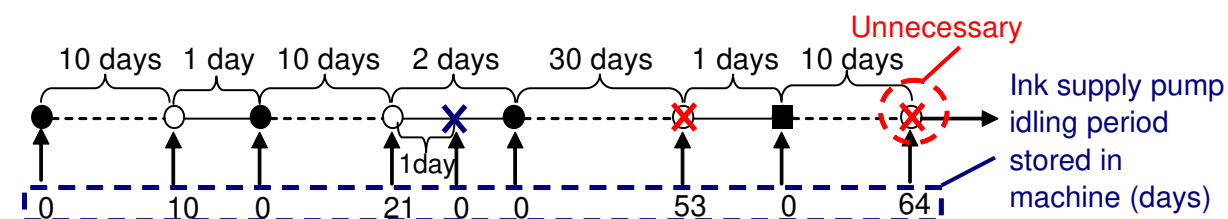
Old: [Power ON date - Power OFF date (stored at power off)]

New: [Power ON date - Date of last time the ink supply pump was rotated (stored in a timely manner)]

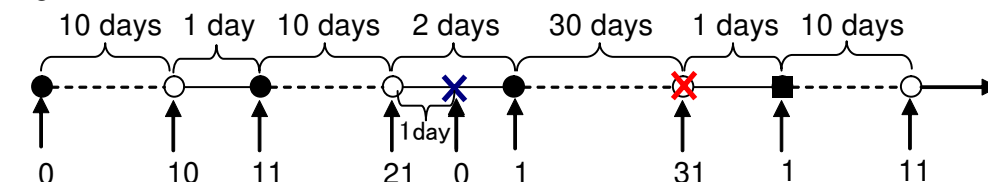
Case example (when power was turned off by any other way than the power button)



Old:



New:



Note: Ink purge will be performed when the monthly print volume is under 10 pages (5% chart at 3P/J) because the ink pump does not rotate for such a low print volume. Therefore, for customers who make mainly black and white printouts, the color ink pumps will not rotate, and the ink purge will be initiated for the color pumps.

Production line:

The following modified firmware is applied to the production line from December 2009.

Model Name	Model Code	Firmware version
M-G1a	J017	V1.04 or later
M-G1b	J019	V1.13 or later

Reissued:02-Jul-10

Model: M-G1	Date: 29-Jan-10	No.: RJ017005a
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In the field:

1. ***If you receive a call, determine whether the symptom described above is occurring, or whether the machine is operating according to specification. To do this, use the GJ analysis tool. * Please refer to the Appendix A below for how to use the tool.***

****The tool can be downloaded by the same way as for firmware.***

2. If you determine that ***the symptom is occurring on the machine in question***, advise the user to try updating to the modified firmware version mentioned below.
3. Also, please reinforce that the machine power should always be turned off using the main power button. (Product quality cannot be guaranteed when the machine is turned off using any other method).

CUT-IN SERIAL NUMBERS

Model Name	Model Code	Cut-in Serial Number
M-G1a	J017-17	R51983xxxxx~
M-G1a	J017-22/-27	R5198400001~
M-G1b	J019-17	R52983xxxxx~
M-G1b	J019-22/-27	R5298400001~

Reissued:02-Jul-10

Model: M-G1

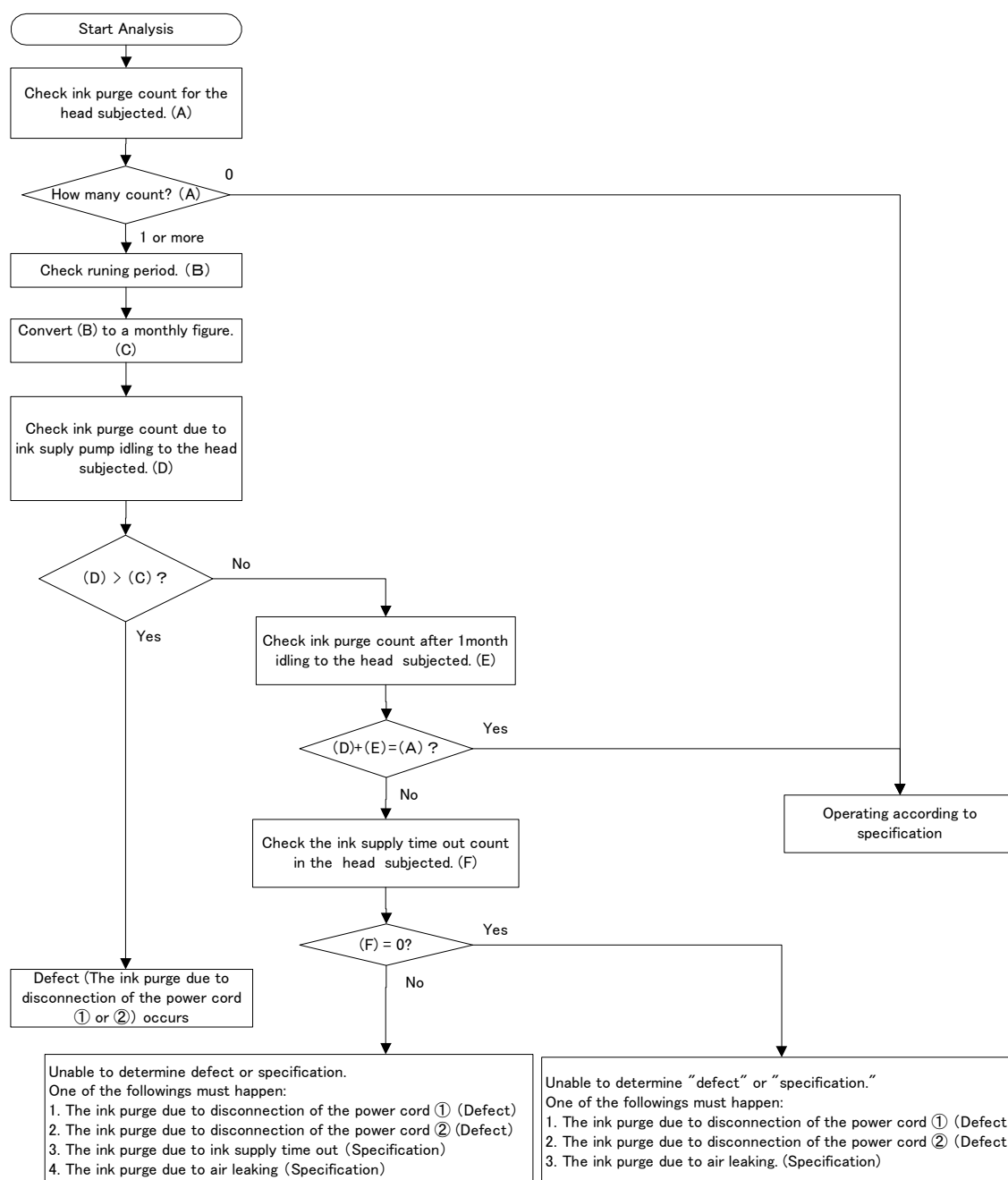
Date: 29-Jan-10

No.: RJ017005a

APPENDIX A

Analysis procedure flowchart

- Do the following for each print head.
- Use the CSV file contained in the GJ analysis tool.



Note: Please refer to Appendix B for more details of each ink purge.

Reissued:02-Jul-10

Model: M-G1	Date: 29-Jan-10	No.: RJ017005a
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Values [A]–[F] mentioned in the flowchart

Examples of values [A]–[F] mentioned in the flowchart appear in **red/bold** below.

• **[A]: Ink purge count**

No.	Large Item	Middle Item	Small Item		
4 • 177	Maintenance data <T-G1/Pi-G1/M-G1>	Ink purge count	Head1	0	times
4 • 178			Head2	1	times

• **[B]: Running period**

No.	Large Item	Middle Item	Small Item		
1 • 7	Basic information	Running period		8	days

• **[C]: [B] converted to a monthly figure**

No.	Large Item	Middle Item	Small Item		
1 • 7	Basic information	Running period		0	days

Note: In this case, $8/30 = 0.2666$, which is rounded down to **0**.

• **[D]: Ink purge count due to ink supply pump idling**

No.	Large Item	Middle Item	Small Item		
4 • 58	Maintenance data <T-G1/Pi-G1/M-G1>	Ink purge due to ink supply pump idling	Head1	1	times
4 • 59			Head2	2	times

• **[E]: Ink purge count after an idling period of one month**

No.	Large Item	Middle Item	Small Item		
4 • 163	Maintenance data <T-G1/Pi-G1/M-G1>	Ink purge count after 1 month idling	Head1	1	times
4 • 164			Head2	2	times

• **[F]: Ink supply time out count**

No.	Large Item	Middle Item	Small Item		
7 • 12	Air input data	Ink supply time out count	Head Tank 1	2	times
7 • 13			Head Tank 2	0	times
7 • 14			Head Tank 3	3	times
7 • 15			Head Tank 4	4	times

Reissued:02-Jul-10
Model: M-G1
Date: 29-Jan-10
No.: RJ017005a

APPENDIX B

Purpose and operational conditions for each type of ink purge

No.	Types	Purposes	Necessary conditions	Operate Timing	Data Availability	Note	Details
1	Ink purge due to ink supply pump idling	<ul style="list-style-type: none"> ■ To clear viscosity increased ink that may exist inside the tube during idling. ■ To clear out air bubbles generated in the ink tube. 	The ink supply pump has been idle for 30 days or more.	At power on	Available		See page 7.
2	Ink purge after 1 month idling	(Same as #1 above)	30 days or more have passed since the last print job or ink purge was performed.	When printing starts	Available		See page 7.
3	Ink purge due to the ink supply time out	To clear air bubbles out of the ink tube by making the ink supply pump run in reverse.	The ink supply pump fails to run in reverse after ink supply time-out is detected.	When the cartridge is replaced	Not available Note: The ink supply time-out count is available.	Ink supply time-out occurs when the ink level feelers do not detect "ink full" even though the machine has tried to supply ink for a certain period of time.	See page 8.
4	Ink purge due to air leaking	To reform negative pressure inside the head tank.	An air leak is detected within 24 hours of an ink purge being performed.	At power on, when the cartridge is replaced, or when a jam is cleared	Not available	In the case air bubbles appears in the head tank, the machine performs this ink purge (instead of an air purge filling). This is because the air purge filling uses the sensor pins in the head tank to detect the ink full condition, and these sensors cannot detect the bubbles.	See page 8.
5	Ink purge due to disconnection of the power cord (1)	(Defect)	The ink supply pump has been idle for 30 days or more.	At power on (within 24 hours of ink purge due to ink supply pump idling)	Not available	If the user turns off the machine incorrectly, such as pulling the power cord out of the outlet, the date/time of the most recent ink pump operation will not be stored in the NV-RAM. This causes the machine to incorrectly recognize the second latest one as the latest one. As a result, an ink purge will be performed again when 30 or more days pass since the second latest operation of the ink supply pump.	See page 9.
6	Ink purge due to pulling the plug out (2)	(Defect)	The air input flag has been raised but there is no history of an ink purge having been performed.	Powering on (more than 24 hours have passed since the last ink purge due to ink supply pump idling)	Not available	The mechanism is the same as #5 above, except that the occurrence timing is not within 24 hours of an ink purge due to ink supply pump idling, but rather after 24 hours have passed.	See page 10.

Reissued:02-Jul-10

Model: M-G1

Date: 29-Jan-10

No.: RJ017005a

Fig. 1: Ink purge due to ink supply pump idling

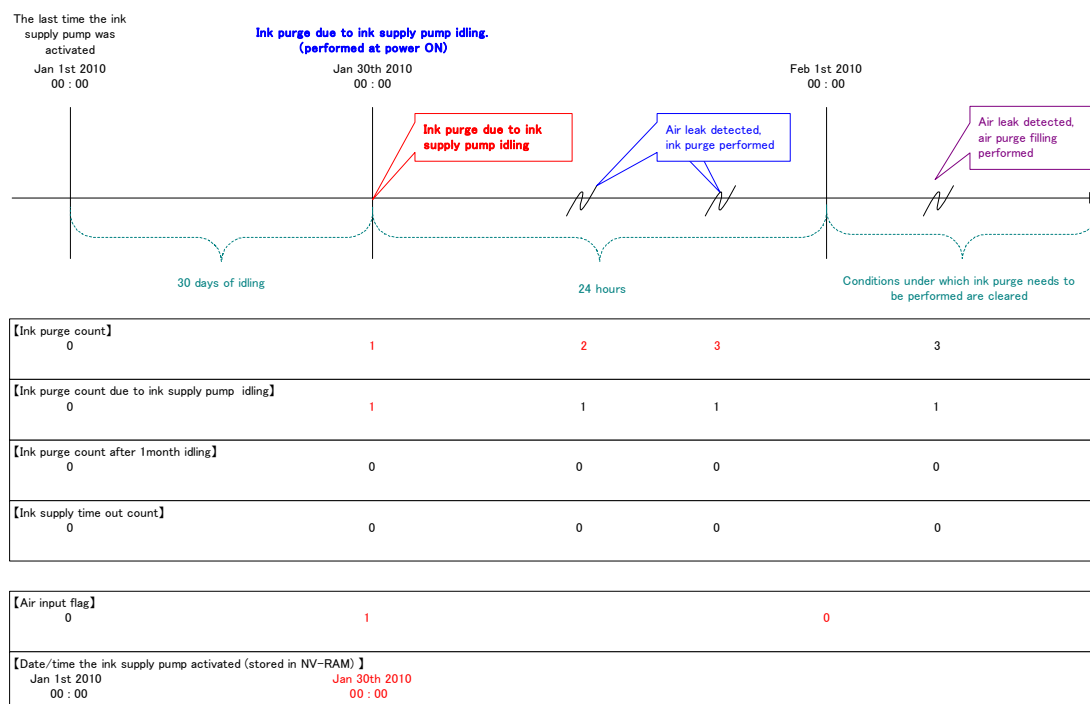
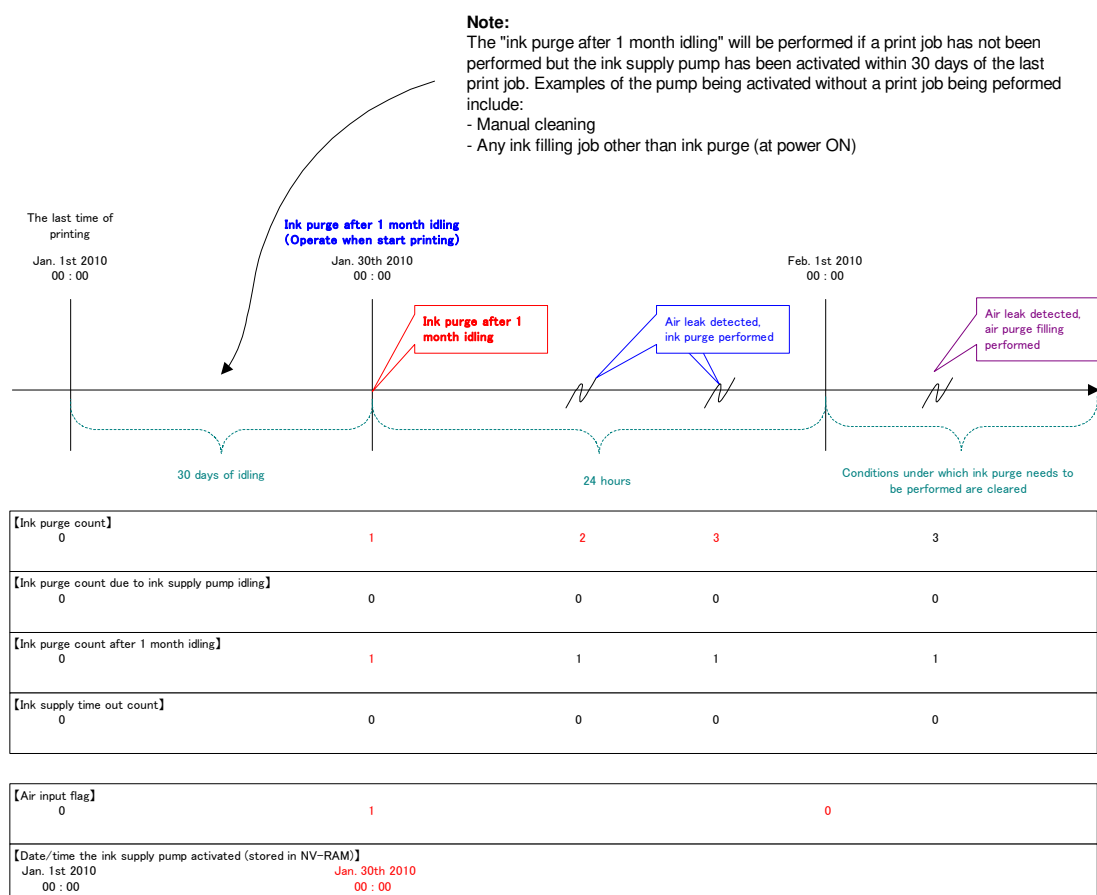


Fig. 2: Ink purge after 1 month idling



Reissued:02-Jul-10

Model: M-G1

Date: 29-Jan-10

No.: RJ017005a

Fig. 3: Ink purge due to ink supply timeout

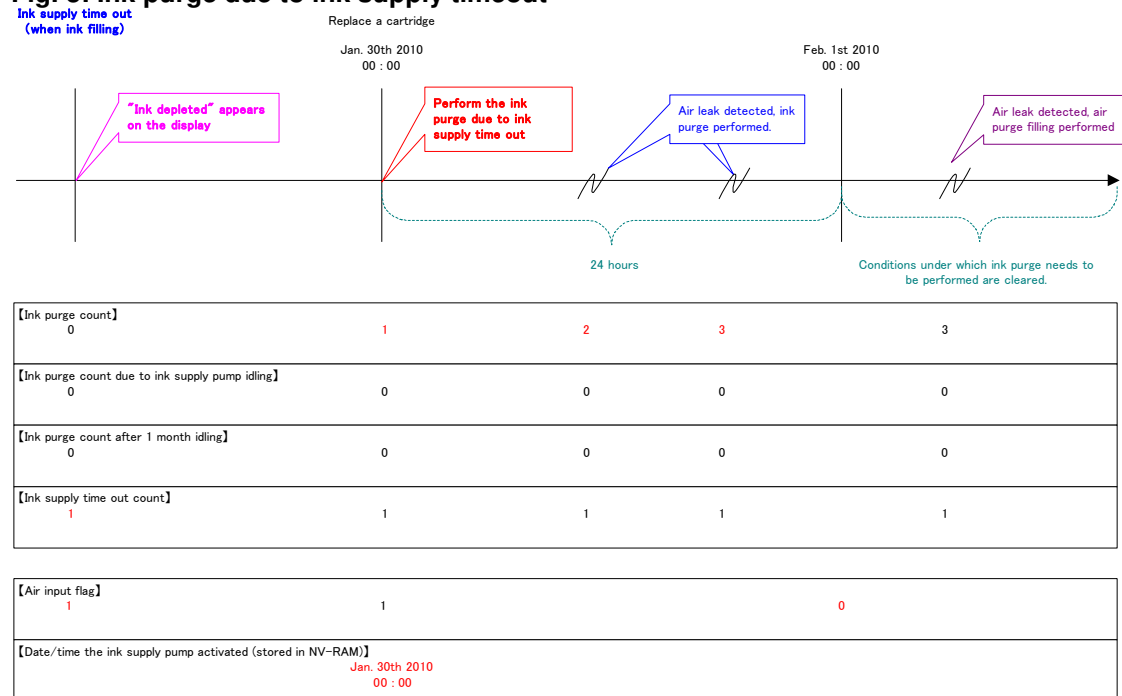
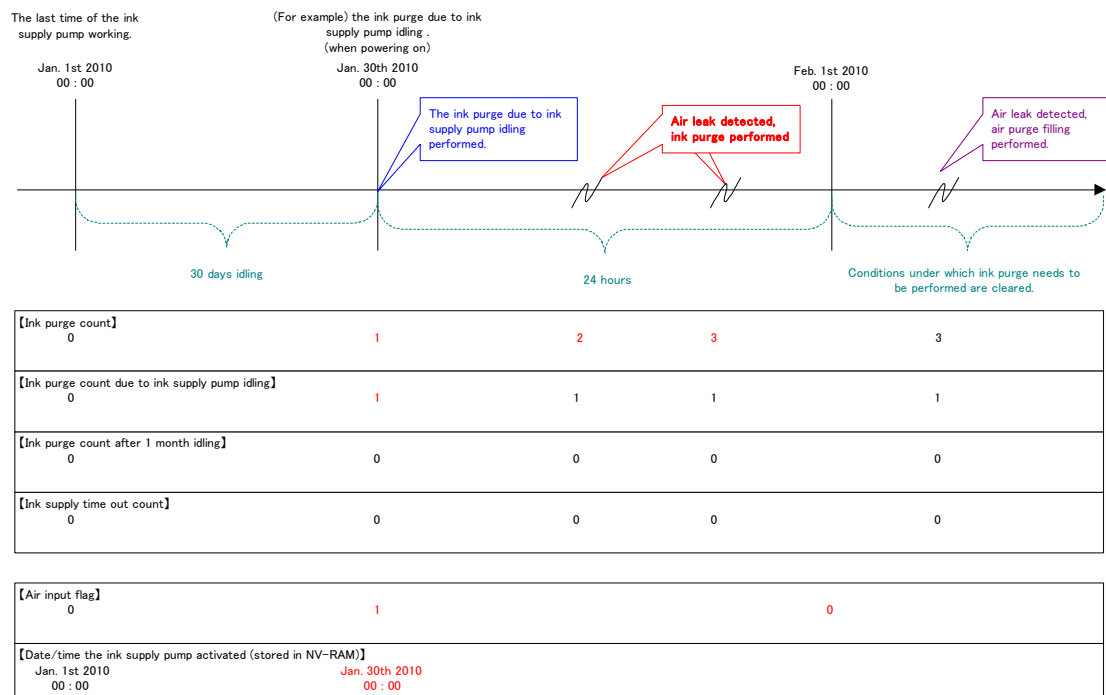


Fig. 4: Ink purge due to an air leak



Reissued:02-Jul-10

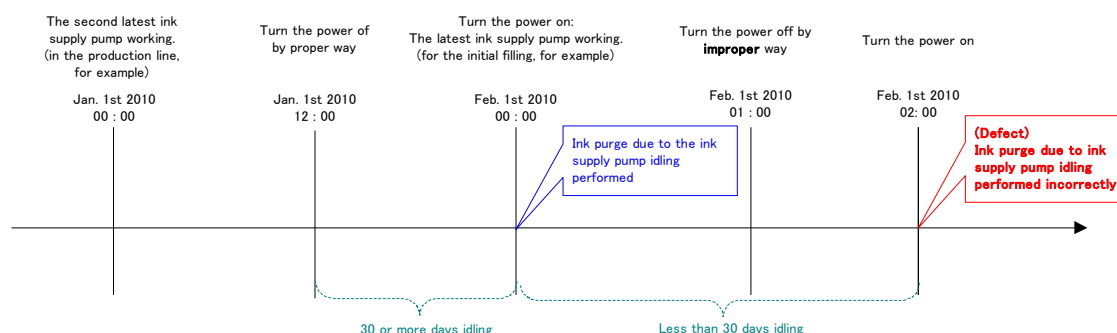
Model: M-G1

Date: 29-Jan-10

No.: RJ017005a

Fig. 5: Ink purge due to disconnection of the power cord (1)

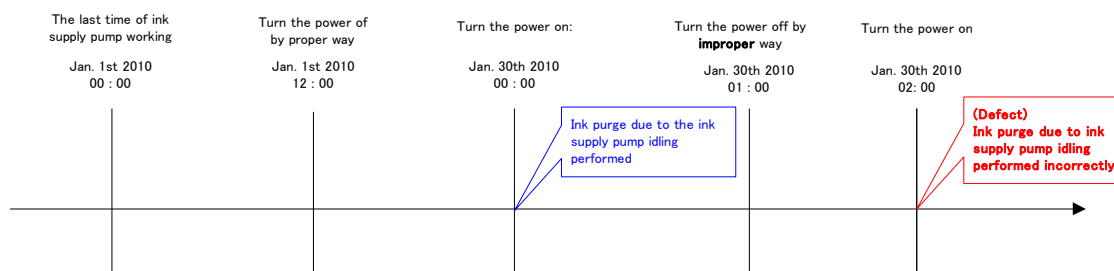
- If the power cord is removed after initial ink filling:



【Ink purge count】	0	0	0	0	1
【Ink purge count due to ink supply pump idling】	0	0	0	0	1
【Ink purge count after 1 month idling】	0	0	0	0	0
【Ink supply time out count】	0	0	0	0	0

【Air input flag】	0	0	0	0	1
【Date/time the ink supply pump activated (stored in NV-RAM)】	— — : —	Jan. 1st 2010 00 : 00	Feb. 1st 2010 00 : 00	Jan. 1st 2010 00 : 00	Feb. 1st 2010 02 : 00

- If the power cord is removed after ink purge due to ink supply pump idling is performed:



【Ink purge count】	0	0	1	1	2
【Ink purge count due to ink supply pump idling】	0	0	1	1	1
【Ink purge count after 1 month idling】	0	0	0	0	0
【Ink supply time out count】	0	0	0	0	0

【Air input flag】	0	0	1	1	1
【Date/time the ink supply pump activated (stored in NV-RAM)】	— 00 : 00	Jan. 1st 2010 00 : 00	Jan. 30th 2010 00 : 00	Jan. 1st 2010 00 : 00	Jan. 30th 2010 02 : 00

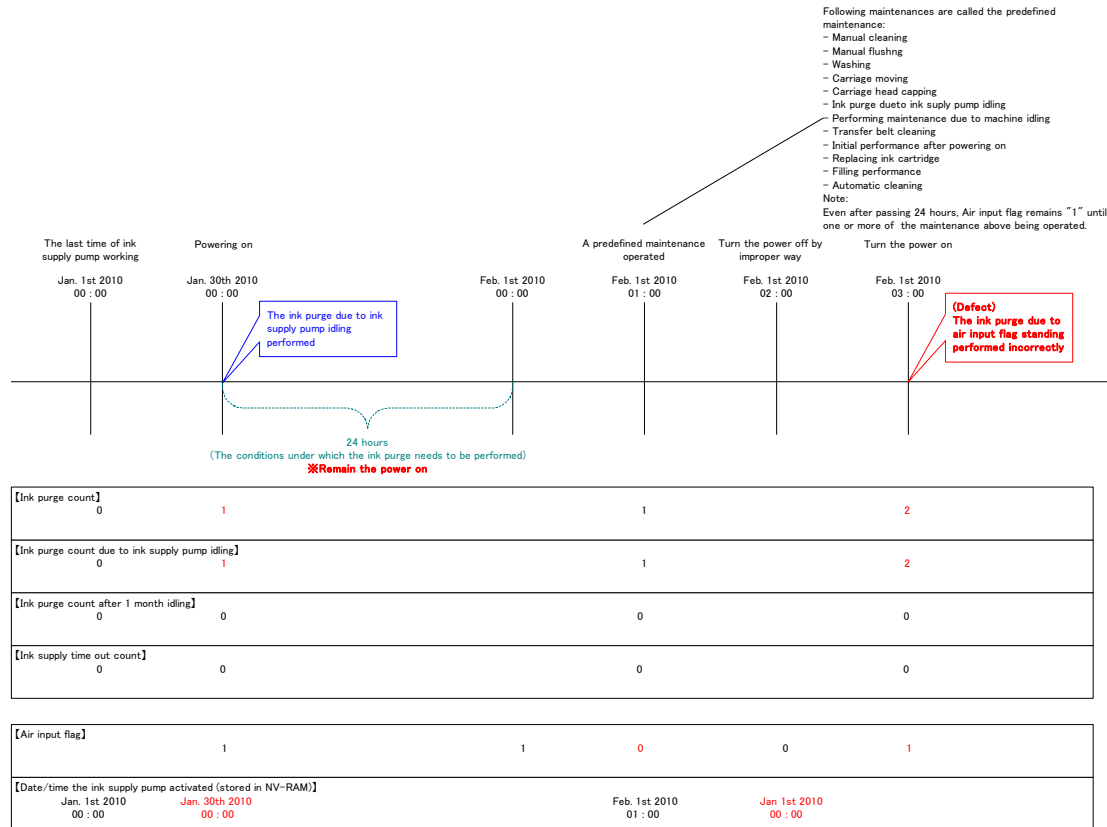
Reissued:02-Jul-10

Model: M-G1

Date: 29-Jan-10

No.: RJ017005a

Fig. 6: Ink purge due to disconnection of the power cord (2)



Model: M-G1		Date: 08-Feb-10	No.: RJ017006
Subject: Carriage Unit Replacement Procedure		Prepared by: K. Nakano	
From: 2nd Overseas Tech Support Sec., 2nd PQM Dept.			
Classification:	<input type="checkbox"/> Troubleshooting <input type="checkbox"/> Mechanical <input type="checkbox"/> Paper path <input type="checkbox"/> Product Safety	<input type="checkbox"/> Part information <input type="checkbox"/> Electrical <input type="checkbox"/> Transmit/receive <input type="checkbox"/> Other (Firmware)	<input type="checkbox"/> Action required <input checked="" type="checkbox"/> Service manual revision <input type="checkbox"/> Retrofit information <input type="checkbox"/> Tier 2

Service Manual Revision

Delete Step 12 of the “After Replacing the Carriage” procedure on page 149-150 (the area contained in the red box below). This setting is not necessary to maintain stable image quality.

All steps surrounded in red will be cleared out (See the diagram below).

11. Press [Enter]> "OK?"> [Enter].

12. Press the down arrow key until you see "SP3104".
J017, J019, J021
These models have two print heads. Two settings are required.

149

4. Replacement and Adjustment

HRANKH1:V 3104	Example Label 1 Head No. 1 2 Head No. 2
HRANKH2:V 3105	4 SP3104 5 SP3105

J018

This model has four print heads. Four settings are required.

HRANKH1:V 3104	Example Label 1 Head No. 1 2 Head No. 2 3 Head No. 3 4 Head No. 4 4 SP3104 4 SP3105 4 SP3106 4 SP3107
HRANKH2:V 3105	
HRANKH3:V 3106	
HRANKH4:V 3107	

J018185a

- The set of numbers are the numbers assigned to the print heads.
- The second set of numbers list the values that you must enter for the SP codes.

Important

- The second numbers that must be entered may be different on your label. Be sure to check the label on the side of the print head unit.

13. Do the SP codes and enter the numbers specified on the label.
J017, J019, J021

1. Replace the four ink cartridges with new ones (provided).

Reissued:24-Mar-10

Model: M-G1a/b, G1L	Date: 08-Feb-10	No.: RJ017007a
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RTB Reissue

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

Subject: Information about replacing the controller board		Prepared by: K. Nakano	
From: 2nd Overseas Tech Support Sec., 2nd PQM Dept.			
Classification:	<input checked="" type="checkbox"/> Troubleshooting <input type="checkbox"/> Mechanical <input type="checkbox"/> Paper path <input type="checkbox"/> Product Safety	<input type="checkbox"/> Part information <input checked="" type="checkbox"/> Electrical <input type="checkbox"/> Transmit/receive <input type="checkbox"/> Other (Firmware)	<input type="checkbox"/> Action required <input type="checkbox"/> Service manual revision <input type="checkbox"/> Retrofit information <input checked="" type="checkbox"/> Tier 2

Information about replacing the controller board

- When you replace the controller board, **DO NOT touch the areas circled in red below directly or with anything metallic.** If you do, **SC974** (RTC* malfunction) may occur.
 * **RTC: Real Time Clock**
- ***If SC974 occurs, turn the main power OFF/ON. If this does not clear the error, replace the controller board.***

Reissued:24-Mar-10

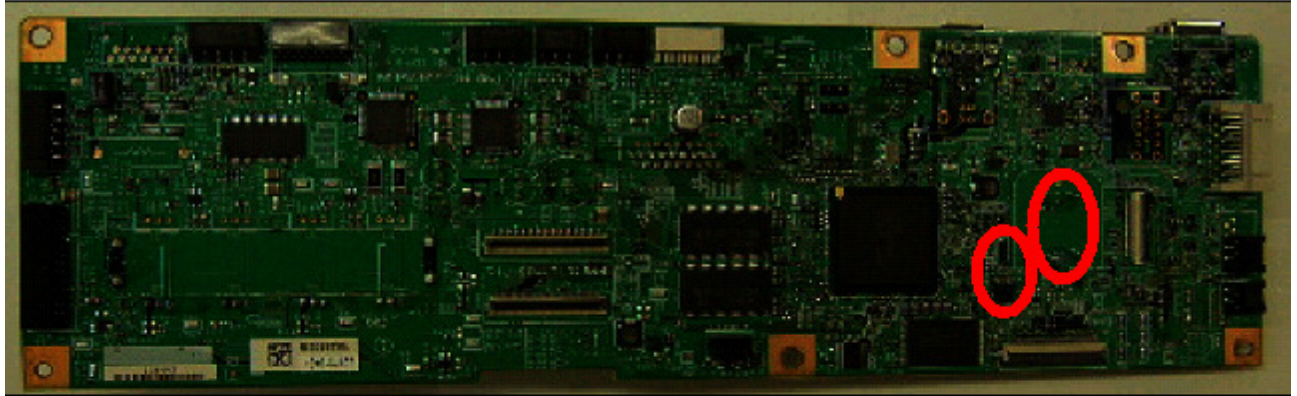
Model: M-G1a/b, G1L

Date: 08-Feb-10

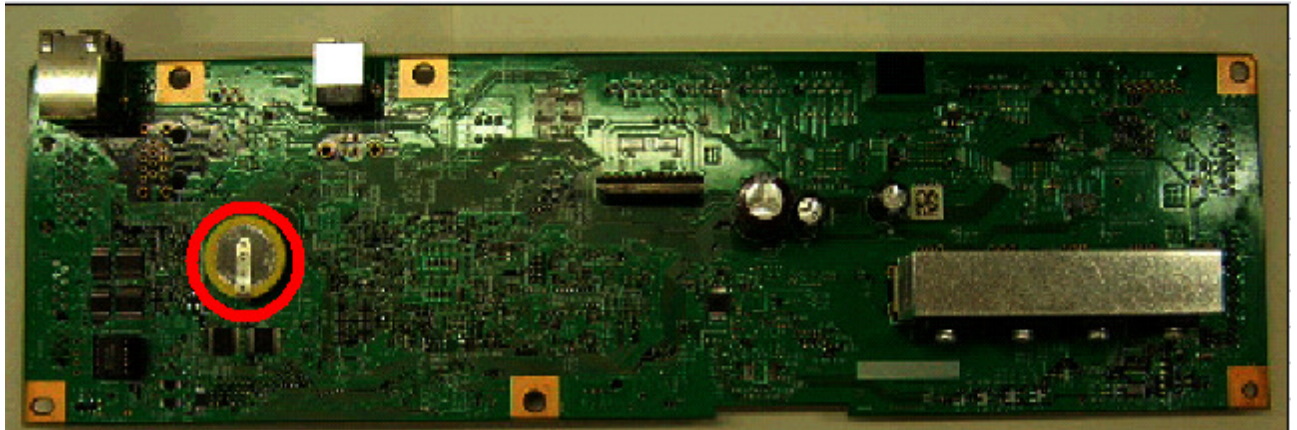
No.: RJ017007a

M-G1a / G1L

Parts side



Solder side



Reissued:24-Mar-10

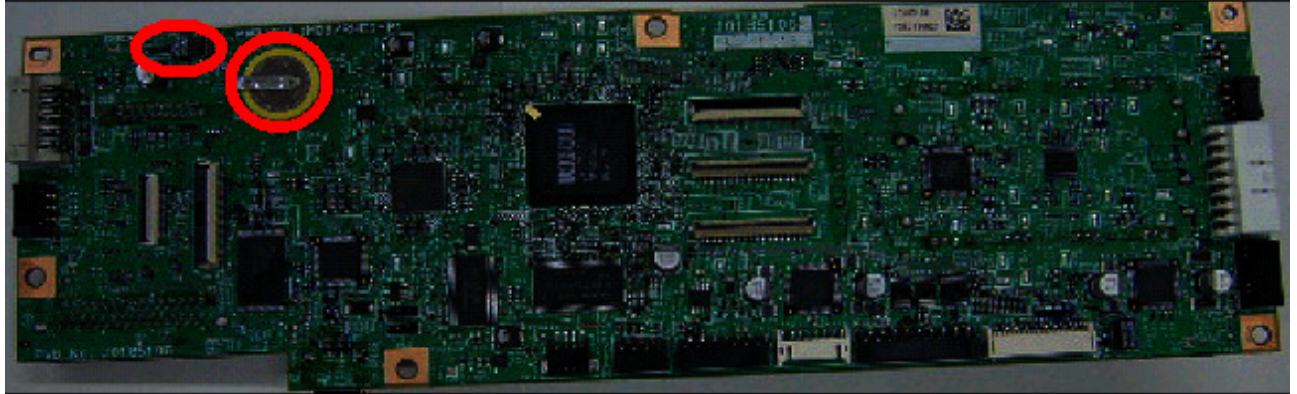
Model: M-G1a/b, G1L

Date: 08-Feb-10

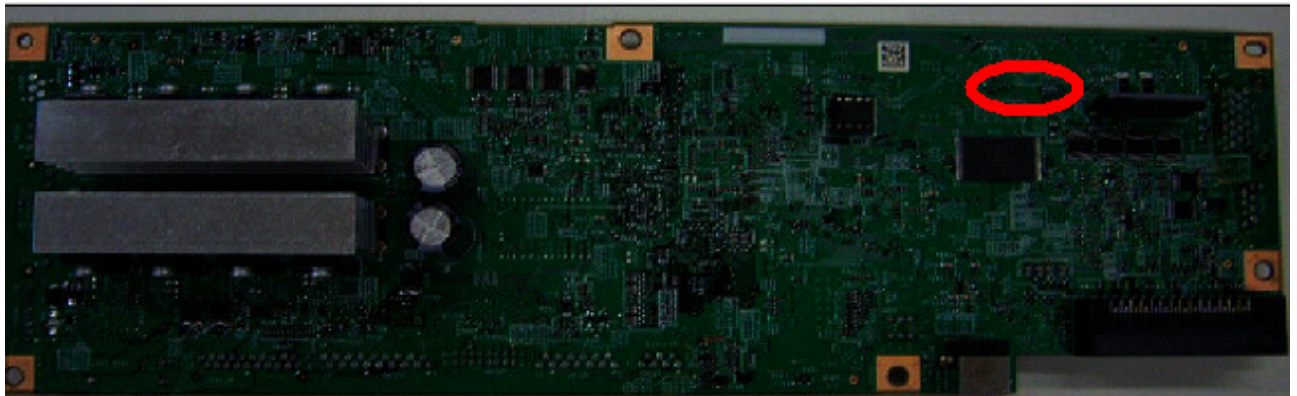
No.: RJ017007a

M-G1b

Parts side



Solder side



Model: M-G1a/b		Date: 15-Apr-10	No.: RJ017008
Subject: Countermeasure for the left cover whitening		Prepared by: K. Nakano	
From: 2nd Overseas Tech Support Sec., 2nd PQM Dept.			
Classification:	<input type="checkbox"/> Troubleshooting <input type="checkbox"/> Mechanical <input type="checkbox"/> Paper path <input type="checkbox"/> Product Safety	<input checked="" type="checkbox"/> Part information <input type="checkbox"/> Electrical <input type="checkbox"/> Transmit/receive <input type="checkbox"/> Other (Firmware)	<input checked="" type="checkbox"/> Action required <input type="checkbox"/> Service manual revision <input type="checkbox"/> Retrofit information <input checked="" type="checkbox"/> Tier 2

Change:

Description	Old Part #	New Part #	I/C	Q'ty
BRACKET:PCB:CONTROL:(for J017)	-	J0171027	-	1
BRACKET:PCB:CONTROL:(for J019)	-	J0191027	-	1
COVER:LEFT:EU	J0171550	J0171570	X/X	1

- 1) The shape of the left cover was changed.
- 2) The bracket for the PCB was added as a service part.

Note: The shape of the bracket was changed as shown in the illustration.

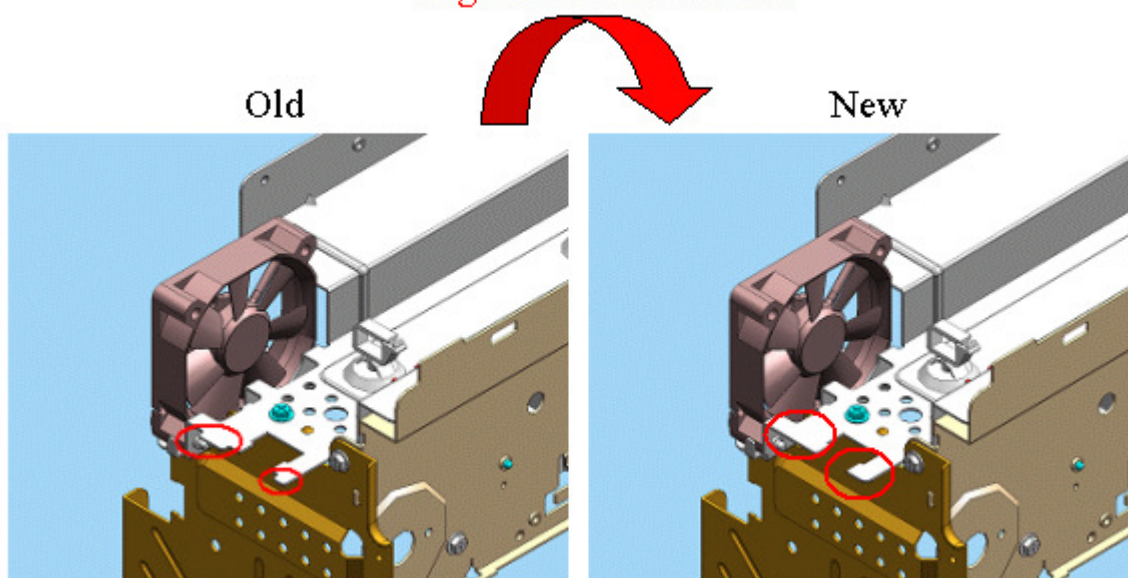
Reason: To provide further protection against shock and vibration during product shipping.

Important: If you need to replace the cover on a machine produced before the cut-in serial numbers (see below), install the new cover and PCB **together as a set**.

BRACKET: PCB: CONTROL

The small tabs on the tip of the bracket were removed.

Slight tabs are removed

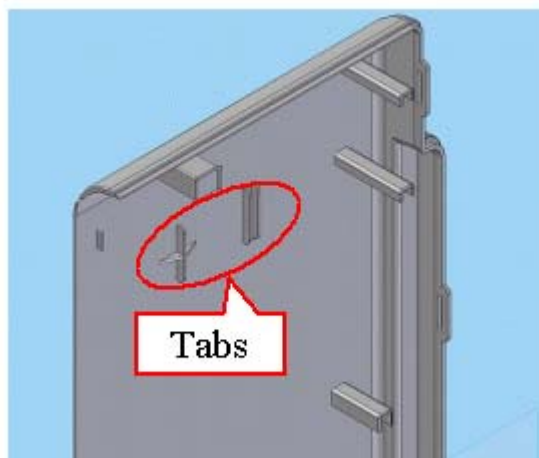


Model: M-G1a/b

Date: 15-Apr-10

No.: RJ017008

COVER: LEFT: MOS-P1: EU
 Tabs were added.



Cut-in Serial Numbers:

The new parts are used on the production line from the following cut-in S/N:

Product Code		Machine S/N
J017	J01717	R5107600001
	J01722	R5107500498
	J01727	R5107500223
J019	J01917	R5207502001
	J01922	R5207502205
	J01927	R5207500584

Model: M-G1a/b		Date: 28-Apr-10	No.: RJ017009
Subject: Service manual correction (SP and SC)		Prepared by: K. Nakano	
From: 2nd Overseas Tech Support Sec., 2nd PQM Dept.			
Classification:	<input type="checkbox"/> Troubleshooting <input type="checkbox"/> Mechanical <input type="checkbox"/> Paper path <input type="checkbox"/> Product Safety	<input type="checkbox"/> Part information <input type="checkbox"/> Electrical <input type="checkbox"/> Transmit/receive <input type="checkbox"/> Other	<input type="checkbox"/> Action required <input checked="" type="checkbox"/> Service manual revision <input type="checkbox"/> Retrofit information <input type="checkbox"/> Tier 2

Service Manual Correction

The areas highlighted in **red/bold** were corrected or added.

SC Codes

974	A	RTC Abnormal
		The RTC (Real Time Clock) malfunctioned.
		<ul style="list-style-type: none"> •Electrical flow to RTC interrupted. •Excessive condensation in machine.
		<ol style="list-style-type: none"> 1. Cycle the printer on/off and check the results. 2. Replace the control board.

<Removed>

987	A	Protection During Transport
		At power on the printer detected that the ink in a cartridge is non-standard ink.
		Use only ink cartridges that are designed for use with this printer. Note: Never use re-filled ink cartridges.

SP Modes

2001	TH:WASTE:RC:NEAR	Software Count: Ink Collector Unit Near Full
		Use this SP to set the threshold value to trigger the near-full alert for the ink collector unit sensor. [0 to 424967295]
2002	TH:WASTE:RC:FULL	Software Count: Ink Collector Unit Full Alert
		Use this SP to set the threshold value to trigger the full alert for the ink collector unit sensor. [0 to 424967295]
5400	INPUT CHK1	Check Input Sensors
		Use this SP to display the on/off status of each sensor and switch. The status of each sensor (0, 1) is displayed on the 2 nd line of the display.

Model: M-G1a/b

Date: 28-Apr-10

No.: RJ017009

J017/J019/J021

No.	Meaning	No.	Meaning
0	Top Cover Switch	8	Not Used
1	Duplex Unit Cover Switch	9	Paper End Sensor (Tray 1)
2	Rear Plate Duplex Unit Switch	10	Not Used
3	Multi Bypass Sensor	11	Not Used
4	Not Used	12	Env. Selector Sensor
5	1st Registration Sensor	13	Ink Level Sensor (Feeler)
6	2nd Registration Sensor	14	Maintenance HP Sensor
7	Trailing Edge Sensor (Tray 1)	15	Ink Cartridge Door Switch

J018

No.	Meaning	No.	Meaning
0	Top Cover Switch	8	Trailing Edge Sensor (Tray 2)
1	Duplex Unit Cover Switch	9	Paper End Sensor (Tray 1)
2	Rear Plate Duplex Unit Switch	10	Paper End Sensor (Tray 2)
3	Multi Bypass Sensor	11	Paper End Sensor (Tray 3)
4	Paper Feed Unit Detection (Tray 2)	12	Env. Selector Sensor
5	1st Registration Sensor	13	Ink Level Sensor (Feeler)
6	2nd Registration Sensor	14	Maintenance HP Sensor
7	Trailing Edge Sensor (Tray 1)	15	Ink Cartridge Door Switch

5401 INPUT CHK2
Check Input Sensors

Use this SP to display the on/off status of each sensor. The status of each sensor (0, 1) is displayed on the 2nd line of the display.

J017/J019/J021

No.	Meaning	No.	Meaning
0	Not Used	8	Not Used
1	NIC Detection	9	Not Used
2	Jam Wheel Cover Switch	10	Not Used
3	Not Used	11	Not Used
4	Not Used	12	Not Used
5	Not Used	13	Not Used
6	Not Used	14	Not Used
7	Not Used	15	Not Used

J018

No.	Meaning	No.	Meaning
0	Not Used	8	HRB Power Circuit Connection Detection
1	NIC Detection	9	Not Used
2	Jam Wheel Cover Switch	10	Not Used
3	Not Used	11	Not Used
4	Not Used	12	Not Used
5	Paper Feed Unit Detection (Tray 3)	13	Not Used
6	Trailing Edge Sensor (Tray 3)	14	Not Used
7	Rear Unit Switch	15	Not Used

Model: M-G1a/b

Date: 28-Apr-10

No.: RJ017009

5421	INPUT CHK WST	Right Ink Sump Set Status J017/J018/J019/J021 Only
		This SP code checks the current status of the right ink sump. Displays "1" if set correctly.
5422	INPUT CHK RES:W	Right Ink Sump Capacity J017/J018/J019/J021 Only
		This SP code checks and displays the amount of space remaining in the right ink sump.
5423	INPUT CHK WSTCNT	Right Ink Sump Count J017/J018/J019/J021 Only
		This SP code checks and displays the software count for the right ink sump.
7201	WASTE CNT:RC:FUL	Ink Collector Unit
		Use this SP to display the current count for the number of times the status of the Ink Collector unit has changed from near-full to full.
7210	FEED CNT:H1	Print Head 1 (Y / M)
7211	FEED CNT:H2	Print Head 2 (K / C)
7212	FEED CNT:H3	Print Head 3 For j011 only
7213	FEED CNT:H4	Print Head 4 For j011 only
		Use this SP to display the current reading of the paper dust counter that determines when to execute automatic cleaning.

Model: M-G1a/b	Date: 31-May-10	No.: RJ017010
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Subject: Troubleshootings for SC988 and white lines		Prepared by: K.Nakano	
From: 2nd Overseas Tech Support Sec., 2nd PQM Dept.			
Classification:	<input checked="" type="checkbox"/> Troubleshooting	<input checked="" type="checkbox"/> Part information	<input checked="" type="checkbox"/> Action required
	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Electrical	<input type="checkbox"/> Service manual revision
	<input type="checkbox"/> Paper path	<input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Retrofit information
	<input type="checkbox"/> Product Safety	<input type="checkbox"/> Other (Firmware)	<input checked="" type="checkbox"/> Tier 2

• SYMPTOM

- SC988 (*), Ink Supply Error (Air Sensor Abnormal), occurs during ink initialization or print head flushing.
- White lines appear on printouts even after print head cleaning is performed.

Note:

- These symptoms may occur after the machine is left unused for a while in a high-temperature environment.
- The solution for SC988 in the Service Manual was revised to reflect this RTB. For details, see RTB No. RJ018002.

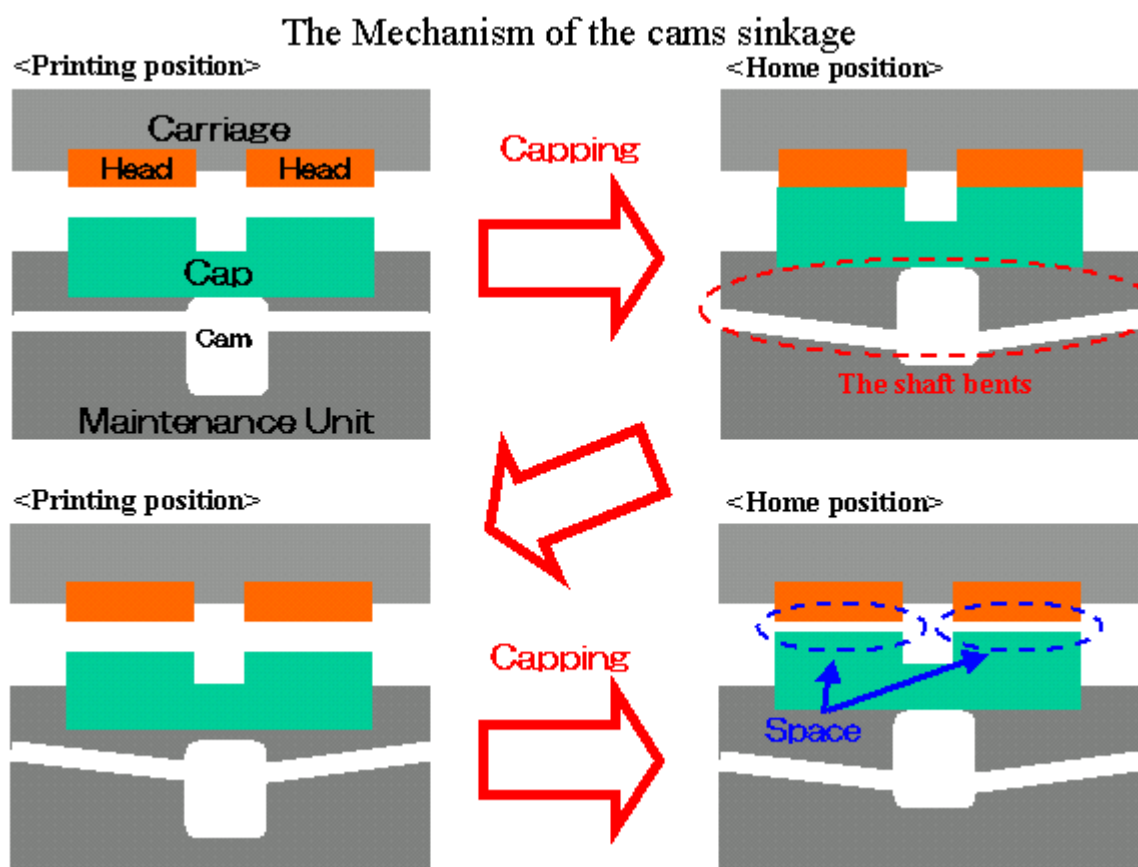
*SC988:

SC988 occurs if electrical current is flowing between the print head pins (i.e. the pins are still immersed in ink) even though the maintenance motor is turning (which would normally drain the ink out of the tank).

• CAUSE

The carriage position lever is mistakenly set to the envelope position (rear position), which raises the carriage unit. A gap develops between the print heads and caps on the maintenance unit. As a result, the machine cannot properly perform ink suction (which causes the SC) or head cleaning (which causes the white lines).

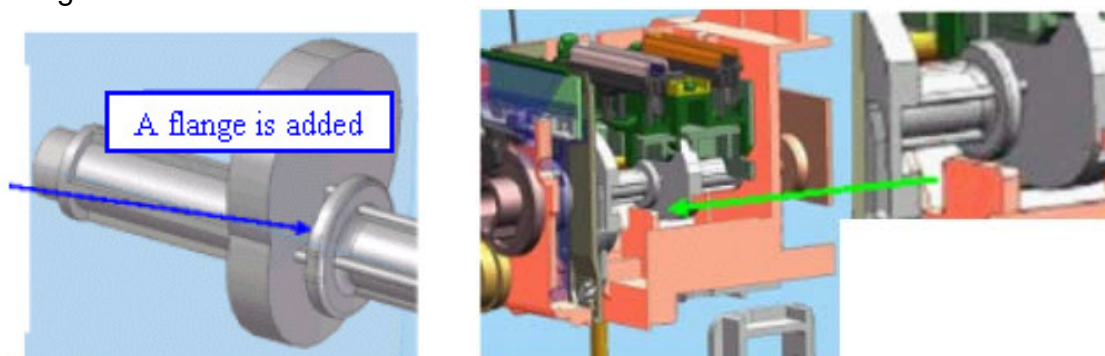
Note: As the capping process for the carriage heads is repeated over time, the camshaft on the maintenance unit bends slightly. If the carriage position lever is left in the envelope position when the machine performs the maintenance tasks mentioned above, a gap develops between the carriage heads and caps on the maintenance unit.



• **SOLUTION**

• **Production line**

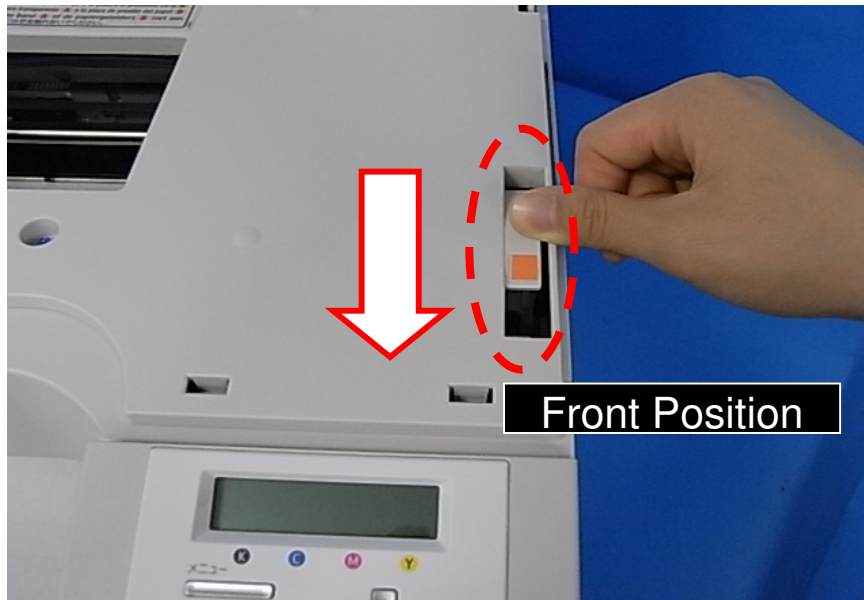
A flange was added to the cam on the maintenance unit.



Old Part #	New Part #	Description	Int.	Q'ty
J0170412	J0170413	MAINTENANCE RECOVERY (for J017/J019)	X/O	1

- **In the field**

1. Please remind users not to move the carriage position lever to the envelope position when performing ink initialization. Also, remind them that the lever should be set to the front position except when printing onto envelopes.



2. For users that print onto envelopes only, replace the maintenance unit.

Cut-in serial numbers

TBA (by the end of June 2010)

Model: M-G1a/b		Date: 02-Jul-10	No.: RJ017011
Subject: Trailing edge sensor broken		Prepared by: K. Nakano	
From: 2nd Overseas Tech Support Sec. 2nd PQM Dept			
Classification:	<input checked="" type="checkbox"/> Troubleshooting <input type="checkbox"/> Mechanical <input type="checkbox"/> Paper path <input type="checkbox"/> Other ()	<input checked="" type="checkbox"/> Part information <input type="checkbox"/> Electrical <input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Action required <input type="checkbox"/> Service manual revision <input type="checkbox"/> Retrofit information <input checked="" type="checkbox"/> Tier 2

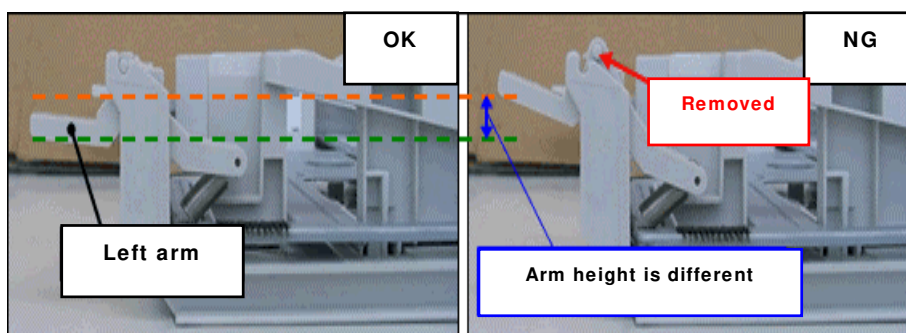
Symptom

The error "Paper misfeed. Press [Form feed] button" appears, but it cannot be cleared even if the remaining paper is removed.

Cause

The trailing edge sensor is broken, which triggers a paper feed jam.

This sensor can be damaged if the cassette tray is loaded with the left arm unseated. When the tray is dropped, the base plate hits the arm, then the arm becomes unseated).



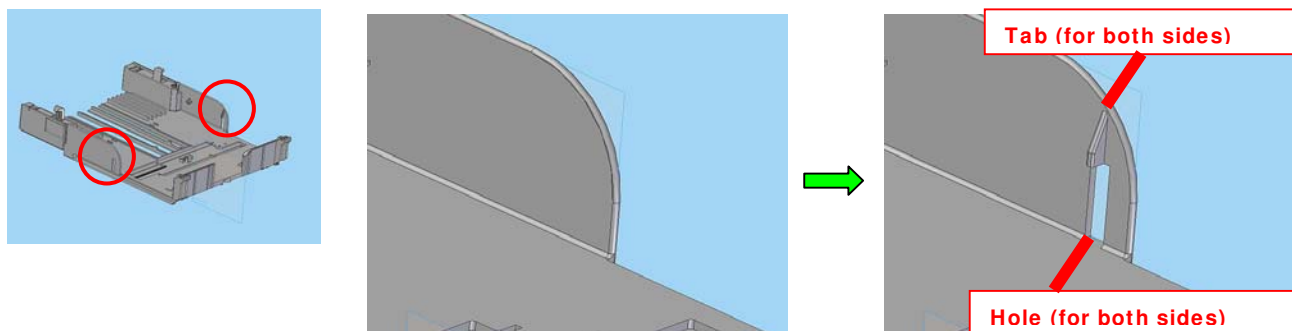
Solution

Production line:

The cassette tray and left side fence were changed as follows.

1. Cassette tray:

Tabs and holes were added to the left and right sides of the tray. This is to prevent the base plate from hitting the left arm.



Model: M-G1a/b

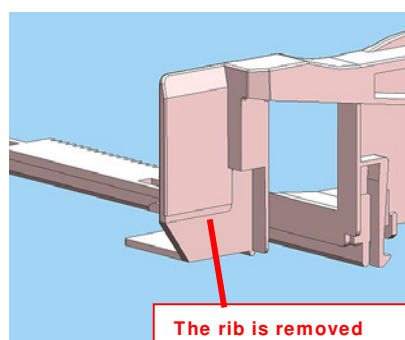
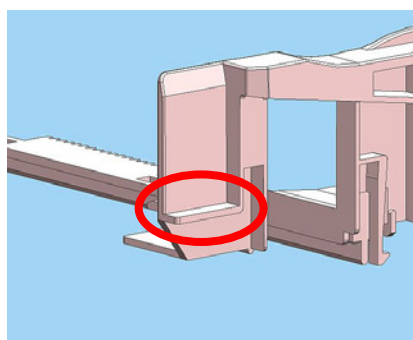
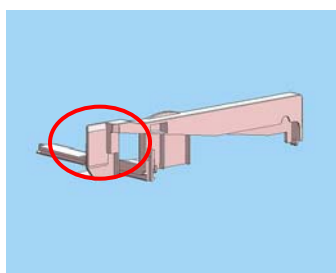
Date: 02-Jul-10

No.: RJ017011

Old Part #	New Part #	Description	Int.	Q'ty	Note
J0173034	J0170034	CASSETTE TRAY	X/O	1	

2. Left side fence:

The rib was removed so that the left arm will not hit the trailing edge sensor even if the tray is set with the left arm incorrectly attached.



Old Part #	New Part #	Description	Int.	Q'ty	Note
J0173004	J0173007	SIDE FENCE: LEFT: A4	X/O	1	

In the field:

- Replace the trailing edge sensor.
- Make sure that the left arm on the cassette tray is correctly attached before inserting the tray.
- Replace the cassette tray and the left side fence with the modified ones mentioned above.

Cut-in Serial Numbers

Model Name	Model Code	Cut-in Serial Number
GXe3300N	J017-17	R5107600001~
	J017-22	R5107500498~
	J017-27	R5107300001~
Gxe3350N	J019-17	R5207300001~
	J019-22	R5207502132~
	J019-27	R5207300101~

Reissued: 17-Dec-10

Model: M-G1ab	Date: 06-Aug-10	No.: RJ017012a
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RTB Reissue

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

Subject: Whisker at FFC connectors		Prepared by: K. Nakano	
From: 2nd Overseas Tech Support Sec., 2nd PQM Dept.			
Classification:	<input checked="" type="checkbox"/> Troubleshooting	<input type="checkbox"/> Part information	<input type="checkbox"/> Action required
	<input type="checkbox"/> Mechanical	<input checked="" type="checkbox"/> Electrical	<input type="checkbox"/> Service manual revision
	<input type="checkbox"/> Paper path	<input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Retrofit information
	<input type="checkbox"/> Product Safety	<input type="checkbox"/> Other (Firmware)	<input checked="" type="checkbox"/> Tier 2

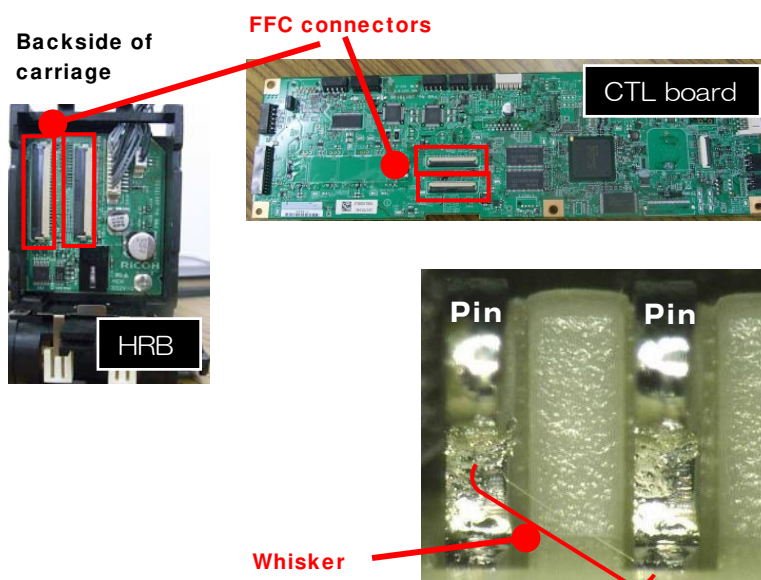
Symptom

- “Cannot use High Temp” is displayed but cannot clear the error even after switching the printer off and on.
- Paper misfeed-related errors occur but cannot clear them even after removing the remaining paper or other actions to clear the errors.

Cause

The FFC connector pins are short-circuited, causing a paper misfeed or abnormal temperature condition to be mis-detected.

The short circuit occurs when a metallic fiber (whisker) attaches itself so that it connects the pins at the FFC connectors, which are located on the controller board and the rear side of the carriage unit.



Reissued: 17-Dec-10

Model: M-G1ab	Date: 06-Aug-10	No.: RJ017012a
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Solution

Production line:

The shape of the connectors will be changed to minimize the possibility of the metallic fiber attaching itself to the FFC connector pins. Applied from: July 2010.

- **For the controller board:**

Old Part #	New Part #	Description	Int.	Q'ty	Note
J0175118	J0175650	PCB:CTL:ASS'Y:(for J017)	X/O	1	
J0195104	J0195110	PCB:CTL:ASS'Y:(for J019)	X/O	1	

- **For the HRB on the carriage unit:**

Old Part #	New Part #	Description	Int.	Q'ty	Note
J0175150	J0175154	PCB:HRB:(for J017/J019/J021)	X/O	1	

In the field:

Remove the FFC from the two main PCB connectors, and then reconnect them. If the symptom still occurs, do the same for the carriage PCB connectors. **Otherwise, please replace the modified parts mentioned above.**

Cut-in Serial Numbers

GXe3300N (J017)	R5107901000~
GXe3350N (J019)	R5207900097~

Model: M-G1a/b		Date: 20-Aug-10	No.: RJ017013
Subject: Long waiting time between jobs		Prepared by: K. Nakano	
From: 2nd Overseas Tech Support Sec., 2nd PQM Dept.			
Classification:	<input checked="" type="checkbox"/> Troubleshooting <input type="checkbox"/> Mechanical <input type="checkbox"/> Paper path <input type="checkbox"/> Product Safety	<input type="checkbox"/> Part information <input type="checkbox"/> Electrical <input type="checkbox"/> Transmit/receive <input type="checkbox"/> Other (Firmware)	<input type="checkbox"/> Action required <input type="checkbox"/> Service manual revision <input type="checkbox"/> Retrofit information <input checked="" type="checkbox"/> Tier 2

Symptom

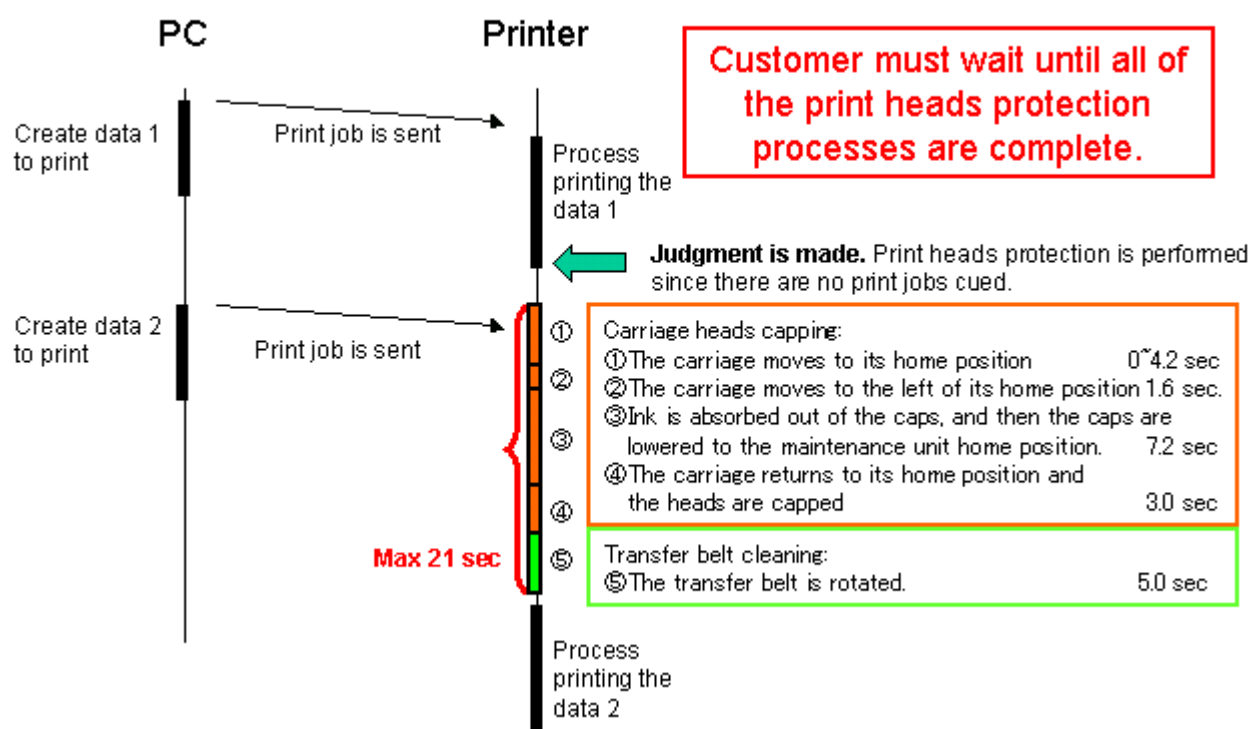
The waiting time between jobs increases (maximum 21 seconds) if the machine receives a new print job just after finishing the current job.

Cause

The machine performs "Print-heads protection maintenance" after completing a print job. This involves performing several operations (please see the diagram below for each operation). Therefore, the customer must wait until all the operations are complete.

Note: "Print-heads protection" is performed for the purpose of preventing the print heads from drying, and also to decrease the frequency that maintenance modes need to be performed.

Before firmware modification (no jobs in the cue)



Model: M-G1a/b

Date: 20-Aug-10

No.: RJ017013

Solution

Production line:

The firmware was modified (see the version below for each model) and will be applied from September 2010 production.

M-G1a (J017): V.1.10 or later

M-G1b (J019): V.1.18 or later

Firmware changes:

- Carriage head capping:



1. If the machine receives a new print job while performing the “print heads protection maintenance”, it will be able to cancel the maintenance and print out the job. In other words, the maximum waiting time will be shortened to 7.2 sec (③ for the carriage heads capping process)

Note: The change will take effect just by updating the firmware.



2. If the customer is still not satisfied with the modification explained above, it is possible to elongate the timing of performing the “print heads protection maintenance” to **9 seconds** after a print job. Therefore, the machine will be ready to perform the job right away during the 9 seconds. This setting can be changed by Bit Switch #1-4 (“0”, default value, means waiting 0s to perform the print heads protection maintenance, and “1” means waiting 9s to perform it)

IMPORTANT:

Since the print heads are kept un-capped for 9s, ink purge or other maintenance will be more frequently performed (which prevents the print heads from drying). Therefore, the yield of the ink collector unit may be less than the figure mentioned in the sales catalog.

- Belt cleaning:

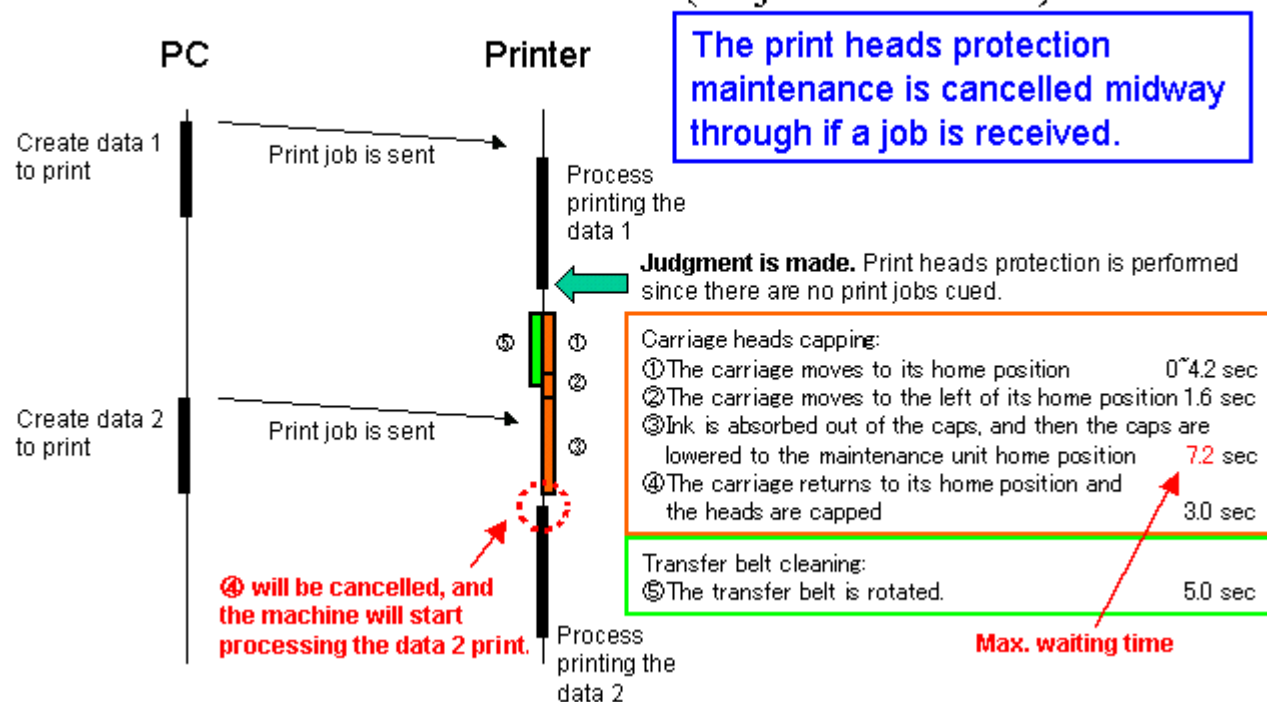
1. The cleaning interval was changed from every print job to every 250 pages.
2. Belt cleaning and carriage head capping are performed at the same time.

Model: M-G1a/b

Date: 20-Aug-10

No.: RJ017013

After firmware modification (no jobs in the cue)



In the field:

If the symptom is reported, advise the user to try updating to **V.1.10 or later for GXe3300N** and **V.1.18 or later for GXe3350N**.

Cut-in Serial Number:

For M-G1a (GXe3300N): R5108100001 ~

For M-G1b (GXe3350N): R5208100001 ~

Model: M-G1b		Date: 24-Sept-10	No.: RJ017014
Subject: Machine stalls after 256 PCL jobs in a row		Prepared by: K. Nakano	
From: 2nd Overseas Tech Support Sec. 2nd PQM Dept			
Classification:	<input checked="" type="checkbox"/> Troubleshooting <input type="checkbox"/> Mechanical <input type="checkbox"/> Paper path <input type="checkbox"/> Other ()	<input type="checkbox"/> Part information <input type="checkbox"/> Electrical <input checked="" type="checkbox"/> Transmit/receive	<input type="checkbox"/> Action required <input type="checkbox"/> Service manual revision <input type="checkbox"/> Retrofit information <input checked="" type="checkbox"/> Tier2

SYMPTOM

The machine stalls if it receives 256 PCL jobs in a row since the last time the main power was turned ON.

Note: During this time, no other print jobs are received, and no internal test prints are made (Service Summary, Configuration page, Error Log, or so on).

CAUSE

Firmware bug

SOLUTION

Production line:

The firmware was modified to **v1.20** and applied from October 2010 production.

In the field:

Upgrade the firmware to **v1.20**.

Important:

- To upgrade the firmware, remove the power plug from the outlet. When you do this, the 256th PCL job will be erased.
- Until you can upgrade the firmware, this symptom can be avoided by interrupting the string of 256 consecutive PCL jobs (e.g. sending a non-PCL print job, turning the power off, making a test print).

Cut-in Serial Number

TBA

Model: M-G1a/b		Date: 28-Jan-11	No.: RJ017015
Subject: Moving mechanism of waste tank was abolished.		Prepared by: I Soh	
From: 2nd Overseas Tech Support Sec. 2nd PQM Dept			
Classification:	<input type="checkbox"/> Troubleshooting <input type="checkbox"/> Mechanical <input type="checkbox"/> Paper path <input type="checkbox"/> Other ()	<input checked="" type="checkbox"/> Part information <input type="checkbox"/> Electrical <input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Action required <input type="checkbox"/> Service manual revision <input type="checkbox"/> Retrofit information <input type="checkbox"/> Tier2

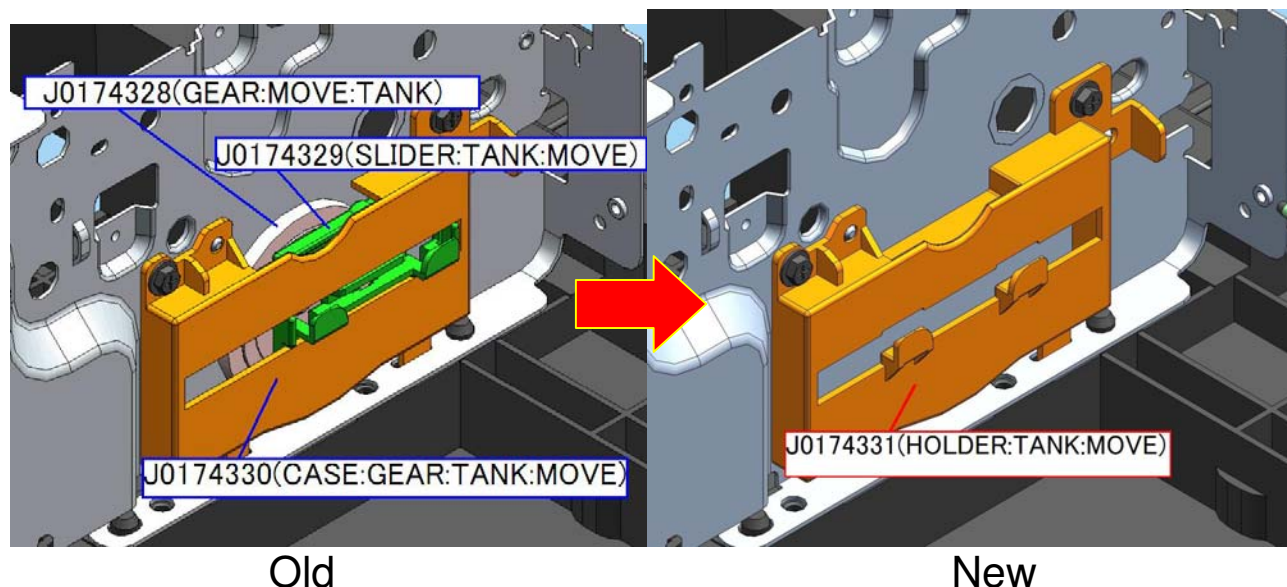
Old Description	Old Part #	New Description	New Part #	I/C	Q'ty
GEAR:MOVE:TANK	J0174328	-	-	-	1
SLIDER:TANK:MOVE	J0174329	-	-	-	1
CASE:GEAR:TANK:MOVE	J0174330	HOLDER:TANK:MOVE	J0174331	X/O	1

Changes:

- 1) The gear and slider were deleted.
- 2) The shape of the case was changed.

Reason: Optimization of service parts (the slider is no longer needed to ensure the case/holder reaches its yield).

Important: When you install the new holder (J0174331) for the first time, make sure to remove the gear (J0174328) and the slider (J0174329).



Model: M-G1a		Date: 19-Jul-11	No.: RJ017016
Subject: Printer Service Mode		Prepared by: K.Nakano	
From: 2nd Overseas Tech Support Sec., 2nd PQM Dept.			
Classification:	<input type="checkbox"/> Troubleshooting <input type="checkbox"/> Mechanical <input type="checkbox"/> Paper path <input type="checkbox"/> Other ()	<input type="checkbox"/> Part information <input type="checkbox"/> Electrical <input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Action required <input checked="" type="checkbox"/> Service manual revision <input type="checkbox"/> Retrofit information

Change:

The item below has been added to the J017 Service Manual.

Please add the following information to Section.2 “SP Mode Tables” of the J017 Service Manual Appendices (Page.26).

Bit Switch Settings

Bit SW 1

Bit	Function	Default	Details
6	Auto Tray Select	0	0: Disabled Auto Tray Select will search for matching trays using both paper size and type as criteria. If a match is not found, no subsequent search will be performed. 1: Enabled Auto Tray Select will search for matching trays using both paper size and type as criteria. If a match is not found, the search will be performed again using paper size as the only criterion.

Effective Date:

Firmware Version: V1.15 or later.

Production Line: Applied from August 2011 production.

Model: M-G1a/b		Date: 20-Dec-11	No.: RJ017017
Subject: Change in the Cleaning Cartridge Storage Period		Prepared by: Y. Murata	
From: 3rd Tech Service Sect., MFP/P Tech Service Dept.			
Classification:	<input type="checkbox"/> Troubleshooting <input type="checkbox"/> Mechanical <input type="checkbox"/> Paper path <input type="checkbox"/> Product Safety	<input type="checkbox"/> Part information <input type="checkbox"/> Electrical <input type="checkbox"/> Transmit/receive <input checked="" type="checkbox"/> Other (Specification change)	<input type="checkbox"/> Action required <input type="checkbox"/> Service manual revision <input type="checkbox"/> Retrofit information

Important Information about the Cleaning Cartridge Storage Period

- The recommended **storage period for the cleaning cartridge** has been changed from eighteen months to **five years**. This is because it was found that the liquid in the cartridge is able to hold its key chemical properties for years when stored in a regular environment.
- Due to this change:
 - For cartridges produced before December 2011:
You can use these cartridges up to **42 months after** the “Recommended to use before” date on the cartridge decal. On these cartridges, the date mentioned is 18 months after production.
 - For cartridges produced in **December 2011 or later**:
You can use these cartridges up to **60 months (five years) after** the lot number printed on the cartridge (The decal has been removed).

Lot No.: **Y M D D # # # # #**

Y: Last digit of the year of production

M: Month of production (Oct: “X”, Nov: “Y”, Dec: “Z”)

D: Day of production