

## 4. Alignment and Adjustments

### 4.1 User Mode

The table below shows the map of User settings available in User Mode. These are fully described in the User Guide and are not included here.

1st level			2nd level	3rd level	Default Value
RETURN ◀--			RETURN		
left/right && Enter --▶		14 character	left/right && Enter		
<b>1. Paper Setting</b> ◀ Paper Type ▶	1	Paper Type	Plain Paper, Thick, Thin, Bond, Color Paper, Card stock, Labels, Transparency, Envelope, Preprinted		Plain Paper
	2	Paper Size	A4, Legal, Executive, Folio A5, B5, A6, Letter		By Country
<b>2. Machine Setup</b> ◀ Machine ID ▶	1	Machine ID (Only SCX-4521F)	Fax: ID:		
	2	Date & Time (only SCX-4521F)	00-00-0000 00:00(AM)		
	3	Clock Mode (only SCX-4521F)	12, 24 hours		12hours
	4	Language	[English/FRANCAIS/Espanol/Portugues/Deutsch/Italiano/Pyccckn/Norsk/Polski/Suomi/Magyar/Dansk/cestina/Svenska/Turkse - 15 language		English
	5	Power Save	On Off	5, 10, 15, 30, 45 min.	5
	6	Ignore Toner	On Off		
	7	USB Mode	Fast/Slow		Fast

1st level			2nd level	3rd level	Default Value
RETURN ◀--			RETURN		
left/right && Enter --▶		14 character	left/right && Enter		
<b>3.Copy Setup</b> ◀Default-Change ▶	1	Default-Change	Darkness	Light/Normal/Dark	Normal
			Original Type	Text, Text/Photo, Photo	Text
			Reduce/Enlarge	[Original(100%)]	100%
				[LGL→LTR(78%)]	
				[LGL→A4(83%)]	
				[A4→A5](71%)]	
				[A4→LTR(94%)]	
				[EXE→LTR(104%)]	
				[A5→A4](141%)]	
				25%	
				50%	
				150%	
				200%	
				400%	
				[Custom:25-400]	
			No. of Copies	[1-99]	1
	2	Timeout	15,30,60,180Sec, Off		60sec
	3	Favorite copy	Clone		
			Copy Collate		
			Autofit		
			2 side in 1 Pg		
			2 UP		
			4 UP		
			Poster		
<b>4. Copy Feature</b> ◀Off ▶	1	Off			
	2	Clone			
	3	Copy Collate			
	4	Autofit			
	5	ID Card Copy			
	6	2 UP		This will set to 2UP	
	7	4 UP		This will set to 4UP	
	8	Poster			

&lt;continue...&gt;

1st level		2nd level	3rd level	Default Value
RETURN ◀--		RETURN		
left/right && Enter --▶	14 character	left/right && Enter		
<b>5. Fax Setup</b> (only SCX-4521F) ◀ Default-Change ▶	1	Default-Change	Resolution	Standard/Fine/Super Fine/Photo/Color
	2	Ring to Answer	1~7	2
	3	Darkness	Light/Normal/Dark	Normal
	4	Redial Term	1~15Min	3minutes
	5	Redials	1~13times	7times
	6	MSG Confirm	On, Off, On-Error	On-Error
	7	Image TCR	On, Off	
	8	Auto Report	On, Off	On
	9	Auto Reduction	On, Off	On
	10	Discard Size	0~30mm	20mm
	11	Receive Code	0~9	9
	12	DRPD Mode	set	
	13	Receive Mode	Fax, Tel, Ans/Fax, DRPD	
<b>6. Fax Feature</b> (only SCX-4521F) ◀ Delay Fax ▶	1	Delay Fax	Fax:	
	2	Priority Fax	Fax:	
	3	Add Page	Yes, No	
	4	Cancel Job	Yes, No	
<b>7. Advanced fax</b> (only SCX-4521F)	1	Send Forward	On,Off	Off
	2	RCV Forward	On	Start Time/ End Time Print Local Copy
			Off	Off
	3	Junk Fax Setup	On	Fax:
			Off	Off
	4	Secure Receive	On,Off, Print	Off
	5	Prefix Dial	FAX: xxxxx (5 digits)	
<b>8. Reports</b> ◀ Phone Book ▶	6	Stamp RCV Name	On, Off	Off
	7	ECM Mode	On, Off	On
	1	Phone Book (only SCX-4521F)		
	2	Sent Report (only SCX-4521F)		
	3	RCV Report (only SCX-4521F)		
	4	System Data		
	5	Scheduled Jobs (only SCX-4521F)		
	6	MSG Confirm (only SCX-4521F)		
	7	Junk Fax List (only SCX-4521F)		
<b>9. Sound/Volume</b> ◀ Speaker ▶			10 ea	
	1	Speaker	On, Off, Comm.	Comm.
	2	Ringer	Off, Low,Med,High	Med
	3	Key Sound	On, Off	Off
	4	Alarm Sound	On, Off	On

&lt;continue..&gt;

1st level			2nd level	3rd level	Default Value
RETURN ◀--			RETURN		
left/right && Enter --▶		14 character	left/right && Enter		
<b>10. Maintenance</b> ◀ Clean Drum ▶	1	Clean Drum	On,Off		Off
	2	Notify Toner	On,Off		Off
	3	Clear Memory	Clear All Mem.		
			Paper setting		
			Machine Setup		
			Copy Setup		
			Fax Setup		
			Fax Feature		
			Advanced Fax		
			Sound/Volume		
			Sent Report		
			RCV Report		
			Phone Book		
	4	Remote Test (only SCX-4521F)	On		Off
			Off		







## 4.2 Tech Mode and Setting

### 4.2.1 How to Enter Tech Mode







In service (tech) mode the technician can check the machine and perform various tests to help with failure diagnosis.

When in Tech mode the machine still performs all normal operations.

#### To enter the Tech mode (SCX-4521F)

To enter the Tech mode press  →  →  →  →  →  in sequence and the LCD briefly displays 'TECH', the machine has entered service (tech) mode.

#### To enter the Tech mode (SCX-4321)

To enter the Tech mode press  →  →  →  →  →  in sequence and the LCD briefly displays 'TECH', the machine has entered service (tech) mode.

## 4.2.2 Setting-up System in Tech Mode

1st level			2nd level	3rd level	Default Value
RETURN	◀--		RETURN		
left/right && Enter	--▶	14 character	left/right && Enter		
Tech Mode ◀Data Setup ▶	1	Data Setup	Send Level	-9~-15	-12
			(only SCX-4521F)		
			Modem Speed	33.6, 28.8, 14.4, 12.0, 9.6, 4.8	33.6
			(only SCX-4521F)		
			Error Rate (only SCX-4521F)	5%, 10%	10%
			Dial Mode (only SCX-4521F)	Tone, Pulse	Tone
			Notify Toner	Customer No.	
				Customer Name	
				Service No.	
				Serial No.	
			Clear All Mem.		
			Clear Count	Total Page Count	Enter Password
				CRU Print CNT	
				FLT Scan Count	
				ADF Scan Count	
				Used Toner CNT	
				Edit Toner Dot	
			Flash Upgrade	Local	
				Remote	
			Silence Time (only SCX-4521F)	Off/ 12 Sec/Unlimited	Off
	2	Machine Test	Switch Test		
			Modem Test (only SCX-4521F)		
			Dram Test		
			Rom Test		
			Pattern Test		
			Shading Test		
	3	Report	Protocol(only SCX-4521F)		
			System Data		
		Key History	Error Info		
		New Cartridge			

## 4.2.3 Setting

### 4.2.3.1 Changing the Display Language

To change the language that displays on the control panel, follow these steps:

1. Press Menu until "Machine Setup" appears on the top line of the display.
2. Press the scroll button ( ◀ or ▶ ) until "Language" appears on the bottom line of the display.
3. Press Enter. The current setting appears on the bottom line of the display.
4. Press the scroll button ( ◀ or ▶ ) until the language you want appears on the display.
5. Press Enter to save the selection.
6. To return to Standby mode, press Stop/Clear.

### 4.2.3.2 Setting the Machine ID (Only for SCX-4521F)

In some countries, you are required by law to indicate your fax number on any fax you send. The Machine ID, containing your telephone number and name (or company name), will be printed at the top of each page sent from your machine.

1. Press Menu until "Machine Setup" appears on the top line of the display. The first available menu item, "Machine ID," displays on the bottom line.
2. Press Enter. The display asks you to enter the fax number.  
If there is a number already set, the number appears.
3. Enter your fax number using the number keypad.

**NOTE:** If you make a mistake while entering numbers, press the ◀ button to delete the last digit.

4. Press Enter when the number on the display is correct. The display asks you to enter an ID.
5. Enter your name or the company name using the number keypad.  
You can enter alphanumeric characters using the number keypad, and include special symbols by pressing the 0 button.  
For details on how to use the number keypad to enter alphanumeric characters.  
If you want to enter the same letter or number in succession, enter one digit, move the cursor by pressing the ▶ button and enter the next digit.  
If you want to insert a space in the name, you can also use the ▶ button to move the cursor to skip the position.
6. Press Enter when the name on the display is correct.
7. To return to Standby mode, press Stop/Clear.

#### 4.2.3.3 Setting the Date and Time

When you turn your machine on for the first time, the display prompts you to enter the current date and time. After entering, it will not appear anymore. For the SCX-4521F, all of your faxes will have the date and time printed on them.

**NOTE:** If power to the machine is cut off, you need to reset the correct time and date once the power has been restored.

1. Press Menu until "Machine Setup" appears on the top line of the display.
2. Press the scroll button ( ◀ or ▶ ) to display "Date & Time" on the bottom line and press Enter.
3. Enter the correct time and date using the number keypad.

For the SCX-4321, press the scroll button ( ◀ or ▶ ) to enter the time and date.

Month = 01 ~ 12

Day = 01 ~ 31

Year = requires four digits

Hour = 01 ~ 12 (12-hour mode)

00 ~ 23 (24-hour mode)

Minute = 00 ~ 59

**NOTE:** The date format may differ from country to country.

You can also use the scroll button ( ◀ or ▶ ) to move the cursor under the digit you want to correct and enter a new number. For the SCX-4321, you can use Enter or Upper Level to move the cursor.

4. To select "AM" or "PM" for 12-hour format, press the \* or # button or any number button.  
For the SCX-4321, press Enter and then the scroll button ( ◀ or ▶ ).  
When the cursor is not under the AM or PM indicator, pressing the \* or # button immediately moves the cursor to the indicator. For the SCX-4321, press the scroll button ( ◀ or ▶ ) to move the cursor to the indicator.  
You can change the clock mode to 24-hour format (e.g. 01:00 PM as 13:00).
5. Press Enter when the time and date on the display is correct.  
When you enter a wrong number, the machine beeps and does not proceed to the next step. If this happens, just reenter the correct number.
6. To return to Standby mode, press Stop/Clear.

#### 4.2.3.4 Changing the Clock Mode

You can set your machine to display the current time using either a 12-hour or 24-hour format.

1. Press Menu until "Machine Setup" appears on the top line of the display.
2. Press the scroll button ( ◀ or ▶ ) until you see "Clock Mode" on the bottom line and press Enter.  
The clock mode currently set for the machine displays.
3. Press the scroll button ( ◀ or ▶ ) to select the other mode and then press Enter to save the selection.
4. To return to Standby mode, press Stop/Clear.



#### 4.2.3.5 Setting the Paper Size and Type

After loading paper in the tray, you need to set the paper size and type using the control panel buttons. These settings will apply to copy and fax modes. For PC-printing, you need to select the paper size and type in the application program you use on your PC.

1. Press Menu.  
The display shows "Paper Setting" on the top line of the display.
2. Press the scroll button ( ◀ or ▶ ) to display "Paper Size" on the bottom line and press Enter to access the menu item.
3. Use the scroll button ( ◀ or ▶ ) to find the paper size you are using and press Enter to save it.
4. Press the button to scroll to "Paper Type" and press Enter to access the menu item.
5. Use the scroll button ( ◀ or ▶ ) to find the paper type you are using and press Enter to save it.
6. To return to Standby mode, press Stop/Clear.

#### 4.2.3.6 Setting Sounds (Only for SCX-4521F)

You can control the following sounds:

- Speaker: You can turn on or off the sounds from the telephone line through the speaker, such as the dial tone or a fax tone. With this option set to "Comm." the speaker is on until the remote machine answers.
- Ringer: You can adjust the ringer volume.
- Key Sound: With this option set to "On" a key tone sounds each time a key is pressed.
- Alarm Sound: You can turn the alarm sound on or off. With this option set to "On" an alarm tone sounds when an error occurs or fax communication ends.
- You can adjust the volume level using the On Hook Dial button.

#### 4.2.3.7 Speaker, Ringer, Key Sound, and Alarm Sound

1. Press Menu until "Sound/Volume" appears on the top line of the display.
2. Press the scroll button ( ◀ or ▶ ) to scroll through the options. Press Enter when you see the desired sound option.
3. Press the scroll button ( ◀ or ▶ ) to display the desired status or volume for the option you have selected. You will see the selection on the bottom line of the display. For the ringer volume, you can select "Off," "Low," "Med," and "High". Setting "Off" means that the ringer does not sound. The machine works normally even if the ringer is turned off.
4. Press Enter to save the selection. The next sound option appears.
5. If necessary, repeat steps 2 through 4.
6. To return to Standby mode, press Stop/Clear.

#### 4.2.3.8 Speaker Volume

1. Press On Hook Dial. A dial tone sounds from the speaker.
2. Press the scroll button ( ◀ or ▶ ) until you hear the volume you want. The display shows the current volume level.
3. Press On Hook Dial to save the change and return to Standby mode.

**NOTE:** You can adjust the speaker volume only when the telephone line is connected.

#### 4.2.3.9 Toner Save Mode

Toner Save mode allows your machine to use less toner on each page. Activating this mode extends the life of the toner cartridge beyond what one would experience in the normal mode, but it reduces print quality.

To turn the toner save mode on or off, press Toner Save.

- If the button backlight is on, the mode is active and the machine uses less toner when printing a document.
- If the button backlight is off, the mode is deactivated and the machine prints with the normal quantity of toner.

#### 4.2.3.10 Power Save Mode

Power Save mode allows your machine to reduce power consumption when it is not in actual use. You can turn this mode on and select a length of time for which the machine waits after a job is printed before it switches to a reduced power state.

1. Press Menu until "Machine Setup" appears on top line of the display.
2. Press the scroll button ( ◀ or ▶ ) until "Power Save" appears on the bottom line. Press Enter.
3. Press the scroll button ( ◀ or ▶ ) to display "On" on the bottom line and press Enter. Selecting "Off" means that the power save mode is deactivated.
4. Press the scroll button ( ◀ or ▶ ) until the time setting you want appears. The available options are 5, 10, 15, 30, and 45 (minutes).
5. Press Enter to save the selection.
6. To return to Standby mode, press Stop/Clear.

## 4.2.4 FLASH UPGRADE

There are 2 methods to update the Flash Rom, Local and Remote.

### (1) Local Machine

#### • RCP (Remote Control Panel) mode

This method is for Parallel Port or USB Port. Connect the PC and activate the RCP (Remote Control Panel) to upgrade the Firmware.

##### < Method >

How to Update Firmware using RCP

1. Connect PC and Printer with a Parallel Cable or a USB Cable.
2. Run the RCP utility and select Firmware Update.
3. Search for the Firmware file to be used to update the set using the Browse Icon.
4. Click the Update icon. The firmware file is transmitted to the Printer automatically and the printer is initialized when the download completes.
5. Click the Refresh icon and check that the updated version numbers are displayed.

#### • DOS Command mode

This method is ONLY for Parallel Port. Connect the PC to the set using a Parallel Cable and enter the DOS Command to upgrade the firmware.

##### < Method >

1. First of all you need the following files : down.bat, down\_com.bin, fprt.exe, and Rom File: (file name for upgrade). Ensure you save ALL of these files in the same folder.
2. At the DOS prompt enter the correct command (as shown below) and push the enter key.  
Then the upgrade will automatically take place..
3. There are two commands use the correct one depending on the condition of the set..
  - \* When the product is in the idle condition  
**down "rom file"**
  - \* When the product is in Ready condition  
(TECH MODE --> DATA SETUP --> FLASH UPGRADE --> LOCAL)  
**copy/b "rom file" lpt1**
4. Do not turn off the power during the upgrade process.

### (2) Remote FAX

It is possible to use a set that already has the latest firmware to upgrade a remote set remotely using the telephone system.

##### < Method >

1. On the set that has the latest firmware set it to transmit the upgrade:-  
(TECH MODE •DATA SETUP••• FLASH UPGRADE••• REMOTE)
2. Enter the telephone number of the set that needs to be upgraded.  
(Several faxes can be upgrade at the same time. In this case, enter each fax number.)
3. When the enter button is pressed the set sends the firmware file by calling designated fax number.  
(Around 10~15 minutes are needed to send the file.)

##### < Caution >

1. The Sending and Receiving fax machines MUST be the same model.
2. The sending fax must be set up in ECM mode and the Receiving fax memory must be 100%.  
If not the function will not work.

## 4.2.5 Machine Test

### SWITCH TEST

Use this feature to test all keys on the operation control panel. The result is displayed on the LCD window each time you press a key.

### MODEM TEST

Use this feature to hear various transmission signals to the telephone line from the modem and to check the modem, amplifier and speaker. If no transmission signal sound is heard, it means the modem part of the main board, amplifier, speaker or speaker harness is faulty.

### DRAM TEST

Use this feature to test the machine's DRAM. The result appears in the LCD display.  
If all memory is working normally, the LCD shows << O K >>

### ROM TEST

Use this feature to test the machine's ROM. The result and the software version appear in the LCD display.

- FLASH VER : 1.00 V
- ENGINE VER :1.00V

### PATTERN TEST

Using this pattern printout you can check that the printer mechanism is functioning properly.  
This function is for factory manufacturing use only.

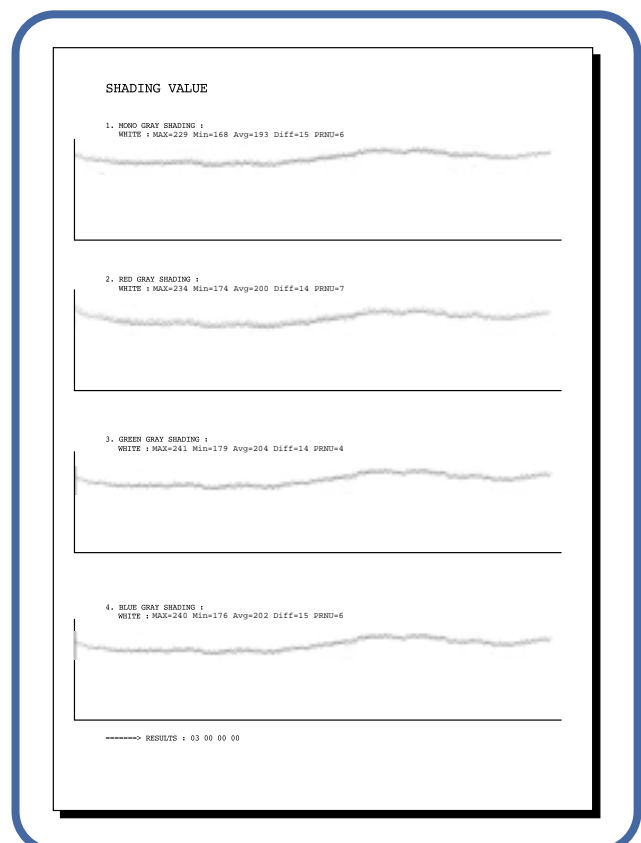
### SHADING TEST

The function is used to set the optimum scan quality determined by the specific characteristics of the CIS(Contact Image Sensor). If copy image quality is poor perform this function to check the condition of the CIS unit.

#### < Method >

1. Select the [Shading Test] in TECH MODE (Menu, #, 1934).
2. Push the ENTER button and an image will be scanned.
3. After scanning the CIS SHADING PROFILE will be print out.
4. If the printed image is different to the sample image shown the CIS is defective.

**NOTICE :** When you test the CIS, make sure that the cover is closed.



## 4.2.6 Report

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### PROTOCOL LIST

This list shows the sequence of the CCITT group 3 T.30 protocol during the most recent sending or receiving operation. Use this list to check for send and receive errors. If

### SYSTEM DATA

This list provides a list of the user system data settings and tech mode settings.

### KEY HISTORY

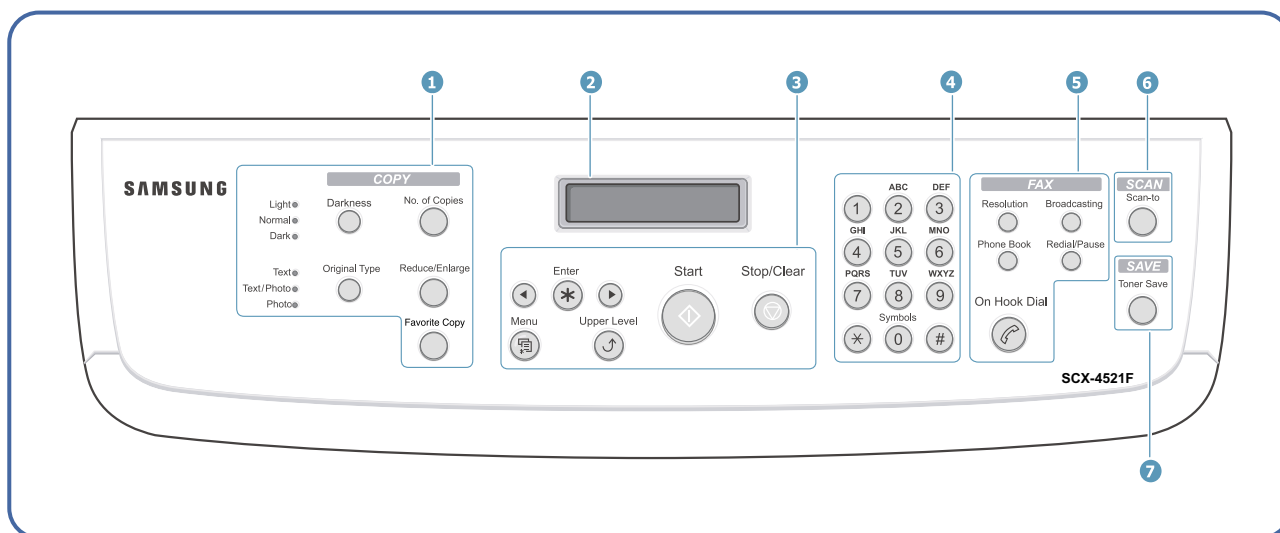
This list shows the input key history.



### ERROR INFO

This list displays the detail machine error list.

## 4.3 Control Panel

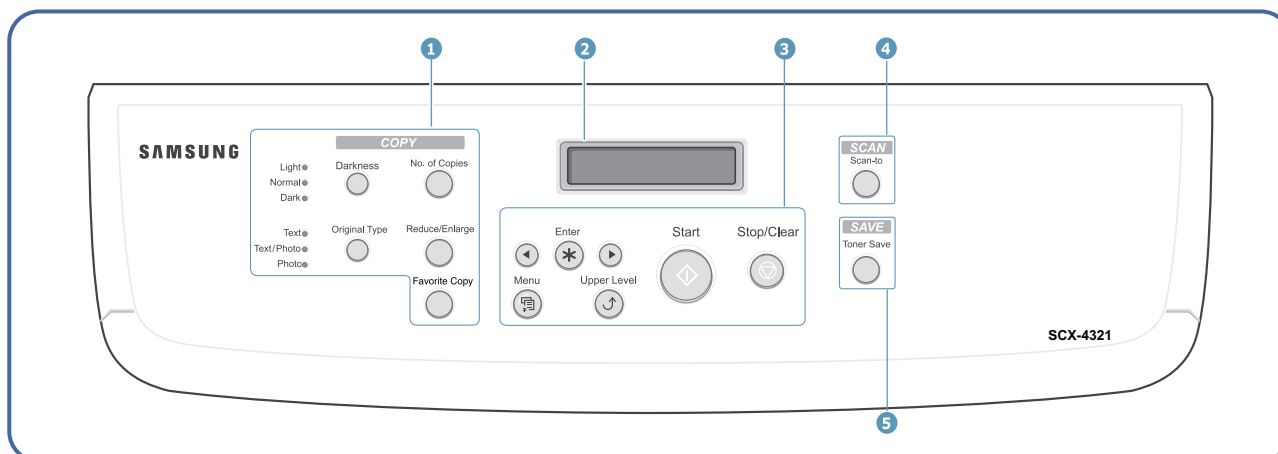
### 4.3.1 Control Panel Functions (SCX-4521F)





① C O P Y	<b>Darkness</b>	Adjusts the brightness of the documents for the current copy job.
	<b>Original Type</b>	Selects the document type for the current copy job.
	<b>No. of Copies</b>	Selects the number of copies.
	<b>Reduce/Enlarge</b>	Makes a copy smaller or larger than the original.
	<b>Favorite Copy</b>	Allows you to use one of the special copy features, such as Clone, Collation, Auto Fit, 2 Sides on 1 page, 2/4 Up (multiple pages on a sheet), and Poster copying after assigning it.
②		Displays the current status and prompts during an operation.
③		Uses to scroll through the available options for the selected menu item.
	<b>Enter</b>	Confirms the selection on the display.
	<b>Menu</b>	Enters Menu mode and scrolls through the menus available.
	<b>Upper Level</b>	Sends you back to the upper menu level.
	<b>Start</b>	Starts a job.
	<b>Stop/Clear</b>	Stops an operation at any time. In Standby mode, clears/cancels the copy options, such as the darkness, the document type setting, the copy size, and the number of copies.
④	<b>Number Keypad</b>	Dials a number or enters alphanumeric characters.

⑤ F A X	<b>Resolution</b>	Adjusts the resolution of the documents for the current fax job.
	<b>Broadcasting</b>	Allows you to send a fax to multiple destinations.
	<b>Phone Book</b>	Allows you to store frequently-dialed fax numbers as one or two-digit speed dial or group dial numbers for automatic dialing and edit the stored numbers. Also allows you to print a Phonebook list.
	<b>Redial/Pause</b>	In Standby mode, redials the last number or in Edit mode, inserts a pause into a fax number.
	<b>On Hook Dial</b>	Engages the telephone line.
⑥ S C A N	<b>Scan-to</b>	Allows you to access a list of your PC software programs that an image can be scanned to. You must create the scan list using the Samsung software (Printer Settings Utility) provided with this machine. For details, see <b>Software User's Guide</b> .
⑦ S A V E	<b>Toner Save</b>	Allows you to save on toner by using less toner to print a document.

### 4.3.2 Control Panel Functions (SCX-4321)



① C O P Y	<b>Darkness</b>	Adjusts the brightness of the documents for the current copy job.
	<b>Original Type</b>	Selects the document type for the current copy job.
	<b>No. of Copies</b>	Selects the number of copies.
	<b>Reduce/Enlarge</b>	Makes a copy smaller or larger than the original.
	<b>Favorite Copy</b>	Allows you to use one of the special copy features, such as Clone, Collation, Auto Fit, 2 Sides on 1 page, 2/4 Up (multiple pages on a sheet), and Poster copying after assigning it.
②		Displays the current status and prompts during an operation.
③		Uses to scroll through the available options for the selected menu item.
	<b>Enter</b>	Confirms the selection on the display.
	<b>Menu</b>	Enters Menu mode and scrolls through the menus available.
	<b>Upper Level</b>	Sends you back to the upper menu level.
	<b>Start</b>	Starts a job.
	<b>Stop/Clear</b>	Stops an operation at any time. In Standby mode, clears/cancels the copy options, such as the darkness, the document type setting, the copy size, and the number of copies.
④ S C A N	<b>Scan-to</b>	Allows you to access a list of your PC software programs that an image can be scanned to. You must create the scan list using the Samsung software (Printer Settings Utility) provided with this machine. For details, see <b>Software User's Guide</b> .
⑤ S A V E	<b>Toner Save</b>	Allows you to save on toner by using less toner to print a document.



## 4.4 LCD Status Error Messages

STATUS	LCD Display	Descriptions
Document Jam	Document Jam	When Document Jam occurred at ADF module. This is displayed on LCD, Print in the Transmission Journal.
Door Open or Jam Cover Open	[Front or Rear] [Cover Open]	When machine' front side cover or Jam Cover was opened, it displayed On the LCD.
NO paper	[ No Paper ] Add Paper	When there is no paper in CASSETTE Tray, machine Displays this message on LCD.
PAPER JAM 0	[Paper Jam 0] Open/Close Door	When the machine encountered paper jam in pick up area, Machine displays on the LCD until DOOR OPEN & CLOSE.
PAPER JAM 1	[Paper Jam 1] Open/Close Door	When the machine encountered paper jam in paper exit of Machine, machine displays on the LCD until DOOR OPEN & CLOSE.
PAPER JAM 2	[Paper Jam 2] Check Inside	When the machine encountered paper jam in paper exit of Machine, machine displays on the LCD until DOOR OPEN & CLOSE.
Communication Error	[COMM. Error]	When the machine has problem in communication, It displayed on the LCD.  Machine displays this in case of Transmission.  Machine displays this in case of fax handshaking step of Reception.
Line Error	[Line Error]	When the machine has problem in case of Fax Data reception step.
NO ANSWER	[No Answer]	When the machine could not connect to remote fax after Completion of redial up to redial counter in system data.
INCOMPATIBLE	[Incompatible]	Remote party did not have the requested feature, such as polling.
LINE BUSY	Line Busy	The remote fax didn't answer.
POWER FAILURE	Power Failure	When the machine's user memory has not been backup and There was power off / on .
STOP PRESSED	[Stop Pressed]	When the operator pressed the STOP button during transmission.
MEMORY FULL	Memory Full	When the machine has encountered the user memory was full,
FUSER ERROR	CRU Fuse Error	When the machine failed in installing the new toner cartridge.
LSU ERROR	[Hsync Error]	tech mode
LSU ERROR	[LSU Error]	user mode  When the machine has encountered the Laser Beam Scanning unit could not reach the READY state,
TONER LOW	[Toner Low]	When the machine has encountered the Toner Low,
TONER EMPTY	[Toner Empty]	When the machine has encountered the Toner Empty,

&lt;continue..&gt;

STATUS	LCD Display	Descriptions
BY PASS JAM	[Bypass Jam]	When the machine detected the non feeding from BYPASS Tray.
GROUP is not available	Group Not Available	You have tried to select a group location where only a single Location number can be used.
RETRY REDIAL?	Retry Redial ?	the machine is waiting for the programmed interval to automatically redial a previously busy station.
NO. NOT ASSIGNED	NO. Not Assigned	The speed dial location you tried to use has no number assigned to it.
Load document	Load Document	You have attempted to set up a sending operation with no Document loaded.
Memory full and cancel the job	Cancel ? 1:Yes 2:No	When the machine has encountered the memory full during storing the document into memory, the machine display the "CANCEL ?" to operator whether he/she make a decision the canceling the job or accept the scanned page so far to transmit the remained documents.
Job has not been created	Operation Not Assigned	When operator is doing in ADD/CANCEL operation and There is no job to handle if operator entered the job no.
Low Heat Error	[Low Heat Error]	Temperature could not reach certain level.
Open Fuser Error	Open Fuser Error	The thermister has been disconnected.
Over Heat Error	[Over Heat]	Temperature has gone up very high degree.
	[Jam 1] [No Catridge]	When the machine detected the toner cartridge has not been installed, or detected jam1 in warmup state.
Memory Dial Full	Memory Dial Full	During Auto dial transmission when all 15 jobs are configured and try to add 16th job

## 4.5 Engine Test Mode

The Engine Test Mode supplies useful functions to check the condition of the print engine. It tests the condition of each device and displays the result of the test on the LCD. It is divided into 5 functions (0~4), and these are shown below.

### 4.5.1 To enter the Engine Test Mode

#### To enter the Engine Test mode (SCX-4521F)

Press  →  →  →  →  →  in sequence, and the LCD briefly displays

'Engine Test', the machine has entered Engine Test Mode.

Press "0", "1", "2", "3" or "4" to select the Test No. (see list below – left hand column)

#### To enter the Engine Test mode (SCX-4321)

Press  →  →  →  →  →  in sequence, and the LCD briefly displays

'Engine Test', the machine has entered Engine Test Mode.

Press "0", "1", "2", "3" or "4" to select the Test No. (see list below – left hand column)

### 4.5.2 Diagnostic

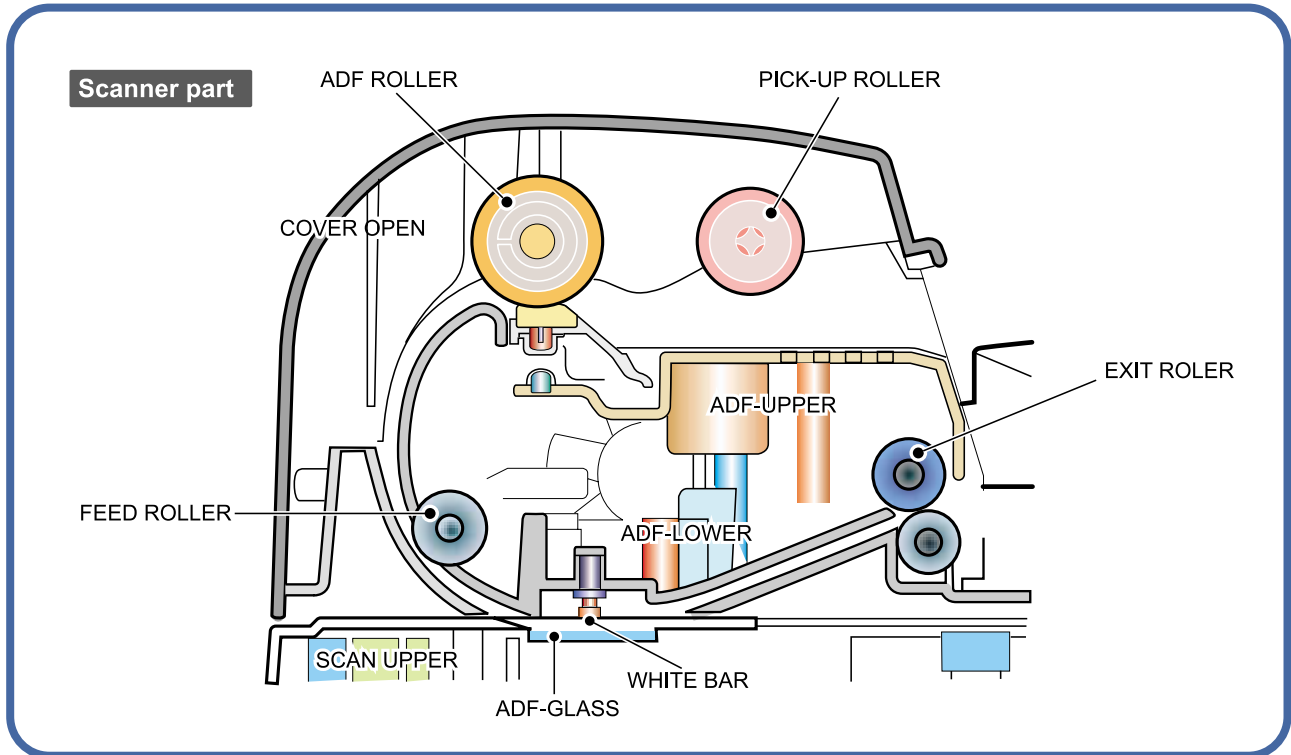
NO.	Sub No.	Engine test	Remark
0	1	Motor Test	1 : On, 2 : Off – next test selected
	2	Pick Up Test	1 : On, 2 : Off – next test selected
	3	Fan Test	1 : On, 2 : Off – next test selected
	4	Manual Clt Test	1 : On, 2 : Off – next test selected
	5	PTL Test	1 : On, 2 : Off – next test selected
1	1	LSU Motor Test	1 : On, 2 : Off – next test selected
	2	LSU Hsync Test	1 : On, 2 : Off – next test selected
	3	LD Test	1 : On, 2 : Off – next test selected
2	1	Feed Sensor Test	1. Check : read the sensor
			2. Next : Next Sensor test
	2	Exit Sensor Test	1. Check : read the sensor
			2. Next : Next Sensor test
	3	Cover Sensor Test	1. Check : read the sensor
			2. Next : Next Sensor test
	4	Empty Sensor Test	1. Check : read the sensor
			2. Next : Next Sensor test
	5	Manual Sensor Text	1. Check : read the sensor
			2. Next : Next Sensor test
3	1	Therm ADC 180	1 : On, 2 : Off (maintain the fusing temp. 80°C)
	2	Therm ADC 140	1 : On, 2 : Off (maintain the fusing temp. 135°C)
	3	Therm ADC 120	1 : On, 2 : Off (maintain the fusing temp. 160°C)
	4	Therm ADC 100	1 : On, 2 : Off (maintain the fusing temp. 191°C)
4	1	MHV Test	1 : On, 2 : Off (-1550V ± 50V)
	2	Dev Bias Test	1 : On, 2 : Off (-430V ± 20V)
	3	THV EN/NEG Test	1 : On, 2 : Off (-1200V +300V/-150V)
	4	THV ON (1300V)	1 : On, 2 : Off (+1300V ± 20V)
	5	THV ADC 1300V	1 : On, 2 : Off (ADC Value : 101 ± 5)
	6	THV ADC 600V~3500V	1 : On, 2 : Off (Compare each ADC Value)

### 4.5.3 Detail Description (Engine Test Mode)

Function Name	Description	Display
01.Motor Test	The main motor starts when the execution key is pressed and stops when the stop key is pressed.	Main Motor On/Off
02.Pick Up Test	Automatically stops, when the execution is chosen. stops, when the execution is chosen.	Tray 1,2 Solenoid On/Off
03.Fan Test	The fan starts when the execution key is pressed and stops when the stop key is pressed.	Fan On/Off
04.Manual Clutch Test	The tray2,3 clutch is on for 1sec and then it automatically stops, when the execution is chosen.On this function, the main motor runs before 2sec from the point of the clutch on in order to check the clutch state.	Tray 2,3 Clutch On/Off
05.PTL Test	PTL(Pre-Transfer Lamp) is lights when the execution key chosen and it stops when the stop key is chosen.	PTL On/Off
11.LSU Motor	The laser motor starts when the execution key is pressed and stops when the stop key is pressed.	Laser Motor On/Off
12.LSU Hsync Test	The LSU motor starts and "Laser Ready" is displayed if the motor spins at the correct speed, otherwise "Laser Error" is displayed.	Laser Leady On/Off
13.LD Test	"Diode On" is displayed, when the laser diode is on. Otherwise "Diode Off" is displayed.	Diode On/Off
21.Feed Sen Test	These functions allow the current state of the sensor to be displayed.	"Sensor Off" or " Sensor On "
22.Exit Sen Test		
23.Cover Sen Test	This function allows the current state of the Cover sensor to be displayed. Touch the sensor and confirm that the message changes: "Cover Open" to " Cover Close"	"Cover Open" or "Cover Close"
24.Empty Sen Test	These functions allow the current state of the sensor to be displayed.	"Sensor Off" or " Sensor On "
25.Manual Sen Test		
31.Them ADC 180	"Current value" is displayed on the upper line of the LCD, and "Target value" on the bottom line. Target value is limited from "191°C" to "80°C"	Target temperature and output temperature from thermistor and ADC.
32.Them ADC 140		
33.Them ADC 120		
34.Them ADC 100		
41.MHV Test	These Functions are provided to check whether the control of the HVPS is functioning correctly.	MHV On/Off
42.Dev Bias Test		Dev Bias On/Off
43.THV EN/NEG Test		THV EN/NEG On/Off
44.THV ON(1300V)		THV On/Off
45.THV ADC 1300V		ADC value displayed.
46.THV ADC 600V~3500		ADC value displayed.

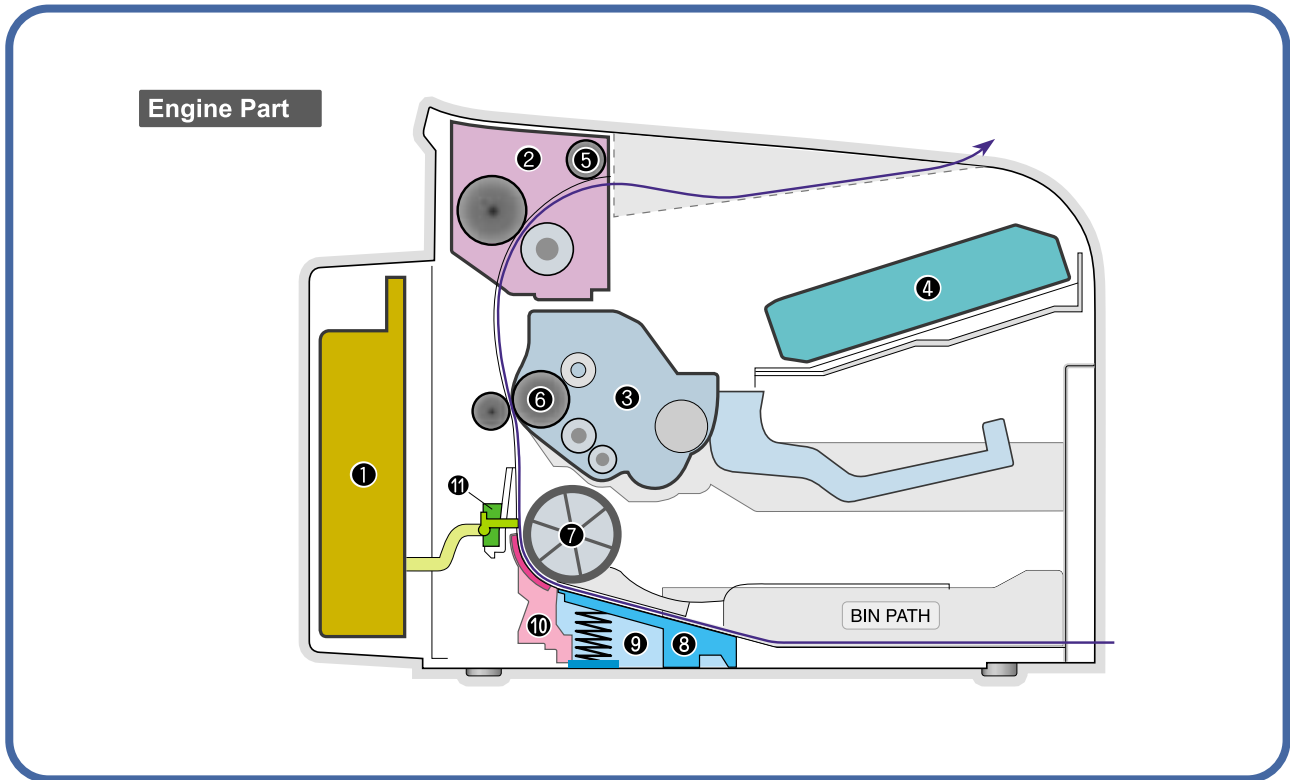
## 4.6 Paper Path and Clearing Paper Jams

### 4.6.1 Copy & Scan Document Path



## 4.6.2 Printer Paper Path

- 1) After receiving a print command, the printer feeds paper from the main cassette or manual feeder as required.
- 2) The paper being fed passes the paper feed sensor. (Jam 0 occurs if the sensor is not operated within a certain time)
- 3) Having passed the paper feed sensor the paper moves to the paper exit sensor via printing process. (Jam 1 occurs if the sensor is not operated within a certain time)
- 4) The paper then passes through the paper exit sensor and out of the set. (Jam 2 occurs if the trailing edge of the paper does not pass the exit sensor within a certain time of the paper leading edge activating the exit sensor)



### 4.6.3 Clearing Paper Jams

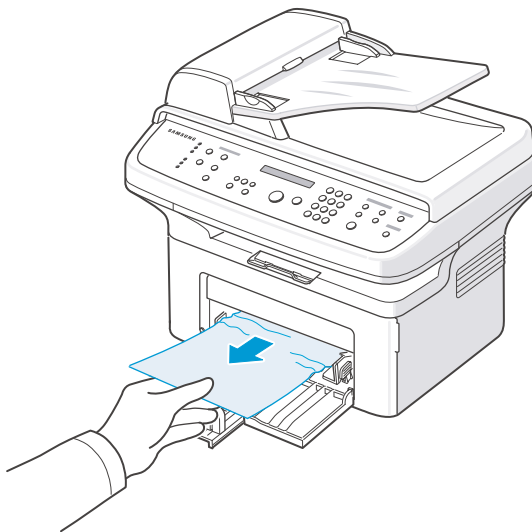
When a paper jam occurs, "Paper Jam" appears on the display.  
Refer to the table below to locate and clear the paper jam.

Message	Location of Jam
[Paper Jam 0] Open/Close Door	In the tray
[Paper Jam 1] Open/Close Door	In the fuser area or around the toner cartridge.
[Paper Jam 2] Check Inside	In the paper exit area

To avoid tearing the paper, pull out the jammed paper gently and slowly. Follow the instructions in the following sections to clear the jam.

#### 4.6.3.1 In the Tray

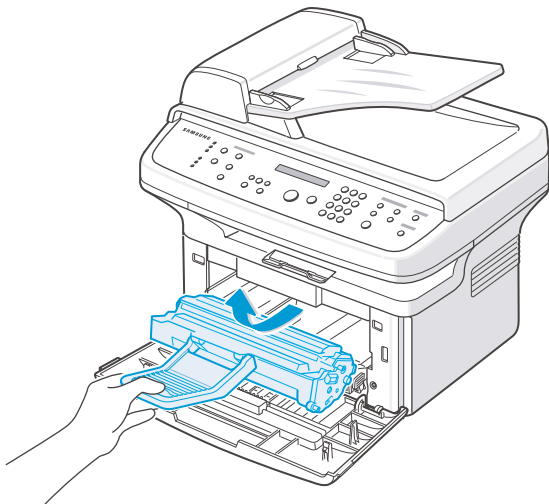
1. Remove the jammed paper in the tray by gently pulling it straight out.
2. Open and close the front door to resume printing.



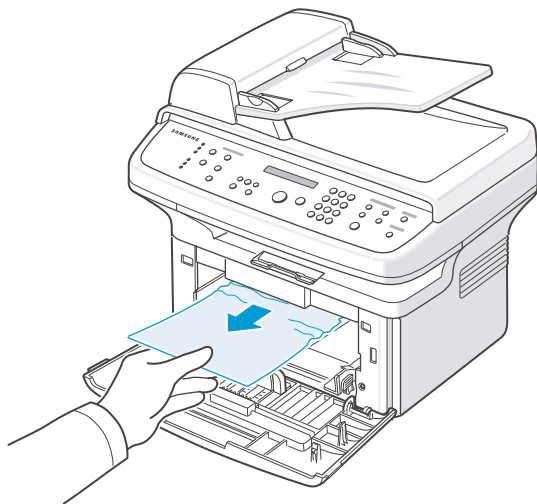
#### 4.6.3.2 In the Fuser Area or Around the Toner Cartridge

**NOTE:** The fuser area is hot. Take care when removing paper from the machine.

1. Open the front door and pull the toner cartridge out, lightly pushing it down.
3. Replace the toner cartridge and close the front door. Printing automatically resumes.



2. Remove the jammed paper by gently pulling it straight out.

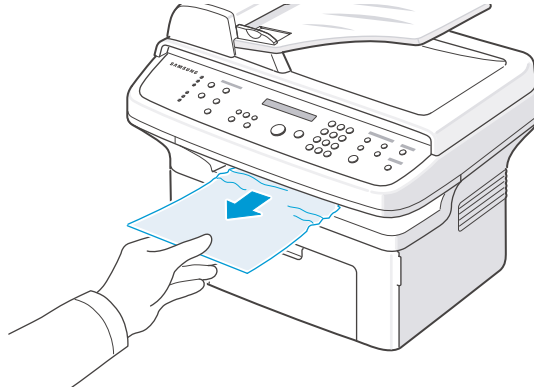




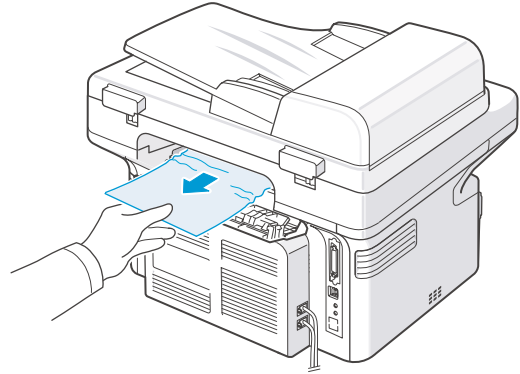
### 4.6.3.3 In the Paper Exit Area

1. Open and close the front door. The jammed paper automatically exits the machine.  
If the paper does not exit, continue to step 2.

2. Gently pull the paper out of the output tray.

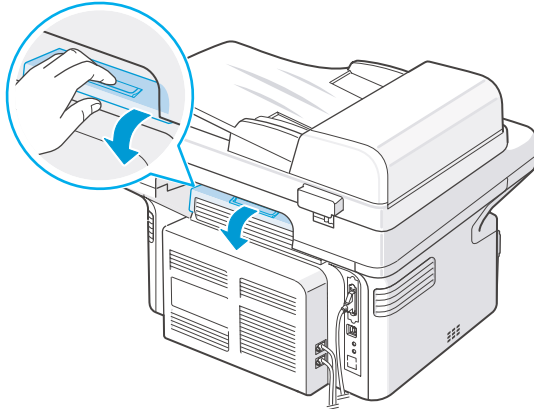


4. Remove the jammed paper by gently pulling it straight out.

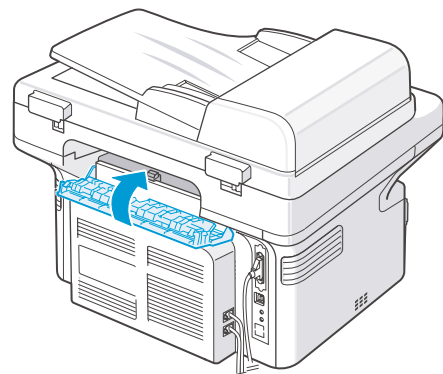


**NOTE:** Inside of the machine is hot. Take care when removing paper from the machine.

3. If there is any resistance and the paper does not move when you pull, or if you cannot see the paper in the output tray, open the rear door by pulling the tab on it.



5. Close the rear door.

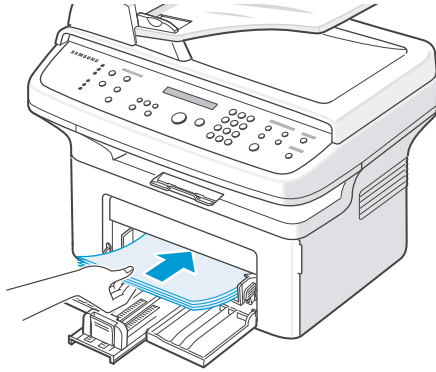


6. Open and close the front door to resume printing.

#### 4.6.3.4 Tips for Avoiding Paper Jams When Printing on the A5-sized Paper

If paper jams occur frequently when you print on A5-sized paper:

1. Load the paper into the tray, as shown below.



3. From the Orientation option of the Layout tab, set the Rotate option to 90°.

4. Click OK to start printing.  
For details, see Software User's Guide.

2. Open the printer's properties window, set the paper size to A5 from the Paper tab.

#### 4.6.3.5 Tips for Avoiding Paper Jams

By selecting the correct paper types, most paper jams can be avoided. When a paper jam occurs.

- Follow the procedures in "Loading Paper". Ensure that the adjustable guides are positioned correctly.
- Do not overload the tray.
- Do not remove paper from the tray while your machine is printing.
- Flex, fan, and straighten the paper before loading.
- Do not use creased, damp, or highly curled paper.
- Do not mix paper types in the tray.
- Use only recommended print materials. See "Paper Specifications".
- Ensure that the recommended print side of print materials is facing up in the tray.