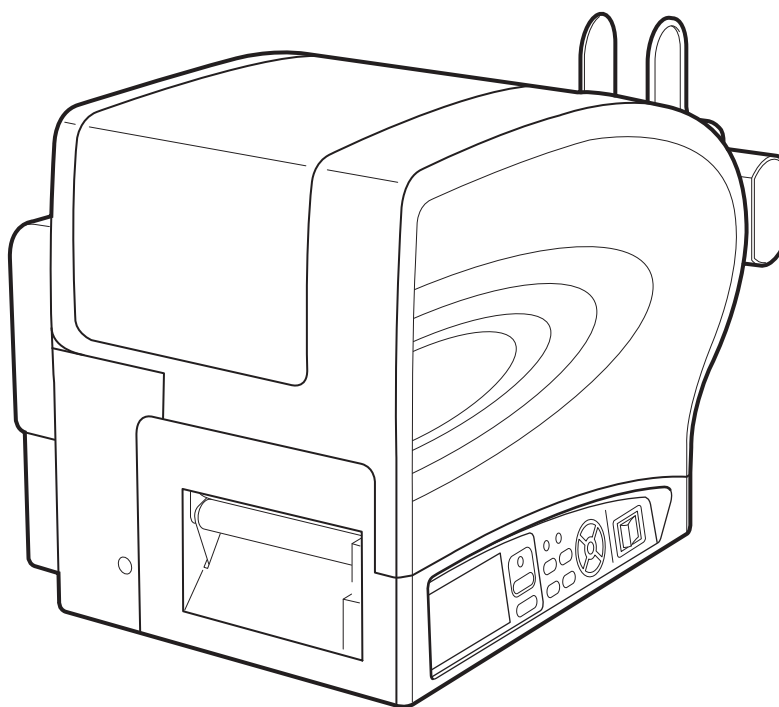




Quick Guide

For printer model:

TG3 Series



PN: 9001224(A)

Read this Quick Guide before using this product.
Keep this document available for future reference.

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Safety Precautions

Please read the following information carefully before installing and using the printer.


Pictographic Symbols

This instruction manual and the printer labels use a variety of pictographic symbols to facilitate safe and correct use of the printer and to prevent injury to others and property damage. The symbols and meanings for them are given below. Be sure to understand these symbols well before reading the main text.


	Ignoring the instructions marked by this symbol and erroneously operating the printer could result in death or serious injury.
	Ignoring the instructions marked by this symbol and erroneously operating the printer could result in injury or property damage.

Example Pictographs





The  pictograph means "Caution is required." A specific warning symbol is contained inside this pictograph (The symbol at left is for electric shock).






















The  pictograph means "Should not be done." What is specifically prohibited is contained in or near the pictograph (The symbol at left means "Disassembly prohibited").



The  pictograph means "Must be done." What is specifically to be done is contained in the pictograph (The symbol at left means "Unplug the power cord from the outlet").

 Warning		
Do not set on an unstable area <ul style="list-style-type: none"> Do not set on an unstable area, such as a wobbly table or slanted area or an area subject to strong vibration. If the printer falls off or topples over, it could injure someone. 	Do not use other than the specified voltage <ul style="list-style-type: none"> Do not use other than the specified voltage. Doing so could result in fire or electric shock. 	When the printer has been dropped or broken <ul style="list-style-type: none"> If the printer is dropped or broken, immediately turn off the power switch, unplug the power cord from the outlet, and contact your SATO reseller or technical support center. Using the printer in this condition could cause a fire or electric shock.
Do not place containers full of water or other liquid on the printer <ul style="list-style-type: none"> Do not place flower vases, cups, or other containers holding liquids, such as water or chemicals, or small metal objects near the printer. If they are spilled and get inside the printer, immediately turn off the power switch, unplug the power cord from the outlet, and contact your SATO reseller or technical support center. Using the printer in this condition could cause a fire or electric shock. 	Always ground the connections <ul style="list-style-type: none"> Always connect the printer's ground wire to a ground. Not grounding the ground wire could result in electric shock. 	Do not use the printer when something is abnormal about it <ul style="list-style-type: none"> Continuing to use the printer in the event something is abnormal about it, such as smoke or unusual smells coming from it, could result in fire or electric shock. Immediately turn off the power switch, unplug the power cord from the outlet, and contact your SATO reseller or technical support center for repairs. It is dangerous for the customer to try to repair it, so absolutely do not attempt repairs on your own.
Do not put objects inside the printer <ul style="list-style-type: none"> Do not insert or drop in metal or burnable objects inside the printer's openings (cable outlets, etc.). If foreign objects do get inside the printer, immediately turn off the power switch, unplug the power cord from the outlet, and contact your SATO reseller or technical support center. Using the printer in this condition could cause a fire or electric shock. 	Handling of the power cord <ul style="list-style-type: none"> Do not damage, break, or modify the power cord. Also, do not place heavy objects on the power cord, heat it, or pull it because doing so could damage the power cord and cause a fire or electric shock. If the power cord becomes damaged (core is exposed, wires broken, etc.), contact your SATO reseller or technical support center. Using the power cord in this condition could cause a fire or electric shock. Do not modify, excessively bend, twist, or pull the power cord. Using the power cord in such a condition could cause a fire or electric shock. 	Do not disassemble the printer <ul style="list-style-type: none"> Do not disassemble or modify the printer. Doing so could result in fire or electric shock. Contact your SATO reseller or technical support center to conduct internal inspections, adjustments, and repairs.

 Warning		
Regarding the cutter  <ul style="list-style-type: none"> Do not touch the cutter with your hands or do not put something into the cutter. Doing so could result in an injury. 	Using the head cleaning fluid   <ul style="list-style-type: none"> Use of flame or heat around the head cleaning fluid is prohibited. Absolutely do not heat it or subject it to flames. Keep the fluid out of reach of children to prevent them from accidentally drinking it. If the fluid is drunk, immediately consult with a physician. 	

 Caution		
Do not place in areas with high humidity  <ul style="list-style-type: none"> Do not place the printer in areas with high humidity or where condensation forms. If condensation forms, immediately turn off the power switch and do not use the printer until it dries. Using the printer while condensation is on it could result in electric shock. Carrying the Printer    <ul style="list-style-type: none"> When moving the printer, always unplug the power cord from the outlet and check to make sure all external wires are disconnected before moving it. Moving the printer with the wires still connected could damage the cords or connecting wires and result in a fire or electrical shock. Do not carry the printer with paper loaded in it. The paper could fall out and cause an injury. When setting the printer on the floor or a stand, make sure not to get your fingers or hands pinched under the printer feet. 	Power supply  <ul style="list-style-type: none"> Do not operate the power switch or plug in/unplug the power cord with wet hands. Doing so could result in electric shock. Power cord    <ul style="list-style-type: none"> Keep the power cord away from hot devices. Getting the power cord close to hot devices could cause the cord's covering to melt and cause a fire or electrical shock. When unplugging the power cord from the outlet, be sure to hold it by the plug. Pulling it by the cord could expose or break the cord wires and cause a fire or electric shock. The power cord set that comes with the printer is especially made for this printer. Do not use it with any other electrical devices. Top cover  <ul style="list-style-type: none"> Be careful not to get your fingers pinched when opening or closing the top cover. Also be careful the top cover does not slip off and drop. 	Print head   <ul style="list-style-type: none"> The print head is hot after printing. Be careful not to get burned when replacing paper or cleaning immediately after printing. Touching the edge of the print head immediately after printing could result in injury. Use caution when replacing the label or cleaning the print head. You should not replace the print head without having received the proper training. Loading paper  <ul style="list-style-type: none"> When loading roll paper, be careful not to get your fingers pinched between the paper roll and the supply unit. When not using the printer for a long time  <ul style="list-style-type: none"> When not using the printer for a long time, unplug the power cord from the outlet to maintain safety. During maintenance and cleaning  <ul style="list-style-type: none"> When maintaining and cleaning the printer, unplug the power cord from the outlet to maintain safety.

Caution
<ol style="list-style-type: none"> Reproduction in any manner of all or part of this document is prohibited. The contents of this document may be changed without prior notice. Great care has been taken in the preparation of this document, but if any problems, mistakes, or omissions are found, please contact your SATO reseller or technical support center.

Precautions for Installation and Handling

Printer operation can be affected by the printer environment.

Refer to the following instructions for installation and handling of the TG3 Series printer.

Select a Safe Location

Place the printer on a surface that is flat and level.

If the surface is not flat and level, this may result in poor print quality. This may also cause malfunction and shorten the life span of the printer.

Do not place the printer on a location that produces vibration.

Giving serious vibration or shock to the printer may cause malfunction and shorten the life span of the printer.

Keep the printer out of high temperature and humidity.

Avoid locations subject to extreme or rapid changes in temperature or humidity.

Do not place the printer in a location subject to water or oil.

Do not place the printer in a location where it will be splashed with water or oil. Water or oil entering inside the printer may cause a fire, electric shock, or malfunction.

Avoid dust.

Dust build up may result in poor print quality.

Keep out of direct sunlight.

This printer has a built-in optical sensor. Exposure to direct sunlight will make the sensor less responsive and may cause the label to be sensed incorrectly. Close the top cover when printing.

Power Supply

This printer requires an AC power supply.

Be sure to connect the printer to an AC power supply via the supplied AC adapter.

Connect the power cord to a grounded power outlet.

Make sure that the printer is plugged into a grounded power outlet.

Provide a stable source of electricity to the printer.

When using the printer, do not share its power outlet with other electrical devices that could result in power fluctuations and performance issues with your printer.

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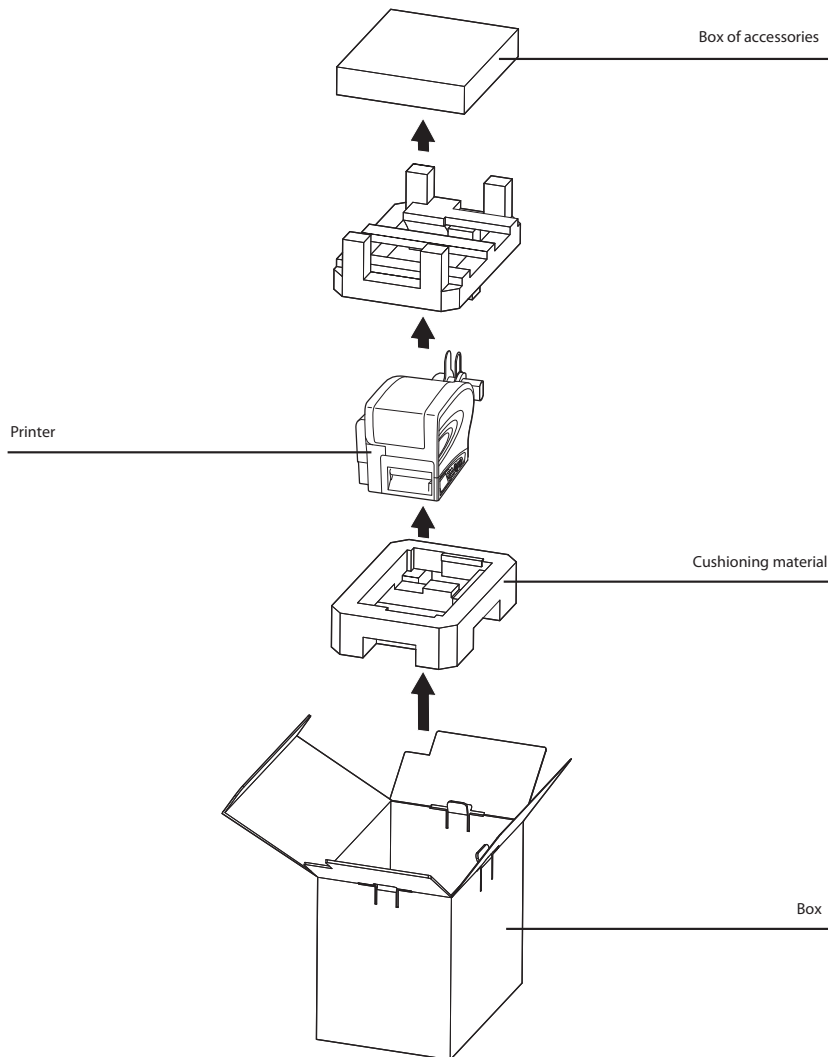
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1

UNPACKING

Unpack the printer and place it in the designated location. First of all, open the box. Next, remove the printer and place it in the designated location.



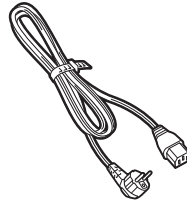
The shape of the cushioning material (cushions that hold the printer in place) may differ slightly from the diagram shown above.

ACCESSORIES

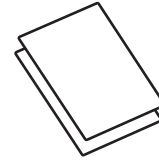
Make sure that you have received all of the following items in the package. If there are any accessories missing, contact your SATO reseller from whom you purchased the printer.



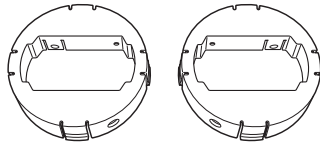
Quick Guide



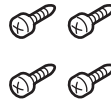
Power cord



Leaflet (Warranty)



Bosses



Boss securing screws

NOTE

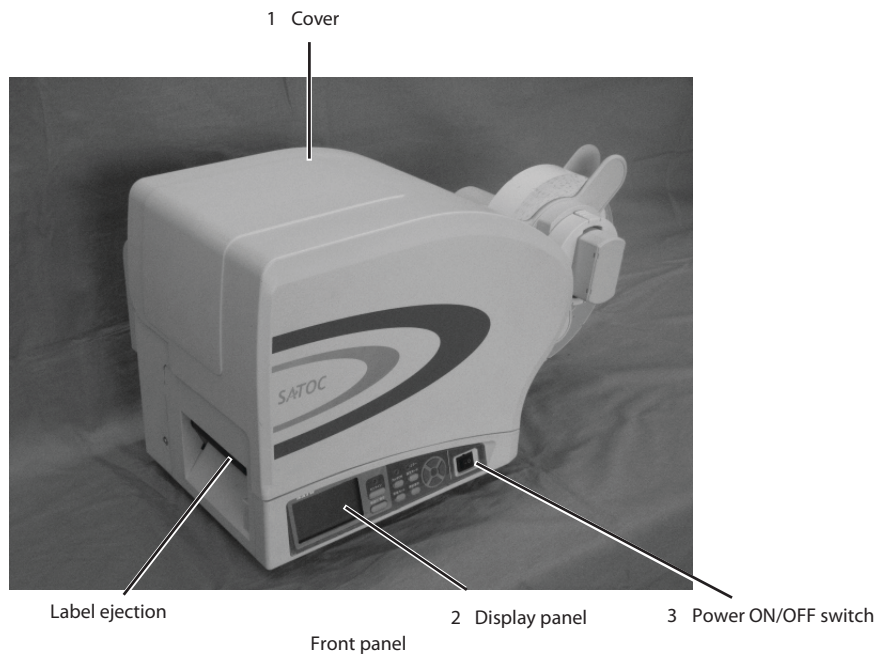
The shape of the plug on the AC power cord may vary, depending on the location in which it was purchased.

About the box

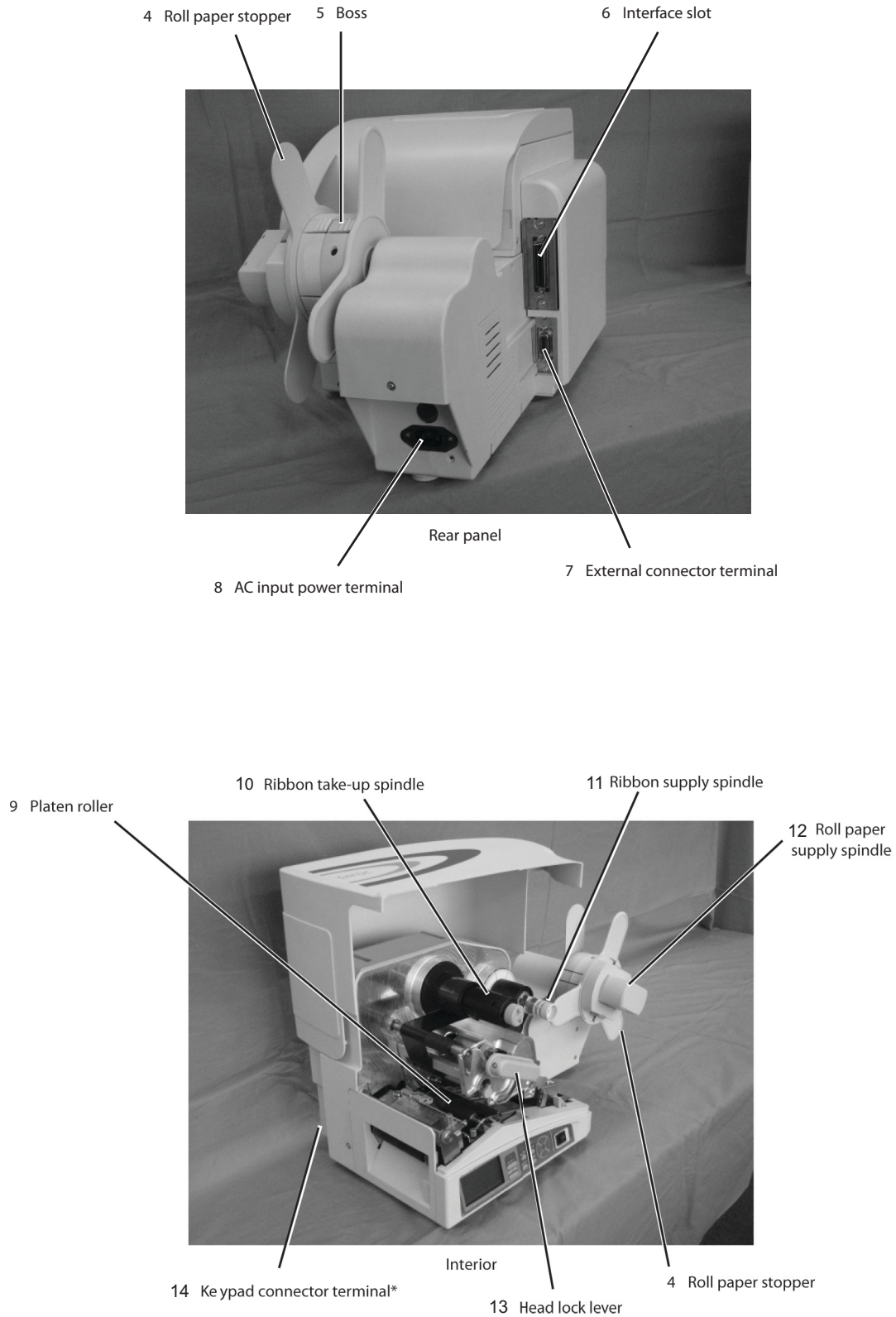
Please retain both the box in which the printer was packed and the cushioning material (cushions that hold the printer in place). If you need to send in the printer for repair, repack it in this box.

2

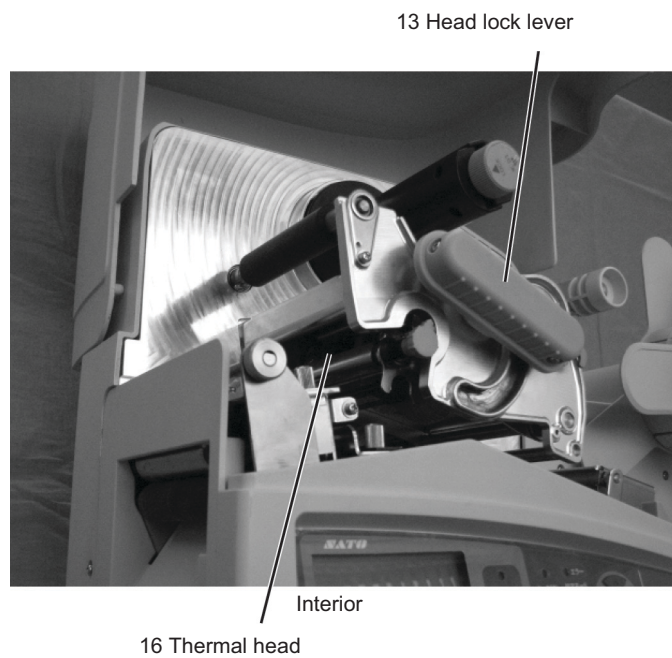
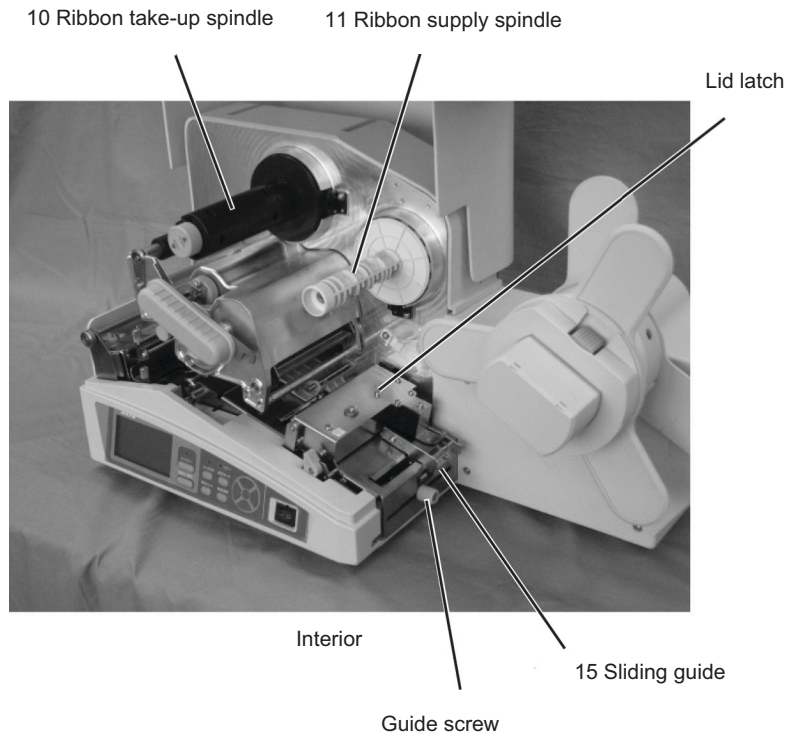
NAMES OF PARTS



Section 2: Names of Parts



* This connector is for the optional keypad only. It is not compatible with a computer's RS-232C serial port. Do not connect any other devices.



NAME AND FUNCTION OF CONTROLS

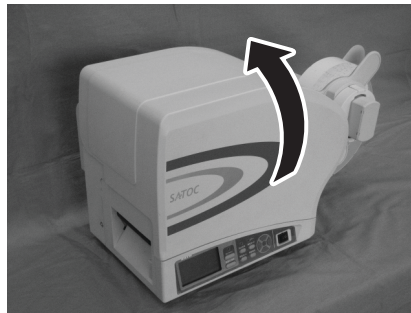
- | | |
|--|--|
| <p>① Cover
Open and close this cover to load the paper, ribbon and other items.</p> <p>② Display panel
Displays an error message and instructions.</p> <p>③ Power ON/OFF switch
This switch turns power ON or OFF.</p> <p>④ Roll paper stopper
Set to meet the size of the label used.</p> <p>⑤ Boss
Attach the boss to match the paper core size.</p> <p>⑥ Interface slot
This optional interface slot is for connection to a PC or other device.</p> <p>⑦ External connector terminal
This interface connector is for external signals.</p> <p>⑧ AC input power terminal
Use this to connect the power cord.</p> | <p>⑨ Platen roller
This roller feeds the paper. Perform maintenance at regular intervals.</p> <p>⑩ Ribbon take-up spindle</p> <p>⑪ Ribbon supply spindle
This is used to load the ribbon.</p> <p>⑫ Roll paper supply spindle
This is used to load the roll paper.</p> <p>⑬ Head lock lever
Use this to open and close the thermal head.</p> <p>⑭ Keypad connection terminal
Use this to connect the optional keypad (simple input device).</p> <p>⑮ Sliding guide
This holds down the paper.</p> <p>⑯ Thermal head
This component prints on the paper. Perform maintenance at regular intervals.</p> |
|--|--|

3

SETTING LABELS

SETTING ROLL PAPER

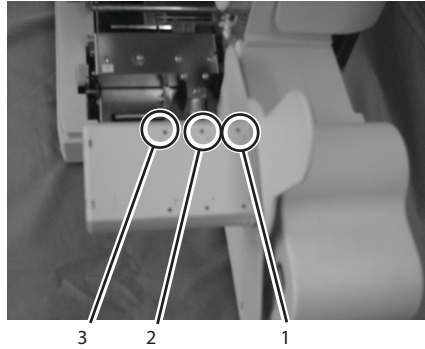
1. Open the cover.



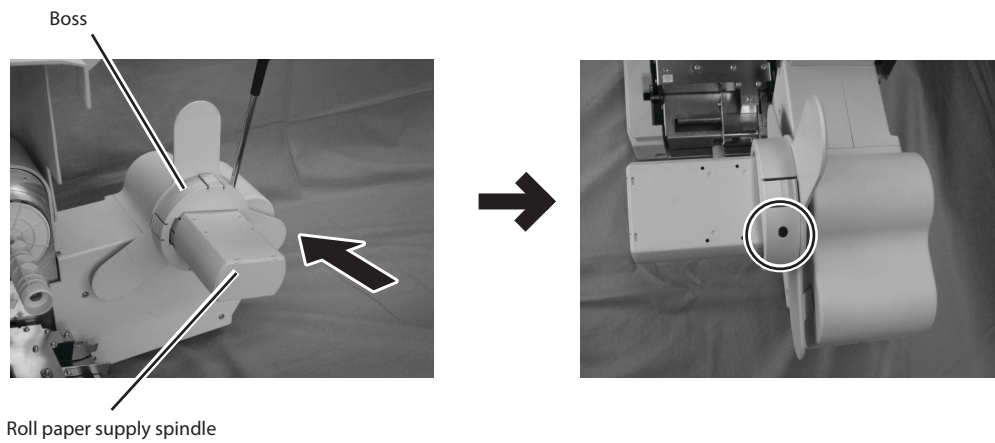
2. If the inner diameter of the roll is 4.0 inches (100 mm), attach the boss at the roll paper supply spindle. If the inner diameter of the roll is 3.0 inches (75 mm), proceed to Step 4.
3. Using the boss attachment positions given in the following table as a guide, attach the boss and then fasten it in place with the screw.

Boss attachment position	Paper width
Attachment hole 1,2	Up to 1.57 inches (40 mm)
Attachment hole 2,3	Up to 1.97 inches (50 mm)
Attachment hole 3	1.97 inches (50 mm) to 3.15 inches (80 mm)

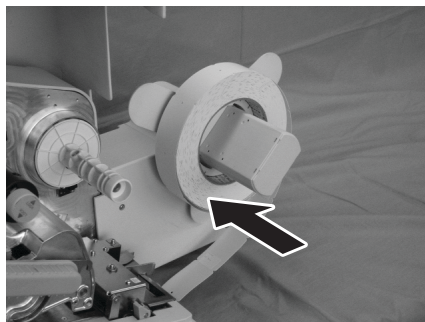
Section 3: Setting Labels



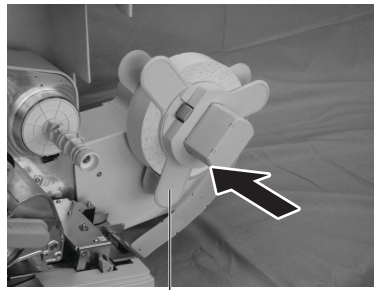
Above are the attachment holes mentioned on the previous page.



4. Load the paper. Push the roll firmly toward the inside of the printer until it touches the back of the spindle.



5. Attach the roll paper stopper.



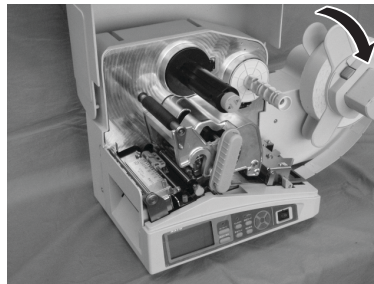
Roll paper stopper

6. Close the cover.



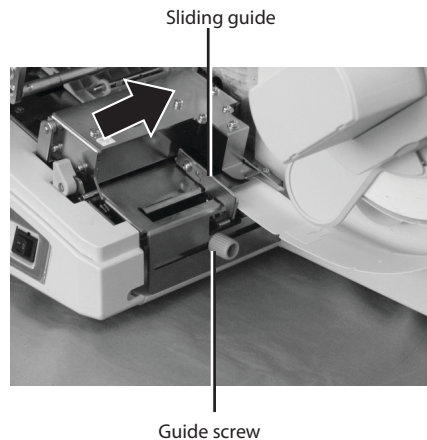
CAUTION

- When closing the cover, please be careful not to get your fingers caught in the cover.

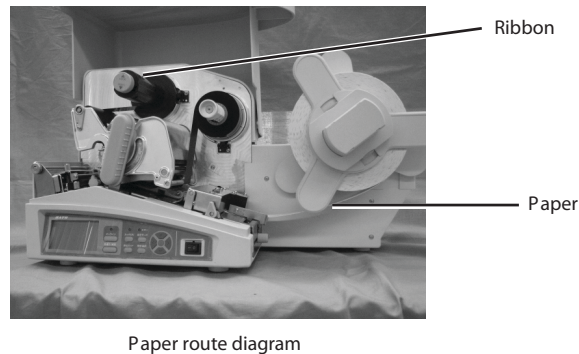


SETTING THE STANDARD CUTTER UNIT PAPER

1. Turn the power ON. "PAPER END" is visible on the display.
2. Turn the head lock level counterclockwise and then clockwise to lock the head. The ONLINE LED goes OFF and the paper type is visible on the display.
3. Press the PAPER button until the paper you want to use is visible on the display.
4. If you use tag stock, adjust the cutter sensor position. If you use label paper, proceed to Step 5. Loosen the adjustment screw to move the cutter sensor according to the scale on the gauge, and then tighten the adjustment screw.
5. Use the guide screw to secure the sliding guide according to the paper width.

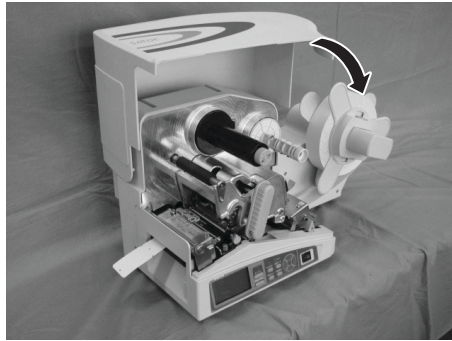


6. Push the paper underneath the paper lid.



7. Lift your hand off the paper when the paper begins to be pulled automatically.

8. After confirming that paper is cut, close the cover.



CAUTION

- Take care not to get your fingers caught when closing the cover.

AUTOMATIC FEED FUNCTION

The automatic feed function automatically transports paper detected with the jump hole sensor to the head position when paper is loaded in the printer.

When paper is inserted in the lid latch part while the printer is in the offline state after the head and lid latch are opened/closed, this function uses the jump hole sensor to detect the paper and then performs the automatic feed operation.

If the head and lid latch are opened/closed, paper is loaded manually, and then the Online key or Feed key is pressed, the feed operation is performed in order to position the paper, but this operation differs from the automatic feed operation.

CUTTING WITHOUT WASTING FIRST TAG OR LABEL

When using the tag or label longer than its maximum length in the automatic feed function, the printer feeds out a blank tag or label. The maximum length dimensions of a tag or label, based on each sensing type, are shown in the below table.

Tag or Label Type	Maximum Length
Center Hole Tag	5.51 inches / 140 mm
I-Mark Tag or Label	2.55 inches / 65 mm
Side Hole Tag	7.87 inches / 200 mm
R-Corner Tag	2.55 inches / 65 mm
Label with Gap	2.75 inches / 70 mm

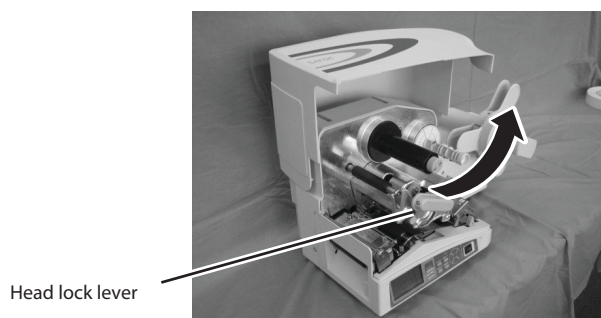
4

LOADING THE RIBBON

- Be sure to use only carbon ribbon supplied by SATO with this printer.
- Do not use a non-standard carbon ribbon.


SETTING CARBON RIBBON

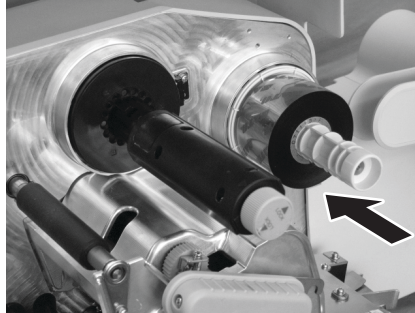
1. Open the cover. Perform the procedures shown in Step 1 of the section, Setting Roll Paper.
2. Rotate the purple head lock lever in the counterclockwise direction. The thermal head opens.



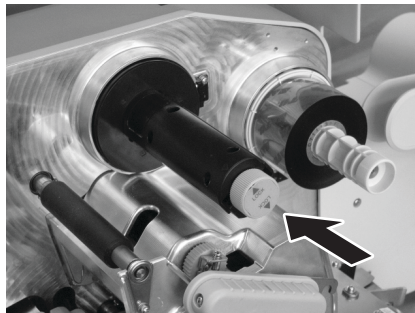
Section 4: Loading the Ribbon

3. Open the carbon ribbon package, and then load the ribbon on the ribbon supply spindle. Confirm that the winding direction is correct, and push the ribbon toward the inside of the printer.

	<p>CAUTION</p> <ul style="list-style-type: none">• Do not pass the carbon ribbon underneath the sensor.
---	--



4. Check that the ribbon take-up reel is fixed to the ribbon take-up spindle. If it is not fixed to the ribbon take-up spindle, push the ribbon take-up reel against the rear, and turn the purple color knob clockwise to lock it.



5. From the ribbon supply spindle, pass the carbon ribbon underneath the thermal head to the ribbon take-up spindle. Wind the ribbon around the take-up reel several times in the direction of the arrow. Confirm that the ribbon has been loaded as shown in the figure below when viewed from the side.

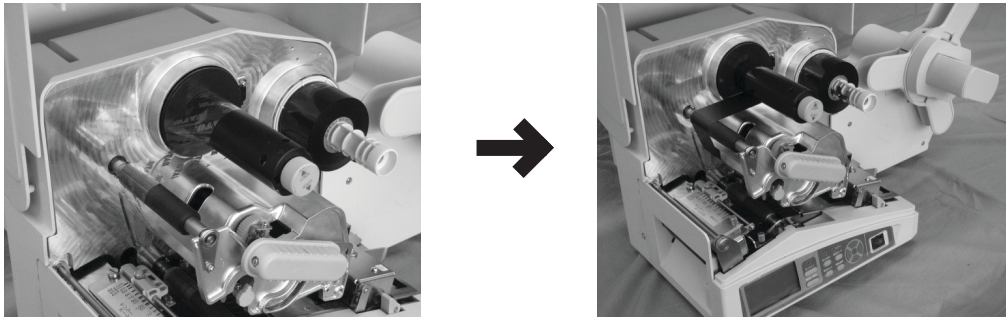
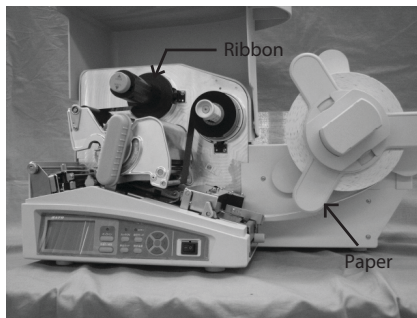

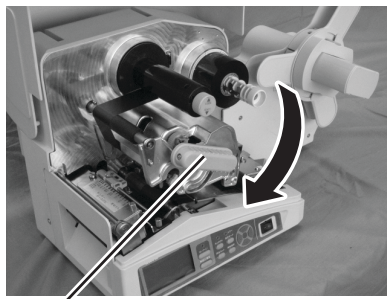


Figure showing the paper and ribbon path



	<p>CAUTION</p> <ul style="list-style-type: none"> • The thermal head and the surrounding area will become hot immediately after a printing operation. Take care not to burn yourself if you need to replace the carbon ribbon immediately after a printing operation. • Touching the edge of the thermal head with your bare hands may result in injury.
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6. Lock the head-lock lever, and then close the cover.

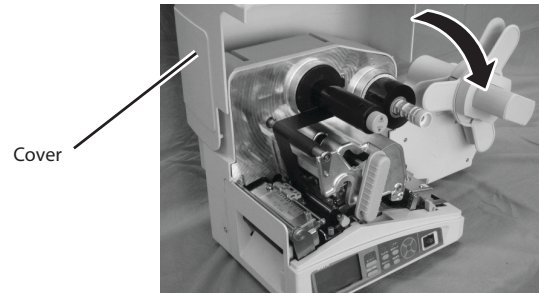


Head lock lever



CAUTION

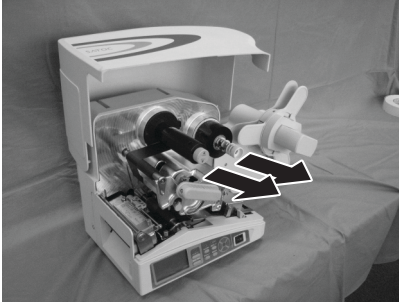
- Do not allow your fingers to be caught by the cover, when closing the open cover.



REMOVING THE CARBON RIBBON

Remove the supply side carbon ribbon in the direction indicated by the arrow.

For the wound-up carbon ribbon, turn the purple-colored knob counterclockwise to unlock the take-up reel. Then remove the ribbon in the direction indicated by the arrow.

**CAUTION**

- Ensure that you remove the wound-up carbon ribbon when the end of each roll of carbon ribbon is reached.
- You may get ink on your hands when you remove the carbon ribbon.

5

TURNING ON THE POWER

This section explains the power cord and interface cable connection procedures.

CONNECTING THE POWER CORD

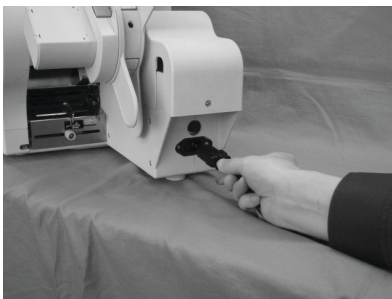
**WARNING**

- Be sure to connect the ground wire. Failure to do so may cause an electric shock.
- Do not operate the power switch or insert or remove the power cord while your hands are wet. Doing so may cause an electric shock.

**CAUTION**

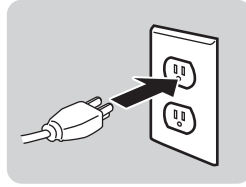
- The power cord provided with this printer is for use with this printer only. You cannot use it with other electrical devices.

1. Connect the power cord to the AC inlet power terminal on the rear panel of the printer. Ensure that the cord is correctly oriented. Secure the printer with one hand, and insert the cord firmly.



Section 5: Turning On the Power

2. Insert the power cord into a power outlet. A 3-pin plug is attached to the power cord provided with your printer. One of these pins is the ground wire. If the power outlet that you plan to use is a 3-pin type, simply insert the power plug as it is.



CONNECTING THE INTERFACE CABLE

The interface matches the options that you have selected.

Use a cable that is compatible with the respective standard:

- Parallel interface board
- Serial interface board (RS-232C)
- USB interface board
- LAN interface board

Ensure that the cable is correctly oriented. Secure the printer with one hand, and insert the cable firmly.



CONNECTING THE KEYPAD (SIMPLE INPUT DEVICE)

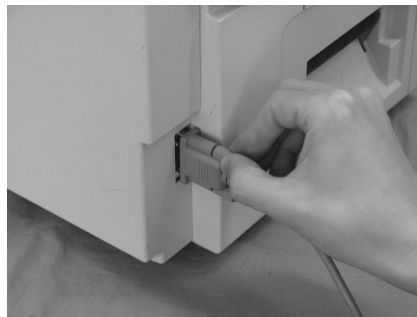
This section explains the optional simple input device connection procedures.

1. Confirm that the power of the printer is off.


2. Use one hand to hold the printer and firmly insert the connector. Make sure that the orientation of the connector is correct.



3. Use your fingers to turn the two screws of the connector to secure the connection.



TURNING ON THE POWER

	<p>WARNING</p> <ul style="list-style-type: none">• Do not operate the power switch or insert or remove the power cord while your hands are wet. Doing so may cause an electric shock.
---	--

Turn on the power switch on the printer's operator panel. Press the side of the switch marked “-.”



When you turn on the power, “ONLINE” is visible on the display.



TURNING OFF THE POWER

When you have confirmed that the printer is operating correctly, turn it off.

1. Press the “ONLINE” button to set the printer offline.

Be sure to confirm that the printer is in an offline status before turning it off.

If there is any printed paper remaining in the printer, cut it off.

2. Turn off the power switch on the printer's operator panel. Press the side of the switch marked “O.”



6

BASIC SPECIFICATIONS

	Specification
Head density (resolution)	TG308: 203 dpi (8 dots/mm) TG312: 305 dpi (12 dots/mm)
Printing method	Direct thermal and thermal transfer
Printable area	3.1" wide x 9.4" long, maximum (80 mm wide x 240 mm long, maximum)
Operation modes	Continuous, cutter, sensor prohibited mode
Print speed	2 to 10 inches / second (50 to 250 mm / second). However, restrictions may apply, depending on the type of print layout, paper, and carbon ribbon being used.
Paper	Use a roll paper specified by SATO.
Paper thickness	Label paper: 140 to 265 μ m, 0.01 inches (0.14 to 0.265 mm) Tag stock: 157 to 330 μ m, 0.01 inches (0.157 to 0.33 mm) For details on support for RFID tags, please contact your SATO reseller or technical support center.

	Specification
Media size	<p>Label Continuous type Length: 0.6 to 9.3 inches (backing liner: 0.7 to 9.4 inches) / 16 to 237 mm (backing liner: 19 to 240 mm) Width: 0.9 to 3.1 inches (backing liner: 1.0 to 3.3 inches) / 22 to 80 mm (backing liner: 25 to 83 mm)</p> <p>Label Cutter Length: 0.9 to 9.3 inches (backing liner: 1.0 to 9.4 inches) / 22 to 237 mm (backing liner: 25 to 240 mm) Width: 0.9 to 3.1 inches (backing liner: 1.0 to 3.3 inches) / 22 to 80 mm (backing liner: 25 to 83 mm)</p> <p>Tag stock Continuous Length: 1.0 to 9.4 inches (25 to 240 mm) Width: 1.3 to 3.3 inches (32 to 83 mm)</p> <p>Tag stock Cutter Length: 1.0 to 9.4 inches (25 to 240 mm) Width: 1.3 to 3.3 inches (32 to 83 mm)</p> <p>Size restrictions may apply, depending upon the conditions of use.</p>
Outer diameter of paper or Roll size	<p>Label paper ø10 inches (ø 250 mm) maximum Core inner diameter: ø 3 inches (ø 76.4 mm), ø 4 inches (ø102 mm)</p> <p>Tag stock ø10 inches (ø 250 mm) maximum Core inner diameter: ø 3 inches (ø 76.4 mm), ø 4 inches (ø102 mm)</p> <p>Fanfold paper Maximum folding height: 7.9 inches (200 mm)</p>

	Specification
Ribbon size and type	<p>Ribbon length: 1,476 feet (450 m) roll maximum</p> <p>Ribbon width: 3.31 inches (84 mm) maximum</p> <p>Winding direction: Both forward and reverse winding</p> <p>Take-up method: Coreless (standard)</p>
Carbon ribbon	Use a carbon ribbon specified by SATO.
Fonts installed as standard bitmap fonts	<p>For text comprised of letters, numbers and symbols:</p> <p>TG308 X1 text: 20 x 15 dots</p> <p>TG312 X1 text: 30 x 75 dots</p> <p>TG308 X2 text: 8 x 20 dots</p> <p>TG312 X2 text: 13 x 30 dots</p> <p>TG308 X3 text: 13 x 21 dots</p> <p>TG312 X3 text: 20 x 32 dots</p> <p>WB text: 18 x 30 dots</p> <p>WL text: 28 x 52 dots</p> <p>TG308 OCR-A: 15 X 22 dots</p> <p>TG312 OCR-A: 22 X 33 dots</p> <p>TG308 OCR-B: 20 x 24 dots</p> <p>TG312 OCR-B: 30 x 36 dots</p> <p>For text comprised of numbers, “\$ ¥ - , “) italics:</p> <p>X70 text: 32 x 48 dots</p> <p>X71 text: 40 x 60 dots</p> <p>X72 text: 48 x 72 dots</p> <p>X73 text: 64 x 96 dots</p> <p>For text comprised of numbers, “\$ ¥ - , “):</p> <p>X74 text: 32 x 48 dots</p> <p>X75 text: 40 x 60 dots</p> <p>X76 text: 48 x 72 dots</p> <p>X77 text: 64 x 96 dots</p>

	Specification
Fonts installed as standard rasterizer fonts	CG Times (letters, numbers and symbols) CG Triumvirate (letters, numbers and symbols) Futura, CG Palacio, CG Century Schoolbook, CG Triumvirate Condensed, CG Univers
Fonts installed as standard outline fonts	Helvetica Bold (letters, numbers and symbols) Proportional or Fixed Spacing Font size: 24 x 24 dots to 999 x 999 dots 10 font variations
Barcodes	UPC-A, UPC-E, EAN-13, EAN-8, CODE39, CODE93, CODE128 (128A, 128B, 128C), GS1-128 (UCC/EAN-128) (Character sets: Set-A, Set-B, Set-C), CODABAR (NW-7), SATOC CODABAR (NW-7), Reduced CODABAR (NW-7), ITF, Industrial2of5, Matrix2of5, BOOKLAND, MSI, POSTNET, GS1 DataBar (RSS), GS1 DataBar Omnidirectional, GS1 DataBar Truncated, GS1 DataBar Stacked, GS1 DataBar Stacked Omni-Directional, GS1 DataBar Limited, GS1 DataBar Expanded, GS1 DataBar Expanded Stacked * GS1 DataBar was formerly RSS.
2D codes	QR code, Micro QR, PDF417, Micro PDF, Security QR, MAXI code, GS1 DataMatrix (ECC200)
Composite symbols	EAN-13 Composite (CC-A/CC-B), EAN-8 Composite (CC-A/CC-B), UPC-A Composite (CC-A/CCB), UPC-E Composite (CC-A/CC-B), GS1 DataBar Composite (CC-A/CC-B), GS1 DataBar Truncated Composite (CC-A/CC-B), GS1 DataBar Stacked, GS1 DataBar Stacked Omni-Directional Composite (CC-A/CC-B), GS1 DataBar Limited Composite (CC-A/CC-B), GS1-128 Composite (CC-A/CC-B/CC-C) * GS1 DataBar was formerly RSS.
Printing direction (text and barcodes)	0°, 90°, 180°, and 270°
Barcode ratio	1:2, 1:3, 2:5 user-definable
Magnification factor (text and barcodes)	Text: 1 to 12 times vertically and horizontally Barcode: 1 to 12 times

	Specification												
Installed functions	<p>(1) Status report function (2) Graphics function (3) Sequential numbering function (4) Form overlay function (5) Non-standard character store function (6) Black/white inverse function (7) Line/box drawing function (8) Formal store function (9) Zero slash selection function (10) JIS/Shift-JIS selection function (11) Tag stock/label paper automatic feeding function (with support for not issuing blank tag/label)* (12) Eject cut function (13) Item cut function</p> <p>* There are restrictions on the tags and labels that can be used with the automatic feeding function (no waste of first tag or label). When the tags or labels exceed the maximum length, automatic feeding is possible, but the first tab or label will be blank.</p> <p>Tags/labels for which the first tag or label is not wasted</p> <table> <tr> <th>Tag or Label Type</th><th>Maximum Length</th></tr> <tr> <td>Center Hole Tag</td><td>5.51 inches / 140 mm</td></tr> <tr> <td>I-Mark Tag or Label</td><td>2.55 inches / 65 mm</td></tr> <tr> <td>Side Hole Tag</td><td>7.87 inches / 200 mm</td></tr> <tr> <td>Edge (tag)</td><td>2.55 inches / 65 mm</td></tr> <tr> <td>Label with Gap</td><td>2.75 inches / 70 mm</td></tr> </table>	Tag or Label Type	Maximum Length	Center Hole Tag	5.51 inches / 140 mm	I-Mark Tag or Label	2.55 inches / 65 mm	Side Hole Tag	7.87 inches / 200 mm	Edge (tag)	2.55 inches / 65 mm	Label with Gap	2.75 inches / 70 mm
Tag or Label Type	Maximum Length												
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Self-diagnosis functions	<p>(1) Broken head element check (2) Paper end detection (3) Test print (4) Ribbon end detection (5) Ribbon near-end detection (6) Kanji data check (7) Head open (8) Lid latch open (9) Cutter error (10) Stacker full (when option is installed) (11) Take-up spindle full (when option is installed)</p>												
Dimensions and Weight	<p>Outer dimensions:</p> <p>Width: 11.18 inches / 284 mm Depth: 21.65 inches / 550 mm Height: 11.81 inches / 300 mm Weight: Approximately 30.86 pounds / 14 kg</p>												

	Specification
Power supply	Input power voltage: AC 100 to 240 V \pm 10% (full range)
	Rated input voltage: AC 100 to 240 V (full range)
	At peak times: 118.1 Volts AC/118.1 Watts (printing rate: 30%)
	In standby: 25.6 Volts AC / 23.5 Watts (input power voltage state: 100 V / 50 Hz)
Noise (EMC) standard	FCC 15B Class B
Wireless standard	Wireless LAN (2.45 GHz): FCC15B Class B
	HF band RFID: FCC 15B / FCC 15C
	UHF BAND RFID: FCC15B / FCC15C
Temperature and humidity environment	Usage environment: 41° to 95° F / 5° to 35° C, and 30 to 80% RH (without condensation)
	Storage environment: 41° to 140° F / -5° to 60° C, and 30 to 90% RH (without condensation) * These ranges do not apply to supply products.
Options	(1) Large stacker (ST-TG3) (2) External rewinder (RWG500) (3) RFID kit (HF band specification / UHF band specification)** (4) Simple input device (Keypad) ** (5) Ribbon core compatibility kit
Interface board	(1) Communication interface (1 slot) (2) External connector (for optional devices) (3) RS-232C D-sub 9-pin type (for simple input device (Keypad) only)
Optional communication interface boards	(1) RS-232C (high-speed) interface board (2) IEEE1284 (ESP/compliant) interface board (3) LAN interface board (4) Wireless LAN interface board * (5) USB interface board (FULL SPEED compatible)
LCD specifications	Graphic LCD (128 x 64 dots) with side light
Operation keys	Online, Feed/OK, Cutter ON, Eject Cut, Setting Mode, Select Paper, Orientation (4)

	Specification
Level adjustment	(1) Paper gap adjustment (2) Pitch sensor level adjustment (3) I-mark sensor level adjustment (4) Gap sensor level adjustment (5) Ribbon sensor level adjustment (6) Print density adjustment (7) Side hole sensor level adjustment (8) Notch sensor level adjustment (9) Jump hole sensor level adjustment
Detection sensors	(1) I-mark sensor (reflective type) (2) Gap sensor (transmissive type) (3) Center hole sensor (4) Side hole sensor (5) Notch sensor (6) Jump hole sensor

* Wireless LAN IEEE 802.11b/g

The board comes with a wired LAN connector. However, the simultaneous use of a wireless connection and wired connection is not possible.

** Contact your SATO Regional Sales Manager or Reseller for availability.

NOTE

Regarding registered trademarks and trademarks of other companies:
 QR Code is a registered trademark of Denso Wave Incorporated.

7

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