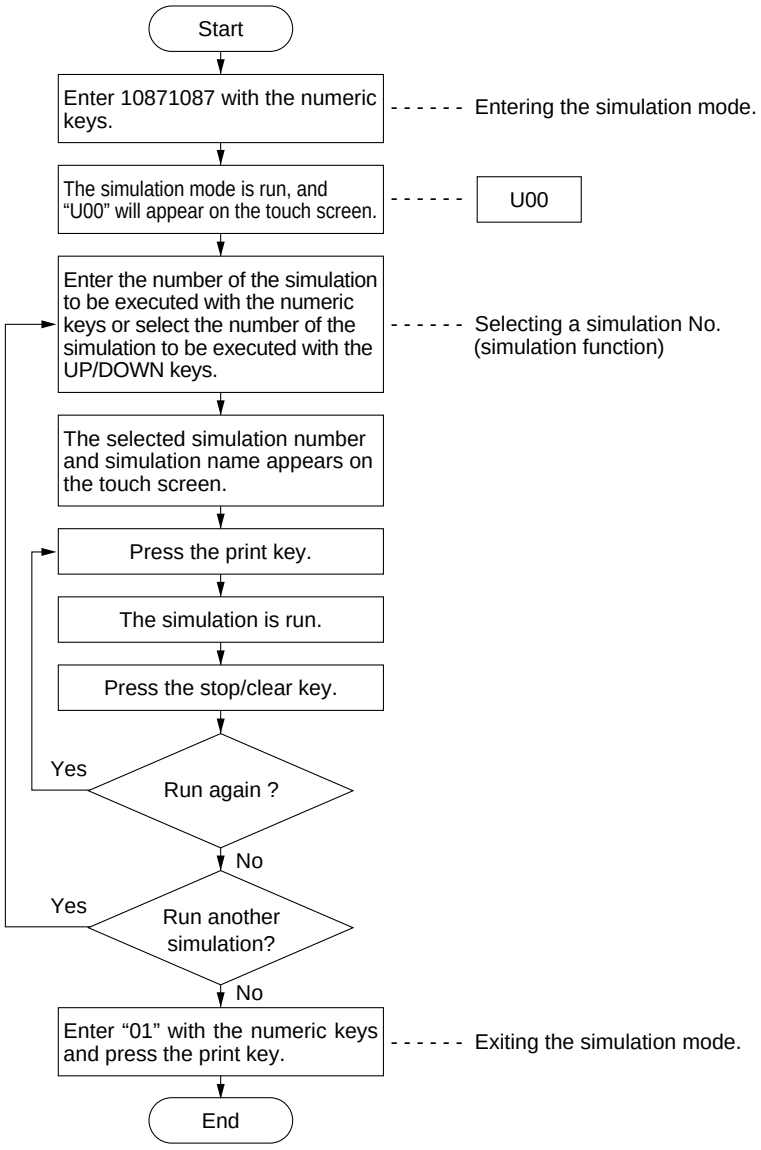
3-2-1 Simulations

This copier is equipped with a simulation function which can be used to check the operation and adjust electrical components.

(1) Running a simulation



• Data setting simulation

It is possible to set the data and make a test copy by pressing each key displayed on the touch screen in data setting simulation.

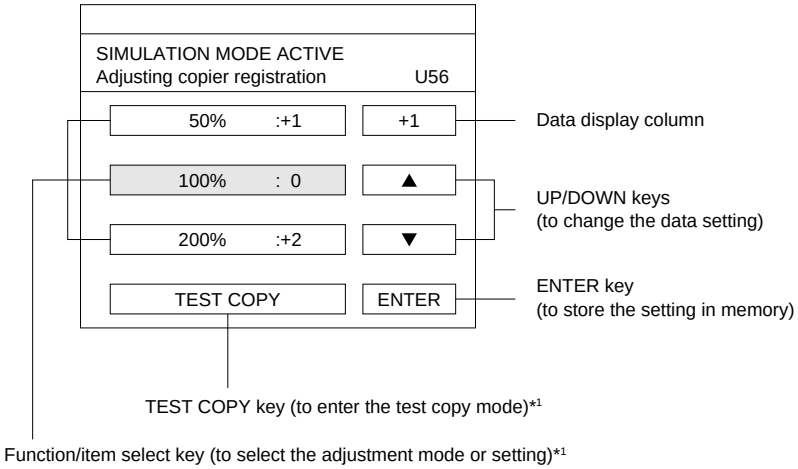


Figure 3-2-1 Display on the touch screen (example display)

*1: If there are four function/item select key, the TEST COPY key function (test copy mode setting) is shifted to the interrupt key.

(2) Simulation list

Section	Sim. No.	Simulation contents	Default
All	01	Exiting the simulation mode	—
	02	Copying without paper feed	—
	03	Zoom copying at fixed ratios	—
	05	Checking DF operation	—
	06	Resetting the disable function mode (the partial operation control function)	RESET
	09	Setting machine number	000000
Paper feed/ conveying	10	Checking motor operation (Drive motors and fans ON)	—
	11	Checking conveying switches	—

Display	Switch
FEED A	Paper feed switch 1
FEED B	Paper feed switch 2
FEED C	Paper feed switch 3
FEED D	Paper feed switch 4
FEED E	Paper feed switch 5
FEED	Feed switch
REGIST	Registration switch
EJECT	Eject switch
BRANCH	Feedshift switch
D REGI	Duplex registration switch
D CONV	Duplex paper conveying switch
D EJEC	Duplex eject switch

<table>
<tr><th>Section</th><th>Sim. No.</th><th>Simulation contents</th><th>Default</th></tr>
<tr><td rowspan="4">Paper feed/ conveying</td><td>12</td><td>Checking clutch operation
Key: Clutch
SB FEED: Bypass paper feed clutch
SB LIFT: Bypass solenoid (bypass lift clutch)
FEED A (H): Feed clutch 1
FEED B (L): Feed clutch 2
FEED C: Feed clutch 3
FEED D: Feed clutch 4
FEED E: Feed clutch 5
FEED F: Feed clutch 6
LCF P1: Large paper deck paper feed clutch 1
LCF P2: Large paper deck paper feed clutch 2
LCF B: Large paper deck paper conveying clutch
DECK D PF: Upper paper feed clutch
DECK E PF: Lower paper feed clutch
DUP PF: Refeed clutch
DUP REGIST: Duplex registration clutch
DUP CONV: Duplex paper conveying clutch
REGIST: Registration clutch
TC BELT: Transfer charger belt release clutch</td><td>—</td></tr>
<tr><td>13</td><td>Checking solenoid operation
Key: Solenoid
BRANCH: Feedshift solenoid
LEAD FEED: Duplex forwarding solenoid
LEAD REST: Duplex paper press solenoid
END PRESS: Duplex paper tapping solenoid</td><td>—</td></tr>
<tr><td>15</td><td>Adjusting the slack amount before registration</td><td>—</td></tr>
<tr><td>16</td><td>Checking for oblique paper feed</td><td>—</td></tr>
<tr><td>18</td><td>Adjusting for duplex unit</td><td>—</td></tr>
<tr><td>52</td><td>Adjusting DF registration</td><td>—</td></tr>
<tr><td>54</td><td>Setting blank cut margins</td><td>—</td></tr>
<tr><td>56</td><td>Adjusting the leading edge registration</td><td>—</td></tr>
</table>

Section	Sim. No.	Simulation contents	Default
Optical	20	Lighting the halogen lamp	—
	21	Scanning	—
	23	Checking mirror and lens motor operation	—
	24	Setting exposure amount (for equal magnification mode)	—
	25	Adjusting lateral magnification	—
	26	Adjusting longitudinal magnification	—
	27	Adjusting appropriate exposure (Light potential)	—
	28	Setting the lens unit rank	—
	29	Adjusting the exposure amount for enlargement/reduction mode	—
Charging	31	Adjusting the transfer timing	—
	32	Adjusting the drum surface potential	—
	34	*Setting the main charging voltage*	—
	35	Displaying potential adjustment data (drum surface potential sensor output data)	—
	38	Setting the primary initialization control interval	5 (5000 copies)
Cleaning	40	Applying toner to the cleaning blade	—
	42	Lighting the blank lamps	—
Fixing	41	Forced stabilization	—
	43	Turning the fixing heaters on Key: MAIN / SUB / ALL Heater: Fixing heater M / Fixing heater S / Both heaters M and S	—
	46	Displaying detection temperature of each thermistor	—

Section	Sim. No.	Simulation contents	Default
Operation	50	Lighting all the indicators on the operation panel	—
	51	Checking the message display	—
	55	Initializing the touch screen	*********
	75	Setting the service call phone No.	—
Developing	60	Setting developer	—
	61	Forcing toner feed	—
	62	*Setting the toner sensor control reference voltage*	—
	64	Adjusting developing bias voltage	—
	66	Displaying toner sensor output	—
Initializing memory	70	Initializing backup memory	—
Counts	68	Checking/setting the developing drive time	Cleared
	69	Setting/checking the developer maintenance count	Cleared
	71	Setting the maintenance counter preset value	200 (200000 copies)
	72	Checking/clearing the maintenance count	Cleared
	74	Checking/clearing jam counts	All Cleared
	76	Checking/clearing service call counts	All Cleared
	77	Checking/clearing copy counts by paper source	All Cleared
	78	Checking/clearing counts by RDH or sorter	All Cleared
	79	Setting the maintenance near indication	000

Section	Sim. No.	Simulation contents	Default
Copy modes	14	Setting folio size (metric models only)	Length: 330 mm Width: 210 mm
	58	Selecting the key card/key counter	Not selected
	59	Setting punch hole modes	
		PUNCH NUMBER LIMIT DATA: UPPER: 2/LOWER4(5) 5 HOLE PITCH: 20000 PITCH 1	
	80	Switching between double/single count	Double count
	81	Selecting newspaper original exposure mode	MODE 0
	84	Setting the auto clear time	90 s
	85	Setting the auto preheat/energy saver time	OFF
	89	Selecting between paper feed/eject count	FEED
	90	Ignoring the self-diagnostic function	0000
	91	Setting operation under the toner empty condition	100 copies Single copies only
	92	Setting between auto start on/off	ON
	93	Setting the destination	JAPAN METRIC
	94	Switching modes	—
		Turning the E2000 function on/off: OFF Turning the preheat/energy saver function on/off: NORMAL MODE Selecting duplex mode as the default: OFF Setting the number of exposure steps: SPECIAL AREA	
	99	Initializing the MMD host monitoring system	—

(3) Contents of simulations

<table>
<tr><th>Sim. No.</th><th>Description</th><th>Remarks</th></tr>
<tr><td>01</td><td>Exiting the simulation mode
1 Enter “01” with the numeric keys.
2 Press the print key.
* The copier returns to the normal mode.</td><td></td></tr>
<tr><td>02</td><td>Copying without paper feed
1 Disconnect the 1-pin connectors connected to CN3(T101) and CN4(GB) on the high voltage transformer PCB.
Preventing toner from being dispersed, and saving toner.
2 Enter simulation mode.
3 Enter “02” with the numeric keys.
4 Press the print key.
5 Press the key corresponding to the desired operation mode.
<table><tr><th>Key</th><th>Operation mode</th></tr><tr><td>PPC</td><td>Not in sync with RDH</td></tr><tr><td>PPC + DF</td><td>In sync with RDH</td></tr></table>6 Set the copy mode by selecting the corresponding key.
7 Set the number of copies with the numeric keys.
* When entering 999, the endless copy mode is set. However, when selecting the duplex copy mode in step 5, the endless copy mode is set regardless of the number of the copies.
8 Remove all the paper from the selected paper source.
* If paper is left in the selected paper source, the paper feed pulleys do not operate.
9 Press the print key to start copying.
* Copy operation is started at the selected conditions.
* Copying continues until the set number of copies have been made or the stop/clear key is pressed.
0 Press the stop/clear key.</td><td>Checking machine operation.</td></tr>
</table>

<table>
<tr><th>Sim. No.</th><th>Description</th><th>Remarks</th></tr>
<tr><td>03</td><td>Zoom copying at fixed ratios
1 Enter “03” with the numeric keys.
2 Press the print key.
3 Place an original in place.
4 Select the paper source and exposure mode.
5 Press the print key.
* Test copies are made at each magnification ratio in the order shown below:
50% → 64% → 71% → 77% →78% → 82% → 87% → 100% → 115% → 122% → 129% → 141% → 154% → 200%
* To interrupt copying midway, press the stop/clear key.
6 Press the stop/clear key.</td><td>Checking zoom (enlargement/ reduction) copying operation at the fixed ratios.</td></tr>
<tr><td>05</td><td>Checking DF operation
1 Enter “05” with the numeric keys.
2 Press the print key.
3 Press the key corresponding to the desired operation mode.
<table><tr><th>Key</th><th>Operation mode</th></tr><tr><td>ADF MODE</td><td>ADF mode with originals</td></tr><tr><td>RADF MODE</td><td>RADF mode with originals</td></tr><tr><td>ADF MODE (NON PAPER)</td><td>ADF mode without originals</td></tr><tr><td>RADF MODE (NON PAPER)</td><td>RADF mode without originals</td></tr></table>4 Press the ENTER key.
* RDH starts to operate stand-alone in the selected mode.
5 Press the stop/clear key.
* RDH operation stops.
6 Press the stop/clear key.</td><td>Checking RDH operation with or without originals.</td></tr>
</table>

Sim. No.	Description	Remarks
06	**Resetting the disable function mode (the partial operation control function)** 1 Enter “06” with the numeric keys. 2 Press the print key. 3 Press the RESET key on the touch screen. 4 Press the ENTER key. * The service call that has prevented the copier from operating is disabled. 5 Press the stop/clear key.	Resets the partial operation control function. (See page 3-5-1 for the service calls related to partial operation control.)
09	**Setting machine number** 1 Enter “09” with the numeric keys. 2 Press the print key. 3 Enter the six digits of the machine serial No. with the numeric keys. MACHINE No.: 000000 4 Press the ENTER key * The entered number is stored.	Checking/setting the machine serial No.
10	**Checking motor operation (Drive motors and fans ON)** 1 Enter “10” with the numeric keys. 2 Press the print key. 3 Press the ENTER key. * The drive motor, image forming motor, paper feed motor and all of the cooling fan motors rotate. * To stop the motors and cooling fan motors midway, press the stop/clear key. 4 Press the stop/clear key.	Checking drive motor, image forming motor and paper feed motor operation.

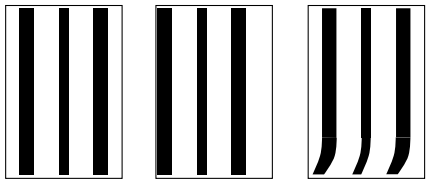
<table>
<tr><th>Sim. No.</th><th>Description</th><th>Remarks</th></tr>
<tr><td>11</td><td>
Checking conveying switches
1 Enter “11” with the numeric key.
2 Press the print key.
3 Press the switch to be checked manually and check the on/off state on the touch screen.
* The corresponding display is highlighted when the switch is on.
<table>
<tr><th>Display</th><th>Switch</th></tr>
<tr><td>FEED A</td><td>Paper feed switch 1</td></tr>
<tr><td>FEED B</td><td>Paper feed switch 2</td></tr>
<tr><td>FEED C</td><td>Paper feed switch 3</td></tr>
<tr><td>FEED D</td><td>Paper feed switch 4</td></tr>
<tr><td>FEED E</td><td>Paper feed switch 5</td></tr>
<tr><td>FEED</td><td>Feed switch</td></tr>
<tr><td>REGIST</td><td>Registration switch</td></tr>
<tr><td>EJECT</td><td>Eject switch</td></tr>
<tr><td>BRANCH</td><td>Feedshift switch</td></tr>
<tr><td>D REGI</td><td>Duplex registration switch</td></tr>
<tr><td>D CONV</td><td>Duplex paper conveying switch</td></tr>
<tr><td>D EJEC</td><td>Duplex eject switch</td></tr>
</table>
4 Press the stop/clear key.
</td><td>Checking the switch operations in the paper conveying systems.</td></tr>
</table>

Sim. No.	Description	Remarks
12	**Checking clutch operation** 1 Enter “12” with the numeric keys. 2 Press the print key. 3 Press the key corresponding to the clutch to be checked. * The clutch corresponding to the pressed key is on for 1 s. Also, while the clutch is on, the key pressed is highlighted. * When the key corresponding to the desired clutch is not displayed on the touch screen, press UP/DOWN keys to show the key corresponding to the desired clutch.	*Turning each clutch on and checking its operation.*

Key	Clutch
SB FEED	Bypass paper feed clutch
SB LIFT	Bypass solenoid (bypass lift clutch)
FEED A (H)	Feed clutch 1
FEED B (L)	Feed clutch 2
FEED C	Feed clutch 3
FEED D	Feed clutch 4
FEED E	Feed clutch 5
FEED F	Feed clutch 6
LCF P1	Large paper deck paper feed clutch 1
LCF P2	Large paper deck paper feed clutch 2
LCF B	Large paper deck paper conveying clutch
DECK D PF	Upper paper feed clutch
DECK E PF	Lower paper feed clutch
DUP PF	Refeed clutch
DUP REGIST	Duplex registration clutch
DUP CONV	Duplex paper conveying clutch
REGIST	Registration clutch
TC BELT	Transfer charger belt release clutch

4 Press the stop/clear key.

<table>
<tr><th>Sim. No.</th><th>Description</th><th>Remarks</th></tr>
<tr><td>13</td><td>Checking solenoid operation
1 Enter “13” with the numeric keys.
2 Press the print key.
3 Press the key corresponding to the solenoid to be checked.
* The solenoid corresponding to the pressed key is on for 1 s. Also, while the solenoid is on, the key pressed is highlighted.
<table><tr><th>Key</th><th>Solenoid</th></tr><tr><td>BRANCH</td><td>Feedshift solenoid</td></tr><tr><td>LEAD FEED</td><td>Duplex forwarding solenoid</td></tr><tr><td>LEAD REST</td><td>Duplex paper press solenoid</td></tr><tr><td>END PRESS</td><td>Duplex paper tapping solenoid</td></tr></table>4 Press the stop/clear key.</td><td>Turning each solenoid on and checking its operation.</td></tr>
<tr><td>14</td><td>Setting folio size (metric models only)
1 Enter “14” with the numeric keys.
2 Press the print key.
3 Select the setting item and change the setting with the UP/DOWN keys.
<table><tr><th>Setting item</th><th>Setting range</th><th>Default</th></tr><tr><td>LENGTH DATA</td><td>330 - 356(mm)</td><td>330(mm)</td></tr><tr><td>WIDTH DATA</td><td>200 - 220(mm)</td><td>210(mm)</td></tr></table>4 Press the ENTER key.
* The setting is stored.
5 Press the stop/clear key.</td><td>Setting the folio size to be used.</td></tr>
<tr><td>15</td><td>Adjusting the slack amount before registration
(see page 3-3-35)</td><td></td></tr>
</table>

Sim. No.	Description	Remarks
16	**Checking for oblique paper feed** 1 Enter “16” with the numeric keys. 2 Press the print key. 3 Select the paper of the maximum size. 4 Open the RDH. 5 Press the print key. * A test copy is made and check pattern copy is printed.  Normal Copy example A Copy example B **Figure 3-2-2** • If the test copy looks like example A, adjust the center registration (see page 3-3-23). • If the test copy looks like example B, the paper conveying system has a problem. 6 Press the stop/clear key.	Checking for mechanical distortion or positioning error in the drum and paper conveying system.

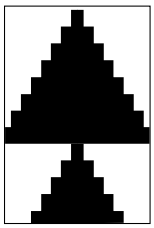
Sim. No.	Description	Remarks
18	**Adjusting for duplex unit (see page 3-3-134, 3-3-136)**	
20	**Lighting the halogen lamp** 1 Enter “20” with the numeric keys. 2 Press the print key. * The current appropriate exposure value (halogen lamp light amount control data in EXP 4 after the light amount correction : value set in simulation 27) is displayed. 3 Change the appropriate exposure amount with UP/DOWN keys. 4 Press the ENTER key. * The halogen lamp lights for 20 s at light amount corresponding to the changed value. The optical section fan motor is turned on at the same time. 5 Press the stop/clear key * Turn the halogen lamp and optical section fan motor off. 6 Press the stop/clear key.	Checking the halogen lamp.
21	**Scanning** 1 Enter “21” with the numeric keys. 2 Press the print key. 3 Set a magnification ratio with the UP/DOWN keys. 4 Press the ENTER key. * The lens and mirrors 4 and 5 move to the position for the selected magnification ratio and then scanning repeats at the speed corresponding to that ratio. 5 Press the stop/clear key * The scanner stops operating. 6 Press the stop/clear key.	Checking the scanner operation by running it at an arbitrary magnification ratio.

Sim. No.	Description	Remarks
23	**Checking mirror and lens motor operation** 1 Enter “23” with the numeric keys. 2 Press the print key. 3 Set a magnification ratio with the UP/DOWN keys. 4 Press the ENTER key. * The lens and mirrors 4 and 5 move to the position for the selected magnification ratio. Also the number of the moving step from the lens carriage home position switch and mirror home position switch is displayed. 5 Press the stop/clear key	Checking the mirror and lens carriage motors operation.
24	**Setting exposure amount (for equal magnification mode) (see page 3-3-70, 3-3-77, 3-3-78)**	
25	**Adjusting lateral magnification (see page 3-3-67)**	
26	**Adjusting longitudinal magnification (see page 3-3-68)**	
27	**Adjusting appropriate exposure (Light potential) (see page 3-3-70)**	
28	**Setting the lens unit rank (see page 3-3-59)**	
29	**Adjusting the exposure amount for enlargement/ reduction mode (see page 3-3-80)**	
31	**Adjusting the transfer timing (see page 3-3-99)**	

Sim. No.	Description	Remarks
32	**Adjusting the drum surface potential** **(see page 3-3-42)**	
34	***Setting main charging voltage*** ***(see page 3-3-87-1)***	
35	***Displaying potential checking data (drum surface potential sensor input data)*** 1 Enter “35” with the numeric keys. 2 Press the print key. * The input value to the MPCB from the drum surface potential sensor during the last primary initialization control (when applying 500 V DC, 200 V DC, 0 V DC to the drum frame) is displayed. 3 Press the DATA INPUT key. * The primary initialization control of the drum surface potential sensor is made, the input value to the MPCB from the drum surface potential sensor is displayed. 4 Press the stop/clear key.	Checking the input value to the MPCB from the drum surface potential sensor during the last primary initialization control.

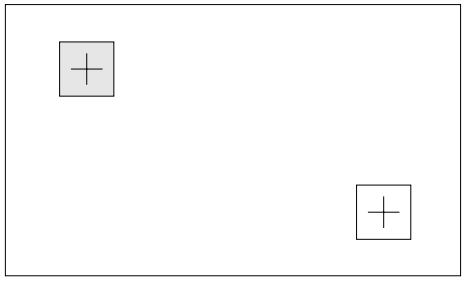
Sim. No.	Description	Remarks
38	**Setting the primary initialization control interval** 1 Enter “38” with the numeric keys. 2 Press the print key. • Setting the primary initialization control interval 3 Set the ADJUST DATA with the UP/DOWN keys. * Setting range: 0 - 20 * The setting corresponds to the primary initialization control interval as follows. Primary initialization control interval = Setting × 1000 (copies) For example, if it is set to 10, the primary initialization control is made every 10000 copies. If it is set to 0, the primary initialization control is made only when the main switch is on. 4 Press the ENTER key. * The setting is stored. 5 Press the stop/clear key. • Checking charger cleaning operation 3 Press the TEST RUN key. * The charger cleaning operation is made once. (The stop/clear key is disabled during operation.) 4 Press the stop/clear key.	Setting the primary initialization control interval.

<table>
<tr><th>Sim. No.</th><th>Description</th><th>Remarks</th></tr>
<tr><td>40</td><td>Applying toner to the cleaning blade
1 Detach the cleaning assembly from the machine and set the cleaning blade to the release position.
2 Reattach the cleaning assembly to the machine.
3 Enter simulation mode.
4 Enter “40” with the numeric keys.
5 Press the print key.
6 Press the ENTER key.
* The machine starts driving, then toner is applied to the drum.
7 After the machine stops driving, open the front cover and pull out the image forming section, then set the cleaning blade to the normal position (contacts to the drum).
8 Push back the image forming section and close the front cover.
* The machine starts driving, the cleaning blade toner applying is made.
* When the machine stops, this simulation is finished.</td><td>To be run during machine setup or when the cleaning blade is replaced.</td></tr>
<tr><td>41</td><td>Forced stabilization
1 Enter “41” with the numeric keys.
2 Press the print key.
3 Press the key corresponding to the desired mode.
<table><tr><th>Key</th><th>Selected mode</th></tr><tr><td>ON</td><td>Forced stabilization mode</td></tr><tr><td>OFF</td><td>Normal mode</td></tr></table>4 Press the ENTER key.
* The setting is completed.
5 Press the stop/clear key.
* Forced stabilization mode is released by changing the setting with this simulation or turning the main switch off and on.</td><td>Forcing the machine into the stabilized condition even if the fixing section is lower than the correct fixing temperature.</td></tr>
</table>

Sim. No.	Description	Remarks
42	**Lighting the blank lamps** 1 Enter “42” with the numeric keys. 2 Press the print key. • Checking the blank lamp operation 3 Press the ENTER key. * All the blank lamps light for a maximum of 10 s. * To turn them off, press the stop/clear key. 4 Press the stop/clear key. • Making a check pattern copy 3 Press the TEST COPY key. * The test copy mode is set. 4 Select the maximum size of paper. 5 *Open the RDH.* 6 Press the print key. * The blank lamps light in a preset order and a check pattern as shown below is printed.  **Figure 3-2-3 Check pattern copy** 6 Press the stop/clear key.	Checking blank lamp operation.

<table>
<tr><th>Sim. No.</th><th>Description</th><th>Remarks</th></tr>
<tr><td>43</td><td>Turning the fixing heaters on
1 Enter “43” with the numeric keys.
2 Press the print key.
3 Press the key corresponding to the heater to be turned on.
* The heater turns on for a maximum of 3 s.
* To turn the heater off, press the stop/clear key.
<table><tr><th>Key</th><th>Heater</th></tr><tr><td>MAIN</td><td>Fixing heater M</td></tr><tr><td>SUB</td><td>Fixing heater S</td></tr><tr><td>ALL</td><td>Both heaters M and S</td></tr></table>4 Press the stop/clear key.</td><td>Checking operation of fixing heaters M and S.</td></tr>
<tr><td>46</td><td>Displaying detection temperature of each thermistor
1 Enter “46” with the numeric keys.
2 Press the print key.
* The current detection temperature of each thermistor are displayed.
<table><tr><th>Display</th><th>Descriptions</th></tr><tr><td>FIX TEMP</td><td>Fixing temperature
(Fixing thermistor detection temperature)</td></tr><tr><td>DRUM TEMP</td><td>Drum temperature
(Drum thermistor detection temperature)</td></tr><tr><td>INNER TEMP</td><td>Inner temperature
(Developing thermistor detection temperature)</td></tr><tr><td>OUTER TEMP</td><td>Outer temperature
(Humidity sensor circuit PCB detection temperature)</td></tr></table>3 Press the stop/clear key.</td><td>Displaying the current temperature detected by each thermistor.</td></tr>
</table>

Sim. No.	Description	Remarks
50	**Lighting all the indicators on the operation panel** 1 Enter “50” with the numeric keys. 2 Press the print key. * All the indicators (LEDs) on the operation panel light for a maximum of 10 s. * To turn them off, press the stop/clear key. 3 Press the stop/clear key.	Checking the indicator LEDs on the operation panel.
51	**Checking the message display** 1 Enter “51” with the numeric keys. 2 Press the print key. * The message checking screen is displayed on the touch screen. 3 Press the UP/DOWN keys. * The next messages can be displayed by pressing the UP/DOWN keys. 4 *Enter a number between 0 and 299 with the numeric keys and press the ENTER key.* * The message checking screen corresponding to the number is displayed. 5 Press the stop/clear key.	Checking the messages on the touch screen.
52	**Adjusting DF registration (see page 3-3-165, 3-3-166)**	
54	**Setting blank cut margins (see page 3-3-27, 3-3-29, 3-3-31, 3-3-33, 3-3-137)**	

Sim. No.	Description	Remarks
55	**Initializing the touch screen** 1 Enter “55” with the numeric key. 2 Press the print key. * The initialization screen is displayed blinking on the touch screen. 3 Press the + key blinking at the upper left of the screen. * The + key at the lower right then starts to blink. 4 Press the + key blinking at the lower right. * This completes initialization of the touch screen.  **Figure 3-2-4 Initialization screen**	Automatically correcting the key display positions on the touch screen. To be run after replacement of the touch screen without fail.
56	**Adjusting the leading edge registration** **(see page 3-3-26)**	

<table>
<tr><th>Sim. No.</th><th>Description</th><th>Remarks</th></tr>
<tr><td>58</td><td>Selecting the key card/key counter
1 Enter “58” with the numeric keys.
2 Press the print key.
3 Select the key card or key counter.
<table><tr><th>Key</th><th>Setting description</th></tr><tr><td>KEY CARD</td><td>With a key card</td></tr><tr><td>KEY COUNTER</td><td>With a key counter</td></tr></table>4 Press the ENTER key.
* The setting is completed.
5 Press the stop/clear key.</td><td>To be run when the optional key card or key counter is installed.</td></tr>
<tr><td>59</td><td>Setting punch hole modes
1 Enter “59” with the numeric keys.
2 Press the print key.
* The item select screen is displayed.
3 Press the key corresponding to the desired setting item.
* The setting screen of the item corresponding to the key pressed is displayed.
<table><tr><th>Key</th><th>Setting item</th></tr><tr><td>PUNCH NUMBER</td><td>Number of punch hole</td></tr><tr><td>LIMIT DATA</td><td>Number of copies that can be punched</td></tr><tr><td>5 HOLE PITCH</td><td>Pitch of 5 hole pitch</td></tr></table>• Setting the number of punch hole
4 Press the key corresponding to the desired number of punch hole.
<table><tr><th>Key</th><th>Setting description</th></tr><tr><td>UPPER: 2/LOWER: 4(5)</td><td>UPPER: 2/LOWER: 4(5)</td></tr><tr><td>UPPER: 2/LOWER: 3</td><td>UPPER: 2/LOWER: 3</td></tr><tr><td>UPPER: 3/LOWER: 4(5)</td><td>UPPER: 3/LOWER: 4(5)</td></tr></table>5 Press the ENTER key.
* The setting is stored, then item select screen reappears.
6 Press the stop/clear key.</td><td>Setting the combination of the punch mode. (inch models only)</td></tr>
</table>

<table>
<tr><th>Sim. No.</th><th>Description</th><th>Remarks</th></tr>
<tr><td>59
(Cont.)</td><td>
• Setting the number of copies that can be punched
4 Press the key corresponding to the desired setting item.
<table>
<tr><th>Key</th><th>Setting description</th></tr>
<tr><td>COUNT DATA</td><td>Number of the present punch waste collected in the punch waste tank.</td></tr>
<tr><td>LIMIT DATA</td><td>Number of the punch waste that can be collected in the punch waste tank.
(If the number of the corrected punch dregs exceeds the setting value, the punch dregs tank check message is displayed.)</td></tr>
</table>
5 Change setting with the UP/DOWN keys.
6 Press the ENTER key.
* The setting is stored, then item select screen reappears.
7 Press the stop/clear key.

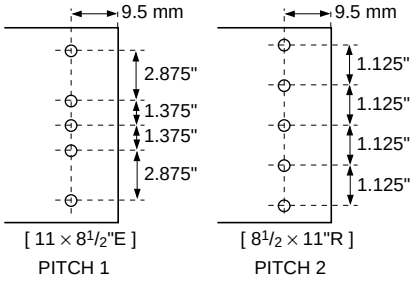
• Setting the pitch of the 5 punch holes
4 Press the key corresponding to the pitch of the desired holes.
<table>
<tr><th>Key</th><th>Setting description</th></tr>
<tr><td>PITCH 1
PITCH 2</td><td>see figure 3-2-5</td></tr>
</table>


Figure 3-2-5

5 Press the ENTER key.
* The setting is stored, then item select screen reappears.
6 Press the stop/clear key.
</td><td>Setting the combination of the punch mode.</td></tr>
</table>

<table>
<tr><th>Sim. No.</th><th>Description</th><th>Remarks</th></tr>
<tr><td>60</td><td>
Setting developer
1 Enter “60” with the numeric keys.
2 Press the print key.
3 Press the ENTER key.
* The aging starts, the toner sensor control voltage is automatically set to the initial developer. The developing maintenance value (Sim No.69) and developing drive time (Sim No. 68) are cleared.
* Approximately 3 min after aging starts, the driving stops, the developing initialization is completed.
* During auto setting of the toner sensor control voltage, the following data are displayed on the touch screen.
<table>
<tr><th>Display position</th><th>Data content</th></tr>
<tr><td>Data display column</td><td>Toner sensor control reference voltage (*1)</td></tr>
<tr><td>INPUT DATA</td><td>Input voltage from the toner sensor to the MPCB (*1)</td></tr>
<tr><td>HUMID</td><td>Current absolute humidity</td></tr>
</table>
4 Press the stop/clear key.
</td><td>
To be run during machine setup or when developer is replaced.

*1: Indicated by Bit
1=0.02 V
</td></tr>
</table>

<table>
<tr><th>Sim. No.</th><th>Description</th><th>Remarks</th></tr>
<tr><td>61</td><td>Forcing toner feed
1 Enter “61” with the numeric keys.
2 Press the print key.
3 Press the ENTER key.
* Aging starts and the toner is replenished until input voltage from the toner sensor reaches the toner-replenishing-off level.
* The following data is shown on the touch screen while toner is being replenished.
<table><tr><th>Display position</th><th>Data content</th></tr><tr><td>Data display column</td><td>Input voltage from the toner sensor to the MPCB after correction by the absolute humidity and developing maintenance count value. (*1)</td></tr><tr><td>INPUT DATA</td><td>Input voltage from the toner sensor to the MPCB (*1)</td></tr><tr><td>CONTROL OUT</td><td>Toner sensor control reference voltage (*1)</td></tr><tr><td>HUMID</td><td>Current absolute humidity</td></tr></table>* To interrupt toner replenishing, press the stop/clear key.
4 Press the stop/clear key.</td><td>To be run when toner is empty.

*1: Indicated by Bit
1=0.02 V</td></tr>
<tr><td>62</td><td>Setting the toner sensor control reference voltage
1 Enter “62” with the numeric keys.
2 Press the print key.
* When carrying the setting developer (Sim. No.60), the toner sensor control reference voltage set automatically is displayed.
3 Change the setting with the UP/DOWN keys.
* Setting range: 0 - 255
4 Press the ENTER key.
* The setting is stored.
5 Press the stop/clear key.</td><td>Checking or changing the toner sensor control reference voltage set by simulation 60.</td></tr>
<tr><td>64</td><td>Adjusting developing bias voltage (see page 3-3-93)</td><td></td></tr>
</table>

<table>
<tr><th>Sim. No.</th><th>Description</th><th>Remarks</th></tr>
<tr><td>66</td><td>
Displaying toner sensor output
1 Enter “66” with the numeric keys.
2 Press the print key.
3 Press the ENTER key.
* The machine starts driving, sampling operation of the toner sensor is made. During the sampling operation, the following data are displayed.
<table>
<tr><th>Display position</th><th>Data content</th></tr>
<tr><td>Data display column</td><td>Input voltage from the toner sensor to the MPCB after correction by the absolute humidity and developing maintenance count value. (*1)</td></tr>
<tr><td>INPUT DATA</td><td>Input voltage from the toner sensor to the MPCB (*1)</td></tr>
<tr><td>CONTROL OUT</td><td>Toner sensor control reference voltage (*1)</td></tr>
<tr><td>HUMID</td><td>Current absolute humidity</td></tr>
</table>
4 Press the stop/clear key.
</td><td>Checking the toner sensor output voltage.

*1: Indicated by Bit
1=0.02 V</td></tr>
</table>

<table>
<tr><th>Sim. No.</th><th>Description</th><th>Remarks</th></tr>
<tr><td>68</td><td>Checking/setting the developing drive time
1 Enter “68” with the numeric keys.
2 Press the print key.
* The current developing drive time is displayed.

• Changing developing drive time
3 Press the key corresponding to the item (hours, minutes, seconds) to be changed.
<table><tr><th>Key</th><th>item</th></tr><tr><td>HOURS</td><td>hours</td></tr><tr><td>MINUTES</td><td>minutes</td></tr><tr><td>SECONDS</td><td>seconds</td></tr></table>4 Change the setting with the UP/DOWN keys.
5 Press the ENTER key.
* The setting (developing drive time) is stored.
6 Press the stop/clear key.

• Clearing developing drive time
3 Press the ALL key.
4 Press the ENTER key.
* The setting (developing drive time) is cleared.
5 Press the stop/clear key.</td><td>Checking and changing the developing drive time (the time of the image forming motor has been on) from the last simulation 60 running up to now. (Developing drive time is cleared when simulation 60 is run.)</td></tr>
<tr><td>69</td><td>Setting/checking the developer maintenance count
1 Enter “69” with the numeric keys.
2 Press the print key.
* The current setting is displayed.
3 Change the setting with the UP/DOWN keys.
* To clear the count, press the all clear key. (When pressing the all clear key, the setting is set to 000000.)
4 Press the ENTER key or print key.
* The setting is stored.
5 Press the stop/clear key.</td><td>Checking and changing the number of copies with current developer. (Developer count is cleared when simulation 60 is run.)</td></tr>
</table>

Sim. No.	Description	Remarks
70	**Initializing backup memory** 1 Enter “70” with the numeric keys. 2 Press the print key. 3 Press the interrupt key. * The following data in memory is initialized.	To be run when replacing the backup PCB.

Description	Default	Sim No.
Setting machine number	000000	09
Setting folio size (metric models only)		14
LENGTH DATA	330	
WIDTH DATA	210	
Adjusting the slack amount before registration		15
DECK DATA	11	
BYPASS DATA	24	
DUPLEX DATA	15	
Adjusting for duplex unit		18
STEPPER	–2	
TIME	0	
Setting exposure amount (for equal magnification mode)		24
NORMAL MODE		
LOW ADJUST	4	
HIGH ADJUST	4	
NPTC DOWN DATA	6	
LIGHT ADJUST	3	
PHOTO MODE		
LOW ADJUST	4	
EXP7(4)	145	
HIGH ADJUST	4	
AE MODE		
NTC DATA	180	
NPTC DATA	470	
Adjusting lateral magnification	0	25
Adjusting longitudinal magnification	0	26
Adjusting appropriate exposure (Light potential)	400	27
Setting the lens unit rank		28
ax–rank		
50%	0	
100%	0	
200%	0	
al–rank		
50%	0	
100%	0	
200%	0	

Sim. No.	Description	Remarks
70 (Cont.)		

Description	Default	Sim No.
Adjusting the exposure amount for enlargement/reduction mode		29
50%	5	
200%	5	
Adjusting the transfer timing	0	31
Adjusting the drum surface potential	900	32
Setting the primary initialization control interval	5	38
Adjusting DF registration		52
NORMAL		
ADF	0	
RADF	0	
2 IN 1		
LEFT	0	
RIGHT	0	
Setting blank cut margins		54
LEAD EDGE		
50%	–3	
100%	0	
200%	22	
AC EDGE	1	
TRAIL EDGE		
PAPER	–6	
PAPER (DUPLEX)	–6	
ORIGINAL	2	
BOOK EDGE		
BOOK EDGE 1	0	
BOOK EDGE 2	0	
Adjusting the leading edge registration		56
50%	0	
100%	0	
200%	0	
Selecting the key card/key counter	Not selected	58
Setting punch hole modes		59
PUNCH NUMBER	UPPER: 2/ LOWER4(5)	
LIMIT DATA	20000	
5 HOLE PITCH	PITCH 1	
Setting the toner sensor control reference voltage	80	62

Sim. No.	Description	Remarks
70 (Cont.)		

Description	Default	Sim No.
Adjusting developing bias voltage		64
NORMAL DATA	82	
PHOTO DATA	115	
Checking/setting the developing drive time	Cleared	68
Setting/checking the developer maintenance count	0 (cleared)	69
Setting the maintenance counter preset value	200 (200000 copies)	71
Checking/clearing the maintenance count	0 (cleared)	72
Checking/clearing jam counts	0 (All cleared)	74
Setting the service call phone No	*********	75
Changing/clearing service call counts	0 (All cleared)	76
Changing/clearing copy counts by paper source	0 (All cleared)	77
Changing/clearing counts by RDH or sorter	0 (All cleared)	78
Setting the maintenance near indication	000	79
Switching between double/single count	DOUBLE COUNT	80
Selecting newspaper original exposure mode	MODE 0	81
Setting the auto clear time	90 s	84
Setting the auto preheat/energy saver time	OFF	85
Selecting between paper feed/eject count	FEED	89
Ignoring the self-diagnostic function	All 0000 (detected)	90
Setting operation under the toner empty condition		91
Number of copies that can be made	100 copies	
Copy mode possible	Single copies only	
Setting between auto start on/off	ON	92
Setting the destination	JAPAN METRIC	93
Switching modes		94
Turning the E2000 function on/off	OFF	
Turning the preheat/energy saver function on/off	NORMAL MODE	
Selecting duplex mode as the default	OFF	
Setting the number of exposure steps	SPACIAL AREA	

4 Press the stop/clear key.

* Take the following procedure after running simulation 70.

1) Run simulation 55 (Initializing the touch screen).
2) Rum simulation 93 to select the destination.
3) Run all the simulations above and reenter the setting data recorded on the simulation label.

Sim. No.	Description	Remarks
71	**Setting the maintenance counter preset value** 1 Enter “71” with the numeric keys. 2 Press the print key. * The current setting is displayed. 3 Change the setting with the UP/DOWN keys. * Setting range: 0 - 600 * The correlation between the setting and maintenance cycle is as follows: Maintenance cycle = Setting × 1000 (copies) For example, if the setting is 10, the maintenance cycle will be 10,000 copies. When the setting is 0, the maintenance display will be canceled. 4 Press the ENTER key. * The setting is stored. 5 Press the stop/clear key.	Checking or changing the maintenance cycle.
72	**Checking/clearing the maintenance count** 1 Enter “72” with the numeric keys. 2 Press the print key. * The current setting is displayed. • Changing the current setting 3 Change the current setting with the numeric keys. 4 Press the ENTER key or print key. * The setting is stored. 5 Press the stop/clear key. • Clearing the setting 3 Press the CLEAR key on the touch screen. 4 Press the ENTER key. * The count resets to 000000. 5 Press the stop/clear key.	*Displaying and clearing the maintenance count.*

Sim. No.	Description	Remarks
74	**Checking/clearing jam counts** 1 Enter “74” with the numeric keys. 2 Press the print key. * The current jam counts are displayed by the jam code in groups of three. 3 Press the UP/DOWN keys to check other jam counts. * The next three counts are displayed as a key is pressed.	*Displaying and clearing jam counts by jam code No.*

Jam cord	Type of paper jam
J013	No paper feed from upper cassette
J014	No paper feed from lower cassette
J015	No paper feed from bypass table
J016	No paper feed from duplex unit
J017	Jam in vertical paper conveying section
J018	Jam in desk vertical paper conveying section
J019	Jam in duplex conveying section
J023	Jam in converging section
J024	Multiple sheets in paper feed section
J025	Multiple sheets in copier vertical conveying section
J026	Multiple sheets in duplex section
J027	Multiple sheets before registration section
J030	Jam in registration/transfer section
J040	Jam in fixing/eject section
J051	Jam in feedshift section
J060	Jam in eject section
J070	No original feed from RDH
J071	Jam in paper feed section in RDH
J072	Jam in conveying belt in RDH
J073	Jam in RDH loop section
J074	Jam in eject section in RDH
J080	Jam between copier and sorter

Sim. No.	Description	Remarks
74 (Cont.)		

Jam cord	Type of paper jam
J081	Jam at sorter entrance
J082	Jam in conveying section for non-sort bin
J083	Jam in eject section for non-sort bin
J084	Jam in conveying section for sort bins
J085	Jam in eject section for sort bins
J090	Jam in post-sorting section
J091	Jam at stacker entrance
J092	Jam in stacker conveying section
J093	Jam in stacker eject section

The following jam codes are only displayed.

J010	*J012*
J011	*J050*

• Clearing some jam counts by the jam code

4 Press the key corresponding to the jam code to be cleared.

5 Press the ENTER key.

* The selected jam code count reverts to 000000.

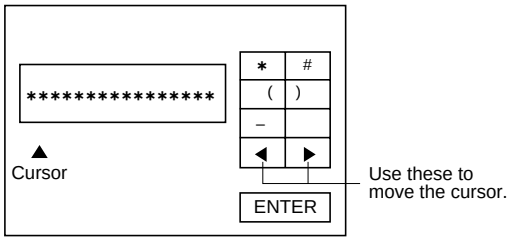
6 Press the stop/clear key.

• Clearing all the jam counts

4 Press the ALL key.

5 Press the ENTER key.

* All the jam counts revert to 000000.

Sim. No.	Description	Remarks
75	**Setting the service call phone No.** 1 Enter “75” with the numeric keys. 2 Press the print key. * The current telephone No. is displayed. 3 Enter a new telephone No. using the numeric keys and keys on the touch screen.  **Figure 3-2-6** 4 Press the ENTER key. * The new No. is stored.	Setting the telephone No. to be displayed when a service call No. is triggered.

Sim. No.	Description	Remarks
76	**Checking/clearing service call counts** 1 Enter “76” with the numeric keys. 2 Press the print key. * The current counts are displayed by the service call code in groups of three. 3 Press the UP/DOWN keys to display another three sets of counts.	*Displaying and clearing service call counts by call code (including disabled function mode (partial operation control function) and alarm).*

Call code	Service call name
C010	Backup memory data problem
C020	RAM read/write problem
C030	CPU communication problem
C031	Scanner CPU communication problem
C032	RDH communication problem
C033	Sorter communication problem
C034	Sub CPU communication problem
C100	Exposure problem
C210	Drive motor problem
C220	Duplex side registration motor problem
C230	Image forming motor problem
C240	Paper feed motor problem
C253	Upper cassette lift motor problem
C254	Lower cassette lift motor problem
C255	Large paper deck right/left lift motor problem
C310	Scanner motor lock
C311	Scanner home position switch problem
C320	Scanner motor problem 1
C321	Scanner motor problem 2
C322	Scanner motor problem 3
C330	Scanner control PCB problem 1
C331	Scanner control PCB problem 2
C337	Scanner watch dog problem
C340	Scanner microcomputer problem
C410	Lens carriage motor problem
C430	Mirror motor problem
C510	Main charger problem
C520	Abnormally high voltage of the transfer charger belt
C550	Drum surface potential sensor problem 1
C551	Drum surface potential sensor problem 2
C560	Potential correction problem 1 (MAX)
C561	Potential correction problem 2 (MIN)

Sim. No.	Description	Remarks
76 (Cont.)		

Call code	Service call name
C570	Light amount correction problem 1 (MAX)
C571	Light amount correction problem 2 (MIN)
C610	Broken fixing heater M·S wire
C630	Broken fixing unit thermistor wire
C640	Fixing unit thermistor short circuit/abnormally high fixing temperature
C650	Detection of low fixing temperature after fixing is stabilized.
C710	Toner sensor problem
C720	Broken drum thermistor wire
C730	Drum thermistor wire short circuit
C731	Broken drum heater wire
C751	Broken outside temperature thermistor wire
C752	Outside thermistor short circuit
C753	Broken developing thermistor wire
C754	Developing thermistor short circuit
C760	Toner hopper problem
C810	*Sorter paper conveying motor problem*
C811	Sorter conveying motor circuit problem
C820	*Sorter bin unit motor problem*
C821	Sorter shift motor circuit problem
C830	*Sorter table motor problem*
C831	Sorter bin sliding motor problem
C832	*Sorter paper holder motor problem*
C833	Sorter side registration motor problem
C840	Sorter bin unit upper limit detected
C841	Sorter bin unit lower limit detected
C850	*Sorter punch motor problem*
C851	*Sorter stapler motor problem*
C852	Sorter stapler motor circuit problem
C860	Sorter shutter problem
C861	*Sorter hand motor problem*
C862	Multihand problem
C863	Multicommunication problem
C864	*Sorter intermediate tray motor problem*
C865	*Sorter stack tray motor problem*
C870	*Sorter arm solenoid problem*
C910	RDH original feed motor problem
C920	RDH original conveying motor problem
C930	RDH original eject motor problem
C940	RDH original moving plate problem
C941	RDH original partition plate problem

<table>
<tr><th>Sim. No.</th><th>Description</th><th>Remarks</th></tr>
<tr><td>76
(Cont.)</td><td>
The following call codes are only displayed.
<table>
<tr><td>C035</td><td>C521</td><td>C950</td><td>C963</td></tr>
<tr><td>C250</td><td>C750</td><td>C951</td><td>C970</td></tr>
<tr><td>C251</td><td>C864</td><td>C960</td><td>C971</td></tr>
<tr><td>C252</td><td>C865</td><td>C961</td><td>C990</td></tr>
<tr><td>C420</td><td>C870</td><td>C962</td><td>C991</td></tr>
</table>
• Clearing some service call counts by the call code
4 Press the key corresponding to the call code to be cleared.
5 Press the ENTER key.
* The selected call code count reverts to 000000.
6 Press the stop/clear key.

• Clearing all the service call counts
4 Press the ALL key.
5 Press the ENTER key.
* All the service call counts revert to 000000.
</td><td></td></tr>
<tr><td>77</td><td>
Checking/clearing copy counts by paper source
1 Enter “77” with the numeric key.
2 Press the print key.
* The current copy counts are displayed by the paper source in groups of three.
3 Press the UP/DOWN keys to display another three sets of counts.
<table>
<tr><th>Key</th><th>Paper source</th></tr>
<tr><td>BYPASS</td><td>Bypass table</td></tr>
<tr><td>LCF</td><td>Large paper deck</td></tr>
<tr><td>D DECK</td><td>Upper paper feed cassette</td></tr>
<tr><td>E DECK</td><td>Lower paper feed cassette</td></tr>
<tr><td>DUPLEX</td><td>Duplex unit</td></tr>
</table>
• Clearing the copy counts by the paper source
4 Press the key for the paper source to be cleared.
5 Press the ENTER key.
* The counts for the paper source revert to 000000.
6 Press the stop/clear key.
</td><td>Displaying and clearing copy counts by paper source.</td></tr>
</table>

<table>
<tr><th>Sim. No.</th><th>Description</th><th>Remarks</th></tr>
<tr><td>77
(Cont.)</td><td>• Clearing all the copy counts
4 Press the ALL key.
5 Press the ENTER key.
* All the counts reset to 000000.</td><td></td></tr>
<tr><td>78</td><td>Checking/clearing counts by RDH or sorter
1 Enter “78” with the numeric keys.
2 Press the print key.
* The function select screen is displayed.
3 Press the key corresponding to the desired setting item.
* Setting screen corresponding to the pressed key and the current count is displayed.
<table>
<tr><th>Key</th><th>Items</th></tr>
<tr><td>DF</td><td>Checking/clearing the RDH counts</td></tr>
<tr><td>SORTER</td><td>Checking/clearing the sorter counts</td></tr>
</table>
• Checking or clearing the RDH counts
4 Press the key corresponding to the count to be clear.
<table>
<tr><th>Key</th><th>Counts</th></tr>
<tr><td>CHANGE</td><td>Original replacement count</td></tr>
<tr><td>ADF</td><td>Number of originals that has passed RDH in ADF mode</td></tr>
<tr><td>RADF</td><td>Number of originals that has passed RDH in RADF mode</td></tr>
</table>
5 Press the ENTER key.
* The selected counts reverts to 000000.
6 Press the stop/clear key.
* The function select screen reappears.
7 Press the stop/clear key.</td><td>Displaying and clearing counts by RDH or sorter.</td></tr>
</table>

<table>
<tr><th>Sim. No.</th><th>Description</th><th>Remarks</th></tr>
<tr><td>78
(Cont.)</td><td>• Checking or clearing the sorter counts
4 Press the key corresponding to the count to be cleared.
<table><tr><th>Key</th><th>Items</th></tr><tr><td>COPY COUNT</td><td>Number of copies that has passed the sorter</td></tr><tr><td>STAPLE</td><td>Number of copies that has passed the stapler</td></tr><tr><td>PUNCH</td><td>Frequency the punch has been activated</td></tr><tr><td>STACKER</td><td>Frequency the stacker has been activated</td></tr></table>5 Press the ENTER key.
* The selected counts reverts to 000000.
6 Press the stop/clear key.
* The function select screen reappears.
7 Press the stop/clear key.</td><td></td></tr>
<tr><td>79</td><td>Setting the maintenance near indication
1 Enter “79” with the numeric keys.
2 Press the print key.
* The current setting is displayed.
3 Change the setting with the numeric keys.
* If the maintenance count reaches the value indicated below, the maintenance near indication (maintenance is near) is displayed.
Maintenance count = maintenance cycle – maintenance near indication setting
4 Press the ENTER key.
* The setting is stored.</td><td>Setting the maintenance near indication timing.</td></tr>
</table>

<table>
<tr><th>Sim. No.</th><th>Description</th><th>Remarks</th></tr>
<tr><td>80</td><td>Switching between double/single count
1 Enter “80” with the numeric keys.
2 Press the print key.
3 Press the key corresponding to the desired counting method.
<table><tr><th>Key</th><th>Counting method</th></tr><tr><td>DOUBLE COUNT</td><td>Only A3/11” × 17” copies are counted as doubles.</td></tr><tr><td>SINGLE COUNT</td><td>All sizes of copies are counted as singles.</td></tr></table>4 Press the ENTER key.
* The setting is completed.</td><td>Switching the total counter counting method between double and single.</td></tr>
<tr><td>81</td><td>Selecting newspaper original exposure mode
1 Enter “81” with the numeric keys.
2 Press the print key.
3 Press the key corresponding to the desired exposure mode.
<table><tr><th>Key</th><th>Newspaper original exposure mode</th></tr><tr><td>MODE 1</td><td>Normal mode</td></tr><tr><td>MODE 2</td><td>Image density importance mode</td></tr></table>4 Press the ENTER key.
* The setting is completed.</td><td>Switching the newspaper original exposure mode between normal mode and Image density importance mode.</td></tr>
<tr><td>84</td><td>Setting the auto clear time
1 Enter “84” with the numeric keys.
2 Press the print key.
* The current setting is displayed.
3 Change the setting with the UP/DOWN keys.
* Setting range: 0 and 30 - 270 s
With the setting at 0, the auto clear function is canceled.
* The setting changes by 30 with a press of the UP/DOWN keys.
4 Press the ENTER key.
* The new setting is stored.</td><td>Checking and setting the auto clear time.</td></tr>
</table>

<table>
<tr><th>Sim. No.</th><th>Description</th><th>Remarks</th></tr>
<tr><td>85</td><td>Setting the auto preheat/energy saver time
1 Enter “85” with the numeric keys.
2 Press the print key.
3 Press the key corresponding to the desired setting.
<table><tr><th>Key</th><th>Contents</th></tr><tr><td>ON</td><td>Auto preheat/energy saver function on</td></tr><tr><td>OFF</td><td>Auto preheat/energy saver function off</td></tr></table>* When ON is selected, the auto preheat/energy saver time is set to the default of 15 minutes, allowing the user to further adjust it using the user setting.
4 Press the ENTER key.
* The setting is completed.</td><td>Changing auto preheat/energy saver function ON/OFF.</td></tr>
<tr><td>89</td><td>Selecting between paper feed/eject count
1 Enter “89” with the numeric keys.
2 Press the print key.
3 Press the key corresponding to the desired count timing.
<table><tr><th>Key</th><th>Count timing</th></tr><tr><td>COUNT UP: FEED</td><td>At the start of secondary paper feed</td></tr><tr><td>COUNT UP: EJECT</td><td>When the eject switch turns off</td></tr></table>4 Press the ENTER key.
* The setting is completed.</td><td>Switching the timing when the number of copies is counted up.</td></tr>
</table>

<table>
<tr><th>Sim. No.</th><th>Description</th><th>Remarks</th></tr>
<tr><td>90</td><td>
Ignoring the self-diagnostic function
1 Enter “90” with the numeric keys.
2 Press the print key.
* The current settings are displayed by the service call code in groups of three.
3 Press the UP/DOWN keys to display another three sets of counts.
<table>
<tr><th>Display</th><th>Setting (operation)</th></tr>
<tr><td>0000</td><td>Cancellation on (Ignore the detection)</td></tr>
<tr><td>0001</td><td>Cancellation off (Detected)</td></tr>
</table>
• Cancelable service calls
<table>
<tr><th>Call code</th><th>Service call name</th></tr>
<tr><td>C100</td><td>Exposure problem</td></tr>
<tr><td>C210</td><td>Drive motor problem</td></tr>
<tr><td>C220</td><td>Duplex side registration motor problem</td></tr>
<tr><td>C230</td><td>Image forming motor problem</td></tr>
<tr><td>C240</td><td>Paper feed motor problem</td></tr>
<tr><td>C253</td><td>Upper cassette lift motor problem</td></tr>
<tr><td>C254</td><td>Lower cassette lift motor problem</td></tr>
<tr><td>C255</td><td>Large paper deck right/left lift motor problem</td></tr>
<tr><td>C310</td><td>Scanner motor lock</td></tr>
<tr><td>C311</td><td>Scanner home position switch problem</td></tr>
<tr><td>C320</td><td>Scanner motor problem 1</td></tr>
<tr><td>C321</td><td>Scanner motor problem 2</td></tr>
<tr><td>C322</td><td>Scanner motor problem 3</td></tr>
<tr><td>C330</td><td>Scanner control PCB problem 1</td></tr>
<tr><td>C331</td><td>Scanner control PCB problem 2</td></tr>
<tr><td>C337</td><td>Scanner watch dog problem</td></tr>
<tr><td>C340</td><td>Scanner microcomputer problem</td></tr>
<tr><td>C410</td><td>Lens carriage motor problem</td></tr>
<tr><td>C430</td><td>Mirror motor problem</td></tr>
<tr><td>C510</td><td>Main charger problem</td></tr>
<tr><td>C520</td><td>Abnormally high voltage of the transfer charger belt</td></tr>
<tr><td>C550</td><td>Drum surface potential sensor problem 1</td></tr>
<tr><td>C551</td><td>Drum surface potential sensor problem 2</td></tr>
<tr><td>C560</td><td>Potential correction problem 1 (MAX)</td></tr>
<tr><td>C561</td><td>Potential correction problem 2 (MIN)</td></tr>
</table>
</td><td>To enable copying by disabling activated service calls.</td></tr>
</table>

Sim. No.	Description	Remarks
90 (Cont.)		

Call code	Service call name
C570	Light amount correction problem 1 (MAX)
C571	Light amount correction problem 2 (MIN)
C610	Broken fixing heater M·S wire
C630	Broken fixing unit thermistor wire
C640	Fixing unit thermistor short circuit/abnormally high fixing temperature
C650	Detection of low fixing temperature after fixing is stabilized.
C710	Toner sensor problem
C720	Broken drum thermistor wire
C730	Drum thermistor wire short circuit
C731	Broken drum heater wire
C751	Broken external temperature thermistor wire
C752	Outer thermistor short circuit
C753	Broken developing thermistor wire
C754	Developing thermistor short circuit
C760	Toner hopper problem

The following call codes are only displayed.

C250	*C252*	*C521*
C251	*C420*	*C750*

• Canceling or resuming individual service calls

4 Press call key that is desired to change the setting.

* The selected service call setting changes.

5 Press the ENTER key.

* The setting for the selected service call is changed.

6 Press the stop/clear key.

• Setting developing related call code (*1)

4 Press the ALL key.

* The all setting of the developing related call code is changed to "0001" (detected).

5 Press the ENTER key.

* The setting is completed.

*1: C710, C753 and C754

<table>
<tr><th>Sim. No.</th><th>Description</th><th>Remarks</th></tr>
<tr><td>91</td><td>Setting operation under the toner empty condition
1 Enter “91” with the numeric keys.
2 Press the print key.
3 Set the number of copies that can be made under the toner empty condition with the UP/DOWN keys.
* Setting range: 0 - 200
When “0” is set, no copies can be made.
4 Press the ENTER key.
* The setting is stored.
5 Press the key corresponding to the desired copy mode.
<table><tr><th>Key</th><th>Copy mode</th></tr><tr><td>SINGLE MODE</td><td>Single copies only</td></tr><tr><td>CONTINUE MODE</td><td>Continuous copying possible</td></tr></table>6 Press the ENTER key.
* The setting is completed.</td><td>Setting the number of copies that can be made and the copy mode under the toner empty condition.</td></tr>
<tr><td>92</td><td>Setting between auto start on/off
1 Enter “92” with the numeric keys.
2 Press the print key.
3 Press the key corresponding to the desired setting.
<table><tr><th>Key</th><th>Contents</th></tr><tr><td>ON</td><td>Auto start function on</td></tr><tr><td>OFF</td><td>Auto start function off</td></tr></table>4 Press the ENTER key.
* The setting is completed.</td><td>Changing auto start function ON/OFF.</td></tr>
</table>

<table>
<tr><th>Sim. No.</th><th>Description</th><th>Remarks</th></tr>
<tr><td>93</td><td>
Setting the destination
1 Enter “93” with the numeric keys.
2 Press the print key.
3 Press the key corresponding to the destination.
<table>
<tr><th>Key</th><th>Contents</th></tr>
<tr><td>JAPAN METRIC</td><td>Japanese (Metric)</td></tr>
<tr><td>INCH</td><td>USA (Inch)</td></tr>
<tr><td>EUROPE METRIC</td><td>Europe (Metric)</td></tr>
<tr><td>ASIA PACIFIC</td><td>Asia and Oceania (Metric)</td></tr>
</table>
4 Press the ENTER key.
* The setting is completed.
5 Press the stop/clear key.

Important: After the destination has been set, the contents of simulations “59”, “79”, “80”, “84”, “85”, “92” and “94” are automatically changed as follows:
<table>
<tr><th>Setting in the Sim. 93</th><th>Setting in the Sim. 59 (punch modes)</th></tr>
<tr><td>JAPAN METRIC</td><td>PUNCH NUMBER: UPPER: 2 LOWER: 4(5)
LIMIT DATA: 20000
5 HOLE PITCH: PITCH 1</td></tr>
<tr><td>INCH</td><td>PUNCH NUMBER: UPPER: 2 LOWER: 3
LIMIT DATA: 20000
5 HOLE PITCH: PITCH 1</td></tr>
<tr><td>EUROPE METRIC</td><td>PUNCH NUMBER: UPPER: 2 LOWER: 4(5)
LIMIT DATA: 20000
5 HOLE PITCH: PITCH 1</td></tr>
<tr><td>ASIA PACIFIC</td><td>PUNCH NUMBER: UPPER: 2 LOWER: 4(5)
LIMIT DATA: 20000
5 HOLE PITCH: PITCH 1</td></tr>
</table>
</td><td>To be run when replacing the backup PCB.
(See Page 3-4-1)</td></tr>
</table>

Sim. No.	Description	Remarks
93 (Cont.)		

Setting in the Sim. 93	Setting in the Sim. 79 (Setting the maintenance near indication)	Setting in the Sim. 80 (count method)	*Setting in the Sim. 84 (auto clear time)*
JAPAN METRIC	000	Single count	120 s
INCH	000	Double count	90 s
EUROPE METRIC	000	Double count	90 s
ASIA PACIFIC	000	Double count	90 s

Setting in the Sim. 93	Setting in the Sim. 79 (Setting the maintenance near indication)	Setting in the Sim. 92 (auto start)	Setting in the Sim. 94 (exposure steps)
JAPAN METRIC	ON	ON	NORMAL MODE
INCH	ON	ON	SPECIAL MODE
EUROPE METRIC	ON	ON	SPECIAL MODE
ASIA PACIFIC	ON	ON	SPECIAL MODE

<table>
<tr><th>Sim. No.</th><th>Description</th><th>Remarks</th></tr>
<tr><td>94</td><td>
Switching modes
1 Enter “94” with the numeric keys.
2 Press the print key.
* The function select screen is displayed.
3 Press the key corresponding to the desired content.
* Setting screen corresponding to the pressed key is displayed.
<table>
<tr><th>Key</th><th>Contents</th></tr>
<tr><td>E2000 mode</td><td>Turning the E2000 function on/off</td></tr>
<tr><td>Pre-heat mode</td><td>Turning the preheat/energy saver function on/off</td></tr>
<tr><td>Duplex mode</td><td>Selecting duplex mode as the default</td></tr>
<tr><td>Manual exp. range</td><td>Setting the number of exposure steps</td></tr>
</table>
• Setting the E2000 function
4 Press the key corresponding to the setting.
<table>
<tr><th>Key</th><th>Contents</th></tr>
<tr><td>ON</td><td>E2000 function on</td></tr>
<tr><td>OFF</td><td>E2000 function off</td></tr>
</table>
* When setting E2000 function is set to the enable, the machine is controlled with E2000 that is the energy specification in Switzerland.
5 Press the ENTER key.
* The setting is stored, then the function select screen reappears.
6 Press the stop/clear key.
</td><td>Switching among E2000 function, preheat function, duplex mode, and manual exposure mode.</td></tr>
</table>

<table>
<tr><th>Sim. No.</th><th>Description</th><th>Remarks</th></tr>
<tr><td>94
(Cont.)</td><td>
• Setting the preheat/energy saver function
4 Press the key corresponding to the setting.
<table>
<tr><th>Key</th><th>Contents</th></tr>
<tr><td>INSTANT READY</td><td>Only the display on the operation panel is turned off.</td></tr>
<tr><td>30s READY</td><td>Normal copy mode is forcibly resumed 30s after the cancellation of the mode.</td></tr>
<tr><td>NORMAL</td><td>Normal copy mode is resumed when the fixing temperature is 175°C after the cancellation of the mode.</td></tr>
</table>
5 Press the ENTER key.
* The setting is stored, then the function select screen reappears.
6 Press the stop/clear key.

• Setting the duplex priority mode
4 Press the key corresponding to the setting.
<table>
<tr><th>Key</th><th>Contents</th></tr>
<tr><td>ON</td><td>Duplex mode as default</td></tr>
<tr><td>OFF</td><td>Simplex mode as default</td></tr>
</table>
5 Press the ENTER key.
* The setting is stored, then the function select screen reappears.
6 Press the stop/clear key.

• Setting the exposure steps
4 Press the key corresponding to the setting.
<table>
<tr><th>Key</th><th>Contents</th></tr>
<tr><td>SPECIAL AREA</td><td>25 steps (special mode)</td></tr>
<tr><td>NORMAL</td><td>13 steps (normal mode)</td></tr>
</table>
5 Press the ENTER key.
* The setting is stored, then the function select screen reappears.
6 Press the stop/clear key.
</td><td></td></tr>
</table>

Sim. No.	Description	Remarks
99	**Initializing the MMD host monitoring system** See page 3-2-52.	