Desktop Barcode Printer

TH220 Series

Thermal Transfer

Series Models

TH220T / TH320T

TH220THC / TH320THC

Service Manual

www.tscprinters.com

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1 Introduction

Thank you very much for purchasing TSC barcode printer.

The TH220 Series Desktop Barcode Printers are versatile and flexible for diverse printing requirements. This series' versatility enables printing a wide range of difficult labels, including thick, tiny, and long labels and certain types of vertical market labels.

Our printer language emulation makes the TH220 Series plug-and-play. Its firmware automatically identifies major printer languages and begins printing immediately without changing label templates. The TH220 Series minimizes downtime during daily operations through comprehensive printer management tools (Internal Embedded Webpage, virtual control panel, TSC Console, and SOTI Connect), printer shutdown prevention, and supports network security configurations to manage printers efficiently.

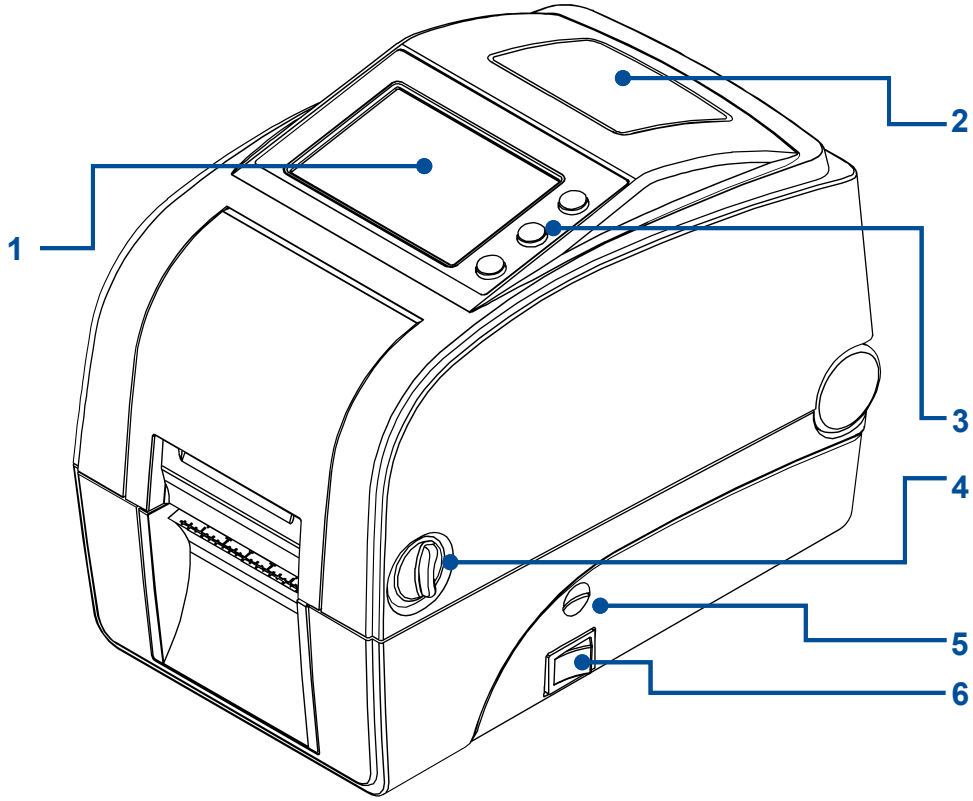
The TH220 Series scales up applications with a wide media width, high-precision printing, and several addable future-proof options. This empowers businesses to adapt to changing requirements for present and future operations. The eco-friendly printer features 100% recyclable packaging and plastic printer casing. Over 90% of printer components are recyclable at the printer's end-of-life, reducing environmental impact.

As with all TSC printers, the TH220 Series features the TSPL-EZD printer-control language, which is fully compatible with other TSC printer languages, while supporting TPLE (Translation Printer Language Eltron®),TPLZ (Translation Printer Language Zebra®) and TPLD (Translation Printer Language Datamax®). The languages automatically decipher and translate the format of each label as it is sent to the printer. TSPL-EZD also features internal scalable True Type fonts (based on the Monotype® font engine), which are typically found only in more expensive printers.

This document provides an easy reference for operating this printer. TSC printers include the Windows labeling software for creating your label template. For system integration, the TSPL/TSPL2 printer programming manual or SDKs can be found on TSC website at: https://www.tscprinters.com.

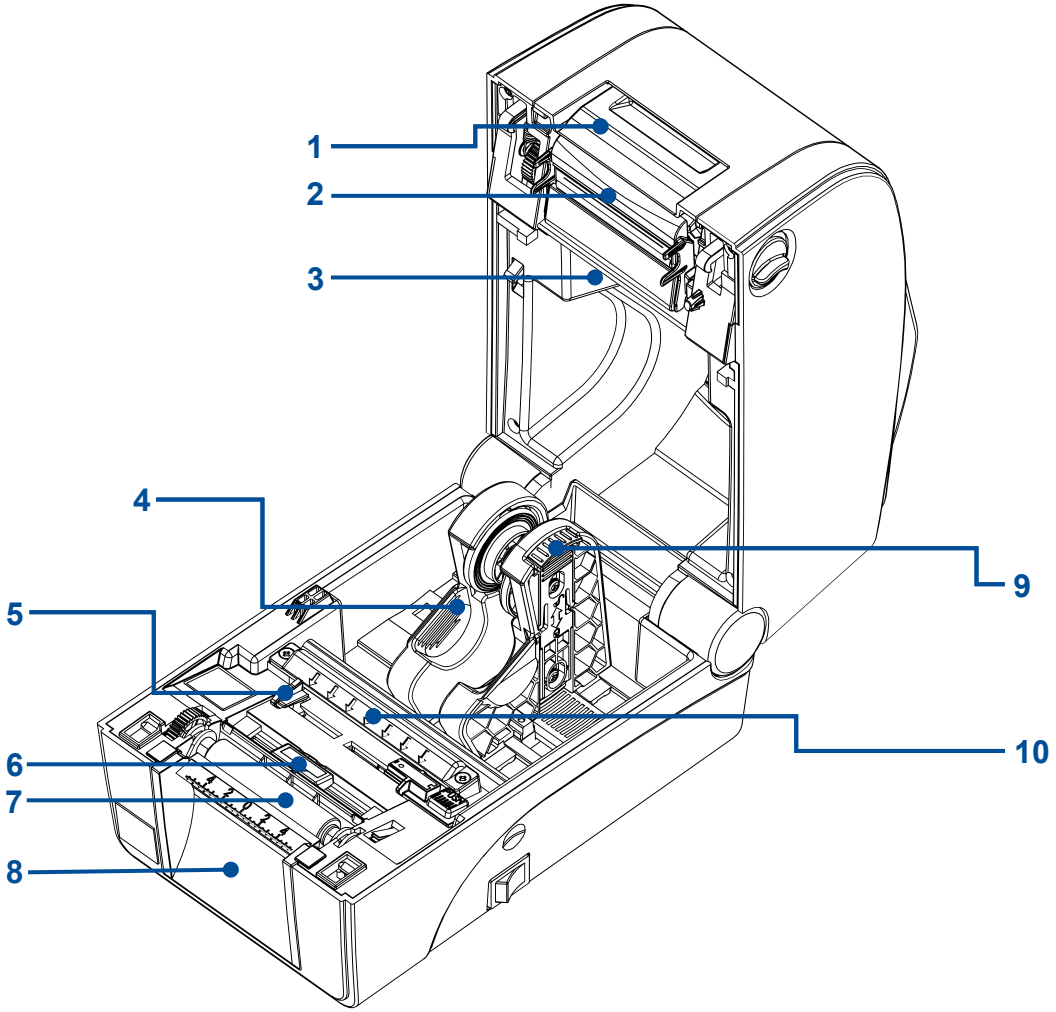
1.1 Printer Features

Front View



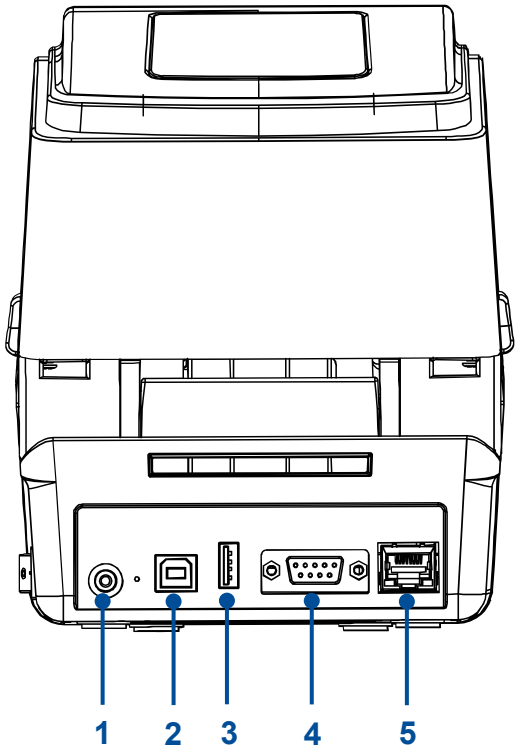
1. LCD
2. Media viewer window
3. Operating buttons
4. Cover lever
5. microSD card slot
6. Power switch

Interior View



1. Ribbon access cover
2. Printhead
3. Ribbon supply hub
4. Media holder
5. Media guide
6. Black mark sensor
7. Platen roller
8. Front panel cover
9. Media holder lock
10. Media guide bar

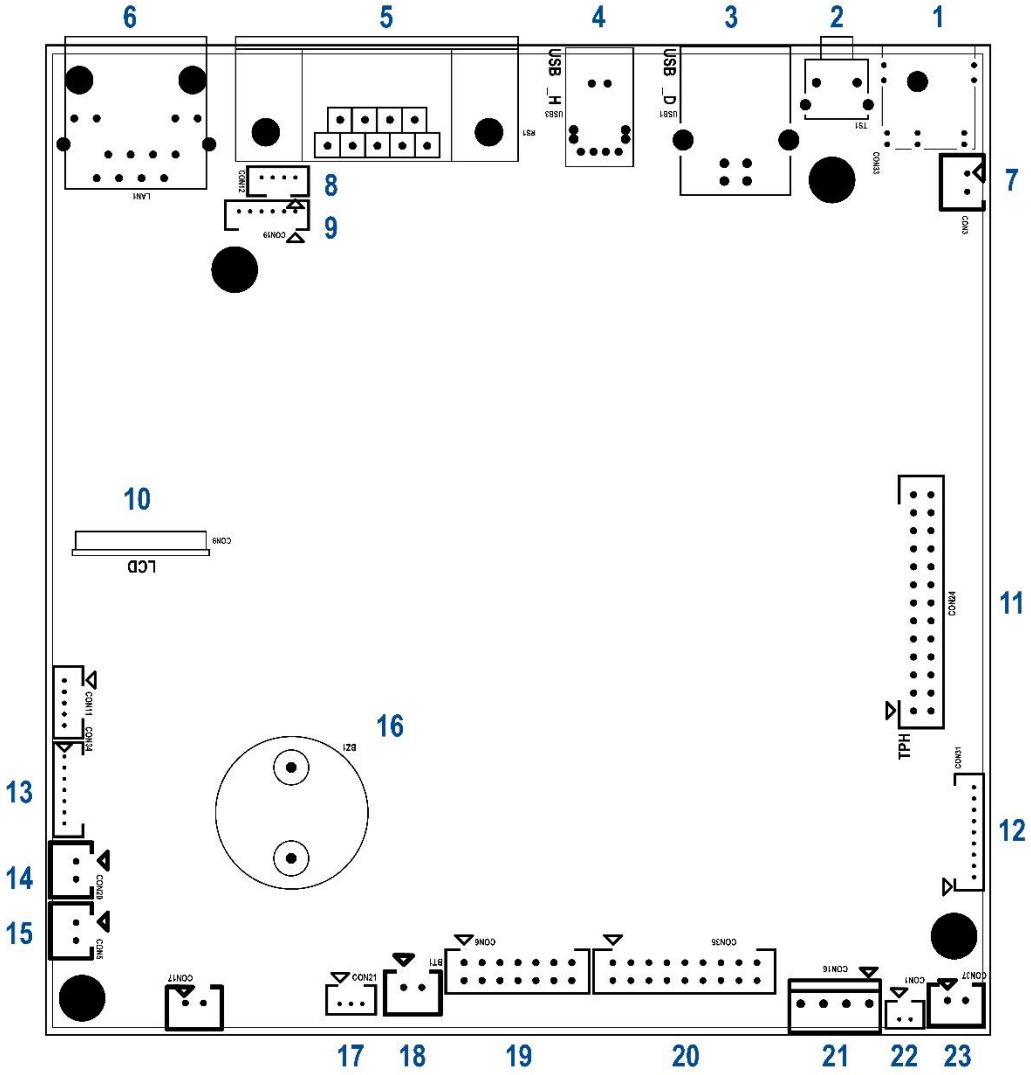
Rear View



1. Power jack
2. USB interface
3. USB host
4. RS-232C interface
5. Ethernet LAN port

2 Electronics

2.1 Main Board Connectors



1. Power supply output (24V DC) connector
2. System reset switch
3. USB device connector
4. USB host connector
5. RS-232C connector
6. Ethernet connector
7. ESD cable connector
8. Ribbon end sensor connector
9. Panel touch and key connector
10. LCD connector
11. TPH connector
12. Micro SD card connector
13. NFC connector
14. Gap sensor connector (transmitter)
15. Gap sensor connector (receiver)
16. Buzzer
17. Black mark sensor connector for back side
18. Coin battery connector
19. Cutter / Peeler connector
20. Wi-Fi & Bluetooth connector
21. Stepping motor connector
22. Head open connector
23. Power switch connector

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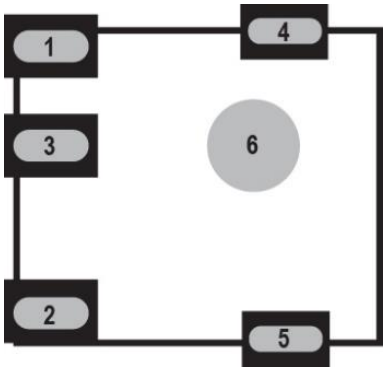
<tr><td> 
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<tr><td>5</td><td>GND</td></tr>
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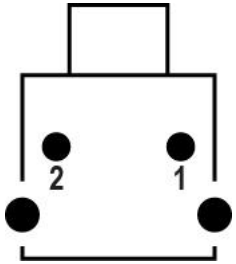
<tr><td> 
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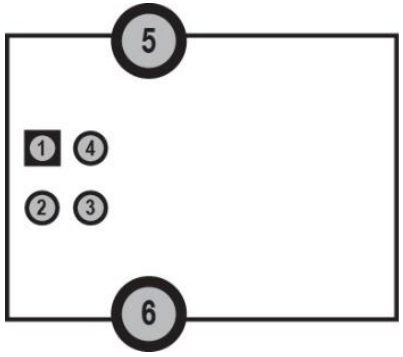
<tr><td> 
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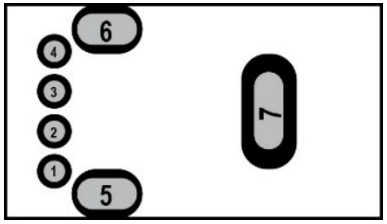
<tr><td> 
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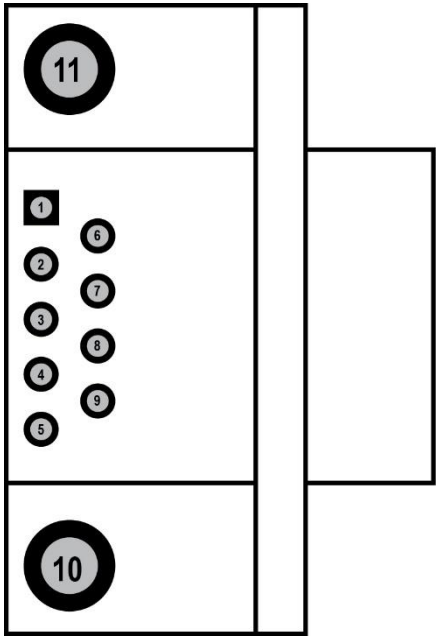
<tr><td> 
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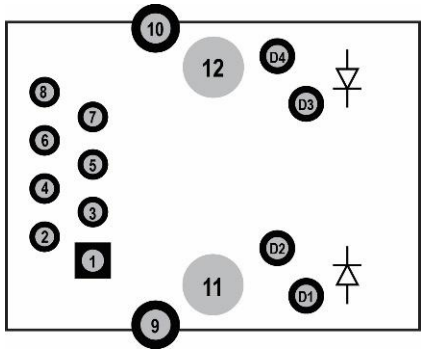
<tr><td> 
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<tr><td>D3</td><td>Yellow LED Control</td></tr>
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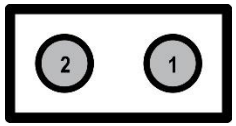
<tr><td> 
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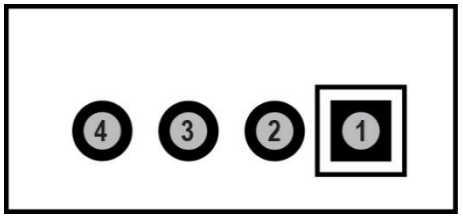
<tr><td> 
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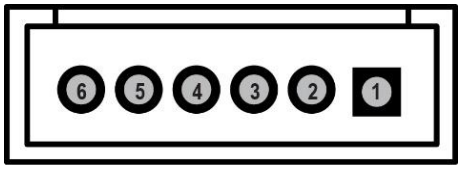
<tr><td> 
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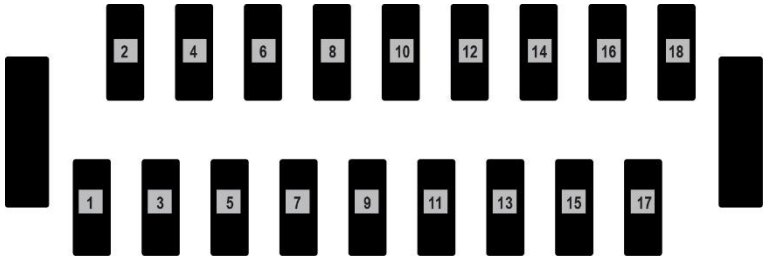
<tr><td> 
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<tr><td>8</td><td>LCD_D1</td></tr>
<tr><td>9</td><td>LCD_D2</td></tr>
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<tr><td>11</td><td>LCD_D4</td></tr>
<tr><td>12</td><td>LCD_D5</td></tr>
<tr><td>13</td><td>LCD_D6</td></tr>
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<tr><td>15</td><td>LCD_NCS</td></tr>
<tr><td>16</td><td>LCD_RESET</td></tr>
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 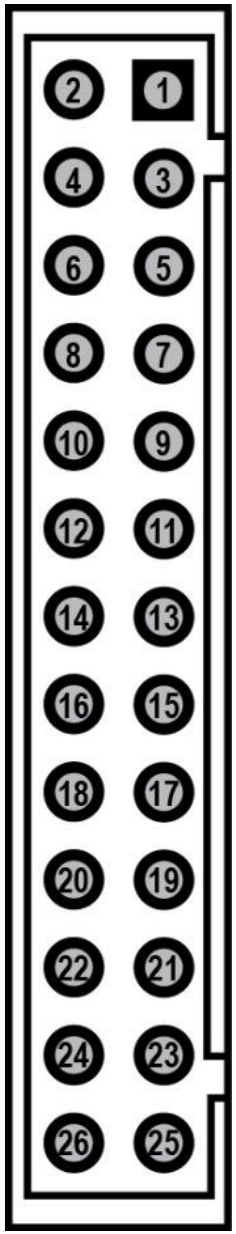
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<tr><td>6</td><td>GND</td></tr>
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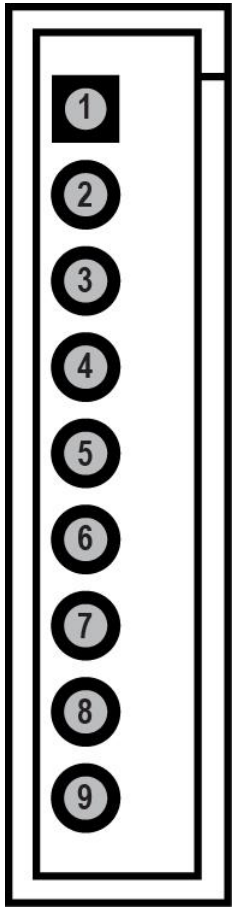
<tr><td></td><td> 
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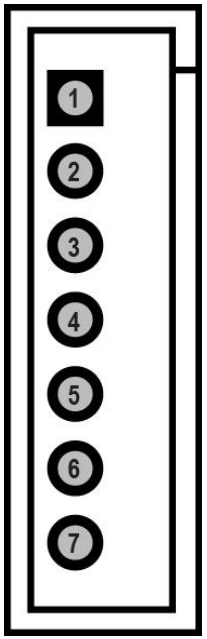
<tr><td> 
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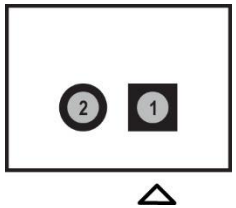
<tr><td> 
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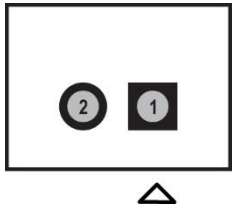
<tr><td> 
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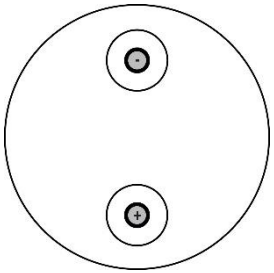
<tr><td>  </td><td><table><tr><th>No.</th><th>Definition</th></tr><tr><td>+</td><td>SYS 24V</td></tr><tr><td>-</td><td>Buzzer control</td></tr></table></td></tr>
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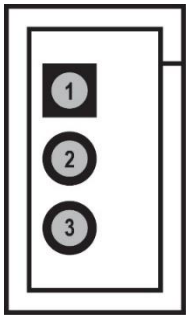
<tr><td> 
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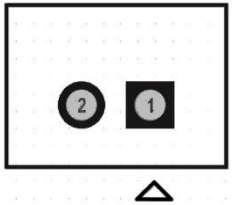
<tr><td rowspan="2">18</td><td colspan="2">Coin battery connector</td></tr>
<tr><td> 
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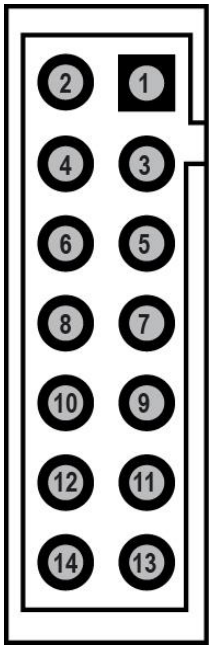
<tr><td rowspan="2">19</td><td colspan="2">Cutter / Peeler</td></tr>
<tr><td> 
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<tr><td>3</td><td>5V_RFID</td></tr>
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<tr><td>5</td><td>Peeler_TWD</td></tr>
<tr><td>6</td><td>Peeler sensor receiver</td></tr>
<tr><td>7</td><td>5V_Cutter</td></tr>
<tr><td>8</td><td>Peeler_TWCK</td></tr>
<tr><td>9</td><td>Cutter rotate direction</td></tr>
<tr><td>10</td><td>Cutter enable signal</td></tr>
<tr><td>11</td><td>GND</td></tr>
<tr><td>12</td><td>Cutter status</td></tr>
<tr><td>13</td><td>GND</td></tr>
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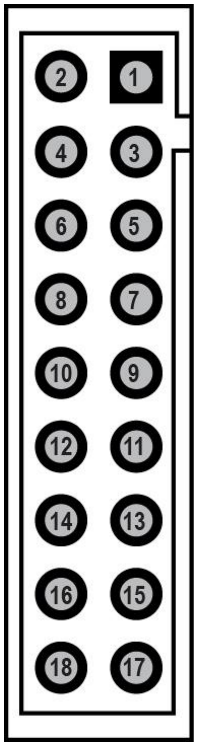
<tr><td> 
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<tr><td>2</td><td>3.3V_WIFI</td></tr>
<tr><td>3</td><td>WIFI/BT_Detect</td></tr>
<tr><td>4</td><td>WIFI_RX0</td></tr>
<tr><td>5</td><td>WIFI_RX1</td></tr>
<tr><td>6</td><td>WIFI_RXDV</td></tr>
<tr><td>7</td><td>WIFI_REFCK</td></tr>
<tr><td>8</td><td>GND</td></tr>
<tr><td>9</td><td>WIFI_WAKEUP</td></tr>
<tr><td>10</td><td>WIFI_TXEN</td></tr>
<tr><td>11</td><td>WIFI_TX0</td></tr>
<tr><td>12</td><td>WIFI_TX1</td></tr>
<tr><td>13</td><td>BT_TXD</td></tr>
<tr><td>14</td><td>BT_CTS</td></tr>
<tr><td>15</td><td>BT_RXD</td></tr>
<tr><td>16</td><td>BT_RTS</td></tr>
<tr><td>17</td><td>3.3V_WIFI</td></tr>
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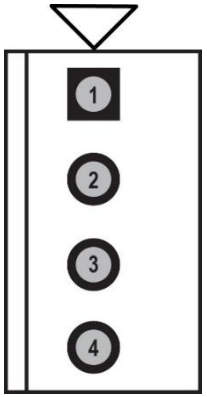
<tr><td> 
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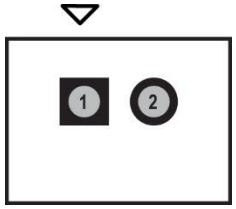
<tr><td> 
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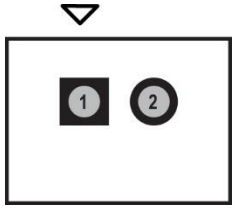
<tr><td> 
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2.2 Interface Pin Configuration

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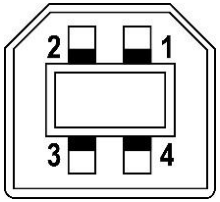
<tr><td> 
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<tr><td>3</td><td>D+</td></tr>
<tr><td>4</td><td>GND</td></tr>
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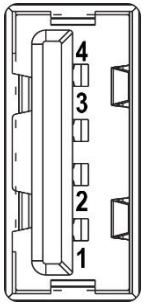
<tr><td> 
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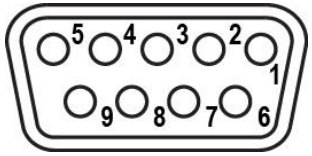
<tr><td> 
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<tr><td>4</td><td>CTS</td></tr>
<tr><td>5</td><td>GND</td></tr>
<tr><td>6</td><td>RTS</td></tr>
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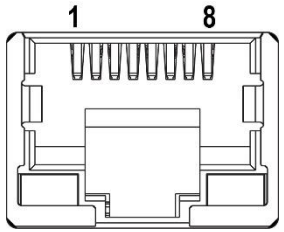
<tr><td> 
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<tr><td>3</td><td>Rx+</td></tr>
<tr><td>4</td><td>NC</td></tr>
<tr><td>5</td><td>NC</td></tr>
<tr><td>6</td><td>Rx-</td></tr>
<tr><td>7</td><td>NC</td></tr>
<tr><td>8</td><td>NC</td></tr>
</table>
</td></tr>
</table>

3 Replacing the Parts

3.1 Before You Begin

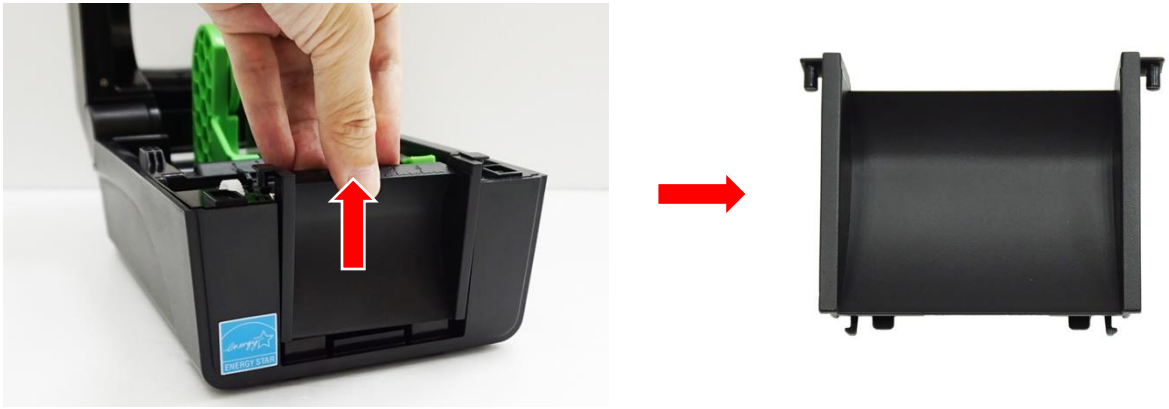
WARNING: To avoid the risk of personal injury from electrical shock, before performing any replacement procedures, unplug the power cord from the printer or power outlet to ensure that power is removed.

To prepare the printer for the replacement or installation:

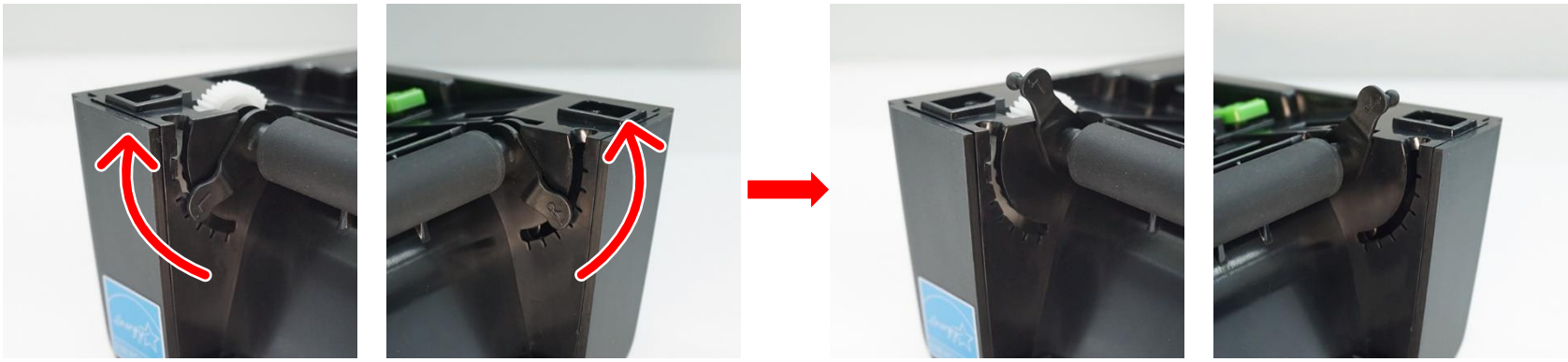
1. Protect yourself from ESD and wear protective gloves.
2. Place the printer on a flat surface.
3. Set the printer's power switch to the **O** (Off) position.
4. Remove the power adapter from the printer or unplug the power cord from the AC power outlet.
5. Disconnect all interface cables from the rear panel of the printer.
6. Remove the media from the printer.
7. Read through the maintenance procedures.

3.2 Replacing the Platen Roller Assembly

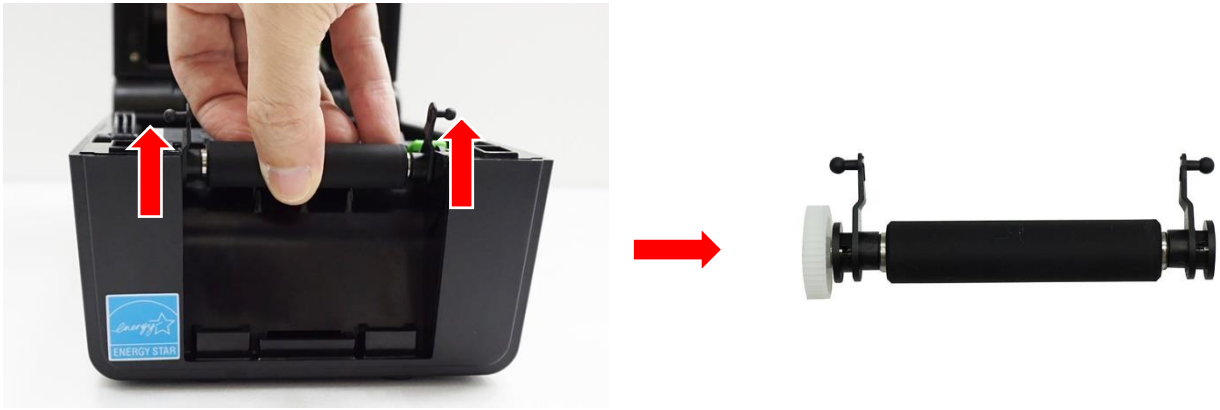
1. Follow the steps in Before You Begin to prepare the printer.
2. Pull the two release latches on the right and left sides of the printer to release the top cover and then open the top cover.
3. Remove the lower front panel.



4. Rotate the two tabs of the platen roller assembly to the indicated position to unlock the platen roller assembly.

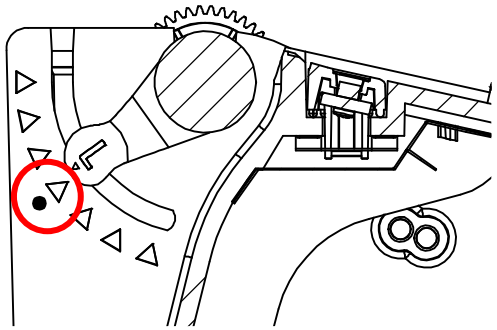


5. Lift up to remove the platen roller assembly.



6. Reverse the steps to install the platen roller assembly.

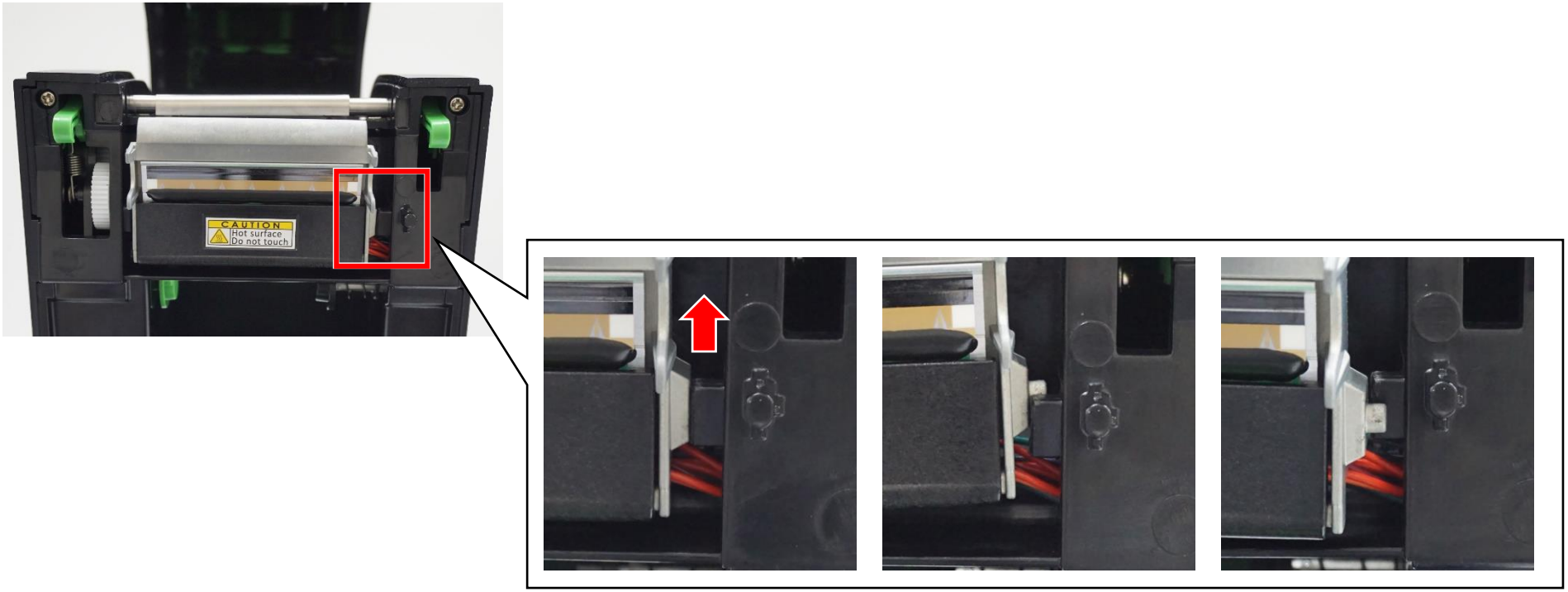
Note: The image below indicates the default position for the two tabs of the platen roller.



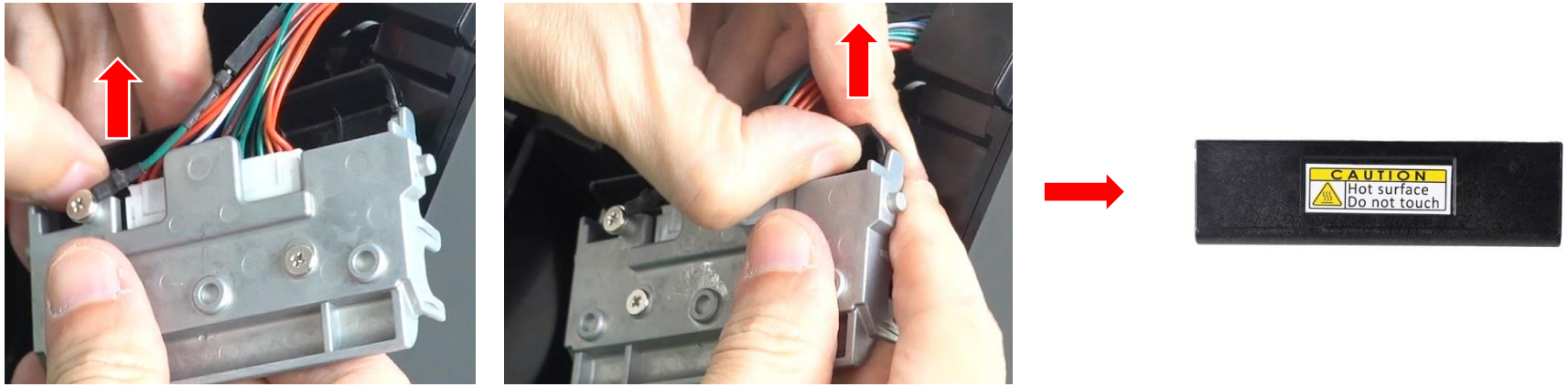
3.3 Replacing the Printhead Assembly

CAUTION: To prevent electrostatic damage to the electronic components, touch the unpainted part of the frame to ground yourself before the replacement procedures.

1. Follow the steps in Before You Begin to prepare the printer.
2. Open the top cover. For how to open the top cover, refer to Replacing the Platen Roller Assembly.
3. Open the ribbon access cover.
4. Slide up the right side of the printhead assembly as indicated to disengage the printhead assembly from the top inner cover.

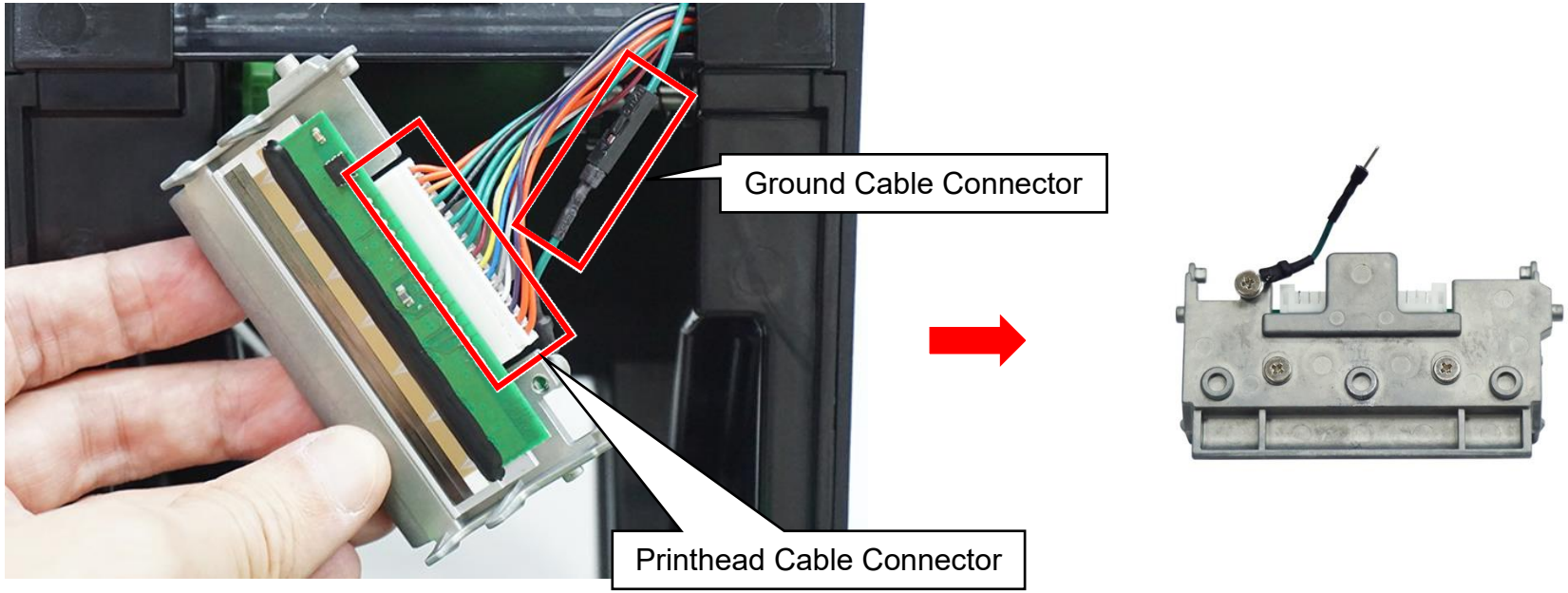


5. Pull the printhead assembly cover in the indicated direction to remove the cover.



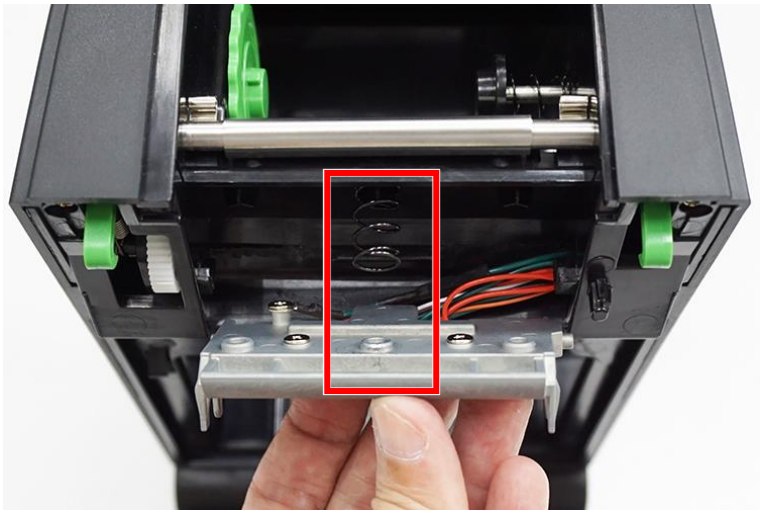
6. Disconnect the green ground cable and printhead cable from the printhead assembly.

CAUTION: DO NOT touch the printhead throughout the replacement procedures. Oils from your hand may damage the printhead.



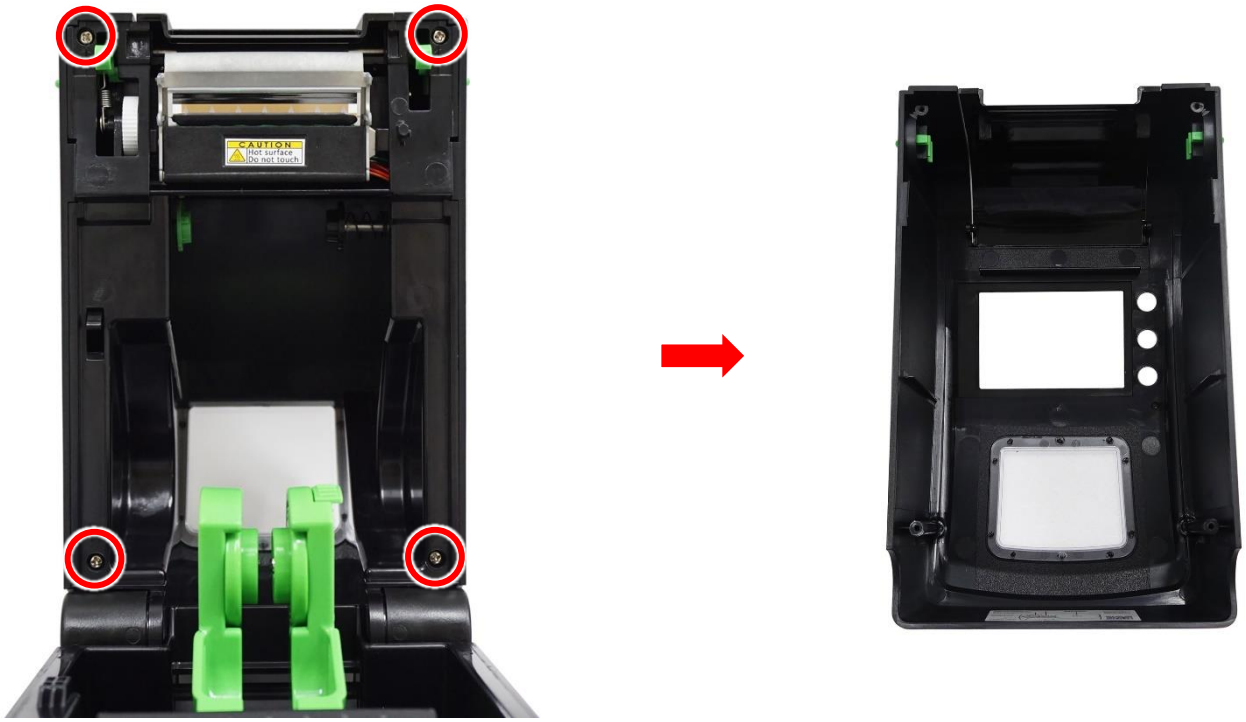
7. Reverse the steps to install the printhead assembly.

Note: When installing the printhead assembly, make sure that the stud on the printhead assembly fit into the coil spring.



3.4 Replacing the Top Cover

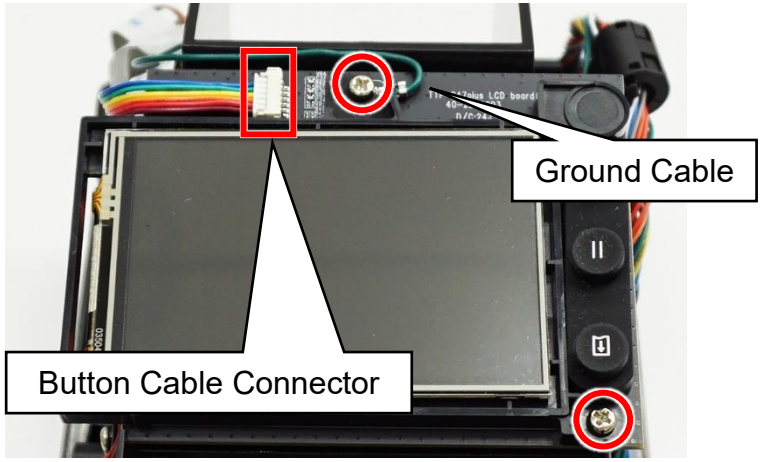
1. Follow the steps in Before You Begin to prepare the printer.
2. Open the top cover. For how to open the top cover, refer to Replacing the Platen Roller Assembly.
3. Remove the four screws securing the top cover in place.
4. Remove the top cover from the printer.



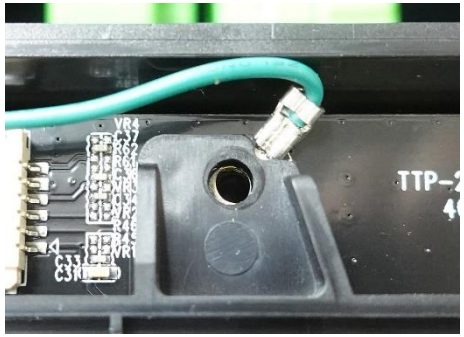
5. Reverse the steps to install the top cover.

3.5 Replacing the Control Panel Assembly

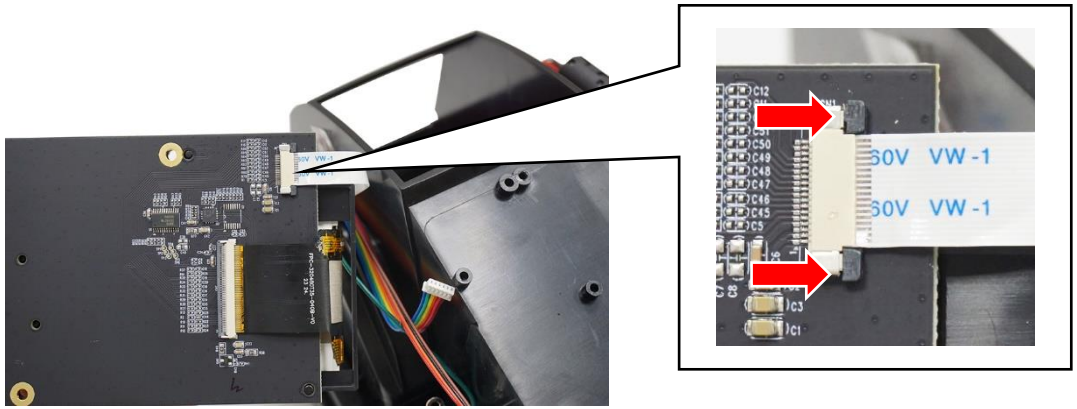
1. Follow the steps in Before You Begin to prepare the printer.
2. Open the top cover. For how to open the top cover, refer to Replacing the Platen Roller Assembly.
3. Remove the top cover. For how to remove the top cover, refer to Replacing the Top Cover.
4. Disconnect the button cable from the control panel board and then remove the two screws securing the ground cable and control panel board in place.



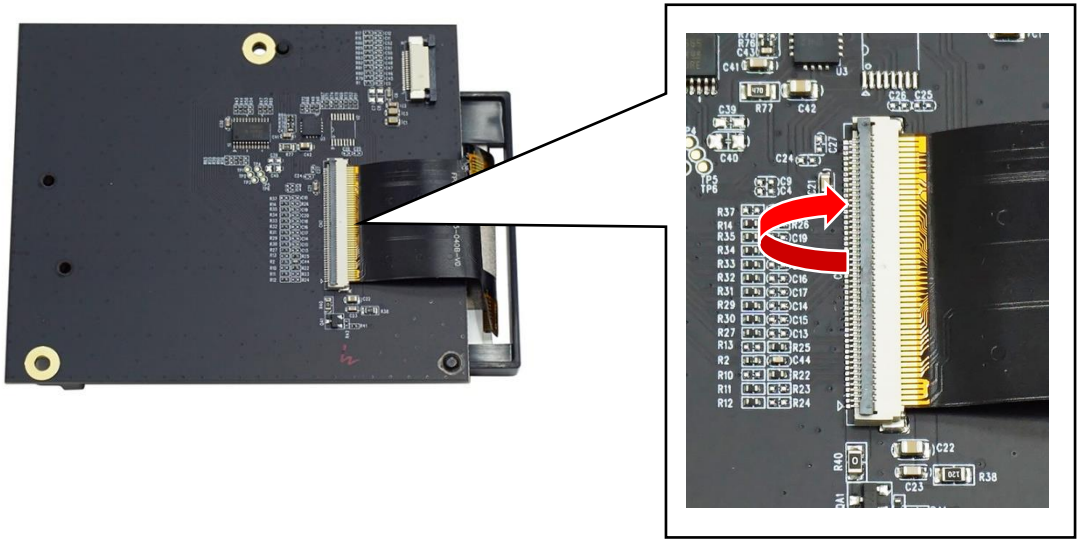
Note: When installing the control panel assembly, the ground cable must be secured underneath the control panel bracket.



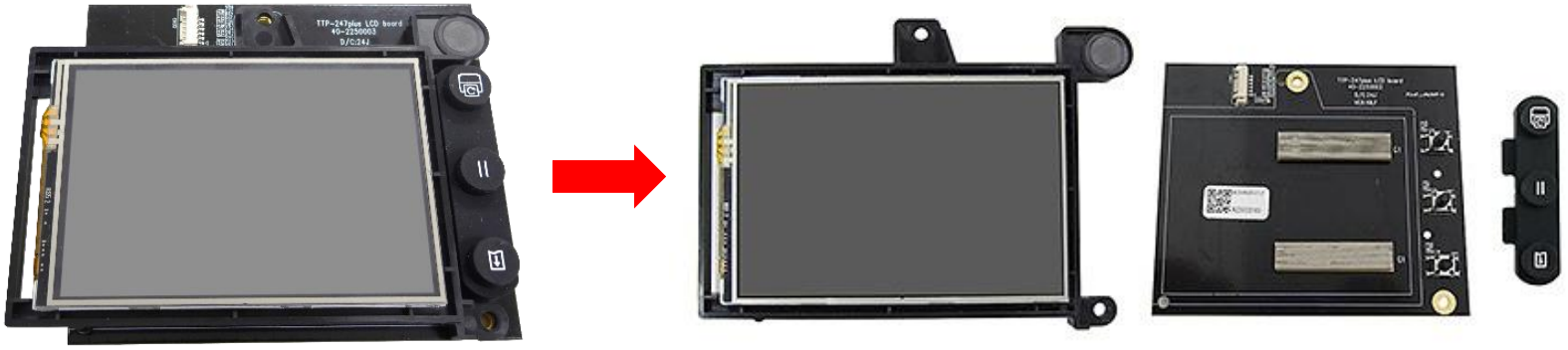
5. Flip over the control panel board. Carefully push the two black tabs in the indicated direction to unlock the white FFC and disconnect the FFC from the control panel board.



6. Carefully flip up the tab to unlock the control panel FPC.



7. Remove the keypad and then carefully detach the control panel with its bracket from the control panel board.



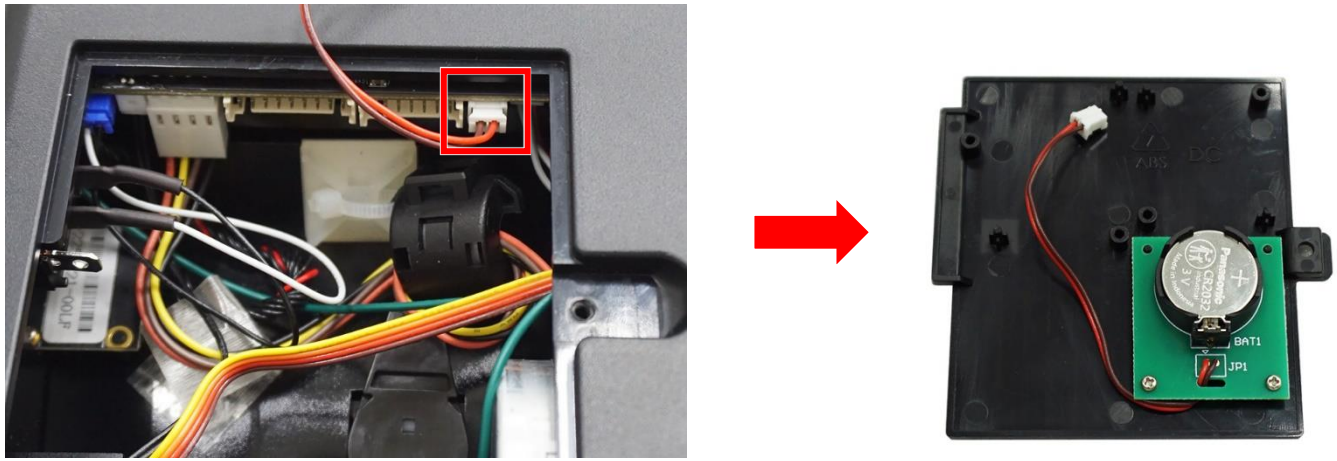
Note: For models shipped with a wireless or Bluetooth module, when replacing the control panel assembly, the NFC tag MUST be transferred to the new control panel assembly. DO NOT dispose the NFC tag with the old control panel assembly.

8. Reverse the steps to install the control panel assembly.

3.6 Replacing the RTC Module

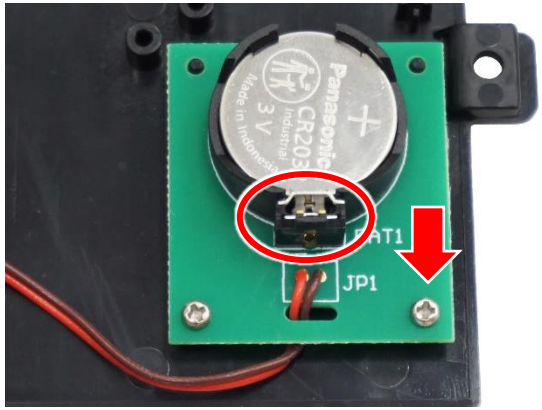
1. Follow the steps in Before You Begin to prepare the printer.
2. Remove the single screw securing the RTC module cover in place.

3. Disconnect the RTC battery cable from the main board.



4. Pull the latch in the indicated direction to release the RTC battery from its compartment.

   Note: The RTC module kit you purchase will not come equipped with the RTC battery (CR2032). As a result, the RTC battery MUST be transferred to the new RTC module. DO NOT dispose the RTC battery.

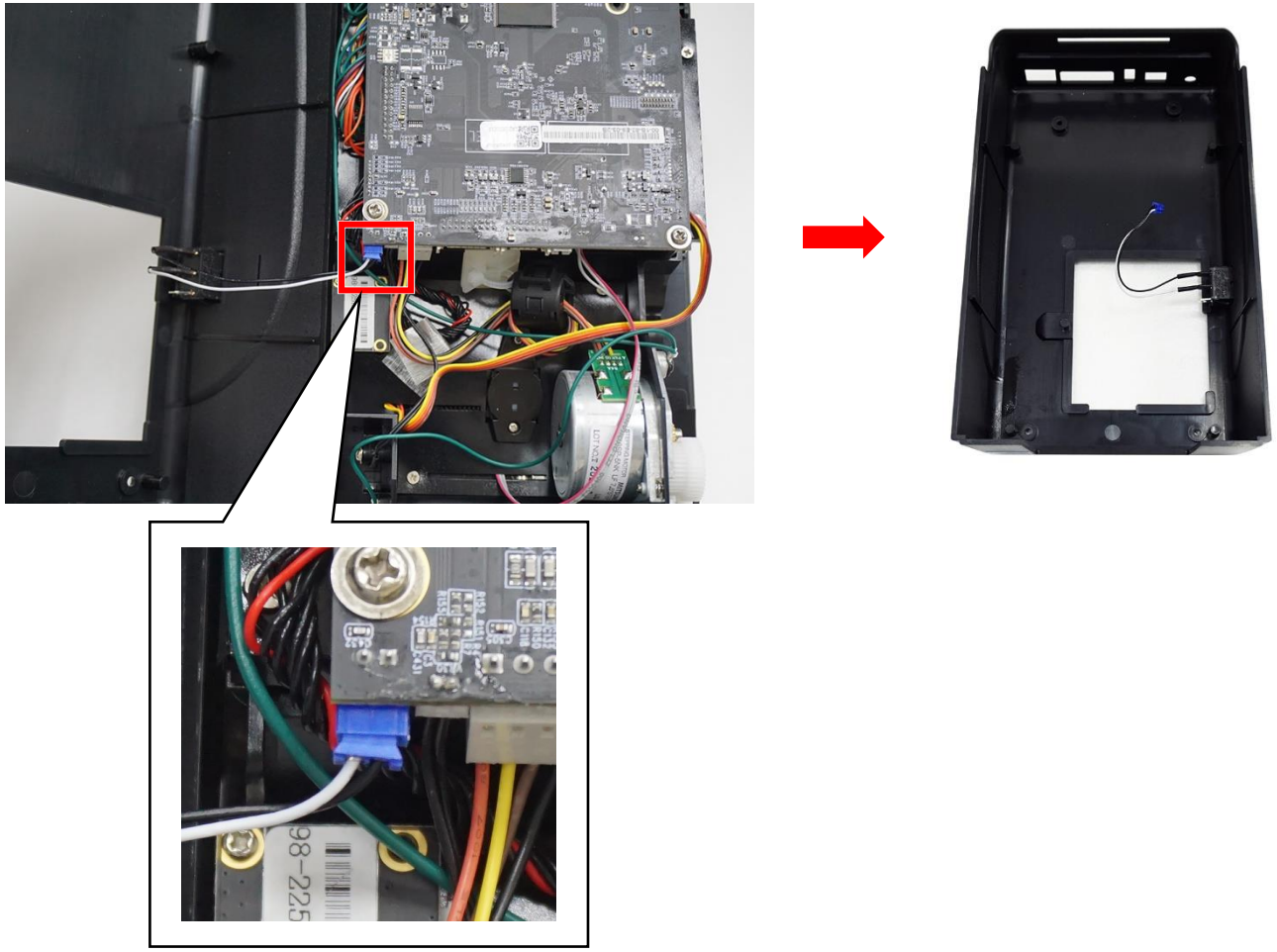


5. Reverse the steps to install the RTC module.

3.7 Replacing the Lower Cover

1. Follow the steps in Before You Begin to prepare the printer.
2. Remove the RTC battery cover. For how to remove the RTC battery cover, refer to Replacing the RTC Module.
3. Remove the four screws securing the lower cover in place.

4. Disconnect the power switch cable from the main board and remove the lower cover.

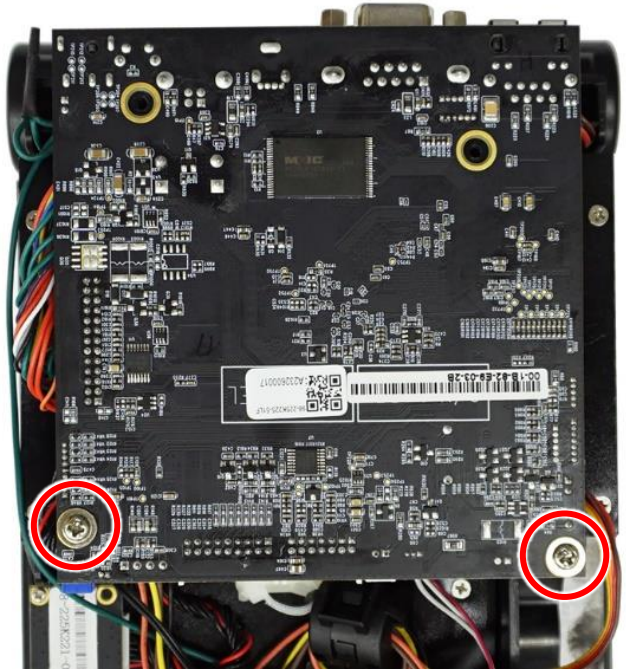


5. Reverse the steps to install the lower cover.

3.8 Replacing the Main Board

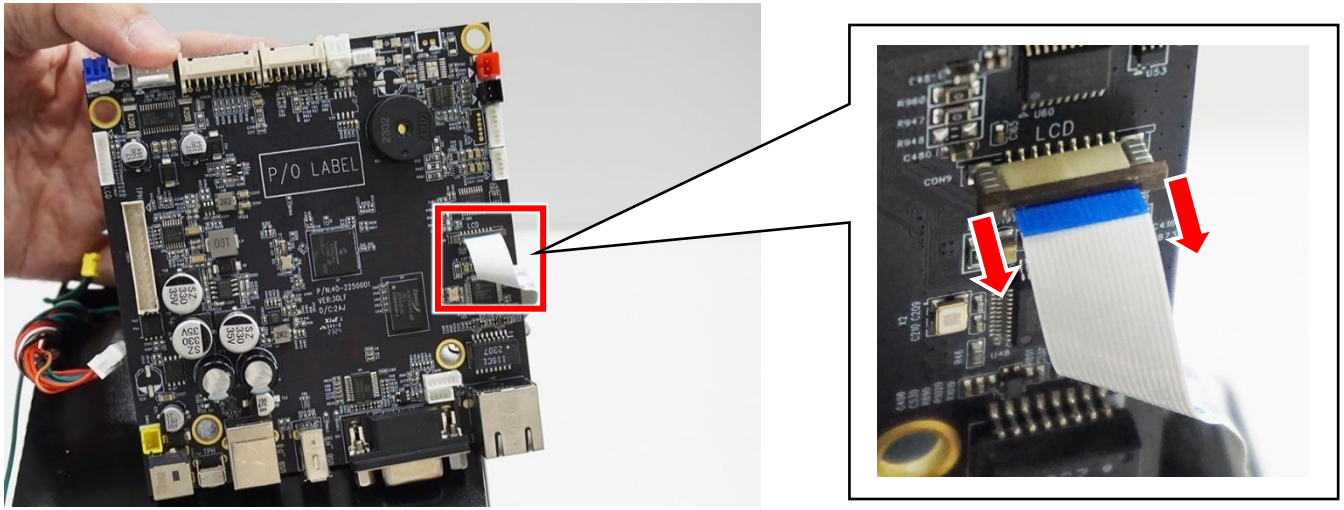
CAUTION: To prevent electrostatic damage to the electronic components, always wear an ESD wrist strap properly grounded when handling circuit boards.

1. Follow the steps in Before You Begin to prepare the printer.
2. Remove the RTC module. For how to remove the RTC module, refer to Replacing the RTC Module.
3. Remove the lower cover. For how to remove the lower cover, refer to Replacing the Lower Cover.
4. Remove the two screws securing the main board in place.



5. Disconnect all cables from the main board to separate the main board from the printer.

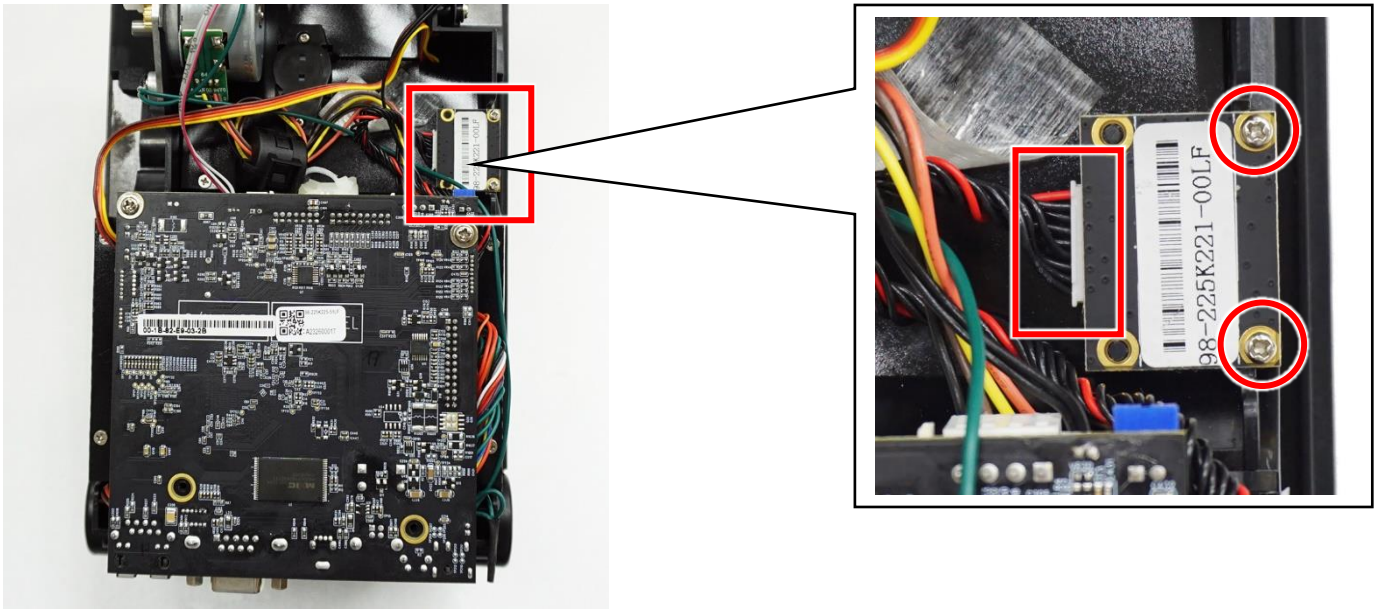
Note: When disconnecting the flat white FFC, slightly push the two tabs to unlock the connector and then release the FFC.



6. Reverse the steps to install the main board.

3.9 Replacing the SD Card Board

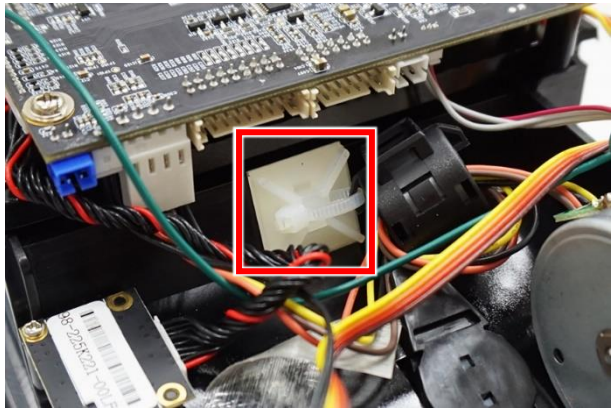
1. Follow the steps in Before You Begin to prepare the printer.
2. Remove the RTC module. For how to remove the RTC module, refer to Replacing the RTC Module.
3. Remove the lower cover. For how to remove the lower cover, refer to Replacing the Lower Cover.
4. Disconnect the cable from the SD card board.
5. Remove the two screws securing the SD card board in place.



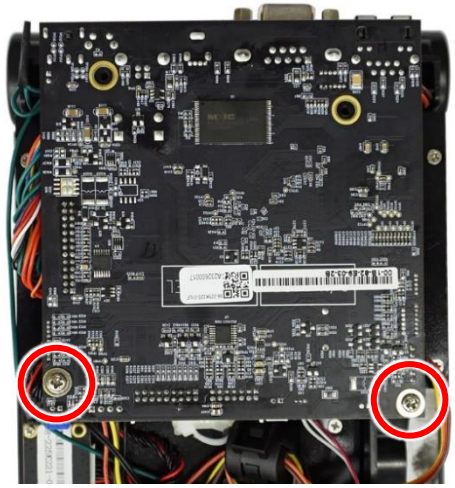
6. Reverse the steps to install the SD card board.

3.10 Replacing the Stepping Motor

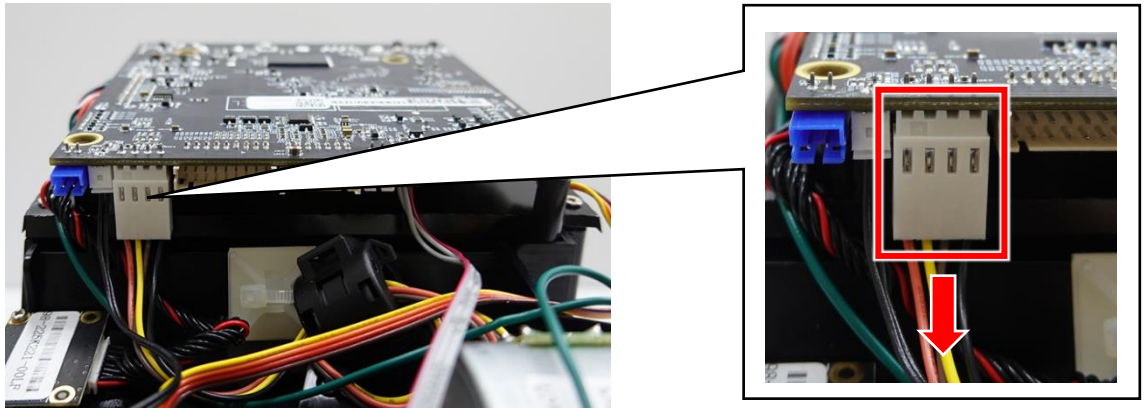
1. Follow the steps in Before You Begin to prepare the printer.
2. Remove the RTC module. For how to remove the RTC module, refer to Replacing the RTC Module.
3. Remove the lower cover. For how to remove the lower cover, refer to Replacing the Lower Cover.
4. Cut the clip securing the stepping motor cable in place.



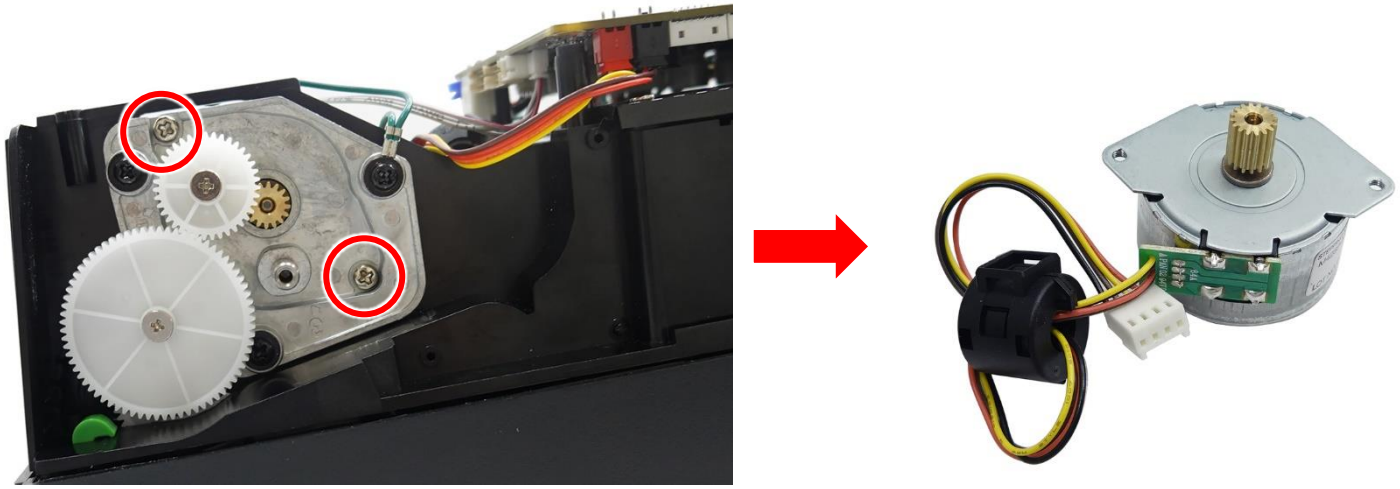
5. Remove the two screws securing the main board in place.



6. Disconnect the stepping motor cable from the main board.



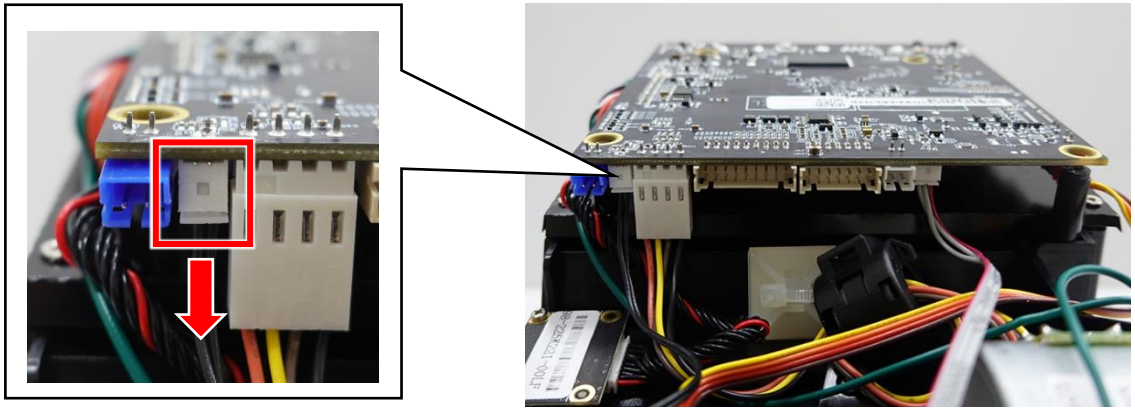
7. Remove the two screws securing the stepping motor in place and then remove the motor.



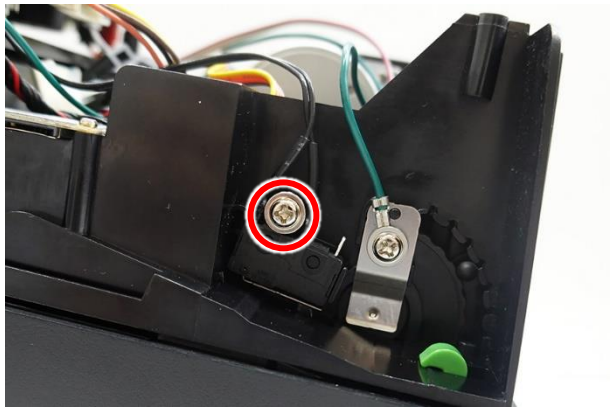
8. Reverse the steps to install the stepping motor.

3.11 Replacing the Head Open Sensor

1. Follow the steps in Before You Begin to prepare the printer.
2. Remove the RTC module. For how to remove the RTC module, refer to Replacing the RTC Module.
3. Remove the lower cover. For how to remove the lower cover, refer to Replacing the Lower Cover.
4. Disconnect the head open sensor cable from the main board.



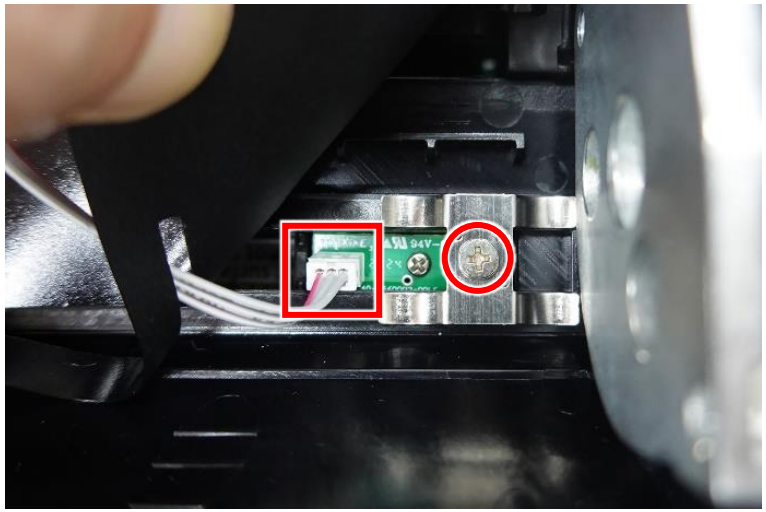
5. Remove the single screw securing the head open sensor in place and then remove the head open sensor.



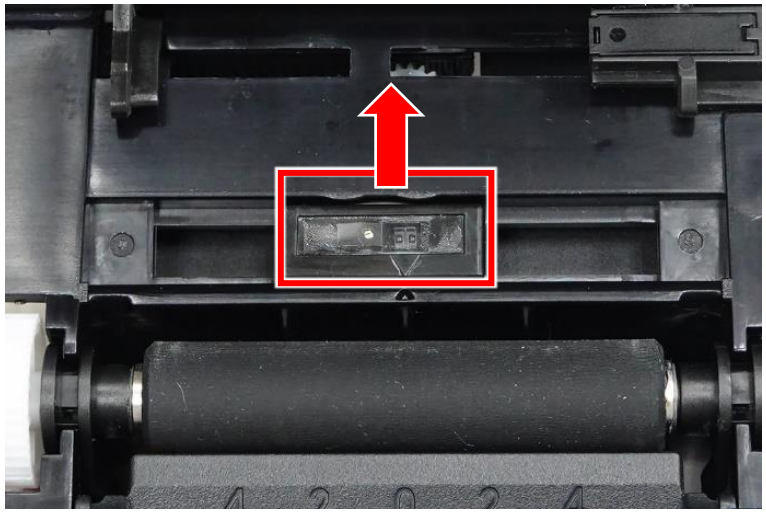
6. Reverse the steps to install the head open sensor.

3.12 Replacing the Black Mark Sensor

1. Follow the steps in Before You Begin to prepare the printer.
2. Open the RTC module cover. For how to open the module cover, refer to Replacing the RTC Module.
3. Remove the lower cover. For how to remove the lower cover, refer to Replacing the Lower Cover.
4. Remove the stepping motor. For how to remove the stepping motor, refer to Replacing the Stepping Motor.
5. Flip over the black mylar from the bottom side. Disconnect the black mark cable from the black mark sensor and then remove the single screw securing the black mark sensor in place.



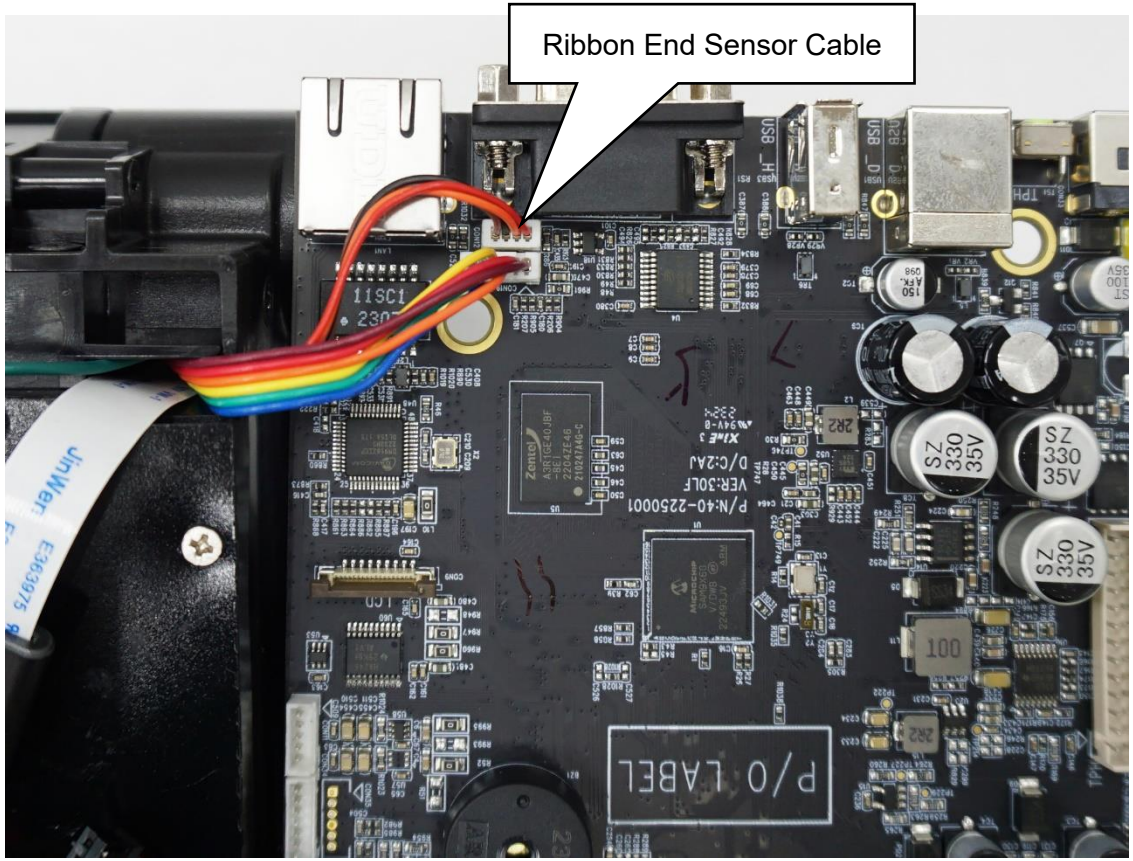
6. Remove the black mark sensore from the top side of the printer.



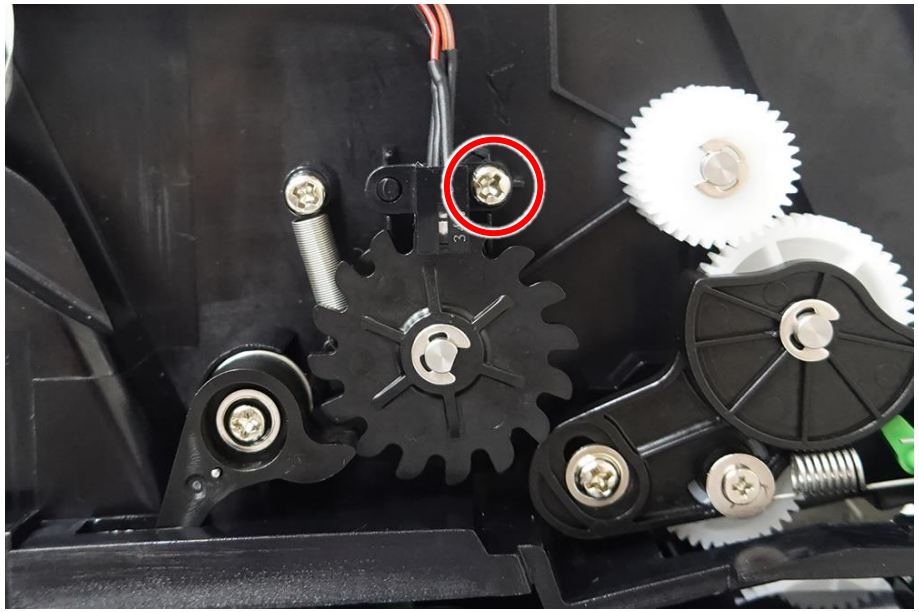
7. Reverse the steps to install the black mark sensor.

3.13 Replacing the Ribbon End Sensor

1. Follow the steps in Before You Begin to prepare the printer.
2. Remove the RTC module. For how to remove the RTC module, refer to Replacing the RTC Module.
3. Remove the lower cover. For how to remove the lower cover, refer to Replacing the Lower Cover.
4. Disconnect the ribbon end sensor cable from the main board. For how to disconnect the ribbon end sensor cable from the main board, refer to Replacing the Main Board.



5. Remove the top cover. For how to remove the top cover, refer to Replacing the Top Cover.
6. Remove the single screw securing the ribbon end sensor in place and then remove the head open sensor.

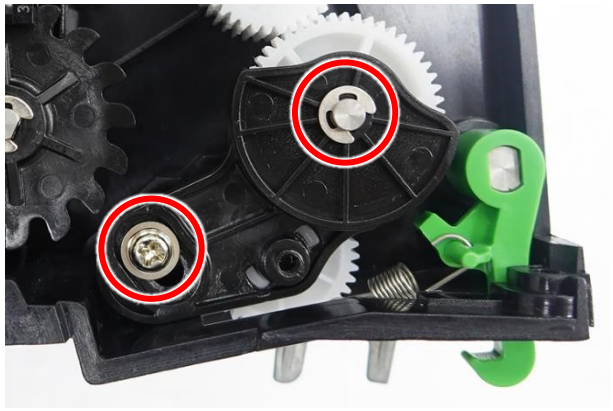


7. Reverse the steps to install the ribbon end sensor.

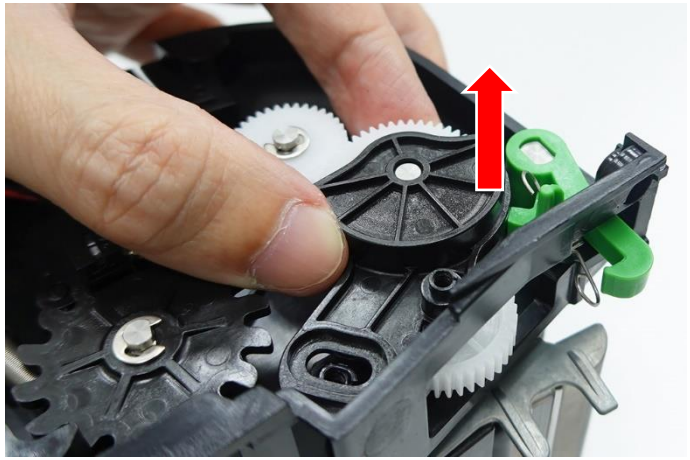
3.14 Replacing the Hook Assembly

1. Follow the steps in Before You Begin to prepare the printer.
2. Remove the top cover. For how to remove the top cover, refer to Replacing the Top Cover.
3. Remove the two screws securing the hook assembly in place and then release the two springs from their corresponding rib on the chassis.

4. Remove the single screw and clip securing the gears in place.

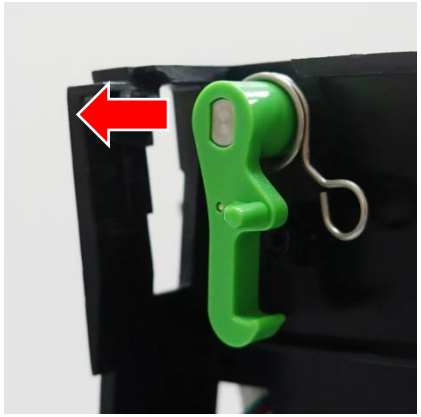


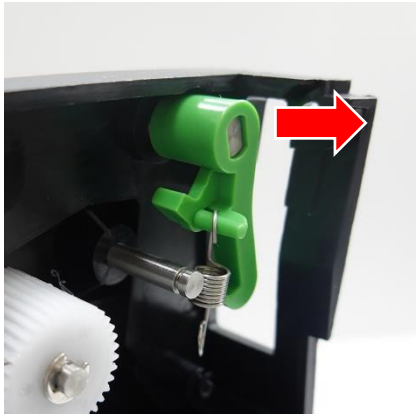
5. Lift up to remove the gears from the top cover.



6. Rotate the right hook in the indicated direction and then remove the hook from the top cover.

   Repeat the same process to remove the left hook from the top cover.

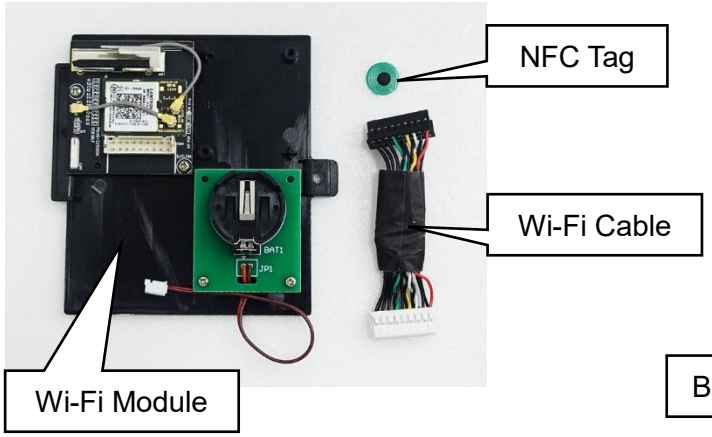




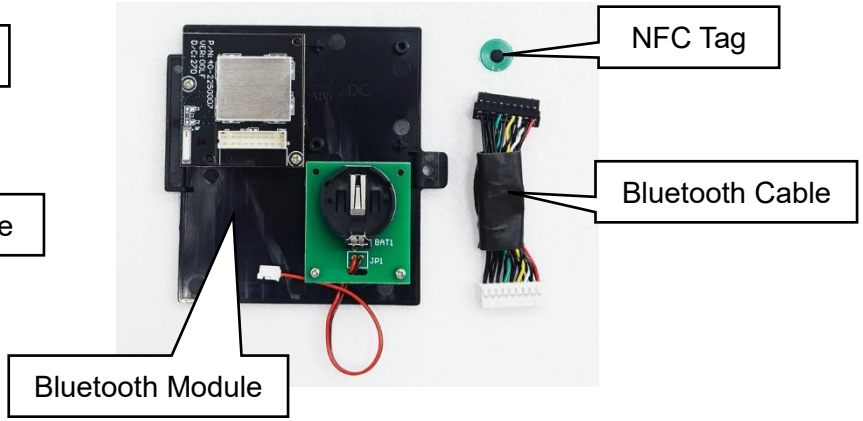
7. Reverse the steps to install the hook assembly.

3.15 Installing the Wi-Fi / Bluetooth Module

Wi-Fi Module Kit



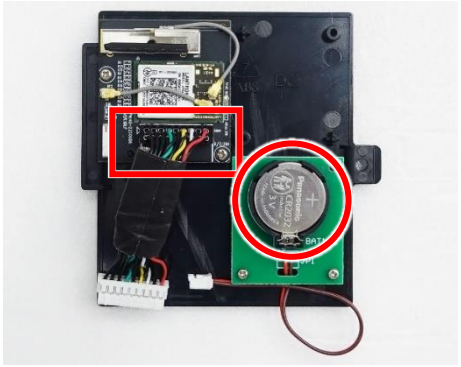
Bluetooth Module Kit



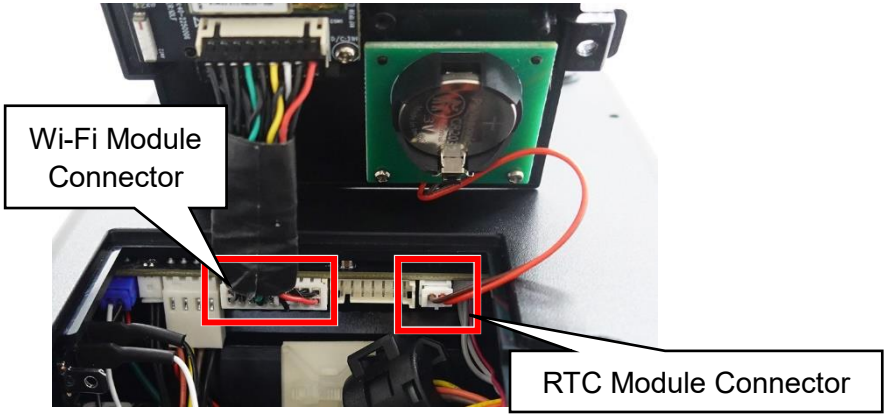
Note: This section demonstrates how to install the Wi-Fi module. The same process is also applicable to the installation of Bluetooth module.

1. Follow the steps in Before You Begin to prepare the printer.
2. Remove the RTC module. For how to remove the RTC module, refer to Replacing the RTC Module.
3. Connect the black end of the Wi-Fi cable to the Wi-Fi module and install the RTC battery on the Wi-Fi module.

   NOTE: The RTC module kit you purchase will not come equipped with the RTC battery (CR2032). As a result, the RTC battery MUST be transferred to the new RTC module. DO NOT dispose the RTC battery.

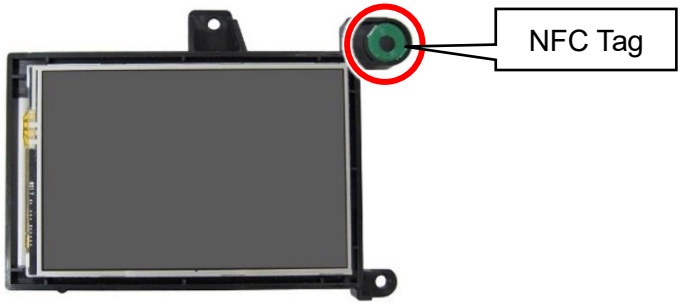


4. Connect the RTC cable and the white end of Wi-Fi module cable to the main board as indicated.



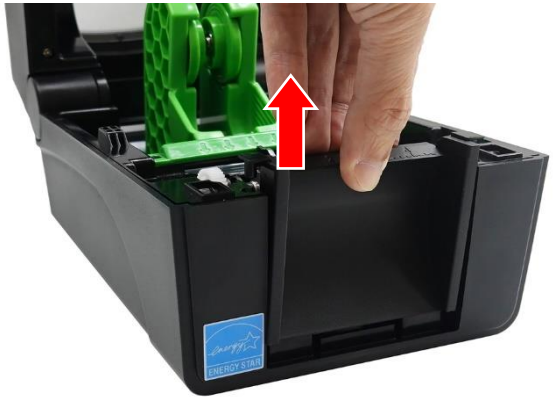
5. Install the single screw to secure the Wi-Fi module cover in place.

6. Install the NFC tag on the LCD module bracket. For how to install the NFC tag on the LCD module bracket, refer to Replacing the Control Panel Assembly.

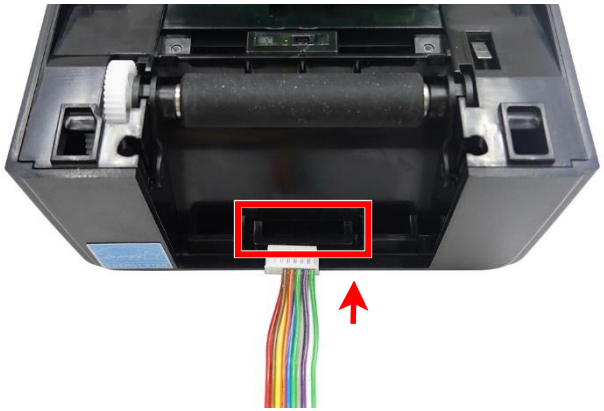


3.16 Installing the Cutter Module

1. Follow the steps in Before You Begin to prepare the printer.
2. Open the top cover. For how to open the top cover, refer to Replacing the Platen Roller Assembly.
3. Remove the lower front panel.

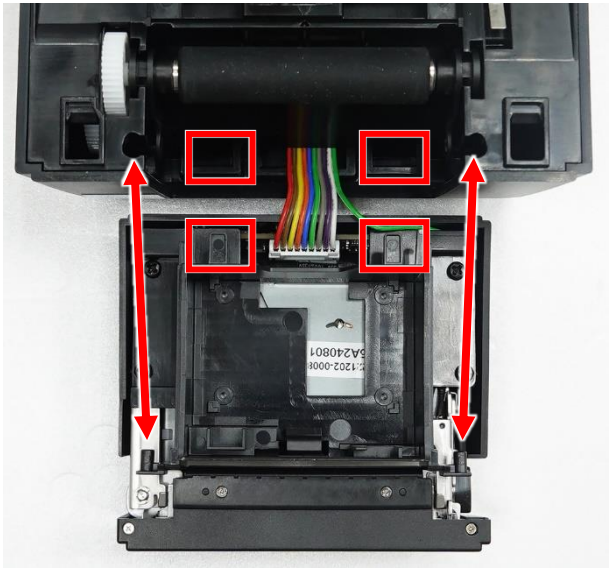


4. Thread the module’s cable through the opening on the front side of the printer.



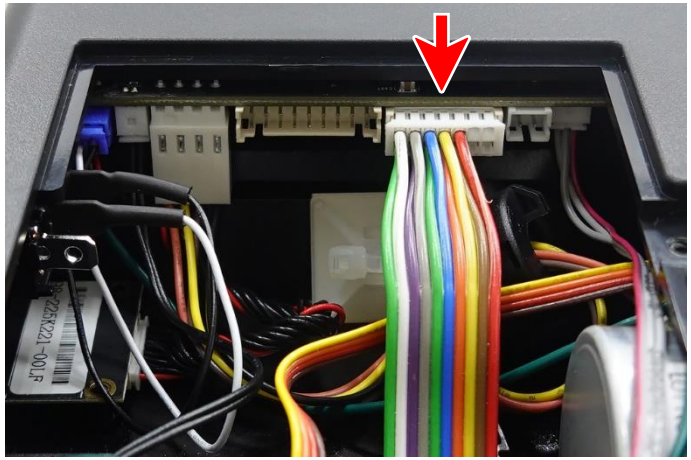
5. Press down to install the module ensuring that the ribs on the module are correctly inserted into the indicated openings.

   NOTE: Make sure that the cable is completely threaded through and is not pressed throughout the installation process.



6. Remove the single screw securing the RTC module cover in place and then open the cover.

7. Connect the cutter module’s cable to the connector on the main board.

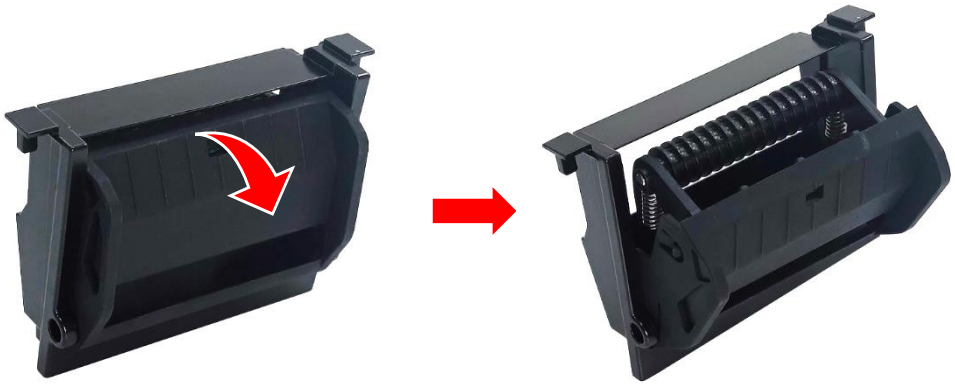


8. Reassemble the RTC module cover and install the single screw to secure the cover in place.

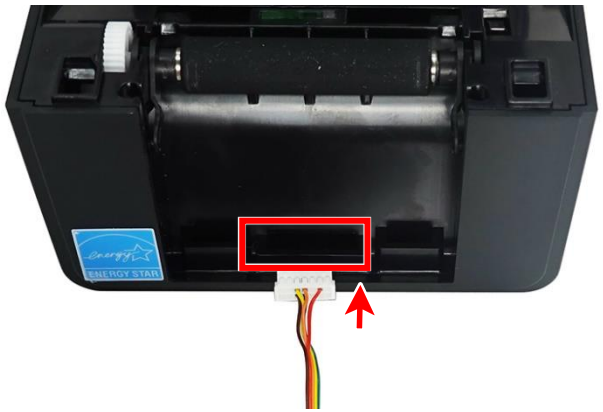
3.17 Installing the Peel-off Module

1. Follow the steps in Before You Begin to prepare the printer.
2. Open the top cover. For how to open the top cover, refer to Replacing the Platen Roller Assembly.
3. Remove the lower front panel.

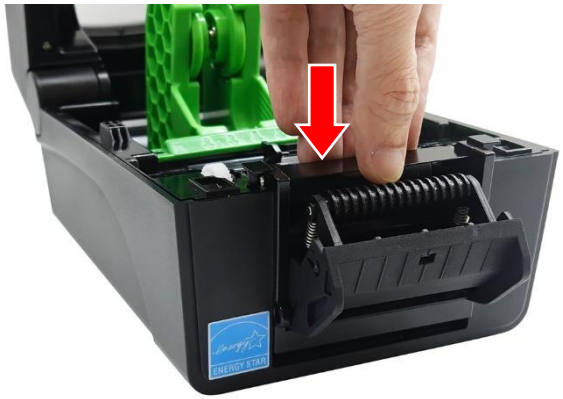
4. Open the peel roller.

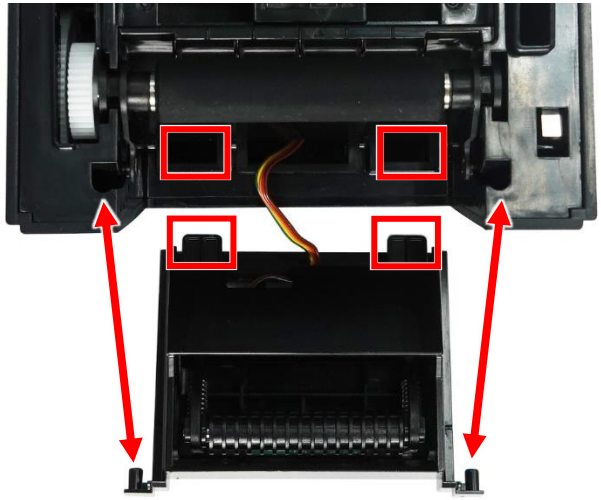


5. Thread the module’s cable through the opening on the front side of the printer.

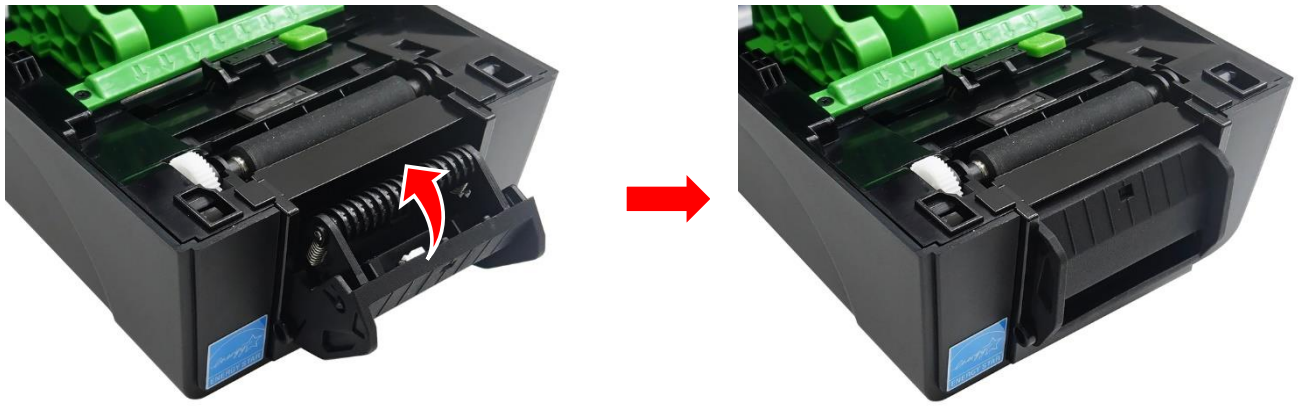


6. Press down to install the module ensuring that the ribs on the module are correctly inserted into the indicated openings.



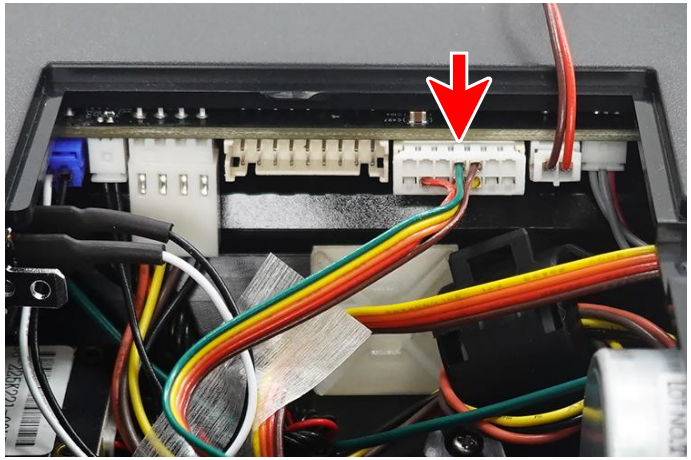


7. Close the peel roller.



8. Remove the single screw securing the RTC module cover in place and then open the cover.

9. Connect the module’s cable to the connector on the main board.



10. Reassemble the RTC module cover and install the single screw to secure the cover in place.

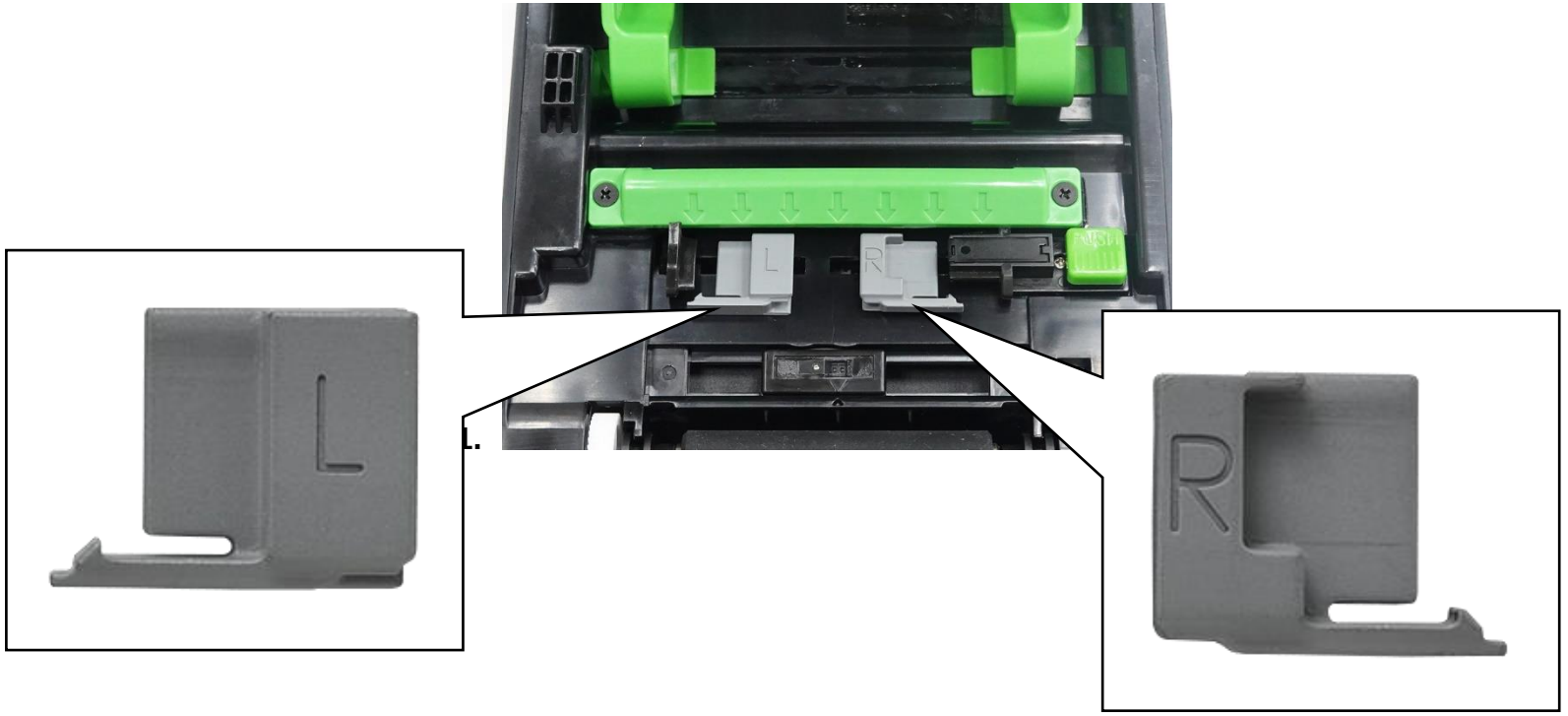
3.18 Installing the Narrow Media Adaptor

1. Open the printer's top cover and then carefully pull to separate the media holders.
2. Press down the media holder lock to secure the media holders in place.
3. Remove the single screw secure the 3-inch core in place and then remove the 3-inch core from the media holder.

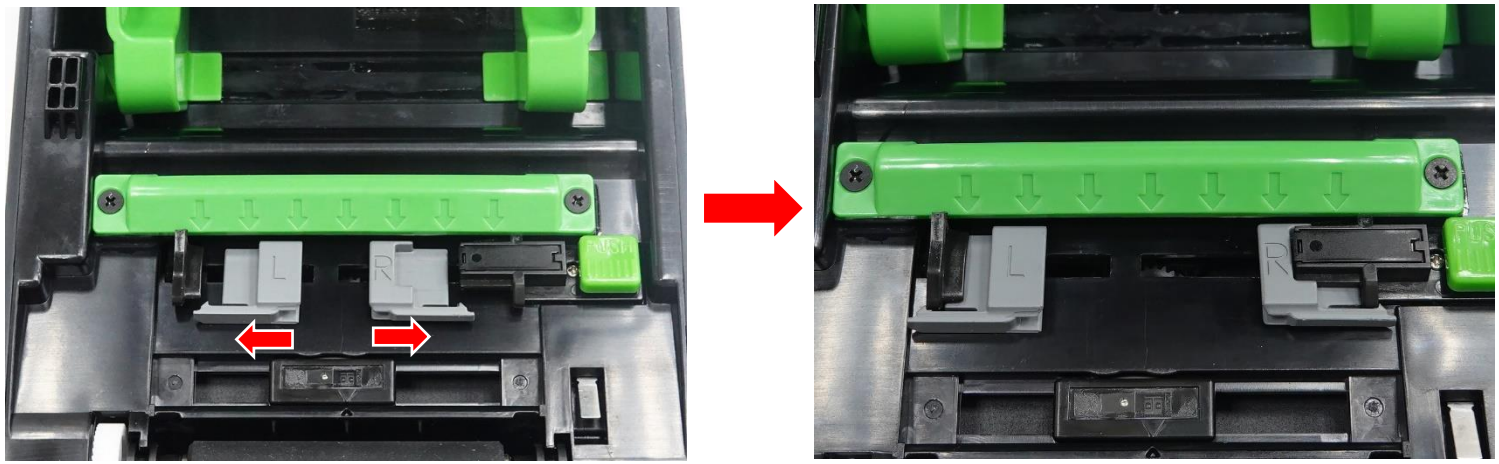
4. Install the single screw to secure narrow media core on the media holder as demonstrated.

5. Repeat step 3 and 4 to install the other narrow media holder.

6. Orientate and place the two narrow media adapters on the printer as demonstrated.



7. Push the two narrow media adapters in the indicated direction until each of the adapters clicks in place.



4 Troubleshooting

4.1 Common Problems

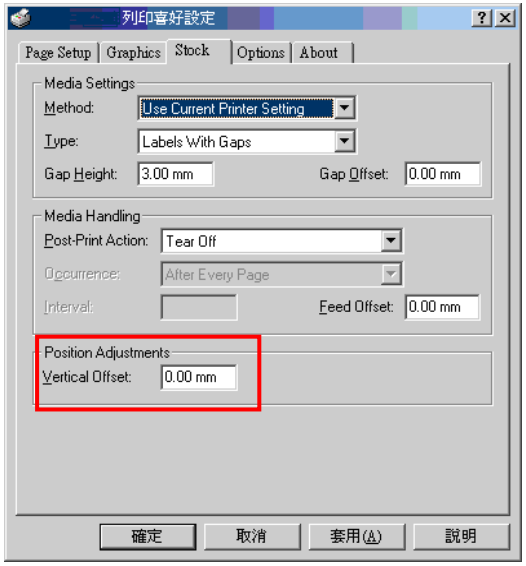
Problem	Possible Cause	Recovery Procedure
Power indicator/ LCD does not illuminate	The power cord is not properly connected.	• Plug the power cord in printer and outlet. • Switch the printer on.
LED turn on (Carriage Open)	The printer head is open.	Please close the print carriages.

Not Printing	• Check if interface cable is well connected to the interface connector.
	• Check if wireless or Bluetooth device is well connected between host and printer.
	• The port specified in the Windows driver is not correct.
		• Re-connect cable to interface or change a new cable.
		• If using serial cable,
		  • Please replace the cable with pin to pin connected.
		  • Check the baud rate setting. The default baud rate setting of printer is 9600,n,8,1.
		• If using the Ethernet cable,
		  • Check if the Ethernet RJ-45 connector green LED is lit on.
		  • Check if the Ethernet RJ-45 connector amber LED is blinking.
		  • Check if the printer gets the IP address when using DHCP mode.
		  • Check if the IP address is correct when using the static IP address.
		  • Wait a few seconds let the printer get the communication with the server

Problem	Possible Cause	Recovery Procedure
		then check the IP address setting again. • Please reset the wireless device setting. • Select the correct printer port in the driver. • Printhead's harness connector is not well connected with printhead. Turn off the printer and plug the connector again. • Check your program if there is a command PRINT at the end of the file and there must have CRLF at the end of each command line.
No print on the label	• Label is not loaded correctly. • Use wrong media type.	• Follow the instructions to reload the media. • The print density setting not correct. • Clean the printhead.
No Paper	• Running out of label. • The label is installed incorrectly. • Gap/black mark sensor is not calibrated.	• Supply a new label roll. • Reinstall the label roll. • Calibrate the gap/black mark sensor.
Paper jam	• Gap/black mark sensor is not set properly. • Make sure label size is set properly. • Labels may be stuck inside the printer mechanism.	• Calibrate the media sensor. • Set media size correctly. • Remove the stuck label inside the printer mechanism.
Can't downloading the file to memory (FLASH / CARD)	The space of memory is full.	Delete unused files in the memory.

Problem	Possible Cause	Recovery Procedure
SD card is unable to use	• SD card is damaged. • SD card doesn't insert correctly. • Use the non-approved SD card manufacturer.	• Use the supported capacity SD card. • Insert the SD card again.
Poor Print Quality	• Media is not loaded correctly. • Dust or adhesive accumulation on the printhead. • Print density is not set properly. • The type of media is not compatible. • Printhead element is damaged. • The printhead pressure is not set properly.	• Reload the media. • Clean the printhead. • Clean the platen roller. • Adjust the print density and print speed. • Run printer self-test and check the printhead test pattern if there is dot missing in the pattern. • Use proper media type. • The release lever does not latch the printhead properly.
Missing printing on the left or right side of label	Wrong label size setup.	Set the correct label size.
Gray line on the blank label	• The printhead is dirty. • The platen roller is dirty.	• Clean the printhead. • Clean the platen roller.
Irregular printing	• The printer is in Hex Dump mode. • The RS-232 setting is incorrect.	• Turn off and on the printer to skip the dump mode. • Re-set the Rs-232 setting.
Label feeding is not stable (skew) when printing	The media guides do not touch the edge of the media.	• If the label is moving to the right side, please move the label guide to left.

Problem	Possible Cause	Recovery Procedure
		• If the label is moving to the left side, please move the label guide to right.
Skip labels when printing	• Label size is not specified properly. • Sensor sensitivity is not set properly. • The media sensor is covered with dust.	• Check if label size is setup correctly. • Calibrate the sensor by Auto Gap or Manual Gap options. • Clear the Gap/Black mark sensor by blower.
Wrinkle problem	• Printhead pressure is incorrect. • Media installation is incorrect. • Print density is incorrect. • Media feeding is incorrect.	• Please set the suitable density to have good print quality. • Make sure the label guides touch the edge of the media guide.
RTC time is incorrect when reboot the printer	The battery has run down.	Check if there is a battery on the main board.
The left side printout position is incorrect	• Wrong label size setup. • The parameter Shift X in printer is incorrect.	Set the correct label size.

Problem	Possible Cause	Recovery Procedure
The printing position of small label is incorrect	• Media sensor sensitivity is not set properly. • Label size is incorrect. • The parameter Shift Y is incorrect. • The vertical offset setting in the driver is incorrect.	• Calibrate the sensor sensitivity again. • Set the correct label size and gap size. • Enter LCD menu (or via TSC Console) to fine tune the parameter of Shift Y. • If using the software BarTender, please set the vertical offset in the driver. 

5 Maintenance

This session presents the clean tools and methods to maintain the printer.

- **For Cleaning**

  Depending on the media used, the printer may accumulate residues (media dust, adhesives, etc.) as a by-product of normal printing. To maintain the best printing quality, you should remove these residues by cleaning the printer periodically. Regularly clean the printhead and supply sensors once change a new media to keep the printer at the optimized performance and extend printer life.

- **For Disinfecting**

  Sanitize your printer to protect yourself and others and can help prevent the spread of viruses.

- **Important**
  - Set the printer power switch to O (Off) prior to performing any cleaning or disinfecting tasks. Leave the power cord connected to keep the printer grounded and to reduce the risk of electrostatic damage.
  - Do not wear rings or other metallic objects while cleaning any interior area of the printer.
  - Use only the cleaning agents recommended in this document. Use of other agents may damage the printer and void its warranty.
  - Do not spray or drip liquid cleaning solutions directly into the printer. Apply the solution on a clean lint-free cloth and then apply the dampened cloth to the printer.
  - Do not use canned air in the interior of the printer as it can blow dust and debris onto sensors and other critical components.
  - Only use a vacuum cleaner with a nozzle and hose that are conductive and grounded to drain off static build up.
  - All reference in these procedures for use of isopropyl alcohol requires that a 99% or greater isopropyl alcohol content be used to reduce the risk of moisture corrosion to the printhead.
  - Do not touch printhead by hand. If you touch it careless, please use 99% Isopropyl alcohol to clean it.

- Always taking personal precaution when using any cleaning agent.

Cleaning Tools:

- Cotton swab
- Lint-free cloth
- Brush with soft non-metallic bristles
- Vacuum cleaner
- 75% Ethanol (for disinfecting)
- 99% Isopropyl alcohol (for printhead and platen roller cleaning)
- Genuine printhead cleaning pen
- Mild detergent (without chlorine)

Cleaning Process:

Printer Part	Method	Interval
Printhead	I. Always turn off the printer before cleaning the printhead. II. Allow the printhead to cool for at least one minute. III. Use a cotton swab and 99% Isopropyl Alcohol or genuine printhead cleaning pen to clean the printhead surface.	Clean the printhead when changing a new label roll.
Platen Roller	I. Turn off the printer. II. Rotate the platen roller and wipe it thoroughly with the lint-free 99% Isopropyl Alcohol.	Clean the platen roller when changing a new label roll
Peel Bar	Use the lint-free cloth with 99% Isopropyl Alcohol to wipe it.	As needed
Sensor	I. Use brush with soft non-metallic bristles or a vacuum cleaner to remove paper dust. II. Clean upper and lower media sensors to ensure reliable Top of Form and Paper Out sensing.	Monthly

Printer Part	Method	Interval
Exterior	Clean the exterior surfaces with a clean, lint-free cloth (water-dampened cloth). If necessary, use a mild detergent or desktop cleaning solution then use the 75% Ethanol to wipe it.	As needed
Interior	Clean the interior of the printer by removing any dirt and lint with a vacuum cleaner, as described above, or use a brush with soft non-metallic bristles then use the 75% Ethanol to wipe it.	As needed

Revision History

Date	Description	Editor
2023/11/15	Official release.	Peter Yao

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