Model: Stinger-C1L	Date: 30-Nov-99	No.: RB001001

Subject: Differences from Stinger-C1	Prepared by: K. Miura
From: Technical Services Dept., GTS Division	

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

The new model, "Stinger-C1L (B001)" will be launched in January 2000. It is a slightly modified version of the already existing model "Stinger-C1 (Ricoh Aficio 180, Gestetner 3218, Nashuatec D418, Rex-Rotary 2818, Savin 9918DP, Infotec 4180 MF)".

This will be six destination codes depending on the area: -10 is Latin America (Ricoh and Gestetner), -15 is North America (Savin), -17 is North America and Canada (Ricoh), -22 is Europe (Gestetner, Nashuatec, and Rex-Rotary), -26 is Europe and Oceania (Infotec), -27 is Europe, Latin America, and Hong Kong (Ricoh).

This RTB clarifies the differences between the base copier and Stinger-C1L (based on the style of the service manual).

1. OVERALL MACHINE INFORMATION

1-1. SPECIFICATIONS

NOTE: Only items marked ∗ are different from the base copiers.

∗Power Source:

120 V, 60Hz
More than 10 A (for North America/Latin America/ Canada)

220 ~ 240 V, 50/60 Hz
More than 6 A (for Europe/Hong Kong/ Latin America)

∗Noise Emission (Sound Power Level):

Stand-by (Mainframe only):   29 dB(A)

Operating (Mainframe only):   59 dB(A)

Operating (Full System):   63 dB(A)

Off Mode: 29 dB(A)

NOTE: 1) The above measurements were made in accordance with ISO 7779.

2) Full System: Mainframe + ADF

∗Coping Speed in Multicopy mode (copies/minute)

	A4 sideways/ 11" x 8$1/2$"	A3	11" x 17"	B4/8$1/2$" x 14"
Non-memory copy mode	15	10	10	11
Memory copy mode	15	11	10	12

NOTE: 1) Measurement Conditions
Not APS mode
Full size

∗Copy Paper Capacity:

Paper Tray:
   250 sheets
By-pass Tray:
      100 sheets (A4, B5, A5, B6, 8$1/2$" x 11", 5$1/2$" x 8$1/2$")
      10 sheets (A3, B4, 11" x 17", 8$1/2$" x 13")
      1 sheets (non-standard sizes)

NOTE: Copy weight: 80g/m^2 (20 lb).

Optional Equipment:	● Platen cover
	● Auto document feeder
	● Tray heater
	● Optics anti-condensation heater
	● Drum heater
	● Copier feature expander (48 MB memory)
Copy Capacity:	Copy Tray: 250 sheets

*1-2. MACHINE CONFIGURATION

A

B
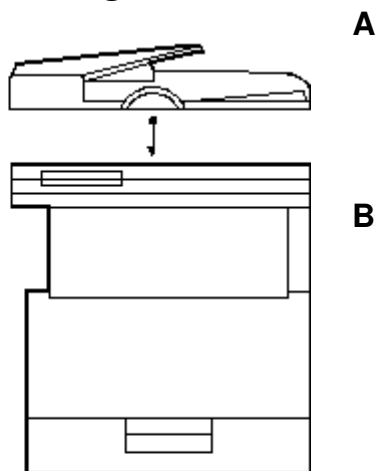
Version	Item	Machine Code	No.
Copier	Copier	B001	B
	ADF (Optional)	A859	A
	Platen Cover (Optional)	A893	
	Memory 48 MB (Optional)	A887	
Printer	Printer Controller (Optional)	B305	
	PS Option (Optional)	B308	
	HDD (Optional)	G690	
	NIB (Optional)	B307	
	Memory 32 or 64 MB (Optional)	G688	

## *1-3. PAPER PATH
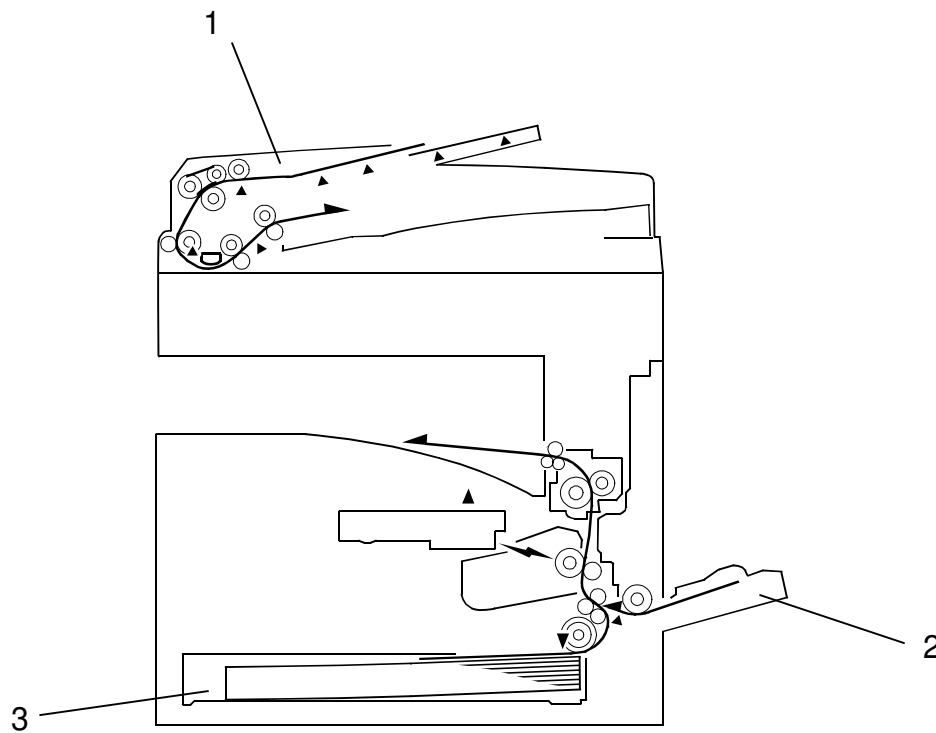
1. Optional ADF
2. By-pass feed tray
3. Paper tray

1-4. ELECTRICAL COMPONENT DESCRIPTIONS

The following items are not included in this machine.

Symbol	Name	Function	Index No.
MC4	Registration	Drives the registration rollers	13
SW4	Vertical Transport Cover Switch	Detects if the front door is open or not, and cuts the +24 V DC power line for the vertical transport clutch.	25
S10	Vertical Transport	Detects misfeeds.	22
PCB10	FCU (Option)	Controls all fax communications and fax features, in cooperation with the BICU.	43
PCB11	NCU (Option)	Switches the analog line between the fax unit and the external telephone.	47
LED1	Exit Tray	Indicates if there is paper on the exit tray.	32
LED2	1-bin Sorter	Indicates if there is paper on the 1-bin sorter. 1-bin sorter is option.	34
SP1	Speaker	Turns on during fax communication.	41

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1-5. DRIVE LAYOUT
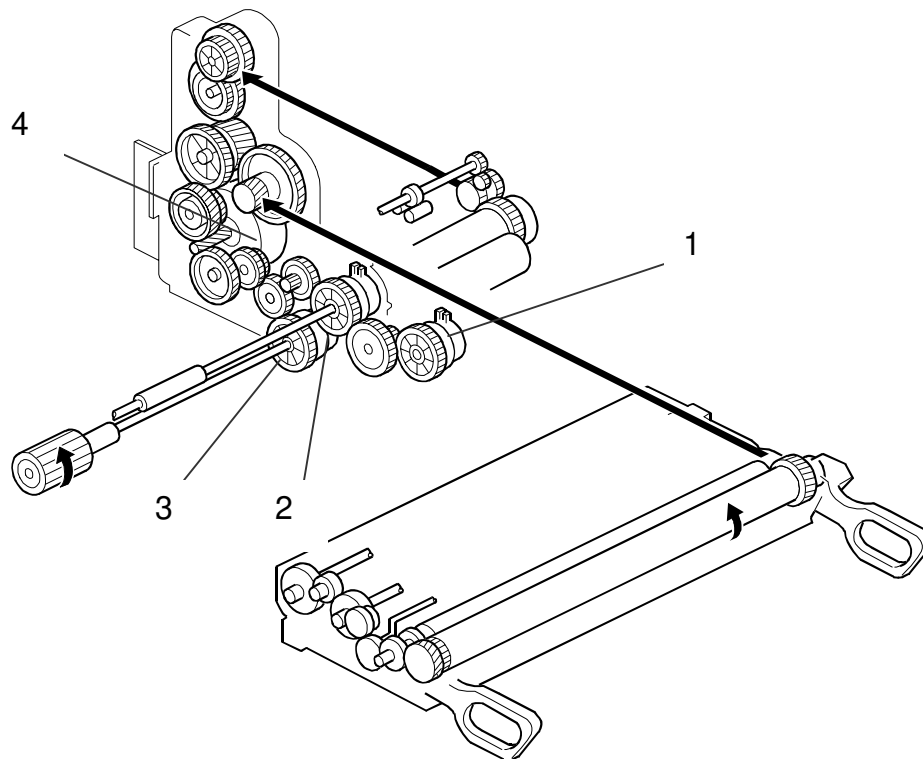
1. By-pass feed clutch

2. Registration clutch

3. Paper feed clutch

4. Main motor

1-6. BOARD STRUCTURE

1-6-1. OVERVIEW

This machine does not have an optional fax controller.

2. DETAILED DESCRITIONS

2-1. MISFEED DETECTION

The following checks are not included in this machine.

- **Vertical transport sensor ON check**
- **Vertical transport sensor OFF check**
- **Vertical transport sensor (Optional PFU) ON check**
- **Vertical transport sensor (Optional PFU) OFF check**
- **1 bin tray exit sensor ON check**
- **1 bin tray exit sensor OFF check**

3. SERVICE TABLES

3-1. SERVICE PROGRAM MODE TABLES

The following modes are not included in this machine.

Mode No.			Mode No.		
Class 1 and 2	**Class 3**		**Class 1 and 2**	**Class 3**	
1-002	2	Side-to-Side Regist. (2nd Paper Feed)	5-930		Fax Forwarding Mode
	3	Side-to-Side Regist. (3rd Paper Feed)	7-003	3	Total Print Counter (Fax)
1-003	2	Paper Feed Timing (2nd Paper Feed)	7-204	2	Copy Counter – Paper Tray (2nd)
	3	Paper Feed Timing (3rd Paper Feed)		3	Copy Counter – Paper Tray (3rd)
1-908	1 ~ 18	Paper Tray Adj.	7-504	4	Total Jams by Location (R Jam)
1-909		Tray Motor Reverse Time		5	Total Jams by Location (Y Jam)
5-103		Auto Paper Tray Shift		7	Total Jams by Location (2nd)
5-401	2	User Code Mode (Fax)		8	Total Jams by Location (3rd)

3-2. INPUT CHECK TABLE

The following checks are not included in this machine.

Number	Description	Number	Description
4	Vertical transport cover switch	44	Lower paper size switch (Optional paper tray unit)
5	Tray cover switch (Optional paper tray unit)	45	Upper paper height sensor (Optional paper tray unit)
7	Bin tray open switch (Optional 1-bin sorter)	46	Lower paper height sensor (Optional paper tray unit)
17	Vertical transport sensor	47	Upper lift sensor (Optional paper tray unit)
18	Vertical transport sensor (Optional paper tray unit)	48	Lower lift sensor (Optional paper tray unit)
21	Exit sensor (Optional 1-bin sorter)	49	Paper sensor (Optional 1-bin sorter)
41	Upper paper end sensor (Optional paper tray unit)	55	Paper tray unit set sensor (Optional paper tray unit)
42	Lower paper end sensor (Optional paper tray unit)	57	1-bin sorter installed
43	Upper paper size switch (Optional paper tray unit)	73	Tray motor lock (Optional paper tray unit)

Model: Stinger-C1L	Date: 30-Nov-99	No.: RB001001

3-3. OUTPUT CHECK TABLE

The following checks are not included in this machine.

Number	Description	Number	Description
21	Vertical transport clutch	30	Lower lift motor (Up) (Optional paper tray unit)
22	Relay clutch (Optional paper tray unit)	31	Upper lift motor (Down) (Optional paper tray unit)
26	Upper paper feed clutch (Optional paper tray unit)	32	Lower lift motor (Down) (Optional paper tray unit)
27	Lower paper feed clutch (Optional paper tray unit)	49	Exit tray LED
28	Tray motor (Optional paper tray unit)	50	1-bin tray LED
29	Upper lift motor (Up) (Optional paper tray unit)	54	Junction gate solenoid (Optional 1-bin sorter)

3-4. USER TOOLS

The following settings are not included in this machine.

System Setting

12. Pap. Tray Priority

13. Auto Tray Switch

14. Output Tray Prio.

Copy Setting

4. R.Srt.Aut Pap.

5. Sort

4. TROUBLESHOOTING

4-1. SC CODE DESCRIPTIONS

The following SC codes are not included in this machine.

SC502: 2nd Tray Lift Malfunction

SC503: 3rd Tray Lift Malfunction

SC506: Paper Tray Motor Lock

SC691: Communication Error between BICU and Fax Controller Unit

Model: Stinger-C1L		Date: 15-Nov-99	No.: RB001002

Subject: ROM HIstory (Stinger-C1L Copy Version)		Prepared by: K. Miura
From: Technical Service Dept., GTS Division		

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

Firmware history for the Stinger-C1L.
- USA Model -

B0015532	File No. (B001uxxx)	Version	C.SUM	Production
B	*001*	*1.01*	*E507*	*1st Mass Prod.*

- European Model -

B0015533	File No. (B001exxx)	Version	C.SUM	Production
B	*101*	*1.01*	*27A4*	*1st Mass Prod.*

B0015532	B001-10	B001-15	B001-17
B	*TBA*	*TBA*	*TBA*

B0015533	B001-22	B001-26	B001-27
B	*TBA*	*TBA*	*TBA*

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Technical Bulletin

Model: Stinger-C1L	Date: 15-Dec-99	No.: RB001003

Subject: ROM History (Stinger-C1L Copy Version)	Prepared by: K. Miura
From: Technical Services Dept., GTS Division	

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

Firmware history for the Stinger-C1L.
- USA Model -

B0015532	File No. (B001uxxx)	Version	C.SUM	Production
B	001	1.01	E507	1st Mass Prod.
C	*002*	*1.03*	*3547*	*December Prod. '99*

- European Model -

B0015533	File No. (B001exxx)	Version	C.SUM	Production
B	101	1.01	27A4	1st Mass Prod.
C	*002*	*1.03*	*B060*	*December Prod. '99*

Symptom Corrected	USA	EU
German text character is incorrectly displayed in the User Tools Menu. OLD: Anw.-Progr. Hauptmen **NEW: Anw.-Progr. Hauptmenü**	*C*	*C*

B0015532	B001-10	B001-15	B001-17
B	H4391200001~	H4391100001~	H4391100146~
C	*TBA*	*TBA*	*TBA*

B0015533	B001-22	B001-26	B001-27
B	H4391200361~	4C81290001~	H4391200761~
C	*TBA*	*TBA*	*TBA*

Model: Stinger-C1L	Date: 31-Jan-00	No.: RB001004c

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

Subject: ROM History (Stinger-C1L Copy Version)	Prepared by: K. Miura
From: Technical Services Dept., GTS Division	

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

Firmware history for the Stinger-C1L.

USA Model

B0015532	File No. (B001uxxx)	Version	C.SUM	Production
B	001	1.01	E507	1st Mass Prod.
C	002	1.03	3547	December Prod. '99
D	003	1.04	302D	May Prod. '00
E	004	1.05	C916	May Prod. '00

European Model

B0015533	File No. (B001exxx)	Version	C.SUM	Production
B	101	1.01	27A4	1st Mass Prod.
C	102	1.03	B060	December Prod. '99
D	103	1.04	4BFE	May Prod. '00
E	104	1.05	139F	May Prod. '00

European 2nd Language

B0015536	File No. (B001exxx)	Version	C.SUM
	201	1.03	59AA
A	202	1.04	8553
B	203	1.05	1B90

European 3rd Language

B0015537	File No. (B001exxx)	Version	C.SUM
	301	1.03	F91E
A	302	1.04	BCE2
B	303	1.05	4D9F
C	*304*	*1.06*	*C391*

Model: Stinger-C1L	Date: 31-Jan-00	No.: RB001004c

Symptom Corrected	USA	EU	EU2	EU3
The message for "Original Jam" in Czech was displayed as a completely different message.	_	_	_	*C*
There are two detections for SC546. 1. After the fusing lamp has been on for 8 seconds, the fusing temperature fails to rise 3°C or more within any of the 10-second detection intervals. 2. The fusing temperature does not reach 74 degrees within 22 seconds of the start of main power warm-up or recovery from Energy Saver/Low Power Mode. The machine did not clear the timer for condition 2 when the fusing lamp was heated up to 100%.	E	E	B	B
The detection conditions for SC546 have been changed as follows: Old: 2. Detection during warm-up, standby and Energy Saver Mode. 2. After the fusing lamp has been on for 8 seconds, the fusing temperature fails to rise 3°C or more within any of the 5-second detection intervals. New: 2. Detection during warm-up only. 2. After the fusing lamp has been on for 8 seconds, the fusing temperature fails to rise 3°C or more within any of the 10-second detection intervals.	D	D	A	A
Previously, it was necessary to enter SP Mode to clear SC547. It is now possible to clear the code by turning the main power switch off and on.	D	D	A	A
A German text character is incorrectly displayed in the User Tools Menu. OLD: Anw.-Progr. Hauptmen **NEW: Anw.-Progr. Hauptmenü**	C	C		

B0015532	B001-10	B001-15	B001-17
B	No production	H4391100001~	H4391100146~
C	H4391200001~	H4391200006~	H4391200176~
D	No production	No production	No production
E	H4300500001~	H4300500051~	H4300500156~

B0015533	B001-22	B001-26	B001-27
B	No production	No production	No production
C	H4391200361~	4C81290001~	H4391200761~
D	No production	No production	No production
E	H4300500506~	4C80500001~	H4300500606~

Model: Stinger-C1L	Date: 31-Jan-00	No.: RB001004b

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

Subject: ROM History (Stinger-C1L Copy Version)	Prepared by: K. Miura
From: Technical Services Dept., GTS Division	

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

Firmware history for the Stinger-C1L

USA Model

B0015532	File No. (B001uxxx)	Version	C.SUM	Production
B	001	1.01	E507	1st Mass Prod.
C	002	1.03	3547	December Prod. '99
D	003	1.04	302D	May Prod. '00
E	*004*	*1.05*	*C916*	*May Prod. '00*

European Model

B0015533	File No. (B001exxx)	Version	C.SUM	Production
B	101	1.01	27A4	1st Mass Prod.
C	102	1.03	B060	December Prod. '99
D	103	1.04	4BFE	May Prod. '00
E	*104*	*1.05*	*139F*	*May Prod. '00*

European 2nd Language

B0015536	File No. (B001exxx)	Version	C.SUM	Production
	201	1.03	59AA	February Prod. '00
A	202	1.04	8553	May Prod. '00
B	*203*	*1.05*	*1B90*	*May Prod. '00*

European 3rd Language

B0015537	File No. (B001exxx)	Version	C.SUM	Production
	301	1.03	F91E	February Prod. '00
A	302	1.04	BCE2	May Prod. '00
B	*303*	*1.05*	*4D9F*	*May Prod. '00*

Model: Stinger-C1L	Date: 31-Jan-00	No.: RB001004b

Symptoms Corrected – new ones only, for old ones, see previous RTBs	USA	EU	EU2	EU3
There are two detection conditions for SC546. *1. After the fusing lamp has been on for 8 seconds, the fusing temperature fails to rise 3°C or more within any of the 10-second detection intervals.* *2. The fusing temperature does not reach 74 degrees within 22 seconds of the start of main power warm-up or recovery from Energy Saver/Low Power Mode.* *The machine did not clear the timer for condition 2 when the fusing lamp was heated up to 100%.*	*E*	*E*	*B*	*B*

B0015532	B001-10	B001-15	B001-17
B	No production	H4391100001~	H4391100146~
C	H4391200001~	H4391200006~	H4391200176~
D	TBA	TBA	TBA
E	*TBA*	*TBA*	*TBA*

B0015533	B001-22	B001-26	B001-27
B	No production	No production	No production
C	H4391200361~	4C81290001~	H4391200761~
D	TBA	TBA	TBA
E	*TBA*	*TBA*	*TBA*

Model: Stinger-C1L	Date: 12-May-00	No.: RB001005

Subject: Hard Disk Compatibility	Prepared by: K. Misugi
From: Technical Services Dept., GTS Division	

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

This RTB is to inform of 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 1.6GB hard disk unit will be discontinued in March, '00 and the new 6.0GB hard disk will be used from April.

When the new 6.0GB 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 1.6GB and the new 6.0GB hard disk unit.

Compatibility Table

	Old 1.6GB HDD (G690-06)	New 6.0GB 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.

Model: Stinger-C1L	Date: 12-May-00	No.: RB001005

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.

RICOH

Technical **B**ulletin

PAGE: 1/1

Model: Stinger-C1L	Date: 12-May-00	No.: RB001006

Subject: NIB NVRAM Backup and Restore	Prepared by: K. Miura
From: Technical Service Dept., GTS Division	

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

This RTB informs of 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 Tool: 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 performing 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 4.5.3 of the printer option service manual for the detailed procedure.)

The controller firmware will be modified so this function will no longer be valid. It will not be shown in the Service Tool menu.
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.