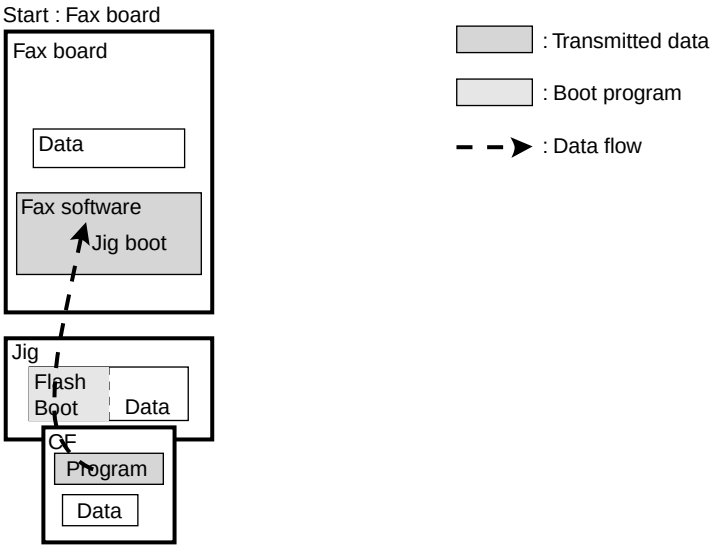
Maintenance item No.	Description
U992	**Checking or clearing the printer/fax count** **Description** Displays, clears or changes the print count of the printer or fax when the printer board or facsimile kit is installed. **Purpose** To check the condition of use of the printer or fax. **Method** Press the start key. The print count of the printer or fax is displayed. **Setting** 1. Press the appropriate item. 2. Enter a six-digit numerical value using the numeric keys. To clear both of the printer and fax counts, press the reset key. 3. Press the start key. The count is set. **Completion** Press the stop/clear key. The screen for selecting a maintenance item No. is displayed.

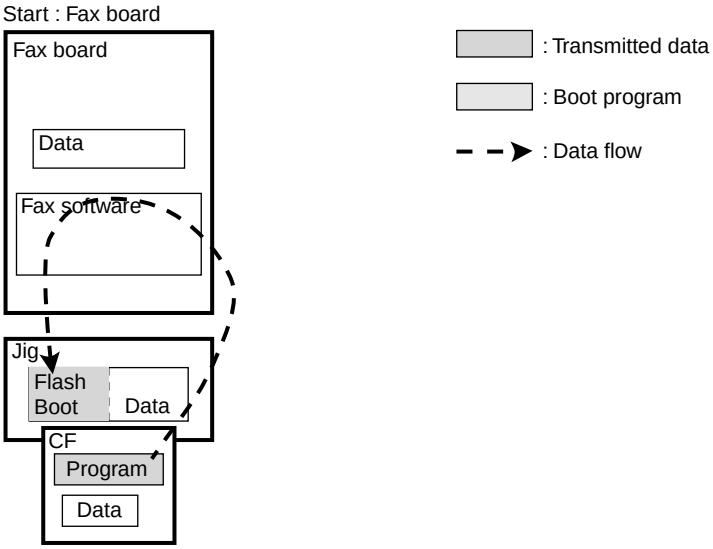
Maintenance item No.	Description
U894	**Performing board test** **Description** Performs tests on the SRAM, DRAM (image memory, bitmap memory) and optional memory on the fax control PCB. **Purpose** Used to check if reading and writing are performed correctly in respective installed memories. **Start** 1. Press the start key. The screen for selecting an item is displayed. 2. Press the appropriate item. The test executes. **Performing tests on SRAM and DRAM** 1. Press the start key. The screen displays the test results as follows. • When the test result is OK: TEST MEMORY OK • If the test result is NG: TEST MEMORY NG DRAM IMG 0x****** ******: address DRAM IMG: DRAM (image memory) error DRAM B.M: DRAM (bitmap memory) error SRAM: SRAM error To return to the screen for selecting an item, press the stop/clear key. **Performing tests on optional memory** 1. Press the start key. The screen displays the test results as follows. • When the test result is OK: TEST OPTION MEMORY OK • If the test result is NG: TEST OPTION MEMORY NG DRAM B.M 0x****** ******: address • If the test result is NG (memory is not installed): TEST OPTION MEMORY NG DRAM B.M To return to the screen for selecting an item, press the stop/clear key. **Completion** If the test result is OK, press the stop/clear key at the screen for selecting an item. The screen for selecting a maintenance item No. is displayed. If the test result is NG, reset by turning the main switch off and on.

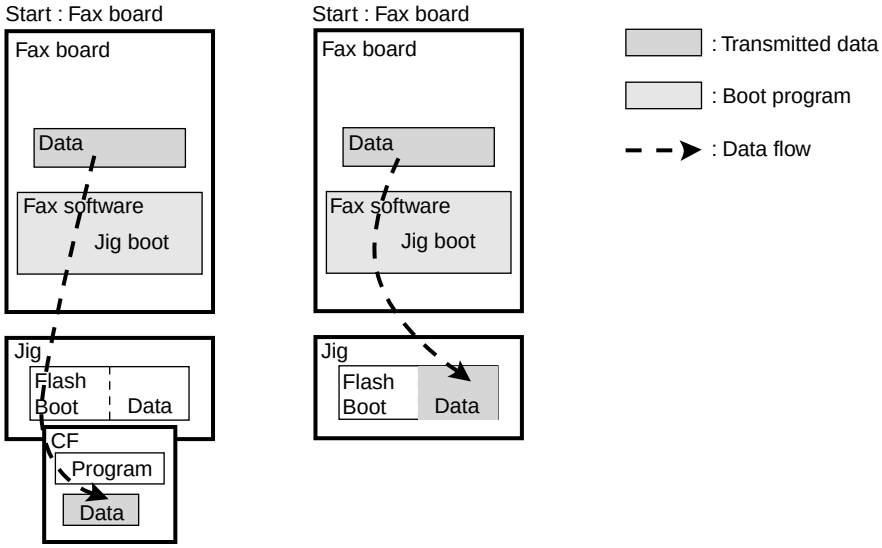
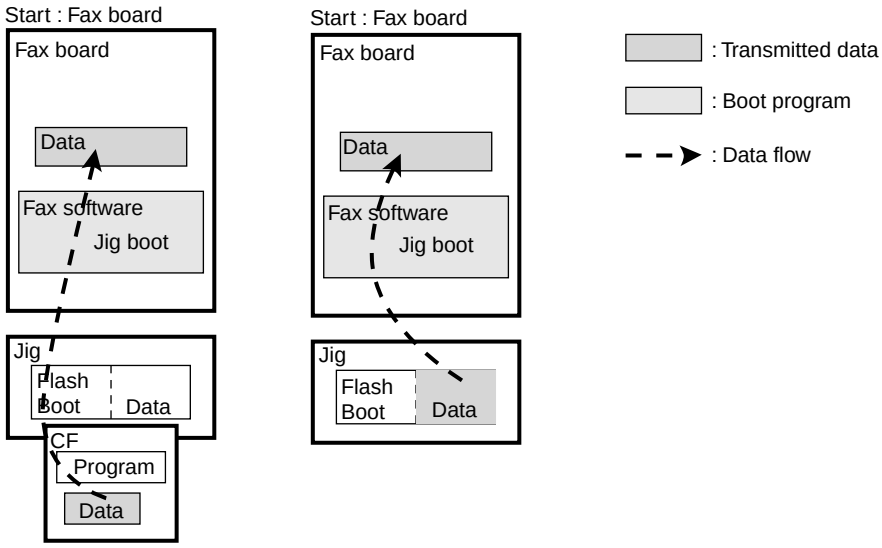
Display	Description
BOARD MEMORY	Performs tests on SRAM and DRAM.
BOARD OP. MEM	Performs tests on optional memory.

Maintenance item No.	Description
U881	• Writing the fax program (Executes automatically when the jig is started.)



• Writing the boot program (Maintenance Mode)



Maintenance item No.	Description
U881	**Data and Program Upload/Download Flows [Conceptual Drawings]** • Saving Stored Data into Jig (Maintenance Mode) • With CF • Without CF  • Loading Saved Data (Maintenance Mode) • With CF • Without CF 

Maintenance item No.	Description
U881	**Error Codes for Operation U881**

Code	Meaning
001	Jig not present.
002	No CF card.
003	No data in CF card.
004	CF data is incompatible. (This error occurs if you change the file name and attempt to load the data into a different machine model.)
005	Bad CF data (Checksum error)
006	CF read error
007	CF write error
008	
009	No data is jig's flash memory // Incompatible data in jig's flash memory (SRAM data has not yet been saved // Attempt was made to load data into a different model.)
010	Jig flash-memory read error (Following SRAM read, flash-memory data failed to match SRAM data.)
011	Jig flash-memory write error
012	Other error

Maintenance item No.	Description
U881	**Writing data from the flash-memory jig into SRAM** Writes the data from the jig into the machine's SRAM. UPLOAD TO JIG? 1. Press the start key. The data write is executed, and the screen displays the result. • If the write operation was successful: UPLOAD TO JIG OK • If the write operation failed: UPLOAD TO JIG NG XXX where XXX is the error code indicating the reason for the failure. See "Error Codes for Operation U881," below. 2. Press the stop key. 3. Turn the power off. **Writing the boot program into the jig** Writes the boot program into the flash memory in the jig. 1. When this item is pressed, the machine writes the boot program into the jig's flash memory, and the screen displays the result. • If the write operation was successful: WRITE BOOT PRG. OK • If the write operation failed: WRITE BOOT PRG. NG XXX where XXX is the error code indicating the reason for the failure. See "Error Codes for Operation U881," below. 2. Press the stop key. 3. Turn the power off.

Maintenance item No.	Description
U881	**Using the flash-memory jig.** **Description** Moves data or program code between the flash-memory jig and the machine's SRAM. **Purpose** When replacing the fax control PCB, use this procedure to save SRAM data from the old PCB and load it into the new PCB. **Start** 1. Press the start key. The item-selection screen appears. 2. Press the appropriate item. The screen for the selected item appears.

Display	Description
UPLOAD TO JIG:ALL	Saves all SRAM data into the jig.
DOWNLOAD FROM JIG: All	Loads all data saved in the jig into the machine's SRAM.
WRITE BOOT PROGRAM	Loads the boot program into the jig.
UPLOAD TO JIG:DIAL	Currently not effective (as of May 2001).
DOWNLOAD FROM JIG: DIAL	Display only.

Saving SRAM data into the jig
Saves SRAM data into the jig.

DOWNLOAD FROM JIG?

1. Press the start key. The data is saved into the jig, and the screen indicates the result.
   • If the operation was successful:

DOWNLOAD FROM JIG
OK

   • If the operation failed:

DOWNLOAD FROM JIG
NG XXX

where XXX is the error code indicating the reason for the failure.
See "Error Codes for Operation U881," below.

If these error code explanations are on the same page, then "below". If on the next page, then "on the next page". If on some other page, then "on page XX".>>

2. Press the stop key.
3. Turn the power off.

<table>
<tr><th>Maintenance item No.</th><th>Description</th></tr>
<tr><td>U670 (cont.)</td><td>
Setting the V.34 symbol speed (2800 Hz)
Sets if the V.34 symbol speed 2800 Hz is used.
1. Enter 1 or 2 using the numeric keys to change the setting.
<table>
<tr><th>Display</th><th>Description</th></tr>
<tr><td>1: ON
2: OFF</td><td>V.34 symbol speed 2800 Hz is used.
V.34 symbol speed 2800 Hz is not used.</td></tr>
</table>
2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.
Completion
Press the stop clear key. The screen for selecting a maintenance item No. is displayed.
</td></tr>
<tr><td>U680</td><td>
Displaying the fax board ROM version
Note: On Japanese domestic models, this also displays the font ROM version.
Description
Displays the version of the ROM on the fax control PCB.
Purpose
Used to check the version of the ROM on the fax control PCB.
Method
1. Press the start key. The version of the ROM on the fax control PCB is displayed.
Completion
Press the stop/clear key. The screen for selecting a maintenance item No. is displayed.
</td></tr>
</table>

Maintenance item No.	Description
U670	**Setting the system (communication 3)** **Description** Makes settings for fax transmission regarding the communication. **Purpose** To reduce transmission errors when a low quality line is used. **Start** 1. Press the start key. The screen for selecting an item is displayed. 2. Press the appropriate list selection. The selected list is output.

Display	Description
V.34 MODEM	Enables or disables V.34 communication.
V.34-3429Hz	Sets the V.34 symbol speed (3429 Hz).
V.34-3200Hz	Sets the V.34 symbol speed (3200 Hz).
V.34-3000Hz	Sets the V.34 symbol speed (3000 Hz).
V.34-2800 Hz	Sets the V.34 symbol speed (2800 Hz).

Enabling/disabling V.34 communication

Sets whether V.34 communication is enabled/disabled for transmission and reception.

1. Change the setting using the numeric keys.

Display	Description
1: ON	V.34 communication is enabled for both transmission and reception.
2: TX	V.34 communication is enabled for transmission only.
3: RX	V.34 communication is enabled for reception only.
4: OFF	V.34 communication is disabled for both transmission and reception.

2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.

Setting the V.34 symbol speed (3429 Hz)

Sets if the V.34 symbol speed 3429 Hz is used.

1. Enter 1 or 2 using the numeric keys to change the setting.

Display	Description
1: ON	V.34 symbol speed 3429 Hz is used.
2: OFF	V.34 symbol speed 3429 Hz is not used.

2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.

Setting the V.34 symbol speed (3200 Hz)

Sets if the V.34 symbol speed 3200 Hz is used.

1. Enter 1 or 2 using the numeric keys to change the setting.

Display	Description
1: ON	V.34 symbol speed 3200 Hz is used.
2: OFF	V.34 symbol speed 3200 Hz is not used.

2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.

Setting the V.34 symbol speed (3000 Hz)

Sets if the V.34 symbol speed 3000 Hz is used.

1. Enter 1 or 2 using the numeric keys to change the setting.

Display	Description
1: ON	V.34 symbol speed 3000 Hz is used.
2: OFF	V.34 symbol speed 3000 Hz is not used.

2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.

<table>
<tr><th>Maintenance item No.</th><th>Description</th></tr>
<tr><td>U660 (cont.)</td><td>
Setting the CNG detection times in the fax/telephone auto select mode
Sets the CNG detection times in the fax/telephone auto select mode.
1. Change the setting using the numeric keys.
<table>
<tr><th>Display</th><th>Description</th></tr>
<tr><td>1: 1 TIME
2: 2 TIMES</td><td>Detects CNG once.
Detects CNG twice.</td></tr>
</table>
2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.
Setting ECM for each one-touch key
Turns ECM on/off for each one-touch key.
1. Enter a registered two-digit one-touch key number and press the start key.
2. Enter 1 or 2 using the numeric keys to change the setting.
<table>
<tr><th>Display</th><th>Description</th></tr>
<tr><td>1: ON
2: OFF</td><td>ECM communication is performed for all one-touch keys.
Disables the ECM for one-touch keys.</td></tr>
</table>
3. Press the start key. The value is set. The screen for entering a one-touch key number is displayed.
To return to the screen for selecting an item, press the stop/clear key at the screen for entering a one-touch key number.
Completion
Press the stop/clear key at the screen for selecting an item. The screen for selecting a maintenance item No. is displayed.
</td></tr>
</table>

Maintenance item No.	Description
U660	**Setting the system (communication 2)**

Description
Makes settings for fax transmission regarding the communication.

Purpose
To reduce transmission errors when a low quality line is used.

Start
1. Press the start key. The screen for selecting an item is displayed.
2. Press the appropriate item.
   The screen for the selected item appears.

Display	Description
TCF CHECK 2	Sets the criteria for receiving a TCF signal 2.
SHORT PROTOCOL TX	Sets the short protocol transmission.
SHORT PROTOCOL RX	Sets the reception of short protocol transmission.
NUMBER of CNG (F/T)	Sets the CNG detection times in the fax/telephone auto select mode.
1TOUCH ECM	Turns ECM for one-touch dialing on/off.

Setting the criteria for receiving a TCF signal 2
Sets the signal checking time as a criterion for a received TCF signal.
1. Enter 1 or 2 using the numeric key to change the setting.

Display	Description
1: LONG	Checks for 1.0 s.
2: SHORT	Checks for 0.8 s.

2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.

Setting the short protocol transmission
Sets if short protocol transmission is performed.
1. Change the setting using the numeric keys.

Display	Description
1: ON	Short protocol transmission is performed.
2: OFF	Short protocol transmission is not performed.

2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.

Setting the reception of a short protocol transmission
Selects whether to receive or ignore transmission using short protocol.
If a short protocol transmission is received when an auto switching device is attached to the machine, communication problems, including auto switching inability, sometimes occur. Change the setting to ignore short protocol transmission to prevent such problems.
1. Change the setting using the numeric keys.

Display	Description
1: ON	Receives short protocol transmission.
2: OFF	Ignores short protocol transmission.

2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.

Maintenance item No.	Description
U651	**Setting the system 2** **Description** Sets the variation range in rotation reception and the number of adjustment lines for automatic reduction. **Start** 1. Press the start key. The screen for selecting an item is displayed. 2. Press the appropriate item. The screen for the selected item appears.

Display	Description
ROTAT. RX ERR	Sets the variation range in the auxiliary scanning direction for rotation reception.
ADJ LINES	Sets the number of adjustment lines for automatic reduction.
ADJ LINES (A4)	Sets the number of adjustment lines for automatic reduction when A4 paper is set.
ADJ LINES (LT)	Sets the number of adjustment lines for automatic reduction when letter size paper is set.

Setting the variations range in rotation reception

Sets the maximum number of lines to be ignored when the received data exceeds the acceptable number of lines in the rotation reception mode. If the number of excessive lines is smaller than the set value, those lines are ignored and rotation reception is performed; if it is larger than the set value, rotation reception is not performed.

1. Change the setting using the numeric keys.

Description	Setting range	Initial setting
Number of variation lines in the auxiliary scanning direction	0 to 255	3

Even if rotation reception fails, it can be enabled by increasing this value, however, some parts of the received image may not be printed.

2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.

Setting the number of adjustment lines for automatic reduction

Sets the number of adjustment lines for automatic reduction.

1. Change the setting using the numeric keys.

Description	Setting range	Initial setting
Number of adjustment lines for automatic reduction	0 to 22	7

2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.

Setting the number of adjustment lines for automatic reduction when A4 paper is set

Sets the number of adjustment lines for automatic reduction when A4 paper is set.

1. Change the setting using the numeric keys.

Description	Setting range	Initial setting
Number of adjustment lines for automatic reduction when A4 paper is set	0 to 22	22

2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.

Setting the number of adjustment lines for automatic reduction when letter size paper is set

Sets the number of adjustment lines for automatic reduction when letter size paper is set.

1. Change the setting using the numeric keys.

Description	Setting range	Initial setting
Number of adjustment lines for automatic reduction when letter size paper is set	0 to 26	26

2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.

Completion

Press the stop/clear key at the screen for selecting an item. The screen for selecting a maintenance item No. is displayed.

<table>
<tr><th>Maintenance item No.</th><th>Description</th></tr>
<tr><td>U650 (cont.)</td><td>
Setting the number of lines to be ignored when receiving a fax (A4R, letter) in the auto reduction mode
Sets the maximum number of lines to be ignored if the received data volume exceeds the recording capacity when the data is recorded in the auto reduction mode onto A4R or letter-size paper under the conditions below. If the number of excess lines is below the setting, those lines are ignored. If over the setting, the entire data on a page is further reduced so that it can be recorded on the same page.
• With A4R present and folio absent in the drawers
• With letter-size paper present and legal-size paper absent in the drawers
1. Change the setting using the numeric keys.
<table>
<tr><th>Description</th><th>Setting range</th><th>Initial setting</th><th>Change in value per step</th></tr>
<tr><td>Number of lines to be ignored when receiving a fax (A4R, letter) in the auto reduction mode</td><td>0 to 22</td><td>3</td><td>6 lines</td></tr>
</table>
Increase the setting if a page received in the reduction mode is over-reduced and too much trailing edge margin is left. Decrease it if the received image does not include all transmitted data.
2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.
Setting the recording width for inch specifications
Sets the maximum recording width and processing method when 11" width fax paper is loaded on an inch-specification machine.
1. Enter 1 or 2 using the numeric keys to change the setting.
<table>
<tr><th>Display</th><th>Description</th></tr>
<tr><td>1: 11 × 17</td><td>Communicates to the destination unit 11" width as A3 width and records at 100% magnifications.</td></tr>
<tr><td>2: B4</td><td>Communicates to the destination unit 11" width as B4 width.</td></tr>
</table>
2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.
Setting the automatic printing of the protocol list
Sets if the protocol list is automatically printed out.
1. Change the setting using the numeric keys.
<table>
<tr><th>Display</th><th>Description</th></tr>
<tr><td>1: OFF</td><td>The protocol list is not printed out automatically.</td></tr>
<tr><td>2: ERROR</td><td>The protocol list is automatically printed out after communication only if a communication error occurs.</td></tr>
<tr><td>3: ON</td><td>The protocol list is automatically printed out after communication.</td></tr>
</table>
2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.
Completion
Press the stop/clear key at the screen for selecting an item. The screen for selecting a maintenance item No. is displayed.
</td></tr>
</table>

Maintenance item No.	Description
U650	**Setting the system 1** **Description** Makes settings for fax reception regarding the sizes of the fax paper and received images and automatic printing of the protocol list. **Start** 1. Press the start key. The screen for selecting an item is displayed. 2. Press the appropriate item. The screen for the selected item appears.

Display	Description
CUT LINE (100%)	Sets the number of lines to be ignored when receiving a fax at 100% magnification.
CUT LINE (AUTO)	Sets the number of lines to be ignored when receiving a fax in the auto reduction mode.
CUT LINE (A4)	Sets the number of lines to be ignored when receiving a fax (A4R, letter) in the auto reduction mode.
RX WIDTH 11"	Sets the recording width for inch specifications.
PROTOCOL PRT	Sets the automatic printing of the protocol list.

Setting the number of lines to be ignored when receiving a fax at 100% magnification

Sets the maximum number of lines to be ignored if the received data volume exceeds the recording capacity when recording the data at 100% magnification. If the number of excess lines is below the setting, those lines are ignored. If over the setting, they are recorded on the next page.

1. Change the setting using the numeric keys.

Description	Setting range	Initial setting	Change in value per step
Number of lines to be ignored when receiving at 100%	0 to 22	3	6 lines

Increase the setting if a blank second page is received, and decrease it if the received image does not include the entire transmitted data.

2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.

Setting the number of lines to be ignored when receiving a fax in the auto reduction mode

Sets the maximum number of lines to be ignored if the received data volume exceeds the recording capacity when the data is recorded in the auto reduction mode. If the number of excess lines is below the setting, those lines are ignored. If over the setting, the entire data on a page is further reduced so that it can be recorded on the same page.

1. Change the setting using the numeric keys.

Description	Setting range	Initial setting	Change in value per step
Number of lines to be ignored when receiving in the auto reduction mode	0 to 22	3	6 lines

Increase the setting if a page received in the reduction mode is over-reduced and too much trailing edge margin is left. Decrease it if the received image does not include all transmitted data.

2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.

Maintenance item No.	Description
U617	**Outputting lists** **Description** Outputs a list of data regarding fax transmissions. **Purpose** Used to check conditions of use, settings and transmission procedures of the fax. **Method** 1. Press the start key. The screen for selecting an item is displayed. 2. Press the appropriate list selection. The selected list is output.

Display	Description
SETTING LIST	Outputs a list of software switches, self telephone number, confidential boxes, ROM versions and other information.
ACTION LIST	Outputs a list of error history, transmission line details and other information.
MONITOR LIST	Outputs a list of transmission speeds, resolutions, minimum transmission time and other information.
SELF ST RPT	Outputs a list of settings in maintenance mode (own-status report) regarding fax transmission only.
PROTOCOL LIST	Outputs a list of transmission procedures.
1-T. ECM	Outputs a list of ECM settings for one-touch dialing.

<table>
<tr><th>Maintenance item No.</th><th>Description</th></tr>
<tr><td>U615 (cont.)</td><td>
Setting for a PBX
Selects the mode to connect an outside call when connected to a PBX.
According to the type of the PBX connected, select the mode to connect an outside call.
1. Change the setting using the numeric keys.
<table>
<tr><th>Display</th><th>Description</th></tr>
<tr><td>1: EARTH
2: FLS
3: LOOP</td><td>Earth mode
Flashing mode
Code number mode</td></tr>
</table>
2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.
Completion
Press the stop/clear key at the screen for selecting an item. The screen for selecting a maintenance item No. is displayed.
</td></tr>
<tr><td>U616</td><td>
Adjusting the ratio of make-to-break of dial pulses
Description
Adjusts the ratio of make-to-break (ratio of make in pulse cycles) of dial pulses.
Purpose
Change the setting if dial pulse transmission problems occur. Note that 20 PPS is for Japanese specifications only and no setting is necessary for other specifications.
Start
1. Press the start key. The screen for selecting an item is displayed.
2. Press the appropriate item.
The screen for the selected item appears.
<table>
<tr><th>Display</th><th>Description</th></tr>
<tr><td>MAKE TIME (10 PPS)
MAKE TIME (20 PPS)</td><td>Make time (10 PPS)
Make time (20 PPS)</td></tr>
</table>
Setting
1. Change the setting using the numeric keys.
<table>
<tr><th>Description</th><th>Setting range</th></tr>
<tr><td>Make time in the pulse cycle (10 PPS)
Make time in the pulse cycle (20 PPS)</td><td>1 to 99 (ms)
1 to 49 (ms)</td></tr>
</table>
2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.
Completion
Press the stop/clear key at the screen for selecting an item. The screen for selecting a maintenance item No. is displayed.
</td></tr>
</table>

Maintenance item No.	Description
U615	**Setting the NCU** **Description** Makes setting regarding the network control unit (NCU). **Purpose** To be set when installing the facsimile kit. **Start** 1. Press the start key. The screen for selecting an item is displayed. 2. Press the appropriate item. The screen for the selected item appears.

Display	Description
EXCHANGE	Sets the connection to PBX/PSTN.
DIAL TONE	Sets PSTN dial tone detection.
BUSY TONE	Sets busy tone detection.
PBX SETTING	Setting for a PBX.

Setting the connection to PBX/PSTN

Selects if a fax is to be connected to either a PBX or public switched telephone network.

1. Enter 1 or 2 using the numeric keys to change the setting.

Display	Description
1: PSTN	Connected to the public switched telephone network.
2: PBX	Connected to a PBX.

2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.

Setting PSTN dial tone detection

Selects if the dial tone is detected to check the telephone is off the hook when a fax is connected to a public switched telephone network.

1. Enter 1 or 2 using the numeric keys to change the setting.

Display	Description
1: ON	Detects the dial tone.
2: OFF	Does not detect the dial tone.

2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.

Setting busy tone detection

When a fax signal is sent, sets whether the line is disconnected immediately after a busy tone is detected, or the busy tone is not detected and the line remains connected until T0 time-out time.
Fax transmission may fail due to incorrect busy tone detection. When set to 2, this problem may be prevented. However, the line is not disconnected within the T0 time-out time even if the destination line is busy.

1. Enter 1 or 2 using the numeric keys to change the setting.

Display	Description
1: ON	Detects busy tone.
2: OFF	Does not detect busy tone.

2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.

Maintenance item No.	Description
U614	**Adjusting the DTMF output level** **Description** Adjusts the DTMF output level of a push-button dial telephone. **Purpose** No change is necessary from the factory default. **Start** 1. Press the start key. The screen for selecting an item is displayed. 2. Press the appropriate item. The screen for the selected item appears.

Display	Description
SGL LVL DTMF (H)	Adjusts the DTMF (high-frequency group) output level.
SGL LVL DTMF (L)	Adjusts the DTMF (low-frequency group) output level.

Setting

1. Change the setting using the numeric keys.

Setting	DTMF (high-/low-frequency group) output level
12	2.0 dBm
11	1.5 dBm
10	1.0 dBm
9	0.5 dBm
8	0 dBm
7	–0.5 dBm
6	–1.0 dBm
5	–1.5 dBm
4	–2.0 dBm

2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.

Completion

Press the stop/clear key at the screen for selecting an item. The screen for selecting a maintenance item No. is displayed.

<table>
<tr><th>Maintenance item No.</th><th>Description</th></tr>
<tr><td>U612</td><td>
Setting the modem detection level
Description
Sets the modem detection level.
Purpose
Used to improve the transmission performance when a low quality line is used.
Method
Press the start key. The current setting is displayed.
Setting
1. Change the setting using the numeric keys.
<table>
<tr><th>Display</th><th>Description</th></tr>
<tr><td>1: 33
2: 38
3: 43
4: 47</td><td>–33 dBm
–38 dBm
–43 dBm
–47 dBm</td></tr>
</table>
2. Press the start key. The value is set.
Completion
Press the stop/clear key. The screen for selecting a maintenance item No. is displayed.
</td></tr>
<tr><td>U613</td><td>
Setting the DTMF output level
Description
Sets the DTMF output level of a push-button dial telephone.
Purpose
Used if problems occur when sending a signal with a push-button dial telephone.
Start
1. Press the start key. The screen for selecting an item is displayed.
2. Press the appropriate item.
The screen for the selected item appears.
<table>
<tr><th>Display</th><th>Description</th></tr>
<tr><td>DTMF TX LEVEL (H)
DTMF TX LEVEL (L)</td><td>Sets the DTMF (high-frequency group) output level.
Sets the DTMF (low-frequency group) output level.</td></tr>
</table>
Setting
1. Change the setting using the numeric keys.
<table>
<tr><th>Description</th><th>Setting range</th></tr>
<tr><td>DTMF (high-/low-frequency group) output level</td><td>0 to 255</td></tr>
</table>
E.g.: When set to 8, the DTMF output level is –8 dBm.
2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.
Completion
Press the stop/clear key at the screen for selecting an item. The screen for selecting a maintenance item No. is displayed.
</td></tr>
</table>

Maintenance item No.	Description
U611	**G3 cable equalizer** **Description** Sets the G3 cable equalizer. **Start** 1. Press the start key. The screen for selecting an item is displayed. 2. Press the appropriate item. The screen for the selected item appears. **Setting the G3 transmission cable equalizer** Perform the following adjustment to make the equalizer compatible with the line characteristics. 1. Change the setting using the numeric keys. 2. Press the start key. The value is set. 3. To return to the screen for selecting an item, press the stop/clear key. **Setting the G3 reception cable equalizer** Perform the following adjustment to make the equalizer compatible with the line characteristics. 1. Change the setting using the numeric keys. 2. Press the start key. The value is set. 3. To return to the screen for selecting an item, press the stop/clear key. **Completion** Press the stop/clear key at the screen for selecting an item. The screen for selecting a maintenance item No. is displayed.

Display	Description
REG. G3 TX EQR	Sets the G3 transmission cable equalizer.
REG. G3 RX EQR	Sets the G3 reception cable equalizer.

Display	Description
1: 0	0 km
2: 18	1.8 km
3: 36	3.6 km
4: 72	7.2 km

Display	Description
1: 0	0 km
2: 18	1.8 km
3: 36	3.6 km
4: 72	7.2 km

Maintenance item No.	Description
U610	**Setting the modem output level** **Description** Sets the modem output level. **Start** 1. Press the start key. The screen for selecting an item is displayed. 2. Press the appropriate item. The screen for the selected item appears.

Display	Description
SGL LEVEL MODEM SGL OUTPUT ADJ	Sets the modem output level. Adjusts the modem output level.

Setting the modem output level

To be set when installing the machine in order to adapt to the line characteristics.

1. Change the setting using the numeric keys.

Description	Setting range
Modem output level	4 to 12

2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.

Adjusting the modem output level

No change is necessary from the factory default.

1. Change the setting using the numeric keys.

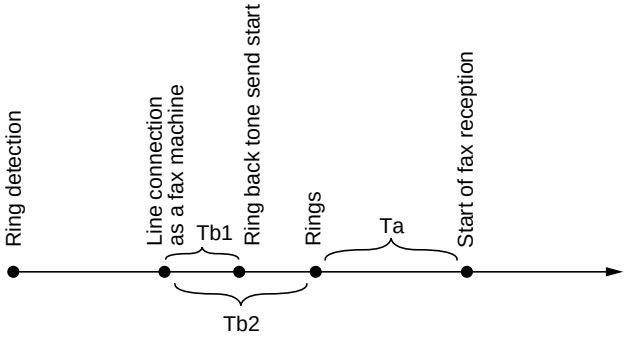
Setting	Output level
12	1.0 dBm
11	0.75 dBm
10	0.5 dBm
9	0.25 dBm
8	0 dBm
7	–0.25 dBm
6	–0.5 dBm
5	–0.75 dBm
4	–1.0 dBm

2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.

Completion

Press the stop/clear key at the screen for selecting an item. The screen for selecting a maintenance item No. is displayed.

<table>
<tr><th>Maintenance item No.</th><th>Description</th></tr>
<tr><td>U609 (cont.)</td><td>
Setting the Tc time-out time
In the TAD mode, set the time to check if there are any triggers for shifting to fax reception after a connected telephone receives a call. Only the telephone function is available if shifting is not made within the set Tc time. In the TAD mode, change the setting when fax reception is unsuccessful or a telephone fails to receive a call.
1. Change the setting using the numeric keys.
<table>
<tr><th>Description</th><th>Setting range</th><th>Initial setting</th></tr>
<tr><td>Tc time-out time</td><td>1 to 255 s</td><td>60</td></tr>
</table>
2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.
Setting the Td time-out time
Sets the length of the time required to determine silent status (fax), one of the triggers for Tc time check. In the TAD mode, change the setting when fax reception is unsuccessful or a telephone fails to receive a call. Be sure not to set it too short; otherwise, the mode may be shifted to fax while the unit is being used as a telephone.
1. Change the setting using the numeric keys.
<table>
<tr><th>Description</th><th>Setting range</th></tr>
<tr><td>Td time-out time</td><td>1 to 255 s</td></tr>
</table>
2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.
Completion
Press the stop/clear key at the screen for selecting an item. The screen for selecting a maintenance item No. is displayed.
</td></tr>
</table>

Maintenance item No.	Description
U609 (cont.)	**Setting the T2 time-out time** The T2 time-out time decides the following. • From CFR signal output to image data reception • From image data reception to the next signal reception • In ECM, from RNR signal detection to the next signal reception 1. Change the setting using the numeric keys. 2. Press the start key. The value is set. 3. To return to the screen for selecting an item, press the stop/clear key. **Setting the Ta time-out time** In the fax/telephone auto select mode, sets the time to continue ringing an operator through the connected telephone after receiving a call as a fax machine (see figure 1-3-1). A fax signal is received within the Ta set time, or the fax mode is selected automatically when the time elapses. In fax/telephone auto select mode, change the setting when fax reception is unsuccessful or a telephone fails to receive a call. 1. Change the setting using the numeric keys. 2. Press the start key. The value is set. 3. To return to the screen for selecting an item, press the stop/clear key.  **Figure 1-3-1 Ta/Tb1/Tb2 time-out time** **Setting the Tb1 time-out time** In the fax/telephone auto select mode, sets the time to start sending the ring back tone after receiving a call as a fax machine (see figure 1-3-1). In fax/telephone auto select mode, change the setting when fax reception is unsuccessful or a telephone fails to receive a call. 1. Change the setting using the numeric keys. 2. Press the start key. The value is set. 3. To return to the screen for selecting an item, press the stop/clear key. **Setting the Tb2 time-out time** In the fax/telephone auto select mode, sets the time to start ringing an operator through the connected telephone after receiving a call as a fax machine (see figure 1-3-1). In the fax/telephone auto select mode, change the setting when fax reception is unsuccessful or a telephone fails to receive a call. 1. Change the setting using the numeric keys. 2. Press the start key. The value is set. 3. To return to the screen for selecting an item, press the stop/clear key.

Description	Setting range	Initial setting	Change in value per step
T2 time-out time	1 to 255	69	100 ms

Description	Setting range	Initial setting
Ta time-out time	1 to 255 s	30

Description	Setting range	Initial setting	Change in value per step
Tb1 time-out time	1 to 255	20	100 ms

Description	Setting range	Initial setting	Change in value per step
Tb2 time-out time	1 to 255	80	100 ms

<table>
<tr><th>Maintenance item No.</th><th>Description</th></tr>
<tr><td>U608 (cont.)</td><td>
Setting the frequency of the CED signal
Sets the frequency of the CED signal. Used as one of the measures to improve transmission performance for international communications.
1. Enter 1 or 2 using the numeric keys to change the frequency.
<table>
<tr><th>Display</th><th>Frequency of the CED signal</th></tr>
<tr><td>1: 2100
2: 1100</td><td>2100 Hz
1100 Hz</td></tr>
</table>
2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.
Completion
Press the stop/clear key at the screen for selecting an item. The screen for selecting a maintenance item No. is displayed.
</td></tr>
<tr><td>U609</td><td>
Setting communication time
Description
Sets the time-out time for fax transmission.
Purpose
Used mainly to improve transmission performance for international communications.
Start
1. Press the start key. The screen for selecting an item is displayed.
2. Press the appropriate item.
The screen for the selected item appears.
<table>
<tr><th>Display</th><th>Description</th></tr>
<tr><td>T0</td><td>Sets the T0 time-out time.</td></tr>
<tr><td>T1</td><td>Sets the T1 time-out time.</td></tr>
<tr><td>T2</td><td>Sets the T2 time-out time.</td></tr>
<tr><td>Ta</td><td>Sets the Ta time-out time.</td></tr>
<tr><td>Tb1</td><td>Sets the Tb1 time-out time.</td></tr>
<tr><td>Tb2</td><td>Sets the Tb2 time-out time.</td></tr>
<tr><td>Tc</td><td>Sets the Tc time-out time.</td></tr>
<tr><td>Td</td><td>Sets the Td time-out time.</td></tr>
</table>
Setting the T0 time-out time
Sets the time before detecting a DIS signal after a dialing signal is sent. Depending on the quality of the exchange, or when the auto select function is selected at the destination unit, a line can be disconnected. Change the setting to prevent this problem.
1. Change the setting using the numeric keys.
<table>
<tr><th>Description</th><th>Setting range</th></tr>
<tr><td>T0 time-out time</td><td>30 to 90 s</td></tr>
</table>
2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.
Setting the T1 time-out time
Sets the time before receiving the correct signal after call reception. No change is necessary for this maintenance item.
1. Change the setting using the numeric keys.
<table>
<tr><th>Description</th><th>Setting range</th></tr>
<tr><td>T1 time-out time</td><td>30 to 90 s</td></tr>
</table>
2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.
</td></tr>
</table>

Maintenance item No.	Description
U608 (cont.)	**Setting the waiting period to prevent echo problems at the sender** Sets the period before a DCS signal is sent after a DIS signal is received. Used when problems occur due to echoes at the sender. 1. Enter 1 or 2 using the numeric keys to change the setting. 2. Press the start key. The value is set. 3. To return to the screen for selecting an item, press the stop/clear key. **Setting the waiting period to prevent echo problems at the receiver** Sets the period before an NSF, CSI or DIS signal is sent after a CED signal is received. Used when problems occur due to echoes at the receiver. 1. Enter 1 or 2 using the numeric keys to change the setting. 2. Press the start key. The value is set. 3. To return to the screen for selecting an item, press the stop/clear key. **Setting ECM transmission** To be set to OFF when reduction of transmission costs is of higher priority than image quality. 1. Enter 1 or 2 using the numeric keys to change the setting. 2. Press the start key. The value is set. 3. To return to the screen for selecting an item, press the stop/clear key. **Setting ECM reception** To be set to OFF when reduction of transmission costs is of higher priority than image quality. 1. Enter 1 or 2 using the numeric keys to change the setting. 2. Press the start key. The value is set. 3. To return to the screen for selecting an item, press the stop/clear key. **Setting the criteria for receiving a TCF signal 1** Sets the maximum number of error bytes judged acceptable when receiving a TCF signal. Used as a measure to ease transmission conditions if transmission errors occur. 1. Change the setting using the numeric keys. 2. Press the start key. The value is set. 3. To return to the screen for selecting an item, press the stop/clear key.

Display	Description
1: 500 2: 300	Sends a DCS 500 ms after receiving a DIS. Sends a DCS 300 ms after receiving a DIS.

Display	Description
1: 500 2: 75	Sends an NSF, CSI or DIS 500 ms after receiving a CED. Sends an NSF, CSI or DIS 75 ms after receiving a CED.

Display	Description
1: ON 2: OFF	ECM transmission is enabled. ECM transmission is disabled.

Display	Description
1: ON 2: OFF	ECM reception is enabled. ECM reception is disabled.

Description	Setting range
Number of allowed error bytes when detecting TCF	0 to 255

Maintenance item No.	Description
U608	**Setting transmission** **Description** Makes settings regarding fax transmission. **Start** 1. Press the start key. The screen for selecting an item is displayed. 2. Press the appropriate item. The screen for the selected item appears.

Display	Description
ERROR	Sets the method to process errors.
DIS-2 RES	Sets the number of times of DIS signal reception.
RTN CHECK	Sets the reference for RTN signal output.
TX ECHO	Sets the waiting period to prevent echo problems at the sender.
RX ECHO	Sets the waiting period to prevent echo problems at the receiver.
ECM TX	Sets ECM transmission.
ECM RX	Sets ECM reception.
TCF CHECK	Sets the criteria for receiving a TCF signal 1.
CED FREQ.	Sets the frequency of the CED signal.

Setting the method to process errors

Selects if transmission is to be treated as an error if an RTN or PIN signal is received. If it is treated as an error, an alarm sounds and a transmission report is output.

1. Enter 1 or 2 using the numeric keys to change the setting.

Display	Description
1: OK	Transmission is not treated as an error.
2: ERROR	Transmission is treated as an error.

2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.

Setting the number of times of DIS signal reception

Sets the number of times to receive the DIS signal to once or twice. Used as one of the correction measures for transmission errors and other problems.

1. Enter 1 or 2 using the numeric keys to change the setting.

Display	Description
1: ONCE	Responds to the first signal.
2: TWICE	Responds to the second signal.

2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.

Setting the reference for RTN signal output

Sets the error line rate as the reference for RTN signal output. If transmission errors occur frequently due to the quality of the line, they can be reduced by lowering this setting.

1. Change the setting using the numeric keys.

Display	Description
1: 5	Error line rate of 5%
2: 10	Error line rate of 10%
3: 15	Error line rate of 15%
4: 20	Error line rate of 20%

2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.

Maintenance item No.	Description
U607 (cont.)	**Setting the mode for remote switching** Sets the signal detection method for remote switching. Be sure to change the setting according to the type of telephone connected to the machine. 1. Enter 1 or 2 using the numeric keys to change the setting. 2. Press the start key. The value is set. 3. To return to the screen for selecting an item, press the stop/clear key. **Setting the transmission intervals** Sets the minimum time required for connection to the line for the next transmission after the previous transmission was completed. Change the setting if transmission problems occur during multi-transmission, such as broadcasting and polling transmission, or reserved transmission. 1. Change the setting using the numeric keys. 2. Press the start key. The value is set. 3. To return to the screen for selecting an item, press the stop/clear key. **Setting the loop current detection before dialing** Sets if the loop current detection is performed before dialing. 1. Enter 1 or 2 using the numeric keys to change the setting. 2. Press the start key. The value is set. 3. To return to the screen for selecting an item, press the stop/clear key. **Setting the DIS signal to 4 bytes** Sets if bit 33 and later bits of the DIS/DTC signal are sent. 1. Enter 1 or 2 using the numeric keys to change the setting. 2. Press the start key. The value is set. 3. To return to the screen for selecting an item, press the stop/clear key. **Completion** Press the stop/clear key at the screen for selecting an item. The screen for selecting a maintenance item No. is displayed.

Display	Description
1: ONE 2: CONT	One-shot detection Continuous detection

Display	Description
1: 10 2: 30 3: 70 4: 120	10 s 30 s 70 s 120 s

Display	Description
1: ON 2: OFF	Performs loop current detection before dialing. Does not perform loop current detection before dialing.

Display	Description
1: ON 2: OFF	Bit 33 and later bits of the DIS/DTC signal are not sent. Bit 33 and later bits of the DIS/DTC signal are sent.

Maintenance item No.	Description
U607	**Setting the system (communication 1)** **Description** Makes settings for fax transmission regarding the communication. **Start** 1. Press the start key. The screen for selecting an item is displayed. 2. Press the appropriate item. The screen for the selected item appears.

Display	Description
INTERVAL	Sets the auto redialing interval.
TIMES	Sets the number of times of auto redialing.
TX SPEED	Sets the communication starting speed.
RX SPEED	Sets the reception speed.
REMOTE	Sets the mode for remote switching.
CALL INT	Sets the transmission intervals.
DC LOOP	Sets the loop current detection before dialing.
DIS 4BYTE	Sets the DIS signal to 4 bytes.

Setting the auto redialing interval

Change the setting to prevent the following problems: fax transmission is not possible due to too short redial interval, or fax transmission takes too much time to complete due to too long redial interval.

1. Change the setting using the numeric keys.

Description	Setting range
Redialing interval	1 to 9 min.

2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.

Setting the number of times of auto redialing

1. Change the setting using the numeric keys.

Description	Setting range
Number of redialing	0 to 9

When set to 0, no redialing is performed.

2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.

Setting the communication starting speed

Sets the initial communication speed when starting transmission. When the destination unit has V.34 capability, V.34 is selected for transmission, regardless of this setting.

1. Change the setting using the numeric keys.

Display	Description
1: 144	V.17, 14400 bps
2: 96	V.17, 9600 bps
3: 48	V.27ter, 4800 bps
4: 24	V.27ter, 2400 bps

2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.

Setting the reception speed

Sets the reception speed that the sender is informed of using the DIS or NSF signal. When the destination unit has V.34 capability, V.34 is selected, regardless of the setting.

1. Change the setting using the numeric keys.

Display	Description
1: 144	V.17, V.33, V.29, V.27ter
2: 96	V.29, V.27ter
3: 48	V.27ter
4: 24	V.27ter (fallback only)

2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.

<table>
<tr><th>Maintenance item No.</th><th>Description</th></tr>
<tr><td>U606 (cont.)</td><td>
Setting if the image scanning quality in fax mode is initialized
Sets if the resolution is to be initialized when fax operation is complete.
1. Enter 1 or 2 using the numeric keys to change the setting.
<table>
<tr><th>Display</th><th>Description</th></tr>
<tr><td>1: ON
2: OFF</td><td>Resolution is initialized.
Resolution is not initialized.</td></tr>
</table>
2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.
Setting if the scanning density in fax mode is initialized
Sets if the scanning density is initialized when fax operation is complete.
1. Enter 1 or 2 using the numeric keys to change the setting.
<table>
<tr><th>Display</th><th>Description</th></tr>
<tr><td>1: ON
2: OFF</td><td>Density is initialized.
Density is not initialized.</td></tr>
</table>
2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.
Setting whether to skip unregistered abbreviated numbers and one-touch key numbers on the list
Sets whether to skip unregistered abbreviated numbers and one-touch key numbers on the list.
1. Enter 1 or 2 using the numeric keys to change the setting.
<table>
<tr><th>Display</th><th>Description</th></tr>
<tr><td>1: ON
2: OFF</td><td>Unregistered numbers are skipped.
Unregistered numbers are not skipped.</td></tr>
</table>
2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.
Completion
Press the stop/clear key at the screen for selecting an item. The screen for selecting a maintenance item No. is displayed.
</td></tr>
</table>

<table>
<tr><th>Maintenance item No.</th><th>Description</th></tr>
<tr><td>U605 (cont.)</td><td>
Setting the continuous detection time for remote switching
Sets the detection time when continuous detection is selected for remote switching. (This setting item will be displayed, but the setting made is ineffective.)
1. Change the setting using the numeric keys.
<table>
<tr><th>Description</th><th>Setting range</th></tr>
<tr><td>Continuous detection time for remote switching</td><td>0 to 255 ms</td></tr>
</table>
2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.
Setting the initial condition of fax image scanning quality
Set to the resolution that is most frequently used by the user.
1. Change the setting using the numeric keys.
<table>
<tr><th>Display</th><th>Description</th></tr>
<tr><td>1: S
2: F
3: SF
4: UF</td><td>Standard
Fine
Super fine
Ultra fine</td></tr>
</table>
2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.
Completion
Press the stop/clear key at the screen for selecting an item. The screen for selecting a maintenance item No. is displayed.
</td></tr>
<tr><td>U606</td><td>
Setting the system (operation unit and display)
Description
Makes settings for fax transmission regarding the operation unit and display.
Start
1. Press the start key. The screen for selecting an item is displayed.
Note: Since this model does not provide LED error indicators, this setting has no affect on actual operation.
<table>
<tr><th>Display</th><th>Description</th></tr>
<tr><td>ALARM LED OFF
DATE PATTERN
RESO. LOCK
DENS. LOCK
REPORT SKIP</td><td>Sets the conditions under which an error indicator turns off.
Sets the date format.
Sets if the image scanning quality in fax mode is initialized.
Sets if the scanning density in fax mode is initialized.
Sets whether to skip unregistered abbreviated numbers and one-touch key numbers on the list.</td></tr>
</table>
Setting the conditions under which an error indicator turns off
1. Enter 1 or 2 using the numeric keys to change the setting.
<table>
<tr><th>Display</th><th>Description</th></tr>
<tr><td>1: RESET

2: COMM</td><td>An error indicator turns off only when the reset key is pressed.
An error indicator turns off when any key is pressed, an original is inserted or the next transmission is started.</td></tr>
</table>
2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.
Setting the date format
Selects the date format on the respective reports and sender's information record.
1. Change the setting using the numeric keys.
<table>
<tr><th>Display</th><th>Order</th></tr>
<tr><td>1: YMD
2: MDY
3: DMY</td><td>Year/month/day
Month/day/year
Day/month/year</td></tr>
</table>
2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.
</td></tr>
</table>

<table>
<tr><th>Maintenance item No.</th><th>Description</th></tr>
<tr><td>U605 (cont.)</td><td>
Setting an alarm for when reception is completed
1. Enter 1 or 2 using the numeric keys to change the setting.
<table>
<tr><th>Display</th><th>Description</th></tr>
<tr><td>1: ON
2: OFF</td><td>An alarm rings.
An alarm does not ring.</td></tr>
</table>
2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.
Selecting if auto reduction in the auxiliary direction is to be performed
Sets whether to receive a long document by automatically reducing it in the auxiliary direction or at 100% magnification.
1. Enter 1 or 2 using the numeric keys to change the setting.
<table>
<tr><th>Display</th><th>Description</th></tr>
<tr><td>1: ON

2: OFF</td><td>Auto reduction is performed if the received document is longer than the fax paper.
Auto reduction is not performed.</td></tr>
</table>
2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.
Setting the addition of an image to the report
Selects if an image is to be added to the transmission report.
1. Enter 1 or 2 using the numeric keys to change the setting.
<table>
<tr><th>Display</th><th>Description</th></tr>
<tr><td>1: ON
2: OFF</td><td>Image added.
Image not added.</td></tr>
</table>
2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.
Setting the error report display format
Selects the format of the transmission report when a transmission error occurs.
1. Change the setting using the numeric keys.
<table>
<tr><th>Display</th><th>Description</th></tr>
<tr><td>1: WORDS
2: CODE
3: MIX</td><td>Records an error message (BUSY, OK, ERROR or STOP).
Records a six-digit error code.
Records either an error message or code.</td></tr>
</table>
2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.
Setting the line-monitoring period
Sets the period to monitor the line. By monitoring a transmission from the start to the end, it can be checked whether the transmission was correct or not.
1. Change the setting using the numeric keys.
<table>
<tr><th>Display</th><th>Description</th></tr>
<tr><td>1: END
2: DIS</td><td>Until transmission is completed.
After dialing is completed until reception of a DIS signal.</td></tr>
</table>
2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.
Setting the one-shot detection time for remote switching
Sets the detection time when one-shot detection is selected for remote switching. (This setting item will be displayed, but the setting made is ineffective.)
1. Change the setting using the numeric keys.
<table>
<tr><th>Description</th><th>Setting range</th></tr>
<tr><td>One-shot detection time for remote switching</td><td>0 to 255 ms</td></tr>
</table>
2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.
</td></tr>
</table>

<table>
<tr><th>Maintenance item No.</th><th>Description</th></tr>
<tr><td>U604</td><td>
Clearing data
Description
Initializes data related to the fax transmission such as transmission history and IDs.
Purpose
Used to clear the transmission history or if an ID has been forgotten.
Method
1. Press the start key. The screen for selecting an item is displayed.
2. Press the appropriate item.
Initialization processing starts. When processing is finished, the screen displays "COMPLETED".
<table>
<tr><th>Display</th><th>Description</th></tr>
<tr><td>COMM. REC</td><td>Clears the activity report, error list, action list, transmission history of each department as listed on the department control report, transmission history for displaying the transmission results, document number, timer program information, protocol list, and other transmission history such as image data, excluding items regarding the machine variation adjustment.</td></tr>
<tr><td>MANAGE PW</td><td>Initializes the management password.</td></tr>
<tr><td>F-CODE ID</td><td>Initializes the F-code confidential box ID.</td></tr>
<tr><td>F-CODE ID</td><td>Initializes the F-code relay box ID.</td></tr>
<tr><td>ENCRPT ID</td><td>Initializes the encription box ID.</td></tr>
</table>
3. To return to the screen for selecting an item, press the stop/clear key.
Completion
Press the stop/clear key at the screen for selecting an item. The screen for selecting a maintenance item No. is displayed.
</td></tr>
<tr><td>U605</td><td>
Setting the system (operational)
Description
Makes settings for fax transmission regarding operation.
Start
1. Press the start key. The screen for selecting an item is displayed.
2. Press the appropriate item.
The screen for the selected item appears.
<table>
<tr><th>Display</th><th>Description</th></tr>
<tr><td>MEM. FULL</td><td>Sets how to proceed if memory becomes full during memory transmission.</td></tr>
<tr><td>FIN. ALARM</td><td>Sets an alarm for when reception is completed.</td></tr>
<tr><td>AUTO REDU</td><td>Selects if auto reduction in the auxiliary direction is to be performed.</td></tr>
<tr><td>ADD IMAGE</td><td>Sets for the addition of an image to the report.</td></tr>
<tr><td>ERR. CODE</td><td>Sets the error report display format.</td></tr>
<tr><td>MONITOR</td><td>Sets the line-monitoring period.</td></tr>
<tr><td>TIME (ONE)</td><td>Sets the one-shot detection time for remote switching.</td></tr>
<tr><td>TIME (CON)</td><td>Sets the continuous detection time for remote switching.</td></tr>
<tr><td>RESOLUT</td><td>Sets the initial condition of fax image scanning quality.</td></tr>
</table>
Setting how to proceed if memory becomes full during memory transmission
Used to select whether to send only stored data or to display an error indication and cancel transmission if memory becomes full during memory transmission.
1. Enter 1 or 2 using the numeric keys to change the setting.
<table>
<tr><th>Display</th><th>Description</th></tr>
<tr><td>1: CONT</td><td>Whether to continue memory transmission or to clear the memory can be selected by the user.</td></tr>
<tr><td>2: STOP</td><td>Memory is forcibly cleared.</td></tr>
</table>
2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.
</td></tr>
</table>

<table>
<tr><th>Maintenance item No.</th><th>Description</th></tr>
<tr><td>U603</td><td>
Setting the user registration data
Description
Makes user settings to enable the use of the copier as a fax.
Purpose
To be run after installation of the facsimile kit if necessary.
Start
1. Press the start key. The screen for selecting an item is displayed.
2. Press the appropriate item.
The screen for the selected item appears.
<table>
<tr><th>Display</th><th>Description</th></tr>
<tr><td>SELF TEL No.
LINE TYPE
RINGS (F/T) #
REMOTE DIAG</td><td>Sets the self telephone number.
Sets the type of telephone line.
Sets the number of rings in fax/telephone auto select mode.
Sets remote diagnostic transmission.</td></tr>
</table>
Setting the self telephone number
1. Enter the telephone number using the numeric keys.
Up to 20 digits can be entered.
To correct the entered telephone number or to delete the stored telephone number, reset by pressing the stop/clear key.
2. Press the start key.
3. To return to the screen for selecting an item, press the stop/clear key.
The item-selection screen does not reappear until registration or deletion processing is completed.
Setting the type of telephone line
1. Change the setting using the numeric keys.
<table>
<tr><th>Display</th><th>Description</th></tr>
<tr><td>1: DTMF
2: 10
3: 20</td><td>DTMF
10 PPS
20 PPS</td></tr>
</table>
2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.
Setting the number of rings in the fax/telephone auto select mode
Use this if the user wishes to adjust the number of rings that occur before the unit switches into fax receiving mode when fax/telephone auto-select is enabled.
1. Change the setting using the numeric keys.
<table>
<tr><th>Description</th><th>Setting range</th></tr>
<tr><td>Number of fax/telephone rings</td><td>0 to 15</td></tr>
</table>
If you set this to 0, the unit will start fax reception without any ringing.
2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.
Setting remote diagnostic transmission
1. Enter 1 or 2 using the numeric keys to select if remote diagnostic transmission is to be enabled.
<table>
<tr><th>Display</th><th>Description</th></tr>
<tr><td>1: ON
2: OFF</td><td>Remote diagnostic transmission is enabled.
Remote diagnostic transmission is disabled.</td></tr>
</table>
2. Press the start key. The value is set.
3. To return to the screen for selecting an item, press the stop/clear key.
Completion
Press the stop/clear key at the screen for selecting an item. The screen for selecting a maintenance item No. is displayed.
</td></tr>
</table>

Maintenance item No.	Description
U602	**Setting factory defaults** **Description** Initializes software switches other than that for machine data and the SRAM on the fax control PCB, according to the destination and OEM. **Purpose** Used to initialize the fax control PCB to the factory default. **Method** 1. Press the start key. Data initialization starts. To cancel data initialization, press the stop/clear key. 2. After data initialization, the entered destination and OEM codes are displayed, and the ROM version is displayed two seconds later. INI. SHIP DATA COMPLETED 000 000 INI. SHIP DATA COMPLETED V1.00

Maintenance item No.	Description

U600 (cont.)

Destination code list

Code	Destination	Code	Destination	Code	Destination
000	Japan	159	South Africa	253	Sweden
009	Australia	169	Thailand		France
080	Hong Kong	181	U.S.A.		Austria
084	Indonesia	242	South America		Switzerland
088	Israel	243	Saudi Arabia		Belgium
108	Malaysia	253	CTR21 (European nations)		Denmark
126	New Zealand		Italy		Finland
136	Peru		Germany		Portugal
137	Philippines		Spain		Ireland
152	Middle East		U.K.		Norway
156	Singapore		Netherlands	254	Taiwan

U601

Initializing permanent data

Description

Initializes software switches other than that for machine data on the fax control PCB according to the destination and OEM.

Purpose

Used to initialize the fax control PCB without changing user registration data and factory settings.

Method

1. Press the start key. The screen for entering the destination code is displayed.
   Enter a destination code using the numeric keys (refer to the destination code list on page 1-3-5 for the destination code).

   ```
   INI.    KEEP  DATA
   COUNTRY CODE:000
   ```

2. Press the start key. The screen for entering the OEM code is displayed.
   There is no operation necessary on this screen.

   ```
   INI.    KEEP  DATA
   OEM  CODE:000
   ```

3. Press the start key. Data initialization starts. To cancel data initialization, press the stop/clear key.
4. After data initialization, the entered destination and OEM codes are displayed, and the ROM version is displayed two seconds later.

   ```
   INI.    KEEP  DATA
   COMPLETED 000 000
   ```

   ```
   INI.    KEEP  DATA
   COMPLETED V1.00
   ```

Caution

If initialized with "000" (code for Japan) entered as the destination code, service call code C082 (fax control PCB problem) will be detected. Be sure to enter the correct destination code. If C082 (fax control PCB problem) is detected, press the COPY/FAX switching key to put the machine in the copy mode, open the front cover and then execute this maintenance item again to enter the correct destination code and initialize data.

(2) Contents of maintenance mode items

Maintenance item No.	Description
U600	**Initializing all data** **Description** Initializes software switches and all data in the SRAM on the fax control PCB, according to the destination and OEM. **Purpose** Used to initialize the fax control PCB. **Method** 1. Press the start key. The screen for entering the destination code is displayed. Enter a destination code using the numeric keys (refer to the destination code list on page 1-3-5 for the destination code). INI. ALL DATA COUNTRY CODE:000 2. Press the start key. The screen for entering the OEM code is displayed. There is no operation necessary on this screen. INI. ALL DATA OEM CODE:000 3. Press the start key. Data initialization starts. To cancel data initialization, press the stop/clear key. 4. After data initialization, the entered destination and OEM codes are displayed, and the ROM version is displayed two seconds later. INI. ALL DATA COMPLETED 000 000 INI. ALL DATA COMPLETED V1.00 **Caution** If initialized with "000" (code for Japan) entered as the destination code, service call code C082 (fax control PCB problem) will be detected. Be sure to enter the correct destination code. If C082 (fax control PCB problem) is detected, press the COPY/FAX switching key to put the machine in the copy mode, open the front cover and then execute this maintenance item again to enter the correct destination code and initialize data.

Section	Item No.	Maintenance item contents	Initial setting
Fax	U881	Using the flash-memory jig • Saving data from SRAM into the jig • Writing data from the jig into RAM • Writing the boot program into the jig	—
	U894	Performing board test • Performing tests on SRAM and DRAM • Performing tests on optional memory	— —
Others	U992	Checking or clearing the printer/fax count	—

Section	Item No.	Maintenance item contents	Initial setting
Fax	U610	Setting the modem output level • Setting the modem output level • Adjusting the modem output level	 — —
	U611	G3 cable equalizer • Setting the G3 transmission cable equalizer • Setting the G3 reception cable equalizer	 — —
	U612	Setting the modem detection level	—
	U613	Setting the DTMF output level • Setting the DTMF (high-frequency group) output level • Setting the DTMF (low-frequency group) output level	 — —
	U614	Adjusting the DTMF output level • Adjusting the DTMF (high-frequency group) output level • Adjusting the DTMF (low-frequency group) output level	 — —
	U615	Setting the NCU • Setting the connection to PBX/PSTN • Setting PSTN dial tone detection • Setting busy tone detection • Setting for a PBX	 — — — —
	U616	Adjusting the ratio of make-to-break of dial pulses • Make time (10 PPS) • Make time (20 PPS)	 — —
	U617	Outputting lists • Settings list • Action list • Monitor list • Own-status report • Protocol list • One-touch dialing ECM setting list	 — — — — — —
	U650	Setting the system 1 • Setting the number of lines to be ignored when receiving a fax at 100% magnification • Setting the number of lines to be ignored when receiving a fax in the auto reduction mode • Setting the number of lines to be ignored when receiving a fax (A4R, letter) in the auto reduction mode • Setting the recording width for inch specifications • Setting automatic printing of the protocol list	 3 3 3 — —
	U651	Setting the system 2 • Setting the variation range in the auxiliary scanning direction for rotation reception • Setting the number of adjustment lines for automatic reduction • Setting the number of adjustment lines for automatic reduction when A4 paper is set • Setting the number of adjustment lines for automatic reduction when letter size paper is set	 3 7 22 26
	U660	Setting the system (communication 2) • Setting the criteria for receiving a TCF signal 2 • Setting the short protocol transmission • Setting the reception of a short protocol transmission • Setting the CNG detection times in the fax/ telephone auto select mode • Turning ECM for one-touch dialing on/off	 — — — — —
	U670	Setting the system (communication 3) • Setting if V.34 transmission is available • Setting the V.34 symbol speed (3429 Hz) • Setting the V.34 symbol speed (3200 Hz) • Setting the V.34 symbol speed (3000 Hz) • Setting the V.34 symbol speed (2800 Hz)	 — — — — —
	U680	Displaying the fax board ROM version	—

1-3-1 Maintenance mode

(1) Maintenance mode item list

Section	Item No.	Maintenance item contents	Initial setting*
Fax	U600	Initializing all data	—
	U601	Initializing permanent data	—
	U602	Setting factory defaults	—
	U603	Setting the user registration data • Setting the self telephone number • Setting the type of telephone line • Setting the number of rings in the fax/telephone auto select mode • Setting remote diagnostic transmission	 — — — —
	U604	Clearing data • Clearing transmission history • Initializing the management password • Initializing the F-code confidential box ID • Initializes the F-code relay box ID • Initializes the encription box ID	 — — — — —
	U605	Setting the system (operational) • Setting how to proceed if memory becomes full during memory transmission • Setting an alarm for when reception is completed • Selecting if auto reduction in the auxiliary direction is to be performed • Setting the addition of an image to the report • Setting the error report display format • Setting the line-monitoring period • Setting the one-shot detection time for remote switching • Setting the continuous detection time for remote switching • Setting the initial condition of fax image scanning quality	 — — — — — — — — —
	U606	Setting the system (operation unit and display) • Setting the conditions under which an error indicator turns off • Setting the date format • Setting if the image scanning quality in fax mode is initialized • Setting if the scanning density in fax mode is initialized • Setting whether to skip unregistered abbreviated numbers and one-touch key numbers on the list	 — — — — —
	U607	Setting the system (communication 1) • Setting the auto redialing interval • Setting the number of times of auto redialing • Setting the communication starting speed • Setting the reception speed • Setting the mode for remote switching • Setting the transmission intervals • Sets the loop current detection before dialing • Sets the DIS signal to 4 bytes	 — — — — — — — —
	U608	Setting transmission • Setting the method to process errors • Setting the number of times of DIS signal reception • Setting the reference for RTN signal output • Setting the waiting period to prevent echo problem at the sender • Setting the waiting period to prevent echo problem at the receiver • Setting ECM transmission • Setting ECM reception • Setting the criteria for receiving a TCF signal 1 • Setting the frequency of the CED signal	 — — — — — — — — —
	U609	Setting communication time • Setting the T0 time-out time • Setting the T1 time-out time • Setting the T2 time-out time • Setting the Ta time-out time • Setting the Tb1 time-out time • Setting the Tb2 time-out time • Setting the Tc time-out time • Setting the Td time-out time	 — — 69 30 20 80 60 —