RICOH

Technical Bulletin **No. K200-004**	Issued on May, 7, 1991

Subject: **Spare Parts List for K200 ISDN Kit**

Model(s): **K200 ISDN Kit**

FAX T.S. Section T.S. Department Manager
H. Motojima

Classification

- [ ] **Action Required**
- [ ] **Troubleshooting**
- [ ] **Retrofit Information**
- [ ] **Revision of Service Manual**
- [x] **Information Only**
- [ ] **Others**

Control No. for Each Area

R.C.	--	Asia	003
SAVIN	--	LAM	--
Europe	003	AT&T	--
HCS	003		

We are issuing the parts list for K200 ISDN Kit as a parts catalog, as attached.

We will not stock initial spare parts for you.
So, we would like you to stock few of the above kits for replacement for an initial period.

RICOH

Technical Bulletin
No. K200-005

Issued on
May, 15, 1991

Subject: G4 CCU Bit Sw Table Correction for K200D

Model(s): G4 kit for K200D

FAX T.S. Section T.S. Department Manager

H. Motojima

Classification

☐ **Action Required**
☐ **Troubleshooting**
☐ **Retrofit Information**
☐ **Revision of Service Manual**
■ **Information Only**
☐ **Others**

Control No. for Each Area

R.C.	004	Asia	004
SAVIN	--	LAM	--
Europe	004	AT&T	--
HCS	004		

We corrected the G4 CCU Bit Sw Table for the service manual in accordance with the requests received during the G4 training held in April, 1991.

Please replace your old bit switch table with this one.

[Note]
> This table is only for the K200D G4 kit (X.21, V.24, V.35 I/F), not for the ISDN G4 kit.
> For the ISDN G4 kit, refer to the table in the ISDN service manual.

RICOH

Subject: **Noise may be generated around the Z51 idle gear.**

Model(s): FAX7000(D), 7000L(Digital G4)
i-6765, 6865

**FAX T.S. Section T.S. Department Manager**
H. Motojima

Classification

- ■ **Action Required**
- ☐ **Troubleshooting**
- ☐ **Retrofit Information**
- ☐ **Revision of Service Manual**
- ☐ **Information Only**
- ☐ **Others**

Control No. for Each Area

R.C.	005	Asia	005
SAVIN	--	LAM	003
Europe	005	AT&T	--
HCS	005		

[Symptom] Noise may be generated around the Z51 idle gear while the main motor is moving. Also, paper jam may occur.

[Cause] The shaft for the Z51 idle gear have become worn. This problem may occur in machines whose printer counter is more than 70000.
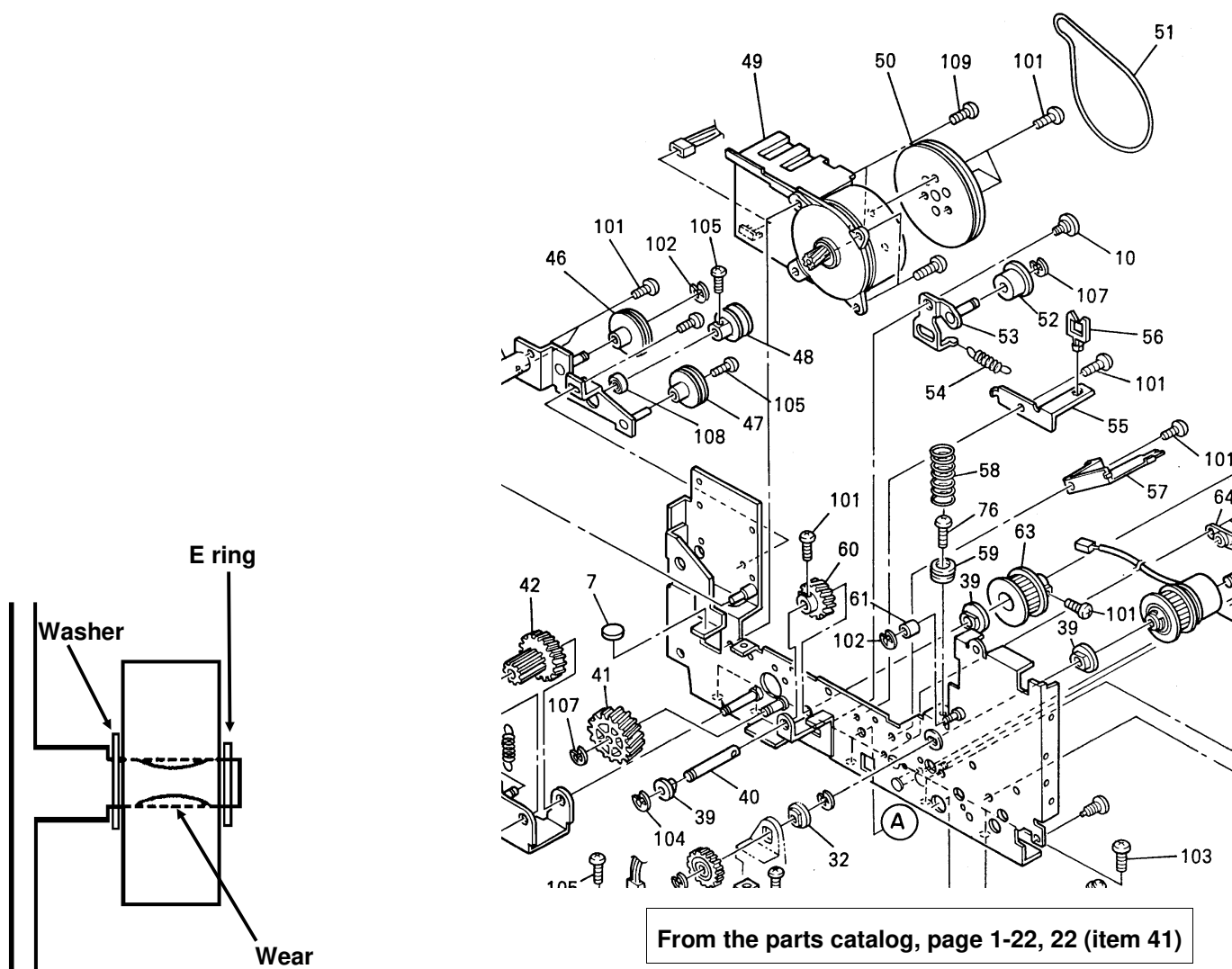
From the parts catalog, page 1-22, 22 (item 41)

RICOH

Subject:

Noise may be generated around the Z51 idle gear.

[Countermeasure]

A washer has been added between the gear and the E ring, and the inside of the gear has been changed from a bearing to a bushing.

      old   **new**

- H0083247 x 1 → H0083283 x 1
- 08075056 x 1 → 08075056 x 2

[Execution date]

From the 1st production of July, 1991.

P/N : 08075056   **P/N : H0083283**

E ring

B S face

B S face

Rounded edge side
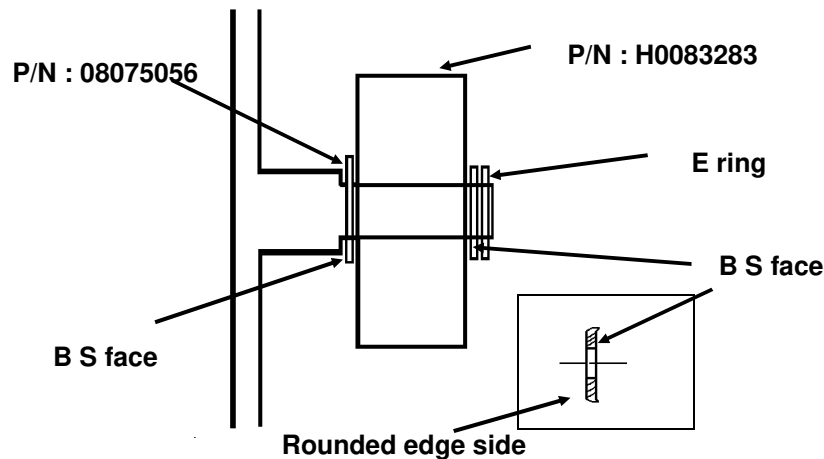
[Modification in the Field]

(Case 1) If the shaft of the gear is not worn.

Please change the following parts at the PM for machines that are not modified. According to the above figure.

H0083283	Main Drive Idler - Z51	1pc
08075056	Washer 8.1 x 14	2pcs

Note: **Please be careful with the washers at both sides of the gear when you modify the machine in the field, because they have the direction. The rounded edge side (opposite to BS face) should be attached to the gear direction. (Refer to the above illustration.**

(Parts)

You can order the above parts separately, but also we made a kit for this modification for convenience

H0089403	Z51 Idler Gear Kit-1

Contents:

H0083283	Main Drive Idler - Z51	1pc
08075056	Washer 8.1 x 14	2pcs

RICOH

Subject:

Noise may be generated around the Z51 idle gear.

(Case 2) If the shaft of the gear is worn.

> **Please change the following parts at the same time.
> (Follow the order of the step numbers which are written in the following figure.)**

a: Z51 Idle Gear - Anti wearing   1 pc
b: Z51 Idle Gear Shaft -Anti wearing   1 pc
c: Z51 Idle Gear Stopper-Anti wearing   1 pc
d: Hexagon Headless Set Screws-M3 x   4 pcs
5
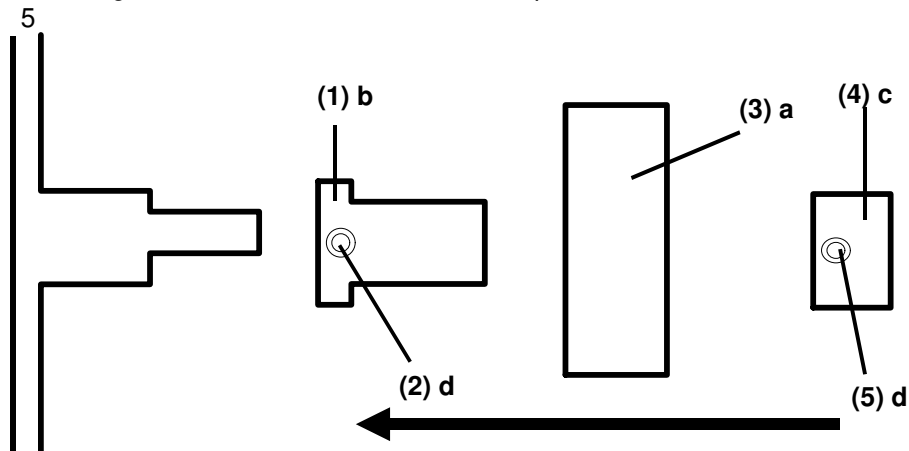
(Parts)

H0089404	Z51 Idler Gear Kit-1

Contents:

Z51 Idle Gear - Anti wearing   1 pc
Z51 Idle Gear Shaft - Anti wearing   1 pc
Z51 Idle Gear Stopper- Anti wearing   1 pc
Hexagon Headless Set Screw   4 pcs

RICOH

Technical Bulletin **No.K200-007**	Issued on July, 24th, 1991

Subject:

International Dialling Problem

Model(s):

FAX T.S. Section T.S. Department
Manager
H. Motojima

Classification

Control No. for Each Area

R.C.	006	Asia	006
SAVIN	--	LAM	004
Europe	006	AT&T	--
HCS	006		

Case 1

Problem: The machine may dial not the all digits of a telephone number if a pause was entered after the international prefix. (<u>Last one digit may be missed.</u>)

e.g.

Input	01 Pause 1 2 3 4 5
Dial	01 Pause 1 2 3 4

Temporary countermeasure:

Either
- Delete the pause after the international prefix, if your exchanger can work without the pause.
- Add one dummy digit after telephhone number.
  e.g. for the above telephone number

    Input   01 Pause 1 2 3 4 5 <u>6</u>
    └─────── **dummy digit**

    Dial   01 pause 1 2 3 4 5

Modification:
- FAX7000

    H0086045M→N   PCB-G3 CCU
    H0087269D→E   PROM : G3CCU-USA

- FAX7000L, Infotec 6765/6865

    H0086042K→L   PCB-G3 CCU : E
    H0087279F→G   PROM : G3CCU-E

Execution Date:
    Effectiv e from the 1st production of April, 1991.

RICOH

Technical Bulletin **No.K200-007**	Issued on	July, 24th, 1991

Subject:

International Dialling Problem

Case 2

Problem: The machine may dial not the all digits of a telephone number if a pause was entered after the international prefix and country code is set at Netherlands. (<u>The digit after the international prefix may be missed.</u>)

e.g.

Input :   02 Pause 1 2 3 4 5
Dial :   02 Pause 2 3 4 5
Cauntry Code : Netherlands

Temporary Countermeasure:

Either
- Delete the pause after the international prefix, if your exchanger can work without the pause.
- Add one dummy digit after the international prefix.
  e.g. for the above telephone number

    Input: 02 pause <u>1</u> 1 2 3 4 5

                                            dummy digit.

    Dial: 02 pause 1 2 3 4 5

Modification:
- FAX7000L / Infotec 6765/6865

    H0086042L→M   PCB-G3 CCU : E

    H0087279G→H   PROM : G3CCU-E

Execution Date:

Effective from 1st production of August, 1991.

CC: Mr. Sonoda.(CS QA)

RICOH

Technical Bulletin	Issued on
No.K200-008	July, 24th, 1991

Subject:

Busy Tone incorrect detection

Model(s):

FAX T.S. Section T.S. Department
Manager
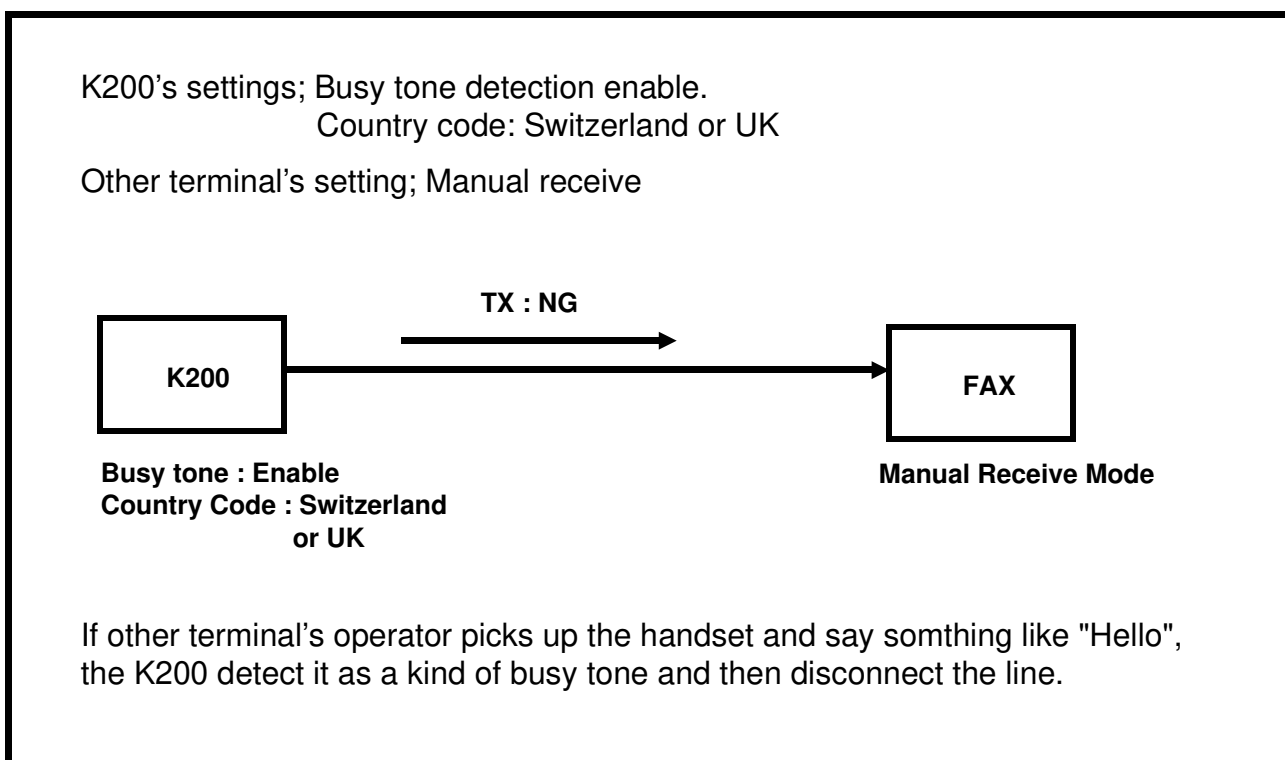H. Motojima

Classification

Control No. for Each Area

R.C.	--	Asia	--
SAVIN	--	LAM	--
Europe	007	AT&T	--
HCS	007		

Problem:

K200 may detect certain voice as busy tone and then disconnect the line even if it is not actual busy tone.

Condition

K200's settings; Busy tone detection enable.
        Country code: Switzerland or UK

Other terminal's setting; Manual receive

TX : NG

K200	───────►	**FAX**

Busy tone : Enable
Country Code : Switzerland
or UK

Manual Receive Mode

If other terminal's operator picks up the handset and say somthing like "Hello", the K200 detect it as a kind of busy tone and then disconnect the line.

Cause:

The comparison method for sent tone from the line on K200 is diffenent from that of the other models. Normally, certain kind of tolerance can be set (Range 1 through Range 4).
K200 compares the sent tone with these tolerance in parallel.
Other models compare them separately in the patterns order.

RICOH

Technical Bulletin
No.K200-008

Subject:

Busy Tone incorrect detection

Countermeasure

RAM data will be changed as follows.

1. When the country code is set at switzerland.

Address		Previous	New
304033H	(Number of busy tone cycles required for detection)	3	6

2. When the country code is set at UK.

| Address		Previous	New
304033H	(Number of busy tone cycles required for detection)	2	4

Execution Date for mass production
Not fixed yet.
we will inform you later by MB

Note:
As the result of the above the Busy 2 *(Equipment busy) will not be detected even if the busy tone detection setting is set as enable.
* Two patterns mixed into one busy tone.

ON 400ms 225ms
OFF 350ms 525ms

CC: Mr. Sonoda (CSQA)

RICOH
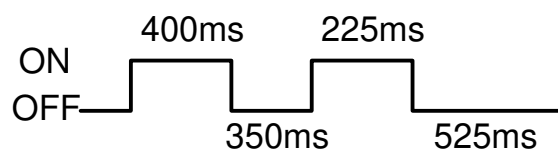
| **Technical Bulletin** **No.K200-009** | Issued on Sep. 25th, 1991 |

Subject:

LDS Handshake fail

Model(s):

FAX7000,FAX7000L,
infotec6765/6865/6866

FAX T.S. Section T.S. Department
Assistant General Manager
H. Motojima

Classification

Control No. for Each Area

R.C.	007	Asia	007
SAVIN	---	LAM	005
Europe	008	AT&T	---
HCS	008		

Problem: LDS handshake fail may often occur in the K200.

Cause: Due to a shertage in the tolerance of the UIB comparator, the machine may falsely detect an LDS handshake fail.

Countermeasure:

A resistor on the PCB-UIB has been changed as follows

H0086023E → H0086023F   PCB-UIB

16100703   → 16100231   R32

16100231   → 16100703   R31

> **Note:**
> 16100231 : Resistor - 3.3KΩ±5%   1/10W
> 16100703 : Resistor - 2.2KΩ ±5%   1/10W

Execution Date :
Effective from 1st production of Aug. 1991.

RICOH

Technical Bulletin **No. K200-010**	Issued on Feb 5th, 1992

Subject:

Corrections

Model(s): **FAX7000L**
       infotec 6765/6865/6866

FAX T.S. Section T.S. Department
Assistant General Manager
H. Motojima

Classification

Control No. for Each Area

R.C.	---	Asia	008
SAVIN	---	LAM	006
Europe	009	AT&T	---
HCS	009		

1. Operator's Manual

[Present Condition]

The charge control system works for all versions.

[Correction]

The charge control system only works for the Germany and Italy versions.

2. Field Service Manual

[Present Condition]

Nothing described in the field Service Manual about Switzerland's requirements.

[Connection]

If the country code is set to the Switzerland setting, the machine acts as follows.
- The machine prints out the received image in substitute reception mode even if the substitute reception condition is cleared (e.g. After adding paper).
- The substitute reception image will not be erased even if the image is printed using function 41, please clean the file using function 41.

RICOH

Technical Bulletin **No. K200-011**	Issued on Feb 5th, 1992

Subject: **Ringing detection fault**

Model(s): **FAX 7000L** **infotec 6765/6865/6866**

FAX T.S. Section T.S. Department
Assistant General Manager
H. Motojima

Classification

Control No. for Each Area

R.C.	--	Asia	--
SAVIN	--	LAM	--
Europe	010	AT&T	--
HCS	010		

Problem: During dialing via the handset, the machine enters receiving mode.
This happens on the Switzerland Setting.

Cause: The setting of NCU parameter 10 for minumum required ring length first limit is too small.

Countermeasure:
Change the NCU parameter settings as follows, if the machine's country code is set up for Switzerland.

NCU Parameter 10:

Previous	**Countermeasure**
1 ⟶	4 or 5

Model: General	Date: 31-Oct-97	No: 011
Subject: Year 2000 Problem	Prepared by: Y.Okunishi	
From: QAC 2nd Field Information Dept.		

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

Check Items

The following functions for which the clock timer is used were checked to see whether or not they will function correctly at 0:00 on Jan. 1, 2000.

1) Display and print of the date and time
The year must be changed to 2000 or 00 from 1999 or 99 and the date must be kept correctly after the start of the year 2000.

2) Clock adjustment
The date and time can be adjusted after the start of the year 2000.

3) Send later mode with memory and without memory
The dialling time must be at the set time after the start of the year 2000.

4) Automatic re-transmission.
When a communication error happens, the machine dials the same destination again automatically at an interval. This must function correctly after the start of the year 2000.

5) Weekly timer and night timer
The energy saver mode (fusing unit) control must work correctly.

6) Displayed date after a power failure
The correct date must be kept by the battery back-up feature.

Models Checked

1) K50 series (FAX10, 20, 60, etc.)

2) K70 series (FAX90, 95, 105, etc.)

3) K90 series (FAX80, 85, 75, 86, etc.)

4) LE series (FAX08, 09, Phone fax for ATT, etc.)

5) B series (B1, RF810, FAX12, FAX300, etc.)

6) ZB series (FAX220, FAX240, Innfax, etc.)

7) BARBARA series (RF01, 02, 03, 05, 06, etc.)

8) OX series (FAX21, 22)

9) PF series (PF-1, PF-2)

10) A series (FAX500, 550, etc.)

11) B60 series (FAX170, 180, etc.)

12) K100 series (FAX1000L, 1010L, etc.)

13) K105 series (FAX4000L, etc.)

14) K200 series (FAX7000L, etc.)

15) KV series (FAX2800L, 1200L, etc.)

16) C series (FAX3000L, 4500L, 5600L, etc.)

17) L80 (MV715)

18) I series (FAX800, 880, 680, etc.)

19) F\L series (FAX2700L, 4700L, MV310, etc.)

20) FX7, LX7 (FAX1700L, MV106, FAX1750MP, etc.)

21) L20 series (Aficio FX10)

Problems found

1) AF0 (FAX500, 550, etc.), CS0 (FAX3000L, 3100L, 3200L, etc.)

    a) The day of week that appears on the display only in the clock adjustment mode goes back to SUNDAY every time the clock is adjusted after the start of the year 2000.

        So, the programmed weekly timer does not work correctly.

        If the clock is not adjusted after the start of the year 2000, the date and the day of the week are kept correctly.

    b) Clock adjustment is available only for years 91 through 99. The other years cannot be set. (Month, day, and time can be adjusted.)

2) K200 (FAX7000L)

    a) Clock adjustment is available only for years 88 through 99. The other years cannot be set. (Month, day, and time can be adjusted.)

    b) The send later mode does not function (no dialling occurs) if it passes the time into the year 2000.
No report is printed and the remaining message in the memory is not cleared automatically but it can be cleared by user operation.

    c) Automatic re-transmission is not done if the year 2000 starts after the transmission failure.
The remaining message in the memory is not cleared automatically but it can be cleared by user operation.

    d) The display year is returned back to 88 after a power failure after the start of the year 2000.

Model: General	Date: 31-Oct-97	No: 011

The other functions in these models work correctly.

Schedule for the countermeasure ROMs

1) AF0 (FAX500, 550, etc.), CS0 (FAX3000L, 3100L, 3200L, etc.)
   In January 1998.

2) K200 (FAX7000L)
   In April 1998.

RC	RE	ASIA	

MB Correction

Reissue date: 15-Nov-97
The items in bold italic have been corrected or added.

Model: General	Date: 31-Oct-97	No: 011**A**
Subject: Year 2000 Problem	Prepared by: Y.Okunishi	
From: QAC 2nd Field Information Dept.		

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

Check Items

The following functions for which the clock timer is used were checked to see whether or not they will function correctly at 0:00 on Jan. 1, 2000.

1) Display and print of the date and time
   The year must be changed to 2000 or 00 from 1999 or 99 and the date must be kept correctly after the year 2000.

2) Clock adjustment
   The date and time can be adjusted after the time becomes the year 2000.

3) Send later mode with memory and without memory
   The calling time must be the set time after the time becomes the year 2000.

4) Automatic re-transmission.
   When the communication error happens, the machine calls to the same destination again automatically with an interval. This must function correctly after the time becomes the year 2000.

5) Weekly timer and night timer
   The energy saver mode (heater) control must work correctly.

6) Displayed date after a power failure
   The correct date must be kept by the battery.

Models Checked

1)   K50 series (FAX10, 20, 60, etc.)

2)   K70 series (FAX90, 95, 105, etc.)

3)   K90 series (FAX80, 85, 75, 86, etc.)

4)   LE series (FAX08, 09, Phone fax for ATT, etc.)

5)   B series (B1, RF810, FAX12, FAX300, etc.)

6)   ZB series (FAX220, FAX240, Innfax, etc.)

7)   BARBARA series (RF01, 02, 03, 05, 06, etc.)

8)   OX series (FAX21, 22)

9)   PF series (PF-1, PF-2)

10)   A series (FAX500, 550, etc.)

11)   B60 series (FAX170, 180, etc.)

12)   K100 series (FAX1000L, 1010L, etc.)

13)   K105 series (FAX4000L, etc.)

14)   K200 series (FAX7000L, etc.)

15)   KV series (FAX2800L, 1200L, etc.)

16)   C series (FAX3000L, 4500L, 5600L, etc.)

17)   L80 (MV715)

18)   I series (FAX800, 880, 680, etc.)

19)   F\L series (FAX2700L, 4700L, MV310, etc.)

20)   FX7, LX7 (FAX1700L, MV106, FAX1750MP, etc.)

21)   L20 series (Aficio FX10)

Problem found

Most of the models except the following models, will not experience any problems.

1)   AFO (FAX 500/550/580, NGR 9620, Infotec 3301/3305, Nashua F492)
      CSO (FAX 3000/3100/3200, NGR 9660/9661/9662, Omnifax L40/41,
      Savin FAX 3660/3620, Infotec 3660)
      CS1 (FAX 3500L,NRG 9665, Omnifax L46, Savin FAX 3670)
      CRO (FAX 2500L/2600L, NRG 9650, Omnifax L42, Savin FAX 3630, Infotec 3661)

   a)   The day of week, that appears on the display only in the clock adjustment
        mode, is returned back to SUNDAY every time when the clock adjustment is
        done after the time becomes the year 2000.

        So, the programmed weekly timer does not work correctly. *(AFO' s do not
        have the weekly timer.)*

        If the clock adjustment is not done after the time becomes the year 2000, the
        date and the day of week is kept correctly.

   b)   Clock adjustment is available only for the year 91 through 99. The other years
        cannot be set. (Month, day and time can be adjusted.)

2) K200 (FAX7000L)

    a) Clock adjustment is available only for the years 88 through 99. The other years cannot be set. (Month, day and time can be adjusted.)

    b) The send later mode does not function (no calling happens) if it passes the time into the year 2000.
No report is printed and the rest message in the memory is not cleared automatically but it is cleared by the user operation.

    c) Automatic re-transmission is not done if the time becomes the year 2000 in the interval after the transmission failure.
The rest message in the memory is not cleared automatically but it is cleared by the user operation.

    d) The display year is returned back to 88 after the power failure after the time becomes the year 2000.

The other functions in these models work correctly.

Schedule of the countermeasure ROMs

1) AFO, CSO, CS1, CRO:
In January 1998.

2) K200(FAX7000L):
In April 1998.

RC	RE	ASIA	
*	*	*	

RICOH Technical Bulletin

PAGE: 1/3

MB Correction

Reissue date: 15-Jan-98
The items in bold italic have been corrected or added.

Model: General	Date: 15-Jan-98	No: 011**B**
Subject: Year 2000 Problem	Prepared by: Y.Okunishi	
From: QAC 2nd Field Information Dept.		
Classification: ☐ Troubleshooting ☐ Mechanical ☐ Paper path ☒ Other (Info only)	☐ Part information ☐ Electrical ☐ Transmit/receive	☐ Action required ☐ Service manual revision ☐ Retrofit information

Check Items

The following functions for which the clock timer is used were checked to see whether or not they will function correctly at 0:00 on Jan. 1, 2000.

1) Display and print of the date and time
The year must be changed to 2000 or 00 from 1999 or 99 and the date must be kept correctly after the year 2000.

2) Clock adjustment
The date and time can be adjusted after the time becomes the year 2000.

3) Send later mode with memory and without memory
The calling time must be the set time after the time becomes the year 2000.

4) Automatic re-transmission.
When the communication error happens, the machine calls to the same destination again automatically with an interval. This must function correctly after the time becomes the year 2000.

5) Weekly timer and night timer
The energy saver mode (heater) control must work correctly.

6) Displayed date after a power failure
The correct date must be kept by the battery.

Models Checked

1) K50 series (FAX10, 20, 60, etc.)

2) K70 series (FAX90, 95, 105, etc.)

3) K90 series (FAX80, 85, 75, 86, etc.)

4) LE series (FAX08, 09, Phone fax for ATT, etc.)

5) B series (B1, RF810, FAX12, FAX300, etc.)

6) ZB series (FAX220, FAX240, Innfax, etc.)

7) BARBARA series (RF01, 02, 03, 05, 06, etc.)

8)   OX series (FAX21, 22)

9)   PF series (PF-1, PF-2)

10)   A series (FAX500, 550, etc.)

11)   B60 series (FAX170, 180, etc.)

12)   K100 series (FAX1000L, 1010L, etc.)

13)   K105 series (FAX4000L, etc.)

14)   K200 series (FAX7000L, etc.)

15)   KV series (FAX2800L, 1200L, etc.)

16)   C series (FAX**2500L**,3000L, **3500L**, 4500L, 5600L, etc.)

17)   L80 (MV715)

18)   I series (FAX800, 880, 680, **MV74**, etc.)

19)   F\L series (FAX2700L, **3700L**, 4700L, MV310, etc.)

20)   FX7, LX7 (FAX1700L, MV106, FAX1750MP, etc.)

21)   L20 series (Aficio FX10)

Problem found

Most of the models except the following models, will not experience any problems.

1)   AFO (FAX 500/550/580, **NRG** 9620, Infotec 3301/3305, Nashua F492)
CSO (FAX 3000/3100/3200, **NRG** 9660/9661/9662, Omnifax L40/41,
     Savin FAX 3660/3620, Infotec 3660)
CS1 (FAX 3500L,NRG 9665, Omnifax L46, Savin FAX 3670)
CRO (FAX 2500L/2600L, NRG 9650, Omnifax L42, Savin FAX 3630, Infotec 3661)

  a)   The day of week, that appears on the display only in the clock adjustment mode, is returned back to SUNDAY every time when the clock adjustment is done after the time becomes the year 2000.

    So, the programmed weekly timer does not work correctly. (AFO' s do not have the weekly timer.)

    If the clock adjustment is not done after the time becomes the year 2000, the date and the day of week is kept correctly.

  b)   Clock adjustment is available only for the year 91 through 99. The other years cannot be set. (Month, day and time can be adjusted.)

2)   K200 (FAX7000L)

   a)   Clock adjustment is available only for the years 88 through 99. The other years cannot be set. (Month, day and time can be adjusted.)

   b)   The send later mode does not function (no calling happens) if it passes the time into the year 2000.
   No report is printed and the rest message in the memory is not cleared automatically but it is cleared by the user operation.

   c)   Automatic re-transmission is not done if the time becomes the year 2000 in the interval after the transmission failure.
   The rest message in the memory is not cleared automatically but it is cleared by the user operation.

   d)   The display year is returned back to 88 after the power failure after the time becomes the year 2000.

The other functions in these models work correctly.

Schedule of the countermeasure ROMs

1)   AFO, CSO, CS1, CRO:
   In January 1998.

2)   K200(FAX7000L):
   In April 1998.

RC	RE	ASIA	
*	*	*	

Model: General	Date: 15-Apr-98	No: 014
Subject: Action Plan for the Year 2000 Issues		Prepared by: Y.Okunishi
From: QAC Field Information Dept.		

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

The year 2000 issue was explained in RTB No. General-011B.

That RTB explains only the technical matters of what will happen after the year 2000 in some models, and the countermeasures.

At this time, we would explain how to talk with customers about the year 2000 issues related to fax machines.

Basically, we can say to the customers that there is no major issue reated to basic operation after the year 2000, and they don't need to take any preventative action before the year 2000.

The only thing that the customers need to know is that the following operations will be changed after the year 2000.

1. AF0 (FAX 500/550/580, NRG 9620, Infotec 3301/3305, Nashua F492)
    CS0 (FAX 3000/3100/3200, NRG 9660/9661/9662, Omnifax L40/41,
         Savin FAX 3660/3620, Infotec 3660)
    CS1 (FAX 3500L,NRG 9665, Omnifax L46, Savin FAX 3670)
    CR0 (FAX 2500L/2600L, NRG 9650, Omnifax L42, Savin FAX 3630, Infotec 3661)

First, please do not forget to inform the customers that they don't need to do anything if they do not go into the clock adjustment mode.

A) Adjustment of the year

A-1) For the year 2000

①Set the clock to 11:59 PM (or 23:59) on December 31 1999, and wait for one minute.

②The year changes to 2000 automatically, then set the current time.
  (Do not change the year.)

A-2) For the year 2001

③After the above step ①, set the clock to 11:59 PM (or 23:59) on December 31 2000, and wait for one minute.

④The year changes to 2001 automatically, then set the current time.
  (Do not change the year.)

A-3) For years 2002 and later, repeat the same procedure as above.

B) Adjustment of the weekly timer (Heater timer) ....Except AF0

This is only for customers who use the weekly timer. (We do not think that many customers are using this function.)

Please recommend adjusting the timer on Sunday if the customer can do it.

If they cannot do it on Sunday, the ROM should be changed to the new one.

The new ROM includes the countermeasure for the above A) also.

2. K200 (FAX7000L)

A) Adjustment of the year

First, please do not forget to inform the customers that they don't need to do anything if they do not go into the clock adjustment mode.

A-1) For the year 2000

①Set the clock to 11:59 PM (or 23:59) on December 31 1999, and wait for one minute.

②The year changes to 2000 automatically, then set the current time.
  (Do not change the year.)

A-2) For the year 2001

③After the above step ①, set the clock to 11:59 PM (or 23:59) on December 31 2000, and wait for one minute.

④The year changes to 2001 automatically, then set the current time.
  (Do not change the year.)

A-3) For years 2002 and later

Repeat the same procedure as above.

If the customer switches off the machine after the year 2000, the year displayed returns to 1988. In this case, follow the above procedure to adjust the clock.

B) Send later mode

Please notify the customer that they should not use send later mode on December 31st 1999, if the transmission will be done on the next day.

If the customer cannot guarantee that they will follow this advice, the ROM should be changed.

Model: General	Date: 15-Apr-98	No: 014

Schedule of the countermeasure ROMs

1) AFO, CSO, CS1, CRO:
   In May 1998.

2) K200 (FAX7000L):
   In May 1998.

∗Both are delayed.

RC	RE	ASIA	
∗	∗	∗	

Model: LSO, CRO, CS1, AFO, AF2, K200		Date: 31-May-98	No: Multi - 008
Subject: ROMs for the year 2000 problem		Prepared by: Y.Okunishi	
From: QAC Field Information Dept.			
Classification:	☐ Troubleshooting ☐ Mechanical ☐ Paper path ☐ Other (　　　)	☒ Part information ☐ Electrical ☐ Transmit/receive	☐ Action required ☐ Service manual revision ☐ Retrofit information

Attached please find the list of the ROMs for the year 2000 problem and the procedure for making R200 ROMs from the ROM files.

Note:

- Please refer to RTB nos. General 11 and 14 for details.

- 8 ROMs for the K200 are combined in one file.

RC	RE	ASIA	
✻	✻	✻	

Model: LSO, CRO, CS1, AFO, AF2, K200	Date: 31-May-98	No: Multi - 008

ROMs for the year 2000

May 29, 1998
Y.Okunishi

Product Code	New ROM No.	Test	File name	Check sum	ROM Code	Model code	Model	Brand	Area	Sold from	Sold by	No. of sold units	Note
CSO	H0817138	yes	CSO7138	8552	c30usa	H081-20	3000L	RICOH	US	91/12	93/4	16,747	2M ROM (1ROM/unit)
						23	3200L			91/12	95/11	18,242	
						24	3100L			93/2	95/2	21,863	
						21	9660	NRG		92/3	92/7	71	
						22	9661			92/3	94/2	1,651	
						26	3660	SAVIN		92/2	93/4	1,372	
						27	3620			92/1	93/4	1,917	
											TOTAL	**61,863**	
	H0817136A	yes	CSO7136S	77A7	c30usa•	25	2600L	RICOH	US	94/9	95/3	**8,000**	
	H0817139E	yes	CSO7139E	3C77	c30tel	28	L40 L41	Omnifax	US	92/1	93/5	5,181	
						29	L41			92/1	93/5	8,008	
											TOTAL	**13,189**	
	H0817124A	yes	CSO7124A	0772	c30eur	40	3000L 3000L	RICOH	Europe	92/3	95/11	37,716	
						46	3000L	RICOH	Switzerland	92/10	95/6	4,179	
						60	9660	NRG	Europe	93/3	95/8	15,659	
											TOTAL	**57,554**	
	H0817123A	no	CSO7123A	0078	c30fra	70	3000LF	RICOH	France	93/4	95/9	393	
						80				92/4	95/9	6,206	
						90	9660F	NRG		92/4	95/9	2,164	
											TOTAL	**8,763**	
	H0817121A	yes	CSO7121A	FA57	c30hcs	30	3660	Infotec	Europe	92/10	94/8	15,528	
	H0817122A	yes	CSO7122A	D225	c30asi	51	3000L	RICOH	Asia	92/3	96/10	18,523	
						59	9660	NRG		94/3	96/4	2,837	
						55	-	Ricoh	Korea			?	
											TOTAL	**36,888**	
	H0817140M	yes	CSO7140M	859C	c30tai	23	3000L	RICOH	Taiwan	92/3	95/11	**1,251**	
	H0817128B	no	CSO7128B	E8C5	c30chi	54	3000L	RICOH	China	93/7	95/11	**981**	
	H0817159N	yes	CSO7159N	C3CE	c30opt	H151-65•SW:HCS•,H151-73(•:RE),H151-83(•:GES)		Option	Europe			?	Language Kit
CS1	H5117150B	yes	CS17150B	6A91	c31usa	H511-20	3500L	RICOH	US	93/6	96/3	31,766	
						21	9669	NRG		93/6	95/9	700	
						22	L46	Omnifax		93/6	95/12	11,472	
						27	3670	SAVIN		93/7	95/9	3,106	
											TOTAL	**47,044**	
CR0	H5107121B	yes	CRO7121B	23AB	c60usa	H510-20	2500L	RICOH	US	93/5	95/4	26,535	
						21	9650	NRG		93/7	95/7	832	

3/8

Group	Part No.	Status	Code	Hex	Name	No.	Model	Brand	Region	Start	End	Qty	Notes
						22	L42	Omnifax		93/9	95/3	6,848	
						27	3630	SAVIN		93/7	95/3	2,136	
									TOTAL			**36,351**	
	H5107120B	yes	CRO7120B	F5BF	c60eur	30	3661	Infotec	Europe	93/9	94/9	5,564	
						40	2500L	RICOH		93/9	95/7	11,418	
						60	9650	NRG		93/9	95/8	5,632	
									TOTAL			**22,614**	
	H5107123B	yes	CRO7123B	0E88	c60fra	33	3661F	Infotec	France	94/4	95/9	242	
						43	2500LF	RICOH		93/10	95/9	2,012	
						63	9650F	NRG		93/10	95/9	931	
									TOTAL			**3,185**	
	H5107132G	yes	CRO7132G	37F5	c60asi	51	2500L	RICOH	Asia	93/12	96/1	5,955	
						59	9650	NRG		94/1	95/9	1,107	
									TOTAL			**7,062**	
	H5107131B	yes	CRO7131B	23A3	c60tai	53	2500L	RICOH	Taiwan	94/10	97/6	**777**	
AFO	H0847130K	yes	AFO7130K	D8D3	a20usa	H084-20	500	RICOH	Taiwan	92/4	93/4	**365**	
	H0847140L	yes	AFO7140L	6B6A	a20eur	44	500	RICOH	Europe	91/8	94/10	**6,817**	
	H0847142H	no	AFO7142H	94D0	a20fra	83	500	RICOH	France	92/4	94/3	**1,231**	
	H0847143L	yes	AFO7143L	350F	a20hcs	34	3301	Infotec	Europe	91/8	95/4	**2,892**	
	H0847141L	yes	AFO7141L	3F13	a20asi	51	500	RICOH	Asia	91/10	96/11	13,696	
						56	500	RICOH	Vietnam	92/11	94/5	1,650	KD
									TOTAL			**15,346**	
	H0847150K	yes	AFO7150K	2A40	a20opt	H15146(•:RICOH),H151-54(SW:HCS)	-	Option	Europe			?	Language Kit
AF1	H0857135B	yes	AF17135B	FCDF	a21chi	H085-54	580	RICOH	China	93/8	96/5	**5,040**	
AF2	H0867130K	yes	AF27130K	9BDF	a22usa	20	550	RICOH	US	92/1	96/2	**14,934**	
	H0867140L	yes	AF27140L	3C35	a22eur	44	550	RICOH	Europe	91/8	95/3	10,824	
						90	9620	NRG		92/4	93/9	1,446	
									TOTAL			**12,270**	
	H0867142H	checking	AF27142H	583D	a22fra	73	3305	Infotec	France	-	-	0	RIF is checking the ROM.
						83	550	RICOH		95/4	95/9	100	
						93	9620	NRG		92/4	94/9	170	
									TOTAL			**270**	
	H0867143L	yes	AF27143L	0CE0	a22hcs	34	3305	Infotec	Europe	91/8	95/9	**6,583**	
	H0867141L	yes		DAD8	a22asi	51	550	RICOH	Asia	92/2	96/2	12,181	
						59		Nashua	Asia	92/2	96/1	1,662	
									TOTAL			**13,843**	
	H0867131A	yes	AF27131A	9BC3	a22tai	53	550	RICOH	Taiwan	94/8	96/2	**109**	
	H0867150L	yes	AF27150L	E725	a22opt	H15147(•:RICOH),H151-55(SW:HCS),H151-93(•:NASHUA)	-	Option	Europe			?	Language Kit

K200	H0087260J H0087261J H0087262J H0087263J H0087264J H0087265J H0087266J H0087267J	yes	H0087260	FC1E EBE0 B88F 08B2 7AA0 C2F0 28D7 CE5E	USA	20	7000L	RICOH	US	89/9	95/6	**790**	1M ROM (8 ROMs/unit)
	H0087270F H0087271F H0087272F H0087273F H0087274F H0087275F H0087276F H0087277F	yes	H0087270	451C 78BA 3FA2 C44F 7B14 4DA3 7C16 380B	GMN	30	7000L	RICOH	Germany	89/10	93/7	**119**	
	H0087320F H0087321F H0087322F H0087323F H0087324F H0087325F H0087326F H0087327F	yes	H0087320	4527 7967 3FA2 C44F 7B14 4DA3 7C16 380B	GMN	40	6765	Infotec	Germany	89/9	90/8	**180**	
	H0087280H H0087281H H0087282H H0087283H H0087284H H0087285H H0087286H H0087287H	yes	H0087280	1956 CB16 4E46 C3F4 799D 33A8 3EE5 6478	ENG	41	7000L	RICOH	UK	89/10	94/8	**85**	
	H0087330H H0087331H H0087332H H0087333H H0087334H H0087335H H0087336H H0087337H	yes	H0087330	1D20 64B7 4FAF D4A1 7830 1EBB C591 854A	ENG	31	6765	Infotec	UK	89/10	92/12	**125**	
	H0087290C H0087291C H0087292C H0087293C H0087294C H0087295C H0087296C H0087297C	yes	H0087290	4A5D 5B24 416A C54D 8882 683D D331 E525	ITY	42	7000L	RICOH	Italy	89/10	91/10	**29**	

H0087340C H0087341C H0087342C H0087343C H0087344C H0087345C H0087346C H0087347C	yes	H0087340	4A68 5BD1 416A C54D 8882 683D D331 E525	ITY		32	6765	Infotec	Italy	89/10	92/9	41
H0087300E H0087301E H0087302E H0087303E H0087304E H0087305E H0087306E H0087307E	yes	H0087300	4A2A 3680 403B 9F7C 8900 DB80 6C4A 1B91	FRN		43	7000L	RICOH	France	89/10	92/3	137
H0087350E H0087351E H0087352E H0087353E H0087354E H0087355E H0087356E H0087357E	yes	H0087350	4A35 372D 403B 9F7C 8900 DB80 6C4A 1B91	FRN		33	6765	Infotec	France	90/7	91/3	156
H0087310H H0087311H H0087312H H0087313H H0087314H H0087315H H0087316H H0087317H	yes	H0087310	196E CB4C 4E46 C3F4 799A 3385 3EE5 6478	UNV		44	7000L	RICOH	Europe/Asia	89/9	94/1	387
H0087360H H0087361H H0087362H H0087363H H0087364H H0087365H H0087366H H0087367H	yes	H0087360	1D38 64ED 4FAF D4A1 782D 1E98 C591 854A	UNV		34	6765	Infotec	Europe	90/1	92/11	38

END

ROM writing procedure for K200 ROMs

1. ROM Writing
    This will vary depending on the ROM writer buffer capacity.
    This is an example with a buffer RAM capacity of 512KB.
    During the first load, 512KB is sent.
    During he first load, 0H~7FFFFH can be loaded.
    During the second, 800000H~FFFFFH can be loaded.
    Since the K200 is 1MB, the sending is completed after 512KB worth has been sent twice.

    First Time
    1-1) Transfer to the ROM writer.
       Motorola-S Format
       Receiving location address   00000000
       Send/Receive buffer RAM start   00000000
       Sending buffer RAM end   Device capacity
    1-2) Program on the ROM
       Set program   16-bit series
       Device Count   4
       Device Start   00000000
       Buffer RAM Start   00000000
       Data Type   BIGENDIAN

    Second Time
    2-1) Transfer to the ROM writer.
       Motorola-S Format
       Receiving location address   00080000
       Send/Receive buffer RAM start   00000000
       Sending buffer RAM end   Device capacity
    2-2) Program on the ROM
       Set program   16-bit series
       Device Count   4
       Device Start   00000000
       Buffer RAM Start   00000000
       Data Type   BIGENDIAN

When the buffer RAM capacity is 1MB, the RAM writing is as follows.
1MB can be sent during the first load.
OH~FFFFFH can be loaded.
Since the K200 is 1MB, it can be transferred all at once.

First Time
1-1) Transfer to the ROM writer.
    Motorola-S Format

Receiving location address	00000000
Send/Receive buffer RAM start	00000000
Sending buffer RAM end	Device capacity

1-2) Program on the ROM

Set program	16-bit series
Device Count	4
Device Start	00000000
Buffer RAM Start	00000000
Data Type	BIGENDIAN

Second Time
2-1) Transfer to the ROM writer.
Since 1MB can be sent the first time, this is not necessary.

2-2) Program on the ROM

Set program	16-bit series
Device Count	4
Device Start	00000000
Buffer RAM Start	00080000
Data Type	BiGENDIAN

ROM locations (Top view of MBU)

3-8 (3')	3-0 (4')
2-8 (1')	2-0 (2')
1-8 (3)	1-0 (4)
0-8 (1)	0-0 (2)

() The number in the parentheses is the ROM writer socket number.
['] The second time is indicated.
The ROM part numbers start from 0-8.
(Ex: For the FAX7000L(US), 0-8:H008726**60**, 3-0:H008726**67**)

Check Sum Chart

ROM location Model	0-8	0-0	1-8	1-0	2-8	2-0	3-8	3-0
K200USA	FC1E	EBE0	B88F	08B2	7AA0	C2F0	28D7	EC5E
K200GMN-R	451C	78BA	3FA2	C44F	7B14	4DA3	7C16	380B
K200G<M-K	4527	7967	3FA2	C44F	7B14	4DA3	7C16	380B
K200ENG-R	1956	CB16	4E46	C3F4	799D	33A8	3EE5	6478
K200ENG-K	1D20	64B7	4FAF	D4A1	7830	1EBB	C591	854A
K200ITY-R	4A5D	5B24	416A	C54D	8882	683D	D331	E525
K200ITY-K	4A68	5BD1	416A	C54D	8882	683D	D331	E525
K200FRN-R	4A2A	3680	403B	9F7C	8900	DB80	6C4A	1B91
K200FRN-K	4A35	372D	403B	9F7C	8900	DB80	6C4A	1B91
K200UNV-R	196E	CB4C	4E46	C3F4	799A	3385	3EE5	6478
K200UNV-K	1D38	64ED	4FAF	D4A1	782D	1E98	C591	854A

R: Ricoh,   K : Kalle (Infotec)

RTB Correction

Reissue date: 30-Jun-98
The items in bold italic have been corrected or added.

Model: General	Date: 15-Jan-98	No: 011*c*
Subject: Year 2000 Problem	Prepared by: Y.Okunishi	
From: QAC 2nd Field Information Dept.		

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

Check Items

The following functions for which the clock timer is used were checked to see whether or not they will function correctly at 0:00 on Jan. 1, 2000.

1) Display and print of the date and time
   The year must be changed to 2000 or 00 from 1999 or 99 and the date must be kept correctly after the year 2000.

2) Clock adjustment
   The date and time can be adjusted after the start of the year 2000.

3) Send later mode with memory and without memory
   The calling time must be the set time after the start of the year 2000.

4) Automatic re-transmission.
   When a communication error occurs, the machine calls the same destination again automatically after an interval. This must function correctly after the start of the year 2000.

5) Weekly timer and night timer
   The energy saver mode (heater) control must work correctly.

6) Displayed date after a power failure
   The correct date must be kept by the battery.

Models Checked

1) K50 series (FAX10, 20, 60, etc.)

2) K70 series (FAX90, 95, 105, etc.)

3) K90 series (FAX80, 85, 75, 86, etc.)

4) LE series (FAX08, 09, Phone fax for ATT, etc.)

5) B series (B1, RF810, FAX12, FAX300, etc.)

6) ZB series (FAX220, FAX240, Innfax, etc.)

7) BARBARA series (RF01, 02, 03, 05, 06, etc.)

8)   OX series (FAX21, 22)

9)   PF series (PF-1, PF-2)

10)   A series (FAX500, 550, etc.)

11)   B60 series (FAX170, 180, etc.)

12)   K100 series (FAX1000L, 1010L, etc.)

13)   K105 series (FAX4000L, etc.)

14)   K200 series (FAX7000L, etc.)

15)   KV series (FAX2800L, 1200L, etc.)

16)   C series (FAX2500L,3000L, 3500L, 4500L, 5600L, etc.)

17)   L80 (MV715)

18)   I series (FAX800, 880, 680, MV74, etc.)

19)   F\L series (FAX2700L, 3700L, 4700L, MV310, etc.)

20)   FX7, LX7 (FAX1700L, MV106, FAX1750MP, etc.)

21)   L20 series (Aficio FX10)

22)   K10 series (FX120, Rapicom120, FX210/230, Rapicom210/230, etc.)

23)   K20 series (FX5000, Rapicom5000, etc.)

24)   K60 series (FAX610, Rapicom610, etc.)

25)   K83 series (FAX830, Rapicom830, etc.)

26)   FR4, FR6 (FAX4800L, FAX3800L, etc.)

Problem found

Most models, except the following models, will not experience any problems.

1)   AFO (FAX 500/550/580, NRG 9620, Infotec 3301/3305, Nashua F492)
      CSO (FAX 3000/3100/3200, NRG 9660/9661/9662, Omnifax L40/41,
            Savin FAX 3660/3620, Infotec 3660)
      CS1 (FAX 3500L,NRG 9665, Omnifax L46, Savin FAX 3670)
      CRO (FAX 2500L/2600L, NRG 9650, Omnifax L42, Savin FAX 3630, Infotec 3661)

   a)   The day of week, that appears on the display only in the clock adjustment
         mode, is returned back to SUNDAY whenever the clock adjustment is done
         after the start of the year 2000.

         So, the programmed weekly timer does not work correctly. (AFO's do not
         have the weekly timer.)

         If the clock adjustment is not done after the start of the year 2000, the date and
         the day of week is kept correctly.

   b)   Clock adjustment is available only for the year 91 through 99. The other years
         cannot be set. (Month, day and time can be adjusted.)

Model: General	Date: 15-Jan-98	No: 011*C*

2)   K200 (FAX7000L)

    a)   Clock adjustment is available only for the years 88 through 99. The other years cannot be set. (Month, day, and time can be adjusted.)

    b)   The send later mode does not function (no calling happens) if it passes the time into the year 2000.
       No report is printed. The message in the memory is not cleared automatically but must be cleared by user operation.

    c)   Automatic re-transmission is not done if the year 2000 starts in the interval after the transmission failure.
       The message in the memory is not cleared automatically but must be cleared by user operation.

    d)   The display year is returned back to 88 after a power failure after the start of the year 2000.

3)   K60 series (FAX610, Rapicom610, Infotec6550)
*   K83 series (FAX830, Rapicom830, Infotec6750)*

    a)   The day of week is not displayed correctly after the start of the year 2000.

    b)   The send later mode does not function (calling at 0:00AM January 1st 2000).

    c)   The display year is returned back to 85 when the power fails after the start of the year 2000.

The other functions in these models work correctly.

Schedule for the countermeasure ROMs

1)   AFO, CSO, CS1, CRO:
       In ***April*** 1998.

2)   K200 (FAX7000L):
       In May 1998 *(The corrected version will be in July 1998.)*

3)   K60, K83: A ROM will not be available.

RC	RE	ASIA	
*	*	*	

RICOH Technical Bulletin

PAGE: 1/5

RTB Correction

Reissue date: 30-Jun-98
The items in bold italic have been correction or added.

Model: CSO, CRO, CS1, AFO, AF2, K200	Date: 31-May-98	No: Multi-008*A*
Subject: ROMs for the year 2000 problem	Prepared by: Y. Okunishi	
From: QAC Field Information Dept.		

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

Attached please find the list of ROMs for the year 2000*. (The list was updated.)*

The ROM files have been saved in the Ricoh QAC server except for the K200 ROMs.

(EP ROMs for the K200 will be prepared by the beginning of June.)

Note:

• Please refer to RTB nos. General 11 and 14 for details.

RC	RE	ASIA	
*	*	*	

ROMs for the year 2000   25-Jun-98

Product Code	New ROM No.	Check sum	Model code	Model	Brand	Area	Note
CSO	H0817138	8552	H081-20	3000L	RICOH	US	2M ROM (1ROM/unit)
			23	3200L			
			24	3100L			
			21	9660	NRG		
			22	9661			
			26	3660	SAVIN		
			27	3620			
	H0817136A	77A7	25	2600L	RICOH	US	
	H0817139E	3C77	28	L40	Omnifax	US	
			29	L41			
	H0817124A	0772	40	3000L	RICOH	Europe	
			46	3000L	RICOH	Switzland	
			60	9660	NRG	Europe	
	H0817123A	0078	70	3000LF	RICOH	France	
			80				
			90	9660F	NRG		
	H0817121A	FA57	30	3660	Infotec	Europe	
	H0817122A	D225	51	3000L	RICOH	Asia	
			59	9660	NRG		
			55	-	Ricoh	Korea	
	H0817140M	859C	23	3000L	RICOH	Taiwan	
	H0817128B	E8C5	54	3000L	RICOH	China	
	H0817159N	C3CE	H151-65•SW:HCS• H151-73(FRN:Ricoh) H151-83(FRN:GES)		Option	Europe	Language Kit
CS1	H5117150B	6A91	H511-20	3500L	RICOH	US	
			21	9669	NRG		
			22	L46	Omnifax		
			27	3670	SAVIN		
CR0	H5107121B	23AB	H510-20	2500L	RICOH	US	
			21	9650	NRG		
			22	L42	Omnifax		
			27	3630	SAVIN		
	H5107120B	F5BF	30	3661	Infotec	Europe	
			40	2500L	RICOH		
			60	9650	NRG		
	H5107123B	0E88	33	3661F	Infotec	France	
			43	2500LF	RICOH		
			63	9650F	NRG		
	H5107132G	37F5	51	2500L	RICOH	Asia	
			59	9650	NRG		
	H5107131B	23A3	53	2500L	RICOH	Taiwan	

AFO	H0847130K	D8D3	H084-20	500	RICOH	Taiwan	
	H0847140L	6B6A	44	500	RICOH	Europe	
	H0847142H	94D0	83	500	RICOH	France	
	H0847143L	350F	34	3301	Infotec	Europe	
	H0847141L	3F13	51	500	RICOH	Asia	
			56	500	RICOH	Vietnam	KD
	H0847150K	2A40	H151-46(FRN:RICOH) H151-54(SW:HCS)		Option	Europe	Language Kit
AF1	H0857135B	FCDF	H085-54	580	RICOH	China	
AF2	H0867130K	9BDF	20	550	RICOH	US	
	H0867140L	3C35	44	550	RICOH	Europe	
			90	9620	NRG		
	H0867142H	583D	73	3305	Infotec	France	
			83	550	RICOH		
			93	9620	NRG		
	H0867143L	0CE0	34	3305	Infotec	Europe	
	H0867141L	DAD8	51	550	RICOH	Asia	
			59	9620	NRG	Asia	
	H0867131A	9BC3	53	550	RICOH	Taiwan	
	H0867150L	E725	H151-47(FRN:RICOH) H151-55(SW:HCS) H151-93(FRN:NASHUA)		Option	Europe	Language Kit

K200	H0087260J H0087261J H0087262J H0087263J H0087264J H0087265J H0087266J H0087267J	FC1E EBE0 B88F 08B2 7AA0 C2F0 28D7 CE5E	H008-20	7000L	RICOH	US	1M ROM (8 ROMs/unit)
	H0087270F H0087271F H0087272F H0087273F H0087274F H0087275F H0087276F H0087277F	451C 78BA 3FA2 C44F 7B14 4DA3 7C16 380B	30	7000L	RICOH	Germany	
	H0087320F H0087321F H0087322F H0087323F H0087324F H0087325F H0087326F H0087327F	4527 7967 3FA2 C44F 7B14 4DA3 7C16 380B	40	6765	Infotec	Germany	

H0087280H	1956	41	7000L	RICOH	UK
H0087281H	CB16				
H0087282H	4E46				
H0087283H	C3F4				
H0087284H	799D				
H0087285H	33A8				
H0087286H	3EE5				
H0087287H	6478				
H0087330H	1D20	31	6765	Infotec	UK
H0087331H	64B7				
H0087332H	4FAF				
H0087333H	D4A1				
H0087334H	7830				
H0087335H	1EBB				
H0087336H	C591				
H0087337H	854A				
H0087290C	4A5D	42	7000L	RICOH	Italy
H0087291C	5B24				
H0087292C	416A				
H0087293C	C54D				
H0087294C	8882				
H0087295C	683D				
H0087296C	D331				
H0087297C	E525				
H0087340C	4A68	32	6765	Infotec	Italy
H0087341C	5BD1				
H0087342C	416A				
H0087343C	C54D				
H0087344C	8882				
H0087345C	683D				
H0087346C	D331				
H0087347C	E525				
H0087300E	4A2A	43	7000L	RICOH	France
H0087301E	3680				
H0087302E	403B				
H0087303E	9F7C				
H0087304E	8900				
H0087305E	DB80				
H0087306E	6C4A				
H0087307E	1B91				
H0087350E	4A35	33	6765	Infotec	France
H0087351E	372D				
H0087352E	403B				
H0087353E	9F7C				
H0087354E	8900				
H0087355E	DB80				
H0087356E	6C4A				
H0087357E	1B91				
H0087310H	196E	44	7000L	RICOH	Europe/Asia
H0087311H	CB4C				
H0087312H	4E46				
H0087313H	C3F4				
H0087314H	799A				
H0087315H	3385				
H0087316H	3EE5				
H0087317H	6478				

H0087360H	1D38	34	6765	Infotec	Europe	
H0087361H	64ED					
H0087362H	4FAF					
H0087363H	D4A1					
H0087364H	782D					
H0087365H	1E98					
H0087366H	C591					
H0087367H	854A					

END

RTB Correction

Reissue date: 31-Jul-98

The items in bold italic have been correction or added.

Model: CSO, CRO, CS1, AFO, AF2, K200	Date: 31-May-98	No: Multi-008***B***
Subject: ROM's for the year 2000	Prepared by: Y.Okunishi	
From: QAC Field Information Dept.		
Classification:	☐ Troubleshooting ☒ Part information ☐ Action required ☐ Mechanical ☐ Electrical ☐ Service manual revision ☐ Paper path ☐ Transmit/receive ☐ Retrofit information ☐ Other ( )		

(B) : The attached ROM List has been corrected.

Attached please find the list of the ROM's for the year 2000 problem. (The list was updated.)

The ROM files have been saved in the Ricoh QAC server, except for the K200 ROMs.

 (EPROMs for the K200 will be prepared by the beginning of June.)

 Note:

- Please refer to RTBs General 11 and 14 for details.

RC	RE	ASIA	
∗	∗	∗	

Model: CSO, CRO, CS1, AFO, AF2, K200	Date: 31-May-98	No: Multi-008*B*

ROMs for the year 2000

25-Jun-98

Product Code	New ROM No.	Check sum	Model cord	Model	Brand	Area	Note
CSO	H0817138	8552	H081-20	3000L	RICOH	US	2M ROM (1ROM/unit)
			23	3200L			
			24	3100L			
			21	9660	NRG		
			22	9661			
			26	3660	SAVIN		
			27	3620			
	H0817136A	77A7	25	2600L	RICOH	US	
	H0817139E	3C77	28	L40 L41	Omnifax	US	
			29	L41			
	H0817124A	0772	40	3000L	RICOH	Europe	
				3000L			
			46	3000L	RICOH	Switzerland	
			60	9660	NRG	Europe	
	H0817123A	0078	70	3000LF	RICOH	France	
			80				
			90	9660F	NRG		
	H0817121A	FA57	30	3660	Infotec	Europe	
	H0817122A	D225	51	3000L	RICOH	Asia	
			59	9660	NRG		
			55	-	Ricoh	Korea	
	H0817140M	859C	23	3000L	RICOH	Taiwan	
	H0817128B	E8C5	54	3000L	RICOH	China	
	H0817159N	C3CE	H151-65（SW:HCS），H151-73(FRN:Ricoh) H151-83(FRN:GES)		Option	Europe	Language Kit
CS1	H5117150B	6A91	H511-20	3500L	RICOH	US	
			21	9669	NRG		
			22	L46	Omnifax		
			27	3670	SAVIN		
CR0	H5107121B	23AB	H510-20	2500L	RICOH	US	
			21	9650	NRG		
			22	L42	Omnifax		
			27	3630	SAVIN		
	H5107120B	F5BF	30	3661	Infotec	Europe	
			40	2500L	RICOH		
			60	9650	NRG		
	H5107123B	0E88	33	3661F	Infotec	France	
			43	2500LF	RICOH		
			63	9650F	NRG		
	H5107132G	37F5	51	2500L	RICOH	Asia	
			59	9650	NRG		
	H5107131B	23A3	53	2500L	RICOH	Taiwan	

AFO	H0847130K	D8D3	H084-20	500	RICOH	Taiwan	
	H0847140L	6B6A	44	500	RICOH	Europe	
	H0847142H	94D0	83	500	RICOH	France	
	H0847143L	350F	34	3301	Infotec	Europe	
	H0847141L	3F13	51	500	RICOH	Asia	
			56	500	RICOH	Vietnam	KD
	H0847150K	2A40	H151-46(FRN:RICOH) H151-54(SW:HCS)	-	Option	Europe	Language Kit
AF1	H0857135B	FCDF	H085-54	580	RICOH	China	
AF2	H0867130K	9BDF	20	550	RICOH	US	
	H0867140L	3C35	44	550	RICOH	Europe	
			90	9620	NRG		
	H0867142H	583D	73	3305	Infotec	France	
			83	550	RICOH		
			93	9620	NRG		
	H0867143L	0CE0	34	3305	Infotec	Europe	
	H0867141L	DAD8	51	550	RICOH	Asia	
			59		Nashua	Asia	
	H0867131A	9BC3	53	550	RICOH	Taiwan	
	H0867150L	E725	H151-47(FRN:RICOH), H151-55(SW:HCS), H151-93(FRN:NASHUA)	-	Option	Europe	Language Kit
K200	H0087260J H0087261J H0087262J H0087263J H0087264J H0087265J H0087266J H0087267J	FC1E E886 B88E 084C 7ABF C07F 29B0 F658	20	7000L	RICOH	US	1M ROM (8 ROMs/unit)
	H0087270F H0087271F H0087272F H0087273F H0087274F H0087275F H0087276F H0087277F	451C 7566 3FA2 C2ED 7A62 1C05 7D08 2830	30	7000L	RICOH	Germany	
	H0087320F H0087321F H0087322F H0087323F H0087324F H0087325F H0087326F H0087327F	4527 7613 3FA2 C2ED 7A62 1C05 7D08 2830	40	6765	Infotec	Germany	
	H0087280H H0087281H H0087282H H0087283H H0087284H H0087285H H0087286H H0087287H	1956 C7BC 4E45 C394 7A16 2A4E 3F82 56B3	41	7000L	RICOH	UK	

H0087330H	1D20	31	6765	Infotec	UK
H0087331H	615D				
H0087332H	4FAE				
H0087333H	D441				
H0087334H	78A7				
H0087335H	1761				
H0087336H	C62A				
H0087337H	7B85				
H0087290C	4A5D	42	7000L	RICOH	Italy
H0087291C	57CA				
H0087292C	4169				
H0087293C	C4EB				
H0087294C	889D				
H0087295C	69BC				
H0087296C	D427				
H0087297C	D12D				
H0087340C	4A68	32	6765	Infotec	Italy
H0087341C	5877				
H0087342C	4169				
H0087343C	CE4B				
H0087344C	889D				
H0087345C	69BC				
H0087346C	D427				
H0087347C	D12D				
H0087300E	4A2A	43	7000L	RICOH	France
H0087301E	3326				
H0087302E	403B				
H0087303E	9E1A				
H0087304E	8968				
H0087305E	CC0C				
H0087306E	6DF3				
H0087307E	18D7				
H0087350E	4A35	33	6765	Infotec	France
H0087351E	33D3				
H0087352E	403B				
H0087353E	9E1A				
H0087354E	8968				
H0087355E	CC0C				
H0087356E	6DF3				
H0087357E	18D7				
H0087310H	196E	44	7000L	RICOH	Europe/Asia
H0087311H	C7F2				
H0087312H	4E45				
H0087313H	C394				
H0087314H	7A13				
H0087315H	2A2B				
H0087316H	3F82				
H0087317H	56B3				
H0087360H	1D38	34	6765	Infotec	Europe
H0087361H	6193				
H0087362H	4FAE				
H0087363H	D441				
H0087364H	78A4				
H0087365H	173E				
H0087366H	C62A				
H0087367H	7B85				

Model: General	Date: 15-Jan-99	No.: RGene011d

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

Subject: Year 2000 Problem		Prepared by: Y. Okunishi
From: Technical Service Dept., GTS Division		
Classification:	☐ Troubleshooting ☐ Part information ☐ Action required ☐ Mechanical ☐ Electrical ☐ Service manual revision ☐ Paper path ☐ Transmit/receive ☐ Retrofit information ☒ Other ( )	

Check Items

The following functions for which the clock timer is used were checked to see whether or not they will function correctly at 0:00 on Jan. 1, 2000.

1) Display and printing of the date and time
   The year must be changed to 2000 or 00 from 1999 or 99 and the date must be kept correctly after the year 2000.

2) Clock adjustment
   The date and time can be adjusted after the year 2000.

3) Send later mode with memory and without memory
   The calling must be made at the set time after the year 2000.

4) Automatic re-transmission.
   When a communication error occurs, the machine calls the same destination again automatically after an interval. This will function correctly after the year 2000.

5) Weekly timer and night timer
   The energy saver mode (fusing unit) control will work correctly.

6) Displayed date after a power failure
   The correct date will be kept by the battery.

7) Leap year

   Machines must recognize the year 2000 as a leap year and the above 1) – 6) will function.

8) The year 2001

   The above 1) – 6) will function in the year 2001.

Model: General	Date: 15-Jan-99	No.: RGene011d

Models Checked

1) K50 series (FAX10, 20, 60, etc.)

2) K70 series (FAX90, 95, 105, etc.)

3) K90 series (FAX80, 85, 75, 86, etc.)

4) LE series (FAX08, 09, Phone fax for ATT, etc.)

5) B series (B1, RF810, FAX12, FAX300, etc.)

6) ZB series (FAX220, FAX240, Innfax, etc.)

7) BARBARA series (RF01, 02, 03, 05, 06, etc.)

8) OX series (FAX21, 22)

9) PF series (PF-1, PF-2)

10) A series (FAX500, 550, etc.)

11) B60 series (FAX170, 180, etc.)

12) K100 series (FAX1000L, 1010L, etc.)

13) K105 series (FAX4000L, etc.)

14) K200 series (FAX7000L, etc.)

15) KV series (FAX2800L, 1200L, etc.)

16) C series (FAX2500L,3000L, 3500L, 4500L, 5600L, etc.)

17) L80 (MV715)

18) I series (FAX800, 880, 680, MV74, etc.)

19) F\L series (FAX2700L, 3700L, 4700L, MV310, etc.)

20) FX7, LX7 (FAX1700L, MV106, FAX1750MP, etc.)

21) L20 series (Aficio FX10)

22) K10 series (FX120, Rapicom120, FX210/230, Rapicom210/230, etc.)

23) K20 series (FX5000, Rapicom5000, etc.)

24) K60 series (FAX610, Rapicom610, etc.)

25) K83 series (FAX830, Rapicom830, etc.)

26) FR4, FR6 (FAX4800L, FAX3800L, etc.)

27) ***Schmidt 1(FAX2000L)***

28) ***Schmidt 3***

Model: General	Date: 15-Jan-99	No.: RGene011d

Problems found

Most models, except the following, will not experience any problems.

1) AFO (FAX 500/550/580, NRG 9620, Infotec 3301/3305, Nashua F492)
    CSO (FAX 3000/3100/3200, NRG 9660/9661/9662, Omnifax L40/41,
         Savin FAX 3660/3620, Infotec 3660)
    CS1 (FAX 3500L,NRG 9665, Omnifax L46, Savin FAX 3670)
    CRO (FAX 2500L/2600L, NRG 9650, Omnifax L42, Savin FAX 3630, Infotec 3661)

    a) The day of the week that appears on the display only in the clock adjustment
        mode is returned back to SUNDAY every time the clock adjustment is done
        after the year 2000.

        So, the programmed weekly timer does not work correctly. (AFO does not
        have the weekly timer.)

        If the clock adjustment is not done after the year 2000, the date and the day of
        week is kept correctly.

    b) Clock adjustment is available only for the year 91 through 99. The other years
        cannot be set. (Month, day and time can be adjusted.)

2) K200 (FAX7000L)

    a) Clock adjustment is available only for the years 88 through 99. The other years
        cannot be set. (Month, day and time can be adjusted.)

    b) The send later mode does not function (no calling happens) if time passes into
        the year 2000.
        No report is printed and the rest of the message in the memory is not cleared
        automatically, but it is cleared by user operation.

    c) Automatic re-transmission is not done if the year 2000 starts in the interval after
        the transmission failure.
        The rest of the message in the memory is not cleared automatically but it is
        cleared by user operation.

    d) The displayed date is reset and turned back to '88 in the event of a power
        failure after the year 2000.

    e) ***The day of the week will be wrong if the clock or date information is
        adjusted after the year 2000.***

3) K60 series (FAX610, Repicom610, Infortec6550)
   K83 series (FAX830, Repicom830, Infortec6750)

   a) The day of the week is not displayed correctly after the year 2000.

   b) The send later mode does not function (calling at 0:00AM January 1st 2000)

   c) The display year is returned back to 85 when the power fails after the year 2000.

The other functions in these models work correctly.

Schedule of the countermeasure ROMs

1) AFO, CSO, CS1, CRO:
   In April 1998.

2) K200(FAX7000L):
   In May 1998. (Corrected version will be in July 1998.)

3) K60, K83:

   The ROM will not be available.

RC	REBV	ASIA	
∗	∗	∗	