### Technical Bulletin

Model: Russian-P		Date: 29-Mar-00		No.: RG038001	
Subject: Hard Disk Compatibility			Prepared by: K. Misugi		
From: Technical Services Dept., GTS Division					
Classification:	☐ Troubleshooting	Part informat		tion 🗌 Actior	n required
	Mechanical			Servio	ce manual revision
	Paper path	Transmit/rec		eive Retrofit information	
	Other ( )				

This RTB informs possible compatibility problems with the Printer Hard Disk Type 185 (model code: G690-06).

This hard disk unit can be used in the following models.

- Stinger-C (Stinger-C1L) printer option
- Russian-C printer option
- Russian-P

#### Background

The production of the current 1.6 GB hard disk unit will be discontinued in March '00, and the new 6.0 GB hard disk will be used from April.

When the new 6.0 GB hard disk unit is installed in the machine with a previous version of the controller software, an error may occur.

Please note that the controller firmware has been modified from January '00 production (for all above models) so the machines are compatible with both the old 1.6 GB and the new 6.0 GB hard disk unit.

Compatibility Table

	Old 1.6 GB HDD (G690-06)	New 6.0 GB HDD (G690-07)
Previous controller firmware	Compatible	Error may occur
Version 1.2.9 or later (modified from January '00 production)	Compatible	Compatible

#### Symptom

The machine may not be able to detect the HDD at the power-on self-diagnostic test.

For Stinger-C/Russian-P with printer option: SC2001 3003 (HDD error) is displayed For Russian-P: Error 5 (HDD error) is displayed

#### Solution

Turn the main switch off and on. If the problem persists, try turning off and on again.

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Once the machine detects the HDD properly (no error message is displayed), there are no problems with the performance of the machine.

For a permanent solution, please upgrade the controller software with version 1.2.9 or later.

### Technical Bulletin

Model: Russian-P		Date: 11-Apr-00		No.: RG038002	
Subject: NIB NVRAM Backup and Restore			Prepared by: K. Misugi		
From: Technical Services Dept., GTS Division					
Classification:	☐ Troubleshooting	Part information     Action requ     Electrical     Service ma		on required	
	Mechanical			Serv	vice manual revision
	Paper path	Transmit/rec		eive 🗌 Retr	ofit information
	Other ( )				

This RTB informs the possible problems when using the NIB NVRAM backup and restore function.

#### Symptom

The machine may not start up after the NIB NVRAM backup procedure (Service Menu 3: NIB read/write). This problem may occur after the NIB NVRAM data is backed up to the controller (data copy direction: "NIB -> CTL").

This is because the NVRAM is not big enough to store all the NIB data.

**Note:** The NIB NVRAM backup and restore procedure is required only when replacing a NIB.

#### Solution

Do not use the NIB NVRAM backup (and restore) procedure.

If the machine does not start up after doing this function, you must download the controller firmware using the error recovery firmware update procedure.

(This procedure will force the controller to boot from the IC card. Please refer to section 4.6.2 of the service manual for the detailed procedures.)

The controller firmware will be modified so this function will no longer be valid. It will not be shown in Service Menu 3.

The firmware is modified from the April '00 production (version 1.3.6).

Currently there is no way to enable this function because the current NVRAM on the controller board is not big enough to store all the NIB NVRAM data.

After replacing a NIB, please input the data manually.

### Technical Bulletin

Model: Russian-P		Date: 11-Apr-00		No.: RG038003	
Subject: Printer Controller Firmware HIstory			Prepared by: K. Misugi		
From: Technical Service Dept., GTS Division					
Classification:	Troubleshooting	Part information		tion 🗌 Actior	n required
	Mechanical	Electrical		Servic	ce manual revision
	Paper path	Transmit/rec		eive 🗌 Retro	fit information
	Other ( )				

Printer controller firmware history for the Russian-P printer (G038 model).

Part Number	Version	Checksum	Production
G0385381E	1.3.6	2B4B	April '00 production
G0385381D	1.3.4	918F	March '00 production
G0385381C	1.2.9	1D5B	January '00 production
G0385381B	1.2.0	85FF	1 st mass production

Descriptions	Version
NIB NVRAM backup and restore NIB NVRAM back and restore function (Service Menu 3: Service Tool "NIB read/write") is no longer vaild. <b>Note:</b> Please refer to RTB No. RG038002 for details.	1.3.6
Input check mode: Firmware modified so the input check mode (Service Menu 2: Input Check) sensor and switch status SP values are displayed as described in the service manual. Engine test pattern:	
<ul> <li>Firmware modified so the machine can print the grid test pattern (Service Menu 2: Test Pattern) to Letter (LEF) and Double Letter (11 x 17) size paper.</li> <li>Note: The paper size dial must be set to Letter (LEF) or Double Letter. The machine prints the test pattern only from the standard cassettes. It will not print using the optional paper trays or LCT.</li> </ul>	1.3.4
New test pattern for registration adjustment: A new test pattern is added so that the leading edge and the side-to-side registration can be adjusted in the field. (Registration adjustments are necessary only when the registration data stored in the engine board EEPROM is lost.) <b>Note:</b> Please refer to the next page for details of the procedure.	
Fimrware compatibility: Firmware modified so the machine is compatible with the new 6.0GB HDD unit which will be manufactured from April, '00. Please note that the functions of the new HDD are the same as for the previous one. <b>Note:</b> Please refer to RTB No. RG038001 for details.	1.2.9

Model: Russian-P

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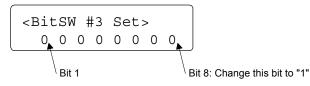
#### Leading Edge/Side-to-side Registration Adjustments

Note: This procedure is required only when the registration data stored in the engine board EEPROM is lost (or damaged). When replacing the engine board, always remove the EEPROM from the old engine board and put it on the new board to restore the data as described in section 6.8.2 of the Russian-P printer (main unit) service manual.

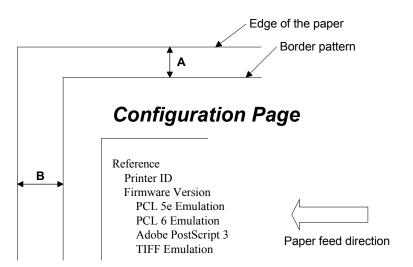
#### Procedure

- 1. Enter SP mode and select "Service Menu 1."
- 2. Select "Bit SW #3 Set".
- 3. Change bit 8 to "1."

Note: The left digit displayed is bit 1 and the right digit is bit 8.



- 4. Press "Enter" to save the change and exit the service mode.
- 5. Print the Configuration Sheet and notice that the border pattern is printed. **Note:** The machine prints the border pattern only for A4 or Letter size paper LEF.



6. Adjust the leading edge and the side-to-side registration using the registration adjustment mode (Service Menu 2: Service regist).

	Leading Edge (A)	Side-to-Side (B)
A4 (LEF)	4.2 mm	6.0 mm
Letter (LEF)	4.2 mm	6.4 mm

#### Adjustment parameters

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Model: Russian-P

RIGOH

 Enter the SP mode again, select "Bit SW #3 Set" and change back bit switch #3 bit 8 to "0."

Press "Enter" to save the change and exit the service mode.

8. Print the Configuration Sheet and check that the border pattern is no longer printed.

#### End of the procedure

Definition of bit switch #3 bit 8

- 1: Print the border pattern on the Configuration Sheet
- **0:** Border pattern not printed

### Technical Bulletin

### Reissued: 24-May-00

Model: Russian-P

Date: 10-Apr-00 No

No.: RG038003a

#### **RTB Correction**

The items in ital	lics have been added.			
Subject: Printer Controller Firmware History			Prepared by: K. Misugi	
From: Technical	Service Dept., GTS Division			
Classification:	Troubleshooting	🗌 Part informa	tion	Action required
	Mechanical	Electrical		Service manual revision
	Paper path	Transmit/rec	eive	Retrofit information
	Other ()			

Printer controller firmware history of the Russian-printer (G038 model).

Part Number	Version	Checksum	Production
G0385381F	1.3.8	A84E	May '00 production
G0385381E	1.3.6	2B4B	April '00 production
G0385381D	1.3.4	918F	March '00 production
G0385381C	1.2.9	1D5B	January '00 production
G0385381B	1.2.0	85FF	1st mass production

Note: The above firmware is being used in USA, Europe, and Asia models.

Descriptions (current RTB only – for previous descriptions, see earlier RTBs)	Version		
Duplex setting menu added to the "Job Control Menu" The duplex setting menu has been added to the "Job Control Menu." This setting allows users in the DOS environment to specify the direction for duplex printing. Please see the following menu tree for the location of the new setting. <b>Note:</b> The new menu item appears only when the optional duplex unit is installed in the machine.			
Job Control - Paper Input - Duplex - OFF - Long Edge Bind - Short Edge Bind - Output Tray - Print Quality : (The new settings are in bold letters.) Important: Please do NVRAM clear 2 after you have updated the firmware. The procedure is explained in section 4.3.2 of the service manual.	1.3.8		

### Technical Bulletin

Model: Russian-P		Date: 24-May-00		No.: RG038004		
Subject: Printer Engine Firmware History				Prepared by: K. Misugi		
From: Technical Services Dept., GTS Division						
Classification:	Troubleshooting	Part informati		tion 🗌 Actior	n required	
	Mechanical	Electrical		Servio	ce manual revision	
	Paper path	Transmit/rec		eive 🗌 Retro	fit information	
	Other ( )					

Printer engine firmware history of the Russian printer (G038 model).

#### USA model

Part Number	Version	Checksum	Production
G0385382C	1.10	BC29	May '00 production
G0385382B	1.09	470F	1st mass production

#### Europe/Asia model

Part Number	Version	Checksum	Production
G0385384C	1.10	9DA3	May '00 production
G0385384B	1.09	35C6	1st mass production

Descriptions	Version
Serial number programming Firmware modified so the last digit of the serial number in the "Service Menu 2" (engine service mode) "Engine S/N" can be changed.	1.10

### Technical Bulletin

Reissued: 25-Jan-01

Date: 11-Apr-00

No.: RG038003b

#### **RTB Correction**

Model: Russian-P

The items in italics have been corrected or added.						
Subject: Printer Controller Firmware History			Prepared by: K. Misugi			
From: Technical Services Dept., GTS Division						
Classification:	Troubleshooting	Part informa	tion	Action required		
	Mechanical	Electrical		Service manual revision		
	Paper path	Transmit/rec	eive	Retrofit information		
	⊠ Other ( )					

Printer controller firmware history of the Russian printer (G038 model).

The items in italics have been added.

Part Number	Version	Checksum	Production
G0385381L	1.4.9	D516	January '00 production
G0385381K	1.4.8	C238	December '00 production
G0385381J	1.4.4	F928	November '00 production
G0385381H	1.4.0	E48B	September '00 production
G0385381F	1.3.8	A84E	May '00 production
G0385381E	1.3.6	2B4B	April '00 production
G0385381D	1.3.4	918F	March '00 production
G0385381C	1.2.9	1D5B	January '00 production
G0385381B	1.2.0	85FF	1 st mass production

Note: The above firmware is being used in USA, Europe, and Asia models.

Reissued: 25-Jan-01

Model: Russian-P

Date: 11-Apr-00

No.: RG038003b

Descriptions (curent changes only – for earlier ones, refer to earlier RTBs)	Version
The following service modes have been added. Printer Engine Service Mode - Service Menu 2 6: Fuser Interval 7: PCU Interval You can adjust the user replacement warning interval for the PCU and fusing unit (maintenance kit). <b>Note:</b> For this function to be enabled, the engine firmware must be updated to version 1.1.3 or newer.	1.4.9
After an A4 LEF print job is completed and the ON Line key is pressed, it takes a relatively long time to go "OFF Line."	
The machine freezes when the test document (A4 LEF) for Corel Draw 9 is printed.	
When printing out from a certain DOS application, the right part of the internal print pattern is not printed.	
When using a certain DOS (CAD) application, the paper size and/or paper feed direction are not sent to the controller, and the machine uses the defaults.	1.4.8
When printing out with a certain macro, the frame and lower area of the image are missing.	
When using the Dazel system, the job cannot be reset after the paper feed tray reaches paper end.	

RIGOR Reissued: 25-Jan-01

Technical Bulletin

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Model: Russian-P

Date: 11-Apr-00

No.: RG038003b

<ul> <li>When printing out with the Microsoft Mini Driver for Windows NT Terminal Server, the image created is sometimes out of specification.</li> <li>When printing out a file made with certain CAD applications for DOS without using a printer driver, thick lines on the original image appear thin on the output.</li> <li>Note: To activate this correction, it is necessary to set Bit SW3, bit 3 to 1 (0=disabled, 1=Enabled).</li> <li>Firmware modified to meet the functional specifications of the Tray Priority function.</li> <li>The print speed slows down during consecutive printing of 1-page jobs.</li> <li>Note: To activate this correction, it is necessary to set Bit SW3, bit 2 to 1 (0=Disabled, 1=Enabled) and set BIT SW3, bit 4 to 1 (DAZEL support function disabled). The correction will not be effective if both of these switches are enabled.</li> <li>Firmware modified so that the controller can connect to and be used with the DAZEL System. However, the Russian is not officially certified by DAZEL Corp.</li> </ul>	1.4.4
With raster images, sometimes part of the right edge of the printable area could not print. Italian and Spanish text characters overlap each other on the configuration page error log. The following title on the configuration page has been changed: "Printer Name (NetWare)" → "Printer Name".	1.4.0

### Technical Bulletin

#### Reissued: 21-Sep-01

Model: Russian-P			Dat	e: 24-May-00		No.: RG038004a
Subject: Printer Engine Firmware History				Prepared by:	: K. N	lisugi
From: Technical Services Dept., GTS Division						
Classification:	ssification: Troubleshooting Part inf		orma	ormation 🗌 Ac		n required
	Mechanical	Electric	al	🗌 S	Servic	e manual revision
	Paper path		it/rec	eive 🗌 F	Retrof	fit information
	⊠ Other ( )					

Printer engine firmware history of the Russian-printer (G038 model).

#### USA model

Part Number	Version	Checksum	Production
G0385382F	1.13	417F	January '01 production
G0385382C	1.10	BC29	May '00 production
G0385382B	1.09	470F	1st mass production

#### Europe/Asia model

Part Number	Version	Checksum	Production
G0385384F	1.13	6CFE	January '01 production
G0385384C	1.10	9DA3	May '00 production
G0385384B	1.09	35C6	1st mass production

Descriptions	Version
New functions added in the printer engine service mode (Service Menu 2):	
6. Fuser Interval	1.13
7. PCU Interval	1.13
Please refer to the table on the next page for details of the functions.	
Serial number programming	
Firmware modified so the last digit of the serial number in "Service Menu 2" (engine service mode), "Engine S/N" can be changed.	1.10

# Reissued: 21-Sep-01

### Technical Bulletin

Model: Russian-P

Date: 24-May-00

No.: RG038004a

	Menu Le	vel	- Function Sett	
Level 1	Level 2	Description	Function	Settings
<b>7:</b> Fuser Interval		Fusing replacement interval	Selects the fusing unit replacement interval. When the fusing PM counter reaches this value, a warning message is displayed. Then, 5000 pages later, printing is disabled.	<b>120K</b> 60K 70K 80K 90K 100K 110K
<b>8:</b> PCU Interval		PCU replacement interval	Selects the PCU replacement interval. When the PCU PM counter reaches this value, a warning message is displayed. Then, 5000 pages later, printing is disabled.	<b>60K</b> 30K 40K 50K

### Technical Bulletin

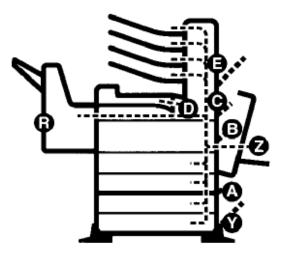
Model: Russian-P	1		Date	e: 1-May-02	No.: RG038005
Subject: Jam Codes				Prepared by: S. Tomoe	
From: Technical Services sec. Service Planning Dept.					
Classification:	Troubleshooting [	Part infe	ormat	tion 🗌 Actior	n required
	Mechanical [	Electric	al	Servic	ce manual revision
	Paper path	Transmit/rec		eive 🗌 Retro	fit information
	Other ( )				

Please add the following table of jam locations and descriptions for engine log errors, which appear on the printer engine maintenance info report.

Engine Error Logging (Printer Engine Maintenance Information: Printer Engine Service Mode)

ERROR CODES	JAM LOCATION	DESCRIPTIONS
0001h	A (Standard Tray)	Paper does not reach the upper (1st) relay sensor.
0002h	В	Paper does not reach the registration sensor.
0004h	С	Paper does not reach or release from the paper exit sensor.
0040h	D	Paper does not reach or release from the bridge relay sensor.
0008h	Y (Optional Tray)	Paper does not reach the lower (2nd) relay sensor or optional relay sensor.
0010h	E (Mailbox)	Paper does not reach or release from the mailbox vertical transport sensor.
0020h	R (Finisher)	Paper does not reach or release from the finisher entrance sensor, or does not reach or release from the finisher exit sensor.
0100h	Z (Duplex)	Paper does not reach or release from the duplex entrance sensor, or does not reach or release from the duplex exit sensor.

Jam Locations:



### Technical Bulletin

#### Reissued: 16-May-02

Model: Russian-P

Date: 11-Apr-00

No.: RG038003c

#### **RTB Correction**

The items in ital	ics have been corrected of	or added.		
Subject: Printer Controller Firmware History		Prepared by: S. Tomoe		
From: Technical	Services sec. Service Planning	g Dept.		
Classification:	Troubleshooting	🗌 Part informa	tion	Action required
	Mechanical	Electrical		Service manual revision
	Paper path	Transmit/rec	eive	Retrofit information
	Other ()			

Printer controller firmware history of the Russian printer (G038 model).

The items in italics have been added.

Part Number	Version	Checksum	Production
G0385381P	1.5.7	B093	May '02 production
G0385381N	1.5.6	FE5B	December '01 production
G0385381M	1.5.4	F9D8	September '01 production
G0385381L	1.4.9	D516	January '00 production
G0385381K	1.4.8	C238	December '00 production
G0385381J	1.4.4	F928	November '00 production
G0385381H	1.4.0	E48B	September '00 production
G0385381F	1.3.8	A84E	May '00 production
G0385381E	1.3.6	2B4B	April '00 production
G0385381D	1.3.4	918F	March '00 production
G0385381C	1.2.9	1D5B	January '00 production
G0385381B	1.2.0	85FF	1 st mass production

Note: The above firmware is being used in USA, Europe, and Asia models.

Model: Russian-P

Date: 11-Apr-00

No.: RG038003c

Descriptions	Version
Using a specific DOS application (UNICO2001): When the data includes the	
following printing order, the printer will hang up.	
<ul> <li>Duplex printing from odd page and single page printing</li> </ul>	
Add some Euro Symbol Sets and Euro Currency Codes for compatibility with HP printers. (PCL5e, PCLXL)	
The Engine Maintenance message "Service man call" has been changed to "Service call".	1.5.7
When the paper runs out while sort print is performing and perform the forced print, the printer prints a multiple set of job.	
When printing a PCL file, certain characters do not print.	
Software modified so that it is possible to perform jobs containing a mixture of PCL	
and PS commands when printing directly from a host application.	
The printer freezes up when the priority paper tray is pulled out after the PS driver	
is unable to locate the paper size specified in the driver.	1.5.6
When adding macro commands to a multiple-page duplex print job, such as when	7.5.0
directly printing out from DOS, the first sheet comes out one-sided.	
For Dazel: When a stack job has been cancelled, a mismatch occurs between the actual number of pages printed out and the number reported to the server.	
OCR font does not download into the HDD.	
With the PS driver, the printer does not print out jobs when the Separator function	
has been selected.	
Configuration Sheet does not print out.	1.5.4
When a job has been sent with the PS driver but the tray has not been specified	1.0.4
(w/manual selection), the machine does not inform Aficio Manager of this error.	
When using the PS driver for a collate print job (bypass feed), only the 1 <sup>st</sup> set is	
printed out.	
A buffer size error occurs during data communication over IEEE1284 ECP.	