

## ***TX200/ TX300/ TX600 Series***

**THERMAL TRANSFER / DIRECT THERMAL  
BAR CODE PRINTER**

**SERVICE  
MANUAL**

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## 1. OVERVIEW

### 1.1 Front View

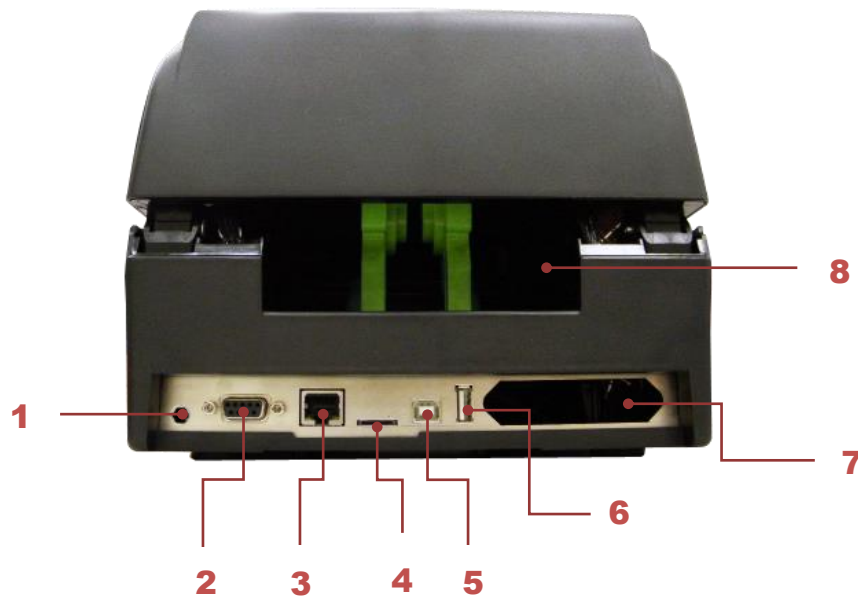


- 1. LED indicators
- 2. Feed/ Pause button
- 3. Paper exit chute
- 4. Top cover open lever
- 5. Power switch

## 1.2 Interior View



## 1.3 Rear View



1. Power jack socket
2. RS-232C interface
3. Ethernet interface
4. \* Micro SD card socket
5. USB interface
6. USB host
7. Centronics interface
8. External label entrance chute

The interface picture here is for reference only. Please refer to the product specification for the interfaces availability.

**Note:**

**\* Recommended MicroSD card specification.**

| Type     | SD card spec        | SD card capacity | Approved SD card manufacturer |
|----------|---------------------|------------------|-------------------------------|
| Micro SD | V2.0 Class 4        | 4G               | Transcend                     |
|          | V2.0 Class 4        | 8G               | Transcend                     |
|          | V3.0 Class 10 UHS-I | 16G              | Transcend                     |

# TX200/ TX300/ TX600

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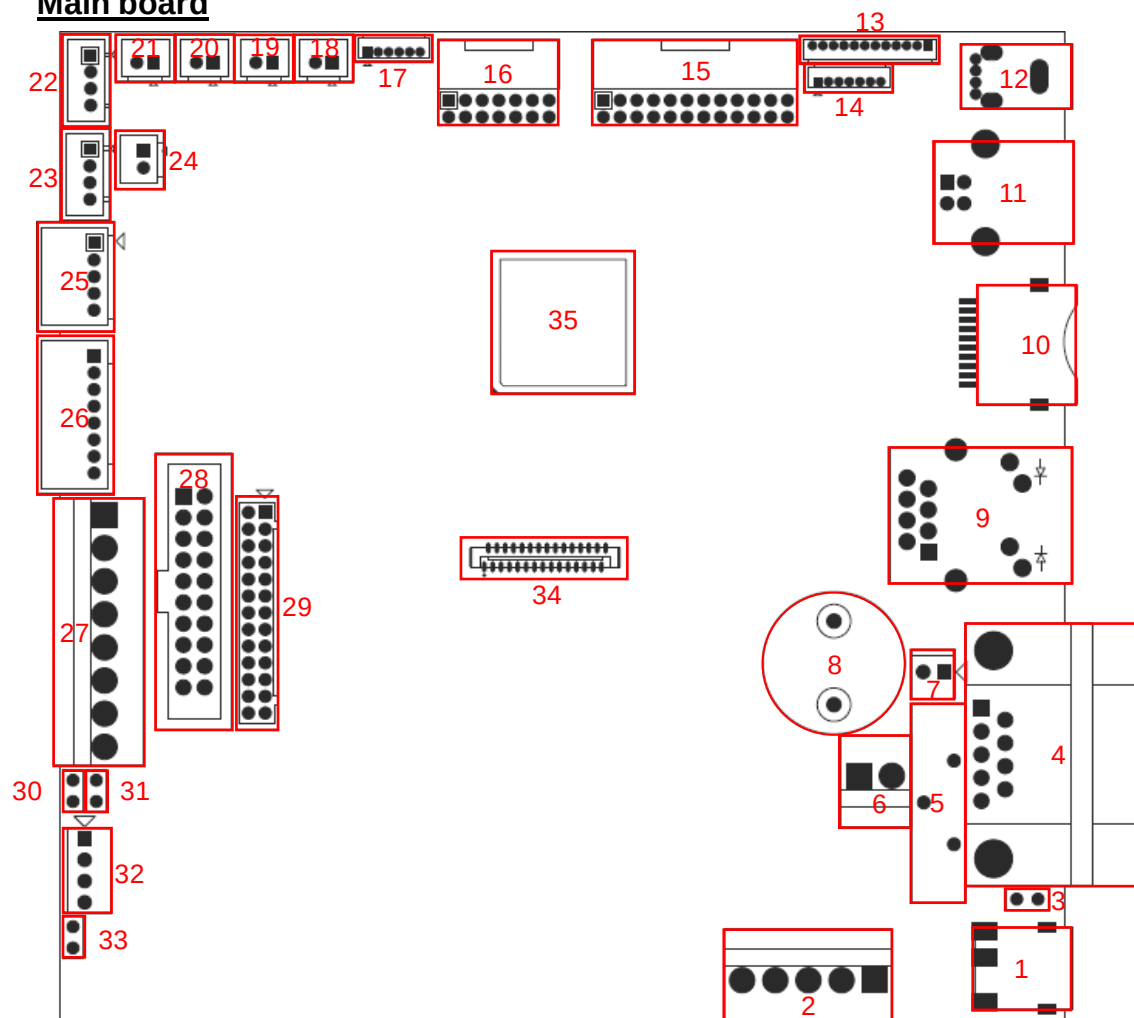


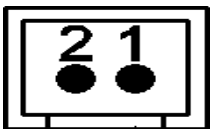
|                                                                                                                                                                                            |                     |     |           |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-----|-----------|
|                                                                                                                                                                                            | V3.0 Class 10 UHS-I | 32G | Transcend |
|                                                                                                                                                                                            | V3.0 Class 10       | 16G | Kingston  |
|                                                                                                                                                                                            | V2.0 Class 4        | 16G | Scandisk  |
|                                                                                                                                                                                            | Class 10 UHS-I      | 16G | Scandisk  |
| <ul style="list-style-type: none"><li>- The DOS FAT file system is supported for the SD card.</li><li>- Folders/files stored in the SD card should be in the 8.3 filename format</li></ul> |                     |     |           |

## 2. ELECTRONICS

### 2.1 Summary of Board Connectors

#### Main board

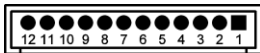
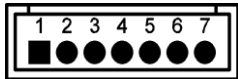


| Connector | Description                                                                         |     |             | Remark  |
|-----------|-------------------------------------------------------------------------------------|-----|-------------|---------|
| 1         | Power supply output (24V DC) connector                                              |     |             | B800    |
| 2         | Power switch cable connector                                                        |     |             | J800    |
| 3         | ESD_GND_PIN                                                                         |     |             | J802    |
|           |  | Pin | Description | Voltage |
|           |                                                                                     | 1   | GND         | 0V      |
|           |                                                                                     | 2   | GND         | 0V      |
| 4         | RS-232C connector                                                                   |     |             | J201    |
| 5         | RTC battery (Factory option)                                                        |     |             | BT800   |
| 6         | ESD_GND_PIN                                                                         |     |             | J805    |

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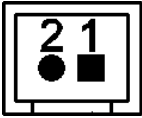
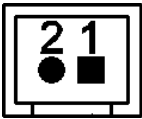
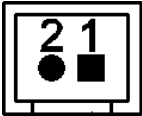
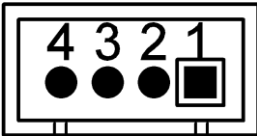


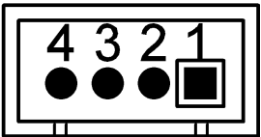
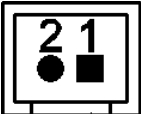
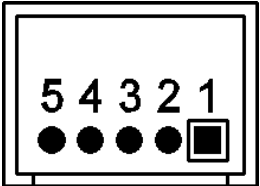
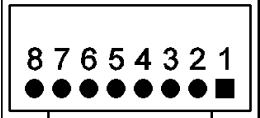
|    |                                                                                     |       |                         |                                         |
|----|-------------------------------------------------------------------------------------|-------|-------------------------|-----------------------------------------|
| 7  | 5V DC connector                                                                     | J200  |                         |                                         |
| 8  | Buzzer (Factory option)                                                             | BZ600 |                         |                                         |
| 9  | Ethernet connector                                                                  | J300  |                         |                                         |
| 10 | Micro SD card slot                                                                  | J100  |                         |                                         |
| 11 | USB Device connector                                                                | J202  |                         |                                         |
| 12 | USB Host connector                                                                  | J203  |                         |                                         |
| 13 | Feed key and LED connector                                                          |       | J701                    |                                         |
|    |   | Pin   | Description             | Voltage                                 |
|    |                                                                                     | 1     | GND                     | 0V                                      |
|    |                                                                                     | 2     | LED1 red : Warning      | LED light on: 3.3V<br>LED light off: 0V |
|    |                                                                                     | 3     | LED2 red : No paper     | LED light on: 3.3V<br>LED light off: 0V |
|    |                                                                                     | 4     | LED3 red : No ribbon    | LED light on: 3.3V<br>LED light off: 0V |
|    |                                                                                     | 5     | LED4 red : Openings     | LED light on: 3.3V<br>LED light off: 0V |
|    |                                                                                     | 6     | Power                   | 3.3V                                    |
|    |                                                                                     | 7     | LED5 green : Startup    | LED light on: 3.3V<br>LED light off: 0V |
|    |                                                                                     | 8     | LED6 orange : waiting   | LED light on: 3.3V<br>LED light off: 0V |
|    |                                                                                     | 9     | LED7 orange : Clean TPH | LED light on: 3.3V<br>LED light off: 0V |
|    |                                                                                     | 10    | LED8 blue : WiFi/BT     | LED light on: 3.3V<br>LED light off: 0V |
|    |                                                                                     | 11    | Feed switch             | 0V: Push key<br>3.3V: Stand-by          |
|    |                                                                                     | 12    | GND                     | 0V                                      |
| 14 | LCD key connector                                                                   |       | J702                    |                                         |
|    |  | Pin   | Description             | Voltage                                 |
|    |                                                                                     | 1     | KEY1 : Down switch      | 0V: Push key<br>3.3V: Stand-by          |
|    |                                                                                     | 2     | KEY2 : Left switch      | 0V: Push key<br>3.3V: Stand-by          |
|    |                                                                                     | 3     | KEY3 : Right switch     | 0V: Push key<br>3.3V: Stand-by          |
|    |                                                                                     | 4     | KEY4 : Up switch        | 0V: Push key<br>3.3V: Stand-by          |
|    |                                                                                     | 5     | KEY5 : Menu/Back switch | 0V: Push key<br>3.3V: Stand-by          |
|    |                                                                                     | 6     | KEY6 : Feed switch      | 0V: Push key<br>3.3V: Stand-by          |
| 7  | GND                                                                                 | 0V    |                         |                                         |

# TX200/ TX300/ TX600

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|    |                                                                                     |                     |                           |                                                |
|----|-------------------------------------------------------------------------------------|---------------------|---------------------------|------------------------------------------------|
| 15 | Centronics port connector (for parallel port)                                       |                     |                           | J900                                           |
| 16 | WiFi / Bluetooth connector                                                          |                     |                           | J1000                                          |
| 17 | RFID connector                                                                      |                     |                           | J205                                           |
| 18 | Head open connector                                                                 |                     |                           | J607                                           |
|    |    | Pin                 | Description               | Voltage                                        |
|    |                                                                                     | 1                   | Head open sensor receiver | 0~1.4V: Head close<br>1.7~3.3V: Head open      |
|    |                                                                                     | 2                   | GND                       | 0V                                             |
| 19 | Gap sensor receiver connector                                                       |                     |                           | J605                                           |
|    |    | Pin                 | Description               | Voltage                                        |
|    |                                                                                     | 1                   | Power                     | 3.3V                                           |
|    |                                                                                     | 2                   | Gap sensor receiver AD    | 0~3.3V                                         |
| 20 | Ribbon end connector (For receive signals)                                          |                     |                           | J604                                           |
|    |  | Pin                 | Description               | Voltage                                        |
|    |                                                                                     | 1                   | Gap sensor receiver AD    | 0~3.3V                                         |
|    |                                                                                     | 2                   | GND                       | 0V                                             |
| 21 | Ribbon end connector (For transmit signals)                                         |                     |                           | J601                                           |
|    |  | Pin                 | Description               | Voltage                                        |
|    |                                                                                     | 1                   | Power                     | 3.3V                                           |
|    |                                                                                     | 2                   | Ribbon end sensor emitter | Emitter on : 2.1~2.3V<br>Emitter off: 2.6~2.8V |
| 22 | Ribbon encoder sensor connector                                                     |                     |                           | J600                                           |
|    |  | Pin                 | Description               | Voltage                                        |
|    |                                                                                     | 1                   | Power                     | 3.3V                                           |
|    |                                                                                     | 2                   | GND                       | 0V                                             |
|    |                                                                                     | 3                   | Power                     | 3.3V                                           |
| 4  | Ribbon encoder sensor receiver                                                      | High:3.3V<br>Low:0V |                           |                                                |

|    |                                                                                     |     |                               |                                                    |
|----|-------------------------------------------------------------------------------------|-----|-------------------------------|----------------------------------------------------|
| 23 | BM / GAP sensor connector                                                           |     |                               | J603                                               |
|    |    | Pin | Description                   | Voltage                                            |
|    |                                                                                     | 1   | Power                         | 3.3V                                               |
|    |                                                                                     | 2   | Not use                       | -                                                  |
|    |                                                                                     | 3   | Black mark sensor emitter     | Emitter on : 2.1~2.3V<br>Emitter off: 2.6~2.8V     |
| 24 | Gap sensor connector (For transmit signals)                                         |     |                               | J602                                               |
|    |    | Pin | Description                   | Voltage                                            |
|    |                                                                                     | 1   | Power                         | 3.3V                                               |
|    |                                                                                     | 2   | Gap sensor emitter            | Emitter on : 2.1~2.3V<br>Emitter off: 2.6~2.8V     |
| 25 | Peel sensor connector                                                               |     |                               | J606                                               |
|    |  | Pin | Description                   | Voltage                                            |
|    |                                                                                     | 1   | Power                         | 3.3V                                               |
|    |                                                                                     | 2   | Reserved                      |                                                    |
|    |                                                                                     | 3   | Peel sensor emitter           | Emitter on : 2.1~2.3V<br>Emitter off: 2.6~2.8V     |
|    |                                                                                     | 4   | Peel sensor receiver AD       | 0~3.3V                                             |
| 26 | Cutter connector                                                                    |     |                               | J501                                               |
|    |  | Pin | Description                   | Voltage                                            |
|    |                                                                                     | 1   | Cutter power                  | 24V                                                |
|    |                                                                                     | 2   | GND                           | 0V                                                 |
|    |                                                                                     | 3   | Cutter direction              | 0V: Cutter positive cut<br>5V: Cutter negative cut |
|    |                                                                                     | 4   | Cutter enable                 | 0V: Cutter work<br>5V: Cutter stop                 |
|    |                                                                                     | 5   | Cutter position sensor switch | 0V: Cutter stop<br>3.3V: Cutter work               |
|    |                                                                                     | 6   | GND                           | 0V                                                 |
|    |                                                                                     | 7   | Logic power                   | 5V                                                 |
|    |                                                                                     | 8   | Reserved                      | -                                                  |
| 27 | Print head power connector (600dpi)                                                 |     |                               | J400                                               |
| 28 | Print head connector (600dpi)                                                       |     |                               | J402                                               |

# TX200/ TX300/ TX600

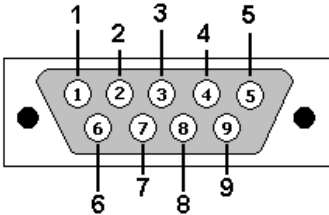
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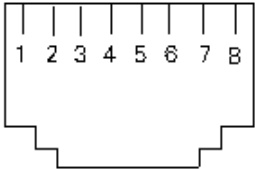
|    |                                        |      |
|----|----------------------------------------|------|
| 29 | Print head connector (200dpi / 300dpi) | J401 |
| 30 | ESD_GND_PIN                            | J804 |
| 31 | ESD_GND_PIN                            | J801 |
| 32 | Stepping motor connector               | J500 |
| 33 | ESD_GND_PIN                            | J803 |
| 34 | Micro processor                        | U1   |
| 35 | TFT-LCD connector                      | J700 |

## 2.2 Pin Configuration

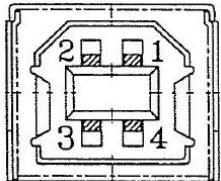
### RS-232C

|  | PIN | CONFIGURATION |
|-----------------------------------------------------------------------------------|-----|---------------|
|                                                                                   | 1   | +5 V          |
|                                                                                   | 2   | TXD           |
|                                                                                   | 3   | RXD           |
|                                                                                   | 4   | CTS           |
|                                                                                   | 5   | GND           |
|                                                                                   | 6   | RTS           |
|                                                                                   | 7   | N/C           |
|                                                                                   | 8   | RTS           |
|                                                                                   | 9   | N/C           |

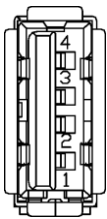
### Ethernet

|  | PIN | CONFIGURATION |
|-------------------------------------------------------------------------------------|-----|---------------|
|                                                                                     | 1   | Tx+           |
|                                                                                     | 2   | Tx-           |
|                                                                                     | 3   | Rx+           |
|                                                                                     | 4   | N/C           |
|                                                                                     | 5   | N/C           |
|                                                                                     | 6   | Rx-           |
|                                                                                     | 7   | N/C           |
|                                                                                     | 8   | N/C           |

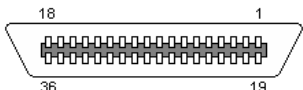
### USB Device

|  | PIN | CONFIGURATION |
|-------------------------------------------------------------------------------------|-----|---------------|
|                                                                                     | 1   | N/C           |
|                                                                                     | 2   | D-            |
|                                                                                     | 3   | D+            |
|                                                                                     | 4   | GND           |

## USB Host

|  | PIN | CONFIGURATION |
|-----------------------------------------------------------------------------------|-----|---------------|
|                                                                                   | 1   | 5V            |
|                                                                                   | 2   | D-            |
|                                                                                   | 3   | D+            |
|                                                                                   | 4   | GND           |

## Centronics

|  | Pin   | SPP Mode        | Nibble | In/Out | Function                                                                                                                                                                      |
|-------------------------------------------------------------------------------------|-------|-----------------|--------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                     | 1     | Strobe          | N/A    | In     | A <b>low</b> on this line indicates that there are valid data at the host. When this pin is de-asserted, the +ve clock edge should be used to shift the data into the device. |
|                                                                                     | 2-9   | Data 0-7        | N/A    | In     | Data Bus. Single-directional.                                                                                                                                                 |
|                                                                                     | 10    | Ack             | N/A    | Out    | A <b>low</b> on this line indicates that there are valid data at the Device. When this pin is de-asserted, the +ve clock edge should be used to shift the data into the host. |
|                                                                                     | 11    | Busy            | N/A    | Out    | When in reverse direction, a <b>high</b> indicates data, while a <b>low</b> indicates a command cycle. In forward direction, it functions as PtrBusy.                         |
|                                                                                     | 12    | Paper Out / End | N/A    | Out    | When <b>low</b> , device acknowledges reverse request.                                                                                                                        |
|                                                                                     | 13    | Select          | N/A    | Out    | Extensibility flag                                                                                                                                                            |
|                                                                                     | 14    | Ground          | N/A    | GND    | Ground                                                                                                                                                                        |
|                                                                                     | 15    | No Defined      | N/A    | N/A    |                                                                                                                                                                               |
|                                                                                     | 16-17 | Ground          | N/A    | GND    | Ground                                                                                                                                                                        |
|                                                                                     | 18    | No Defined      | N/A    | N/A    |                                                                                                                                                                               |
|                                                                                     | 19-30 | Ground          | N/A    | GND    | Ground                                                                                                                                                                        |
|                                                                                     | 31    | No Defined      | N/A    | N/A    |                                                                                                                                                                               |
|                                                                                     | 32    | Error / Fault   | N/A    | Out    | A <b>low</b> set by the device indicates that the                                                                                                                             |

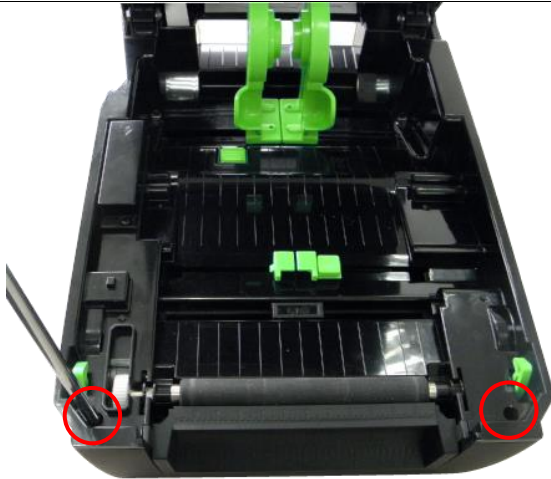
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|  |       |            |     |     |                           |
|--|-------|------------|-----|-----|---------------------------|
|  |       |            |     |     | reverse data is available |
|  | 33-35 | Ground     | N/A | GND | Ground                    |
|  | 36    | No Defined | N/A | N/A |                           |

### 3. MECHANISM

#### 3.1 Replacing the Lower Cover



1. Open the printer's top cover by pulling the top cover open levers located on each side of the printer and lifting the top cover to the maximum open angle.
2. Remove two screws on the lower inner cover.

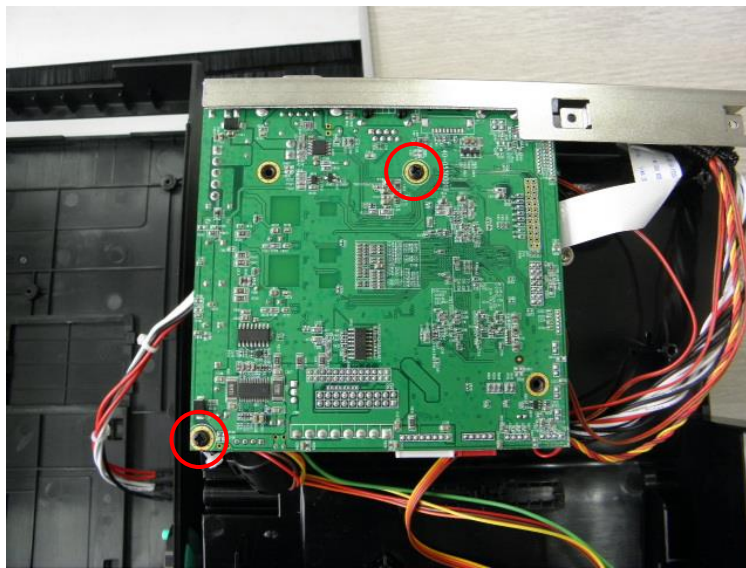


3. Turn the printer upside down to remove six screws.

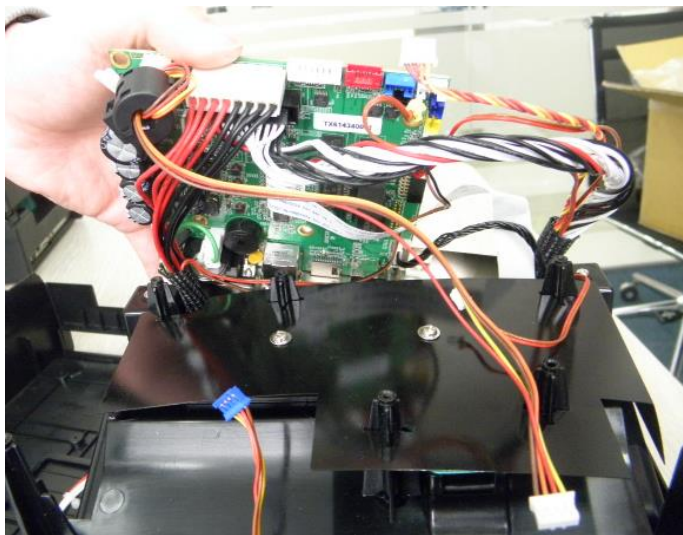


4. Remove/Replace the lower cover.
5. Reassemble the parts in the reverse procedure.

## 3.2 Replacing the Main Board



1. Please refer to the [section 3.1](#) to remove the lower cover.
2. Remove two screws on the main board.

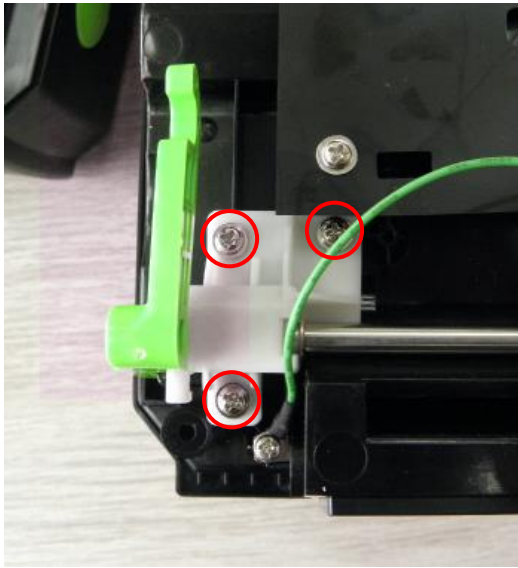


3. Disconnect all connectors on the main board.

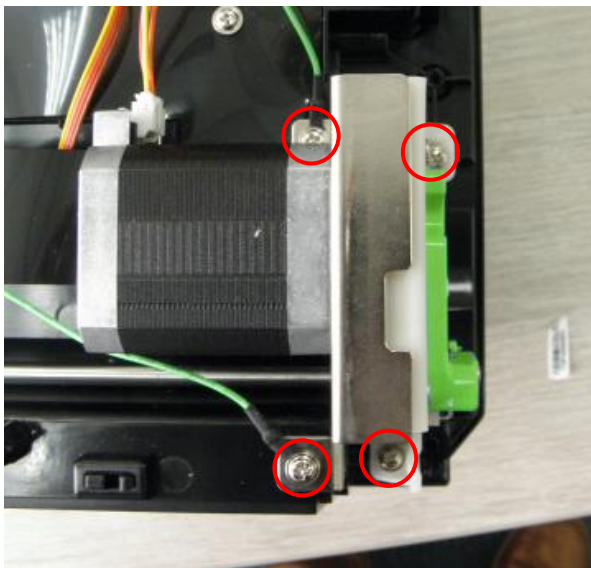


4. Remove/Replace the main board assembly.
5. Reassemble the parts in the reverse procedure.

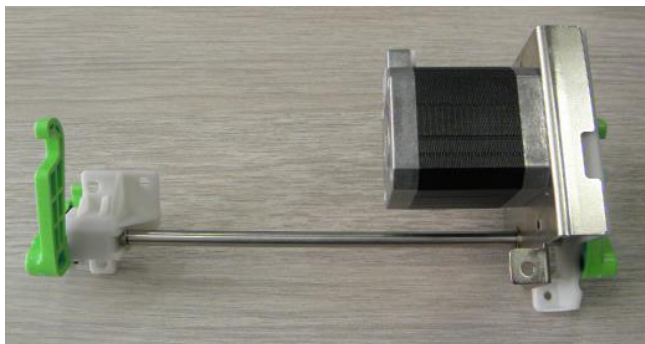
### 3.3 Replacing the Stepping Motor Module



1. Please refer to the [section 3.1](#) to remove the lower cover.
2. Remove three screws as shown.



3. Remove four screws as shown.

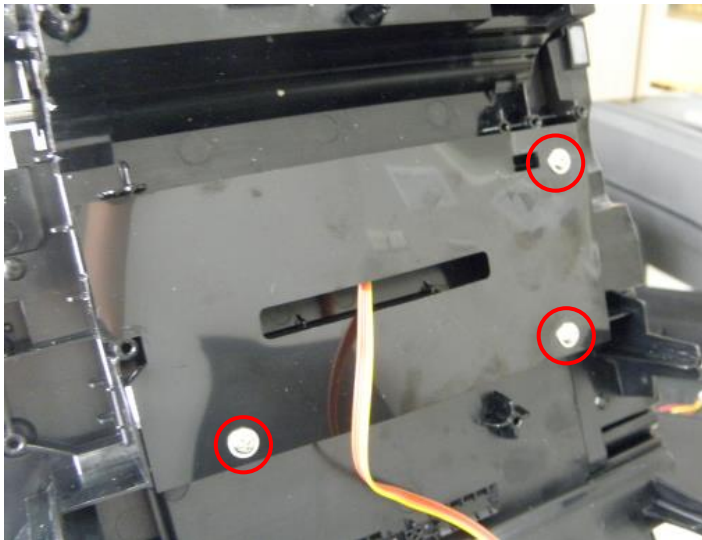


4. Remove the hook module assembly.

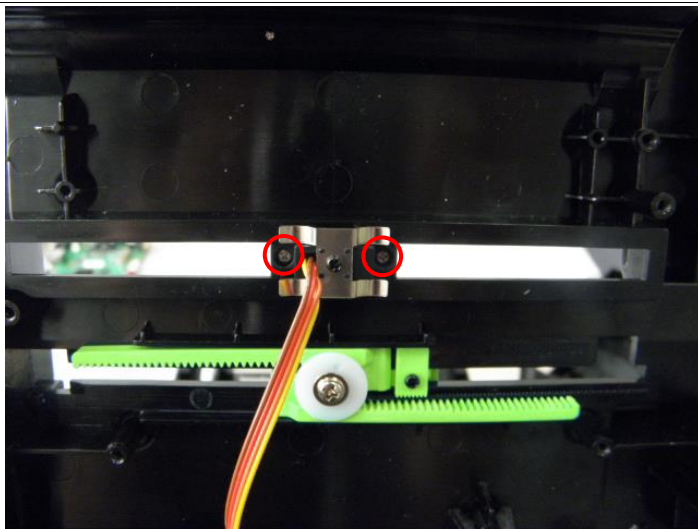


5. Remove one e-ring to replace stepping motor module.
6. Reassemble the parts in the reverse procedure.

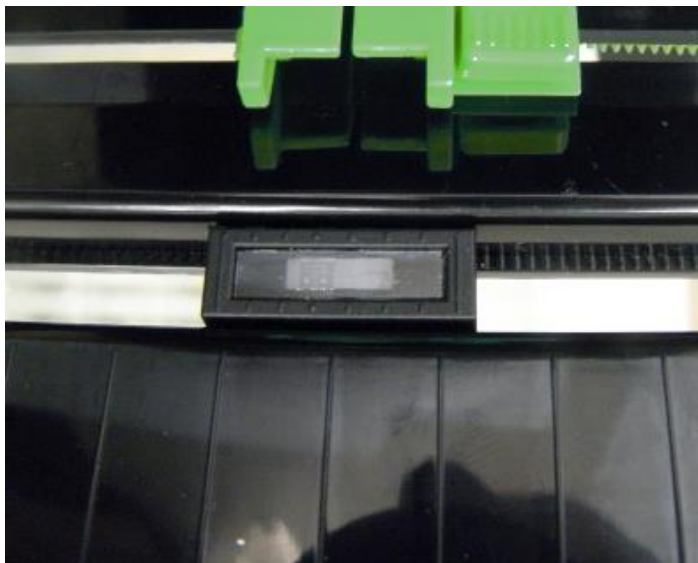
### 3.4 Replacing the Black-mark Sensor Module



1. Please refer to the [section 3.3](#) to remove the hook module assembly.
2. Remove three screws to take out the black mylar.

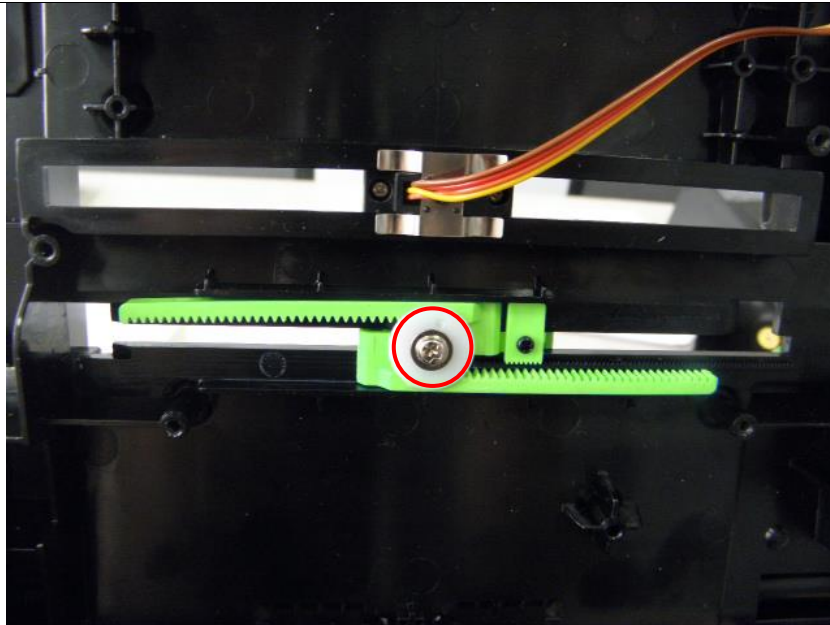


3. Remove two screws on the black-mark sensor fixing plate.



4. Remove/replace the black-mark sensor module.
5. Reassemble the parts in the reverse procedure.

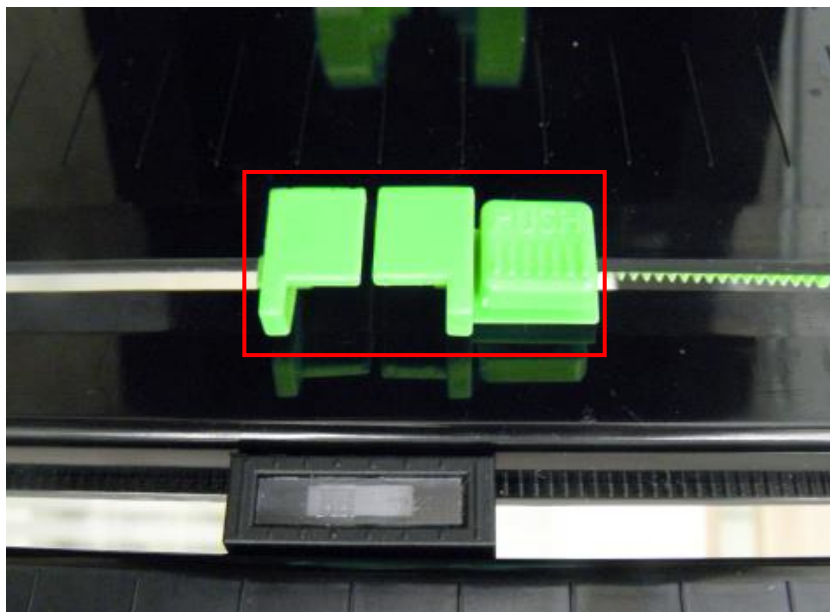
### 3.5 Replacing the Media Guide Assembly



1. Please refer to the [section 3.3](#) to remove the hook module assembly.

2. Remove three screws to take out the black mylar.

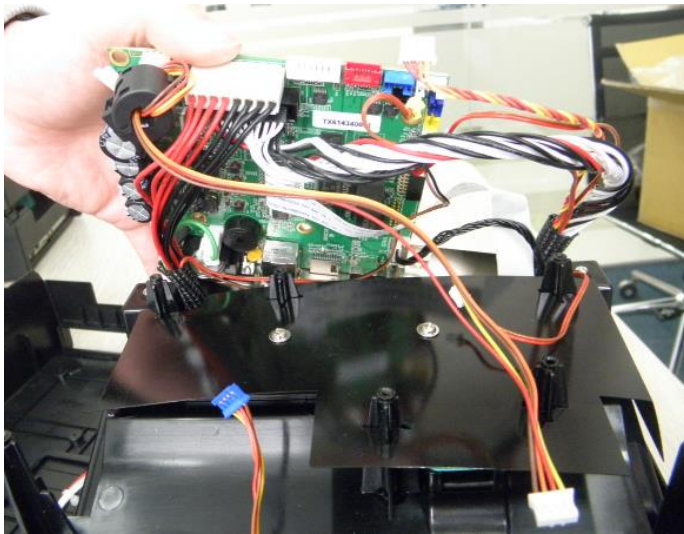
3. Remove one screw on the label guide assembly.



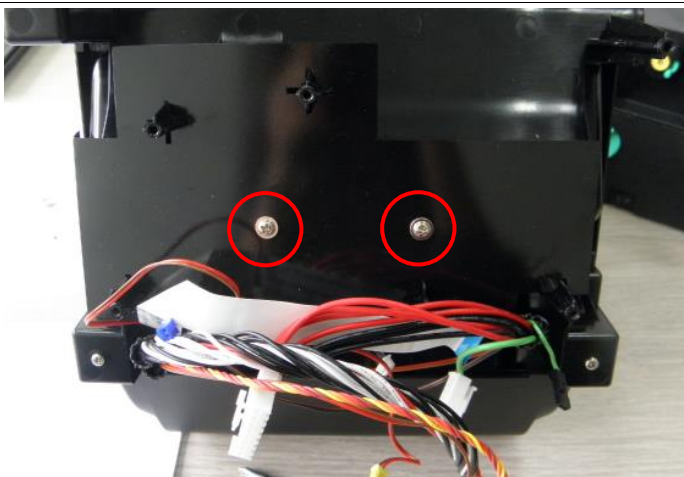
4. Remove/replace the media guide assembly.

5. Reassemble the parts in the reverse procedure.

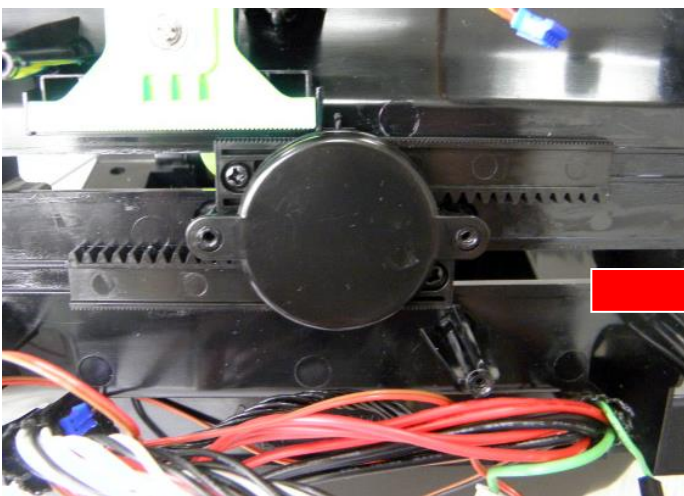
### 3.6 Replacing the Media holder assembly



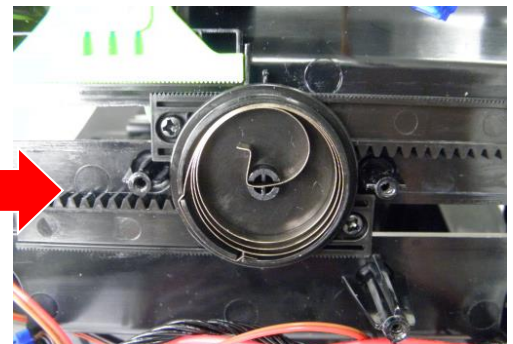
1. Please refer to [section 3.2](#) to remove the main board.

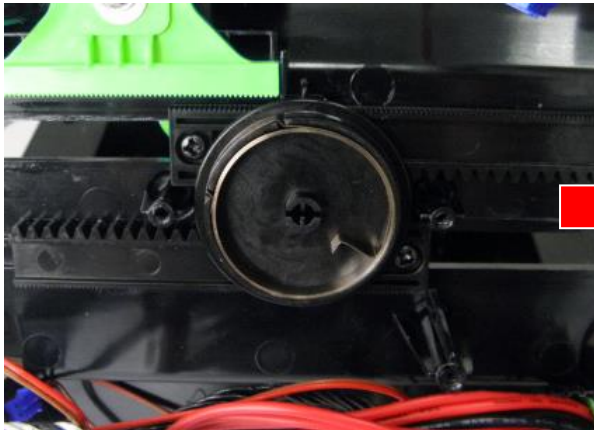


2. Remove two screws to take out the black mylar.

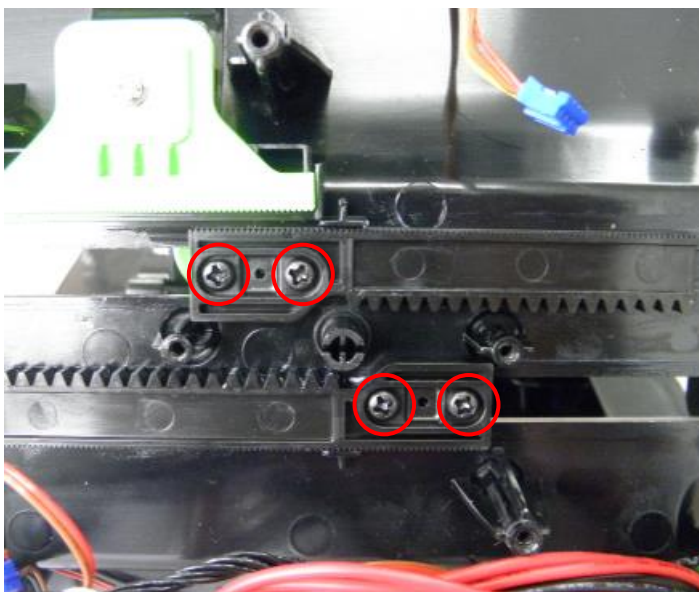


3. Remove the cover as shown.





4. Use tool to loose the spiral spring then take out it.

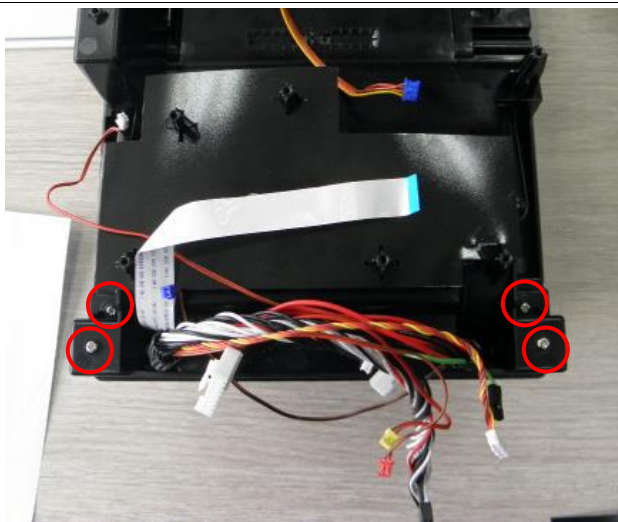


5. Remove four screws to replace the media holder assembly.

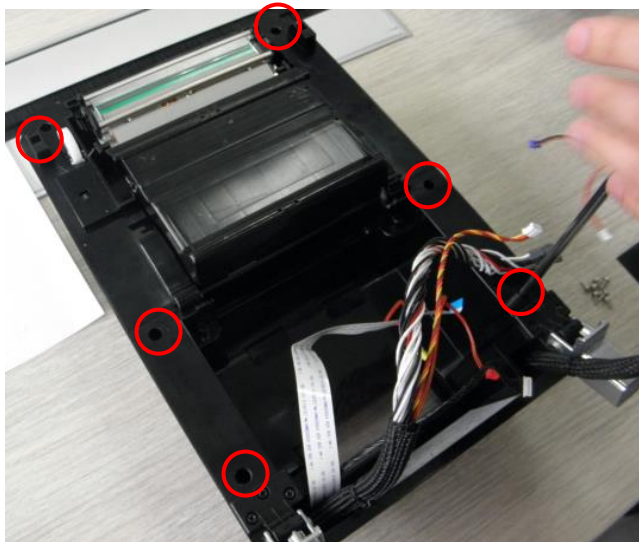


6. Reassemble the parts in the reverse procedure.

### 3.7 Replacing the LED/LCD module



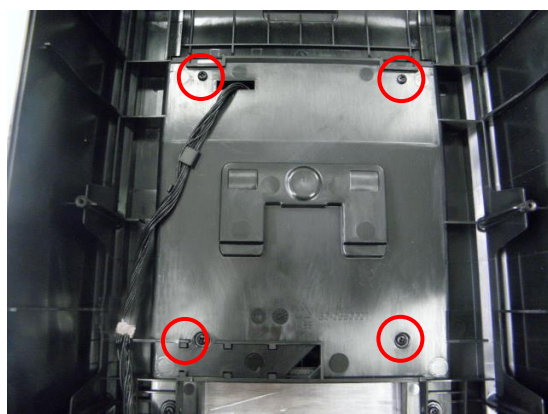
1. Please refer to the [section 3.2](#) to remove the main board.
2. Remove four screws to take out the lower inner cover assembly.



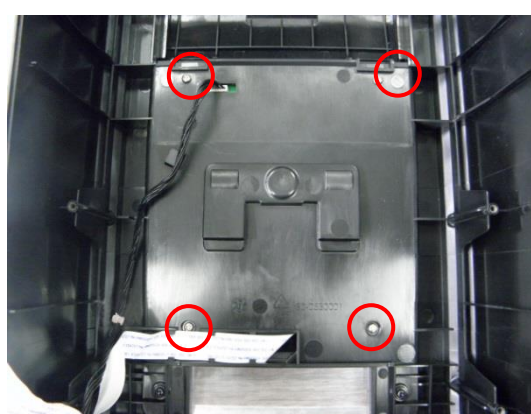
3. Remove six screws to remove top cover assembly.

4. Remove four screws to remove/replace LED/LCD module. Reassemble the parts in the reverse procedures.

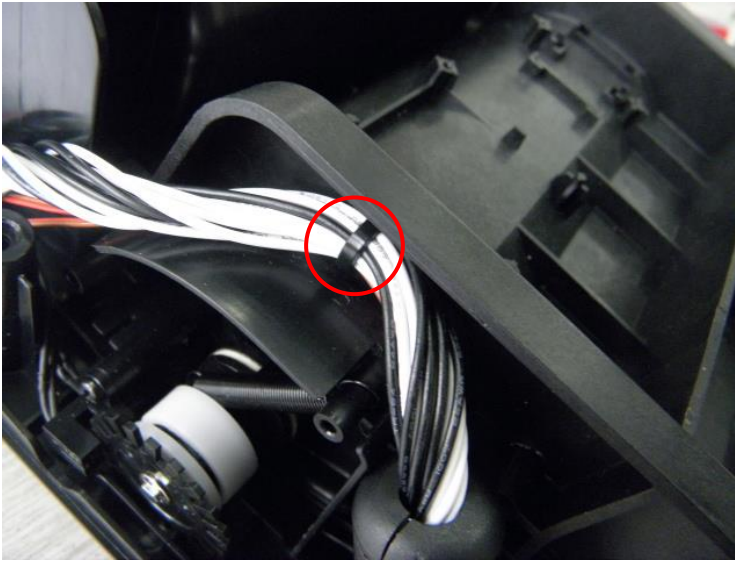
LED module



LCD module

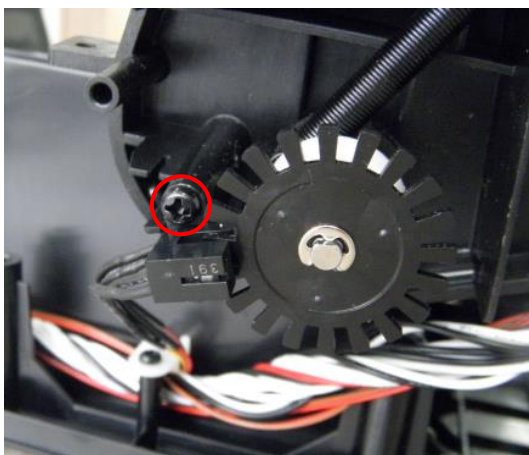
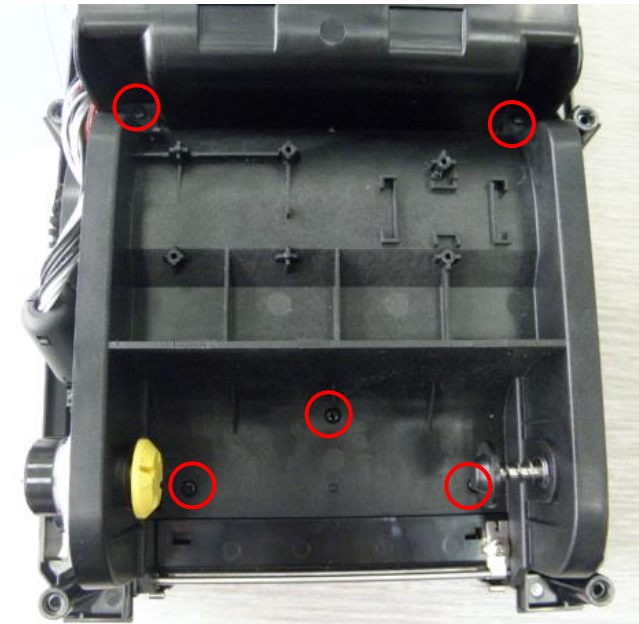


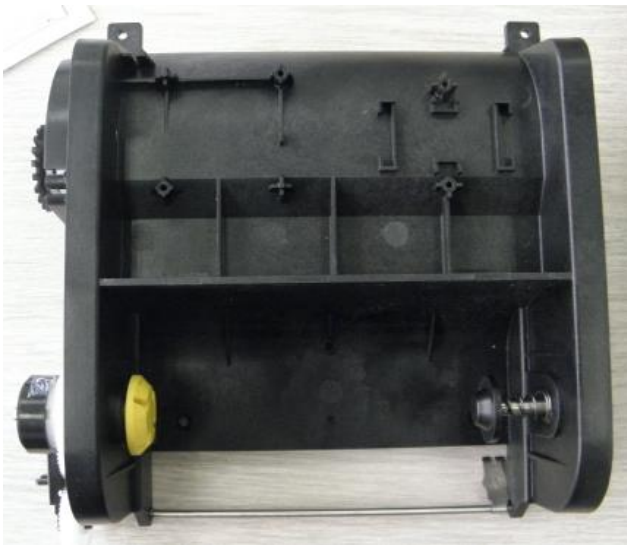
### 3.8 Replacing the Ribbon Base Module



1. Please refer to the [section 3.7](#) to remove top cover assembly.
2. Remove one cable tie.

3. Remove the seven screws on the ribbon base module.





4. Remove/Replace the ribbon base module.
5. Reassemble the parts in the reverse procedure.

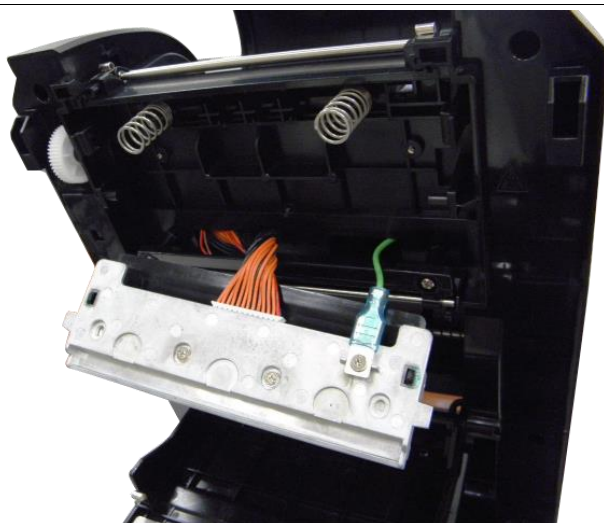
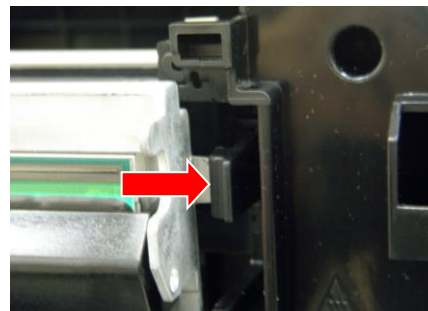
### 3.9 Replacing the Printhead Module



1. Open the printer cover.
2. Open ribbon access cover and media cover.



3. Peel the tab as picture shown to remove the printhead module.



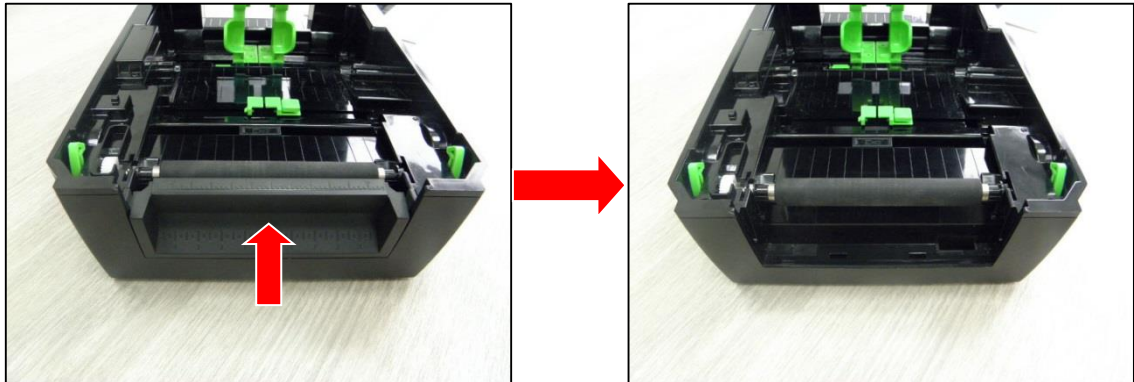
4. Disconnect printhead harness and ground cable to replace the printhead module.

**Note:**

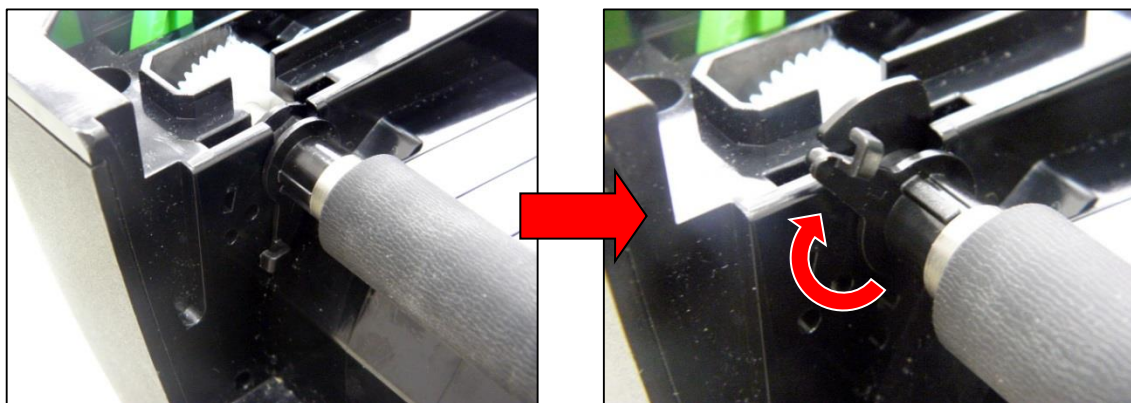
There are 2 harnesses for TX600 series printhead module.

### 3.10 Replacing the Platen Roller assembly

1. Open the printer cover to remove the lower front panel.

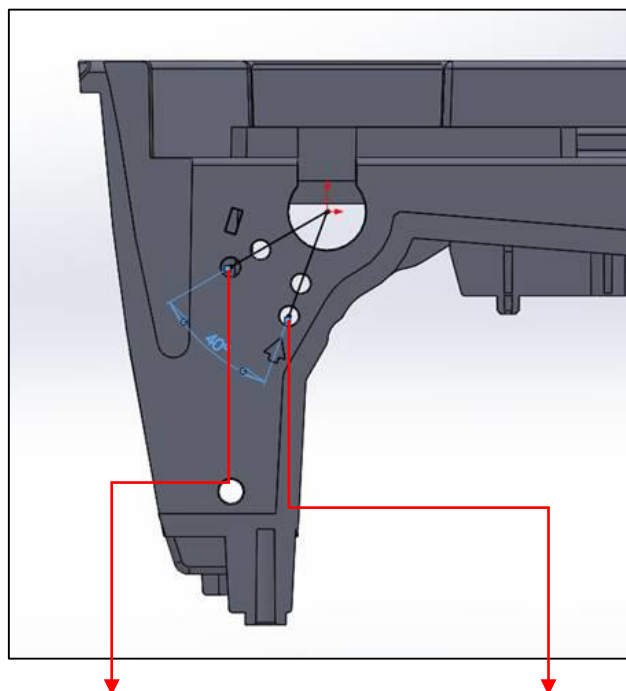


2. Disengage the platen holder tabs by pulling out the right side and left side tabs. Rotate the tabs into the forward position. (see picture below)



3. Take out the platen roller assembly to replace. Reassemble the parts in the reverse procedure.

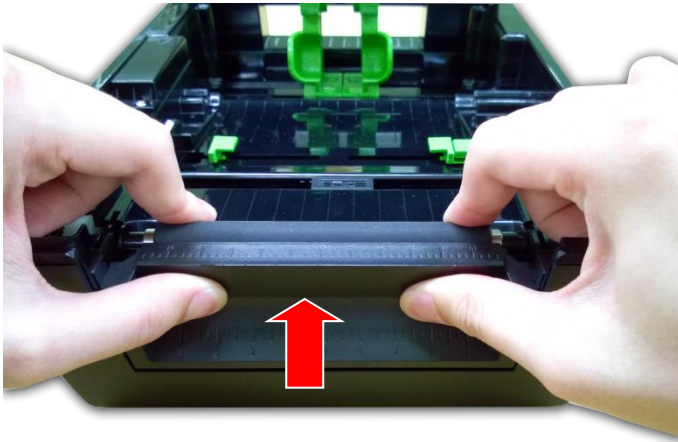
**Note:**



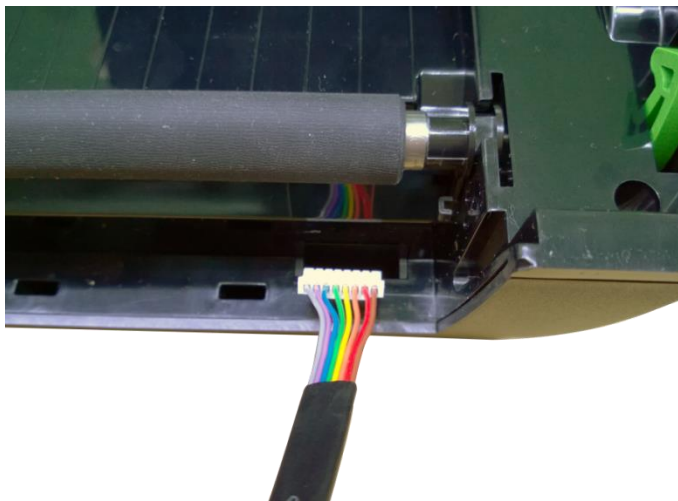
The tab here is for thick label.  
(Thickness is 0.19 mm)

The tab here is for regular  
label.

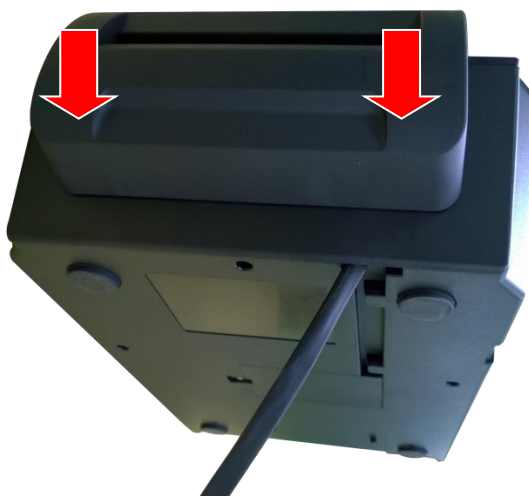
### 3.11 Cutter Module Installation (Option)



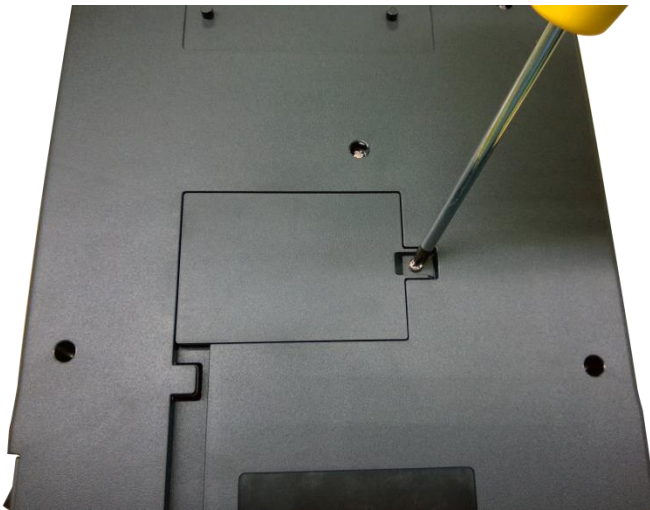
1. Open the printer cover to remove the lower front panel.



2. Put the cutter module harness through the slot of the lower inner cover front side.



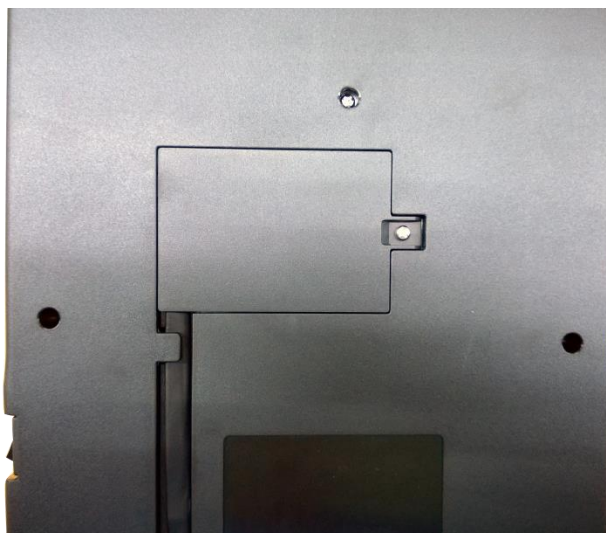
3. Gently place the cutter module into the both sides of niches on lower inner cover, then push cutter to lock into the lower inner cover.



4. Unscrew one screw on the printer bottom cover.



5. Hook the cutter module harness onto the printer lower cover. Plug-in the cutter module harness connector to the 8-pin white socket on the main board.



6. Screw back the screw on the printer bottom cover.



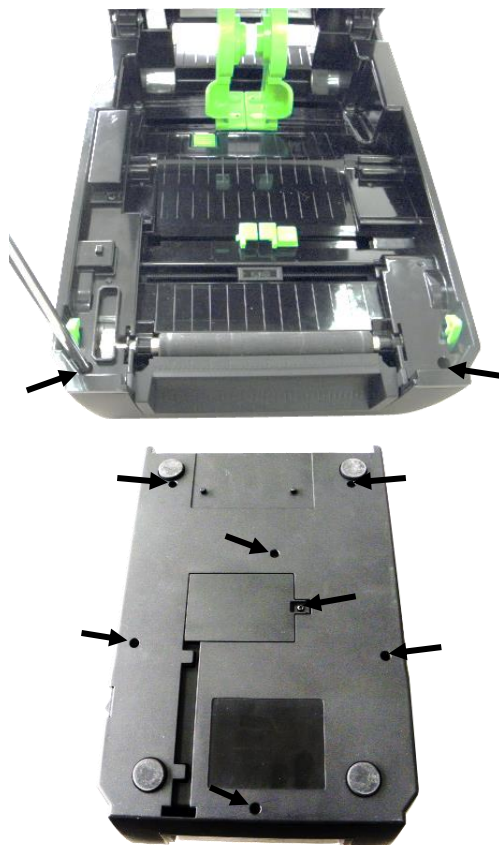
7. The cutter module is ready to use.

**Note:**

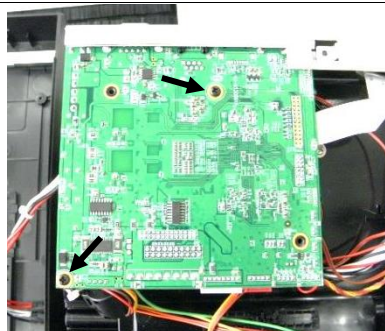
\* Except for the linerless cutter, all regular/ heavy duty/ care label cutters DO NOT cut on media with glue.

For more details, please refer to the cutter specification in the user's manual.

### 3.12 Peel-off Module Installation (Option)

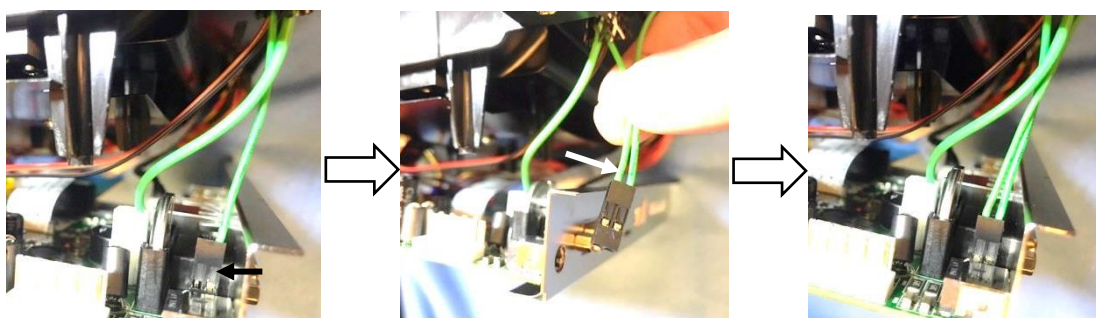


1. Remove nine screws on lower inner cover and lower cover as shown.



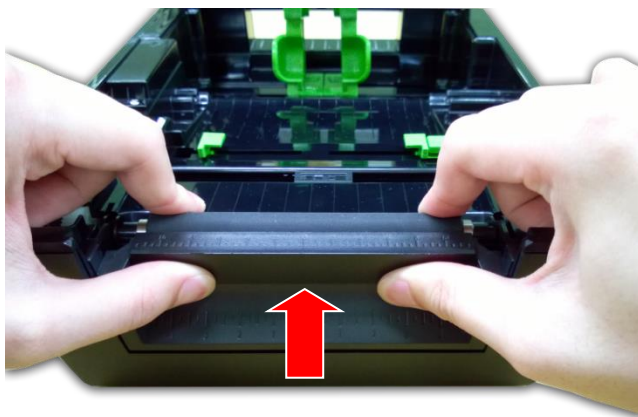
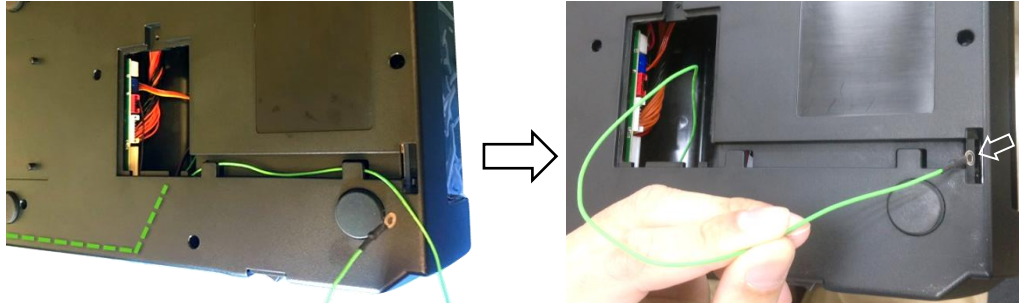
2. After removing the lower cover, remove two screws securing the main board on the lower inner cover. (no need to disconnect all the cables on the main board)

3. Disconnect the grounding connector next to the DC jack. Plug the peel-off bar grounding cable pin into the same connector then connect it back on the main board. Secure the main board back by two screws.



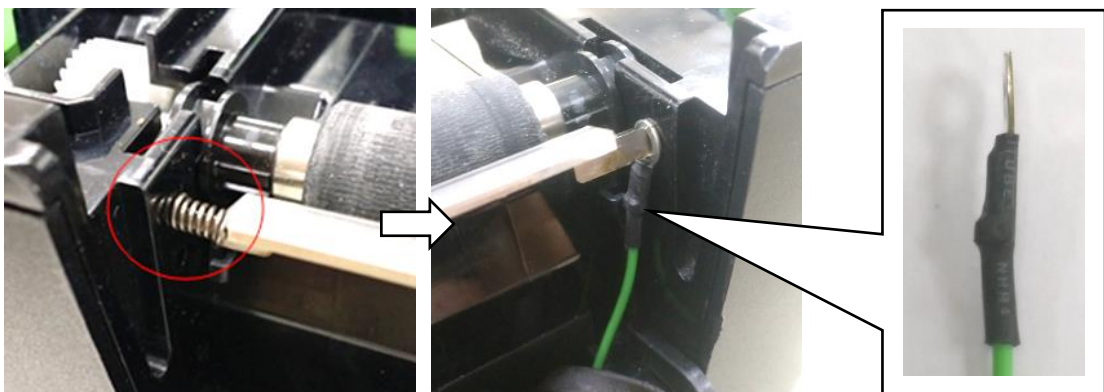
4. Install the lower cover by eight screws then pull the grounding cable through the opening. Put the grounding cable through the slot of the lower cover.

Note: The grounding cable is placed on the side as shown below in dotted line.



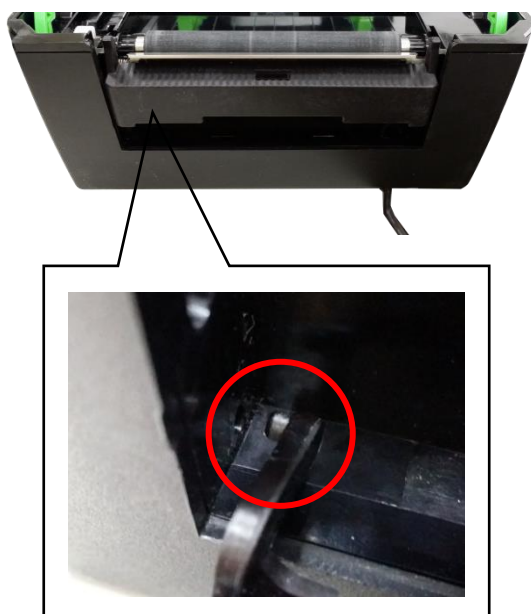
5. Open the printer top cover then open the print head mechanism. Remove the lower front panel.

6. Hold the grounding cable onto the right side of the peel-off bar. Then, install the peel-off bar into both slots on front inner lower cover. Please install left side (with spring) first. **Make sure the flat side of grounding wire is on right side as shown below.**

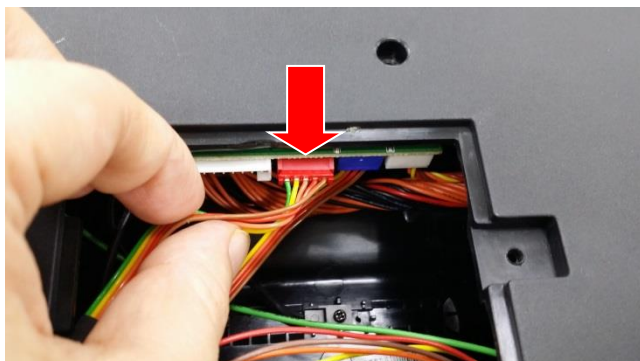




7. Put the peel-off module harness through the slot of the lower inner cover front side.



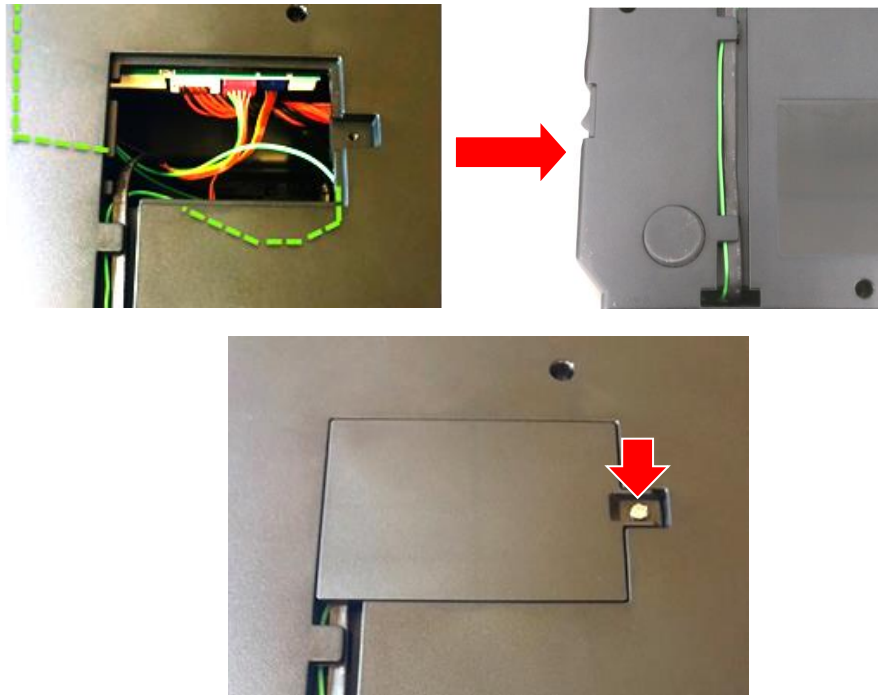
8. Install the peel-off panel by putting the both sides of tabs into the holes on front inner printer.



9. Plug-in the peel-off module harness connector to the 5-pin red socket on the main board.

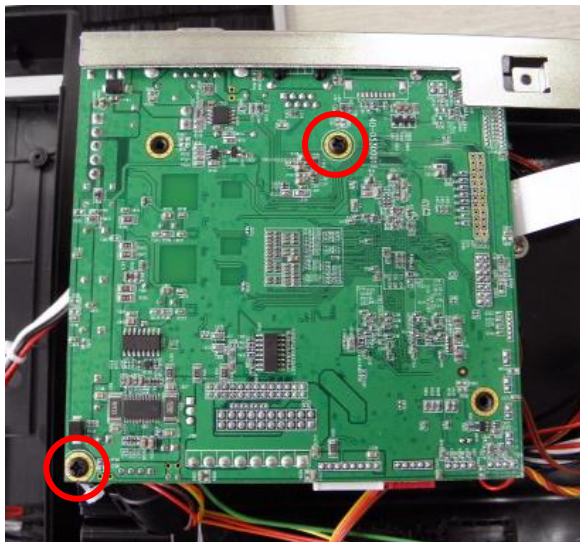
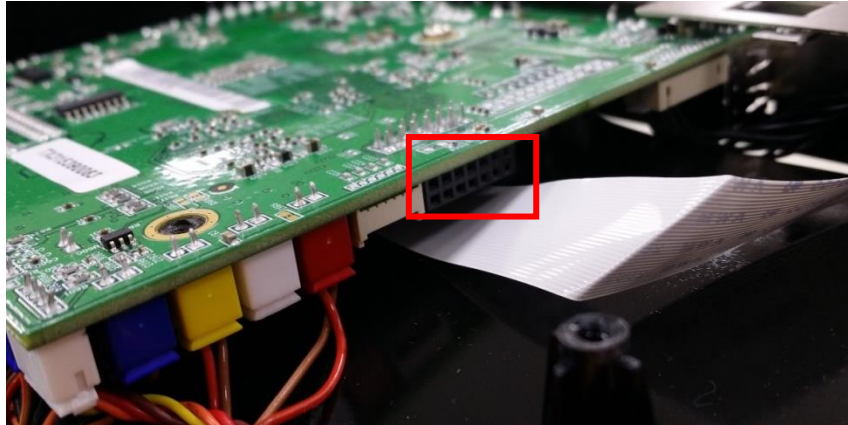
10. Hook peel-off module harness and grounding cable onto the printer lower cover. Secure back the printer bottom cover by one screw.

**Note: The grounding cable is placed as shown below in dotted line.**



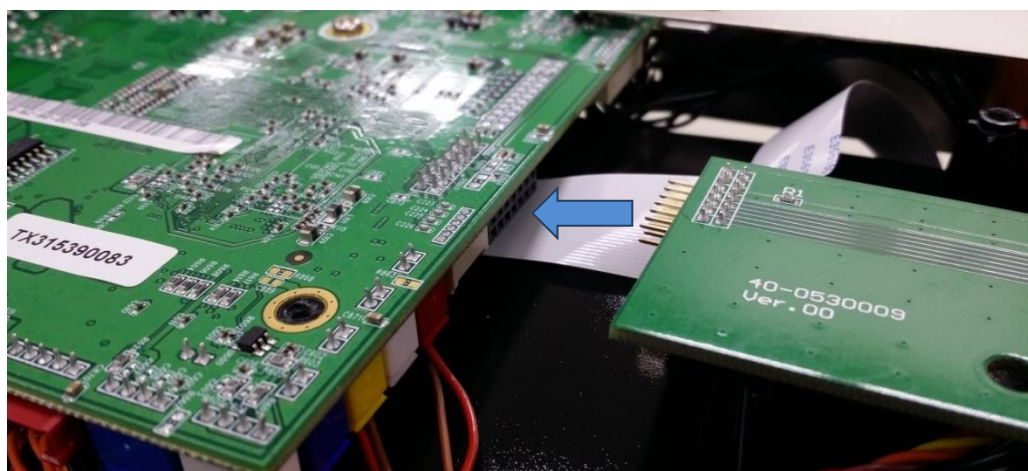
### 3.13 Slot-in Wireless Interface Board Installation (Option)

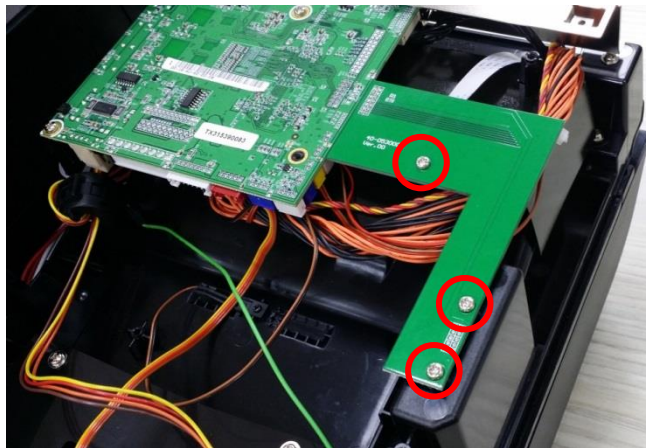
1. Please refer to the [section 3.1](#) to remove the lower cover.
2. Please check the main board if there is a black connector (as picture shown) for wireless interface board.



3. If there is no black connector on main board for wireless interface board, please remove 2 screws to replace the main board for wireless module.

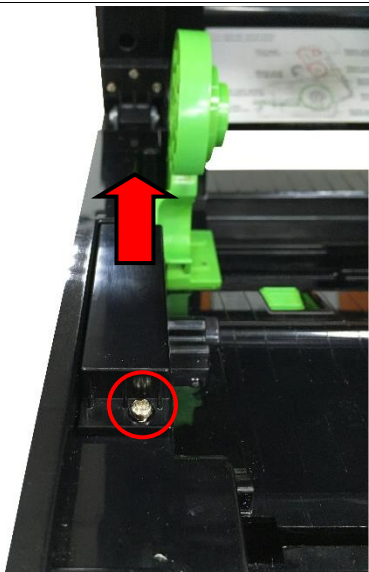
4. Install the wireless interface board into the main board.





5. Fasten 3 screws to fix wireless interface board. Reassemble the parts in the reverse procedures.

### 3.14 Slot-in Wi-Fi module Installation (Option)

|                                                                                     |                                                                                                      |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
|    | <p>1. Remove the screw and open the Wi-Fi module cover as indicated.</p>                             |
|   | <p>2. Replace the Wi-Fi module in the slot.<br/>(Please push down the module until it is fixed.)</p> |
|  | <p>3. Close the cover and fix the screw to complete the Wi-Fi module installation.</p>               |

Common | Z | D | RS-232 | Wireless |

Device Type  
☐ Built-in wireless module ☒ External wireless module

External wireless module

WLAN SSID: TEST

WLAN Encryption: WPA

WLAN Key: 123456

WLAN DHCP: ON

WLAN IP Address: 10.0.10.118

WLAN Subnet Mask: 255.255.255.0

WLAN Gateway: 10.0.10.252

Bluetooth Local Name:

Bluetooth PIN Code:

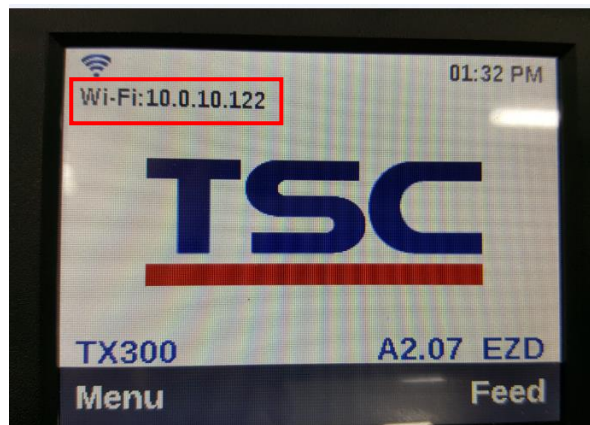
Enable Setup

Scan AP

Setup

Clear Load Save **Set** Get

4. Please use “Diagnostic tool” to set up the Wireless **WLAN SSID** and **WLAN Key**. Then click “**set**” to complete the Wi-Fi setting.
5. Restart the printer.



6. Check if the Wi-Fi has connected to the printer and shown the Wi-Fi IP address on panel.

## 4. TROUBLESHOOTING

The following guide lists the most common problems that might be encountered when operating this bar code printer. If the printer still does not function after all suggested solutions have been invoked, please contact the Customer Service Department of your purchased reseller or distributor for assistance.

### 4.1 LED Status

This section lists the common problems that according to the LED status and other problems you may encounter when operating the printer. Also, it provides solutions.

| LED Status / Color  | Printer Status | Possible Cause                                                   | Recovery Procedure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|---------------------|----------------|------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| OFF                 | No response    | No power                                                         | <ul style="list-style-type: none"><li>* Turn on the power switch.</li><li>* Check if the green LED is lit on power supply. If it is not lit on, power supply is broken.</li><li>* Check both power connections from the power cord to the power supply and from the power supply to the printer power jack if they are connected securely.</li></ul>                                                                                                                                                                                                                   |
| Solid Green         | ON             | The printer is ready to use.                                     | <ul style="list-style-type: none"><li>* No action necessary.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Green with blinking | Pause          | The printer is paused.                                           | <ul style="list-style-type: none"><li>* Press the FEED button to resume for printing.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Red with blinking   | Error          | The out of label or ribbon or the printer setting is not correct | <ol style="list-style-type: none"><li>1. Out of label or ribbon<ul style="list-style-type: none"><li>* Load a roll of label and follow the instructions in loading the media then press the FEED button to resume for printing.</li><li>* Load a roll of ribbon and follow the instructions in loading the ribbon then press the FEED button to resume for printing.</li></ul></li><li>2. Printer setting is not correct<ul style="list-style-type: none"><li>* Initialize the printer by instructions in "Power on Utility" or "Diagnostic Tool".</li></ul></li></ol> |

**Note:**

Printer status can be easily shown on the Diagnostic Tool. For more information about the Diagnostic Tool, please refer to the instruction in the software CD disk.

## 4.2 Print Quality

| Problem                                                                                                                                                     | Possible Cause                                                                           | Recovery Procedure                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Not Printing</b>                                                                                                                                         | Check if interface cable is well connected to the interface connector.                   | Re-connect cable to interface or change a new cable.                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                                                                                                                                                             | The serial port cable pin configuration is not pin to pin connected.                     | Please replace the cable with pin to pin connected.                                                                                                                                                                                                                                                                                                                                                                                                                           |
|                                                                                                                                                             | The serial port setting is not consistent between host and printer.                      | Please reset the serial port setting. Check the baud rate setting. The default baud rate setting of printer is 9600,n,8,1.                                                                                                                                                                                                                                                                                                                                                    |
|                                                                                                                                                             | The port specified in the Windows driver is not correct.                                 | Select the correct printer port in the driver.                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                                                                                                                                                             | The Ethernet IP, subnet mask, gateway is not configured properly.                        | <ul style="list-style-type: none"> <li>- Check if the Ethernet RJ-45 connector green LED is lit on.</li> <li>- Check if the Ethernet RJ-45 connector amber LED is blinking.</li> <li>- Check if the printer gets the IP address when using DHCP mode.</li> <li>- Check if the IP address is correct when using the static IP address.</li> <li>- Wait a few seconds let the printer get the communication with the server then check the IP address setting again.</li> </ul> |
| <b>No print on the label</b>                                                                                                                                | Label or ribbon loaded not correctly.                                                    | Follow the instructions in loading the media or loading the ribbon.                                                                                                                                                                                                                                                                                                                                                                                                           |
|                                                                                                                                                             | Ribbon run out.                                                                          | Loading the ribbon.                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Continuous feeding labels</b>                                                                                                                            | The printer setting may go wrong.                                                        | Please do the initialization and gap/black mark calibration.                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <ul style="list-style-type: none"> <li>- The printer status from DiagTool shows "<b>Paper Jam</b>".</li> <li>- The LCD shows "<b>Paper Jam</b>".</li> </ul> | Gap/black mark sensor sensitivity is not set properly (sensor sensitivity is not enough) | Calibrate the gap/black mark sensor.                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                                                                                                                                                             | Make sure label size is set properly.                                                    | Set label size exactly as installed paper in the labeling software or program.                                                                                                                                                                                                                                                                                                                                                                                                |
|                                                                                                                                                             | Labels may be stuck inside the printer mechanism near the sensor area.                   | Remove the stuck label.                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

# TX200/ TX300/ TX600

## Bar Code Printer Service Manual

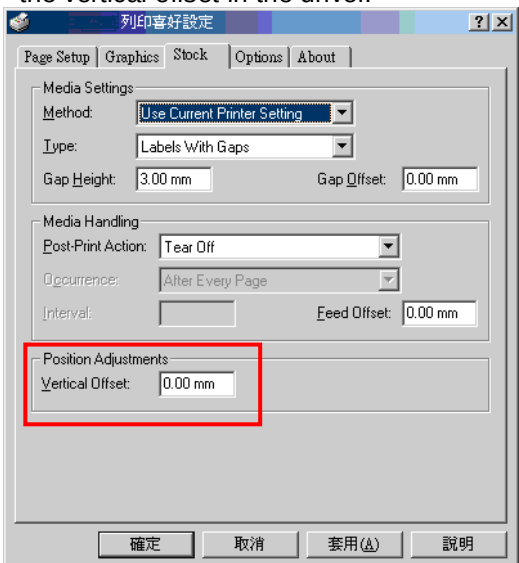


|                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Poor Print Quality</b>                                                                                                                      | <ul style="list-style-type: none"> <li>* Ribbon and media is loaded incorrectly</li> <li>* Dust or adhesive accumulation on the print head.</li> <li>* Print density is not set properly.</li> <li>* Printhead element is damaged.</li> <li>* Ribbon and media are incompatible.</li> <li>* The printhead pressure is not set properly.</li> </ul> | <ul style="list-style-type: none"> <li>* Reload the supply.</li> <li>* Clean the print head.</li> <li>* Clean the platen roller.</li> <li>* Adjust the print density and print speed.</li> <li>* Run printer self-test and check the print head test pattern if there is dot missing in the pattern.</li> <li>* Change proper ribbon or proper label media.</li> <li>* The print head mechanism does not latch the print head properly.</li> </ul> |
| <b>Power indicator does not illuminate</b>                                                                                                     | The power cord is not properly connected.                                                                                                                                                                                                                                                                                                          | Plug the power cord in printer and outlet.<br>Switch the printer on.                                                                                                                                                                                                                                                                                                                                                                               |
| - The printer status from DiagTool shows " <b>Head Open</b> ".<br>- The LCD shows " <b>Carriage Open</b> ".                                    | The printer carriage is open.                                                                                                                                                                                                                                                                                                                      | Please close the print carriage.                                                                                                                                                                                                                                                                                                                                                                                                                   |
| - The printer status from DiagTool shows " <b>Ribbon End Err.</b> " Or " <b>Ribbon Encoder Err.</b> "<br>- The LCD shows " <b>No Ribbon</b> ". | Running out of ribbon.<br>The ribbon is installed incorrectly.                                                                                                                                                                                                                                                                                     | Supply a new ribbon roll.<br>Please re-install the ribbon.                                                                                                                                                                                                                                                                                                                                                                                         |
| - The printer status from DiagTool shows " <b>Out of Paper</b> ".<br>- The LCD shows " <b>No Paper</b> ".                                      | Running out of label.<br>The label is installed incorrectly.<br>Gap/black mark sensor is not calibrated.                                                                                                                                                                                                                                           | Supply a new label roll.<br>Please reinstall the label roll.<br>Calibrate the gap/black mark sensor.                                                                                                                                                                                                                                                                                                                                               |
| - The LCD shows " <b>Take Label</b> ".                                                                                                         | * Peel-off function is enabled.                                                                                                                                                                                                                                                                                                                    | <ul style="list-style-type: none"> <li>* If the peel-off module is installed, please remove the label.</li> <li>* If there is no peel-off module in front of the printer, please switch off the printer and install it.</li> <li>* Check if the connector is plugging correctly.</li> </ul>                                                                                                                                                        |
| <b>Memory full ( FLASH / DRAM )</b>                                                                                                            | * The space of FLASH/DRAM is full.                                                                                                                                                                                                                                                                                                                 | <ul style="list-style-type: none"> <li>* Delete unused files in the FLASH/DRAM.</li> <li>* The max. numbers of DRAM is 256 files.</li> <li>* The max. user addressable memory space of DRAM is 256KB.</li> <li>* The max. numbers of file of FLASH is 256 files.</li> <li>* The max. user addressable memory space of FLASH is 2560KB.</li> </ul>                                                                                                  |
| <b>microSD card is unable to use</b>                                                                                                           | <ul style="list-style-type: none"> <li>* microSD card is damaged.</li> <li>* microSD card doesn't insert correctly.</li> <li>* Use the non-approved microSD card manufacturer.</li> </ul>                                                                                                                                                          | <ul style="list-style-type: none"> <li>* Use the supported capacity microSD card.</li> <li>* Insert the microSD card again.</li> <li>* The supported microSD card spec and the approved microSD card manufacturers, please refer to section 1.3.</li> </ul>                                                                                                                                                                                        |

# TX200/ TX300/ TX600

## Bar Code Printer Service Manual



|                                                            |                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                |
|------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Cutter is not working</b>                               | <ul style="list-style-type: none"> <li>* The connector is loose.</li> <li>* Cutter jam.</li> <li>* Cutter PCB is damaged.</li> </ul>                                                                                                                                    | <ul style="list-style-type: none"> <li>* Plug in the connect cable correctly.</li> <li>* Remove the label.</li> <li>* Make sure the thickness of label is less than 0.19 mm.</li> <li>* Replace a cutter driver IC board.</li> </ul>                                                                                           |
| <b>Skip labels when printing</b>                           | <ul style="list-style-type: none"> <li>* Label size is not specified properly.</li> <li>* Sensor sensitivity is not set properly.</li> <li>* The media sensor is covered with dust.</li> </ul>                                                                          | <ul style="list-style-type: none"> <li>* Check if label size is setup correctly.</li> <li>* Calibrate the sensor by Auto Gap or Manual Gap options.</li> <li>* Clear the GAP/Black mark sensor by blower.</li> </ul>                                                                                                           |
| <b>The printing position of small label is incorrect</b>   | <ul style="list-style-type: none"> <li>* Media sensor sensitivity is not set properly.</li> <li>* Label size is incorrect.</li> <li>* The parameter Shift Y in the LCD menu is incorrect.</li> <li>* The vertical offset setting in the driver is incorrect.</li> </ul> | <ul style="list-style-type: none"> <li>* Calibrate the sensor sensitivity again.</li> <li>* Set the correct label size and gap size.</li> <li>* If using the software BarTender, please set the vertical offset in the driver.</li> </ul>  |
| <b>Missing printing on the left or right side of label</b> | <ul style="list-style-type: none"> <li>* Wrong label size setup.</li> </ul>                                                                                                                                                                                             | <ul style="list-style-type: none"> <li>* Set the correct label size.</li> </ul>                                                                                                                                                                                                                                                |
| <b>RTC time is incorrect when reboot the printer</b>       | <ul style="list-style-type: none"> <li>* The battery has run down.</li> </ul>                                                                                                                                                                                           | <ul style="list-style-type: none"> <li>* Check if there is a battery on the main board.</li> </ul>                                                                                                                                                                                                                             |
| <b>Wrinkle problem</b>                                     | <ul style="list-style-type: none"> <li>* Ribbon installation is incorrect.</li> <li>* Media installation is incorrect.</li> <li>* Print density is incorrect.</li> <li>* Media feeding is incorrect.</li> </ul>                                                         | <ul style="list-style-type: none"> <li>* Please set the suitable density to have good print quality.</li> <li>* Make sure the label guide touch the edge of the media guide.</li> </ul>                                                                                                                                        |
| <b>Gray line on the blank label</b>                        | <ul style="list-style-type: none"> <li>* The print head is dirty.</li> <li>* The platen roller is dirty.</li> </ul>                                                                                                                                                     | <ul style="list-style-type: none"> <li>* Clean the print head.</li> <li>* Clean the platen roller.</li> </ul>                                                                                                                                                                                                                  |
| <b>Irregular printing</b>                                  | <ul style="list-style-type: none"> <li>* The printer is in Hex Dump mode.</li> <li>* The RS-232 setting is incorrect.</li> </ul>                                                                                                                                        | <ul style="list-style-type: none"> <li>* Turn off and on the printer to skip the dump mode.</li> <li>* Re-set the Rs-232 setting.</li> </ul>                                                                                                                                                                                   |

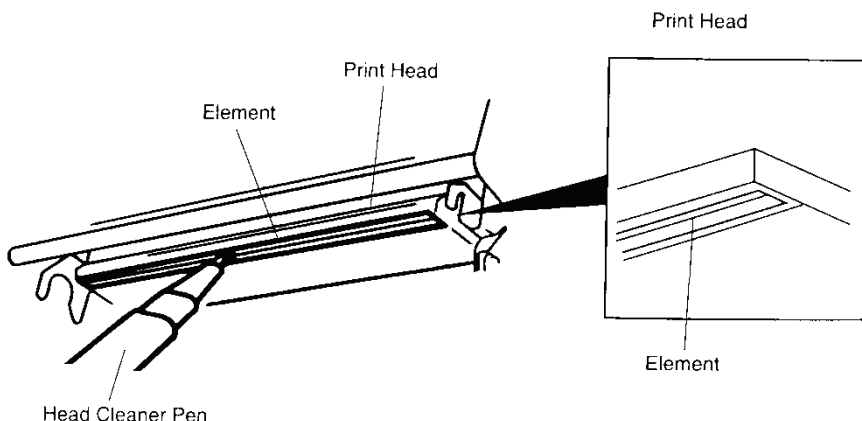
## 5. MAINTENANCE

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

1. Please use one of following material to clean the printer.

- Cotton swab (Head cleaner pen)
- Lint-free cloth
- Vacuum / Blower brush
- 100% ethanol

2. The cleaning process is described as following

| Printer Part             | Method                                                                                                                                                                                                                                                                                    | Interval                                               |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|
| <b>Print Head</b>        | <ol style="list-style-type: none"> <li>1. Always turn off the printer before cleaning the print head.</li> <li>2. Allow the print head to cool for a minimum of one minute.</li> <li>3. Use a cotton swab (Head cleaner pen) and 100% ethanol to clean the print head surface.</li> </ol> | Clean the print head when changing a new label roll    |
|                          |                                                                                                                                                                                                       |                                                        |
| <b>Platen Roller</b>     | <ol style="list-style-type: none"> <li>1. Turn the power off.</li> <li>2. Rotate the platen roller and wipe it thoroughly with 100% ethanol and a cotton swab, or lint-free cloth.</li> </ol>                                                                                             | Clean the platen roller when changing a new label roll |
| <b>Tear Bar/Peel Bar</b> | Use the lint-free cloth with 100% ethanol to wipe it.                                                                                                                                                                                                                                     | As needed                                              |

## TX200/ TX300/ TX600 Bar Code Printer Service Manual



|                 |                                   |           |
|-----------------|-----------------------------------|-----------|
| <b>Sensor</b>   | Compressed air or vacuum          | Monthly   |
| <b>Exterior</b> | Wipe it with water-dampened cloth | As needed |
| <b>Interior</b> | Brush or vacuum                   | As needed |

**Note:**

- Do not touch printer head by hand. If you touch it careless, please use ethanol to clean it.
- Please use 100% Ethenol. DO NOT use medical alcohol, which may damage the printer head.
- Regularly clean the print head and supply sensors once change a new ribbon to keep printer performance and extend printer life.

## UPDATE HISTORY

| Date              | Content                                                          | Editor  |
|-------------------|------------------------------------------------------------------|---------|
| <b>2015/10/21</b> | Modify section 1.3 (Recommended SD card specification)           | Camille |
| <b>2015/11/17</b> | Add section 3.12 (Peel-off module installation)                  | Camille |
| <b>2015/12/17</b> | Add section 3.13 (Slot-in Wireless interface board installation) | Camille |
| <b>2017/9/29</b>  | Add section 3.14 (Slot-in Wi-Fi module Installation (Option))    | Kate    |
| <b>2018/11/20</b> | Modify section 3.12 (Peel-off Module Installation (Option))      | Kate    |
|                   |                                                                  |         |
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