

Model: Model U-C1		Date: 2-Dec-02	No.: RB051001
Subject: Firmware History - Copier		Prepared by: H.K.	
From: Technical Services sec. Service Planning 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 checked="" type="checkbox"/> Other (Firmware History)		

This is to inform you of the Copier firmware history (BICU, Operation Panel, FAX, FCU).

Ver.	US Models		EU Models		Asia/Taiwan Models		Effective Date
	Program No.	C. SUM	Program No.	C. SUM	Program No.	C. SUM	
1.04	B0515557L	7C35	B0515558L	37D2	B0515559L	4912	September Production '02'
1.03	B0515557K	-	B0515558K	-	B0515559K	-	Not applied to the production machines
1.02	B0515557J	-	B0515558J	-	B0515559J	-	Not applied to the production machines
1.0192	UraC1CardV1 192.bin	-	UraC1CardV1 192.bin	-	UraC1CardV1 192.bin	-	Not applied to the production machines
1.0181	UraC1CardV1 181.bin	-	UraC1CardV1 181.bin	-	UraC1CardV1 181.bin	-	August Production '02

The program contains the following firmware:

US version

Ver	Firmware / Versions							
	BICU(Engine)		Operation Panel LCD		FAX application		FCU	
	Firmware No.	version	Firmware No.	version	Firmware No.	version	Firmware No.	version
1.04	B0515554L	1.204:1	B0515536C	1.19	B0515551D	1.17	B5025771D	03.01.00
1.03	B0515554K	1.204:1	B0515536C	1.19	B0515551D	1.17	B5025771C	02.01.00
1.02	B0515554J	1.202.01	B0515536C	1.19	B0515551D	1.17	B5025771C	02.01.00
1.019	UraC1CardV1 192.bin	1.192:01	B0515536C	1.19	B0515551D	1.17	B5025771C	02.01.00
1.018	UraC1CardV1 181.bin	1.181:01	B0515536C	1.19	B0515551D	1.17	B5025771C	02.01.00

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European version

Ver Firmware / Versions								
BICU(Engine)			Operation Panel LCD		FAX application		FCU	
	Firmware No.	version	Firmware No.	version	Firmware No.	version	Firmware No.	version
1.04	B0515554L	1.204:1	B0515537C	1.19	B0515551D	1.17	B5025772D	03.01.00
1.03	B0515554K	1.204:1	B0515537C	1.19	B0515551D	1.17	B5025772C	02.01.00
1.02	B0515554J	1.202.01	B0515537C	1.19	B0515551D	1.17	B5025772C	02.01.00
1.019	UraC1CardV1 192.bin	1.192:01	B0515537C	1.19	B0515551D	1.17	B5025772C	02.01.00
1.018	UraC1CardV1 181.bin	1.181:01	B0515537C	1.19	B0515551D	1.17	B5025772C	02.01.00

Asian version

Ver Firmware / Versions								
BICU(Engine)			Operation Panel LCD		FAX application		FCU	
	Firmware No.	version	Firmware No.	version	Firmware No.	version	Firmware No.	version
1.04	B0515554L	1.204:1	B0515531	1.19	B0515551D	1.17	B5025772D	03.01.00
1.03	B0515554K	1.204:1	B0515531	1.19	B0515551D	1.17	B5025772C	02.01.00
1.02	B0515554J	1.202.01	B0515531	1.19	B0515551D	1.17	B5025772C	02.01.00
1.019	UraC1CardV1 192.bin	1.192:01	B0515531	1.19	B0515551D	1.17	B5025772C	02.01.00
1.018	UraC1CardV1 181.bin	1.181:01	B0515531	1.19	B0515551D	1.17	B5025772C	02.01.00


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BICU(Engine)

Symptom Corrected	Version
Toner end and/or toner near end may be detected even when the toner cartridge still contains enough to continue printing.	1.204:1
<p>Process control mode timing To reduce the cycle of process control mode (every 200 prints), Mono (Bk) prints are no longer counted for process control.</p> <p>Charge corona cleaning Charge corona cleaning mode-entering timing has been changed from 640 to 700. After 700 development counts (stops in the middle of the job), charge corona cleaning is carried out.</p> <p>SC560 (Zero cross error) If the following abnormal frequency for the power source is detected when the main switch is turned on, SC560 is displayed (upper limits eliminated, as they are unnecessary). Old control for SC560: 50Hz: 45&gt;Detected Hz or 54&lt;Detected Hz, 60Hz: 55&gt;Detected Hz or 64&lt;Detected Hz New control for SC560: 50Hz: 45&gt;Detected Hz, 60Hz: 55&gt;Detected Hz</p> <p>SP1-905-01 (pressure roller type): To prevent fusing jams (wrapping around the pressure roller), the layer thickness of the pressure roller has been changed from 1.5 mm to 2.1mm from the first production machines. <b><u>When the old firmware from 1.192:01 or older version is updated to 1.202.01 or later for the first time, even if the new pressure roller is installed, it is necessary to select 'new' in SP1-905-01 to initialize fusing temperature control.</u></b> The settings for the August production machines have been input on the production line. When firmware 1.192:01 or older is updated to 1.202.01 or later for the first time, the machine cannot judge which data (old or new) should be used for fusing control. Note : When selecting 0 in SP1-905-1 and then pressing # on the LCD, the new control data is applied to fusing control. <b>0 : new pressure roller type (2.1mm), 1 : old pressure roller type (1.5mm)</b></p> <p>SP2-944-4 and -5 :(OPC Lubrication – High Coverage) The default settings for SP2-944-4 and -5 have been reviewed and changed to reduce the cycle of OPC lubrication mode. SP2-944-4 : Sheets-1 : [10 to 80/ <b>30</b> / 1 sheet/step] SP2-944-5 : Sheets-2 : [10 to 80/ <b>60</b> / 1 sheet/step]</p>	1.202.01
<p>SP2-905-01: (Paper transfer roller type) To improve transfer, the shape of the paper transfer roller has been changed from the 1<sup>st</sup> production. Due to this modification, paper transfer currents (SP2-310-001 to SP2-341-032) and paper transfer adjustment (SP2-903-01) have been reviewed. The settings for August production machines have been input on the production line. This SP changes the default and factory settings for SP2-310-001 to SP2-341-032 and SP2-903-01 for both types. It is</p>	1.192:01



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<p>necessary to set the type to 0 and press the # key when firmware version 1.181:01 or older (August production machines) is updated to 1.192:01 or newer for the first time. This is because the machine cannot judge which data (old or new) should be used for paper transfer currents. Check the SP settings after updating the firmware (SP2-310-001 to SP2-341-032, and SP2-903-01).</p> <p>Note: All settings will be initialized to their new defaults (see tables below), therefore any previously input field customized settings must be re-input manually.</p> <p><b>0: New paper transfer roller type</b> (Drum type), 1: Old paper transfer roller type (straight type)</p> <p>SP2-321-7 and -9: (Paper transfer bias of edge) The default settings have been changed from 1.0 to 0.8 to improve image quality in low temperature and low humidity conditions.</p> <p>SP7-931-001 to -017 (Engine status display) The engine log can be checked with SP mode for field symptom evaluation, because if the machine stalls, the SMC cannot be printed out. Checking the indication in this SP can be helpful in problem/cause identification.</p> <p>Reducing fan motor rotation period The development fan is stopped and the fusing unit fan turns at half speed for 15 seconds after the last sheet of paper exits the printer. With the previous firmware, the fusing unit fan and development fan were both run for 3 minutes after paper exit.</p>	
<p>Doctor roller reverse mode timing After 20 prints (at job end) or after 50 prints (stops in the middle of the job), the machine carries out the doctor roller reverse rotation to maintain good printing quality. A4/LT SEF or shorter printing is counted as 1 and a print longer than A4/LT SEF is counted as 2. With the prototype firmware, A4/LT LEF or shorter printing is counted as 1 and longer than A4/LT LEF is counted as 2. This is to reduce the frequency of the doctor roller reverse.</p>	<p>1.181:01</p>

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August production serial numbers

B051-17: J2526800001 to J2526800023

B051-27: J2526800024 to J2526800043

B052-17: J2626800001 to J2626800042

B052-27: J2626800043 to J2626800061

**Note for Updating the BICU firmware of the August production machines**

When the BICU firmware is updated from the August production machines to 1.204:1 or later for the first time, be sure to update main unit controller firmware to V1.332 or later at the same time. (Refer to the main unit controller firmware history RTB (RTB No.2). Then, change the following SP modes after updating the firmware.

SP2-905-01: (Paper transfer roller type): Select 0, then press #.

SP1-905-01 (pressure roller type): Select 0, then press #.

SP2-944-4 and -5: (OPC Lubrication – High Coverage): -4: Change setting from 20 to 30. -5: Change the setting from 40 to 60.

Operation Panel LCD

Symptom Corrected	Version
<p>Thin, Normal in Spanish (US version), French (European version).                      The words in the Spanish user tools (US version) and French user tools (EU version), which had been corrected in English from first production, have been corrected as follows : The Spanish user tools are standard for the US version, and the French user tools are standard for the EU version as a second language.</p> <ul style="list-style-type: none"> <li>• Thin? Normal</li> <li>• Normal? Middle Thick/90-105g/m2</li> </ul> <p>These words are located in the following screens :                      User tool - Maintenance - Plain paper type</p> <p>Clean / Adjust in Spanish, French                      The indication for the Clean / Adjust key and its instruction in Spanish or French was temporarily displayed in English until the displays for Spanish and French were available. The new firmware contains these French and Spanish displays for user tools :                      User tool - Maintenance - Clean / Adjust</p> <p>First release for Asia version</p>	1.19

Fax application

Symptom Corrected	Version
First release	1.17

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FCU

Symptom Corrected	Version
Job numbers for standby for fax transmission by LAN FAX (P/C FAX) : System Switch 19 No.4 (SP1-101-026 ; page 4-17 in S/M) System Switch 19 No.4 (SP1-101-026 ; page 4-17) added to FAX SP mode.  Job numbers for standby for fax transmission by LAN FAX (P/C FAX) are limited as follows : <b>0 : 64</b> 1 : Depends on memory (400 : standard, 800 : with Fax Function Upgrade Unit)  Taiwan area Taiwan Area parameters added.	03.01.00
First release	02.01.00

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New defaults for SP2-310 to 314

S P	SP code Class 1and 2				
	2-310	2-311	2-312	2-313	2-314
Class 3	LL1	LL2	NN1	NN2	HH
-1	25	27	28	29	30
-2	25	28	30	30	30
-3	25	29	32	31	30
-4	25	28	31	30	28
-5	25	27	30	28	26
-6	26	28	29	30	31
-7	26	29	31	31	31
-8	26	30	33	32	31
-9	26	29	32	31	29
-10	26	28	31	29	27
-11	14	15	15	16	16
-12	15	15	15	15	15
-13	16	15	14	15	15
-14	18	16	14	14	14
-15	20	17	14	14	14
-16	28	28	27	29	30
-17	30	29	28	31	33
-18	28	29	30	33	36
-19	28	29	30	32	34
-20	28	29	30	31	32
-21	29	29	28	30	31
-22	31	30	29	32	34
-23	29	30	31	34	37
-24	29	30	31	33	35
-25	29	30	31	32	33
-26	12	13	14	14	14
-27	16	16	16	15	15
-28	20	19	17	17	16
-29	24	23	23	23	22
-30	28	29	30	29	28
-31	16	17	17	18	18
-32	20	21	21	22	22

New default for SP2-903

[0 to 70.0 /1.0/ 0.1μA/step]