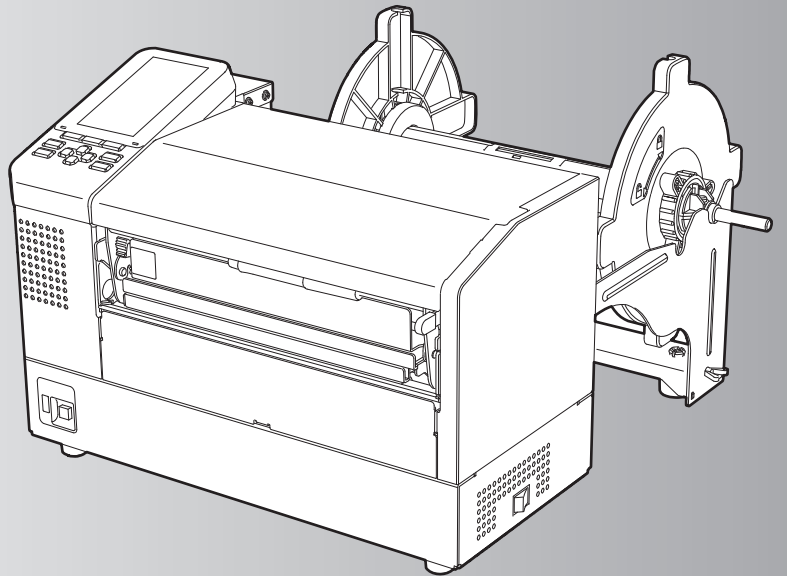


TOSHIBA

BARCODE PRINTERS

Owner's Manual

BX820T-TS02-QM-S



Preface




Thank you for purchasing our product.

To keep the product in its best condition, keep this manual handy and use it whenever necessary.

■ How to read this manual

□ Symbols in this manual

In this manual, some important items are described with the symbols shown below. Be sure to read these items before using this equipment.

 WARNING	Indicates a potentially hazardous situation which, if not avoided, could result in death, serious injury, or serious damage, or fire in the equipment or surrounding objects.
 CAUTION	Indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury, partial damage to the equipment or surrounding objects, or loss of data.
Note	Indicates information to which you should pay attention when operating the equipment.
Tip	Describes handy information that is useful to know when operating the equipment.
	References describing items related to what you are currently doing. See these references as required.

□ Target audience for this manual

This is a manual that is aimed at general users and administrators.

□ Important notices about this manual

- This product is designed for commercial usage and is not consumer product.
- When using the product (including software), be sure to follow the instructions in this manual.
- This manual cannot be reproduced, duplicated, or reprinted in any form without prior written permission of Toshiba Tec Corporation.
- The contents of this manual may be changed without notification. Contact your authorized Toshiba Tec Corporation representative for the latest version of the manual. Refer to your local authorized service representative with regard to any queries you may have in this manual.

□ Disclaimer Notice

The following notice sets out the exclusions and limitations of liability of Toshiba Tec Corporation (including its employees, agents and sub-contractors) to any purchaser or user ('User') of this printer including its accessories, options and bundled software ('Product').

1. The exclusion and limitations of liability referred to in this notice shall be effective to the fullest extent permissible at law. For the avoidance of doubt, nothing in this notice shall be taken to exclude or limit Toshiba Tec Corporation's liability for death or personal injury caused by Toshiba Tec Corporation's negligence or Toshiba Tec Corporation's fraudulent misrepresentation.
2. All warranties, conditions and other terms implied by law are, to the fullest extent permitted by law, excluded and no such implied warranties are given or apply in relation to the Products.
3. Toshiba Tec Corporation shall not be liable for any loss, cost, expense, claim or damage whatsoever caused by any of the following:
 - (a) use or handling of the Product otherwise than in accordance with the manuals, including but not limited to Operator's Manual, User's Guide, and/or incorrect or careless handling or use of the Product;
 - (b) any cause which prevents the Product from operating or functioning correctly which arises from or is attributable to either acts, omissions, events or accidents beyond the reasonable control of Toshiba Tec Corporation including without limitation acts of God, war, riot, civil commotion, malicious or deliberate damage, fire, flood, or storm, natural calamity, earthquakes, abnormal voltage or other disasters;
 - (c) additions, modifications, disassembly, transportation, or repairs by any person other than service technicians authorized by Toshiba Tec Corporation; or
 - (d) use of paper, supplies or parts other than those recommended by Toshiba Tec Corporation.
4. Subject to paragraph 1, Toshiba Tec Corporation shall not be liable to Customer for:

(a) loss of profits; loss of sales or turnover; loss of or damage to reputation; loss of production; loss of anticipated savings; loss of goodwill or business opportunities; loss of customers; loss of, or loss of use of, any software or data; loss under or in relation to any contract; or

(b) any special, incidental, consequential or indirect loss or damage, costs, expenses, financial loss or claims for consequential compensation;

whatsoever and howsoever caused which arise out of or in connection with the Product or the use or handling of the Product even if Toshiba Tec Corporation is advised of the possibility of such damages.

Toshiba Tec Corporation shall not be liable for any loss, cost, expense, claim or damage caused by any inability to use (including, but not limited to failure, malfunction, hang-up, virus infection or other problems) which arises from use of the Product with hardware, goods or software which Toshiba Tec Corporation has not directly or indirectly supplied.

❑ Screens and description of operation procedures

The screen display may differ depending on your model and operating environment, such as installed options, OS version, and application software.

❑ Trademarks

- Microsoft, Windows, Windows NT, and the brand names and product names of other Microsoft products are trademarks of Microsoft Corporation in the US and other countries.
- The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Toshiba Tec Corporation is under license. Other trademarks and trade names are those of their respective owners.
- Other company names and product names in this manual are the trademarks of their respective companies.

❑ Official Names of Windows Operating System

- The official name of Windows® 10 is Microsoft Windows 10 Operating System.
- The official name of Windows® 11 is Microsoft Windows 11 Operating System.
- The official name of Windows Server® 2016 is Microsoft Windows Server 2016 Operating System.
- The official name of Windows Server® 2019 is Microsoft Windows Server 2019 Operating System.
- The official name of Windows Server® 2022 is Microsoft Windows Server 2022 Operating System.
- The official name of Windows Server® 2025 is Microsoft Windows Server 2025 Operating System.

❑ Importers/Manufacturer

Importer (For EU, EFTA)

Toshiba Tec Germany Imaging Systems GmbH
Carl-Schurz-Str. 7, 41460 Neuss, Germany

Importer (For UK)

Toshiba Tec U.K. Imaging Systems Ltd
Abbey Cloisters, Abbey Green, Chertsey, Surrey, KT16 8RB, United Kingdom

Importer (For Türkiye)

Boer Bilisim San. Tic. AS.
Yukari Dudullu, Tavukcuyolu Cad. Demirturk Sok No: 8A 34775,
Umraniye - Istanbul, Türkiye

Manufacturer

Toshiba Tec Corporation
1-11-1, Osaki, Shinagawa-ku, Tokyo, 141-8562, Japan

Precautions for the handling of Wireless Communication Devices

The following precautions are specific to wireless function. See “Safety Information” for general product precautions and regulatory information.

This product is classified as “wireless equipment for stations of low-power data transmissions systems” under the Wireless Telegraphy Act, and does not require a radio transmission license. The law prohibits modification of the interior of this product.

■ Regulatory Information

This product must be installed and used in strict accordance with the manufacturer’s instructions as described in the user documentation that comes with the product. This product complies with the following radio frequency and safety standards.

Standards below are certified under the operation with the provided antenna. Do not use this product with other antennas.

☐ Europe – EU Declaration of Conformity

Hereby, Toshiba Tec Corporation, declares that the BX820T series are in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU.

☐ USA – Federal Communications Commission (FCC)

NOTE:

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operations of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

CAUTION:

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the grantee of this device could void the user’s authority to operate the equipment.

RF EXPOSURE WARNING:

This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provided with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.

☐ Canada – Innovation, Science and Economic Development Canada (ISED)

This device complies with ISED’S licence-exempt RSS standard(s).

Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'ISDE applicables aux appareils radio exempts de licence.

L'exploitation est autorisée aux deux conditions suivantes :

- (1) cet appareil ne doit pas causer d'interférence et
- (2) cet appareil doit accepter toute interférence, notamment les interférences qui peuvent affecter son fonctionnement.

Radio Frequency (RF) Exposure Information

The radiated output power of the Wireless Device is below the Innovation, Science and Economic Development Canada (ISED) radio frequency exposure limits. The Wireless Device should be used in such a manner such that the potential for human contact during normal operation is minimized.

This device has also been evaluated and shown compliant with the ISED RF Exposure limits under mobile exposure conditions (antennas are greater than 20 cm from a person's body).

Informations concernant l'exposition aux fréquences radio (RF)

La puissance de sortie émise par l'appareil de sans fil est inférieure à la limite d'exposition aux fréquences radio Innovation, Sciences et Développement économique Canada (ISDE). Utilisez l'appareil de sans fil de façon à minimiser les contacts humains lors du fonctionnement normal.

Ce périphérique a également été évalué et démontré conforme aux limites d'exposition aux RF d'ISDE dans des conditions d'exposition à des appareils mobiles (antennes sont supérieures à 20 cm à partir du corps d'une personne).

■ Approved Countries/Regions for Use for the Devices

This equipment is approved to the radio standard by the specific countries/regions. Please ask Toshiba Tec authorized dealers or service technicians.

■ Precaution for Use

This product communicates with other devices by radio. Depending on the installation location, orientation, environment, etc., its communication performance may deteriorate or devices installed near by may be affected. Bluetooth® and Wireless LAN devices operate within the same radio frequency range and may interfere with one another. If you use Bluetooth® and Wireless LAN devices simultaneously, you may occasionally experience a less than optimal network performance or even lose your network connection.

If you should experience any such problem, immediately turn off your Bluetooth® or Wireless LAN device.

Keep away from a microwave. Communication performance may deteriorate or a communication error may occur due to the radio emitted from a microwave.

Do not use the product on a metal table or near a metal object. Communication performance may be deteriorated.

* Bluetooth® is a registered trademark owned by Bluetooth SIG, Inc.

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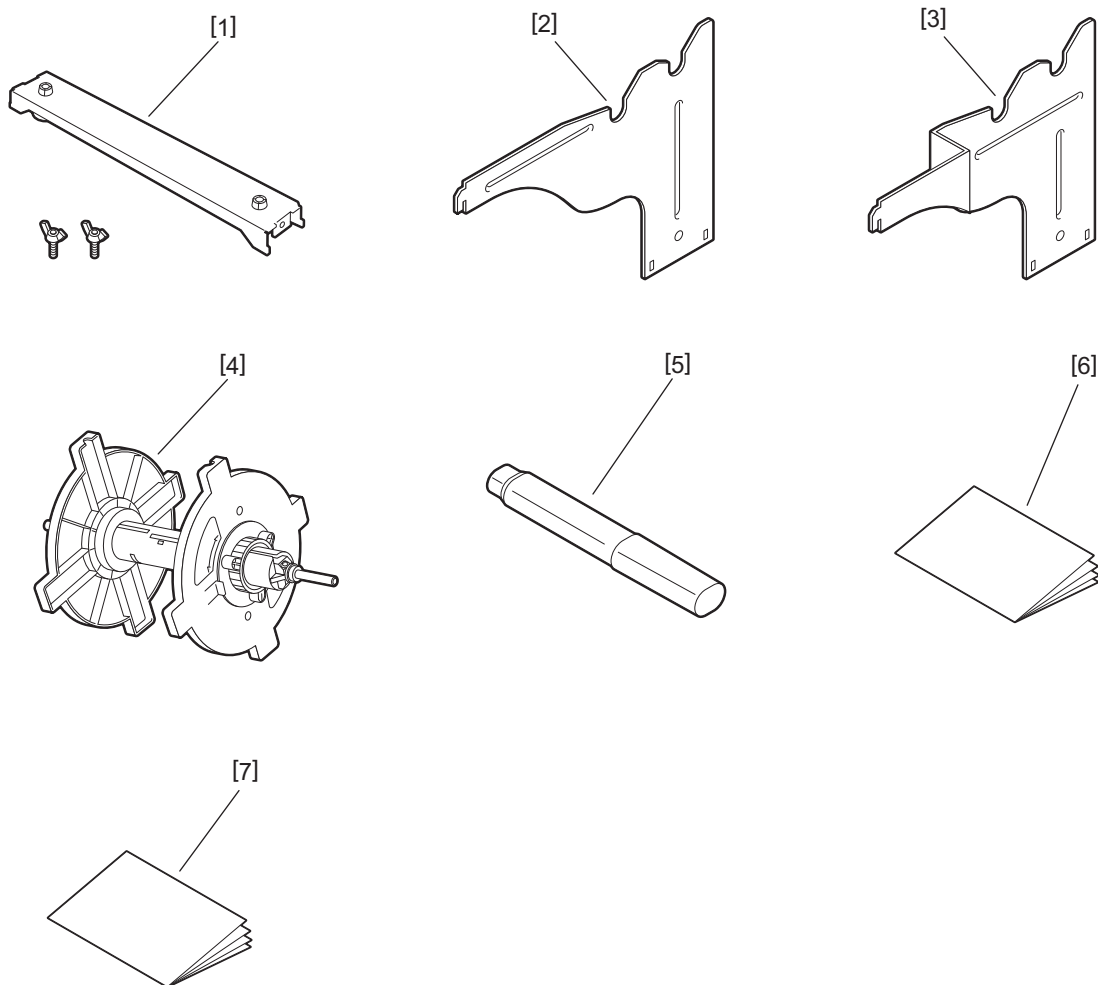
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Accessories

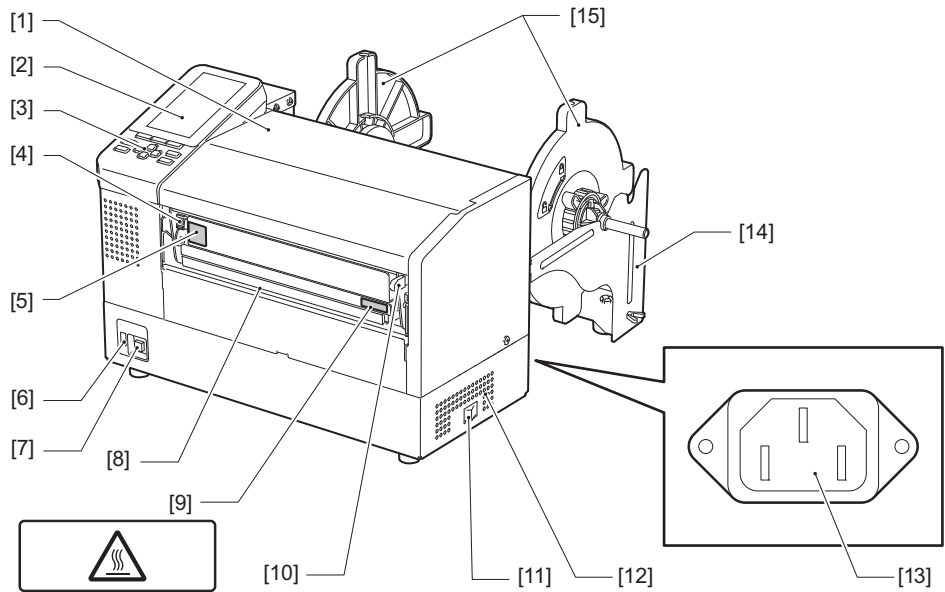
Confirm whether all the accessories are present.
If anything is missing, contact your service representative.



No.	Name of part
1	Supply stand base (1), wing bolt (2)
2	Right supply holder frame (1)
3	Left supply holder frame (1)
4	Supply holder unit (1)
5	Head cleaner pen (1 pc.)
6	Safety Information (multi-language)
7	Quick Setup Guide (1 set)

■ Exterior view

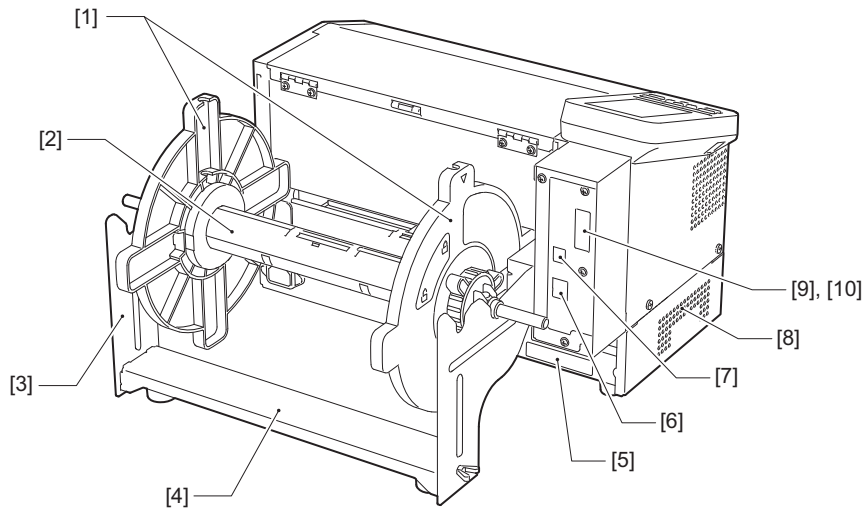
□ Front side



No.	Name of part
1	Top cover Open this cover when replacing the media or ribbon, or cleaning the inside.
2	Color LCD Displays the setting screen of each function and the status of the printer.
3	Operation panel There are two types of lamps that indicate the status of the printer and 11 buttons that operate the printer. 📖 P.14 "Operation panel"
4	Pressure switch lever Switches the pressure applied to the media.
5	Pressure switch label
6	USB host Connects a USB memory, scanner, keyboard, etc.
7	POWER button Press to turn on/off the power of the printer.
8	Media outlet The printed media comes from this outlet.
9	Caution label
10	Head block release lever Releases the print head block.
11	Main power switch Turn on/off the main power of the printer. —: ON ○: OFF
12	Ventilation holes
13	AC power inlet Connects the power cable.

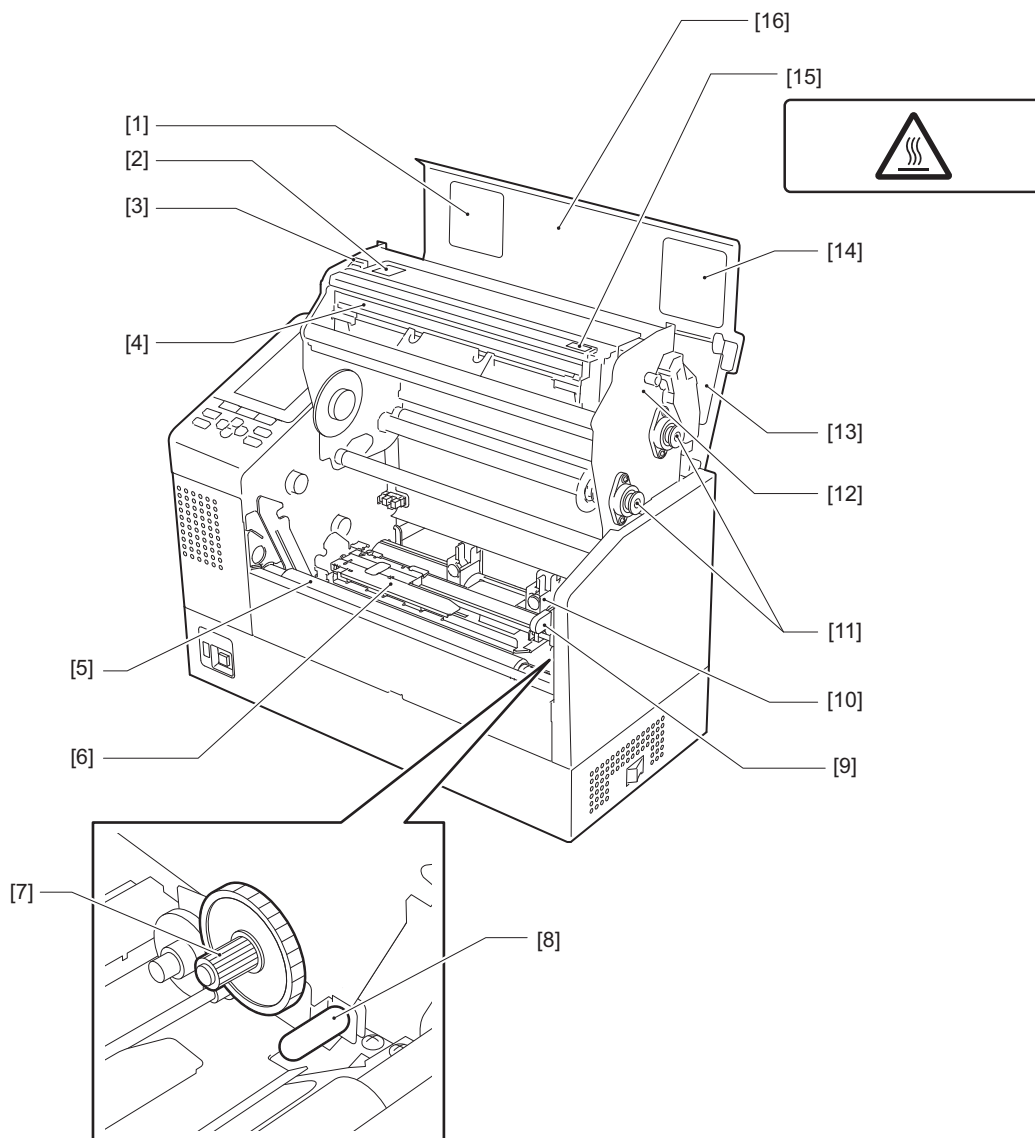
No.	Name of part
14	Supply stand
15	Supply holder unit

□ Rear side



No.	Name of part
1	Supply holder unit
2	Supply shaft
3	Supply holder frame
4	Supply stand base
5	Extended I/O port (optional) Connects peripherals. For peripheral devices connected to the extended I/O port, use devices that comply with specifications and relevant laws and regulations. Note that Toshiba Tec does not manufacture any devices for connection to the extended I/O port.
6	LAN port Connects a LAN cable. 📖 P.21 “Connecting to a computer”
7	USB port Connects a USB cable. 📖 P.21 “Connecting to a computer”
8	Ventilation holes
9	Serial interface port (option) Connects RS-232C compliant communication cable. (D-Sub 9-pin connector inch-screw type) Wireless LAN/Bluetooth cannot be used when the serial interface is utilized.
10	Wireless LAN / Bluetooth port (optional) Connects the wireless communication module (Wireless LAN / Bluetooth). The serial interface cannot be used when wireless LAN/Bluetooth is utilized.

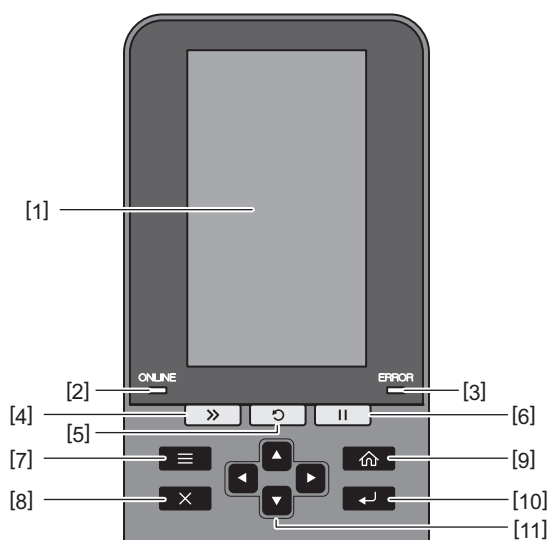
Interior



No.	Name of part
1	Caution label
2	Pressure switch label
3	Pressure switch lever Switches the pressure applied to the media.
4	Print head Prints by applying heat to the media.
5	Platen unit
6	Media detection sensor section
7	Sensor adjustment dial Adjusts the position of the media detection sensor.
8	Sensor section open/close knob
9	Head block release lever Releases the print head block.
10	Media guides

No.	Name of part
11	Knob
12	Print head block
13	Media loading instruction label
14	Supply path label
15	High-temperature warning label Be careful of high temperatures.
16	Top cover

■ Operation panel



No.	Name of part
1	Color LCD (272 x 480 dots) Displays the status of the printer and the setting screen of each function.
2	ONLINE lamp (blue) The status of the printer is informed as follows. <ul style="list-style-type: none"> • On: The printer is ready to communicate with the computer. • Fast flashing: The printer is currently communicating with the computer. • Slow flashing: The printer is in the power-saving mode.
3	ERROR lamp (orange) The status of the printer is informed as follows. <ul style="list-style-type: none"> • On: An error has occurred. • Flashing: Ribbon end detected.
4	[FEED] button Press this button to advance the media by one sheet or to adjust the media to the designated position. <p>Note</p> After replacing the media or ribbon, press and hold down the [FEED] button to feed the media by about 10 to 20 cm (3.94" to 7.87") to confirm that the media can be fed correctly. If any print wrinkles occur, press [FEED] button a few more times.

No.	Name of part
5	<p>[RESTART] button</p> <ul style="list-style-type: none"> • Press this button to restart printing after a pause or to clear an error and reissue the print job if an error occurs. • Press this button to revert to the initial power-on state. This action will reset any data and settings that were being processed. • Holding this button down for more than 3 seconds while in pause state will switch to user mode.
6	<p>[PAUSE] button</p> <ul style="list-style-type: none"> • Press this button to pause printing. • Press this button to confirm menu selections or adjust settings. • Holding this button down for more than 3 seconds while in pause state will switch to threshold mode.
7	<p>[MODE] button</p> <ul style="list-style-type: none"> • Press this button to display the menu screen. • Holding this button down for more than 3 seconds in online mode will switch to user mode.
8	<p>[CANCEL] button</p> <ul style="list-style-type: none"> • Press this button to clear the current print job. • Press this button to cancel any ongoing setting changes.
9	<p>[HOME] button Press this button to return to online mode.</p>
10	<p>[ENTER] button Press this button to confirm your menu selection or any setting changes.</p>
11	<p>[Up arrow] button/[Down arrow] button Moves the cursor up and down. These buttons are also used to increase or decrease the settings. When you hold down these buttons, the settings will continue to increase (or decrease).</p>
	<p>[Left arrow] button/[Right arrow] button Moves the cursor to the left or right.</p>

Compatible USB memories

You can save receive buffer contents and operation log information to a USB memory.
For details, refer to “Key Operation Specification”.

Use a USB memory that meets the following conditions:

- Integrated device with flash memory (directly connects to the USB port)
- Capacity of 1 GB or more (2 GB or more recommended)
- Compliant with the following standards set by the USB-IF (USB Implementers Forum):
 - Class value: 8 (08h) (USB Mass Storage Class)
 - SubClass value: 6 (06h) (SCSI Transparent Command Set)
 - Protocol value: 80 (50h) (Bulk-Only Transport)
- Compliant with USB 2.0
If using a USB memory compliant with USB 3.0, it will operate at USB 2.0 speed (High Speed, 480 Mbps)
- USB format type must be FAT32 or exFAT
If saving files larger than 2 GB, use a USB memory formatted with exFAT.

Tip

You can use a USB memory by inserting it immediately before an operation. It does not need to be inserted in advance.

USB memories whose operation has been confirmed on the printer

Manufacturer	Product name	Capacity
Silicon Power	ULTIMA-U02	32 GB, 128 GB
BUFFALO	RUF3-C	16 GB, 32 GB
	RUF3-K32GA	32 GB
ELECOM	MF-MSU3A04GBK	4 GB
KIOXIA	TransMemory U301	16 GB
SONY	USM128GU	128 GB
GREEN HOUSE	GH-UF3LA512G-WH	512 GB
Kingston	DataTraveler	8 GB

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Preparing to use the printer

This section explains how to set up the printer, connect a computer, and connect the power cable.

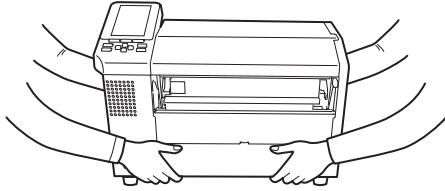
■ Setup locations

⚠ CAUTION

Always ensure that at least two people are involved when relocating the printer.

Attempting to relocate this printer alone can lead to injury.

When relocating this printer, grasp it at the indicated area shown below.



When relocating this printer, do not hold it by the cutter module.

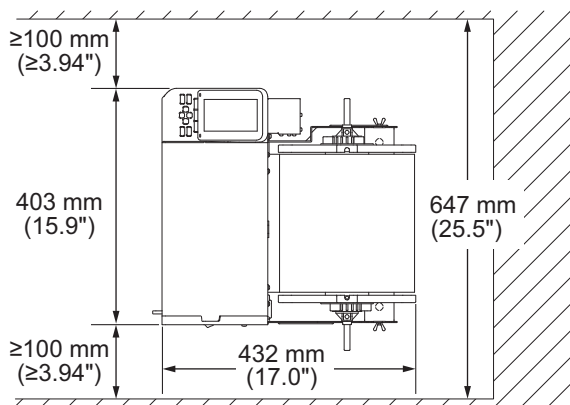
Doing so could lead to the printer becoming detached and falling, potentially causing injury.

Do not set up in the following locations.

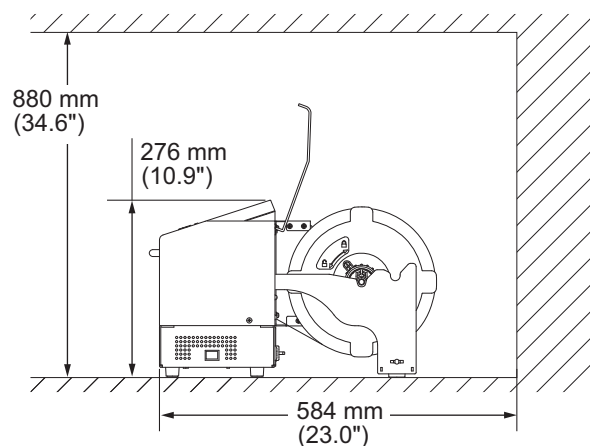
It may cause fire, electric shock, malfunction, damage, or deformation.

- Locations with temperatures outside the specified range
- Locations exposed to direct sunlight
- Near a window
- High humidity locations
- Locations exposed to direct cold air
- Locations subject to vibrations
- Locations with a lot of steam or dust
- Locations exposed to oil smoke, steam, or heat
- Near cooking appliances, humidifiers, or heating devices
- Near devices that use microwaves, such as microwave ovens
- Near devices that generate magnetic fields or electromagnetic waves
- Near the sea

Set up the printer in a location that is flat and level, with good ventilation, and enough space to do operations. Also, provide open space around the printer as shown in the illustrations below.



[A]



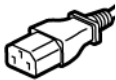
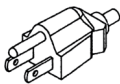
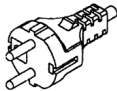
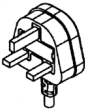

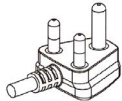
[B]

[A]: Top view

[B]: Side view

■ When purchasing the power cable

In some countries/regions, the power cable is not provided with this printer. In this case, use a power cable approved for your country/region.

Power cable instructions					
1. For use with 100 – 125 Vac mains power supply, select a power cable rated Min. 125 V, 10 A. 2. For use with 200 – 240 Vac mains power supply, select a power cable rated Min. 250 V. 3. Select a power cable with the length of 2 m or less. 4. The power cable plug connected to the AC adapter must be able to be inserted into an ICE-320-C14 inlet. Refer to the following figure for the shape.					
					
Country/Region	North America	Europe	United Kingdom	Australia	South Africa* ¹
Rated (Min.) Type	125 V, 10 A SVT	250 V H05VV-F	250 V H05VV-F	250 V AS3191 approved, Light or Ordinary Duty type	250 V H05VV
Conductor size (Min.)	No. 3/18AWG	3 x 0.75 mm ²	3 x 0.75 mm ²	3 x 0.75 mm ²	3 x 0.75 mm ²
Plug configuration (locally approved type)					
Rated (Min.)	125 V, 10 A	250 V, 10 A	250 V * ²	250 V * ²	250 V * ²

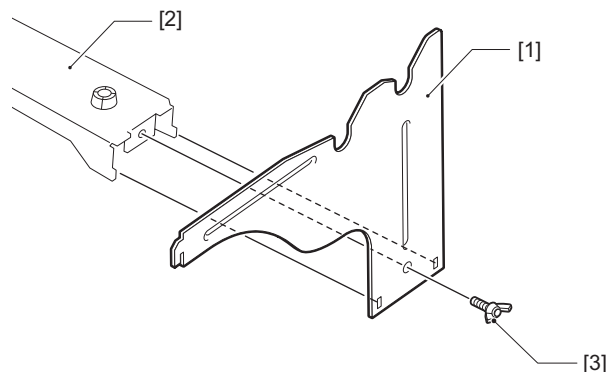
*1 South Africa is not included in the sales regions for this product.

*2 At least, 125% of the rated current of the product

■ Assembling the supply stand

Assemble the supply stand according to the following procedure, and then attach it to the rear side of the printer.

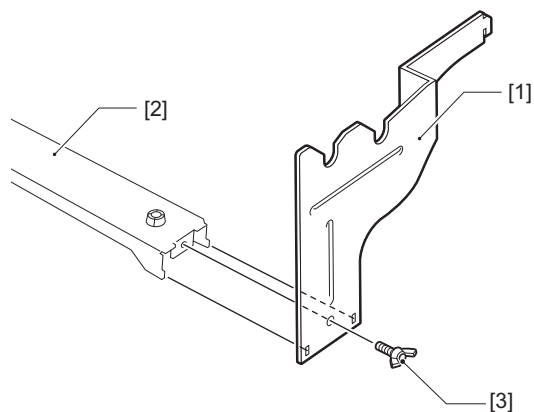
- 1** Align the protrusion of the supply stand base [2] to the square hole on the right supply holder frame [1] and secure it firmly with the supplied wing bolt [3].



Tip

The supply stand base is not side-specific.

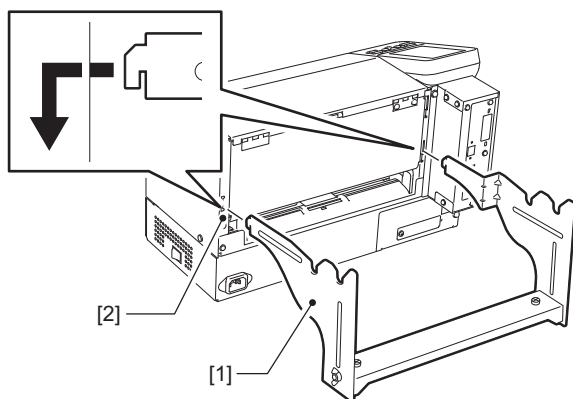
-
- 2** Align the protrusion of the supply stand base [2] to the square hole on the left supply holder frame [1] and secure it firmly with the supplied wing bolt [3].



Tip

Assemble the supply holder frames so that the left and right sides face the same direction.

- 3** Securely attach the assembled supply stand [1] to the mounting holes [2] on the rear side of the printer.



Note

If the supply stand is not properly secured in the mounting holes, media skewing or a feeding failure may occur.

■ Connecting to a computer

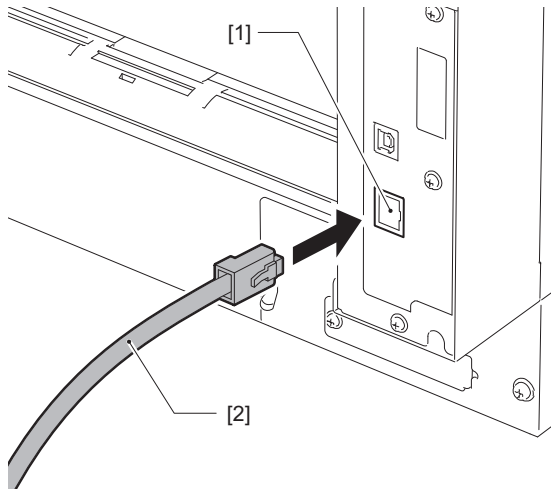
Use the following procedure to connect to a computer.

Which communications cable to use depends on the means of communicating with the computer.

For details, consult with your service representative.

□ Connecting with a LAN cable

1 Connect the connector of the LAN cable [2] to the LAN port [1] on the back of the printer.



Tip

You do not need to turn off the power to the printer or the computer.

2 Connect the connector on the other end of the LAN cable to the LAN port on the computer or hub.

Refer to the owner's manual for the computer being used regarding how to connect to the computer.

Note

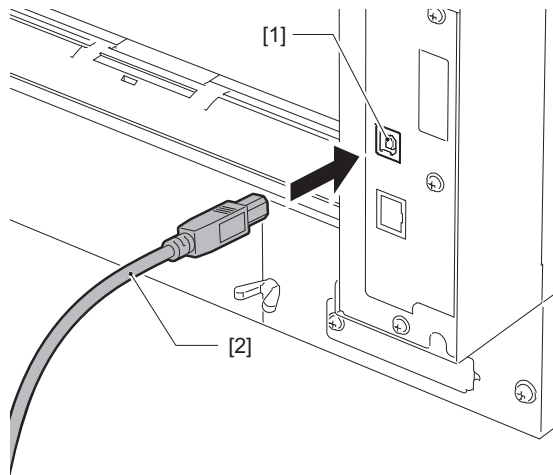
- Use a LAN cable that is compliant with standards.
 - 10BASE-T standard: Category 3 or higher
 - 100BASE-TX standard: Category 5 or higher
 - 1000BASE-T standard: Category 5e or higher
 - Cable length: Up to 100 m (328.1 ft) maximum segment length
- Communication errors may occur depending on the connected LAN environment and the noise environment. In this case, you may need shielded cables (STP) and matching of the connected devices.
- It is recommended to change the default SNMP community name.

❑ Connecting with a USB cable

- 1** Turn on the computer and start up the Windows system.
- 2** Turn on the main power switch on the side of the printer, then press the POWER button on the front.

📖 P.34 “Turning on the printer”

- 3** Connect the connector of the USB cable [2] to the USB interface [1] for connecting a host computer on the back of the printer.



- 4** Connect the connector on the other end of the USB cable to the USB interface on the computer. Refer to the owner's manual for the computer being used regarding how to connect to the computer.

Note

Use the B type connector of a USB cable that is compliant with the 2.0 standard or higher to connect to the printer.

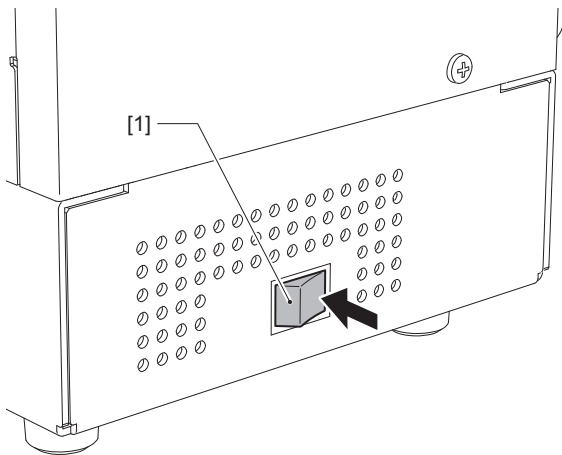
❑ Connecting with a serial cable

Note

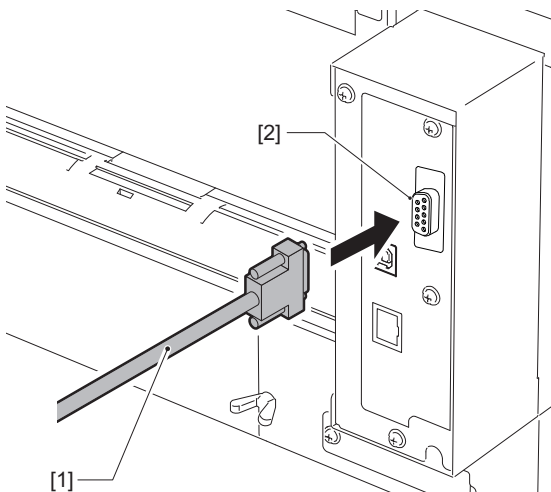
Serial interface port is optional.

1 Confirm that the main power switch [1] of the printer is turned off.

○ side is off.



2 Connect the printer-side plug of the serial cable [1] to the serial interface port [2] on the rear side of the printer and secure the plug with the screws.

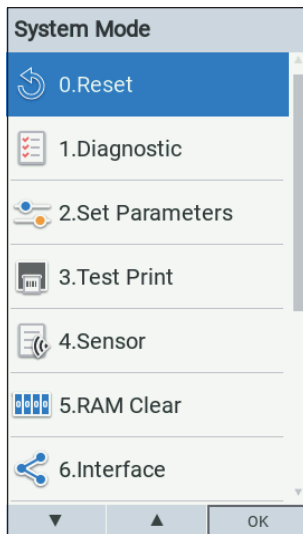


3 Connect the computer-side plug of the serial cable to the serial interface port on the computer. Refer to the owner's manual for the computer being used regarding how to connect to the computer.

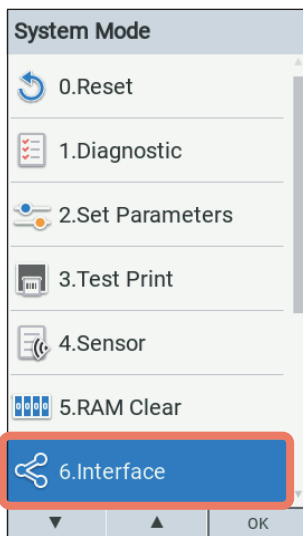
❑ Connecting with Bluetooth (optional)

Enabling Bluetooth

- 1** While pressing the [FEED] and [PAUSE] buttons, turn on the power.
The System Mode screen is displayed.

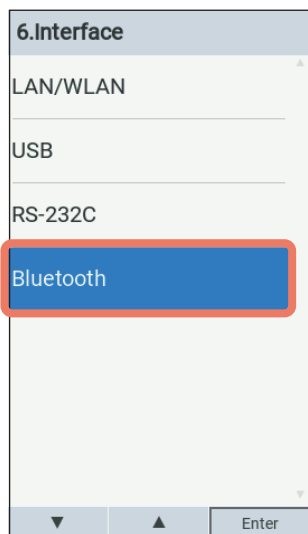


- 2** Use the [Up arrow] or [Down arrow] button to select the [Interface] menu, and then press the [PAUSE] or [ENTER] button.



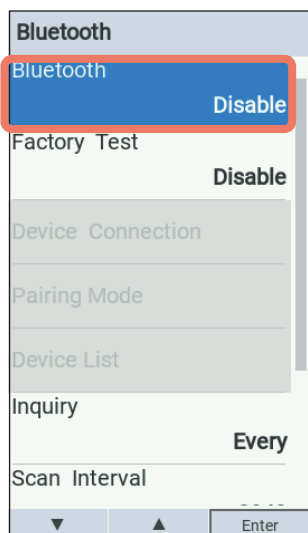
The [Interface] screen is displayed.

3 Use the [Up arrow] or [Down arrow] button to select [Bluetooth], and press the [PAUSE] or [ENTER] button.

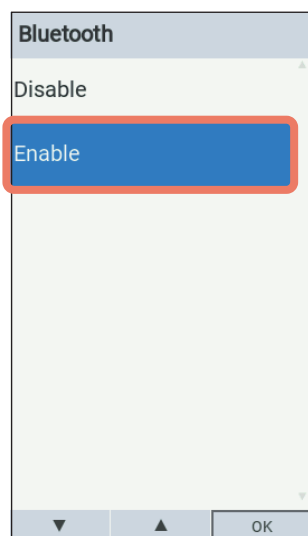


The [Bluetooth] setting screen is displayed.

4 Use the [Up arrow] or [Down arrow] button to select [Bluetooth], and press the [PAUSE] or [ENTER] button.



-
- 5** Use the [Up arrow] or [Down arrow] button to select [Enable], and press the [PAUSE] or [ENTER] button.



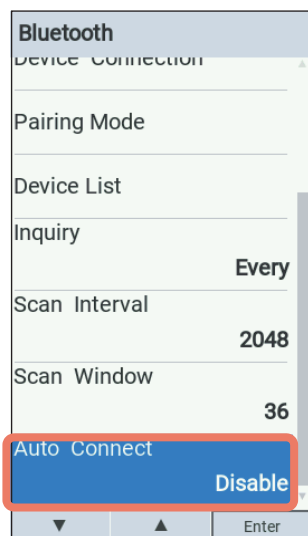
Returns to [Bluetooth] setting screen.

Returning to the online mode screen will initialize the network and enable the Bluetooth function.

Changing auto reconnection setting

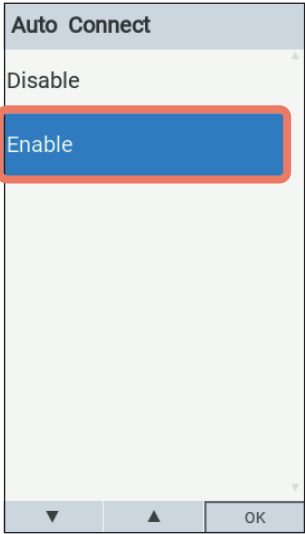
Set whether the printer reconnects to the paired host device automatically or manually.

- 1** On the [Bluetooth] settings screen, use the [Up arrow] or [Down arrow] button to select [Auto Connect], then press the [PAUSE] or [ENTER] button.

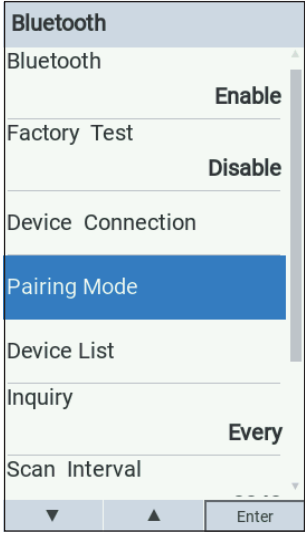


The [Auto Connect] setting screen is displayed.

2 Use the [Up arrow] or [Down arrow] button to select Enable/Disable and press the [PAUSE] or [ENTER] button.



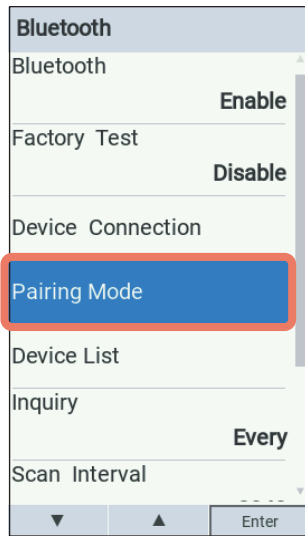
Returns to [Bluetooth] setting screen.



Pairing with the host terminal

Pair the host terminal with the printer.

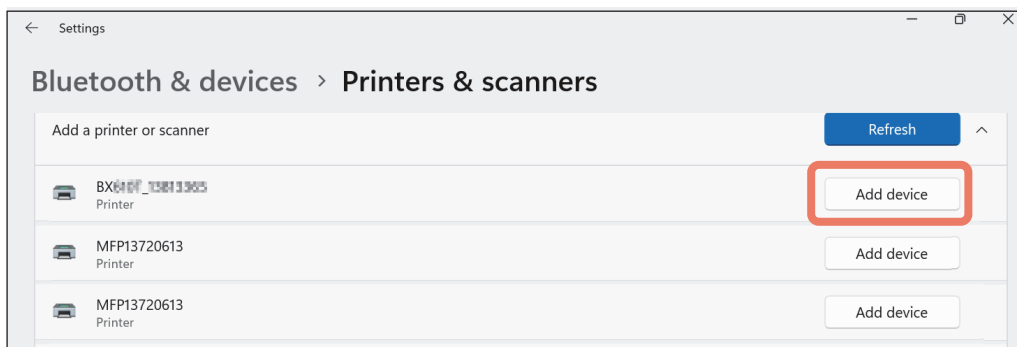
- 1** On the [Bluetooth] settings screen, use the [Up arrow] or [Down arrow] button to select [Pairing Mode], then press the [PAUSE] or [ENTER] button.



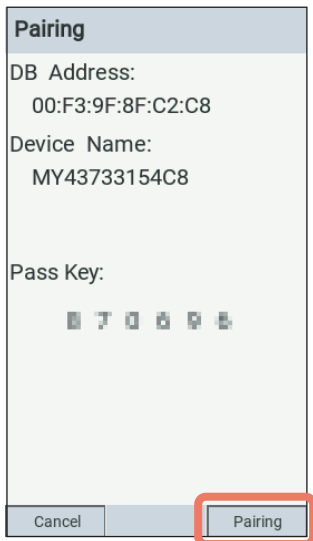
The [Pairing] screen is displayed.



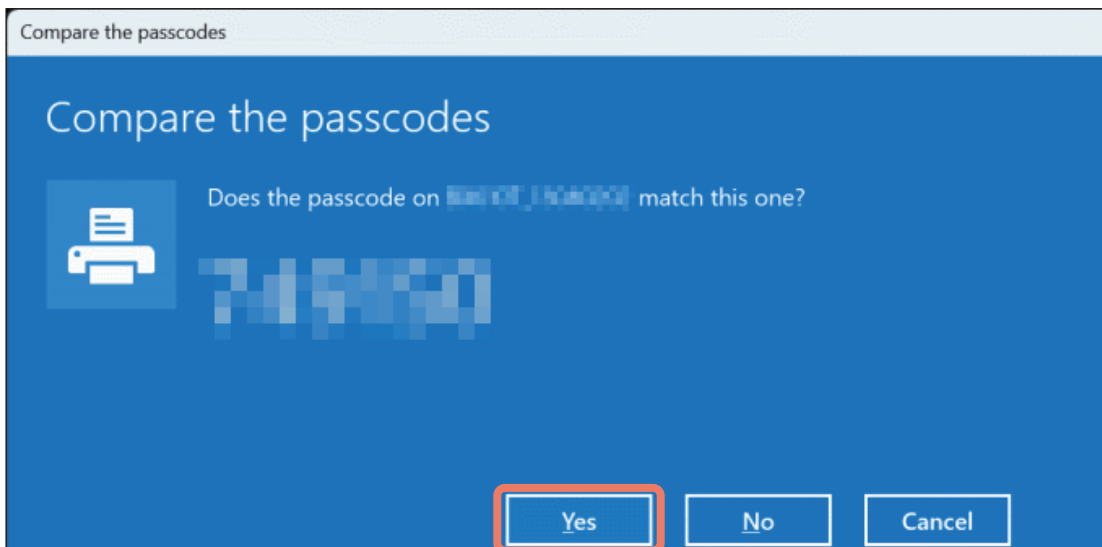
- 2** On the host terminal, perform the operation to add the printer as the device to be connected. The display may vary depending on the device type and OS version.



3 On the printer, press the [PAUSE] or [ENTER] button to initiate pairing.

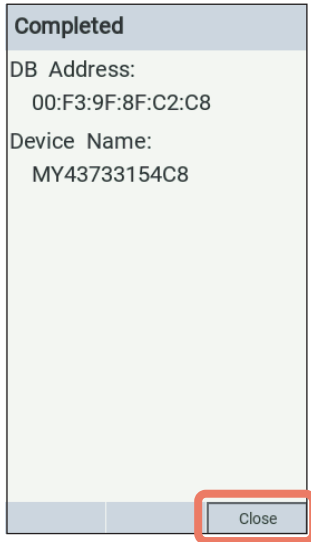


4 On the host terminal, perform the pairing operation.
The display may vary depending on the device type and OS version.

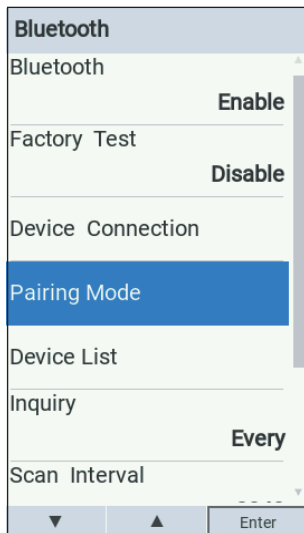


Pairing is complete.

5 Press the [PAUSE] or [ENTER] button on the printer to close the screen.



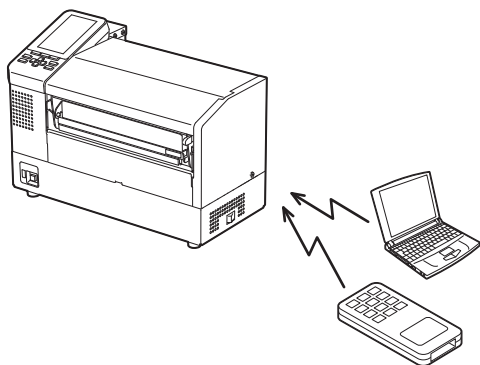
Returns to [Bluetooth] setting screen.



6 The online mode screen is displayed.

Communicating via Bluetooth

- 1 Bring the host device to within 3 m (9.8 ft) of the printer.



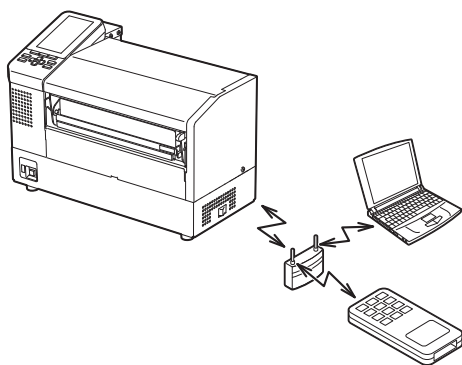
- 2 Turn on the printer and host device.
- 3 Confirm that the Bluetooth connection icon is lit.
- 4 Transmit data from the host device to the printer.

Connecting via wireless LAN (optional)

Note

- Before doing wireless communications, be sure to carefully read the information referenced below.
 📖 P.5 “Precautions for the handling of Wireless Communication Devices”
- Check that there are no obstructions between the printer and the host. Obstructions in between them could cause poor communications.

- 1 Place the printer inside the coverage area of the access point.



- 2 Turn on the printer and host device.
- 3 Transmit data from the host device to the printer.

Tip

Communications may be difficult, depending on the environment in which the printer is being used. Confirm this in advance. Specifically, communications may be impossible near metal objects, in locations with extensive metal dust, or in a room enclosed by metal walls, etc.

■ Connecting the power cable

Use the following procedure to connect the provided power cable to an electric outlet.

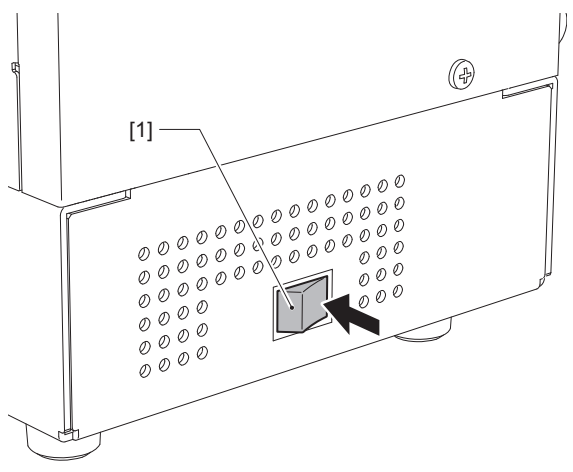
⚠ WARNING

- **Use only the AC voltage specified on the rating plate.**
Otherwise, it may cause fire or electric shock.
- **The socket outlet shall be near the equipment and be easily accessible.**
- **Be sure to use the power cable* supplied with this printer.**
Use of a power cable other than the supplied one may result in a fire. Also, do not use the supplied power cable for equipment other than this printer.
* In some countries/regions, the power cable is not provided with this printer. In this case, use a power cable approved for your country/region.
- **Do not use extension cords or connect multiple wires to a single outlet.**
There is a risk of fire and electric shock from exceeding the capacity of the power source.
- **Do not excessively bend, damage, pull on, place heavy objects on, or heat the power cable.**
There is a risk of fire and electric shock from damaging the power cable. If the power cable should ever be damaged, ask for a replacement at your service representative.
- **Do not plug or unplug the power plug with wet hands.**
There is a risk of fire and electric shock from plugging or unplugging the power plug with wet hands.

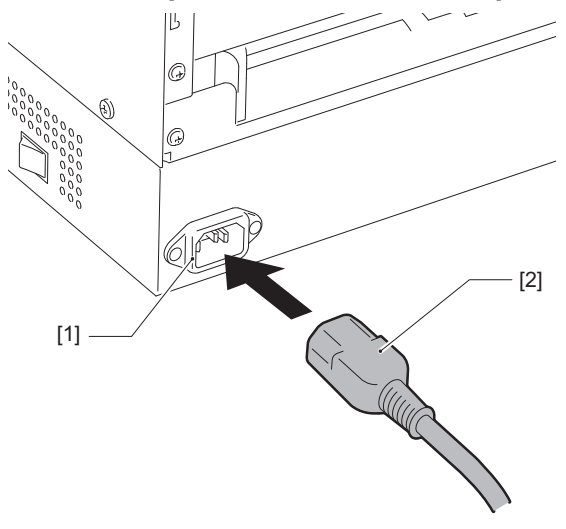
⚠ CAUTION

- **Ensure the printer's power switch is off before connecting the power cable.**
Connecting while the power is on may cause electric shock or short circuit.
- **Insert the power plug fully and securely into the electric outlet.**
There is a risk of fire and electric shock from not plugging the power plug in securely.
- **Always hold the plug when unplugging the power plug.**
There is a risk of fire and electric shock from pulling on the power cable which can break or expose the core wires.
- **Unplug the power plug at least once a year and clean the blades of the plug and the area around the blades.**
There is a risk of fire from the collected dust.
- **When unplugging the power cable, make sure that the main power is turned off.**
There is a risk of malfunction from unplugging the power cable while the power is on.

1 Confirm that the main power switch [1] of the printer is turned off.
○ side is off.



2 Connect the power cable [2] to the AC power inlet [1] on the rear panel.



Turning the printer ON/OFF

Use the main power switch on the side and the POWER button on the front to turn the printer on or off.

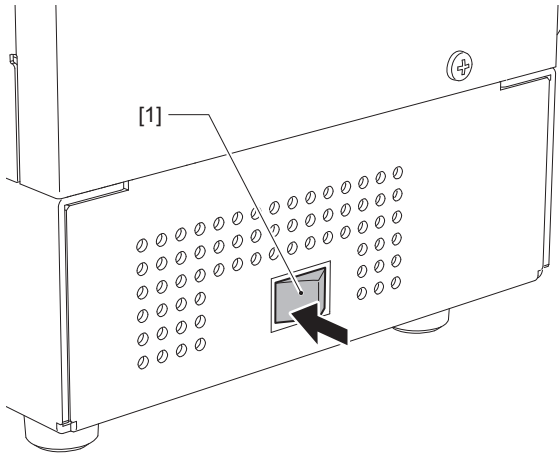
Note

Do not connect or disconnect the power cable to on/off the printer. This could cause malfunctions.

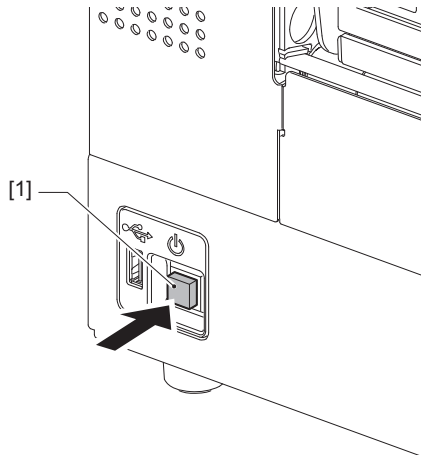
■ Turning on the printer

1 Turn on the main power switch [1] on the side of the printer.

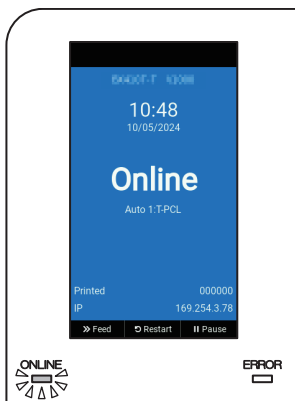
— side is on.



2 Press the POWER button [1] on the front of the printer.



“Online” is displayed on the color LCD, and the ONLINE lamp (blue) turns on.



Tip

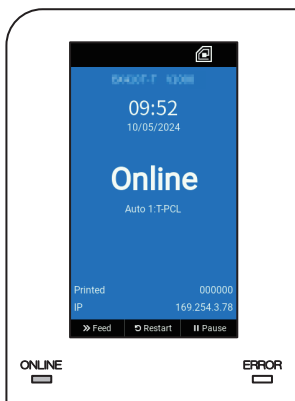
- If the power does not turn on or an error message is displayed, refer to the following page.
📖 P.68 “Troubleshooting”
- This printer has a function that allows you to start the printer by simply turning on the main power switch on the rear without using the POWER button on the front. For details, contact your service representative.

■ Turning off the printer

Note

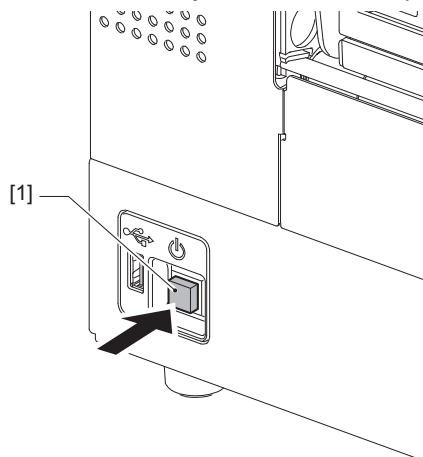
- Do not turn off the power while media is being output. This could cause paper jams or malfunctions. However, if the printer produces strange smells or smoke, immediately turn off the power and unplug the power plug from the electric outlet.
- If the ONLINE lamp is flashing quickly, the printer may be communicating with the computer, so do not turn off the power. This could have a bad effect on the connected computer.

- 1 Confirm that “Online” is displayed on the color LCD and ONLINE lamp (blue) is lit.**
If the ONLINE lamp (blue) is flashing, wait until it lights up.



2 Press the POWER button [1] on the front of the printer.

The data in memory is erased and the printer is turned off.



3 Press the [PAUSE] or [ENTER] button.

Tip

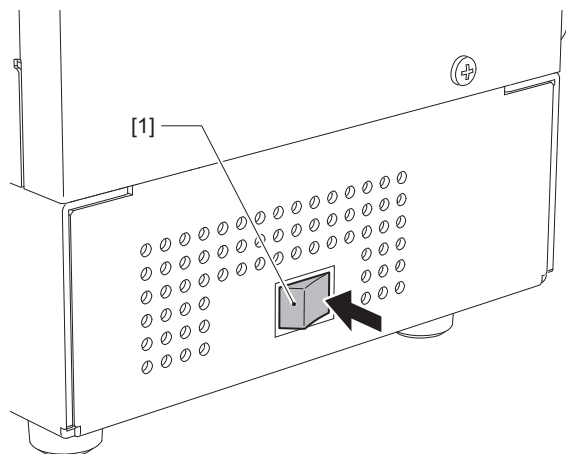
- To cancel the operation and return to the previous screen, press the [FEED] or [CANCEL] button.
- The message displayed on the color LCD varies depending on the printer operation status.
- The power cannot be turned off while network functions are active, firmware updates are in progress, or font data is being uploaded from the Web Utility. Press the [PAUSE] or [ENTER] button to return to the previous screen.

4 The color LCD turns off.

After the ONLINE lamp and ERROR lamp flash together, they turn off.

5 Turn off the main power switch [1] on the side of the printer.

○ side is off.

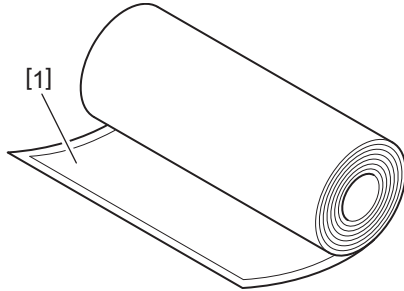


Media loading procedure

This section explains the procedure for loading media (Label/Tag) in the printer.

Note

- The size of media that can be loaded in the printer is as below.
 - Roll diameter: Max. 230 mm (9.06")
 - Inner diameter of the core: 76.2 mm (3")
- There are media for thermal transfer and direct thermal use, and the media include both labels and tags.
- Use only inside-wound media. Load it into the printer so that the print side [1] is facing up.



- Before loading the roll media, flatten the sides of the roll as shown below.



- When installing new or different media than previously used, adjust the media detection sensor's sensitivity using the "Sensor" option in system mode.
For details, refer to "Key Operation Specification".
- If you install pre-printed media, set the threshold.
For details, refer to "Key Operation Specification".

Tip

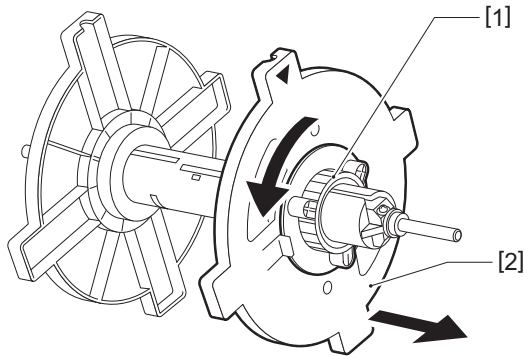
- Use Toshiba Tec Corporation certified genuine media. For details about ordering and preparing media, contact your service representative.
- Toshiba Tec Corporation shall assume no liability for any consequences of printing by loading media other than Toshiba Tec Corporation certified ones.

■ Loading the media

⚠ CAUTION

- **Fully open the top cover toward the rear side.**
Leaving it at a halfway position could cause it to close by itself, causing injury.
- **Lift the print head block until it is vertical.**
Leaving it at a halfway position could cause it to close by itself, causing injury.
- **Immediately after printing, do not touch the print head or its surrounding area.**
This could cause burns.

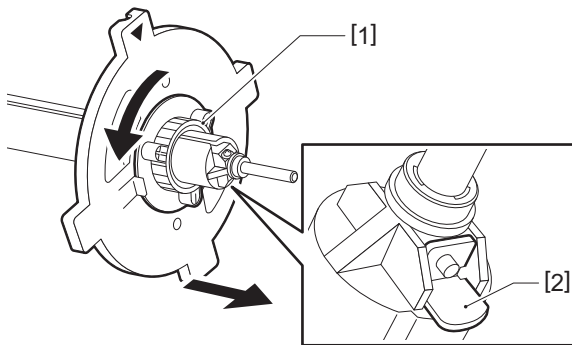
- 1 Loosen the locking knob [1] of the supply holder on the removable side by turning it in the release direction (🔓) and pull out the holder [2] from the supply shaft.**



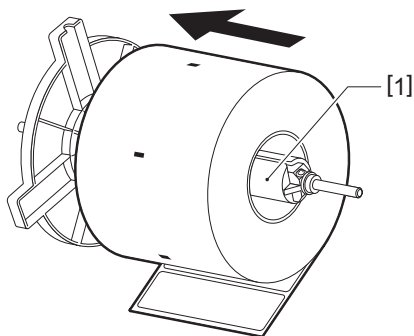
Tip

The supply holder with the stopper cannot be removed from the supply shaft.

- 2 Loosen the locking knob [1] of the supply holder on the non-removable side by turning it in the release direction (🔓) and move it to the edge until it stops at the stopper [2].**

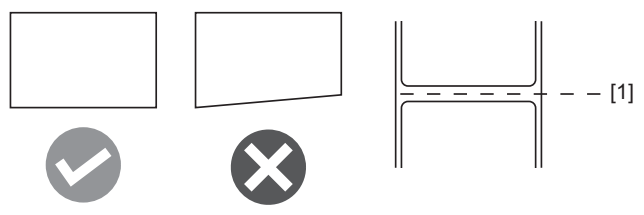


- 3 Load the media onto the supply shaft [1].**

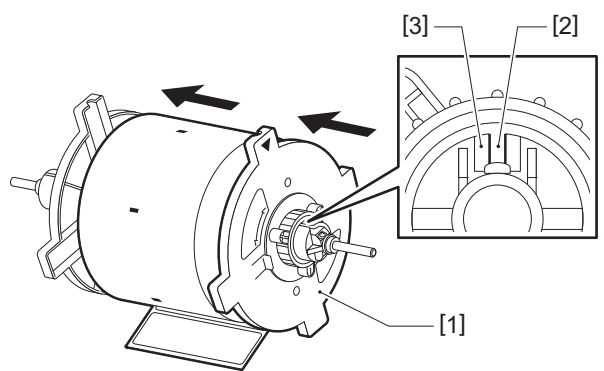


Note

For labels, cut the liner [1] straight between the labels.



4 Align the ▼ mark on the supply holder [1] on the removable side to the groove on the supply shaft, and push it together with the media into the supply holder on the opposite side.

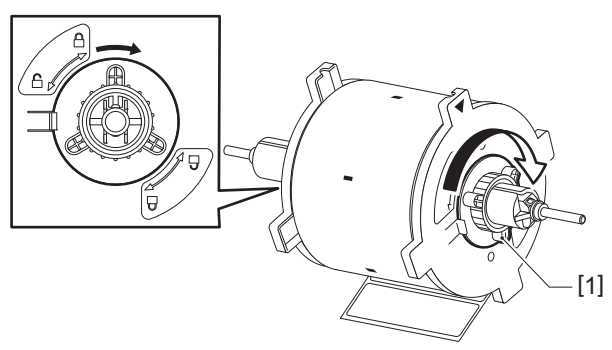


Tip

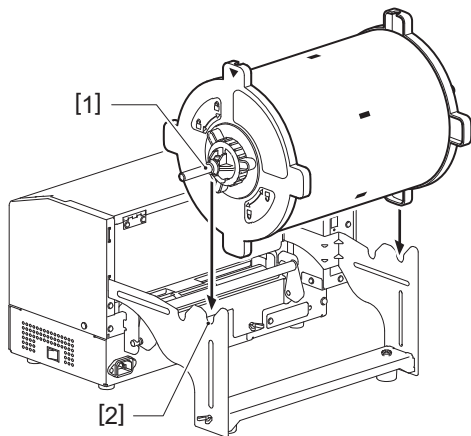
- When the ▼ mark is aligned to the groove on the supply shaft, the protrusion [2] on the supply holder will fit into the groove [3].
- Both supply holders will now be clamping the media and it will be set in the center of the supply shaft.

5 Turn the locking knobs [1] on both supply holders in the locking direction (🔒) to secure them.

⚠ CAUTION Do not tilt the supply holder unit with the media loaded without securing the locking knobs. The supply holder on the removable side may come off and the media may fall, causing injury.



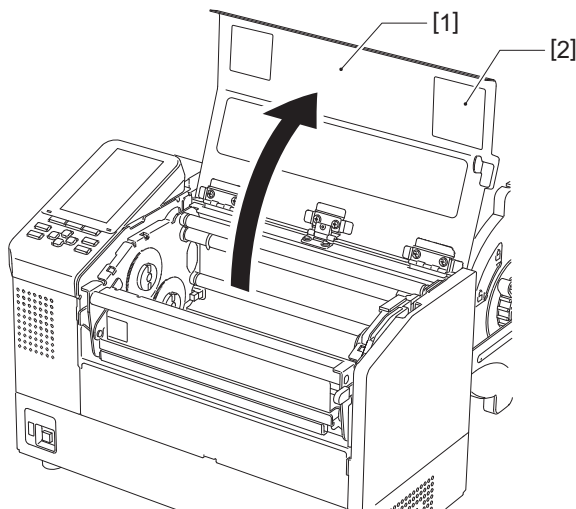
6 Place the supply holder unit [1] with media installed on the U-shaped groove [2] at the rear of the supply stand.



Tip

- Set the media so that its print side is facing up.
- Make sure that the oil-impregnated bearings on the left and right sides of the supply shaft are properly seated on the U-shaped part of the supply stand.

7 Fully open the top cover [1] toward the rear side.



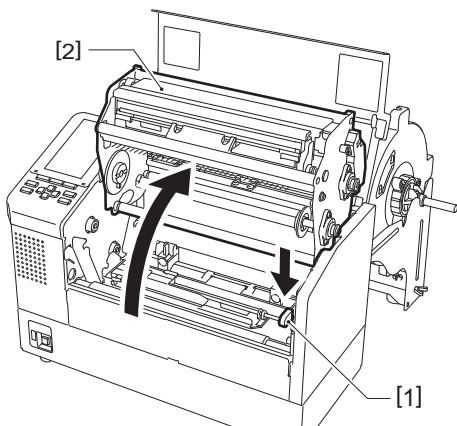
Note

When opening the top cover, do not push it open strongly. Excessive force may deform the parts and prevent the top cover from closing properly. If this happens, an error message will be displayed indicating that the top cover is open.

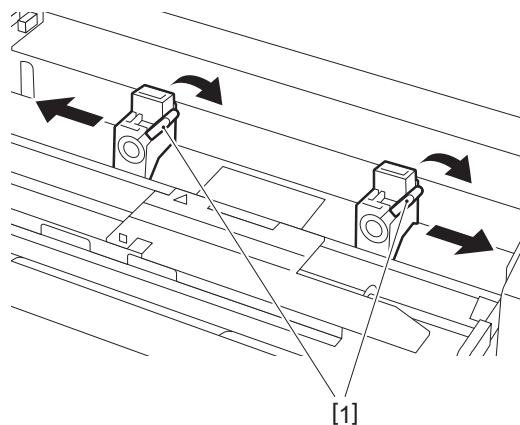
Tip

Follow the supply path label [2] inside the top cover.

8 Push down the head block release lever [1] and lift the print head block [2] to the vertical position.

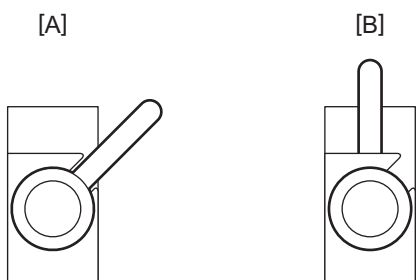


9 Flip the lock levers [1] of the left and right media guides in the release direction (right side) and open the guides slightly wider than the media width.



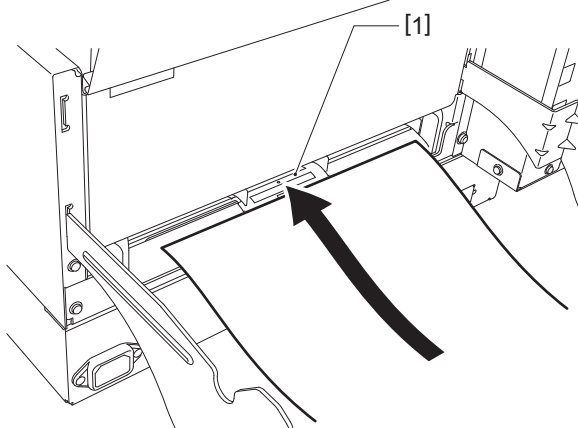
Tip

When moving the media guides, be sure to move both lock levers in the release direction. The media guides will not move if the lock lever on one side remains locked.

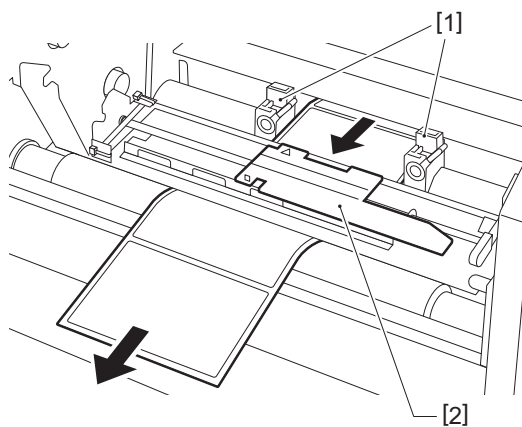


[A]: Released
[B]: Locked

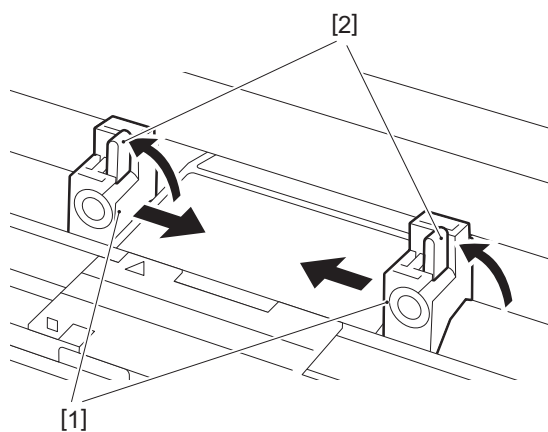
10 Pull out the media by approx. 50 cm (19.7") and insert it into the media slot [1].



11 Pass the media between the left and right media guides [1], pass it under the media detection sensor section [2], and feed it manually to the media outlet.



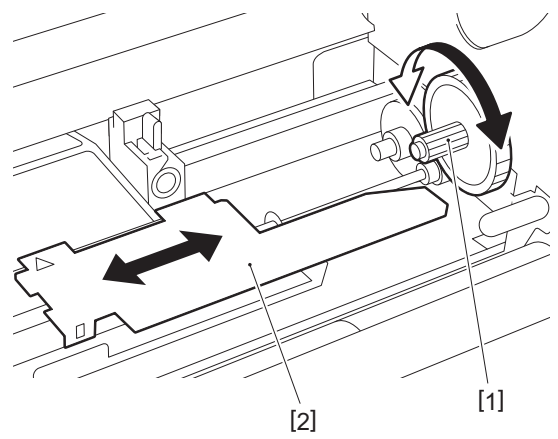
12 Adjust the media guides [1] to the exact width of the media, then lift the lock levers [2] to lock them in place.



Tip

Make sure that the media passes straight through from the supply holder to the media outlet.

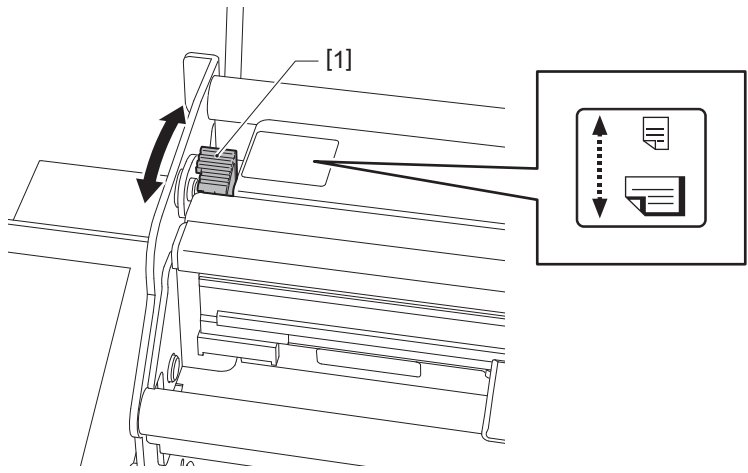
13 Turn the sensor adjustment dial [1] to adjust the position of the media detection sensor [2] according to the loaded media.



Tip

See below for details on how to adjust.
 📖 P.51 “Adjusting the position of the media detection sensor”

14 Depending on the width of the loaded media, use the pressure switch lever [1] to switch the print head pressure.

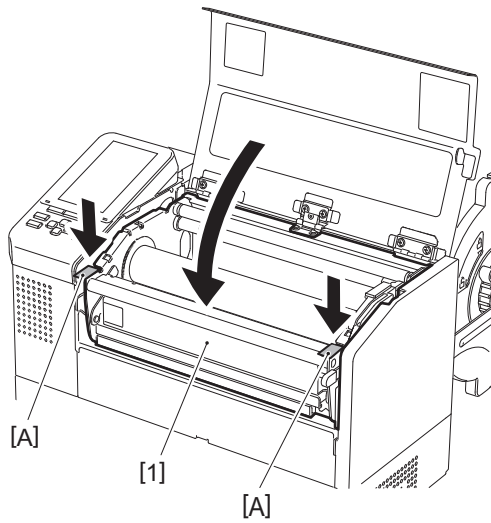


Lever position	Head pressure	Media width
UP	Low	120 mm (4.72") or less
DOWN	High	More than 120 mm (4.72")

Tip

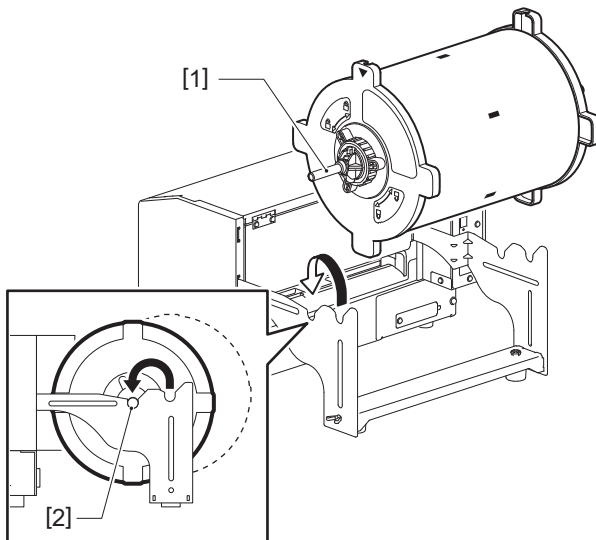
- If faint printing occurs, changing the pressure switch lever to the opposite setting may improve print quality.

15 Gently lower the print head block [1] and lock it by pressing section A firmly in until a clicking sound hears.



16 Close the top cover gently.

17 Move the supply holder unit [1] with media installed and place it onto the U-shaped groove [2] at the front of the supply stand.



Tip

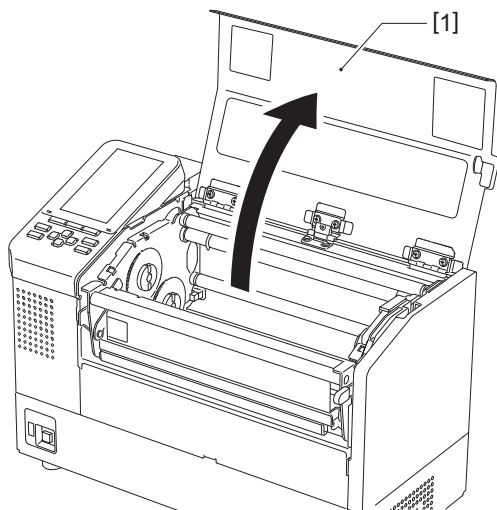
Make sure that the oil-impregnated bearings on the left and right sides of the supply shaft are properly seated on the U-shaped part of the supply stand.

■ Loading the fanfold paper

⚠ CAUTION

- **Fully open the top cover toward the rear side.**
Leaving it at a halfway position could cause it to close by itself, causing injury.
- **Lift the print head block until it is vertical.**
Leaving it at a halfway position could cause it to close by itself, causing injury.
- **Immediately after printing, do not touch the print head or its surrounding area.**
This could cause burns.

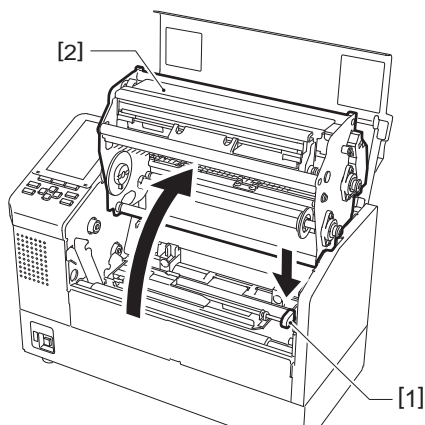
1 Fully open the top cover [1] toward the rear side.



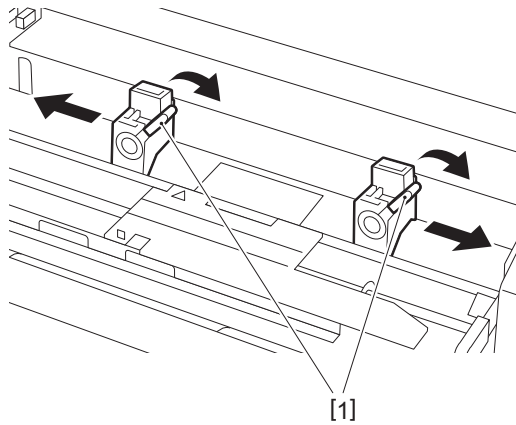
Note

When opening the top cover, do not push it open strongly. Excessive force may deform the parts and prevent the top cover from closing properly. If this happens, an error message will be displayed indicating that the top cover is open.

2 Push down the head block release lever [1] and lift the print head block [2] to the vertical position.

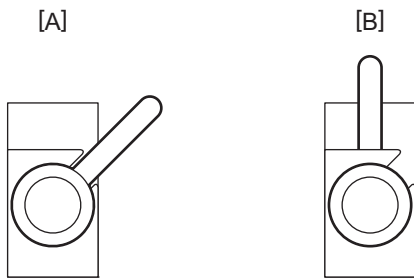


- 3** Flip the lock levers [1] of the left and right media guides in the release direction (right side) and open the guides slightly wider than the media width.



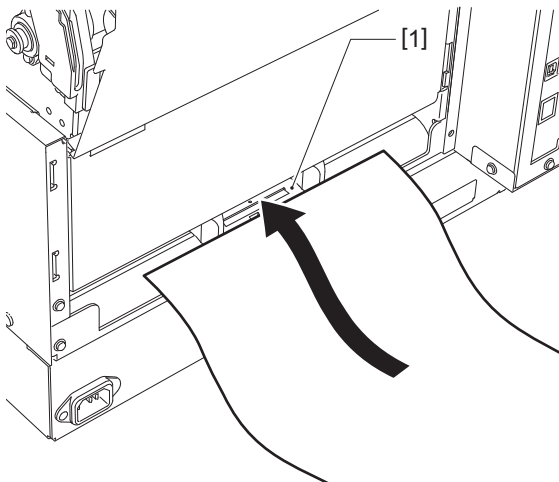
Tip

When moving the media guides, be sure to move both lock levers in the release direction. The media guides will not move if the lock lever on one side remains locked.



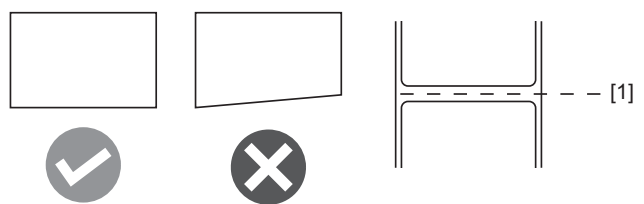
[A]: Released
[B]: Locked

- 4** Pull out the media by approx. 50 cm (19.7") and insert it into the media slot [1].

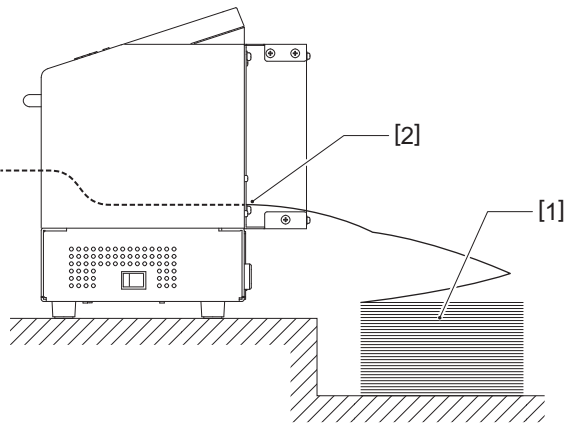


Note

For labels, cut the liner [1] straight between the labels.

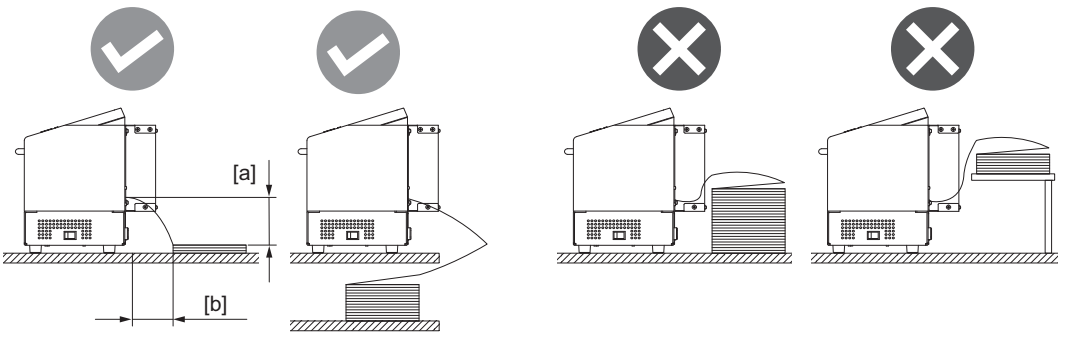


5 Place fanfold paper [1] behind the rear of the printer and insert the end of it into the media slot [2].



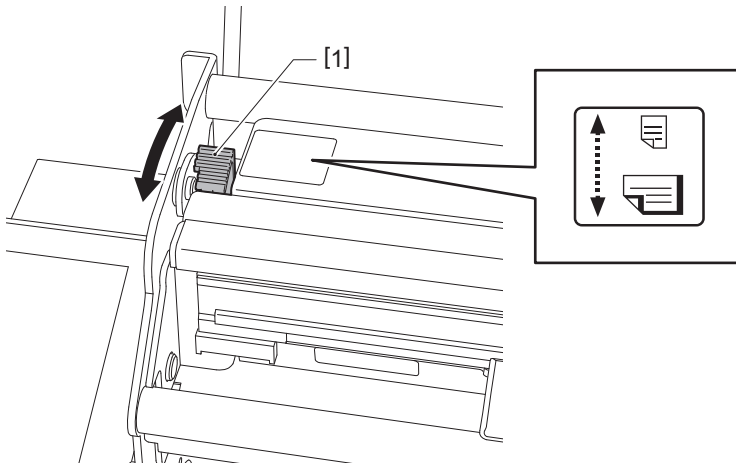
Note

- Place the fanfold paper so that the print side will face upward.
- Place the fanfold paper so that it meets both of the following conditions:
 - The top surface [a] of the fanfold paper is at least 100 mm (approx. 3.94") below the printer's media slot.
 - The distance [b] between the fanfold paper and the printer's media slot is at least 100 mm (approx. 3.94").



- Make sure that the communication cable, power cable, etc. do not interfere with the fanfold paper.
- If a media feed error occurs, move the fanfold paper farther away from the printer.

6 Depending on the width of the loaded media, use the pressure switch lever [1] to switch the print head pressure.

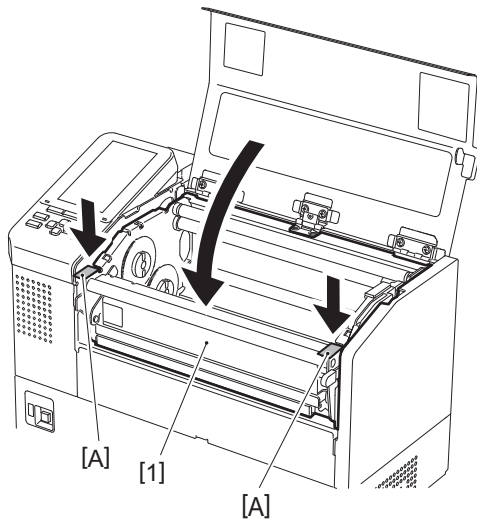


Lever position	Head pressure	Media width
UP	Low	120 mm (4.72") or less
DOWN	High	More than 120 mm (4.72")

Tip

- If faint printing occurs, changing the pressure switch lever to the opposite setting may improve print quality.
- When you load media that use the reflective sensor, adjust the position of the reflective sensor.
 P.51 "Adjusting the position of the media detection sensor"

7 Gently lower the print head block [1] and lock it by pressing section A firmly in until a clicking sound hears.



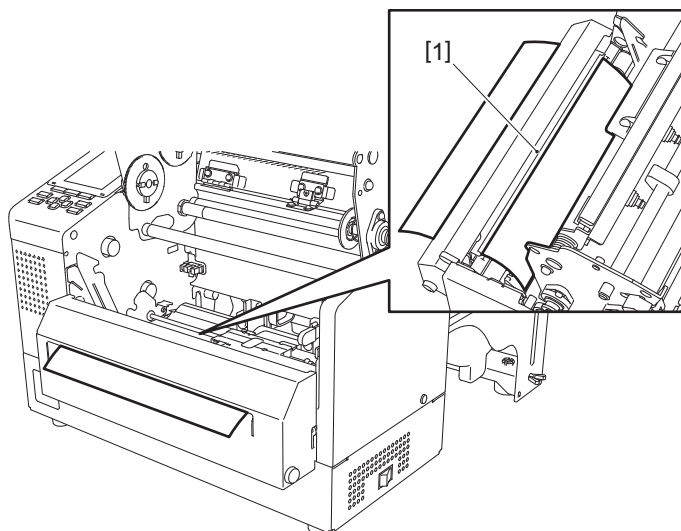
8 Close the top cover gently.

■ Loading media with the optional cutter module attached

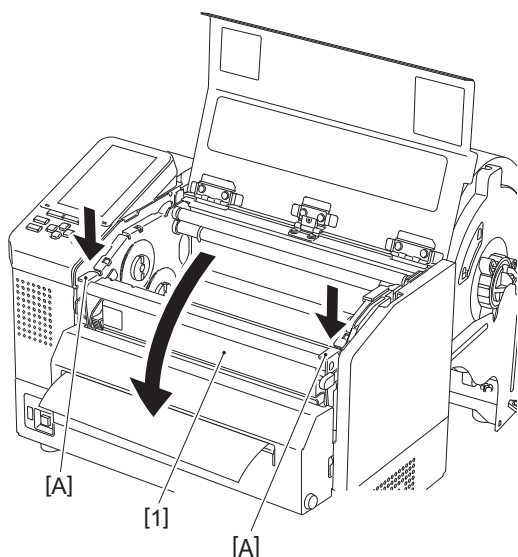
⚠ CAUTION

- **Fully open the top cover toward the rear side.**
Leaving it at a halfway position could cause it to close by itself, causing injury.
- **Lift the print head block until it is vertical.**
Leaving it at a halfway position could cause it to close by itself, causing injury.
- **Immediately after printing, do not touch the print head or its surrounding area.**
This could cause burns.
- **Do not touch the sharp cutter blade.**
This could cause injury.

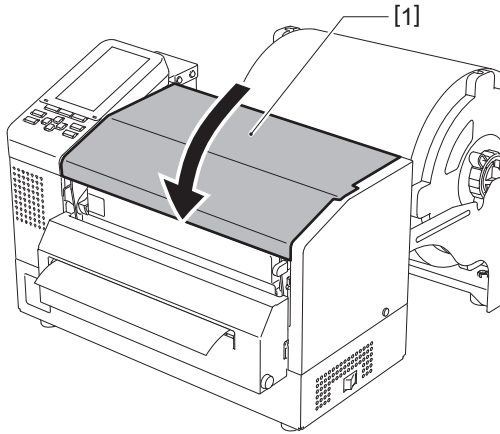
- 1 Follow the standard media installation steps 1 through 12 to load the media.**
- 2 Insert the leading edge of the media into the media slot [1] of the cutter unit.**



- 3 Gently lower the print head block [1] and lock it by pressing section A firmly in until a clicking sound hears.**



4 Close the top cover [1] gently.



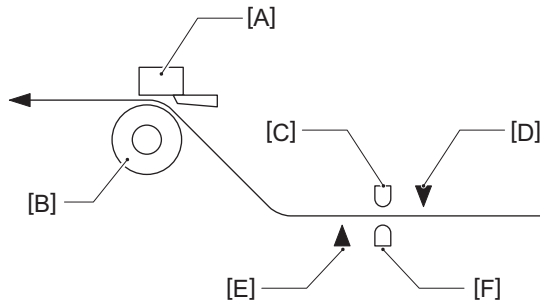
Tip

- If faint printing occurs, changing the pressure switch lever to the opposite setting may improve print quality.
- When you load media that use the reflective sensor, adjust the position of the reflective sensor.
📖 P.51 “Adjusting the position of the media detection sensor”

Adjusting the position of the media detection sensor

To ensure that the media are fed correctly, the printer is equipped with two types of media detection sensor.

- **Transmissive sensor:** Detects gaps between labels or square holes punched in the media.
- **Reflective sensor:** Detects black marks printed on the reverse side of the media's reverse side. One reflection sensor is provided on the top side and one on the bottom side.



- [A]: Print head
 [B]: Platen unit
 [C]: Transmissive sensor (emitter side)
 [D]: Upper reflective sensor
 [E]: Lower reflective sensor
 [F]: Transmissive sensor (receiver side)

The position of these sensors is adjusted by turning the sensor adjustment dial. When you operate the dial, these sensors move simultaneously.

Note

- If the sensors are not adjusted to the correct position, the printer will not be able to issue media and the message “Paper Jam ****” will be displayed, indicating an error.
- When using a different type of media than was previously used, adjust the sensitivity of the media detection sensor as well.
For details, refer to “Key Operation Specification”.

⚠ CAUTION

- **Fully open the top cover toward the rear side.**
Leaving it at a halfway position could cause it to close by itself, causing injury.
- **Lift the print head block until it is vertical.**
Leaving it at a halfway position could cause it to close by itself, causing injury.
- **Immediately after printing, do not touch the print head or its surrounding area.**
This could cause burns.

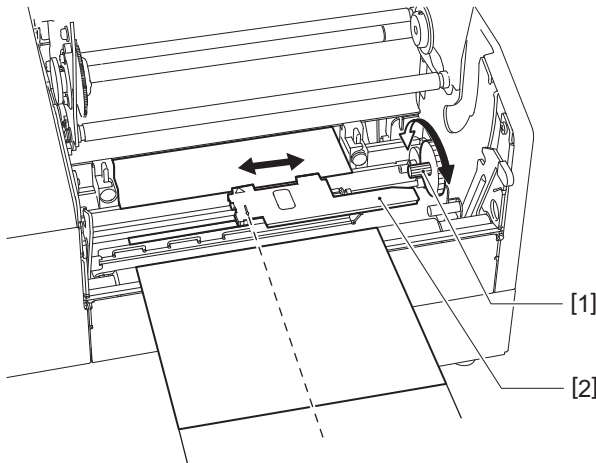
■ Adjusting the position of transmissive sensor

- 1 Fully open the top cover toward the rear side.

Note

When opening the top cover, do not push it open strongly. Excessive force may deform the parts and prevent the top cover from closing properly.
If this happens, an error message will be displayed indicating that the top cover is open.

- 2 Push down the head block release lever and lift the print head block to the vertical position.
- 3 Turn the sensor adjustment dial [1] to align the ↓ mark on the top of the sensor cover [2] with the sensor's target position, either the gap between labels or the square holes in the media.



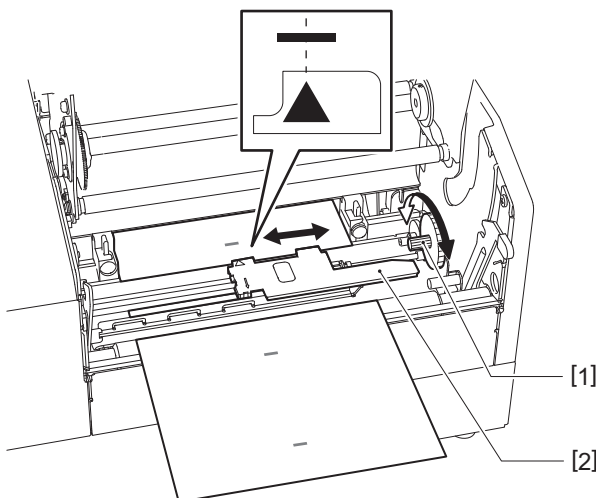
■ Adjusting the position of the upper reflective sensor

- 1 Fully open the top cover toward the rear side.

Note

When opening the top cover, do not push it open strongly. Excessive force may deform the parts and prevent the top cover from closing properly.
If this happens, an error message will be displayed indicating that the top cover is open.

- 2 Push down the head block release lever and lift the print head block to the vertical position.
- 3 Turn the sensor adjustment dial [1] to align the green ▲ mark on the top of the sensor cover [2] to the center line of the black mark.



■ Adjusting the position of the lower reflective sensor

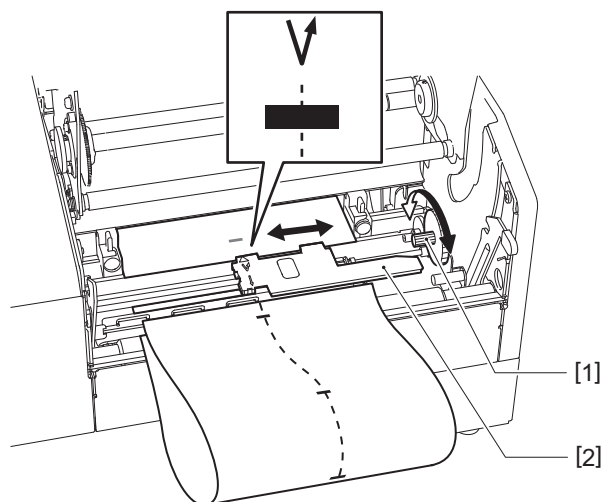
- 1 Fully open the top cover toward the rear side.

Note

When opening the top cover, do not push it open strongly. Excessive force may deform the parts and prevent the top cover from closing properly.

If this happens, an error message will be displayed indicating that the top cover is open.

- 2 Push down the head block release lever and lift the print head block to the vertical position.
- 3 Pull out the media by about 50 cm (19.7") and fold it so that the black mark on the back side of the media faces upward.
- 4 Turn the sensor adjustment dial [1] to align the √ mark on the top of the sensor cover [2] to the center line of the black mark.



Loading the ribbon (thermal transfer method)

This printer supports two printing methods: thermal transfer and direct thermal.

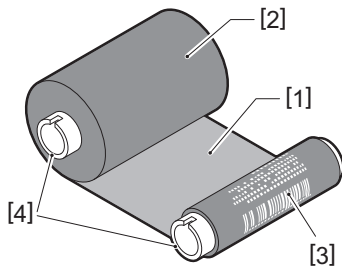
- **Thermal transfer:** The heat from the print head melts the ink on the ribbon, which is then transferred to the media for printing.
- **Direct thermal:** The heat from the print head activates the chemical coating on the media, which then produces color for printing.

This section explains the procedure for loading a ribbon in the printer.

Use a Toshiba Tec Corporation certified genuine ribbon. For details about ordering a ribbon, contact your service representative.

Note

- To print with the direct thermal method, do not load a ribbon. Printing with a ribbon loaded could damage the print head and could also cause the melted ribbon to adhere to the print head, requiring the replacement of the print head (for a fee).
- The ribbon has a front (ink) side and a back side [1]. Load it carefully; incorrect loading can result in printing failure and may necessitate replacing the print head, which incurs a fee.
- Consult the figure below to differentiate between the unused and used sides of a partially used ribbon. For a new ribbon, the side with the larger diameter [2] is the unused side.



1. Back side
2. Ribbon (unused roll)
3. Ribbon (used roll)
4. Core

⚠ CAUTION

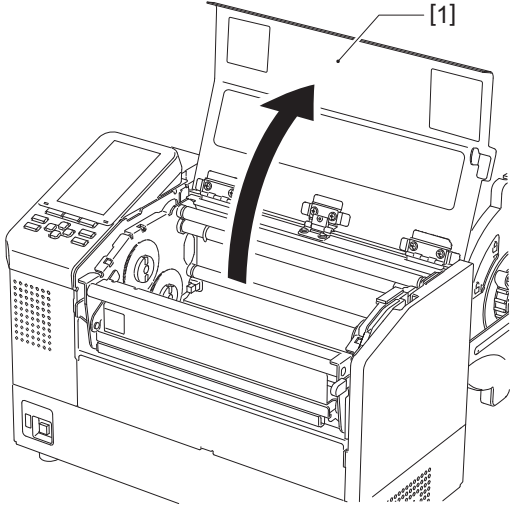
- **Fully open the top cover toward the rear side.**
Leaving it at a halfway position could cause it to close by itself, causing injury.
- **Lift the print head block until it is vertical.**
Leaving it at a halfway position could cause it to close by itself, causing injury.
- **Immediately after printing, do not touch the print head or its surrounding area.**
This could cause burns.

Tip

Ensure the ribbon width matches the media size. For assistance, please contact your service representative.

■ Attaching the ribbon

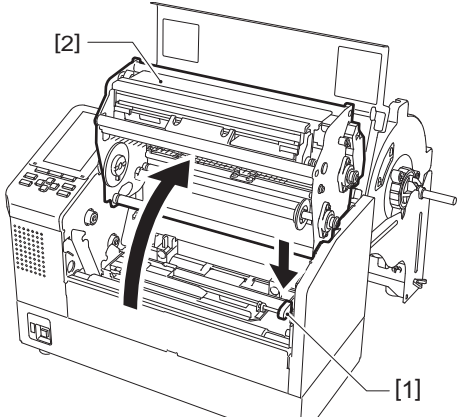
1 Fully open the top cover [1] toward the rear side.



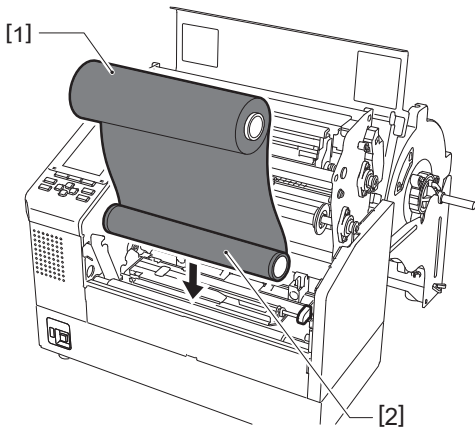
Note

When opening the top cover, do not push it open strongly. Excessive force may deform the parts and prevent the top cover from closing properly. If this happens, an error message will be displayed indicating that the top cover is open.

2 Push down the head block release lever [1] and lift the print head block [2] to the vertical position.



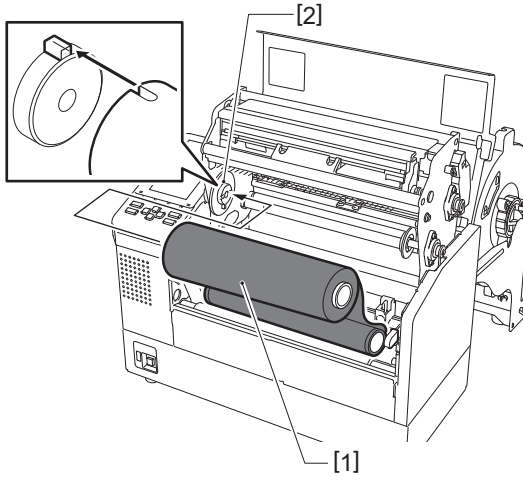
3 Hold the ribbon [1] on the unused side (larger diameter) and gently place the ribbon core [2] on the take-up side (smaller diameter) in front of the media detection sensor section.



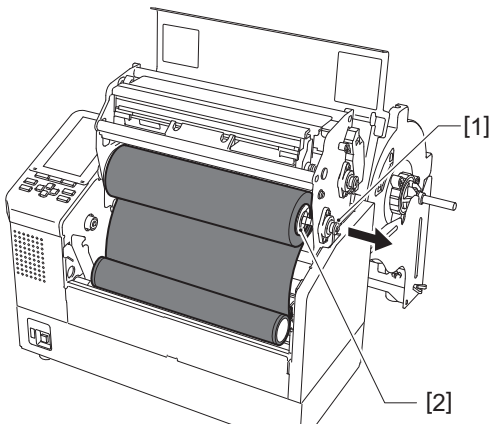
Note

- Be sure to hold the ribbon firmly with your hands during installation, as it can easily unwind and spread out.
- If ink from the ribbon gets on your hands, wash them thoroughly with soap and water.

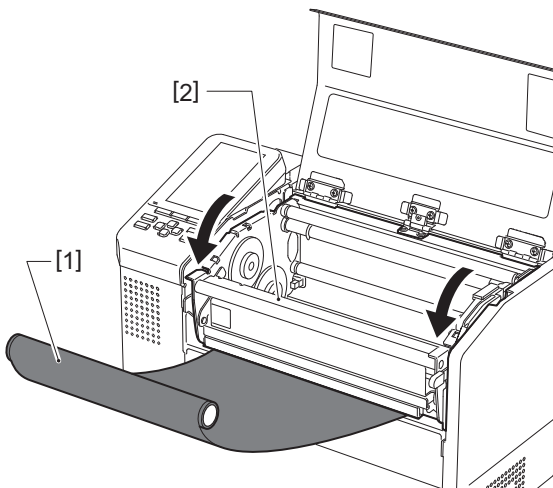
4 Align the notch on the ribbon core [1] on the unused side (larger diameter) with the protrusion on the guide wheel [2] in the front (lower) side and set it in place.



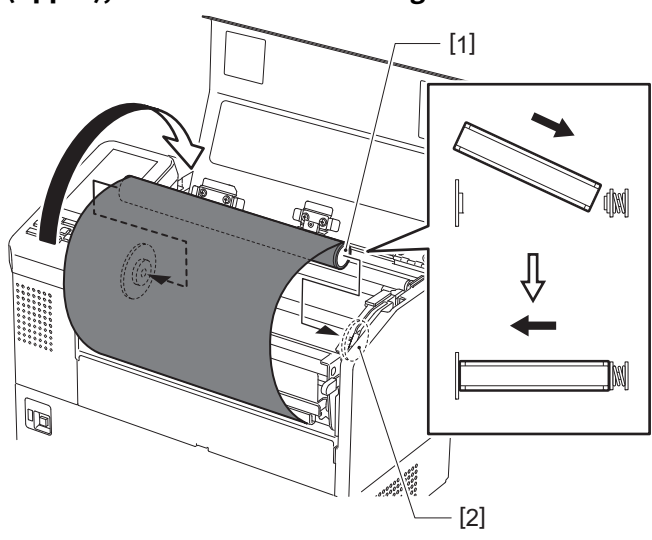
5 Pull the knob [1] on the right side of the spring guide wheel at the front (lower), align the right side of the ribbon core with the spring guide wheel [2], and then release the knob to secure it.



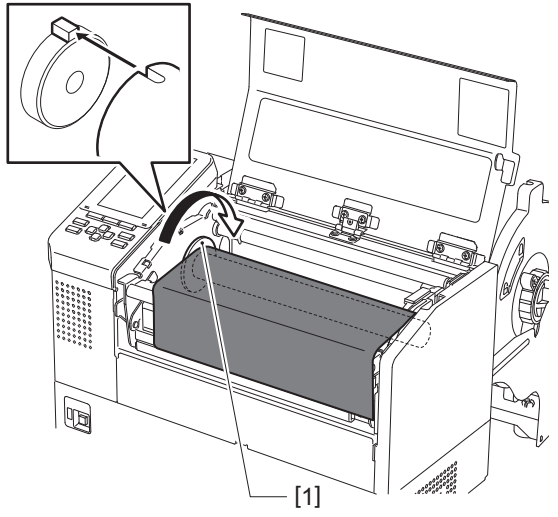
6 Hold the ribbon core [1] on the take-up side that was placed in front of the media detection sensor section in step 3, and gently lower the print head block [2].



7 While pressing the right side of the ribbon core [1] against the spring guide wheel [2] at the rear (upper), set the left side on the guide wheel.

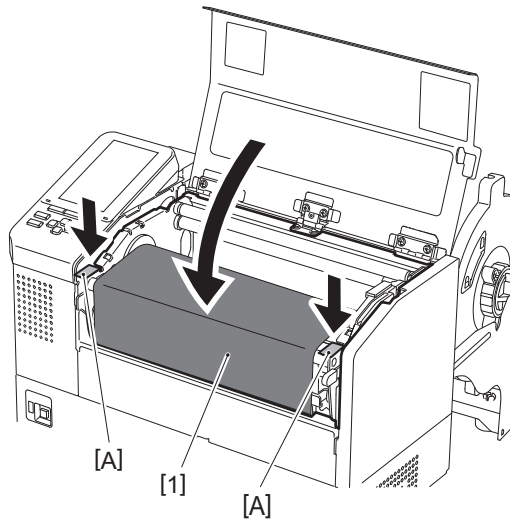


8 Turn the rear (upper) guide wheel [1] to engage the protrusion into the notch in the ribbon core.



9 Turn the rear (upper) guide wheel backward to remove any slack or wrinkles from the ribbon.

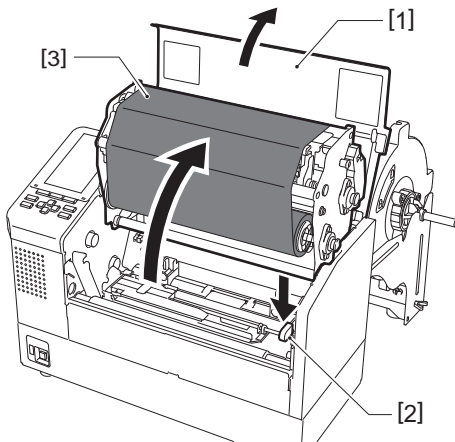
10 Gently lower the print head block [1] and lock it by pressing section A firmly in until a clicking sound hears.



11 Close the top cover gently.

■ Removing the ribbon

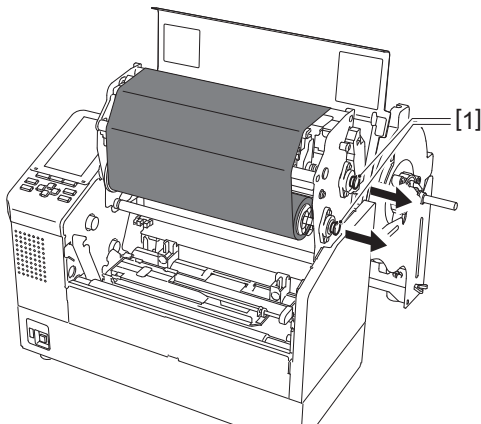
- 1 Fully open the top cover [1] toward the rear. Push down the head block release lever [2] and lift the print head block [3] to the vertical position.**



Note

When opening the top cover, do not push it open strongly. Excessive force may deform the parts and prevent the top cover from closing properly. If this happens, an error message will be displayed indicating that the top cover is open.

- 2 Remove the ribbon on the unused side and the take-up side by pulling the knobs [1] on the right side of each spring guide wheel.**



Tip

Hold the ribbon firmly to prevent it from spreading.

Daily Maintenance

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Cleaning the printer

Clean the printer periodically (at each media replacement) to ensure that clear prints can always be obtained. The print head and the platen unit, in particular, can easily get dirty. Clean them with the procedure below.

⚠ WARNING

- **Do not splash water directly or clean with a cloth containing a large amount of moisture.**
Allowing water to enter inside the printer could cause fire and electric shock.
- **Turn off the main power switch and unplug the power cable.**
Cleaning with the power on could cause fire and electric shock.

⚠ CAUTION

- **Do not clean the printer with a cleaner that contains paint thinner, benzene, and flammable gas, for example.**
This could cause fire.
- **Fully open the top cover toward the rear side.**
Leaving it at a halfway position could cause it to close by itself, causing injury.
- **Lift the print head block until it is vertical.**
Leaving it at a halfway position could cause it to close by itself, causing injury.
- **Immediately after printing, do not touch the print head or its surrounding area.**
This could cause burns.
- **Do not touch the sharp cutter blade.**
This could cause injury.

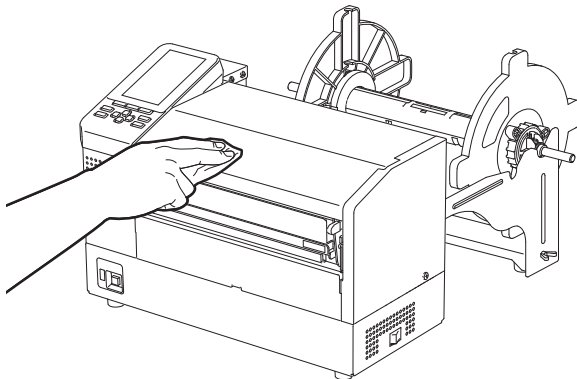
Note

When opening the top cover, do not push it open strongly. Excessive force may deform the parts and prevent the top cover from closing properly.

If this happens, an error message will be displayed indicating that the top cover is open.

■ Cover

- 1 Turn off the main power switch and unplug the power cable.**
- 2 Wipe dirt off the cover with a dry, soft cloth.**
Wipe any particularly conspicuous dirt with a soft cloth containing a small amount of water.

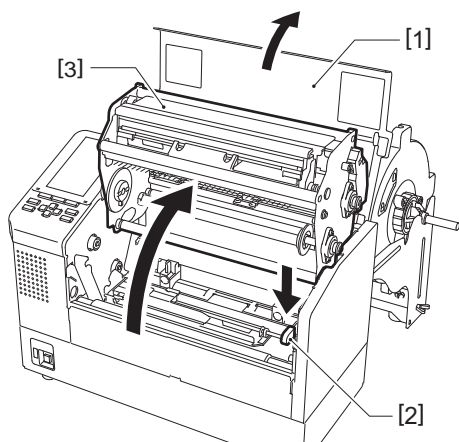


Note

Never use paint thinner, benzene, or other chemicals. Using them could cause discoloration of the cover and breakage of plastic parts.

■ Print head

- 1** Turn off the main power switch and unplug the power cable.
- 2** Fully open the top cover [1] toward the rear. Push down the head block release lever [2] and lift the print head block [3] to the vertical position. If a ribbon is set, remove it.



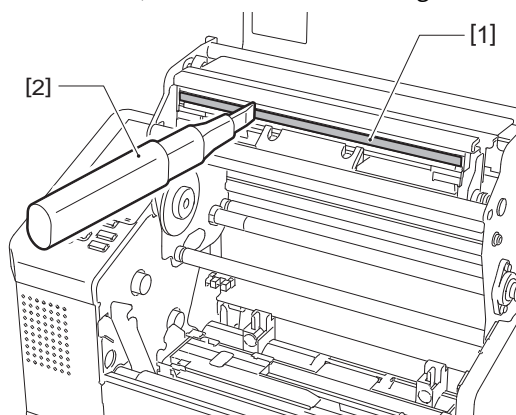
Note

When opening the top cover, do not push it open strongly. Excessive force may deform the parts and prevent the top cover from closing properly.

If this happens, an error message will be displayed indicating that the top cover is open.

3 Clean the print head (hatched portion).

Clean the print head heating section [1] (hatched portion), with a head cleaner pen [2], a commercially available cotton swab, or a soft cloth containing a small amount of anhydrous ethanol.



Tip

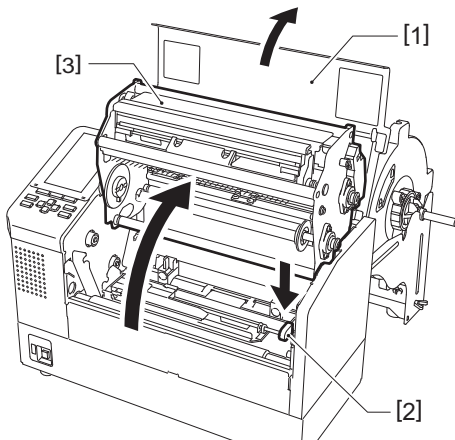
Order the separately sold head cleaner pen from your service representative.

Note

- Do not damage the print head with a sharp object. This could cause print failures and malfunctions.
- Do not touch the heating portion of the print head directly. This could cause electrostatic damage and corrosion.
- Never use paint thinner, benzine, or other chemicals. This could cause print failures and malfunctions.

■ Platen unit

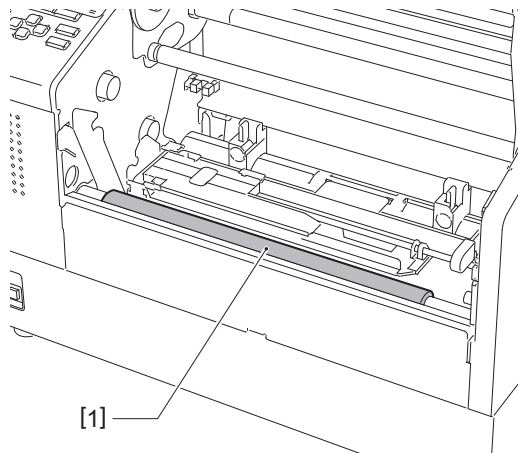
- 1** Turn off the main power switch and unplug the power cable.
- 2** Fully open the top cover [1] toward the rear. Push down the head block release lever [2] and lift the print head block [3] to the vertical position.



Note

When opening the top cover, do not push it open strongly. Excessive force may deform the parts and prevent the top cover from closing properly. If this happens, an error message will be displayed indicating that the top cover is open.

- 3** Wipe dirt off the platen unit [1] a soft cloth moistened with a small amount of water. Conduct cleaning for each roll of media.

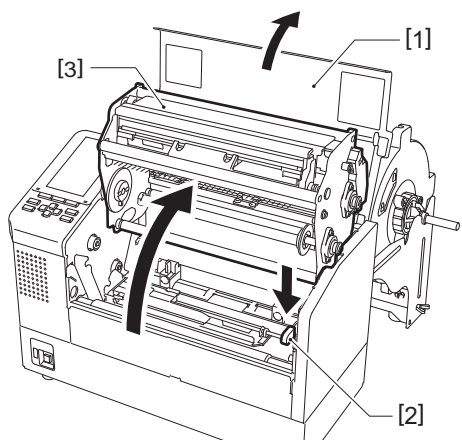


Note

- Do not damage the platen unit with a sharp object. This could cause print failures and malfunctions.
- Never use paint thinner, benzine, or other chemicals. This could cause print failures and malfunctions.

Media detection sensors

- 1 Turn off the main power switch and unplug the power cable.
- 2 Fully open the top cover [1] toward the rear. Push down the head block release lever [2] and lift the print head block [3] to the vertical position.

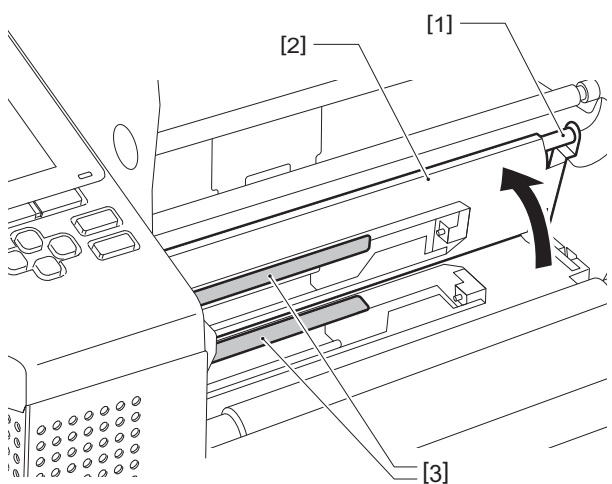


Note

When opening the top cover, do not push it open strongly. Excessive force may deform the parts and prevent the top cover from closing properly. If this happens, an error message will be displayed indicating that the top cover is open.

- 3 Lift the knob [1] in front of the sensor adjustment dial to fully open the upper sensor block [2]. Wipe the media detection sensor [3] with a soft cloth or cotton swab moistened with a small amount of anhydrous ethanol.

Wipe paper powder and dust with a dry, soft cloth.



Note

- Do not damage the sensor with a sharp object. This could cause print failures and malfunctions.
- Never use paint thinner, benzine, or other chemicals. This could cause print failures and malfunctions.

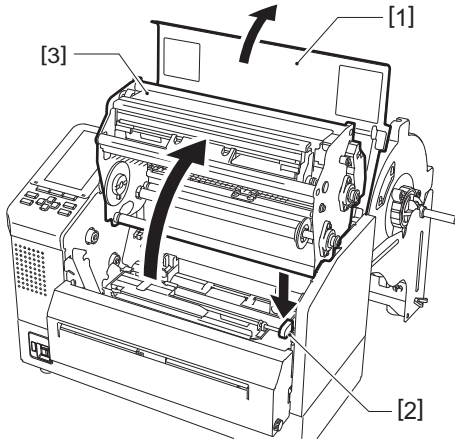
■ Cutter

⚠ CAUTION

Do not touch the sharp cutter blade.

This could cause injury.

- 1 Turn off the main power switch and unplug the power cable.**
- 2 Fully open the top cover [1] toward the rear. Push down the head block release lever [2] and lift the print head block [3] to the vertical position.**

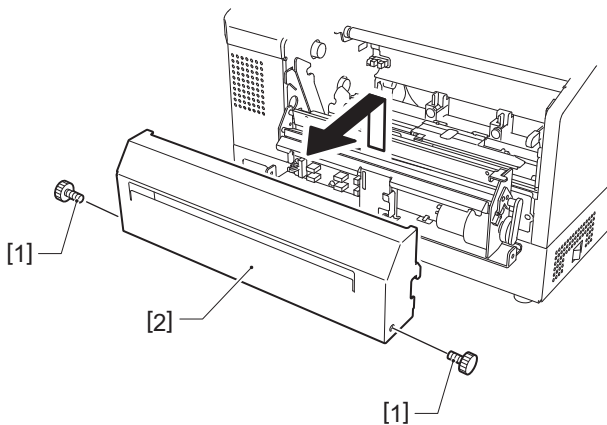


Note

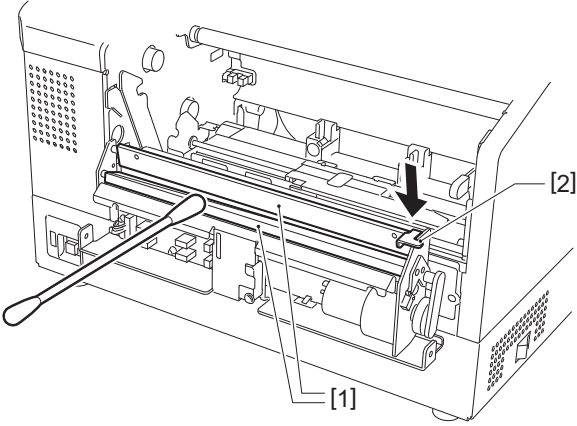
When opening the top cover, do not push it open strongly. Excessive force may deform the parts and prevent the top cover from closing properly.

If this happens, an error message will be displayed indicating that the top cover is open.

- 3 Remove the thumbscrews [1], then remove the cutter cover [2].**



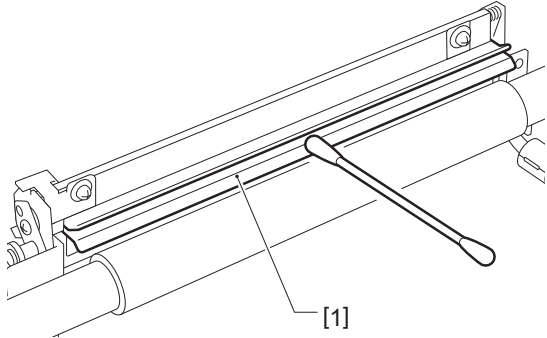
4 Wipe off any glue or paper dust on the upper and lower cutter blades [1] with a cotton swab moistened with a small amount of anhydrous ethanol.



Tip

Push down the lever [2] on the right side of the upper blade to facilitate cleaning the right edge of the lower blade.

5 Wipe off any glue or paper dust adhering to the upper and lower media guide plates [1] in front of the platen with a cotton swab moistened with a small amount of anhydrous ethanol.



Tip

The media guide plate is opened by pushing down the lever on the right side of the upper blade.

Note

- Do not damage the cutter blade with metal or other hard objects. Doing so may cause cutting failure or malfunction.
- Never use chemicals such as thinner or benzine. This could cause cutting failure or malfunctions.

■ When you do not use the printer for a long period of time

If the printer is to be left unused for a long time, remove the media from the printer to prevent deformation of the media.

Troubleshooting

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Troubleshooting

If any problems occur during use, check the following.

If the printer is not restored to normal, turn off the main power switch, unplug the power cable from the electric outlet, and consult with your service representative.



■ Error messages

If an error message appears, take action according to the details of the error.

Resolving the error's cause and pressing the [RESTART] button will clear the error.

Display	Cause	Action
Paper Jam	The media are not loaded correctly.	Load the media correctly. 📖 P.37 "Media loading procedure"
	During issuance, a paper jam occurred.	Remove the media jam, load the media again, and press the [RESTART] button. 📖 P.75 "If the media are jammed"
	The media are not fed correctly.	Load the media again and press the [RESTART] button to continue printing where it left off. 📖 P.37 "Media loading procedure"
	Media with a size different from that specified in the program are loaded.	Load media with the specified size and press the [RESTART] button.
	The reflective sensor does not detect the black marks.	Adjust the position of the reflective sensor. 📖 P.52 "Adjusting the position of the upper reflective sensor" 📖 P.53 "Adjusting the position of the lower reflective sensor" If the position is correct, adjust the sensor level or set the threshold. For details, refer to "Key Operation Specification". If the problem recurs, turn off the power and contact the service personnel.
	The transmissive sensor does not detect the transmissive between labels.	Adjust the sensor level or set the threshold. For details, refer to "Key Operation Specification". If the problem recurs, turn off the power and contact the service personnel.
	Media of a type not suitable for the sensor specified in the program are set.	Load the media suitable for the specified sensor and press the [RESTART] button.
	Media with a size other than the specified one or not suitable for the sensor were loaded and the [FEED] button was operated.	Load media with the specified size or suitable for the sensor and press the [RESTART] button.
Automatic media measurement was performed using media with both black marks and gaps between labels, specifying [All Sensor] for the [Auto Calibration] setting.	To perform automatic media measurement using media with both black marks and gaps between labels, specify [Lower Reflective Sensor] for the [Auto Calibration] setting. For details, refer to "Key Operation Specification".	

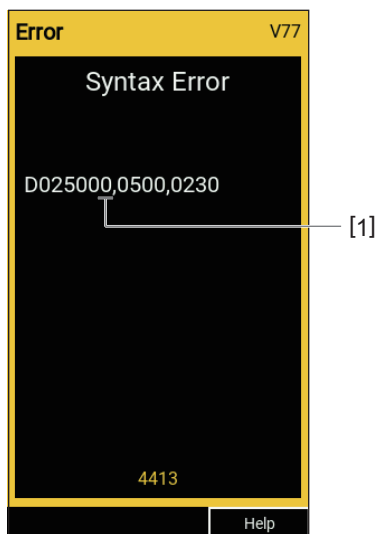
Display	Cause	Action
No Paper	The media were used up.	Load new media and press the [RESTART] button to continue printing where it left off. 📖 P.37 “Media loading procedure”
	No media are loaded.	Load the media correctly. 📖 P.37 “Media loading procedure”
	The detection level of the media sensor does not match the media.	Adjust the sensor by using the media used. For details, refer to “Key Operation Specification”.
Ribbon Error	The ribbon is not loaded correctly.	Load the ribbon correctly. 📖 P.54 “Loading the ribbon (thermal transfer method)”
	The ribbon has a slack.	Turn the ribbon shaft on the take-up side clockwise to remove any slack in the ribbon. 📖 P.54 “Loading the ribbon (thermal transfer method)”
	The ribbon was cut off in the middle.	Paste the cut-off portions of the ribbon together or replace it with a new one. 📖 P.78 “If the ribbon is cut off in the middle” 📖 P.54 “Loading the ribbon (thermal transfer method)”
	The ribbon is jammed inside.	Load the ribbon again and press the [RESTART] button to continue printing where it left off. 📖 P.54 “Loading the ribbon (thermal transfer method)”
	The ribbon drive sensor is faulty.	Turn off the power and contact the service personnel.
	The ribbon has run out.	Load a new ribbon. 📖 P.54 “Loading the ribbon (thermal transfer method)”
Head Open	The print head block is not secured.	Push down the print head block firmly until it clicks into place and locks securely.
Top Cover Open	The top cover is open.	Make sure the top cover is closed.
Head Error	A disconnection error occurred in the print head. Or, an error occurred in the print head driver.	Turn off the power and contact the service personnel.
Excess Head Temp.	The temperature of the print head is too high.	Turn off the power and wait until the temperature reduces. If the problem recurs, turn off the power and contact the service personnel.
Communication Error	During RS-232C communication, a parity error or a framing error occurred.	Make sure that the communication settings on the connected computer side match those on the printer side.
Memory Write Error	An error occurred in writing to the registration memory (USB memory or flash ROM on the CPU board).	Turn off the power and then on again and retry writing. Check the details of the command to register. If the problem recurs, turn off the power and contact the service personnel.

Display	Cause	Action
Format Error Check the settings.	An error occurred in formatting the registration memory (USB memory or flash ROM on the CPU board).	Turn off the power and then on again and retry formatting. Check the details of the command to register. If the problem recurs, turn off the power and contact the service personnel.
Memory Full	Registration fails because the registration memory (USB memory or flash ROM on the CPU board) does not have enough free space.	Turn off the power and then on again. Confirm the free memory space and the size of the data to register. If the problem recurs, turn off the power and contact the service personnel.
Password Invalid	The password was entered incorrectly three times in a row.	Turn off the power and then on again.
Power Failure	An instantaneous power outage occurred.	Turn off the power and then on again.
Cutter Error	A paper jam occurred in the cutter.	Remove the media jam, load the media again, and press the [RESTART] button to continue printing where it left off.  P.75 "If the media are jammed"
	The cutter module cover is open.	Close the cutter module cover securely.
	Due to a cutter fault, the cutter does not move from the home position.	Contact the service personnel.
Internal COM Error	A hardware error occurred in the internal serial interface port.	Turn off the power and then on again.
System Error ## (##: 2-digit number)	An operation such as the following was performed: <ul style="list-style-type: none"> • Fetch an instruction from an odd-numbered address • Access word data from other than a word data boundary • Access long word data from other than a long word data boundary • Access the 80000000H to FFFFFFFFH area in the logical space in user mode • Decode an undefined instruction inside/outside a delay slot • Decode an instruction or rewriting in a delay slot 	Turn off the power and then on again. If the problem recurs, turn off the power and contact the service personnel.
Low Battery	The RTC (Real Time Clock) battery voltage is low.	Turn off the power and contact the service personnel.
Syntax Error	If up to 42 alphanumeric characters are displayed, a syntax error has occurred.	Turn off the power and then on again and then send the correct command again.  P.71 "Syntax error"
Please insert USB Memory	A USB memory is required but not inserted.	Insert the USB memory.
Other error messages	A problem has occurred in hardware or software.	Turn off the power and then on again. If the problem recurs, turn off the power and contact the service personnel.

❑ Syntax error

If a command sent from the computer has an error, 42 bytes are displayed on the LCD, starting with the command code of the command that has an error. [LF], [NUL], and any portion that exceeds 42 bytes are not displayed.

Syntax error display examples



1. Syntax error


Tip

When a syntax error is displayed, codes other than 20H to 7FH and A0H to DFH are displayed as “?” (3FH).

■ If the printer does not operate correctly

Symptom	Cause	Action
The power is not supplied even though the power is turned on.	The power cable is disconnected from the printer.	Insert the power cable into the AC power inlet securely. 📖 P.32 “Connecting the power cable”
	The power plug is disconnected from the electric outlet.	Insert the power plug fully and securely into the electric outlet. 📖 P.32 “Connecting the power cable”
	A power outage occurs or the power is not supplied to the electric outlet.	Confirm whether the power is supplied, using another electric appliance. If the power is not supplied, consult with the nearest power company.
	The fuse or the circuit breaker in the building is blown.	Inspect the fuse and the circuit breaker.
The media are not issued.	The media are not loaded correctly.	Load the media correctly. 📖 P.37 “Media loading procedure”
	The print head block is not properly secured.	Push down the print head block firmly until it clicks into place and locks securely. 📖 P.37 “Media loading procedure”
	The communication cable is disconnected.	Confirm the connection states on the printer side and the computer side and connect the communication cable securely. 📖 P.21 “Connecting to a computer”
	The media detection sensors are dirty.	Clean the media detection sensors. 📖 P.63 “Media detection sensors”
	Ribbon is not loaded even though the thermal transfer method is selected.	Load the ribbon. 📖 P.54 “Loading the ribbon (thermal transfer method)”
The media are not printed.	Direct thermal media are not loaded although the direct thermal method is selected.	Load direct thermal media. 📖 P.37 “Media loading procedure”
	The media are not loaded correctly.	Load the media correctly. 📖 P.37 “Media loading procedure”
	The ribbon is not loaded correctly.	Load the ribbon correctly. 📖 P.54 “Loading the ribbon (thermal transfer method)”
	No print data is sent from the computer.	Send print data.

Symptom	Cause	Action
Printing is blurry.	Toshiba Tec Corporation certified media are not used.	Replace the media with Toshiba Tec Corporation certified ones. 📖 P.83 “Media”
	Toshiba Tec Corporation certified ribbon is not used.	Replace the ribbon with Toshiba Tec Corporation certified one. 📖 P.85 “Ribbon”
	The print head is dirty.	Clean the print head. 📖 P.61 “Print head”
	The print head pressure does not match the media being used.	Tilt the pressure switch lever to the position that matches your media type. 📖 P.37 “Media loading procedure”
	The density setting of the print head is low.	Set the density to high with the density fine-tuning parameter. For details, refer to “Key Operation Specification”.
	The print speed is too high depending on what to print.	If printing is blurry if ruled lines and reversed characters are printed at a maximum speed, reduce the print speed. For details, refer to “Key Operation Specification”.
	If left unused for an extended period with media, the media may become deformed where it is pressed between the print head and the platen unit.	Remove the media from the printer if it will not be used for an extended period.
There are broken letters.	The print head is dirty.	Clean the print head. 📖 P.61 “Print head”
	Part of the heating portion of the print head is disconnected.	Turn off the power, unplug the power plug from the electric outlet, and contact the service personnel.
	The media stuck to the print head when the print rate or the print density was high.	You can keep the print head from sticking by changing the printing conditions appropriately. <ul style="list-style-type: none"> • Reduce the number of dots to be printed at a time. • Fine-tune the print density to a lower value. • Increase the print speed setting.
Scanning of the printed serial barcode (ladder barcode) and 2 dimensional codes is poor.	Depending on the printing conditions, the print quality may deteriorate and scanning may become poor.	You can improve the print quality by changing the printing conditions appropriately. <ul style="list-style-type: none"> • Lower the print density. • Decrease the print speed setting. • Increase the cell size (module size).
The ribbon residue adheres to the media.	When data that partially has a high print rate, such as serial barcodes, was printed continuously, ribbon debris stuck to the media due to the heat accumulated in the print head.	You can keep ribbon residue from adhering by changing the printing conditions appropriately. <ul style="list-style-type: none"> • Change the print pattern. • Fine-tune the print density to a lower value. • Decrease the print speed setting.

Symptom	Cause	Action
The ribbon residue adheres to the liner surface between the labels.	Ribbon residue adhered to the liner surface, not the label surface, due to residual adhesive on the liner.	This is not a fault. Continue to use the printer.
A media feed error occurs immediately after the media are issued.	If left unused for an extended period with media in the print head block, the media may become deformed where it is pressed between the print head and the platen unit.	Remove the media from the printer if it will not be used for an extended period.
The media are not cut neatly. (When the cutter module is attached)	The cutter blade is dirty.	Turn off the power, unplug the power plug from the electric outlet, and contact the service personnel.
	The cutter blade has expired.	Turn off the power, unplug the power plug from the electric outlet, and contact the service personnel.
The ribbon is wrinkled.	There is more print data on either the right or left side.	Push down the head block release lever and lift the print head block to the vertical position, then wind the ribbon until there is no slack or wrinkles. After the operation, push down the print head block firmly until it clicks into place and locks securely.  P.54 “Loading the ribbon (thermal transfer method)” Review the placement of the print format so that there will be equal amounts of print data on the right and left sides.
The ribbon is used up, but the media is issued normally and there is no indication of a ribbon error.	Ribbon errors may not be correctly detected under the conditions of media pitch of 20 mm (0.79") or less, print speed of 6 ips, and single sheet issuance.	By setting the issuance speed to 4 ips, ribbon errors can be correctly detected.
During printing operation, operation is momentarily stopped and then printing is resumed.	When high-density printing continued, operation was temporarily stopped to keep the performance of the printer.	This is not a fault. Continue to use the printer.
During printing operation, operation is stopped for a few seconds and then printing is resumed.	When the temperature of the print head exceeded the specified value, operation was temporarily stopped to keep the performance of the printer.	This is not a fault. Continue to use the printer.
Wireless LAN connection fails.	The LAN/Wireless LAN settings are not made correctly.	Confirm whether the settings are correct. For details, refer to “Key Operation Specification”. If the problem persists, contact the service personnel.
	Unable to make a connection to a wireless LAN access point.	For details about the establishment of an access point, refer to the instruction manual for the wireless LAN access point used.
A wireless LAN communication error occurs immediately after the power is turned on.	Wireless LAN communication is unavailable immediately after the power is turned on.	After turning on the power, start communication at least 10 seconds after the ONLINE lamp turns on.

■ If the media are jammed

If the media are jammed inside the printer, remove the jam by following the procedure below.

⚠ WARNING

Turn off the main power switch and unplug the power cable.

Cleaning with the power on could cause fire and electric shock.

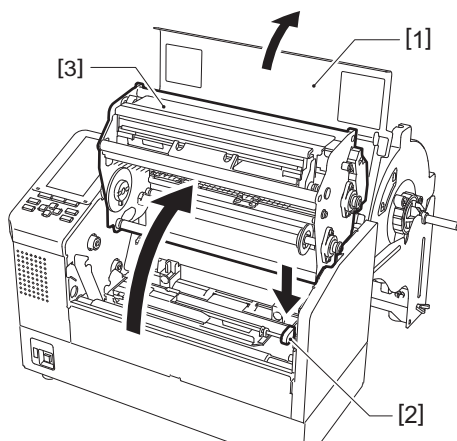
⚠ CAUTION

- **Fully open the top cover toward the rear side.**
Leaving it at a halfway position could cause it to close by itself, causing injury.
- **Lift the print head block until it is vertical.**
Leaving it at a halfway position could cause it to close by itself, causing injury.
- **Immediately after printing, do not touch the print head or its surrounding area.**
This could cause burns.

Note

- Do not damage the print head or the platen unit with a sharp object. This could cause print failures and malfunctions.
- Do not touch the heating portion of the print head directly. This could cause electrostatic damage to the print head.

- 1 Fully open the top cover [1] toward the rear. Push down the head block release lever [2] and lift the print head block [3] to the vertical position.**

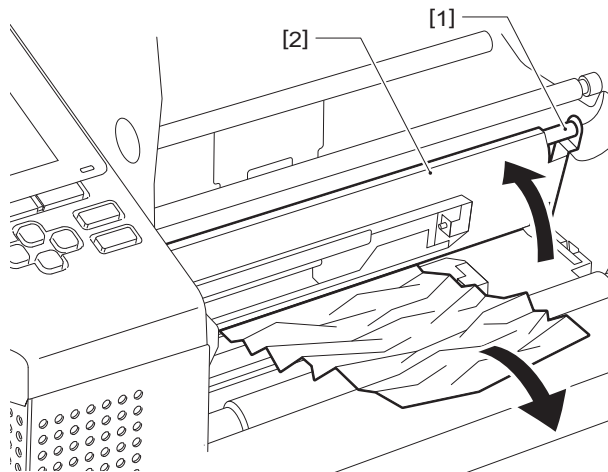


Note

When opening the top cover, do not push it open strongly. Excessive force may deform the parts and prevent the top cover from closing properly.

If this happens, an error message will be displayed indicating that the top cover is open.

- 2 Lift the knob [1] in front of the sensor adjustment dial to fully open the upper sensor block [2]. Remove the media jam.**



- 3 Reload the media properly.**
📖 P.37 “Media loading procedure”

❑ Clearing a jam inside the cutter

If media becomes jammed inside the cutter module, follow the steps below to remove it.

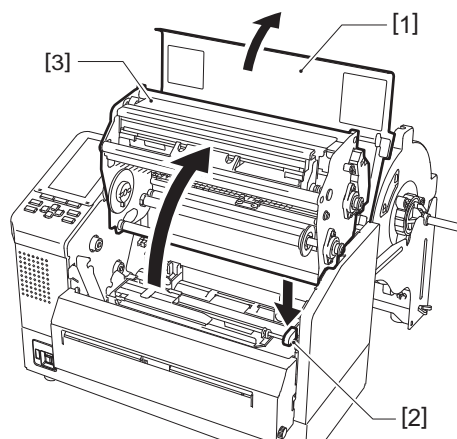
⚠ CAUTION

- **Fully open the top cover toward the rear side.**
Leaving it at a halfway position could cause it to close by itself, causing injury.
- **Lift the print head block until it is vertical.**
Leaving it at a halfway position could cause it to close by itself, causing injury.
- **Immediately after printing, do not touch the print head or its surrounding area.**
This could cause burns.
- **Do not touch the sharp cutter blade.**
This could cause injury.

Note

Do not damage the cutter blade with metal or other hard objects. Doing so may cause cutting failure or malfunction.

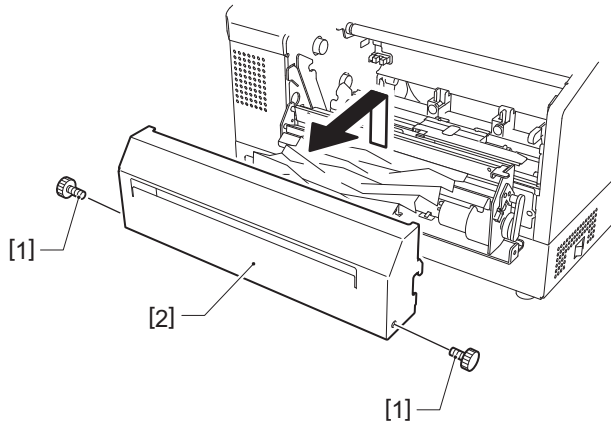
- 1 Fully open the top cover [1] toward the rear. Push down the head block release lever [2] and lift the print head block [3] to the vertical position.**



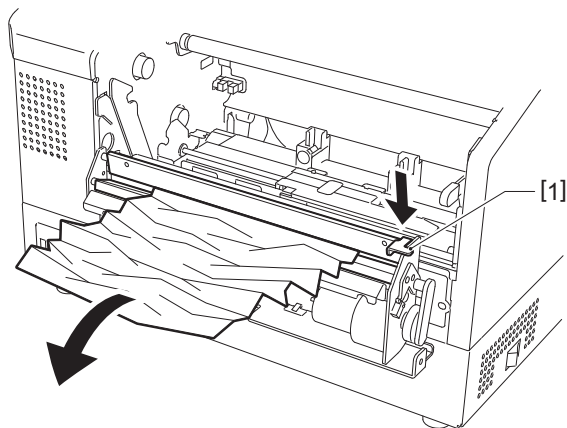
Note

When opening the top cover, do not push it open strongly. Excessive force may deform the parts and prevent the top cover from closing properly. If this happens, an error message will be displayed indicating that the top cover is open.

2 Remove the thumbscrews [1], then remove the cutter cover [2].



3 Push down the lever [1] on the right side of the upper blade to remove jammed media.



4 Attach the cutter cover.

5 Reload the media properly.

📖 P.37 “Media loading procedure”

■ If the ribbon is cut off in the middle

If the ribbon is cut off in the middle, repair it with the procedure below. (Temporary measure)

If you have a new ribbon, replace the ribbon with that one.

📖 P.54 “Loading the ribbon (thermal transfer method)”

⚠ CAUTION

- **Fully open the top cover toward the rear side.**
Leaving it at a halfway position could cause it to close by itself, causing injury.
- **Lift the print head block until it is vertical.**
Leaving it at a halfway position could cause it to close by itself, causing injury.
- **Immediately after printing, do not touch the print head or its surrounding area.**
This could cause burns.

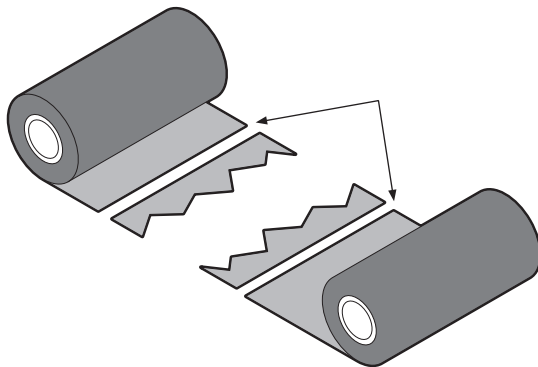
- 1 Fully open the top cover toward the rear side. Push down the head block release lever and lift the print head block to the vertical position.**

Note

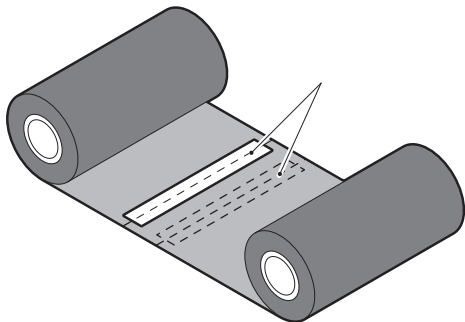
When opening the top cover, do not push it open strongly. Excessive force may deform the parts and prevent the top cover from closing properly.

If this happens, an error message will be displayed indicating that the top cover is open.

- 2 Remove the ribbon on the unused side and the take-up side by pulling the knobs on the right side of each spring guide wheel.**
- 3 Cut the cut off portions neatly.**



- 4 Overlay one portion on the other, aligning them horizontally, and fasten the overlay firmly with adhesive cellophane tape.**



- 5 Make two or three winds of the ribbon around the take-up (used ribbon) side roll.**

- 6 Reload the ribbon properly.**

📖 P.54 “Loading the ribbon (thermal transfer method)”

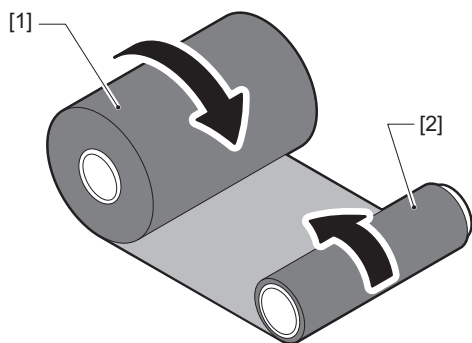
■ If the ribbon winds become disordered

If the ribbon winds become disordered because the ribbon storage condition is poor or you dropped the ribbon when loading it, wind the ribbon again with the procedure below. (Temporary measure)

If you have a new ribbon, replace the ribbon with that one.

📖 P.54 “Loading the ribbon (thermal transfer method)”

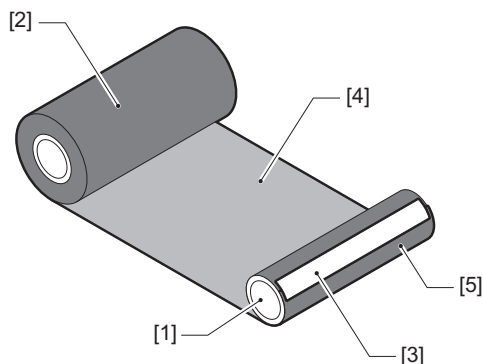
- 1 This step requires two people. One person holds the supply side (unused) ribbon roll [1] and the other holds the take-up side (used) ribbon roll [2]. Wind the ribbon, aligning it horizontally, while keeping the ribbon taut.**



Note

Do not pull the ribbon strongly. Pulling it more strongly than necessary could cut off the ribbon.

- 2 If the ribbon cannot be wound properly, cut off the used ribbon roll.**
Remove the used ribbon roll from the take-up side core.
- 3 Attach the supply side (unused) ribbon [2] to the take-up side core [1] firmly with adhesive cellophane tape [3].**
A ribbon has a back side [4] and a front side (ink side) [5]. Load it carefully.



Note

Attach the ribbon so that it will be vertical to the take-up side core [1]. Attaching it diagonally could cause the ribbon to be wrinkled.

- 4 Make two or three winds of the ribbon around the take-up side core.**
- 5 Reload the ribbon properly.**
📖 P.54 “Loading the ribbon (thermal transfer method)”

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Specifications

■ Printer

Item		Description
Model		BX820T-TS02-QM-S
Power supply		AC100–240 V, 50/60 Hz
Power consumption		During printing: 185 W (at a print rate of 15 %, slant line print format) During standby: 13 W
Operating temperature range		5 to 40 °C (41 to 104 °F)
Operating humidity range		25 to 85% (no condensation)
Printing method		Thermal transfer (ribbon transfer)/Direct thermal (heat direct coloring)
Resolution		12 dots/mm (300 dpi)
Printing speed *1		Batch/cut issuance: 50.8 mm (2")/sec., 101.6 mm (4")/sec., 152.4 mm (6")/sec.
Issue mode		Batch/Cut (optional)
Color LCD		272 x 480 dot-color LCD
Display language		English, German, French, Dutch, Spanish, Japanese, Italian, Portuguese, Simplified Chinese, Korean, Turkish, Polish, Russian, Czech
Effective print width		Up to 216.8 mm (8.54")
Characters	Alpha-numeric/ kana	Times Roman, Helvetica, Presentation, Letter Gothic, Prestige Elite, Courier, OCR-A, OCR-B, Gothic 725 Black
	Kanji	16x16, 24x24, 32x32, 48x48 (Kaku Gothic) 24x24, 32x32 (Mincho)
	External characters	16x16, 24x24, 32x32, 48x48 dots: 1 type each, one-size-fits-all: 40 types
	Other	Outline font (alphanumeric): 5 types, Price font: 3 types, NotoSansFont
Barcodes		JAN8/13, EAN8/13, EAN8/13 add on 2&5, UPC-A/E, UPC-A/E add on 2&5, Interleaved 2 of 5, NW-7, CODE39/93*2/128*2, EAN128, MSI, Industrial 2of5, RM4SCC, KIX code, GS1 Databar, USPS Intelligent mail barcode, Customer Barcode, POSTNET, MATRIX 2of5 for NEC
2D codes		QR code, Micro QR code, PDF417, MaxiCode, DataMatrix, MicroPDF417, GS1 Data Matrix, GS1 QR code, Aztec code, CP code
Interface		USB port x1 (high-speed 2.0-compliant port) LAN port x1 (10BASE-T/100BASE-TX/1000BASE-T compliant) USB host x1 (high-speed USB V2.0-compliant port) Bluetooth x1 (Optional: BX700-WLBT-S) (Bluetooth® Dual-Mode)*3 Wireless LAN x1 (Optional: BX700-WLBT-QM-S) (IEEE802.11a/b/g/n/ac/ax compliant)*3 RS-232C x1 (Optional: B-EX700-RS-QM-R)*3 External I/O x1 (Optional: BX700-IO-QM-S)
Dimensions (W x D x H)		403.0 mm x 432.0 mm x 276.0 mm (15.87" x 17.01" x 10.87")
Weight		Approx. 14.4 kg (31.7 lb)
Options (separately sold)		Cutter module (BX208-QM-S) Real time clock (BX704-RTC-QM-S) Real time clock board harness (BX708-RTCH-QM-S) Wireless communication module (BX700-WLBT-QM-S)*3 Serial I/F board (B-EX700-RS-QM-R)*3 External I/O board (BX700-IO-QM-S) External I/O board harness (BX708-IOH-QM-S)

- *1 Depending on the combination of supplies used, the print speed may be restricted.
- *2 When printing a CODE93 or CODE128 serial barcode, locate it at least 10 mm away from the print start position. Otherwise, poor scanning may occur.
- *3 The serial interface and the wireless LAN/Bluetooth cannot be used at the same time. Only one can be installed.

Tip

Specifications of the printer are subject to change in the future without prior notice.

Media

Media include labels, tags, and receipts of the heat direct coloring type.

Use Toshiba Tec Corporation certified genuine media.

For details about ordering and preparing media, contact your service representative.

Item		Batch issuance	Cut issuance
Media length (pitch)	Label	15.0 - 1368.0 mm (0.59" - 53.86")	38.0 - 1368.0 mm (1.5" - 53.86")
	Tag	15.0 - 1368.0 mm (0.59" - 53.86")	25.4 - 1368.0 mm (1.0" - 53.86")
Label length		13.0 - 1366.0 mm (0.51" - 53.78")	32.0 - 1362.0 mm (1.26" - 53.62")
Liner width (Tag width)	Thermal	100.0 - 242.0 mm (3.94" - 9.53")	100.0 - 235.0 mm (3.94" - 9.25")
	Transfer	100.0 - 210.0 mm (3.94" - 8.27")	100.0 - 210.0 mm (3.94" - 8.27")
Label width	Thermal	97.0 - 239.0 mm (3.82" - 9.41")	97.0 - 232.0 mm (3.82" - 9.13")
	Transfer	97.0 - 207.0 mm (3.82" - 8.15")	97.0 - 207.0 mm (3.82" - 8.15")
Gap length		2.0 - 20.0 mm (0.08" - 0.79")	6.0 - 20.0 mm (0.24" - 0.79")
Black mark length		2.0 - 10.0 mm (0.08" - 0.39")	
Black mark width		10.0 mm (0.39") or longer	
Effective print width		216.8±0.2 mm (8.54"±0.01")	
Effective print length	Label	13.0 - 1366.0 mm (0.51" - 53.78")	32.0 - 1362.0 mm (1.26" - 53.62")
	Tag	13.0 - 1366.0 mm (0.51" - 53.78")	23.4 - 1366.0 mm (0.92" - 53.78")
Non-printing area		1 mm (0.04") forward of the feed start position 1 mm (0.04") behind the feed stop position	
Maximum effective print length for on-the-fly issuance		1366.0 mm (53.78")	
Thickness	Label	138 - 169 µm (0.0054" - 0.0067")	
	Tag	79 - 165 µm (0.0031" - 0.0065")	
Maximum outer roll diameter		Ø230 mm (9.06")	
Core inner diameter		Ø76.2±0.3 mm (3.0"±0.01")	
Roll direction		Inner roll	

□ Notes for media

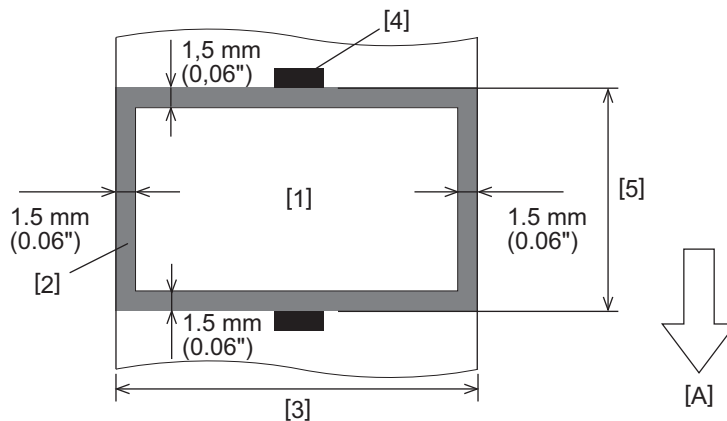
Note

- If the tail end of the media is fastened to the core with tape or glue, the load on the media could fluctuate at the moment the tail end is peeled off. This could cause uneven transfer, having an impact on printing. Of particular note is that in that event, the printed barcodes or 2 dimensional codes could become unreadable. Before using such labels, be sure to confirm the codes.

For labels, the impact on printing can be avoided by attaching the media by leaving about 300 mm (11.81") of the liner from the last label to the core. Note that in this case, after the last label is printed, a media feed error occurs with the liner, instead of a media absence error.

For labels for which the media pitch is 87 mm (3.43") or less, it is possible to make a media absence error occur even without leaving the liner from the last label, as mentioned above, but for the printing of labels about 280 mm (11.02") before the end of the liner, uneven transfer may occur, having an impact on printing.

- Depending on the status of the tape at the tail end of the media, the peeled off tape may affect the sensor, causing a media feed error to occur, not a media absence error.
- The gray portions in the figure below are outside the printing-guaranteed area. Printing in any of these portions could affect the print quality in the printing-guaranteed area.



1. Printing-guaranteed area
 2. Area outside the printing-guaranteed area
 3. Width of label upper paper/tag
 4. Detector
 5. Length of label upper paper/tag
- A: Media feed direction

■ Ribbon

Use a Toshiba Tec Corporation certified genuine ribbon.

The warranty does not apply to any problem caused by using non-approved ribbons.

For details about ordering a ribbon, contact your service representative.

Item		Description
Ribbon shape		Spool method
Ribbon width		120 - 220 mm (Standard width: 120 mm, 160 mm, and 220 mm) 4.72" - 8.66" (Standard width: 4.72", 6.30", and 8.66")
Maximum ribbon length		300 m (328 yd)
Maximum ribbon outer diameter		Ø72 mm (2.83")
Ribbon core	Material	Paper
	Inner diameter	Ø25.8±0.2 mm (1.02"±0.01")
	Width	240 +0/-0.5 mm (9.45" +0/-0.02")
	Shape	Notch of 4 +0.2/-0 mm (0.157" +0.008"/-0") (depth 4 +1/-0 mm (0.157" +0.039"/-0")) on the specified side
Leader tape		Yes
End tape		No
Winding method		Outer roll (align the ribbon and ribbon core centers within ±1 mm (±0.04"))

Note

- To ensure print quality and print head life use only Toshiba Tec specified ribbons.
- Select a ribbon that matches the width of your media (base). A ribbon that is too narrow reduces the printable area, while one that is too wide can lead to wrinkling. Ideally, use a ribbon slightly wider than the media (base) as shown below.
- Depending on the width of the ribbon you use, voltage adjustment of the ribbon motor may be necessary. If a narrow ribbon is used, strong winding can cause wrinkles in the ribbon. Set the ribbon torque in the parameter setting menu of the system mode as follows.
For details, refer to "Key Operation Specification".

Media width	Ribbon width	Ribbon torque
100 ≤ Width ≤ 110 mm (3.94" ≤ Width ≤ 4.33")	120 mm (4.72")	Low
110 < Width ≤ 150 mm (4.33" < Width ≤ 5.91")	160 mm (6.30")	Standard
150 < Width ≤ 210 mm (5.91" < Width ≤ 8.27")	220 mm (8.66")	Standard

- Adjust the ribbon so its center aligns with the media's center. Misaligned centers can lead to ribbon wrinkling.

■ Notes on using options

⚠ WARNING

Be sure to turn off the main power switch and unplug the power plug from the wall outlet before installing the options.

Incorporating an option with the power on could cause fire, electric shock, and injury. To protect the electric circuit inside the printer, connect and disconnect cables at least 1 minute after turning off the power of the printer.

⚠ CAUTION

- **Make sure that your fingers and hands do not get caught in covers and so on.**
- **Immediately after printing, do not touch the print head, stepping motor, or their surrounding areas.**
This could cause burns.
- **When mounting and cleaning the cutter module, do not touch the cutter blade directly.**
This could cause injury.

Note

- When using a cutter module to cut label media, cut off the media at the gaps in the liner rather than through the labels themselves. Cutting through labels can lead to media jams, malfunctions, and reduced cutter lifespan. We recommend using paper with a 6 mm (0.24") gap in the liner between labels.
- When using the cutter for cutting, the minimum label length is as follows:
Label length ≥ 35.0 mm (1.38") - (Gap length / 2)
- Adjust the cutting position as needed using the [Cut/Peel Adjust].
For details, refer to "Key Operation Specification".
- If the media jams in the platen during cut issuance, set the [Move To Tearoff] in the parameter settings to [Enable].
For details, refer to "Key Operation Specification".
- If you want to use perforated label media, contact your service representative for details.

BARCODE PRINTERS

Owner's Manual

BX820T-TS02-QM-S

Toshiba Tec Corporation

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