Model: Schmidt1	Date: 15-Feb-99	No.: 1

Subject: Service Manual Correction	Prepared by: K. Misugi
From: GTSS Field Information Dept.	

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

This RTB is to inform of corrections to the Schmidt1 service manual.

Section 5. Preventive Maintenance
5.2 PM Table
The following items do not require replacement at 60K. Please delete these items from the PM table.

Printer: <u>Paper Feed Clutch</u>
Paper Feed Unit: <u>Paper Feed Clutch</u>
Multi-purpose Feeder: <u>Paper Feed Clutch</u>

Please add the following remark to the manual.
"Machine Life of the Multi-Purpose Feeder is <u>60,000 sheets</u>."
Please refer to the following page for the corrections in the PM table.

Section 4. Service Tables and Procedures
4.2 Bit Switches
4.2.1 System Switches
Please add the following remarks in the comments for RAM Reset Level 2.

When RAM reset level 2 is done, the machine refers to the bit switch country code (System bit switch 0F: functional settings) and automatically changes the NCU country code (NCU parameter: RAM 807F00) to the same code.

To change the machine settings to those for another country, set the bit switch country code (System bit switch 0F) to the code for that country, then do RAM reset level 2. Then all bit switch and NCU parameter settings will be changed to the defaults for that country.

RC	RE	ASIA	
*	*	*	

Model: Schmidt1	Date: 15-Feb-99	No.: 1

5. PREVENTIVE MAINTENANCE

5.1 SPECIAL TOOLS AND LUBRICANTS

- Flash/SRAM data copy tool (P/N: A1939353 or H5159100)
- Flash/SRAM data copy board (P/N: A1939351)

5.2 PM TABLE

Scanner / ADF   **C: Clean, R: Replace**

Item	30K	60K	Notes
CIS Glass	C (user)	C (user)	Soft cloth and water
White Roller	C (user)	C (user)	Soft cloth and water
ADF Feed Roller Assembly	C (user)	R	Soft cloth and water
ADF Separation Roller	C (user)	R	Soft cloth and water

Printer

Item	30K	60K	Notes
Paper Feed Roller	C (user)	C	Soft cloth and water
~~Paper Feed Clutch~~		~~R~~	
Separation Pad	C (user)	R	Soft cloth and water
Fusing Thermistor		R	
Hot Roller Strippers		R	4 pieces used
Hot Roller		R	
Pressure Roller (Fusing)		R	
Transfer Roller		R	
Cleaning Pad	R (user) Replaced after installing a new cartridge.		A cleaning pad is included with the cartridge.

Paper Feed Unit (Optional)

Item	30K	60K	Notes
Feed Roller	C (user)	R	Soft cloth and water
~~Paper Feed Clutch~~		~~R~~	
Friction Pad	C (user)	R	Soft cloth and water

Multi-purpose Feeder (Optional)

Item	30K	~~60K~~	Notes
Feed Roller	C (user)	~~R~~	Soft cloth and water
~~Paper Feed Clutch~~		~~R~~	
Friction Pad	C (user)	~~R~~	Soft cloth and water

NOTE: Machine life of the Multi-purpose Feeder is 60K.

Model: Schmidt1	Date: 15-Feb-99	No.: 2

Subject: International Access Code for Spain	Prepared by: K. Misugi
From: GTSS Field Information Dept.	

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

The following procedure must be done at the time of installation if machines manufactured in November (first mass production) and December '98 are to be sold in Spain.

Procedure
After all initial programming items are set, please change the data in the following address. Otherwise the machine will not be able to make international transmissions.
Important: The NCU country code must be set to Spain prior to this procedure.

807F5C - International dial access code
Default setting: "00"
Please change the data to "07."

ROM Version
ROM version of machines manufactured in November and December,
ROM version: 65
ROM number: H5457200E

Cause of the Problem
The international dial access code in Spain is changing to 00 from 07.
In addition to this change, the international dial tone will not be sent from the exchanger.

Machines manufactured in November and December wait for the international dial tone after dialing of 00.
     For the new exchanger ("00" without dial tone):
     If "00" is dialed, the machine waits for the dial tone, however no dial tone will be sent back.
     For the old exchanger ("07" and dial tone):
     If "07" is dialed, the machine will not wait for the dial tone.
In both cases, the machine will not be able to make international calls.

Software Change to the Machine
The international dial access code for machines manufactured from January '99 will be set to 07 when the NCU country code is set to "Spain."
New ROM version: 67
New ROM number: H5457200F.

Model: Schmidt1	Date: 15-Feb-99	No.: 2

NOTE: All other current models (such as FR4/FR6/LFO/FX6) would not be affected because the international dial tone is set to 07 when the NCU country code is set to Spain.

RC	RE	ASIA	
	*		

Model: Schmidt 1	Date: 28-Feb-99	No.: 3

Subject: No Tx and Rx through PABX	Prepared by: Y. Okunishi
From: GTSS Field Information Dept.	

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

Problem:
No communication can be done when the machine is installed with a PABX that can recognize the Ground Start (GS) signal at the 6th pin of the telephone line and react to it. No problem occurs when a telephone cord with 2 pins or 4 pins is used or the PABX ignores the signal at the 6th pin.

Cause:
The machine closes the GS relay and the direct current circuit in the NCU is connected to the 6th pin of the modular jack when the main power switch is turned on.
(It must stay open when the main power is on, other than when a number is dialed if GS is selected.)
In the case of PSTN or many PABX's, the signal at the 6th pin of the telephone line is ignored and this cannot be the cause of the problem. But, there are still some PABX's that can recognize the GS signal. We guess that the PABX considers the connected terminal busy while the GS signal is being detected. (We don't know the details of the PABX.)

Countermeasure:
The firmware is modified to correct the above problem.

Action taken in the field:
When the above problem happens at installation, check whether GS must be selected for the connected PABX. (If the PABX is not an old type, another signal can be used to get the outside line in many cases.)
(1) If GS is not mandatory, cut the line of 6th pin on the telephone line or on the cable to the
  NCU. (The orange colored line from the NCU to the jack can be cut.)
  Then, choose Flash Start, Loop Start or PSTN (User parameter 13).
(2) If GS is mandatory, you need to change the firmware.
  The new firmware H5457200G will be installed for the February production run in 1999.

Note:
When you use the RDS to change the firmware, you need to make the machine active for the RDS because you cannot communicate with the machine.
Please follow the instructions below.
1) Select GS with User parameter 13 in Function 63. (See the O/M page 132-136.)
2) Set an access number with Function 61. (See O/M page 167.)
3) Put a document in the ADF and choose non-memory transmission.
4) Input the set GS access number plus some dummy numbers then press Start.
5) Wait until the GS signal is dialed out (about 10 seconds) then press Stop. (The GS relay opens now.)
6) Keep this condition to prevent the machine from entering the energy saver mode.
7) Now the machine is ready for the RDS. (For the Asia version machine, you need to turn the RDS switch on with Function 62.)

RC	REBV	ASIA	
	*	*	

Model: General	Date: 31-Mar-99	No.: 3

Subject: File Dividing Utility Program	Prepared by: K. Moriizumi
From: GTSS Field Information Dept.	

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

SYMPTOM

It is impossible to use the utility program HEXDIV.EXE for the Schmidt1 and F66 in the normal way. However, using this program, the firmware file can be divided into 2 or 4 files so that it can be written to the EPROM.

SOLUTION

If some options are added to the command line, the firmware files for the Schmidt1 and F66 can be divided.

Options

– b start address
– e end address
– M offset
– s : The source file is the Motorola S format
– S: The output file is the Motorola S format
– O file name: The output file name

For example, the file for the Schmidt1 can be divided into 2 files as follows.

C:\> hexdiv   -bf00000 -ef7ffff -Mf00000 -s -S -O H5457200.LOW H5457200.MS

C:\> hexdiv   -bf80000 -effffff -Mf80000 -s -S -O H5457200.HIG   H5457200.MS

H5457200.LOW (or HIG) is the output file name, H5457200.MS is the source file name.

RC	REBV	ASIA	
*	*	*	

Model: G Series, Schmidt Series	Date: 30-Jun-99	No.: RFMLU009

Subject: Vertical gray band	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 ( )		

Symptom

Vertical gray band along the left edge of the printout.

Cause

Part of the development roller surface in the AIO becomes damaged due to overuse.

Action taken

Replace the AIO.

Note

The maximum copy volumes of the G series and Schmidt 3 are 1500 and 2000 prints / month respectively.

This symptom may occur if the customer exceeds these limits.

RC	REBV	ASIA	
*	*	*	

Model: Schmidt 1/3	Date: 15-Aug-99	No.: RH545004

Subject: Noise reduction for the fan	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 ( )		

Symptom

The noise level of the machine is within standard parameters. However, some customers do not like the noise generated by the fan, as the machine is sometimes installed on or by a desk.

Action taken

We have prepared the following countermeasure to reduce the noise from the fan:

1) New ROM H5457200J (See MB no. MH545008.) --- Only for Schmidt 1.
   This reduces the noise level of the fan by about 20% during printing.
   Notes
   - The running time of the fan is longer than the original time using the old ROM.
   - We cannot change the fan control in Schmidt 3.

2) Silencer
   We will provide a special part called a "Silencer" which can be set at the air exit near the fan by the customer. (See below)
   This will reduce the noise from the fan.
   The part number of the <u>Silencer</u> is H5459500. This part will be available soon at SPC.

RC	REBV	ASIA	
*	*	*	

Model: I - Schmidt 3 (G4 Fax)	Date: 15-Aug-99	No.: RH545005

Subject: Differences between the Schmidt3 and the I-Schmidt3	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 ( )		

I-Schmidt3 is available only in Europe (including France).

The following tables show the differences between the Schmidt3 and the I-Schmidt3.

Main differences

Items	Schmidt3	I-Schmidt3	Remarks
PC Fax Expander Option	Available	Not available	
G4 Unit	Option	Standard	
PSTN (G3) communication	Available	Not available	
On Hook Dial	Available	Not available	This key is used for programming the G4 sub-addresses.
NCU	Installed	Not installed	

The following items cannot be programmed in the I-Schmidt3:

- TT(PB)/DP line type selection:
- PSTN access code (PSTN access method from behind PBX)
- CSI (PSTN)
- NCU parameter settings

Note:
  The same FCU is used in the Schmidt3 and the I-Schmidt3. After replacing the FCU in the I-Schmidt3, do the RAM reset level 2 first thing before operating the machine (see System Bit Switch 00 bits 0 and 1) so the machine sets itself up as a I-Schmidt3.

Model: I - Schmidt 3 (G4 Fax)	Date: 15-Aug-99	No.: RH545005

Differences in the spare parts

Parts	P/N	Q'ty in Schmidt3	Q'ty in I-Schmidt3	Parts Catalog		Remarks
				Page	Index	
PCB – SIG4	H5476170	0	1	3	30	Option for Schmidt3
ISDN Harness	H1435701	0	1			Option for Schmidt3
ISDN Cable	H3025700	0	1			Option for Schmidt3
G4 Cover	H5484200	0	1	3	31	Option for Schmidt3
G4 Bracket	H5484201	0	1	3	32	Option for Schmidt3
G4 Shield Plate	H5484202	0	1	3	33	Option for Schmidt3
OP Panel Ass'y	H5484602	0	1	5	1	
OP Panel Ass'y	H5484606	0	1	5	1	For Infotec
OP Panel Ass'y	H5474602	1	0	5	1	
OP Panel Ass'y	H5474606	1	0	5	1	For Infotec
Harness – NCU2	H5475125	1	0	21	8	
Harness – NCU3	H5455126	1	0	21	16	
PCB – NCU-EUR	H5476136	1	0	21	9	
PCB – NCU-FRA	H5476137	1	0	21	9	For France
Shielding Sheet	H5454111	1	0	21	10	
Cap – Tele Socket	H5044901	1	0	21	15	

RC	REBV	ASIA	
	*		

Model: Schmidt 1	Date: 31-Aug-99	No.: RH545006

Subject: New Model (Schmidt1 Light)	Prepared by: K. Misugi
From: Technical Service Dept., GTS Division	

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

The new model Schmidt1 Light (FAX1900L) will be released in the line-up of the Schmidt1 (FAX2000L) series.

This technical bulletin is to inform the differences between the Schmidt1 Light and the Schmidt1. They are listed in order of sections that appear in the service manual.

1. OVERALL MACHINE INFORMATION

1.1. SPECIFICATIONS

Item	Schmidt1	Schmidt1 Light
2 MB Memory (Optional)	Available	Not Available Only 1 MB memory option is available for the Schmidt1 Light.
Multi-purpose Feeder (Optional)	Available	Not Available
Paper Feed Unit (Optional)	Available	Not Available
Print Resolutions Printer Mode	600 x 600 dpi	PC option is not available
Dimensions (W x D x H)	399 x 730 x 323 mm	399 x 604 x 299 mm The extension trays are not available in the Schmidt1 Light.

Model: Schmidt 1	Date: 31-Aug-99	No.: RH545006

1.2. FEATURES

Features Comparison Table

Features	Schmidt1	Schmidt1 Light
Equipment		
Optional cassette (Multi-purpose feeder)	Available	Not available
Optional paper feed unit	Available	Not available
Optional printer interface	Available	Not available
Extension trays (Both document and paper trays: not listed in the features list.)	Available	Not available
Communication Features		
Batch transmission	Max 35 files	Not available
Other User Features		
Center mark	Available	Not available
Quick dial label printing	Available	Not available
Specified cassette selection	Available	Not available
Blank Document Detection (Not listed in the features list.)	Available	Not available

2. DETAILED SECTION DESCRIPTIONS

2.1 SCANNER

Scanning Speed

The scanning speed (during memory tx) for each resolution is as described below. Please note that this description is not mentioned in the Schmidt1 service manual.

Resolution	Scan Speed (A4)	
	Schmidt1	Schmidt1 Light
Standard	2.8 s	5.6 s
Detail	5.6 s	5.6 s
Fine	11.3 s	11.3 s

3. PARTS CATALOG INFORMATION

The following parts for the Schmidt1 Light are different from the Schmidt1.

Index	Schmidt1	Schmidt1 Lite	Description
3-3	H5454315	Not used	Document Tray Extension
3-16	H5454314	Not used	Document Table Extension
3-25	H5452131	Not used	Copy Tray Extension
3-26	H5456080	Not used	PC I/F Board
3-27	G0121165	Not used	Knob Screw
3-34	H5517258	Not used	Ferrite Core
5-1	H5454602	H5454617	Operation Panel Ass'y - Lite (RIC-EUR)
5-1	H5454606	H5454616	Operation Panel Ass'y - Lite (Infotec)
17-28	H5455116	Not used	Main Harness - Multi-purpose
19-22	H5454101	H5474101	Right Side Plate
21-13	H5456130	H5456136	PCB - FCU - Lite
21-13	H5456135	H5456136	PCB - FCU - Lite
23-16	H5454213	Not used	Decal - Parallel
23-20	H5455115 (modified to H5455137)	Not used	Main Harness - 2nd
25-13	H5453128	H5453204	Paper Feed Bracket - Lite
25-22	H5453189	H5473189	Magnetic Clutch Bracket
25-24	H5453174	Not used	Idler Gear 2 - 14Z
25-25	H5453173	Not used	Idler Gear 1 - 23Z
25-26	H5453171	Not used	Gear 2 - 31Z
25-27	H5453172	Not used	Gear 3 - 16Z
25-29	H5453130	Not used	Idle Gear - 2 nd – 24Z
21-	---	H5453199	Slow Down Gear - Lite

Model: Schmidt 1	Date: 31-Aug-99	No.: RH545006

4. PRODUCT INFORMATION

The Schmdit1 Light is available only in the European market.

Model Code	Model Name	Product Code	Serial #
Schmidt1 Lite (EUR)	FAX1900L	H545-41	A12 Y MM 00001
Schmidt1 Lite (FRA)	FAX1900L	H545-44	A13 Y MM 00001
Schmidt1 Lite (INFO)	INFOTEC 3683L	H545-31	4C9 MM Y 0001
Schmidt1 Lite (INFO FRA)	INFOTEC 3683L	H545-34	4C9 MM Y 9001

RC	REBV	ASIA	
	∗		

Model: Schmidt1		Date: 29-Feb-00	No.: RH545007

Subject: Firmware modification history	Prepared by: Y. Okunishi
From: Technical Services Dept., GTS Division	

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

FAX2000L firmware modification history

H5457200K
PCB-FCU: H5456120T, H5456135K, H5456145B
Schedule: Sep. production run in 1999
Reasons for the change:
   1) For standards in China and Taiwan

H5457200J
PCB-FCU: H5456100L, H5456120R, H5456135J
Reasons for the change:
   1)   Correction of the following bugs
       -    "SID" was "PWD" on the protocol dump list.
       -    Symbol rate for Rx with V34 was incorrect on the protocol dump list.
   2)   Checking the auto call not to be active will not be done in manual Tx mode.
       (For France)
   3)   A new bit switch is assigned for fusing fan control. See MB no. MH545008, which will be issued at
       the end of April.
       New switch = Printer switch 0F Bit1
Note: Do not change the new ROM to the old ROM (H5457200H or an older version).
       If you do it, you have to reset the RAM.

H5457200H
PCB-FCU: H5456100J, H5456120Q, H5456135H
Reasons for the change:
   1)   Correction of the following problem
       -    When the handset is picked up just after starting the ring, the LCD display does not change
           from READY. There is no problem during the conversation.
   2)   Control of the fusing fan is changed. See MB no. 005.
   3)   To meet regulations for Ireland
   4)   To meet a request from Norway (Parameter for auto dialing)

H5457200G
PCB-FCU: H5456100H, H5456120P, H5456135G
Reasons for the change:
   1)   For the problem of No Tx/Rx through PABX with Ground Start
       The GS relay on the NCU was closed when the main power is on.

H5457200F
PCB-FCU: H5456100F, H5456120M, H5456135F
Reasons for the change:
   1)   For international access code in Spain
       00 => 07
   2)   Correction of words in Swedish

Model: Schmidt1	Date: 29-Feb-00	No.: RH545007

H5457200E
Applied from the 1st lot of mass production of machines for Europe/Asia.
Program for Schmidt1 (US, 1st production of the machines to Europe/Asia)
Software version: 65
Reasons for the change:

1) To meet the regulations for France
2) To meet the regulations for Switzerland
3) Error code 0-32 is programmed
When the machine recognizes a reception mode it is not capable of (outside the spec.) from the signal which is sent by the transmitting terminal in phase B or after the receiving mode is changed, the machine disconnects the line and error code 0-32 is shown.

H5457200D
Applied from the 1st lot of mass production of machines for the US.

RC	REBV	ASIA	
∗	∗	∗	

Model: Schmidt1	Date: 21-Mar-00	No.: RH545008

Subject: Service Manual Correction (Schmidt1)	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 mistakes in the service manual.

1. Dedicated transmission parameters

2. System switch 02 bits 6, 7: Memory read/write by RDS

Please refer to the following pages for details.

1. Dedicated Transmission Parameters.

Section in the service manual:
4.4 Dedicated Transmission Parameters
4.4.2 Parameters
Please note that the parameter byte numbers which appear on the display panel are "1" to "4", not "0" to "3" as described in the service manual.

Wrong Description	Correct Description
Byte 0	Byte 1 (Switch 1)
Byte 1	Byte 2 (Switch 2)
Byte 2	Byte 3 (Switch 3)
Byte 3	Byte 4 (Switch 4)

Please refer to the following pages for the correct descriptions.

Model: Schmidt1	Date: 21-Mar-00	No.: RH545008

Switch 1
FUNCTION AND COMMENTS
ITU-T T1 time If the connection time to a particular terminal is longer than the NCU parameter setting, adjust this byte. The T1 time is the value stored in this byte (in hex code), multiplied by 1 second. **Range:** 1 to 127 s (01H to 7FH) 00H or FFH - The local NCU parameter factory setting is used. Do not program a value between 80H and FEH.

Switch 2		
No	**FUNCTION**	**COMMENTS**

0 to 4	Tx level
	Bit 4 3 2 1 0 Setting
	    0 0 0 0 0 0
	    0 0 0 0 1 -1
	    0 0 0 1 0 -2
	    0 0 0 1 1 -3
	    0 0 1 0 0 -4
	          :
	          :
	    0 1 1 1 1 -15
	    1 1 1 1 1 Disabled
		If communication with a particular remote terminal often contains errors, the signal level may be inappropriate. Adjust the Tx level for communications with that terminal until the results are better.
		
		When disabled, the NCU parameter 01 setting is used.
		Note: Do not use settings other than listed on the left.

5 to 7	Cable equalizer
	Bit 7 6 5 Setting
	    0 0 0 None
	    0 0 1 Low
	    0 1 0 Medium
	    0 1 1 High
	    1 1 1 Disabled
		Use a higher setting if there is signal loss at higher frequencies because of the length of wire between the modem and the telephone exchange when calling the number stored in this Quick/Speed Dial.
		
		Also, try using the cable equalizer if one or more of the following symptoms occurs.
		• Communication error with error codes such as 0-20, 0-23, etc.
		• Modem rate fallback occurs frequently.
		
		Note: Do not use settings other than listed on the left.

Switch 3		
No	**FUNCTION**	**COMMENTS**

0 to 3	Initial Tx modem rate
	Bit 3 2 1 0 Setting (bps)
	        0 0 0 0 Not used
	        0 0 0 1 2,400
	        0 0 1 0 4,800
	        0 0 1 1 7,200
	        0 1 0 0 9,600
	        0 1 0 1 12,000
	        0 1 1 0 14,400
	        0 1 1 1 16,800
	        1 0 0 0 19,200
	        1 0 0 1 21,600
	        1 0 1 0 24,000
	        1 0 1 1 26,400
	        1 1 0 0 28,800
	        1 1 0 1 31,200
	        1 1 1 0 33,600
	        1 1 1 1 Disabled
	Other settings: Not used
		If training with a particular remote terminal always takes too long, the initial modem rate may be too high. Reduce the initial Tx modem rate using these bits.
		
		Note: Do not use settings other than listed on the left.

4-7	Not used	Do not change the settings.

Switch 4		
No	**FUNCTION**	**COMMENTS**
0-1	Not used	Do not change the settings.

2
 	
3
	DIS/NSF detection method
	Bit 3 2 Setting
	        0 0 First DIS or NSF
	        0 1 Second DIS or NSF
	        1 0 Not used
	        1 1 Disabled
		(0, 1): Use this setting if echoes on the line are interfering with the set-up protocol at the start of transmission. The machine will then wait for the second DIS or NSF before sending DCS or NSS.

4	V.8 protocol **0**: Disabled **1**: Enabled	If transmissions to a specific destination always end at a lower modem rate (lower than 14,400 bps), disable V.8 protocol so as not to use V.34 protocol. **0:** V.34 communication will not be possible.
5	Compression modes available in transmit mode **0:** MH only **1:** All available compression modes	This bit determines the capabilities that are informed to the other terminal during transmission.

6
 	
7
	ECM during transmission
	Bit 7 Bit 6 Setting
	    0 0 Disabled
	    0 1 Enabled
	    1 0 Not used
	    1 1 Disabled
		For example, if ECM is switched on but is not wanted when sending to a particular terminal, use the (0, 0) setting.
		Note that V.8/V.34 protocol is automatically disabled if ECM is disabled.

2. Memory Read/Write by RDS

Section in the service manual:
4.2 Bit Switches
4.2.1 System Switches
System Switch 02 bit 6s, 7

Wrong description (shaded)

System Switch 02		
No	**FUNCTION**	**COMMENTS**

6
 	
7
	Memory read/write by RDS
	Bit 7 6 Setting
	     0 0 Always disabled
	     0 1 User selectable
	     1 0 User selectable
	     1 1 Always enabled
		(0,0): All RDS systems are always locked out.
		(0,1), (1,0): At any time, an RDS system can access the machine.
		(1,1): At any time, an RDS system can access the machine.

Correct description (shaded)

System Switch 02		
No	**FUNCTION**	**COMMENTS**

6
 	
7
	Memory read/write by RDS
	Bit 7 6 Setting
	     0 0 Always disabled
	     0 1 User selectable
	     1 0 User selectable
	     1 1 Always enabled
		(0,0): All RDS systems are always locked out.
		(0,1), (1,0): Normally, RDS systems are locked out, but the user can temporarily switch RDS on to allow RDS operations to take place. RDS will automatically be locked out again after a certain time, which is stored in System Switch 03 (see below). Note that if an RDS operation takes place, RDS will not switch off until this time limit has expired.
		(1,1): At any time, an RDS system can access the machine.

RICOH

Model: Schmidt1	Date: 04-Jul-00	No.: RH545009

Subject: New Model Schmidt1 Light (US version) Release	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 (New Model Release Information)		

The new model Schmidt1 Light - US (FAX1900L) will be released in the line-up of the Schmidt1 (FAX2000L) series.

This technical bulletin is to inform the differences between the Schmidt1 Light and the Schmidt1. They are listed in order of sections that appear in the service manual.

NOTE: The Schmidt1 Light has already been released in the European market.
This machine is not available in the Asian market.

1. OVERALL MACHINE INFORMATION

1.1. SPECIFICATIONS

Item	Schmidt1	Schmidt1 Light
1 MB Memory (Optional)	Available	Not Available (No longer manufactured.) Only the 2 MB memory option is available.
Multi-purpose Feeder (Optional)	Available	Not Available
Paper Feed Unit (Optional)	Available	Not Available
Print Resolutions Printer Mode	600 x 600 dpi	The PC option is not available
Dimensions (W x D x H)	399 x 730 x 323 mm	399 x 707 x 299 mm The document table extension (P/N: H5454314) is not available.

1.2. FEATURES

Features Comparison Table

Features	Schmidt1	Schmidt1 Light (US version)
Equipment		
Optional cassette (Multi-purpose feeder)	Available	Not available
Optional paper feed unit	Available	Not available
Optional printer interface	Available	Not available
Communication Features		
Batch transmission	Max 35 files	Not available
Other User Features		
Center mark	Available	Not available
Quick dial label printing	Available	Not available
Specified cassette selection	Available	Not available
Blank Document Detection (Not listed in the features list.)	Available	Not available

2. DETAILED SECTION DESCRIPTIONS

2.1 SCANNER

Scanning Speed

The scanning speed (during memory tx) for each resolution is as described below. Please note that this description is not mentioned in the Schmidt1 service manual.

Resolution	Scan Speed (A4)	
	Schmidt1	Schmidt1 Light
Standard	2.8 s	5.6 s
Detail	5.6 s	5.6 s
Fine	11.3 s	11.3 s

3. PARTS CATALOG INFORMATION

The following parts for the Schmidt1 Light are different from the Schmidt1.

Index	Schmidt1	Schmidt1 Lite	Description
3-6	H5454400	Not used	Handset Bracket
3-7	H0814141	Not used	Screw - Handset
3-8	H5054178	Not used	Stay - Handset
3-9	H5454401	Not used	Handset Bracket Ass'y
3-12	H5454330	Not used	Fan cover
3-16	H5454314	Not used	Document Table Extension
3-19	H5454368	H5454331	Decal - Paper Jam
3-26	H5456080	Not used	PC I/F Board
3-27	G0121165	Not used	Knob Screw
3-28	H5458600	H5458660	Operation Manual - Lite (RIC-US)
	H5458630	H5458631	Operation Manual - Lite (Savin)
3-30	H5458670	H5458677	Installation Procedure - Lite - US
3-34	H5517258	Not used	Ferrite Core
5-1	H5454600	H5454615	Operation Panel Ass'y - Lite (RIC-US)
5-1	H5454605	H5454618	Operation Panel Ass'y - Lite (Savin)
9-21	H5164095	Not used	Decal - Energystar
11-21	H5455151	Not used	Ground Wire
17-28	H5455116 (modified to H5455138)	Not used	Main Harness - Multi-purpose
19-22	H5454101	H5474101	Right Side Plate
21-13	H5456120	H5456122	PCB - FCU – Lite US
23-16	H5454213	Not used	Decal - Parallel
23-20	H5455115 (modified to H5455137)	Not used	Main Harness - 2nd
25-13	H5453128	H5453204	Paper Feed Bracket - Lite
25-21	H5455151	Not used	Ground Wire
25-22	H5453189	H5473189	Magnetic Clutch Bracket
25-24	H5453174	Not used	Idler Gear 2 - 14Z

25-25	H5453173	Not used	Idler Gear 1 - 23Z
25-26	H5453171	Not used	Gear 2 - 31Z
25-27	H5453172	Not used	Gear 3 - 16Z
-26	---	**H5453199**	Slow Down Gear - Lite (Please refer to the following diagram.)

NOTE: Please refer to the following diagram for the location of H5453199 (Index No. 26). This illustration is extracted from page 1-24 of the parts catalog.
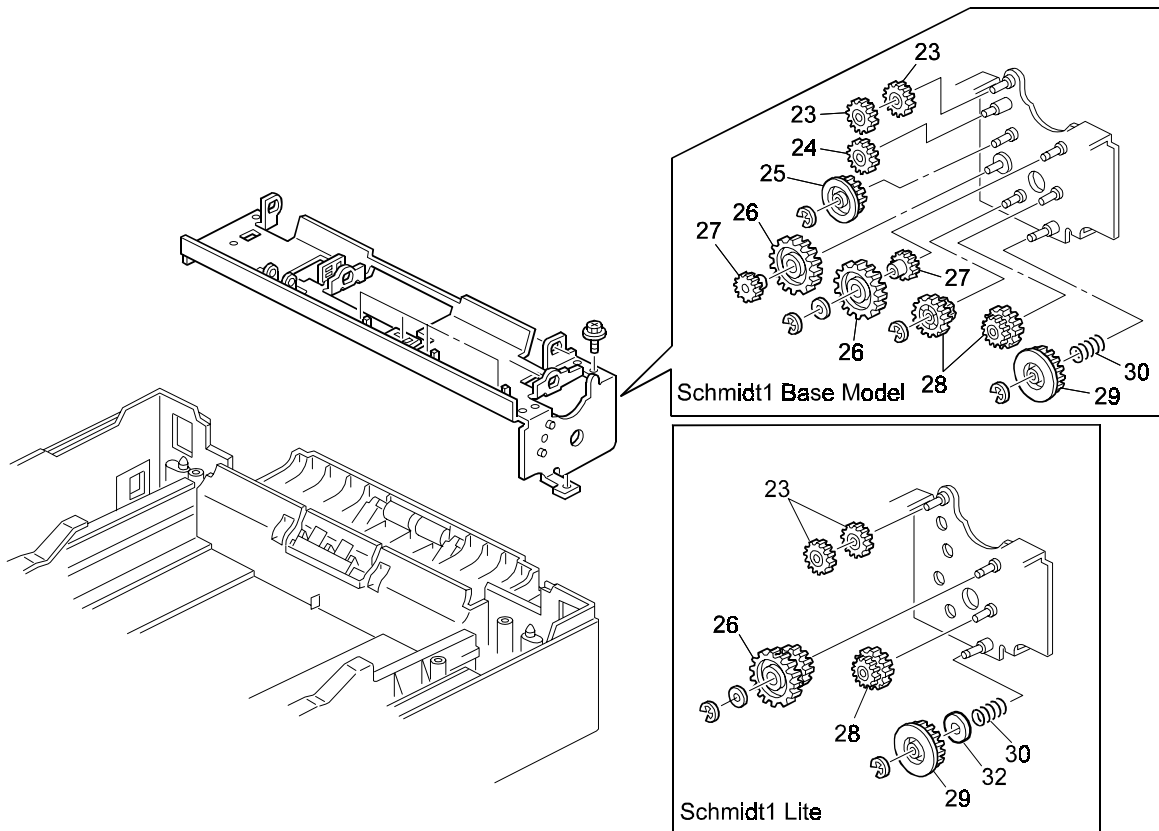
4. PRODUCT INFORMATION

Model Code	Model Name	Product Code	Serial #
Schmidt1 Lite (RIC-US)	FAX1900L	H545-24	A26 Y MM 00001
Schmidt1 Lite (Savin/Ges)	Savin Fax3705 Gestetner 9877	H545-28	A27 Y MM 00001

Model: Kaiser1, Schmidt1/3, FR4/6, FX4/6, FX7, LSO, LFO, LX7	Date: 11-Jul-00	No.: RGenF021

Subject: Modem turn-on level (NCU Parameter)	Prepared by: Y.Okunishi
From: Technical Services Dept., GTS Division	

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

Please note the following points when setting the modem turn-on level:

1) Schmidt 3 Service Manual, pg. 4-49:
   The maximum value at the address (NCU Parameter) for the modem turn-on level
   (incoming signal detection level) is 1F(h).

   Of the 8 bits, only the first 5 are used.
   Therefore, if the input were 20(h), the 5 bits would be 00000.

2) The level is calculated by the following equations:

   Kaiser1, Schmidt1/3:
      Modem carrier on: $= (-33dB) - (0.5 \times N)$
                   off: $= (-33dB) - (0.5 \times N) - (3dB)$

   FX4/6, LSO, FX7, LSO, LFO, LX7:
      Modem carrier on: $= (-37dB) - (0.5 \times N)$
                   off: $= (-37dB) - (0.5 \times N) - (3dB)$

   FR4/6:
      Modem carrier on: $= -33dB$ (N= 00h)
                           $= -38dB$ (N= 01h – 0Ah)
                           $= -43dB$ (N= 0Bh – 14h)
                           $= -48dB$ (N= 15h – 1Fh)
                   off: $=$ (above value – 3dB)

Model: Schmidt	Date: 16-Nov-00	No.: RH545010

Subject: Model S-2	Prepared by: Y. Okunishi
From: Technical Services Dept., GTS Division	

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

The new model S-2 will be released in the line-up of the Schmidt 1 series.

This technical bulletin is to inform the differences between the Schmidt1 and the S-2.

1. OVERALL MACHINE INFORMATION

1-2. Specifications/Features

Item	Schmidt1	S-2
France version model	Yes	Universal model for European countries including France
Closed Network (Tx and Rx)	Not available	Available
Quick (Parallel) Memory Tx	Not available	Available
Memory Lock (Locking incoming messages)	Not available	Available
Restricted Access	Not available	Available
Operation flow for installation	Not available	Available
SAF Memory	Standard: 0.5MB Option: 1MB / 2MB	Standard: 1MB Option: 2MB (Supply of 1M memory card from RCL has been discontinued.)
Standard paper cassette	Universal cassette	US/Asia: Universal cassette Europe: A4 cassette (Universal Cassette is an option.)

Model: Schmidt	Date: 16-Nov-00	No.: RH545010

1-3. Electrical Differences in PCBs

	Schmidt1	S-2	Note
<US>			
FCU	H5456120	H5466120	Only the firmware is different.
NCU	H5455930	H5455930	Same
<Europe>			
FCU	H5456135	H5466135	Only the firmware is different.
NCU	H5455931	**54886151**	Circuit and specifications are the same as Sch1 but the sizes of the PWB and some components are different.
<Asia>			
FCU	H5456130	H5466135	Only the firmware is different.
NCU	H5455931	**54886151**	Circuit and specifications are the same as Sch1 but the sizes of the PWB and some components are different.

1-4. Firmware

H5467200(EU-1): Installed in the factory

English, French, German, Italian, Spanish, Swedish, Dutch, Portuguese, Norwegian

H5467201(EU-2): installed by service rep.

English, French, German, Danish, Polish, Czech, Hungarian, Hebrew

*Tools for programming the firmware and the RAM data are the same as Schmidt1.

1-5. Initial settings

1) Turn the Power on
2) Select the language (Europe/Asia)
3) Select the country code (Europe/Asia)
4) Adjust the clock
5) Program OWN NAME (RTI)
6) Program FAX HEADER (TTI)
7) Program FAX NUMBER (CSI)
→ READY

1-6. Wording

RTI = Own Name
TTI = FAX Header
CSI = FAX Number
Own Tel. Number = Own Number
(TRANSFER REPORT is displayed for programming Own Number.)

1-7. How to return to the factory setting condition

1. Resetting the RAM
1) FUNCTION 06
2) 1998 + YES
3) 06 + YES for MEMORY
4) 0 for RAM read and write
5) Input 800005 (RAM address) + "**>**"
6) Input 00 + YES for level 1 RAM reset
7) Turn the main switch off then on.
The machine is reset for the US version.

2. Setting the functional country code
1) FUNCTION 06
2) 1998 + YES
3) 01 + YES for BIT SW
4) Choose 0F for country code
5) Set 02 (0000 0010) for UK for example, then YES
6) FUNCTION

3. Setting the NCU country code
1) FUNCTION 06
2) 1998 + YES
3) 8 + YES for NCU
4) 0 for NCU
5) Input 002 at No.CC (for UK) +YES
6) FUNCTION
Now, The machine is set for Europe
If you want it for Asia, choose the following:
    Functional country code = 12(H)
    NCU country code = 018(Decimal)

4. Resetting the initial flow
1) Press the Resolution key, 0 and 1.
2) Turn the main switch off after PROGRAMMING is displayed.
3) Turn the main switch on.

Model: Schmidt		Date: 16-Nov-00	No.: RH545010

2. PARTS CATALOG INFORMATION

The following parts are different between the Schmidt1 and the S-2.

Index	Schmidt1	S-2	Description
2-1	H5455021	Not packed	Power Supply Cord – 230V (France)
-3	H5454315	Not used for Europe version	Document Tray Extension (used for US/Asia version)
-11	H5454360	Not used	Decal – Toner Cartridge
-16	H5454314	Not used for EU version	Document Table Extension (used for US/Asia version)
-19	H5454368	H5464385	Decal – Paper Jam
-25	H5452131	Not used for EU version	Copy Tray Extension (used for US/Asia version)
-28	H5458600	H5468600	Operation Manual - (RIC-US)
-28	H5458629	H5468629	Operation Manual - (NRG-Asia)
-28	H5458609	H5468609	Operation Manual - (RIC-Asia)
-28	H5458630	H5468630	Operation Manual - (Savin)
-30	H5458670	H5468670	Installation Procedure - US
-30	H5458679	H5468679	Installation Procedure - Asia
4-1	H5454600	H5463600	Operation Panel Ass'y (RIC-US)
-1	H5454602	H5463603	Operation Panel Ass'y - (RIC-Europe)
-1	H5454603	H5463604	Operation Panel Ass'y - (RIC-Asia)
-1	H5454605	H5463601	Operation Panel Ass'y - (Savin)
-1	H5454606	H5463602	Operation Panel Ass'y - (Infotec)
-1	H5454608	H5463605	Operation Panel Ass'y - (NRG-Asia)
-1	H5454609	No change	Operation Panel Ass'y - (NRG-Europe)
-6	---	H5454651	Decal – LED-Left
-7	---	H5454654	Decal - Scale
-8	---	H5463620	Decal – LCD (RIC US)
-8	---	H5463621	Decal – LCD (Savin)
-8	---	H5463622	Decal – LCD (Infotec)
-8	---	H5463623	Decal – LCD (RIC EU/Asia)
-8	---	H5463625	Decal – LCD (GES EU/Asia)
-9	---	H5454652	Decal – LED-Right
-10	---	H5454653	Decal – Start/Stop
6-28	H5451103	H5461050	Platen Roller

| Model: Schmidt | | | Date: 16-Nov-00 | No.: RH545010a |

16-17	H5454130	Not used	Left Guide Decal – Cartridge
-42	H5454131	Not used	Right Guide Decal – Cartridge
20-9	H5455930	H5455930	NCU Board – (US) --- No change
-9	H5455931	*54886156*	NCU Board – (Europe/Asia)
		H5465101	***Harness: Modularconnector: EU2***
-9	H5455932	Not used	PCB – NCU (France)
	---	H5463301	NCU Bracket (Europe/Asia)
-13	H5456120	H5466120	FCU Board – (US)
-13	H5456130	H5466135	FCU Board – (Europe/Asia)
-13	H5456135	H5466135	FCU Board – (Europe/Asia)
24-13	H5453128	H5353160	Paper Feed Bracket
-19	H5455077	H5355070	Magnetic Clutch
-23	H5453175	(2 - 1)	Idler Gear 3 – 15z
-23	H5453175	H5353185	Idler Gear (Left one on page 24)
-26	H5453171	(2 - 1)	Gear 2 - 31Z (Left one on page 24 is not changed.)
-27	H5453172	(2 – 1)	Gear 3 - 16Z(Left one on page 24 is not changed.)
26+27	---	H5453199	Slow Down Gear
26-1	H5453103	Not used for EU version	Cassette Cover (Used for US/Asia version)
-5	H5453105	Not used for EU version	Left Side Fence Ass'y (Used on US/Asia version)
-10	H5453104	Not used for EU version	Right Side Fence Ass'y (Used on US/Asia version)
-11	H5453100	Not used for EU version	Cassette Ass'y (Used on US/Asia version)
-12	H5453101	Not used for EU version	Cassette Slider (Used for US/Asia version)
11+12	---	H5353010	Cassette Ass'y – A4 (Only for EU version)
-13	H5453112	Not used for EU version	Paper Level Plate (Used on US/Asia version)
-14	H5453107	Not used for EU version	Paper Size Selector (Used on US/Asia version)
-18	H5454362	Not used for EU version	Decal – Cassette Cover (Used on US/Asia version)

RICOH

Technical Bulletin

Model: Model S-1/2	Date: 18-Jan-01	No.: RH545011

Subject: PCIF	Prepared by: Y. Okunishi
From: Technical Services Dept., GTS Division	

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

The evaluation of WinStyler T180 for the PCIF has been completed. The following sheet will be inserted into the PCIF Operator's Manual from January 2001 PCIF production.

PC INTERFACE KIT TYPE 180 Operator's Manual **- Additional Information**

Please note the following:

❒ WinStyler T180 can also be run under Windows Me.

(For H545-7215B)

Model: Model S-1, 2, 3	Date: 16-Apr-01	No.: RH545012

Subject: Noise from the paper cassette	Prepared by: Y. Okunishi
From: Technical Services Dept., GTS Division	

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

<Symptom>

Noise from the paper feed tray.

<Cause>

The noise is caused by the friction between the paper and separation pad. However, the paper is fed normally without any problem.

<Action>

Replacement of the Separation Pad Assembly (H5453155).

RICOH   Technical Bulletin   PAGE:1/1

Model: Model S-3	Date: 16-Apr-01	No.: RH545013

Subject: New Error Code	Prepared by: Y. Okunishi
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 following new error code has been released for the Model S-3.

New code: 2-51

Symptom: Communication failure.

Note: After this error occurs, the program for the communication job is reset.

Cause: FCU malfunction

Recommendation: FCU replacement

RC	REBV	ASIA	
∗	∗	∗	

Model: Model S-1, 2, 3	Date: 21-Aug-01	No.: RH545014a

RTB Correction
The illustration has changed as shown below.

Subject: Paper jam at the paper entrance	Prepared by: K. Moriizumi
From: Technical Services Dept., GTS Division	

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

Symptom

Paper jams at the paper entrance area or is not fed.

Principle Causes

-   Use of paper other than that specified in the Operator's Manual

-   Dirty rollers

-   Defective Paper Feed Clutch

Action

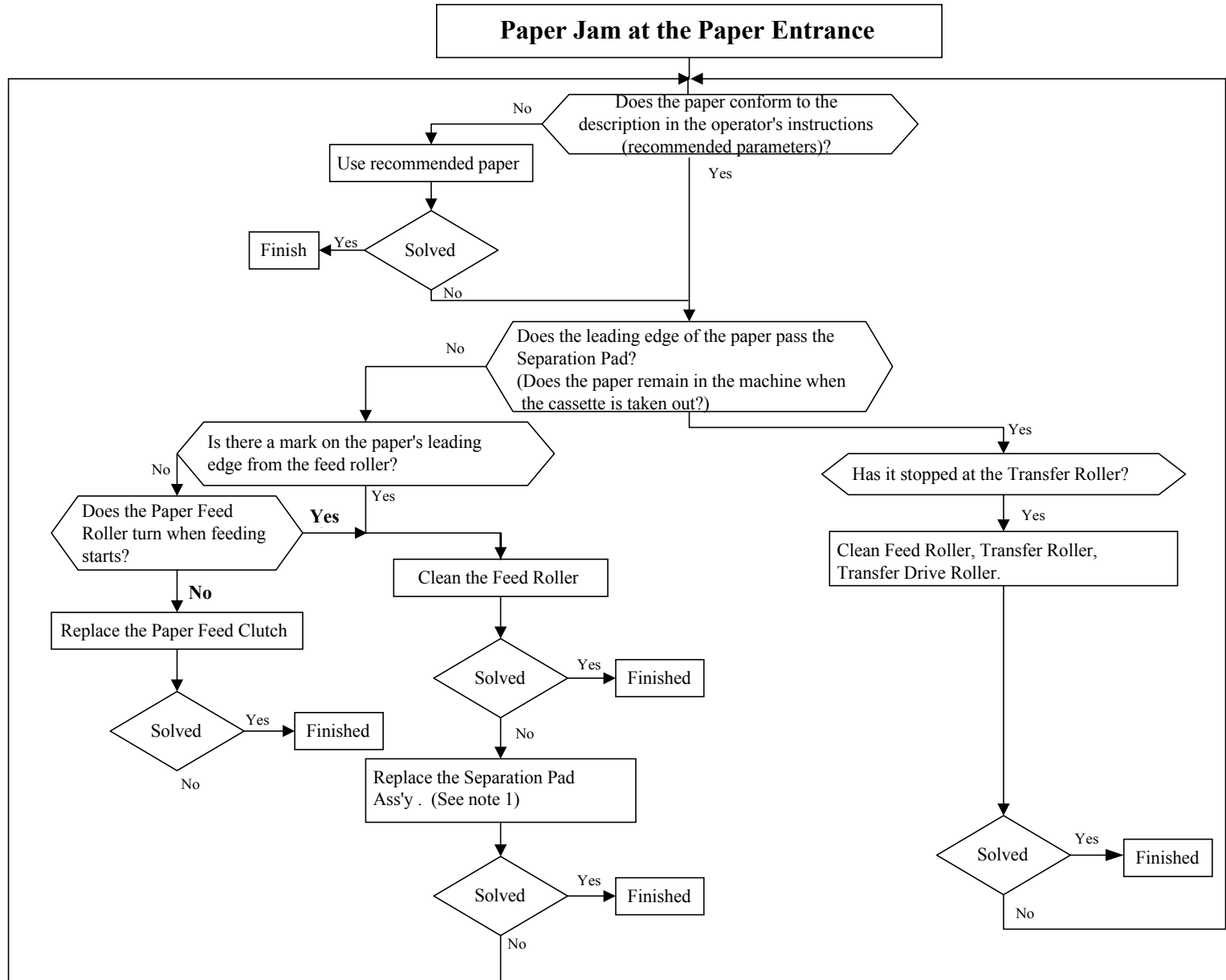Please see the flow chart on the following page.

Additional tips:

1) The Separation Pad Assembly (H5353006) for Model S-4 can also be used in the S-1/2/3. This assembly works better for paper feed/separation.

    Please try using this assembly if the customer frequently reports paper non-feeds. However, because the noise level may be increased, please do not use the part for customers who may be sensitive to this.

2) Depending on the cause, a paper jam might not always occur in some cases, or may only occur under specific conditions. Therefore after taking the action specified in the flowchart below, please be sure to carefully confirm the effectiveness. This will help ensure that reoccurrences are avoided.

Reissued: 12-Sep-01

Model: Model S-1, 2, 3	Date: 21-Aug-01	No.: RH545014a

Paper Jam at the Paper Entrance

Does the paper conform to the description in the operator's instructions (recommended parameters)?
- No → Use recommended paper → Solved
  - Yes → Finish
  - No → (continue)
- Yes → Does the leading edge of the paper pass the Separation Pad? (Does the paper remain in the machine when the cassette is taken out?)

Does the leading edge of the paper pass the Separation Pad? (Does the paper remain in the machine when the cassette is taken out?)
- No → Is there a mark on the paper's leading edge from the feed roller?
- Yes → Has it stopped at the Transfer Roller?

Is there a mark on the paper's leading edge from the feed roller?
- No → Does the Paper Feed Roller turn when feeding starts?
- Yes → Clean the Feed Roller

Does the Paper Feed Roller turn when feeding starts?
- No → Replace the Paper Feed Clutch → Solved
  - Yes → Finished
  - No
- Yes → Clean the Feed Roller

Clean the Feed Roller → Solved
- Yes → Finished
- No → Replace the Separation Pad Ass'y . (See note 1) → Solved
  - Yes → Finished
  - No

Has it stopped at the Transfer Roller?
- Yes → Clean Feed Roller, Transfer Roller, Transfer Drive Roller. → Solved
  - Yes → Finished
  - No

RICOH Technical Bulletin

Model: Schmidt	Date: 27-Aug-01	No.: RH545015

Subject: Software Release Information (S-4)	Prepared by: K. Moriizumi
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 model S-4.

	Version	C.SUM	Effective Date
H5357200C	59	1730	1st mass production for the USA
H5357200D	65	3689	For the Japanese market
H5357200E	70	F597	1st mass production for Europe
H5357200F	71	5FA8	February 2001 prod.
H5357200G	72	57A3	March 2001 prod.
H5357200H	73	5C74	May 2001 prod.
H5357200J	74	650A	June 2001 prod.
H5357200K	75	ADC5	August 2001 prod.

Version	Title	Symptom Corrected
59		1st mass production – N. America
65		1st mass production – Japan
70		1st mass production – Europe
71	Errors in Italian	Several wording errors in Italian were corrected.
	Tone/Pulse wording	The words for "tone" and "pulse" had been reversed for several languages.
72	Memory reset	The memory resets during parallel memory transmission.
73	Machine reset	The machine resets when printing the specified sender list in Polish.
74	ISDN I-G3 transmission	Scanning stops and the line is disconnected in ISDN G3 Tx mode (reported by REBV).
	Redialing	A 254-digit fax number registered for redialling is not displayed.

Model: Schmidt		Date: 27-Aug-01	No.: RH545015

		Communication parameter display	When sending at fine resolution (200x400dpi) with System Switch 00 bit 5 (communication parameter display) turned on, "44" is displayed for the resolution (correct=24).
		Receiving files LED does not blink.	The received files LED lights (instead of blinking), even when there are both memory locked files and substitute reception files stored in memory.
		Polling reception report	The polling reception reports are printed out automatically, even if user parameter switch 03 bit 4 (Automatic print polling reception reports) is turned off and user parameter switch 03 bit 0 (Automatic print memory transmission reports) is turned on.
		Print test pattern	After making copies, dots appear on both sides of the Grand Prix test pattern.
		Dump lists	When the maximum number of files is stored in the machine, it is not possible to print out any reports after printing out the protocol dump list or memory dump list.
		Batch transmission	When using both Quick Dials and the 10-key pad to input the destinations for a batch file transmission job, the dedicated transmission parameters are not applied to the second file.
		Development bias	To minimize dirty background, the development bias was changed from –400V to –450V.
	75	Report with the sample image	Software was modified so that reports with sample images are always printed out onto LT size paper (even if both LT and LG paper are set in the cassettes).
		Default cassette for copy mode	In response to a field request, when the optional PFU cassette is installed in the machine, this will become the default paper cassette for copy mode.
		SMTP mail reception with LAN unit option	Despite the actual specification of 30 max., the operator is able to register over 30 destinations for transfer of mail received via SMTP.

RICOH

Technical Bulletin

Reissued: 06-Nov-01

Model: Schmidt	Date: 27-Aug-01	No.: RH545015a

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

Subject: Software Release Information (S-4)	Prepared by: K. Moriizumi
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 model S-4.

	Version	**C.SUM**	**Effective Date**
H5357200C	59	1730	1st mass production for USA
H5357200D	65	3689	For the Japanese market
H5357200E	70	F597	1st mass production for Europe
H5357200F	71	5FA8	February 2001 prod.
H5357200G	72	57A3	March 2001 prod.
H5357200H	73	5C74	May 2001 prod.
H5357200J	74	650A	June 2001 prod.
H5357200K	75	ADC5	August 2001 prod.
H5357200L	*76*	*1D92*	*October 2001 prod.*

Version	Title	Symptoms Corrected (for this release only)
76	*Text mail longer than 95 characters*	*When the machine receives mail longer than 95 characters, the 95th and later characters do not come through.*
	Communication Results Report into User Function Key	*The Communication Results Report can now be programmed into the User Function Key, allowing the option of printing out the report for selected files only.*
	Memory File Transfer	*When the SAF memory is full, an error appears, and all messages in the memory cannot be transferred*

Model: Schmidt 4	Date: 09-Nov-01	No.: RH545016

Subject: Parameters for the periodic service call (S-4)	Prepared by: K. Moriizumi
From: Technical Services Dept., GTS Division	

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

Please add the following RAM addresses to your S-4 Service Manuals, page 4-97.

800D97 to 800D9A(H) - Periodic service call parameters.

Parameters		Address (H)
Call interval: 01 through 15 month(s) (BCD) 00: Periodic service call disabled		**800D97**
Date and time of the next call	Day: 01 through 31 (BCD)	**800D9A**

800DA1 to 800DA3(H) - Effective term of automatic service calls.

Parameters	Address (H)
Year: last two digits of the year (BCD)	**800DA1**
Month: 01 through 12 (BCD)	**800DA2**
Day: 01 through 31 (BCD)	**800DA3**

Model: Schmidt Series	Date: 20-Nov-01	No.: RH545017

Subject: Software Release Information (S-2)	Prepared by: K. Moriizumi
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 model S-2.

For world-wide

	Version	C.SUM	Effective Date
H5467200A	09	B1B1	1st mass production for USA
H5467200B	10	F5E5	October 2001 prod.
H5467200C	11	5B15	November 2001 prod.

For the Language Kit (Europe)

	Version	C.SUM	Effective Date
H5467201A	09	EAE7	1st mass production for USA
H5467201B	10	2F1B	October 2001 prod.
H5467201C	11	944B	November 2001 prod.

Version	Title	Symptom Corrected
09		1st mass production
10	Transmission Result Report	When an immediate transmission job is programmed into a Quick Dial, and a job is then sent using this Quick Dial, the transmission result report is automatically printed out even if User Parameter switch 03 Bit 5 is turned off. (Note: This does not occur when using the 10-key pad).
11	"Too Many Destinations" with broadcasting	After the line is clear, (which the machine waits for to prevent collision between immediate transmission and incoming ring signals), the machine displays "too many destinations" when the operator tries to input the 3rd destination.
	Freeze with legal paper ADF job	The machine freezes and displays "Copying" after the first document has been fed and copied. Conditions: -ADF copy, 2 or more legal documents, 1 set. -Resolution: detail -Only 1 cassette has legal paper

Model: Schmidt-Series	Date: 11-Dec-01	No.: RH545018

Subject: Service Manual Correction for S-4	Prepared by: K.Moriizumi
From: Technical Service Dept., GTS Division	

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

Please add the words in **bold/italics** below to your Model S-4 Service Manual (machine codes: H535/H536/H537).

Communication Switch 00		
No.	**FUNCTION**	**COMMENTS**

0-1	Compression modes available in receive mode
	Bit 1 0 Modes
	  0 0 MH only
	  0 1 MH/MR
	  1 0 MH/MR/MMR
	  1 1 ***MH/MR/MMR/JBIG***
		These bits determine the compression capabilities declared in phase B (handshaking) of T.30 protocol.

2-3	Compression modes available in transmit mode
	Bit 3 2 Modes
	  0 0 MH only
	  0 1 MH/MR
	  1 0 MH/MR/MMR
	  1 1 ***MH/MR/MMR/JBIG***
		These bits determine the compression capabilities used in the transmission and declared in phase B (handshaking) of T.30 protocol.

4	Not used	Do not change these settings.
5	JBIG reception mode **0:** Standard mode only **1:** Standard and optional mode (default)	If this bit is 0, JBIG optional mode is switched off for reception. Change the setting when communication problems occur using the JBIG compression.
6	Priority for JBIG mode used for transmission **0:** Standard mode **1:** Optional mode (default)	This bit determines the priority for the compression mode used for JBIG transmission. Change the setting when communication problems occur using the JBIG compression.
7	Closed network (reception) **0:** Disabled **1:** Enabled	**1:** Reception will not go ahead if the ID code of the other terminal does not match the ID code of this terminal. This function is only available in NSF/NSS mode.

Model: Schmidt Series	Date: 20-Dec-01	No.: RH545019

Subject: FCU board for the S4	Prepared by: K.Moriizumi
From: Technical Service Dept., GTS Division	

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

Service manual correction
We mentioned that SW1 is the battery switch on page 2-37 of the S4 service manual. However, this is incorrect.The correct description is as follows.

Switch

Item	Description
TB2	Switches the backup battery on/off

When replacing the FCU board, change TB2 from off to on.

What to do after the FCU board has been replaced for the Model S-4.
The firmware for the S4 is covered worldwide, but the default language is Japanese, and the default country setting is Japan.

After replacing the FCU board, Japanese is displayed on the LCD. Please perform the initial setting procedure on page 4-24 of the S4 service manual, section 4.2.32 in order to change the area setting, After changing the area setting to either Europe or Asia, the language on the LCD is automatically changed to English.

Reissued: 11-Jun-02

Model: Schmidt	Date: 27-Aug-01	No.: RH545015b

RTB Correction

The items in bold italics have been corrected or added.

Subject: Software Release Information (S-4)	Prepared by: K. Moriizumi
From: Technical Services sec. Service Planning Dept.	

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

Firmware history for the model S-4.

	Version	**C.SUM**	**Effective Date**
H5357200C	59	1730	1st mass production for USA
H5357200D	65	3689	For the Japanese market
H5357200E	70	F597	1st mass production for Europe
H5357200F	71	5FA8	February 2001 prod.
H5357200G	72	57A3	March 2001 prod.
H5357200H	73	5C74	May 2001 prod.
H5357200J	74	650A	June 2001 prod.
H5357200K	75	ADC5	August 2001 prod.
H5357200L	76	1D92	October 2001 prod.
H5357200M	*78*	*9ACE*	*March 2002 prod.*
H5357200N	*79*	*B205*	*May 2002 prod.*

Model: Schmidt	Date: 27-Aug-01	No.: RH545015b

Version	Title	Symptom Corrected
78	**Default for G4 Internal SW0 bit0**	**The default value for G4 Internal SW0 bit0 has been corrected to 1 (NA).**
	Reboot after transmitting	**After transmitting, the machine might reboot if the Quick Dial label has been programmed but the RTI has not.**
	Transfer result report mail not sent	**When set to exclude the sample image, the machine does not send the transfer result report mail or mail with viewer download URL.**
	SMTP reception routes to Speed Dial 00	**Software changed so that if an SMTP mail is received without a routing number (e.g. FAX=#*@schmidt4.ricoh.co.jp), it will be routed to Speed Dial 00.**
	Manual mail reception	**The NIC board does not reset, even after the POP server fails to respond within the allotted time during manual mail reception.**
	Supports PCSM	**Supports PCSM counter charge utility software.**
79	**Thin lines with multi-copy (standard resolution)**	**Thin horizontal lines appear when making multiple copies of an original at standard resolution.**
	SMTP reception	**The transmission result report is printed out when using SMTP reception/routing, even if report printing has been disabled.**

Model: Schmidt Series	Date: 25-Sep-02	No.: RH545020a

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

Subject: No Feed Paper Jam	Prepared by: K. Moriizumi
From: Technical Services sec. Service Planning Dept.	

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

For Schmidt 1/2

SYMPTOM

Paper jams or misfeeds at the paper entrance area.

(Please refer to RTB #RH545014).

CAUSE

- Use of paper other than that specified in the Operator's Manual
- Dirty rollers
- Defective Paper Feed Clutch
- *Curled paper*
- *High amount of friction (resistance) between sheets of paper*

ACTION

Production

As mentioned in MB #MH545025, the Separation Pad has been changed, and a Separation Unit has been newly registered (consisting of the pad, holder, and spring).

In the Field

Please check the following and take corrective action if necessary:

1. Setting of the paper cassette (see the O/I for the correct method).
2. Setting of the paper in the paper cassette (see the O/I for the correct method).
3. Shape of the bottom plate and spring of the paper cassette assembly:
   Replace the plate or spring if they appear bent out of shape.

Note: Manually bending components of the cassette is not an effective measure against paper jams.

4. Surface of the paper feed roller:
   Clean the roller if the surface shows dust or other particles.

5. Replace the paper feed clutch from H5455077 → H5465070:
   For easier replacement, see the procedure below.

6. Replace the paper separation pad.
   H5453155 → H546311**2**.

   Please also check the separation pad holder (H545315**7**), and the paper separation spring (G8003147), and replace them if broken.

   Note: These parts can be replaced individually, or as a set with the new separation unit (H5463101, which includes the pad, holder and spring).

Please note the following for non-feed paper jams on the Schmidt3:

1. *Do not use the new Separation Pad (H5463112) or Separation Pad Unit (H5463101).*

2. *The paper speed of the Schmidt3 is the same as the Schmidt4, i.e. not the same as the Schmidt1/2.*

3. *Please try using the Separation Pad Ass'y (H5353006) of the Schmidt4.*

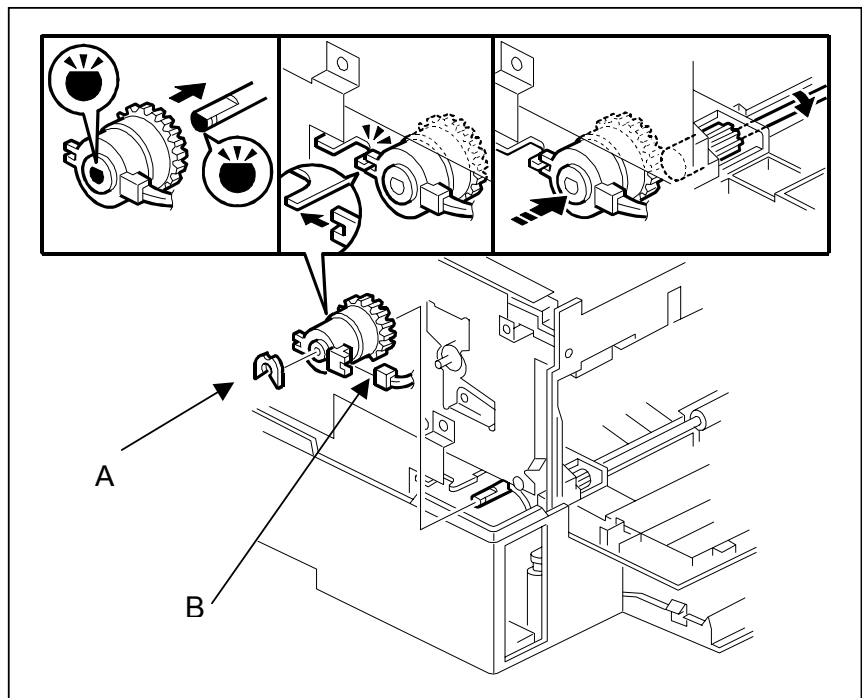| Model: Schmidt Series	Date: 25-Sep-02	No.: RH545020a

Additional tips

The following will make replacement of the paper feed clutch easier.

Removing the paper feed clutch

1. Remove the top cover, then the FCU cover.
2. Remove the FCU board.
3. Remove the plastic clip on the paper feed clutch [A], then the connector [B].
4. Remove the paper feed clutch.

Installing the new paper feed clutch

1. Attach the paper feed clutch connector.
2. Mount the clutch onto the D-shaped paper feed roller shaft.
3. Attach the clutch stopper onto the side plate as shown.
4. Adjust the shaft in the clutch hole so that the paper feed rollers rotate.
5. Secure the clutch in place by attaching the plastic clip.
6. Reattach the FCU board, FCU cover and top cover.

Reissued: 14-May-03

Model: Schmidt Series	Date: 17-Jan-03	No.: RH545021a

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

Subject: Paper feed jam at the registration roller	Prepared by: K. Moriizumi
From: 1st Tech. Support Sec. Service Support Dept.	

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

The following applies only to the Schmidt 4. It does not occur on the Schmidt 1/2/3.

SYMPTOM

An Error Code 9-84 feed jam occurs at the registration roller when printing out a report, receiving a fax or performing a copy job. The jam tends to occur more frequently in low-temperature environments and is sometimes accompanied by a noise.

CAUSE

There is a relatively low amount of grease on the shaft of the Gear: H5353303 (index #4 in the illustration below), which gradually increases the rotational torque on the gear, causing the gear to repeatedly disengage/reengage during paper feed. This torque is relatively higher under low-temperature conditions.

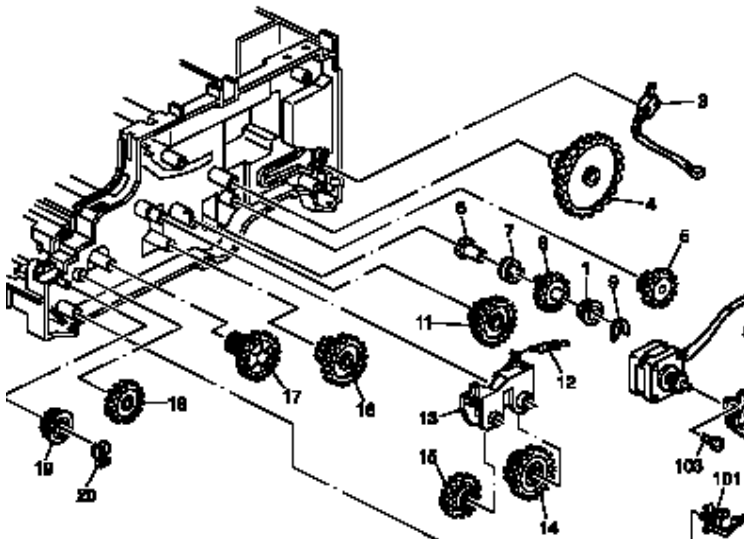| Model: Schmidt Series	Date: 17-Jan-03	No.: RH545021a

SOLUTION

1. Increase the main motor drive power by increasing the motor current from 0.75A to 1.0A (overwriting SRAM data):

- Change RAM address 800715 from 40h (default) → 00h.

2. If returning the machine to the service depot for repair (or whenever possible, if repairing the machine on site), apply extra grease (Grease G501) to the following gears and bushing areas. Numbers refer to the index callouts in the illustration.

- Inner diameter of Gears #5, 16, 17, 18, 19 and tips of all corresponding bushing areas on the frame.

- Gear attachment areas on the Gear Link Arm (#13).

Note: Please be sure to use Grease G501 only, as spray-based lubricants can gradually weaken the plastic bushing areas on the frame.

Model: Schmidt 3	Date: 9-Jul-03	No.: RH545022

Subject: Firmware Release Note	Prepared by: K. Moriizumi
From: 1st Tech. Support Sec. Service Support Dept.	

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

Firmware Release Note
Model Name: FAX 2900L

1. PCB Name: FCU Board (H5476101: EUR/ASIA, H5476111: US)

   1.1 Firmware Information:
      Version: 56
      ROM size: 1FFFFF, 2MB (16Mbit)

      H5467200M2
      Files:
      For Flash Card: H5477200M2.bin
      For RDS: H5477200M2.lz / H5477200M2.frh
      SUM TOTAL = B4BB

   1.2 Release Date: July 2003 (out of production)
   1.3 Symptom Corrected

      The transmission time printed out on the incoming Fax is not correct, as the machine did not initialize the system clock after recovering from Energy Saver Mode.

      Example:
      On the printed page: 8 May 16:46
      On the journal (transmitting machine): 9 May 10:05

      Correct: 9 May 10:05