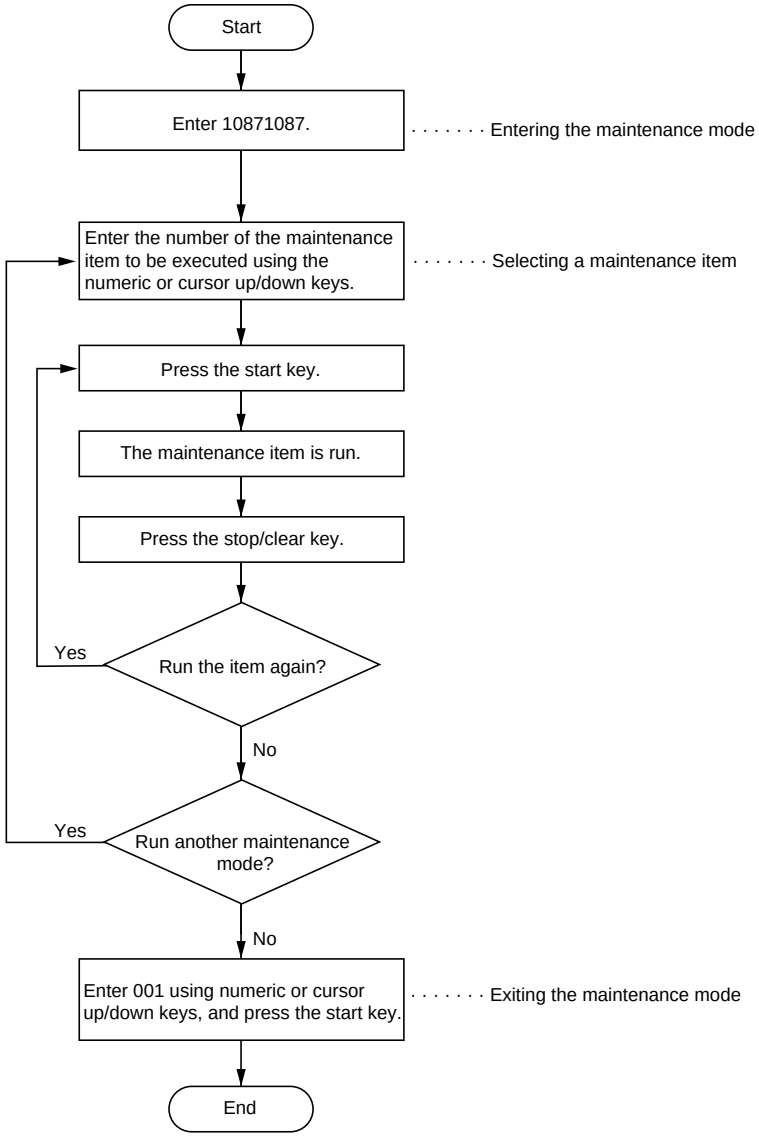
## 3-2-1 Maintenance mode

The copier is equipped with a maintenance function which can be used to maintain and service the machine.

**(1) Executing a maintenance item**



• Data setting

Data is changed by pressing the cursor left/right keys, and the new data is set by pressing the start key. In a maintenance item where multiple items can be changed, the item to be changed is selected by pressing the cursor up/down keys.

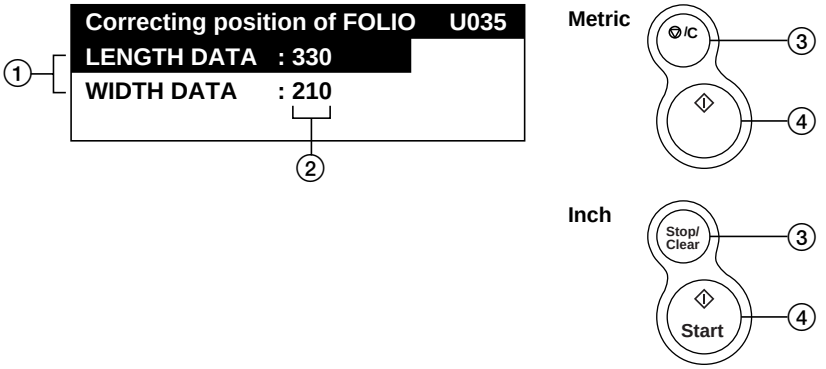



**Figure 3-2-1**

① Items ..... Displays the selected item in reverse.
② Setting ..... Displays the current setting.
③ Stop/clear key ..... Cancels the change.
④ Start key ..... Sets the changed setting.

• Operation execution
The specified operations and auto adjustments are performed by pressing the start key. In a maintenance item where multiple operations can be performed, the item to be executed is selected by pressing the cursor up/down keys.

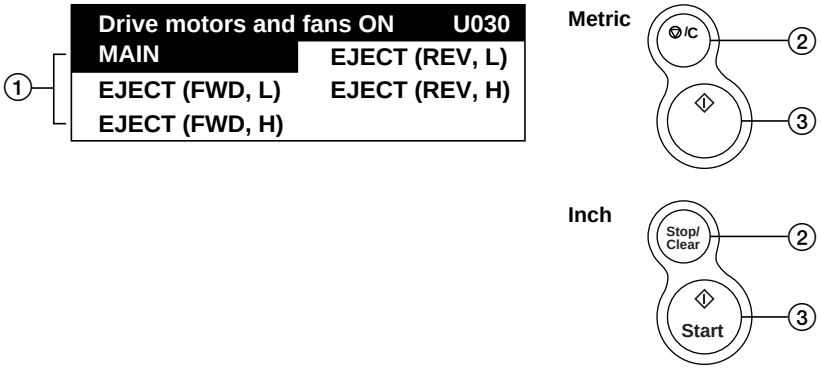



**Figure 3-2-2**

① Items ····· Displays the selected item in reverse.
② Stop/clear key ····· Stops operation.
③ Start key ····· Starts operation.

• Interrupt copy mode
Outputting a test copy or PG pattern is required in some maintenance items. Such an output is enabled by pressing the interrupt key to enter interrupt copy mode.
However, since this function is restricted depending on maintenance items, only outputting may be enabled, or a test copy even from an original may not be as good as that made in normal copy mode.
To return the screen from interrupt copy mode to maintenance mode, press the interrupt key again.

**(2) Maintenance mode item list**

| Section | Item No. | Maintenance item contents | Initial setting* |
|---|---|---|---|
| General | U000 | Outputting an own-status report | ——— |
| | U001 | Exiting the maintenance mode | ——— |
| | U003 | Setting the service telephone number | ——— |
| | U004 | Setting the machine number | ——— |
| | U005 | Copying without paper | ——— |
| | U019 | Displaying the ROM version | ——— |
| Initialization | U020 | Initializing all data | ——— |
| | U021 | Initializing memories | ——— |
| | U022 | Initializing backup data | ——— |
| Drive, paper feed, paper conveying and cooling system | U030 | Checking motor operation | ——— |
| | U031 | Checking switches for paper conveying | ——— |
| | U032 | Checking clutch operation | ——— |
| | U033 | Checking solenoid operation | ——— |
| | U034 | Adjusting the print start timing<br>• Adjusting the leading edge registration of image printing<br>• Adjusting the leading edge registration of image printing for duplex copying<br>• Adjusting the center line of image printing<br>• Adjusting the center line of image printing for duplex copying | <br>+0.5<br>0<br>–0.5<br>0.0 |
| | U035 | Setting folio size<br>• Length<br>• Width | <br>330<br>210 |
| | U051 | Adjusting the amount of slack in the paper<br>• Regist data<br>• Feed data | <br>———<br>——— |
| | U053 | Performing fine adjustment of the motor speed<br>• Drive motor<br>• Feedshift motor<br>• Polygon motor | <br>3<br>7<br>0 |
| | U059 | Setting the cooling fan mode | MODE 0 |
| Optical | U060 | Adjusting the scanner input properties<br>• Text/text and photo/photo mode | <br>12 |
| | U061 | Turning the exposure lamp on | ——— |
| | U063 | Adjusting the shading position | 0 |

* Initial setting for executing maintenance item U020

| Section | Item No. | Maintenance item contents | Initial setting* |
|---|---|---|---|
| Optical | U065 | Adjusting the scanner magnification<br>• Main scanning direction/auxiliary scanning direction | 0 |
| | U066 | Adjusting the leading edge registration for scanning an original on the contact glass | 0 |
| | U067 | Adjusting the center line for scanning an original on the contact glass | 0 |
| | U070 | Adjusting the DF magnification | 0 |
| | U071 | Adjusting the DF scanning timing | 0 |
| | U072 | Adjusting the DF center line | 0 |
| | U073 | Checking scanner operation | ——— |
| | U074 | Adjusting the DF input light luminosity | 4 |
| | U087 | Turning the DF scanning position adjust mode on/off | OFF |
| | U088 | Setting the input filter (moiré reduction mode) | OFF |
| | U091 | Checking shading | ——— |
| | U092 | Adjusting the scanner automatically | ——— |
| | U093 | Setting the exposure density gradient<br>• Text/text and photo/photo mode | 0 |
| | U099 | Checking the original size detection | ——— |
| High voltage | U100 | Setting the surface potential | 193 |
| | U101 | Setting high voltages<br>• Developing bias<br>• Transfer voltage<br>• Transfer voltage output timing | 191/34<br>168<br>0 |
| | U110 | Checking/clearing the drum count | ——— |
| | U111 | Checking/clearing the drum drive time | ——— |
| Develop-ing | U130 | Initial setting for the developer | ——— |
| | U131 | Setting the toner sensor control voltage | 170 |
| | U132 | Replenishing toner forcibly | ——— |
| | U135 | Checking toner feed motor operation | ——— |
| | U155 | Displaying the toner sensor output | ——— |
| | U156 | Changing the toner control level<br>• Toner feed start level<br>• Toner empty level | 138<br>44 |
| | U157 | Checking/clearing the developing drive time | ——— |
| | U158 | Checking/clearing the developing count | ——— |

* Initial setting for executing maintenance item U020

| Section | Item No. | Maintenance item contents | Initial setting* |
|---|---|---|---|
| Fixing and cleaning | U161 | Setting the fixing control temperature<br>• Normal stabilization fixing temperature<br>• Primary stabilization fixing temperature<br>• Secondary stabilization fixing temperature<br>• Degree of temperature to be reduced from CONT TEMP during duplex copying<br>• Aging time after secondary stabilization | <br>175<br>170<br>175<br>10<br><br>10 |
| | U162 | Stabilizing fixing forcibly | ——— |
| | U196 | Turning the fixing heater on | ——— |
| | U199 | Checking the fixing temperature | ——— |
| Operation panel and support equipment | U200 | Turning all LEDs on | ——— |
| | U202 | Setting the MMD host monitoring system | ——— |
| | U203 | Operating DF separately | ——— |
| | U204 | Setting the presence or absence of a key card or key counter | ——— |
| | U206 | Setting the presence or absence of the coin vender | OFF |
| | U208 | Setting the paper size for the large paper deck | A4 |
| | U210 | Reversing the LCD | OFF |
| | U243 | Checking the operation of the DF motors, solenoids and clutch | ——— |
| | U244 | Checking the DF switches | ——— |
| | U245 | Checking messages | ——— |
| | U247 | Checking the operation of the large paper deck and paper feed desk | ——— |
| | U249 | Checking the paper ejection to optional devices | ——— |
| Mode setting | U250 | Setting the maintenance cycle | 45 |
| | U251 | Checking/clearing the maintenance count | ——— |
| | U252 | Setting the destination | JAPAN |
| | U253 | Switching between double and single counts | DOUBLE COUNT |
| | U254 | Turning auto start function on/off | ON |
| | U255 | Setting auto clear time | 120 |
| | U256 | Turning auto preheat/energy saver function on/off | ON |
| | U258 | Switching copy operation at toner empty detection | SINGLE MODE, 70 |
| | U260 | Changing the copy count timing | EJECT |
| | U343 | Switching between duplex/simplex copy mode | OFF |

* Initial setting for executing maintenance item U020

| Section | Item No. | Maintenance item contents | Initial setting* |
|---|---|---|---|
| Mode setting | U344 | Setting preheat/energy saver mode | ENERGY STAR |
| | U345 | Setting the value for maintenance due indication | 0 |
| | U347 | Setting auto drawer size detection | ON |
| | U348 | Setting the copy density adjustment range | SPECIAL AREA |
| Image processing | U402 | Adjusting margins of image printing | ——— |
| | U403 | Adjusting margins for scanning an original on the contact glass | ——— |
| | U404 | Adjusting margins for scanning an original from the DF | ——— |
| | U407 | Adjusting the leading edge registration for memory image printing | ——— |
| Others | U901 | Checking/clearing copy counts by paper feed locations | ——— |
| | U903 | Checking/clearing the paper jam counts | ——— |
| | U904 | Checking/clearing the service call counts | ——— |
| | U905 | Checking/clearing counts by optional devices | ——— |
| | U906 | Resetting partial operation control | ——— |
| | U990 | Checking/clearing the time for the exposure lamp to light | ——— |
| | U993 | Outputting a VTC-PG pattern | ——— |

* Initial setting for executing maintenance item U020

<table>
<tr><th>Maintenance item No.</th><th>Description</th></tr>
<tr><td>U100</td><td>

**Setting the surface potential**

**Description**
Changes the surface potential by changing the grid control voltage. Also performs main charging.

**Purpose**
To set the surface potential or check main charging. Also used when reentering data after replacing the backup RAM or initializing the set data.

**Start**
Press the start key. The screen for selecting an item is displayed.

<table>
<tr><th>Display</th><th>Description</th></tr>
<tr><td>MC DATA<br>MC ON<br>LASER ON/OFF</td><td>Changing the grid control voltage<br>Turning the main charger on<br>Turning the main charger on and the laser scanner unit on and off</td></tr>
</table>

**Method for main charger output**
1. Select either MC ON or LASER ON/OFF using the cursor up/down keys.
2. Press the start key. The selected operation starts.
3. To stop operation, press the stop/clear key.

**Setting the grid control voltage**
1. Select MC DATA using the cursor up/down keys.
2. Change the setting using the cursor left/right keys.

<table>
<tr><th>Description</th><th>Setting range</th><th>Initial setting</th></tr>
<tr><td>Grid control voltage</td><td>0 to 255</td><td>193</td></tr>
</table>

Increasing the setting makes the surface potential higher, and decreasing it makes the potential lower.
Change in value per step: approximately 3.6 V

3. Press the start key. The value is set.

**Interrupt copy mode**
While this maintenance item is being performed, copying from an original can be made in interrupt copy mode.

**Completion**
Press the stop/clear key at the screen for selecting an item when main charger output stops. The screen for selecting a maintenance item No. is displayed.

</td></tr>
</table>

| Maintenance item No. | Description |
|---|---|
| U101 | **Setting high voltages**<br>**Description**<br>Changes the developing bias voltage and transfer voltage by changing the developing bias control voltage and transfer control voltage. Also checks the transfer output voltage.<br>**Purpose**<br>To check and change high voltages other than the main charger voltage.<br>**Start**<br>1. Press the start key. The screen for selecting an item is displayed.<br>2. Select the item to be set or checked using the cursor up/down keys.<br>3. Press the start key. The screen for the selected item is displayed. |

| Display | Description |
|---|---|
| DEV BIAS SET | Setting the developing bias |
| TC SET | Setting and checking the transfer voltage |

**Setting the developing bias**

1. Select the item to be adjusted using the cursor up/down keys. The selected item is displayed in reverse.
2. Change the setting using the cursor left/right keys.

| Display | Description | Setting range | Initial setting |
|---|---|---|---|
| DB DATA | Developing bias control voltage during image formation | 0 to 255 | 191 |
| DB DATA2 | Developing bias control voltage during no image formation | 0 to 255 | 34 |

Increasing the setting makes the developing bias higher and the image darker; decreasing it makes the bias lower and the image lighter.

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

| Maintenance item No. | Description |
|---|---|
| U101 (cont.) | **Setting the transfer voltage**<br>1. Select the item to be adjusted using the cursor up/down keys. The selected item is displayed in reverse.<br>2. Change the TC DATA setting using the cursor left/right keys. |

| Display | Description | Setting range | Initial setting |
|---|---|---|---|
| TC DATA<br>TC TIMING | Transfer control voltage<br>Transfer voltage output timing | 0 to 255<br>–100 to +100 | 168<br>0 |

Increasing the TC DATA setting makes the transfer voltage higher, and decreasing it makes the voltage lower.
Increasing the TC TIMING setting makes the transfer voltage output timing later and improves paper separation performance.

3. Press the start key. The value is set.
4. To check the transfer voltage output, select TC ON using the cursor up/down keys and press the start key. The currently set transfer voltage is output.
5. To stop the transfer voltage output, press the stop/clear key.
6. To return to the screen for selecting an item, press the stop/clear key after the transfer voltage output is stopped.

**Interrupt copy mode**
While this maintenance item is being performed, copying from an original can be made in interrupt copy mode.

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

| Maintenance item No. | Description |
|---|---|
| U110 | **Checking/clearing the drum count**<br>**Description**<br>Displays the drum counts for checking, clearing or changing the figure, which is used as a reference when correcting the main charger potential output.<br>**Purpose**<br>To check the drum status. Also used to clear the count after replacing the drum during regular maintenance.<br>Since the count was cleared before shipping, do not clear it when installing.<br>**Method**<br>Press the start key. The drum counter count is displayed.<br>**Clearing**<br>1. Select CLEAR using the cursor up/down keys.<br>2. Press the start key. The count is cleared, and the screen for selecting a maintenance item No. is displayed.<br>**Setting**<br>1. Enter a six-digit count using the numeric keys.<br>2. Press the start key. The count is set, and the screen for selecting a maintenance item No. is displayed.<br>**Completion**<br>To exit the maintenance mode without changing the count, press the stop/clear key. The screen for selecting a maintenance item No. is displayed. |

| Maintenance item No. | Description |
|---|---|
| U111 | **Checking/clearing the drum drive time**<br>**Description**<br>Displays the drum drive time for checking, clearing or changing a figure, which is used as a reference when correcting the high voltage based on time.<br>**Purpose**<br>To check the drum status. Also used to clear the drive time after replacing the drum.<br>**Method**<br>Press the start key. The drum drive time is displayed in minutes.<br>**Clearing**<br>1. Select CLEAR using the cursor up/down keys.<br>2. Press the start key. The time is cleared, and the screen for selecting a maintenance item No. is displayed.<br>**Setting**<br>1. Enter a five-digit drive time (in minutes) using the numeric keys.<br>2. Press the start key. The time is set, and the screen for selecting a maintenance No. is displayed.<br>**Completion**<br>To exit this maintenance item without changing the time, press the stop/clear key. The screen for selecting a maintenance item No. is displayed. |

<table>
<tr><th>Maintenance item No.</th><th>Description</th></tr>
<tr><td>U130</td><td>
Initial setting for the developer<br>
Description<br>
Automatically sets the toner sensor control voltage and toner feed start level for the installed developer.<br>
Purpose<br>
To set the initial settings for the developer when installing the machine or replacing the developer.<br>
Caution<br>
Before performing the initial setting for the developer, remove the transfer roller (see page 3-3-53).<br>
Method<br>
1. Press the start key. The screen for executing is displayed.<br>
2. Press the start key. The initial settings for the developer is set, and the result is displayed.
<table>
<tr><th>Display</th><th>Description</th></tr>
<tr><td>INPUT<br>CONTROL<br>TARGET<br>HUMID</td><td>Toner sensor output value<br>Toner sensor control voltage<br>Toner feed start level<br>Absolute humidity</td></tr>
</table>
Supplement<br>
The following data is also renewed or cleared by performing this maintenance item:<br>
• Renewing the toner sensor control voltage (U131)<br>
• Renewing the toner feed start level (U156)<br>
• Clearing the developing drive time (U157)<br>
• Clearing the developing count (U158)<br>
• Resetting the toner feed start level and toner empty detection<br>
Completion<br>
After initial setting is complete, press the stop/clear key. 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>U131</td><td>
Setting the toner sensor control voltage<br>
Description<br>
Displays or changes the toner sensor control voltage automatically set in maintenance item U130.<br>
Purpose<br>
To check the automatically set toner sensor control voltage. Also to change the toner density if an image is too dark or light.<br>
Method<br>
Press the start key. The current setting for the toner sensor control voltage is displayed.<br>
Setting<br>
1. Change the setting using the cursor left/right keys.
<table>
<tr><th>Description</th><th>Setting range</th><th>Initial setting</th></tr>
<tr><td>Toner sensor control voltage</td><td>0 to 255</td><td>170</td></tr>
</table>
Increasing the setting makes the density higher, and decreasing it makes the density lower.<br>
Increasing the setting too high may result in toner scattering.<br>
2. Press the start key. The value is set.<br>
Completion<br>
Press the stop/clear key. 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>U132</td><td>
Replenishing toner forcibly<br>
Description<br>
Replenishes toner forcibly until the toner sensor output value reaches the toner feed start level.<br>
Purpose<br>
Used when the toner empty is detected frequently.<br>
Method<br>
1. Press the start key. The screen for executing is displayed.<br>
2. Press the start key. Operation starts, and the current data is displayed.<br>
Toner is replenished until the toner sensor output value reaches the toner feed start level.
<table>
<tr><th>Display</th><th>Description</th></tr>
<tr><td>INPUT</td><td>Toner sensor output value after start key is pressed</td></tr>
<tr><td>TARGET</td><td>Current toner feed start level</td></tr>
<tr><td>CONTROL</td><td>Current toner sensor control voltage</td></tr>
<tr><td>HUMID</td><td>Absolute humidity</td></tr>
</table>
3. To stop operation, press the stop/clear key.<br>
Completion<br>
Press the stop/clear key when toner replenishment stops. 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>U135</td><td>
Checking toner feed motor operation<br>
Description<br>
Drives the toner feed motor.<br>
Purpose<br>
To check the operation of the toner feed motor.<br>
Caution<br>
Note that driving the motor unnecessarily long may cause a toner jam, resulting in machine lockup. Be sure to drive the motor for only a few seconds.<br>
Method<br>
1. Press the start key. The screen for executing is displayed.<br>
2. Press the start key. The toner feed motor turns on.<br>
3. To stop operation, press the stop/clear key.<br>
Completion<br>
Press the stop/clear key when operation stops. The screen for selecting a maintenance item No. is displayed.
</td></tr>
<tr><td>U155</td><td>
Displaying the toner sensor output<br>
Description<br>
Displays the toner sensor output value, and related data.<br>
Purpose<br>
To check the toner sensor output value.<br>
Method<br>
1. Press the start key. The screen for executing is displayed.<br>
2. Press the start key. The current data is displayed.
<table>
<tr><th>Display</th><th>Description</th></tr>
<tr><td>INPUT</td><td>Toner sensor output value after start key is pressed</td></tr>
<tr><td>TARGET</td><td>Current toner feed level (value corrected based on humidity and drive time)</td></tr>
<tr><td>CONTROL</td><td>Current toner sensor control voltage</td></tr>
<tr><td>HUMID</td><td>Absolute humidity</td></tr>
</table>
3. Press the stop/clear key. The sampling operation stops.<br>
Completion<br>
Press the stop/clear key. 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>U156</td><td>
Changing the toner control level<br>
Description<br>
Changes the toner feed start level set in maintenance item U130 or the toner empty level to be determined by the difference from the toner feed start level.<br>
Purpose<br>
To check the toner feed start level and toner empty level.<br>
Method<br>
Press the start key. The screen for selecting an item is displayed.
<table>
<tr><th>Display</th><th>Description</th></tr>
<tr><td>TARGET<br>EMPTY</td><td>Toner feed start level<br>Difference between the toner feed start level and toner empty level</td></tr>
</table>
Setting for the toner feed start level<br>
1. Select TARGET using the cursor up/down keys.<br>
2. Change the setting using the cursor left/right key.
<table>
<tr><th>Description</th><th>Setting range</th></tr>
<tr><td>Toner feed start level</td><td>0 to 255</td></tr>
</table>
Increasing the setting makes the toner density lower.<br>
3. Press the start key. The value is set.<br>
Setting for the toner empty level<br>
1. Select EMPTY using the cursor up/down keys.<br>
2. Change the setting using the cursor left/right key.
<table>
<tr><th>Description</th><th>Setting range</th></tr>
<tr><td>Difference between the toner feed start level and the toner empty level</td><td>0 to 255</td></tr>
</table>
Increasing the setting makes the toner empty level higher: the toner density is lower when the toner empty is detected.<br>
3. Press the start key. The value is set.<br>
Completion<br>
Press the stop/clear key. The screen for selecting maintenance item No. is displayed.
</td></tr>
</table>

| Maintenance item No. | Description |
|---|---|
| U157 | **Checking/clearing the developing drive time**<br>**Description**<br>Displays the developing drive time for checking, clearing or changing a figure, which is used as a reference when correcting the toner control. It is automatically cleared when U130 is executed.<br>**Purpose**<br>To check the developing drive time after replacing the developer.<br>**Method**<br>Press the start key. The developing drive time is displayed in minutes.<br>**Clearing**<br>1. Select CLEAR using the cursor up/down keys.<br>2. Press the start key. The time is cleared, and the screen for selecting a maintenance item No. is displayed.<br>**Setting**<br>1. Enter a five-digit drive time (in minutes) using the numeric keys.<br>2. Press the start key. The time is set, and the screen for selecting a maintenance item No. is displayed.<br>**Completion**<br>To exit this maintenance item without changing the time, press the stop/clear key. The screen for selecting a maintenance item No. is displayed. |
| U158 | **Checking/clearing the developing count**<br>**Description**<br>Displays the developing count for checking, clearing or changing a figure, which is used as a reference when correcting the toner control. It is automatically cleared when U130 is executed.<br>**Purpose**<br>To check the developing count after replacing the developer.<br>**Method**<br>Press the start key. The developing count is displayed.<br>**Clearing**<br>1. Select CLEAR using the cursor up/down keys.<br>2. Press the start key. The count is cleared, and the screen for selecting a maintenance item No. is displayed.<br>**Setting**<br>1. Enter a six-digit count using the numeric keys.<br>2. Press the start key. The count is cleared, and the screen for selecting a maintenance item No. is displayed.<br>**Completion**<br>To exit this maintenance item without changing the count, press the stop/clear key. The screen for selecting a maintenance item No. is displayed. |

| Maintenance item No. | Description |
|---|---|
| U161 | **Setting the fixing control temperature**<br>**Description**<br>Changes the fixing control temperature.<br>**Purpose**<br>Normally no change is necessary. However, can be used to prevent curling or creasing of paper, or solve a fixing problem on thick paper.<br>**Method**<br>Press the start key. The screen for selecting an item is displayed.<br>**Setting**<br>1. Select the item to be set using the cursor up/down keys. The selected item is displayed in reverse.<br>2. Change the setting using the cursor left/right keys. |

| Display | Description | Setting range | Initial setting |
|---|---|---|---|
| CONT TEMP | Normal stabilization fixing temperature | 160 to 190 (°C) | 175 |
| 1ST TEMP | Primary stabilization fixing temperature | 150 to 180 (°C) | 170 |
| 2ND TEMP | Secondary stabilization fixing temperature | 160 to 190 (°C) | 175 |
| DUP TEMP | Degree of temperature to be reduced from CONT TEMP during duplex copying | 0 to 20 (°C) | 10 |
| RUN TIME | Aging time after secondary stabilization | 0 to 120 (s) | 10 |

The respective temperatures are to be set such that CONT TEMP ≥ 2ND TEMP ≥ 1ST TEMP.

3. Press the start key. The value is set.

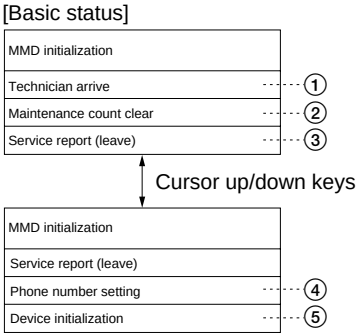
**Completion**

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

<table>
<tr><th>Maintenance item No.</th><th>Description</th></tr>
<tr><td>U162</td><td>
Stabilizing fixing forcibly<br><br>
Description<br>
Stops the stabilization fixing drive forcibly, regardless of fixing temperature.<br><br>
Purpose<br>
To forcibly stabilize the machine before the fixing section reaches stabilization temperature.<br><br>
Method<br>
1. Press the start key. The screen for executing is displayed.<br>
2. Press the start key. The forced stabilization mode is entered, and stabilization operation stops regardless of fixing temperature. The screen for selecting a maintenance item No. is displayed.<br>
To exit the forced stabilization mode, turn the power off and on.<br><br>
Completion<br>
To exit this maintenance item without executing forced fixing stabilization, press the stop/clear key.
</td></tr>
<tr><td>U196</td><td>
Turning the fixing heater on<br><br>
Description<br>
Turns the fixing heater M or S on.<br><br>
Purpose<br>
To check fixing heaters.<br><br>
Method<br>
1. Press the start key. The screen for selecting an item is displayed.<br>
2. Select the heater to be turned on using the cursor up/down keys.<br>
3. Press the start key. The selected heater turns on for 3 s and then turns off.<br><br>
<table>
<tr><th>Display</th><th>Description</th></tr>
<tr><td>MAIN<br>SUB</td><td>Fixing heater M (H1)<br>Fixing heater S (H2)</td></tr>
</table>
<br>
Completion<br>
Press the stop/clear key when fixing heaters M and S are off. The screen for selecting the maintenance item No. is displayed.
</td></tr>
</table>

| Maintenance item No. | Description |
|---|---|
| U199 | **Checking the fixing temperature**<br>**Description**<br>Displays the fixing temperature and the ambient temperature.<br>**Purpose**<br>To check the fixing temperature and the ambient temperature.<br>**Method**<br>Press the start key. The fixing temperature and ambient temperature are displayed in centigrade (°C).<br>**Completion**<br>Press the stop/clear key. The screen for selecting a maintenance item No. is displayed. |
| U200 | **Turning all LEDs on**<br>**Description**<br>Turns all the LEDs on the operation panel on.<br>**Purpose**<br>To check if all the LEDs on the operation panel light.<br>**Method**<br>Press the start key. All the LEDs on the operation panel light.<br>Press the stop/clear key or wait for 10 s. The LEDs turns off, and the screen for selecting a maintenance item No. is displayed. |

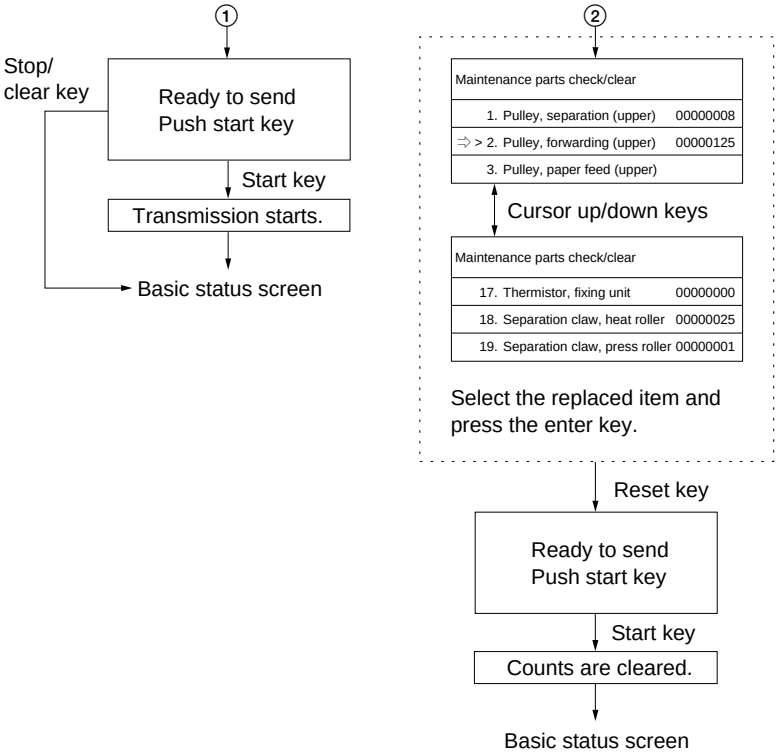
| Maintenance item No. | Description |
|---|---|
| U202 | **Setting the MMD host monitoring system**<br>**Description**<br>Initializes or operates the MMD host monitoring system*.<br>* Optional for 120 V specifications only.<br>**Purpose**<br>Used when setting up the machine or during regular maintenance or repair.<br>**Method**<br>1. Press the start key. The basic status screen is displayed.<br>2. Select the item to be executed using the cursor up/down keys and press the start key. The screen for executing is displayed.<br>3. Operate the device following the instructions on the screen.<br>**Completion**<br>Press the stop/clear key on the basic status screen. The screen for selecting a maintenance item No. is displayed. |



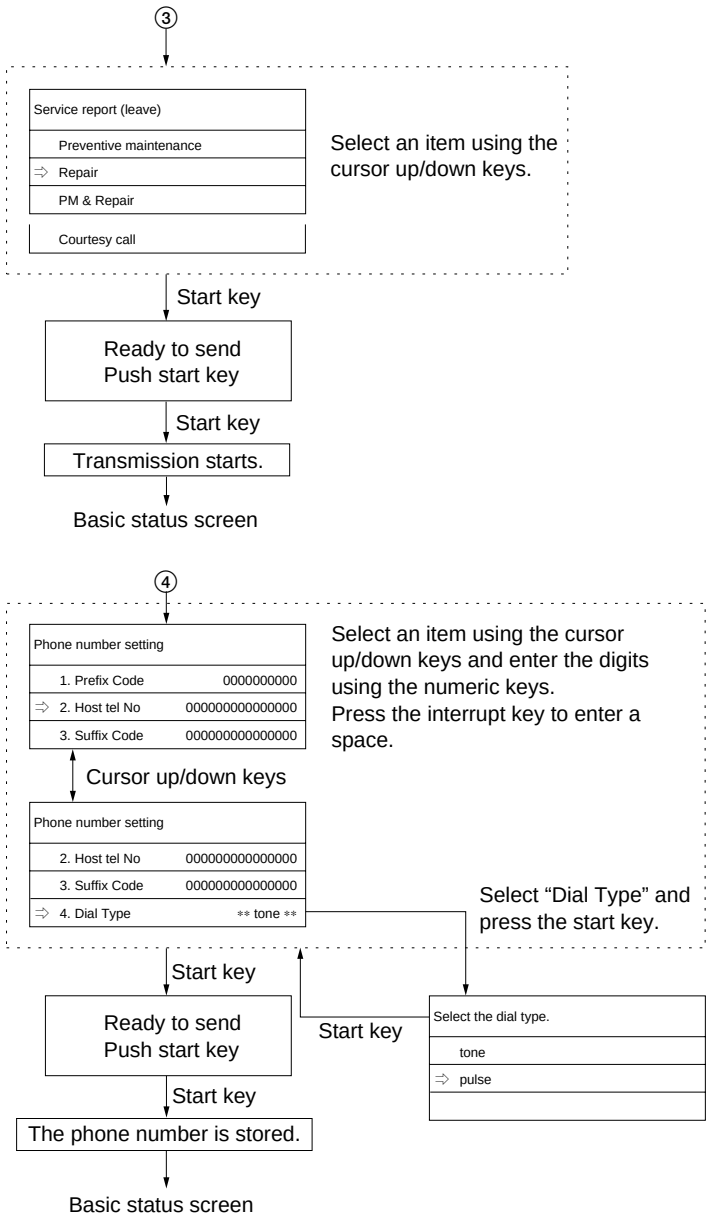

- During regular maintenance or service, run the following items in order:
  - Technician arrive ①
  - Maintenance count clear ②
  - Service report (leave) ③

- To initialize the MMD host monitoring system, run the following items in order:
  - Phone number setting ④
  - Device initialization ⑤

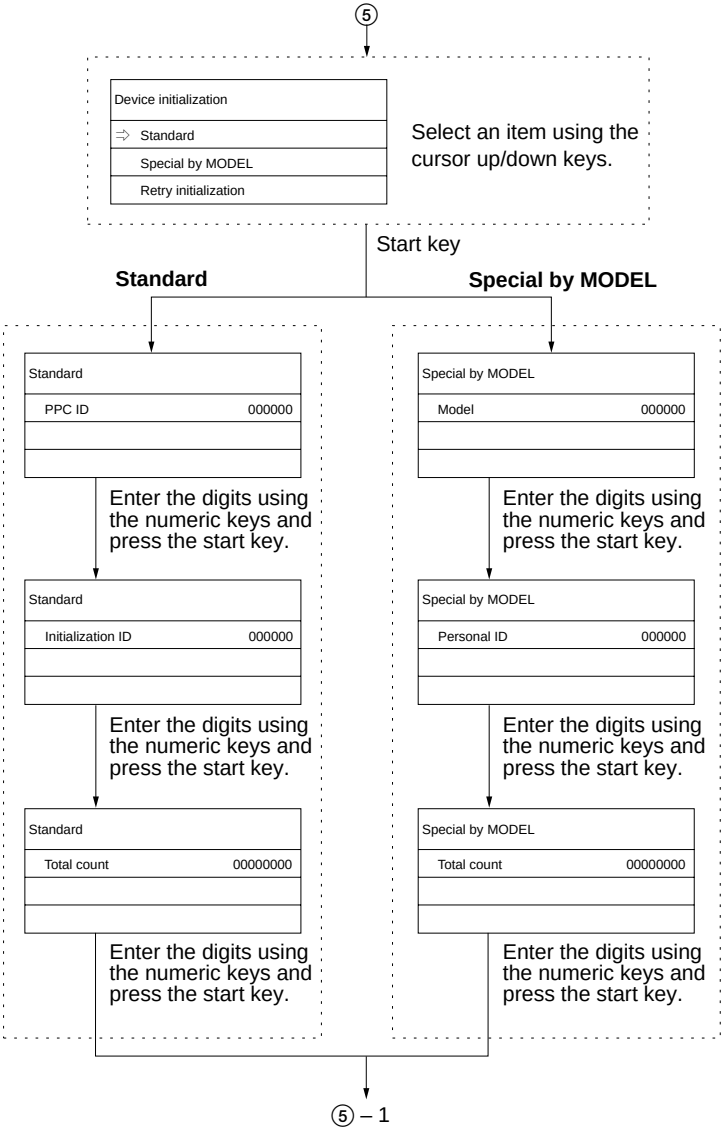
| Maintenance item No. | Description |
|---|---|



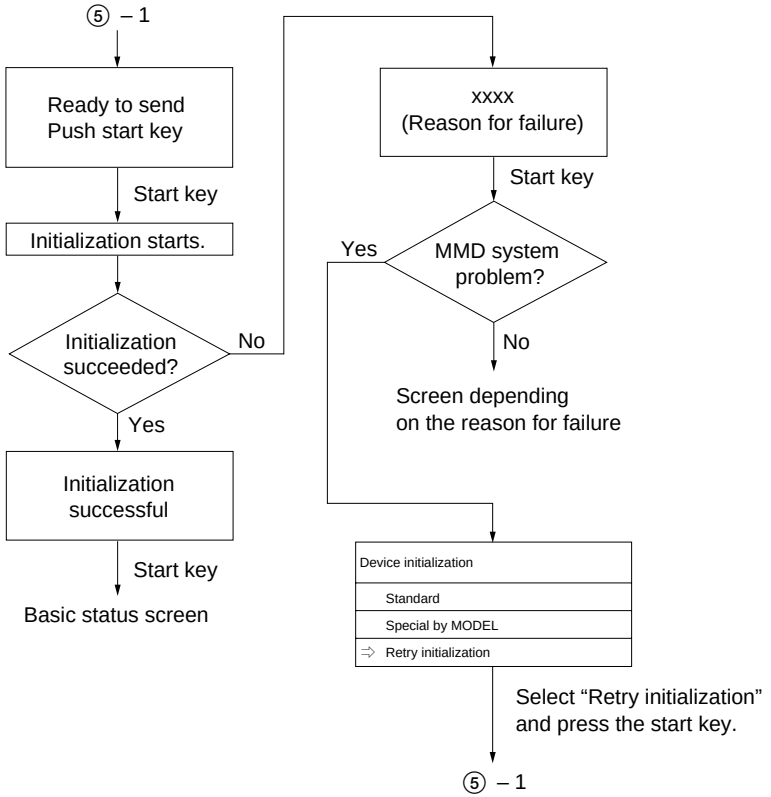
| Maintenance item No. | Description |
|---|---|



| Maintenance item No. | Description |
|---|---|



| Maintenance item No. | Description |
|---|---|



<table>
<tr><th>Maintenance item No.</th><th>Description</th></tr>
<tr><td>U203</td><td>
Operating DF separately<br>
Description<br>
Simulates the original conveying operation separately in the optional SRDF.<br>
Purpose<br>
To check the SRDF.<br>
Method<br>
1. Press the start key. The screen for selecting an item is displayed.<br>
2. Place an original in the SRDF if running this simulation with paper.<br>
3. Select the item to be operated using the cursor up/down keys. The selected item is displayed in reverse.
<table>
<tr><th>Display</th><th>Operation</th></tr>
<tr><td>ADF</td><td>With paper, single-sided original</td></tr>
<tr><td>RADF</td><td>With paper, double-sided original</td></tr>
<tr><td>ADF (NON-P)</td><td>Without paper, single-sided original (continuous operation)</td></tr>
<tr><td>RADF (NON-P)</td><td>Without paper, double-sided original (continuous operation)</td></tr>
</table>
4. Press the start key. The operation starts.<br>
5. To stop continuous operation, press the stop/clear key.<br>
Completion<br>
Press the stop/clear key when the operation stops. 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>U204</td><td>
Setting the presence or absence of a key card or key counter<br>
Description<br>
Sets the presence or absence of the optional key card or key counter.<br>
Purpose<br>
It is not necessary to run this maintenance item if a key card is installed on a 120 V specification machine. A key card is not available for 220 – 240 V specifications.<br>
Method<br>
Press the start key.<br>
Setting<br>
1. Select the optional counter to be installed using the cursor up/down keys. The selected counter is displayed in reverse.
<table>
<tr><th>Display</th><th>Description</th></tr>
<tr><td>KEY CARD<br>KEY COUNTER</td><td>The key card is installed<br>The key counter is installed</td></tr>
</table>
2. Press the start key. The setting is set and the screen for selecting a maintenance item No. is displayed.<br>
Completion<br>
To exit this maintenance item without changing the current setting, press the stop/clear key. The screen for selecting a maintenance item No. is displayed.
</td></tr>
</table>

| Maintenance item No. | Description |
|---|---|
| **U206** | **Setting the presence or absence of the coin vender**<br>**Description**<br>Sets the presence or absence of the optional coin vender. Also sets the details for coin vender operation, such as mode and unit price.<br>This is an optional device which is currently supported only by Japanese specification machines, so no setting is necessary. |
| **U208** | **Setting the paper size for the large paper deck**<br>**Description**<br>Sets the size of paper used in the optional large paper deck. Note that the setting cannot be changed on inch-specification machines since the paper size for the large paper deck is fixed.<br>**Purpose**<br>To change the setting when the size of paper used in the large paper deck is changed.<br>**Method**<br>Press the start key. The screen for selecting an item is displayed.<br>**Setting**<br>1. Select the paper size (A4 or B5) using the cursor up/down keys. Initial setting: A4<br>2. Press the start key. The setting is set, and the screen for selecting a maintenance item No. is displayed.<br>**Completion**<br>To exit this maintenance item without changing the current setting, press the stop/clear key. The screen for selecting a maintenance item No. is displayed. |

<table>
<tr><th>Maintenance item No.</th><th>Description</th></tr>
<tr><td>U210</td><td>
Reversing the LCD<br><br>
Description<br>
Sets whether to reverse the message display (LCD) in the operation panel.<br><br>
Purpose<br>
To reverse the message display.<br><br>
Method<br>
Press the start key. The screen for selecting an item is displayed.<br><br>
Setting<br>
1. Select ON or OFF using the cursor up/down keys.<br><br>
<table>
<tr><th>Display</th><th>Description</th></tr>
<tr><td>ON<br>OFF</td><td>Reverse<br>Normal</td></tr>
</table>
Initial setting: OFF<br><br>
2. Press the start key. The setting is set, and the screen for selecting a maintenance item No. is displayed.<br><br>
Completion<br>
To exit this maintenance item without changing the current setting, press the stop/clear key. The screen for selecting a maintenance item No. is displayed.
</td></tr>
</table>

| Maintenance item No. | Description |
|---|---|
| U243 | **Checking the operation of the DF motors, solenoids and clutch**<br>**Description**<br>Turns the motors, solenoids or clutch in the optional SRDF on.<br>**Purpose**<br>To check the operation of the SRDF motors, solenoids and clutch.<br>**Method**<br>1. Press the start key. The screen for selecting an item is displayed.<br>2. Select the item to be operated using the cursor up/down keys.<br>3. Press the start key. The operation starts. |

| Display | Motors, solenoids and clutch | Operation |
|---|---|---|
| F MOT | Original feed motor (OFM) | In operation |
| C MOT | Original paper conveying motor (OCM) | In operation |
| FD CL | Original feed clutch (OFCL) | On for 0.5 s |
| EJ SL | Eject feedshift solenoid (EFSSOL) | On for 0.5 s |
| RJ SL | Switchback feedshift solenoid (SBFSSOL) | On for 0.5 s |
| FD SL | Original feed solenoid (OFSOL) | On and off |
| RP SL | Switchback pressure solenoid (SBPSOL) | On and off |

4. To turn each motor off, press the stop/clear key.

**Completion**
Press the stop/clear key when operation stops. The screen for selecting a maintenance item No. is displayed.

<table>
<tr><th>Maintenance item No.</th><th>Description</th></tr>
<tr><td>U244</td><td>
Checking the DF switches<br>
Description<br>
Displays the status of the respective switches in the optional SRDF.<br>
Purpose<br>
To check if respective switches in the optional SRDF operate correctly.<br>
Start<br>
1. Press the start key. The screen for selecting an item is displayed.<br>
2. Select the type of switches (SW or VR) to be checked using the cursor up/down keys.<br>
3. Press the start key. The screen for executing is displayed.<br>
<table>
<tr><th>Display</th><th>Type of switches</th></tr>
<tr><td>SW<br>VR</td><td>On/off switches<br>Volume switch</td></tr>
</table>
Method for the on/off switches<br>
1. Turn the respective switches on and off manually to check the status. If the on-status of a switch is detected, the corresponding switch is displayed in reverse.<br>
<table>
<tr><th>Display</th><th>Switches</th></tr>
<tr><td>SET SW<br>FEED SW<br>REV SW<br>TMG SW<br>SZ A SW</td><td>Original set switch (OSSW)<br>Original feed switch (OFSW)<br>Original switchback switch (OSBSW)<br>DF timing switch (DFTSW)<br>Original size length switch (OSLSW)</td></tr>
</table>
2. To return to the screen for selecting an item, press the stop/clear key.<br>
Method for the volume switch<br>
1. Move the original insertion guides to check the detection status of the original size width switch.<br>
The detected original width is displayed as a numerical value with the decimals omitted.
</td></tr>
</table>

| Maintenance item No. | Description |
|---|---|
| U244 (cont.) | |

| Numerical value | Original width to be detected |
|---|---|
| 000 | |
| 49.664 | A5R |
| 50.176 | |
| 61.440 | |
| 61.952 | B5R |
| 103.936 | |
| 104.448 | Folio/A4R |
| 139.264 | |
| 139.776 | |
| 146.432 | B4/B5 |
| 146.994 | |
| 197.120 | |
| 197.632 | CF (11" × 15") |
| 197.720 | |
| 223.232 | A3/A4 |
| 256 | |

$5^1/_2$" × $8^1/_2$"

$8^1/_2$" × 14"/
$8^1/_2$" × 11"

11" × 17"/
11" × 15"/
11" × $8^1/_2$"

For example, if any value between 105 and 139 is displayed when the original insertion guides are adjusted for A4R paper, it indicates that the original width is detected correctly.

2. 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>U245</td><td>
Checking messages<br><br>
Description<br>
Displays a list of messages and graphics to be displayed.<br><br>
Purpose<br>
To check the messages and graphics to be displayed.<br><br>
Method<br>
1. Press the start key. The screen for selecting an item is displayed.<br>
2. Select either messages or graphics using the cursor up/down keys.<br>
3. Press the start key. The message display screen or graphic display screen is displayed.<br>
4. Enter the message number or graphic number to be checked using the numeric keys and press the start key. The selected message or graphic is displayed.<br>
5. To check the messages in the listing order, use the cursor up/down keys.<br>
6. To return to the screen for selecting an item, press the stop/clear key.<br><br>
Completion<br>
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>U247</td><td>
Checking the operation of the large paper deck and paper feed desk<br><br>
Description<br>
Turns on motors and clutches of the optional large paper deck or the optional paper feed desk.<br><br>
Purpose<br>
To check the operation of motors and clutches of the respective paper feed devices.<br><br>
Start<br>
1. Press the start key. The screen for selecting an item is displayed.<br>
2. Select the paper feed device to be checked using the cursor up/down keys.<br>
3. Press the start key. The screen for executing is displayed.<br><br>
<table>
<tr><th>Display</th><th>Paper feed device</th></tr>
<tr><td>3000 DECK<br>500 × 2 DESK</td><td>Large paper deck<br>Paper feed desk</td></tr>
</table>
</td></tr>
</table>

| Maintenance item No. | Description |
|---|---|
| U247 (cont.) | **Method**<br>1. Select the item to be operated using the cursor up/down keys.<br>2. Press the start key. The operation starts. |

• Large paper deck

| Display | Motors and clutches | Operation |
|---|---|---|
| LCF MOT | Deck paper conveying motor (CM) | On for 5 s |
| B CL | Paper conveying clutch (CCL) | On for 1 s |
| PCL1 | Paper feed clutch 1 (PFCL1) | On for 1 s |
| PCL2 | Paper feed clutch 2 (PFCL2) | On for 1 s |

• Paper feed desk

| Display | Motors and clutches | Operation |
|---|---|---|
| DESK MOT | Desk drive motor (DDM) | On for 5 s |
| FEED CL | Desk feed clutch (DFCL) | On for 1 s |
| UPP CL | Upper desk paper feed clutch (DPFCL-U) | On for 1 s |
| LOW CL | Lower desk paper feed clutch (DPFCL-L) | On for 1 s |

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>U249</td><td>
Checking the paper ejection to optional devices<br>
Description<br>
Ejects paper to an optional mailbox or job separator, or to the ejection slot at the machine left.<br>
Purpose<br>
To check paper conveying operation to optional paper eject devices or the ejection slot at the machine left.<br>
Method<br>
1. Press the start key. The screen for selecting an item is displayed.<br>
2. Select the paper eject location using the cursor up/down keys.<br>
<table>
<tr><th>Display</th><th>Paper eject device</th></tr>
<tr><td>MAIL BOX<br>JOB SEPARATOR<br>LEFT BIN OUTPUT</td><td>Mailbox<br>Job separator<br>Ejection slot at the machine left<br>(finisher not installed)</td></tr>
</table>
3. When selecting the mailbox, specify the mail tray number (1 to 7) to which paper is to be ejected by using the cursor left/right keys. If 0 is selected, paper is ejected to the mail trays in ascending order from mail tray 1 to mail tray 7 repeatedly.<br>
4. Press the interrupt key to enter interrupt copy mode.<br>
5. Make a test copy and check paper ejection.<br>
Completion<br>
Press the stop/clear key. 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>U250</td><td>
Setting the maintenance cycle<br>
Description<br>
Displays and changes the maintenance cycle.<br>
Purpose<br>
To check and change the maintenance cycle.<br>
Method<br>
Press the start key. The current setting is displayed as follows:<br>
Maintenance cycle (number of copies) = setting × 1000<br>
Setting<br>
1. Change the setting using the cursor left/right keys.
<table>
<tr><th>Description</th><th>Setting range</th><th>Initial setting</th><th>Change in value per step</th></tr>
<tr><td>Maintenance cycle</td><td>0 to 600</td><td>45</td><td>1000 (copies)</td></tr>
</table>
For example, when set to 120, the maintenance cycle is set to 120000.<br>
2. Press the start key. The value is set, and the screen for selecting a maintenance item No. is displayed.<br>
Completion<br>
To exit this maintenance item without changing the current setting, press the stop/clear key. The screen for selecting a maintenance item No. is displayed.
</td></tr>
<tr><td>U251</td><td>
Checking/clearing the maintenance count<br>
Description<br>
Displays, clears and changes the maintenance count.<br>
Purpose<br>
To check the maintenance count. Also to clear the count during maintenance service.<br>
Method<br>
Press the start key. The maintenance count is displayed.<br>
Clearing<br>
1. Select CLEAR using the cursor up/down keys.<br>
2. Press the start key. The count is cleared, and the screen for selecting a maintenance item No. is displayed.<br>
Setting<br>
1. Enter a six-digit count using the numeric keys.<br>
2. Press the start key. The count is set, and the screen for selecting a maintenance item No. is displayed.<br>
Completion<br>
To exit this maintenance item without changing the count, press the stop/clear key. The screen for selecting a maintenance item No. is displayed.
</td></tr>
</table>

| Maintenance item No. | Description |
|---|---|
| U252 | **Setting the destination**<br>**Description**<br>Switches the operations and screens of the machine according to the destination.<br>**Purpose**<br>To be executed after replacing the backup RAM on the main PCB or initializing the backup RAM by running maintenance item U020, in order to return the setting to the value before replacement or initialization.<br>**Method**<br>Press the start key. The screen for selecting an item is displayed.<br>**Setting**<br>1. Select the destination using the cursor up/down keys. The selected item is displayed in reverse. |

| Display | Description |
|---|---|
| JAPAN METRIC | Metric (Japan) specifications |
| INCH | Inch (North America) specifications |
| EUROPE METRIC | Metric (Europe) specifications |
| ASIA PACIFIC | Metric (Asia Pacific) specifications |

2. Press the start key. The setting is set, and the machine automatically returns to the same status as when the power is turned on.

**Completion**
To exit this maintenance item without changing the current count, press the stop/clear key. The screen for selecting a maintenance item No. is displayed.

**Supplement**
The specified initial settings are provided according to the destinations in the maintenance items below. To change the initial settings in those items, be sure to run maintenance item U021 after changing the destination.

• Initial setting according to the destinations

| Maintenance item No. | Title | Japan | Inch | Europe Metric, Asia Pacific |
|---|---|---|---|---|
| 253 | Switching between double and single counts | Single | Double | Double |
| 255 | Setting auto clear time | 120 s | 90 s | 90 s |
| 348 | Setting the copy density adjustment range | Normal | Special area | Special area |

<table>
<tr><th>Maintenance item No.</th><th>Description</th></tr>
<tr><td>U253</td><td>
Switching between double and single counts<br>
Description<br>
Switches the count system for the total counter and other counters.<br>
Purpose<br>
According to user (copy service provider) request, select if A3/11" × 17" paper is to be counted as one sheet (single count) or two sheets (double count).<br>
Method<br>
Press the start key. The screen for selecting an item is displayed.<br>
Setting<br>
1. Select double or single count using the cursor up/down keys.<br>
<table>
<tr><th>Display</th><th>Description</th></tr>
<tr><td>DOUBLE COUNT<br>SINGLE COUNT</td><td>Double count for A3/11" × 17" paper only<br>Single count for all size paper</td></tr>
</table>
Initial setting: DOUBLE COUNT<br>
2. Press the start key. The setting is set, and the screen for selecting a maintenance item No. is displayed.<br>
Completion<br>
To exit this maintenance item without changing the current setting, press the stop/clear key. 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>U254</td><td>
Turning auto start function on/off<br><br>
Description<br>
Selects if the auto start function is turned on.<br><br>
Purpose<br>
Normally no change is necessary. If incorrect operation occurs, turn the function off: this may solve the problem.<br><br>
Method<br>
Press the start key. The screen for selecting an item is displayed.<br><br>
Setting<br>
1. Select either ON or OFF using the cursor up/down keys. The selected item is displayed in reverse.<br><br>
<table>
<tr><th>Display</th><th>Description</th></tr>
<tr><td>ON<br>OFF</td><td>Auto start function on<br>Auto start function off</td></tr>
</table>
Initial setting: ON<br><br>
2. Press the start key. The setting is set, and the screen for selecting a maintenance item No. is displayed.<br><br>
Completion<br>
To exit this maintenance item without changing the current setting, press the stop/clear key. 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>U255</td><td>
Setting auto clear time<br>
Description<br>
Sets the time to return to initial settings after copying is complete.<br>
Purpose<br>
To be set according to frequency of use. Set to a comparatively long time for continuous copying at the same settings, and a comparatively short time for frequent copying at various settings.<br>
Method<br>
Press the start key. The current setting is displayed.<br>
Setting<br>
1. Change the setting using the cursor left/right keys.
<table>
<tr><th>Description</th><th>Setting range</th><th>Initial setting</th></tr>
<tr><td>Auto clear time</td><td>0 to 270</td><td>90</td></tr>
</table>
The setting can be changed by 30 s per step.<br>
When set to 0, the auto clear function is cancelled.<br>
2. Press the start key. The value is set, and the screen for selecting a maintenance item No. is displayed.<br>
Completion<br>
To exit this maintenance item without changing the current setting, press the stop/clear key. 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>U256</td><td>
Turning auto preheat/energy saver function on/off<br><br>
Description<br>
Selects if the auto preheat/energy saver function is turned on. When set to ON, the time to enter preheat/energy saver mode can be changed in copy management mode.<br><br>
Purpose<br>
According to user request, to set the preheat time to save energy, or enable copying promptly without the recovery time from preheat mode.<br><br>
Method<br>
Press the start key. The screen for selecting an item is displayed.<br><br>
Setting<br>
1. Select ON or OFF using the cursor up/down keys. The selected item is displayed in reverse.<br><br>
<table>
<tr><th>Display</th><th>Description</th></tr>
<tr><td>ON<br>OFF</td><td>Auto preheat/energy saver function on<br>Auto preheat/energy saver function off</td></tr>
</table>
Initial setting: ON<br><br>
2. Press the start key. The setting is set, and the screen for selecting a maintenance item No. is displayed.<br>
When the setting is changed from OFF to ON, the auto preheat time is set to the initial setting of 15 minutes.<br><br>
Completion<br>
To exit this maintenance item without changing the current setting, press the stop/clear key. 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>U258</td><td>
Switching copy operation at toner empty detection<br>
Description<br>
Selects if continuous copying is enabled after toner empty is detected, and sets the number of copies that can be made after the detection.<br>
Method<br>
Press the start key. The current setting is displayed.<br>
Setting<br>
1. Select single or continuous copying using the cursor up/down keys. The selected item is displayed in reverse.
<table>
<tr><th>Display</th><th>Description</th></tr>
<tr><td>SINGLE MODE<br>CONTINUE MODE</td><td>Enables only single copying.<br>Enables single and continuous copying.</td></tr>
</table>
Initial setting: SINGLE MODE<br>
2. Set the number of copies that can be made using the cursor left/right keys.
<table>
<tr><th>Description</th><th>Setting range</th><th>Initial setting</th></tr>
<tr><td>Number of copies after toner empty detection</td><td>0 to 200 (copies)</td><td>70</td></tr>
</table>
The setting can be changed by 5 copies per step.<br>
When set to 0, the number of copies is not limited regardless of the setting for single or continuous copying.<br>
3. Press the start key. The setting is set, and the screen for selecting a maintenance item No. is displayed.<br>
Completion<br>
To exit this maintenance item without changing the current setting, press the stop/clear key. 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>U260</td><td>
Changing the copy count timing<br><br>
Description<br>
Changes the copy count timing for the total counter and other counters.<br><br>
Purpose<br>
To be set according to user (copy service provider) request.<br>
If a paper jam occurs frequently in the finisher when the number of copies is counted at the time of paper ejection, copies are provided without copy counts. The copy service provider cannot charge for such copying. To prevent this, the copy timing should be made earlier.<br>
If a paper jam occurs frequently in the paper conveying or fixing sections when the number of copies is counted before the paper reaches those sections, copying is charged without a copy being made. To prevent this, the copy timing should be made later.<br><br>
Method<br>
Press the start key. The screen for selecting an item is displayed.<br><br>
Setting<br>
1. Select the copy count timing using the cursor up/down keys.<br><br>
<table>
<tr><th>Display</th><th>Description</th></tr>
<tr><td>COUNT: FEED<br>COUNT: EJECT</td><td>When secondary paper feed starts<br>When the paper is ejected</td></tr>
</table>
Initial setting: EJECT<br><br>
2. Press the start key. The setting is set, and the screen for selecting a maintenance item No. is displayed.<br><br>
Completion<br>
To exit this maintenance item without changing the current setting, press the stop/clear key. 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>U343</td><td>
Switching between duplex/simplex copy mode<br>
Description<br>
Switches the initial setting between duplex and simplex copy.<br>
Purpose<br>
To be set according to frequency of use: set to the more frequently used mode.<br>
Method<br>
Press the start key. The screen for selecting an item is displayed.<br>
Setting<br>
1. Select ON or OFF using the cursor up/down keys.
<table>
<tr><th>Display</th><th>Description</th></tr>
<tr><td>ON<br>OFF</td><td>Duplex copy<br>Simplex copy</td></tr>
</table>
Initial setting: OFF<br>
2. Press the start key. The setting is set, and the screen for selecting a maintenance item No. is displayed.<br>
Completion<br>
To exit this maintenance item without changing the current setting, press the stop/clear key. 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>U344</td><td>
Setting preheat/energy saver mode<br><br>
Description<br>
Changes the control for preheat/energy saver mode.<br><br>
Purpose<br>
According to user request, selects which has priority, the recovery time from preheat or energy saver.<br><br>
Method<br>
Press the start key. The screen for selecting an item is displayed.<br><br>
Setting<br>
1. Select control mode using the cursor up/down keys.<br><br>
<table>
<tr><th>Display</th><th>Control in preheat mode</th></tr>
<tr><td>INSTANT READY</td><td>Without decreasing the fixing control temperature, the display on the operation panel is turned off.</td></tr>
<tr><td>ENERGY STAR</td><td>The fixing control temperature is decreased by 80°C/144°F. When the ambient temperature at main switch turning on is 18°C/64.4°F or higher, the copier is forcibly stabilized 30 s after exiting preheat/energy saver mode.</td></tr>
<tr><td>E 2000</td><td>The fixing control temperature is decreased by 80°C/144°F.</td></tr>
</table>
Initial setting: ENERGY STAR<br><br>
2. Press the start key. The setting is set, and the screen for selecting a maintenance item No. is displayed.<br><br>
Completion<br>
To exit this maintenance item without changing the current setting, press the stop/clear key. 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>U345</td><td>
Setting the value for maintenance due indication<br>
Description<br>
Sets when to display a message notifying that the time for maintenance is about to be reached, by setting the number of copies that can be made before the current maintenance cycle ends.<br>
When the difference between the number of copies of the maintenance cycle and that of the maintenance count reaches the set value, the message is displayed.<br>
Purpose<br>
To change the time to display the maintenance due indication.<br>
Method<br>
Press the start key. The current setting is displayed.<br>
Setting<br>
1. Change the setting using the numeric or cursor left/right keys.
<table>
<tr><th>Description</th><th>Setting range</th></tr>
<tr><td>Display period for the next maintenance (remaining count before the end of the maintenance cycle)</td><td>0 to 9999</td></tr>
</table>
Initial setting: 0<br>
2. Press the start key. The setting is set, and the screen for selecting a maintenance item No. is displayed.<br>
Completion<br>
To exit this maintenance item without changing the current setting, press the stop/clear key. 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>U347</td><td>
Setting auto drawer size detection<br><br>
Description<br>
Turns the auto drawer size detection function on/off.<br><br>
Purpose<br>
To be used when turning the auto paper size (in the drawers) detection off and making copies onto only the specified size paper.<br><br>
Method<br>
Press the start key. The screen for selecting an item is displayed.<br><br>
Setting<br>
1. Select ON or OFF using the cursor up/down keys.<br><br>
<table>
<tr><th>Display</th><th>Description</th></tr>
<tr><td>ON</td><td>Detects the paper sizes in the drawers automatically.</td></tr>
<tr><td>OFF</td><td>Does not detect the paper sizes in the drawers automatically.</td></tr>
</table>
Initial setting: ON<br><br>
2. Press the start key. The setting is set, and the screen for selecting a maintenance item No. is displayed.<br><br>
Completion<br>
To exit this maintenance item without changing the current setting, press the stop/clear key. 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>U348</td><td>
Setting the copy density adjustment range<br>
Description<br>
Selects the adjustment range for copy density from NORMAL and SPECIAL AREA (for wider range).<br>
Purpose<br>
To change the setting according to user request.<br>
When especially dark or light density is requested, set to SPECIAL AREA.<br>
Method<br>
Press the start key. The screen for selecting an item is displayed.<br>
Setting<br>
1. Select the density range using the cursor up/down keys.
<table>
<tr><th>Display</th><th>Description</th></tr>
<tr><td>SPECIAL AREA<br>NORMAL</td><td>25 steps (enlargement mode)<br>13 steps</td></tr>
</table>
Initial setting: SPECIAL AREA<br>
2. Press the start key. The setting is set, and the screen for selecting a maintenance item No. is displayed.<br>
Completion<br>
To exit this maintenance item without changing the current setting, press the stop/clear key. The screen for selecting a maintenance item No. is displayed.
</td></tr>
<tr><td>U402</td><td>
Adjusting margins of image printing<br>
Adjustment<br>
See page 3-3-21.
</td></tr>
<tr><td>U403</td><td>
Adjusting margins for scanning an original on the contact glass<br>
Adjustment<br>
See page 3-3-42.
</td></tr>
<tr><td>U404</td><td>
Adjusting margins for scanning an original from the DF<br>
Description<br>
Adjusts margins for scanning the original from the DF.<br>
Purpose<br>
Used if margins are not correct when the optional SRDF is used.<br>
Caution<br>
Before making this adjustment, ensure that the following adjustments have been made in maintenance mode.<br>
U053 → U034 → U402 → U070 → U071 → U072 → U404<br>
Method<br>
Press the start key. The screen for selecting an item is displayed.
</td></tr>
</table>

| Maintenance item No. | Description |
|---|---|
| U404 (cont.) | **Setting**<br>1. Select the item to be set using the cursor up/down keys. The selected item is displayed in reverse.<br>2. Change the setting using the cursor left/right keys. |

| Display | Description | Setting range | Initial setting | Change in value per step |
|---|---|---|---|---|
| A MARGIN | Left margin | 0 to 20 | 2 | 0.5 mm |
| B MARGIN | Leading edge margin | 6 to 20 | 6 | 0.5 mm |
| C MARGIN | Right margin | 0 to 20 | 2 | 0.5 mm |
| D MARGIN | Trailing edge margin | 0 to 20 | 6 | 0.5 mm |

Increasing the setting makes the margin wider, and decreasing it makes the margin narrower.

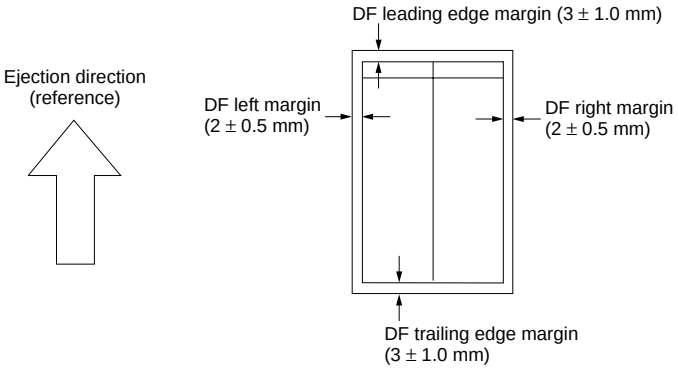



**Figure 3-2-9 Correct margin amount**

3. Press the start key. The value is set.

**Interrupt copy mode**
While this maintenance item is being performed, copying from an original can be made in interrupt copy mode.

**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>U407</td><td>Adjusting the leading edge registration for memory image printing<br>Adjustment<br>See page 3-3-19.</td></tr>
<tr><td>U901</td><td>Checking/clearing copy counts by paper feed locations<br>Description<br>Displays or clears copy counts by paper feed locations.<br>Purpose<br>To check the time to replace consumable parts. Also to clear the counts after replacing the consumable parts.<br>Method<br>1. Press the start key. The counts by paper feed locations are displayed.<br>2. Change the screen using the cursor left/right keys.<br><table><tr><th>Display</th><th>Paper feed locations</th></tr><tr><td>BYPASS*2<br>FIRST<br>SECOND<br>THIRD*1<br>FORTH*1<br>LCF*1<br>DUPLEX*1</td><td>Bypass table<br>Copier upper drawer<br>Copier lower drawer<br>Paper feed desk upper drawer<br>Paper feed desk lower drawer<br>Large paper deck<br>Duplex unit</td></tr></table>*1: Optional.<br>*2: Optional for 120 V specifications only.<br>When an optional paper feed device is not installed, the corresponding count is not displayed.<br>Clearing<br>1. Select the count to be cleared using the cursor up/down keys. The selected item is displayed in reverse.<br>To clear the counts for all paper feed locations, select ALL using the cursor up/down keys.<br>2. Press the start key. The count is cleared, and the screen for selecting a maintenance item No. is displayed.<br>Completion<br>Press the stop/clear key. The screen for selecting a maintenance item No. is displayed.</td></tr>
</table>

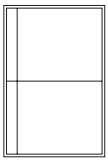
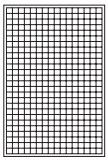
| Maintenance item No. | Description |
|---|---|
| U903 | **Checking/clearing the paper jam counts**<br>**Description**<br>Displays or clears the jam counts by jam locations.<br>**Purpose**<br>To check the paper jam status. Also to clear the jam counts after replacing consumable parts.<br>**Method**<br>1. Press the start key. The jam count is displayed by jam codes.<br>2. Change the screen using the cursor left/right keys.<br>**Clearing**<br>1. Select ALL using the cursor up/down keys. Jam counts cannot be cleared individually.<br>2. Press the start key. The count is cleared, and the screen for selecting a maintenance item No. is displayed.<br>**Completion**<br>To exit this maintenance item without changing the current setting, press the stop/clear key. The screen for selecting a maintenance item No. is displayed. |
| U904 | **Checking/clearing the service call counts**<br>**Description**<br>Displays or clears the service call code counts by types.<br>**Purpose**<br>To check the service call code status by types. Also to clear the service call code counts after replacing consumable parts.<br>**Method**<br>1. Press the start key. The service call count is displayed by service call codes.<br>2. Change the screen using the cursor left/right keys.<br>**Clearing**<br>1. Select the count to be cleared using the cursor up/down keys. The selected count is displayed in reverse. To clear all counts, select ALL using the cursor up/down keys.<br>2. Press the start key. The count is cleared. When all counts are cleared, the screen for selecting a maintenance item No. is displayed.<br>**Completion**<br>Press the stop/clear key. The screen for selecting a maintenance item No. is displayed. |

<table>
<tr><th>Maintenance item No.</th><th>Description</th></tr>
<tr><td>U905</td><td>
Checking/clearing counts by optional devices<br>
Description<br>
Displays or clears the counts of the optional SRDF or finisher.<br>
Purpose<br>
To check the use of the SRDF and finisher. Also to clear the counts after replacing consumable parts.<br>
Method<br>
1. Press the start key. The screen for selecting an item is displayed.<br>
2. Select the device, the count of which is to be checked using the cursor up/down keys. The count of the selected device is displayed.<br>
<br>
• SRDF (DF)<br>
<table>
<tr><th>Display</th><th>Description</th></tr>
<tr><td>CHANGE<br>ADF<br><br>RADF</td><td>Original replacement count<br>No. of single-sided originals that has passed through the DF in ADF mode<br>No. of double-sided originals that has passed through the DF in RADF mode</td></tr>
</table>
• Finisher (SORTER)<br>
<table>
<tr><th>Display</th><th>Description</th></tr>
<tr><td>CP CNT<br>STAPLE<br>STACK</td><td>No. of copies that has passed<br>Frequency the stapler has been activated<br>Frequency the stacker has been activated</td></tr>
</table>
Clearing<br>
1. Select the item to be cleared using the cursor up/down keys. The selected item is displayed in reverse.<br>
2. Press the start key. The count is cleared.<br>
3. To return to the screen for selecting an item, press the stop/clear key.<br>
Completion<br>
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 |
|---|---|
| U906 | **Resetting partial operation control**<br>**Description**<br>Resets the service call code for partial operation control.<br>**Purpose**<br>To be reset after partial operation is performed due to problems in the drawers or other sections, and the related parts are serviced.<br>**Method**<br>1. Press the start key.<br>2. Select EXECUTE using the cursor up/down keys.<br>3. Press the start key to reset partial operation control. The maintenance mode is exited, and the machine returns to the same status as when the main switch is turned on. |

| Maintenance item No. | Description |
|---|---|
| **U990** | **Checking/clearing the time for the exposure lamp to light**<br>**Description**<br>Displays, clears or changes the accumulated time for the exposure lamp to light.<br>**Purpose**<br>To check duration of use of the exposure lamp. Also to clear the accumulated time for the lamp after replacement.<br>**Method**<br>Press the start key. The accumulated time of illumination for the exposure lamp is displayed in minutes.<br>**Clearing**<br>1. Select CLEAR using the cursor up/down keys.<br>2. Press the start key. The accumulated time is cleared, and the screen for selecting a maintenance item No. is displayed.<br>**Setting**<br>1. Enter a six-digit accumulated time using the numeric keys.<br>2. Press the start key. The time is set, and the screen for selecting a maintenance item No. is displayed.<br>**Completion**<br>To exit this maintenance item without changing the accumulated time, press the stop/clear key. The screen for selecting a maintenance item No. is displayed. |

| Maintenance item No. | Description |
|---|---|
| U993 | **Outputting a VTC-PG pattern**<br>**Description**<br>Selects and outputs a VTC-PG pattern created in the copier.<br>**Purpose**<br>When performing respective image printing adjustments, used to check the machine status apart from that of the scanner with a non-scanned output VTC-PG pattern.<br>**Method**<br>1. Press the start key. The screen for selecting an item is displayed.<br>2. Select the VTC-PG pattern to be output using the cursor up/down keys. |

| Display | PG pattern to be output | Purpose |
|---|---|---|
| VTC-PG1 |  | • Center line adjustment |
| VTC-PG2 |  | • Lateral squareness adjustment<br>• Magnification adjustment |

3. Press the interrupt key. The copy mode screen is displayed.
4. Press the start key. A VTC-PG pattern is output.

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