

TE200/TE210/TE300/TE310 Series

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

**SERVICE
MANUAL**

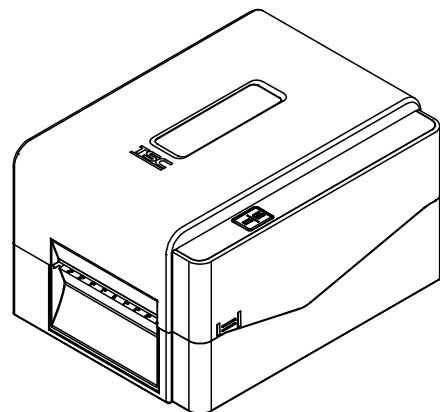


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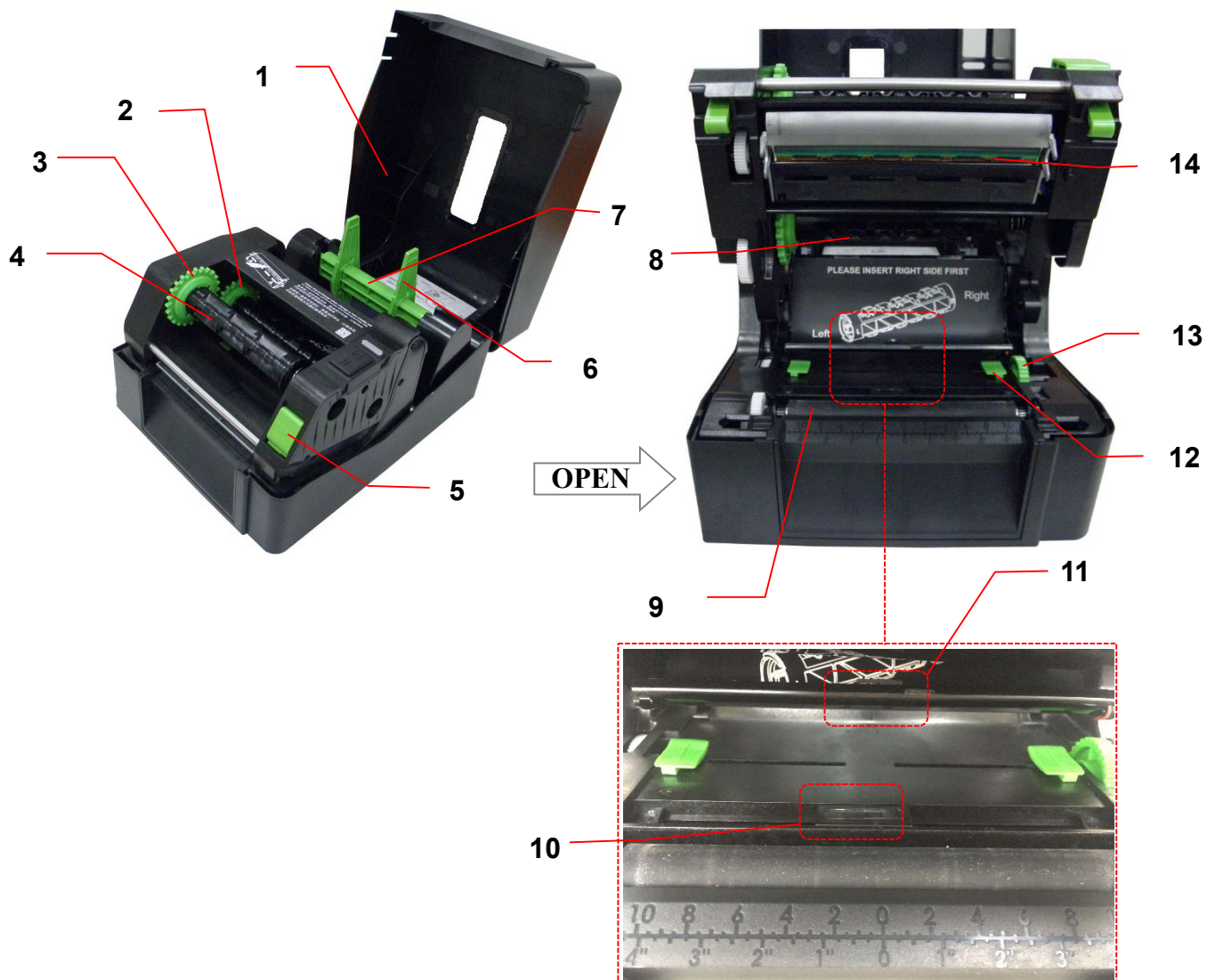
1. OVERVIEW

1.1 Front View



- 1. LED indicator
- 2. Feed/Pause button
- 3. Top cover open tab
- 4. Paper exit chute

1.2 Interior View

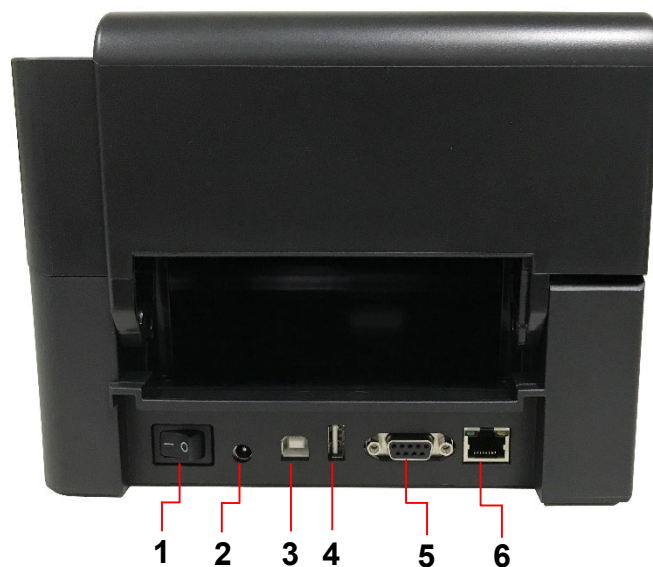


- 1. Printer top cover
- 2. Ribbon supply hub
- 3. Ribbon rewind hub
- 4. Ribbon rewind spindle
- 5. Print head release button
- 6. Fixing tabs
- 7. Media supply spindle

- 8. Ribbon supply spindle
- 9. Platen roller
- 10. Black mark sensor
- 11. Gap sensor
- 12. Media guide
- 13. Media guide hub
- 14. Print head

WARNING
HAZARDOUS MOVING PARTS
KEEP FINGERS AND OTHER
BODY PARTS AWAY

1.3 Rear View



1. Power switch
2. Power jack socket
3. USB interface (USB 2.0/Full speed mode)
4. USB host (TE210/TE310 Series only)
5. RS-232 interface (TE210/TE310 Series only)
6. Ethernet interface (TE210/TE310 Series only)

Note:

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

*** Recommended SD card specification.**

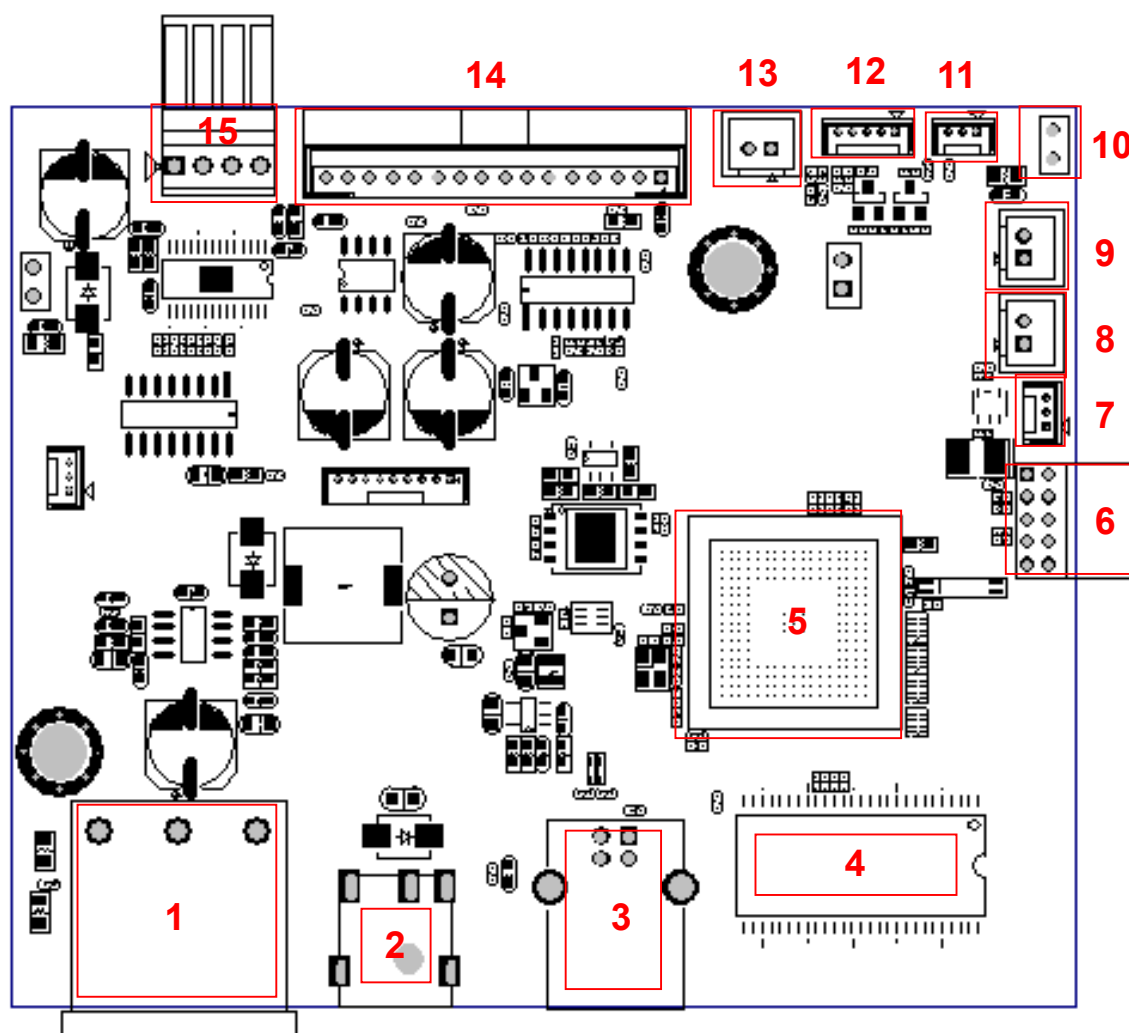
SD card spec	SD card capacity	Approved SD card manufacturer
V1.0, V1.1	microSD 128 MB	Transcend, Panasonic
V1.0, V1.1	microSD 256 MB	Transcend, Panasonic
V1.0, V1.1	microSD 512 MB	Panasonic
V1.0, V1.1	microSD 1 GB	Transcend, Panasonic
V2.0 SDHC CLASS 4	microSD 4 GB	Panasonic
V2.0 SDHC CLASS 6	microSD 4 GB	Transcend

- The DOS FAT file system is supported for the SD card.
- Folders/files stored in the SD card should be in the 8.3 filename format.

2. ELECTRONICS

2.1 Summary of Board Connectors

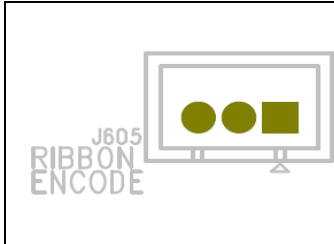

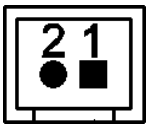
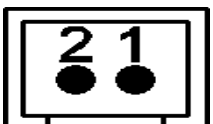
Main board for TE200/TE300 Series



TE200/TE210/TE300/TE310 Series

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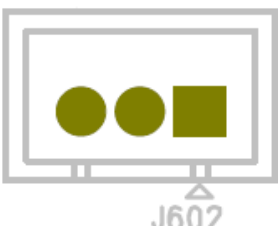
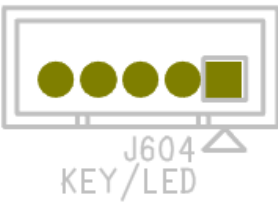



Connector	Description			
1	Switch			
2	DCIN			
3	USB connector			
4	SDRAM			
5	MCU			
6	BT connector			
7	Ribbon Encode connector			
		Pin	Description	Voltage
		1	Power	3.3V
		2	Encoder signal	3.3V
		3	GND	0V
8	Gap sensor emit connector			
		Pin	Description	Voltage
		1	Power	3.3V
		2	Gap sensor emitter	Emitter on : 2.1~2.3V Emitter off: 2.6~2.8V
9	Gap sensor receive connector			
		Pin	Description	Voltage
		1	Power	3.3V
		2	Gap sensor receiver AD	0~3.3V
10	ESD_GND_PIN			
		Pin	Description	Voltage
		1	GND	0V
		2	GND	0V
11	BM sensor connector			

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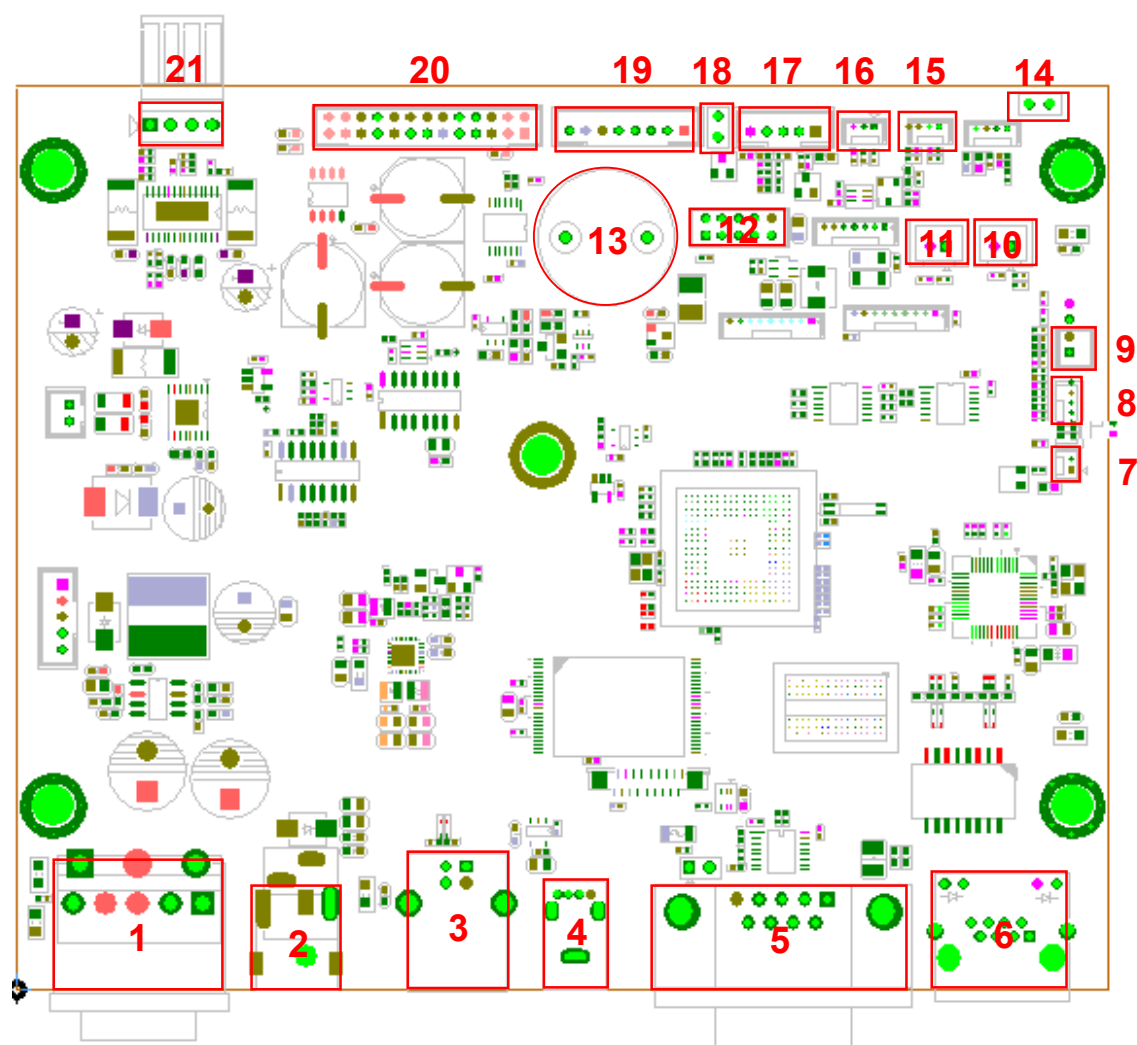


		Pin	Description	Voltage
		1	Power	3.3V
		2	BM sensor emitter	2.1~2.2V: Emitter on 2.6~2.7V: Emitter off
		3	BM sensor receiver	A/D : 0~3.3V
12	Key& LED connector			
		Pin	Description	Voltage
		1	POWER	3.3V
		2	LED Green	LED on:1.1~1.4V light LED off:1.6~1.9V light
		3	LED Red	LED on:1.4~1.7V light LED off:1.8~2.1V light
		4	KEY	0V: Push key 3.3V: Stand-by
		5	GND	0V
13	Head open sensor connector			
		Pin	Description	Voltage
		1	Head open switch	0V : Head close 3.3V : Head open
		2	GND	0V
14	KPZ-108-8TAE1-TSCA			
15	Step motor connector			

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Main board for TE210/TE310 Series



Connector	Description	Remark
1	Power switch connector	SW1
2	Power supply (24V DC) connector	DCIN1
3	USB Device connector	USB1
4	USB Host connector	USB2
5	RS-232C connector	RS1
6	Ethernet connector	LAN1
7	RTC battery connector	BT1

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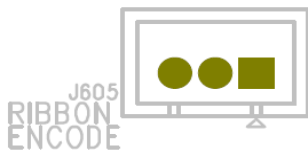
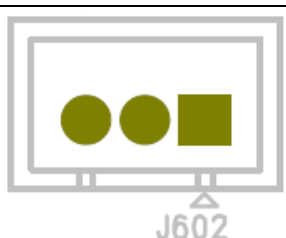
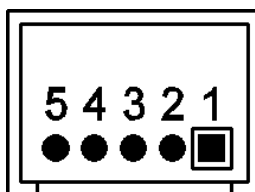
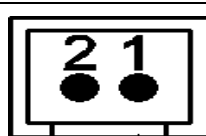
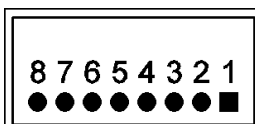


8	LED & KEY connector			CON19	
		Pin	Description	Voltage	
		1	POWER	3.3V	
		2	LED Green	LED light on:1.1~1.4V LED light off:1.6~1.9V	
		3	LED Red	LED light on:1.4~1.7V LED light off:1.8~2.1V	
		4	KEY	0V: Push key 3.3V: Stand-by	
		5	GND	0V	
9	Head open sensor connector			CON1	
		Pin	Description	Voltage	
		1	Head open switch	0V : Head close 3.3V : Head open	
		2	GND	0V	
10	Gap sensor receiver connector			CON5	
		Pin	Description	Voltage	
		1	Power	3.3V	
		2	Gap sensor receiver AD	0~3.3V	
11	GAP sensor connector (for Transmit signals)			CON20	
		Pin	Description	Voltage	
		1	Power	3.3V	
		2	Gap sensor emitter	Emitter on : 2.1~2.3V Emitter off: 2.6~2.8V	
12	Wi-Fi / Bluetooth connector			CON13	
13	Buzzer (Factory option)			BZ1	
14	ESD_GND_PIN			JP1	
		Pin	Description	Voltage	
		1	GND	0V	
		2	GND	0V	
15	Ribbon Encode connector			CON12	
		Pin	Description	Voltage	
		1	Power	3.3V	
		2	Encoder signal	3.3V	

TE200/TE210/TE300/TE310 Series

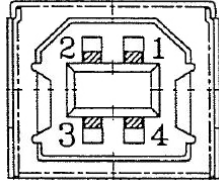
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			3	GND	0V	
16	BM sensor connector				CON21	
		Pin	Description	Voltage		
		1	Power	3.3V		
		2	BM sensor emitter	2.1~2.2V: Emitter on 2.6~2.7V: Emitter off		
		3	BM sensor receiver	A/D : 0~3.3V		
17	PEEL sensor connector				CON10	
		Pin	Description	Voltage		
		1	Power	3.3V		
		2	Reserved			
		3	Peel sensor emitter	Emitter on : 2.1~2.3V Emitter off: 2.6~2.8V		
		4	Peel sensor receiver AD	0~3.3V		
5	GND	0V				
18	ESD_GND_PIN				JP2	
		Pin	Description	Voltage		
		1	GND	0V		
		2	GND	0V		
19	Cutter connector				CON6	
		Pin	Description	Voltage		
		1	Cutter power	24V		
		2	GND	0V		
		3	Cutter direction	0V: Cutter positive cut 5V: Cutter negative cut		
		4	Cutter enable	0V: Cutter work 5V: Cutter stop		
		5	Cutter position sensor switch	0V: Cutter stop 3.3V: Cutter work		
		6	GND	0V		
		7	Logic power	5V		
	8	Reserved				
20	Print head connector (TE-210 / TX-310)				CON24	
21	STEP_MOTOR connector				CON16	

2.2 Pin Configuration

USB

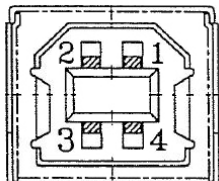
	PIN	CONFIGURATION
	1	N/C
	2	D-
	3	D+
	4	GND

TE210/TE310 Series only:

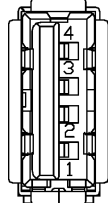
RS-232C

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

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

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Ethernet

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

3. MECHANISM

Please turn off the power switch and unplug the power adapter before replacing parts.

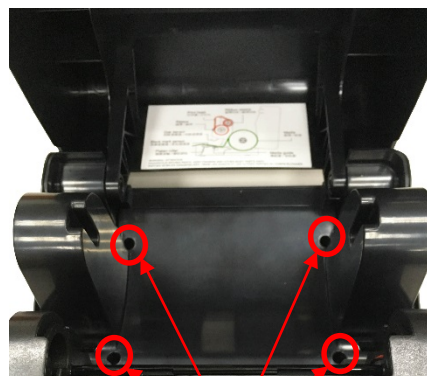
3.1 Replacing the Print Engine Mechanism



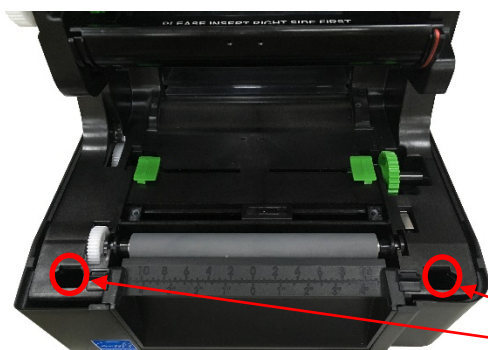
1. Open the printer top cover by pressing the top cover open tabs located on each side of the printer.



2. Remove the four screws on media holder and disengage it.

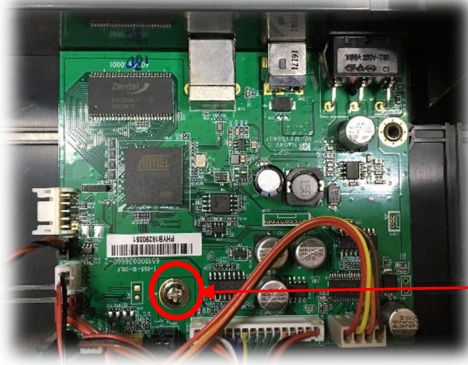


Screws



3. Remove the two screws on the print engine which besides the platen roller.

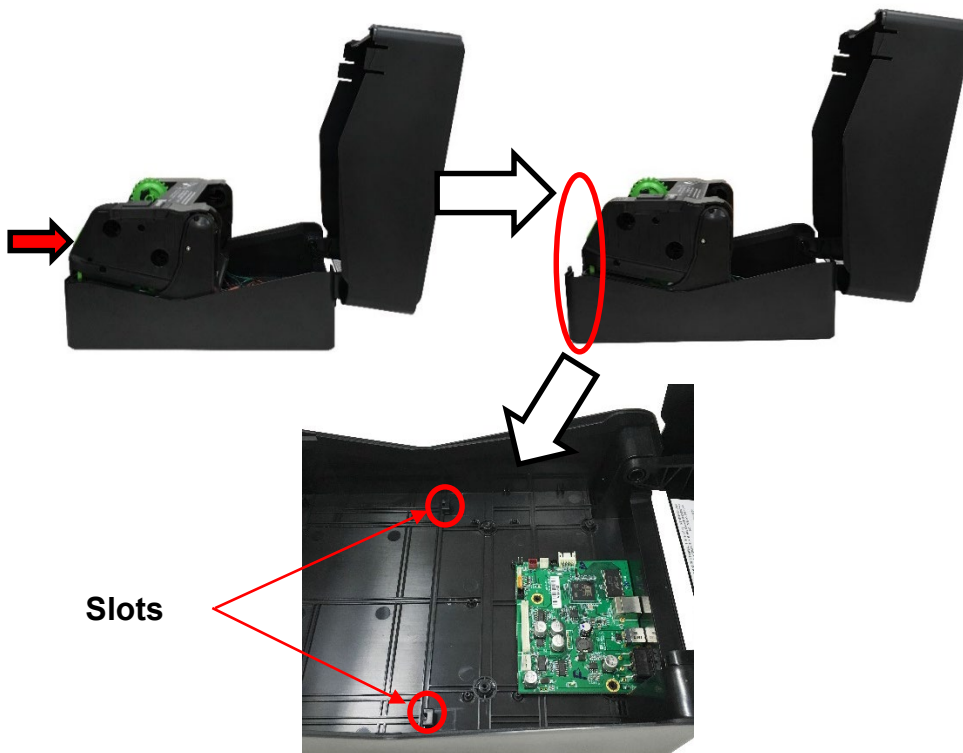
Screws



4. Please remove the screw and all of the cables connected to the main board and disengage the print engine.

Screw

5. Push the print engine forward and leave the slots, then lift it up to disconnect the print cover assembly.



Slots

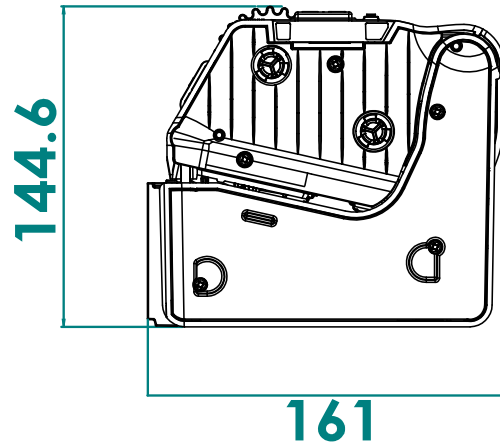
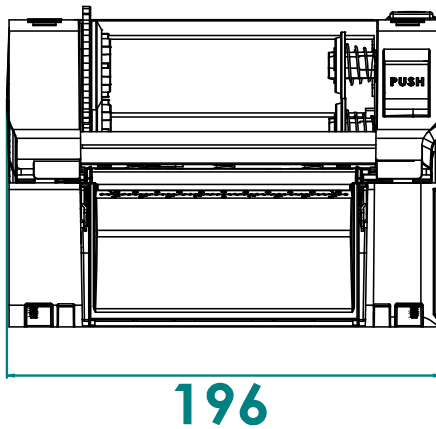


6. Reassemble the parts in the reverse procedure.

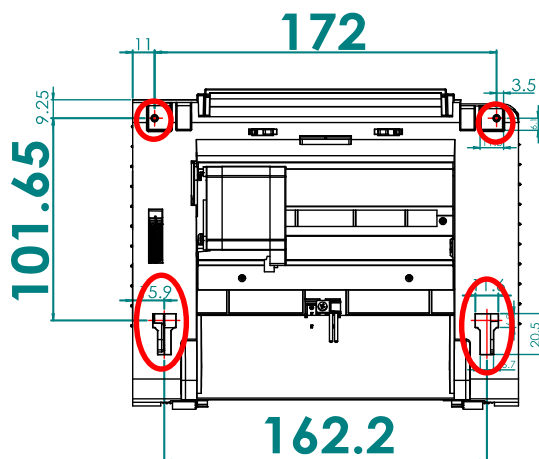
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Print engine mechanism measurements



Bottom view



Note:

1. All dimensions in millimeters.
2. There are 4 location holes in this print engine mechanism, the fixing location holes are marked in red on bottom view drawing which can be fixed by the customer's reference.

3.2 Replacing the Main Board

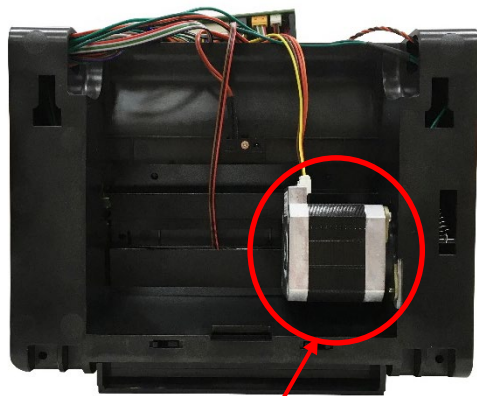


1. Please refer to the [section 3.1](#) to remove the print engine.



2. Remove/replace the main board.
3. Reassemble the parts in the reverse procedure.

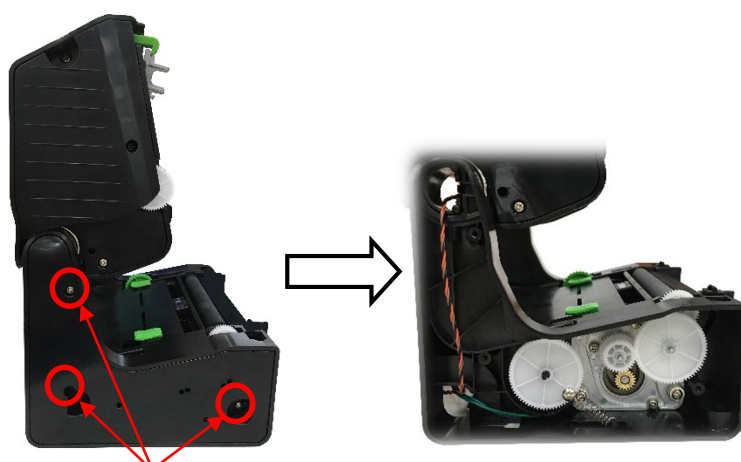
3.3 Replacing the Stepping Motor Module



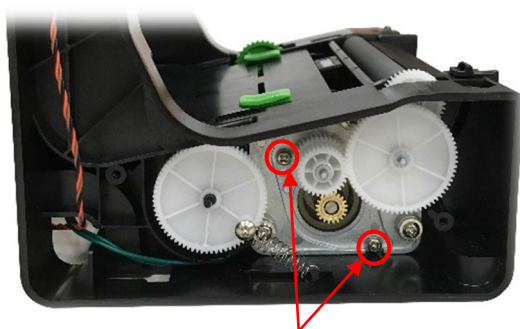
Stepping Motor

1. Please refer to the [section 3.1](#) to remove the print engine mechanism.
2. Turn the print engine mechanism upside down and the stepping motor is installed below as indicated.

3. Remove the three screws on the left side lower cover and open it.

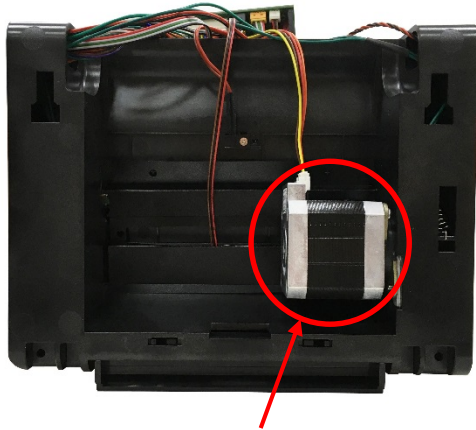


Screws



Screws

4. After the stepping motor left side lower cover opened, please remove the two screws as indicated to disengage the stepping motor module.



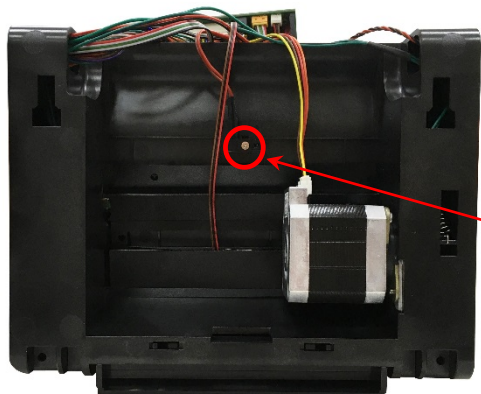
Stepping Motor

5. Disconnect the stepping motor connectors on the main board.
6. Remove/replace the stepping motor module.
7. Reassemble the parts in the reverse procedure.



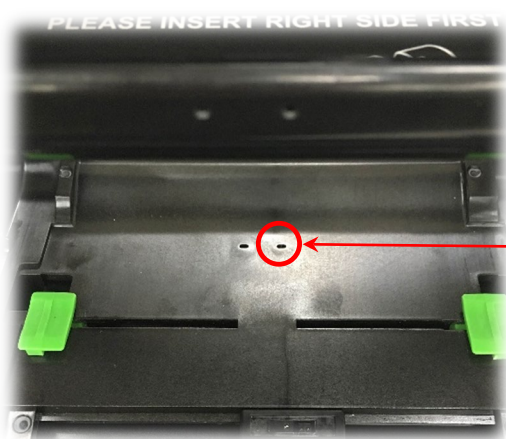
Steeping motor module

3.4 Replacing the Gap Sensor Module



1. Please refer to the [section 3.1](#) to remove the print engine.
2. Turn the print engine upside down and remove the screw as indicated.

Screw on Gap Sensor (receiver)



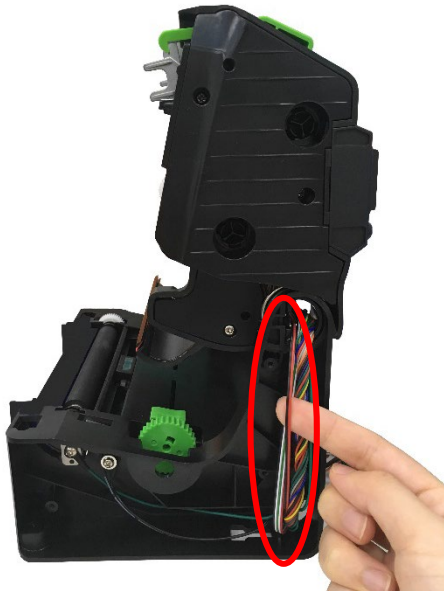
3. Remove/replace the gap sensor (receiver).

Gap sensor (receiver)
(Fixed position, shift 4 mm to right)



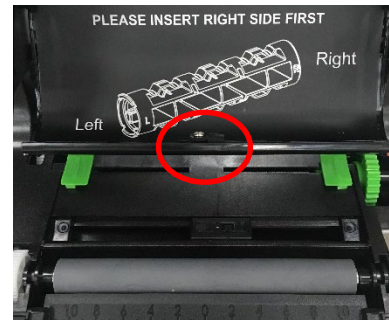
4. Remove the three screws on lower print engine right side cover as indicated and open it.

Screws

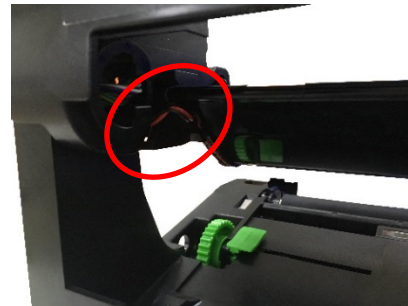


**Cable of gap sensor emitter
(black with red)**

5. Remove/replace the gap sensor emitter.
6. Reassemble the parts in the reverse procedure.

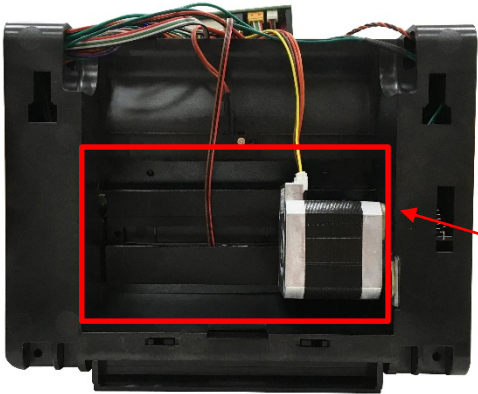
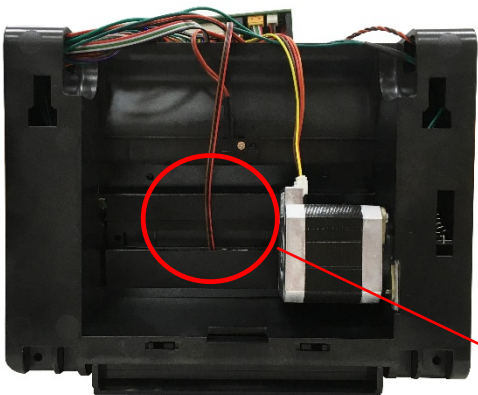
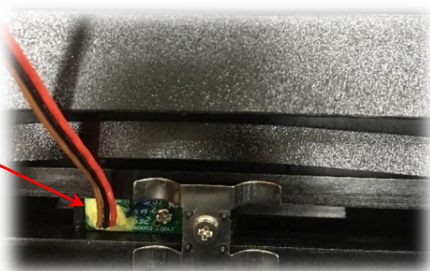



Gap sensor (transmitter)



Cable of gap sensor (transmitter)

3.5 Replacing the Black-mark Sensor Module

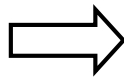
	<ol style="list-style-type: none">1. Please refer to the section 3.3 to remove the stepping motor module.2. Open the Mylar film cover. <p>Mylar film</p>
	<ol style="list-style-type: none">3. Remove the screw on the black-mark sensor module. Remove/replace the black-mark sensor module. 
 <p>Black-mark sensor</p>	<ol style="list-style-type: none">4. Reassemble the parts in the reverse procedure.

3.6 Replacing the Platen Roller Assembly

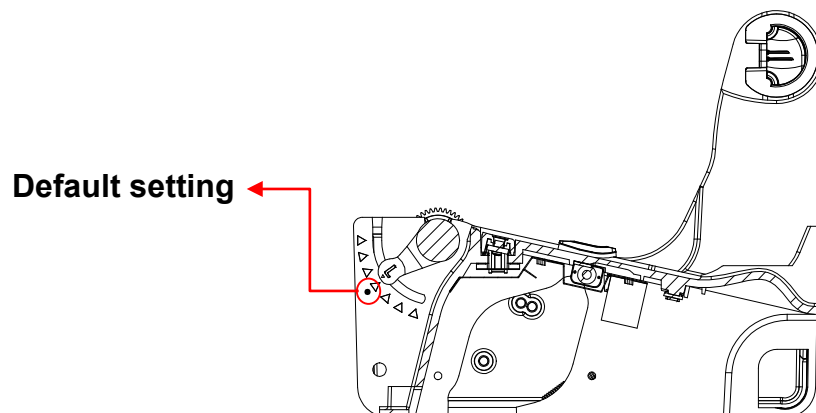


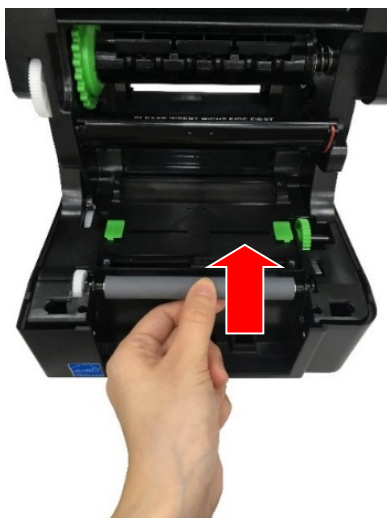
1. Open the printer top cover then push the print head release button to open the print head mechanism.
2. Remove the lower front panel.

3. Disengage the platen roller by pulling out the tabs located on each side. Rotate the tabs into the upward position. (see pictures below)



Note: The white mark is the default setting of tab position





4. Pulling upward to remove/replace the platen roller assembly.
5. Reassemble the parts in the reverse procedure.



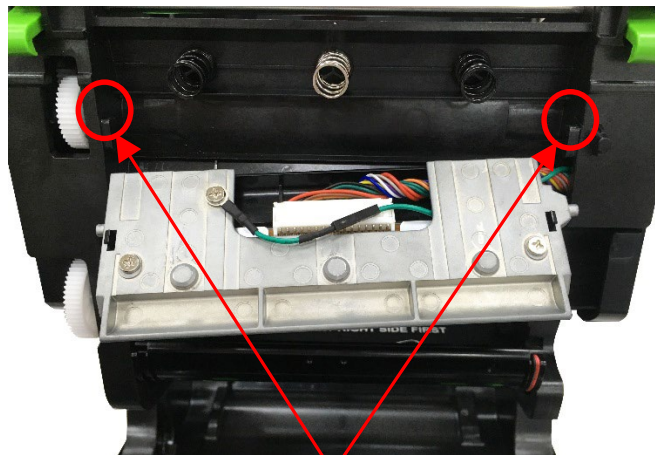
Platen roller module

3.7 Replacing the Print Head Module



1. Open the printer top cover and press the print head release button to open the print head mechanism.

2. Disengage the print head module by push it forward and leave the slots as indicated.

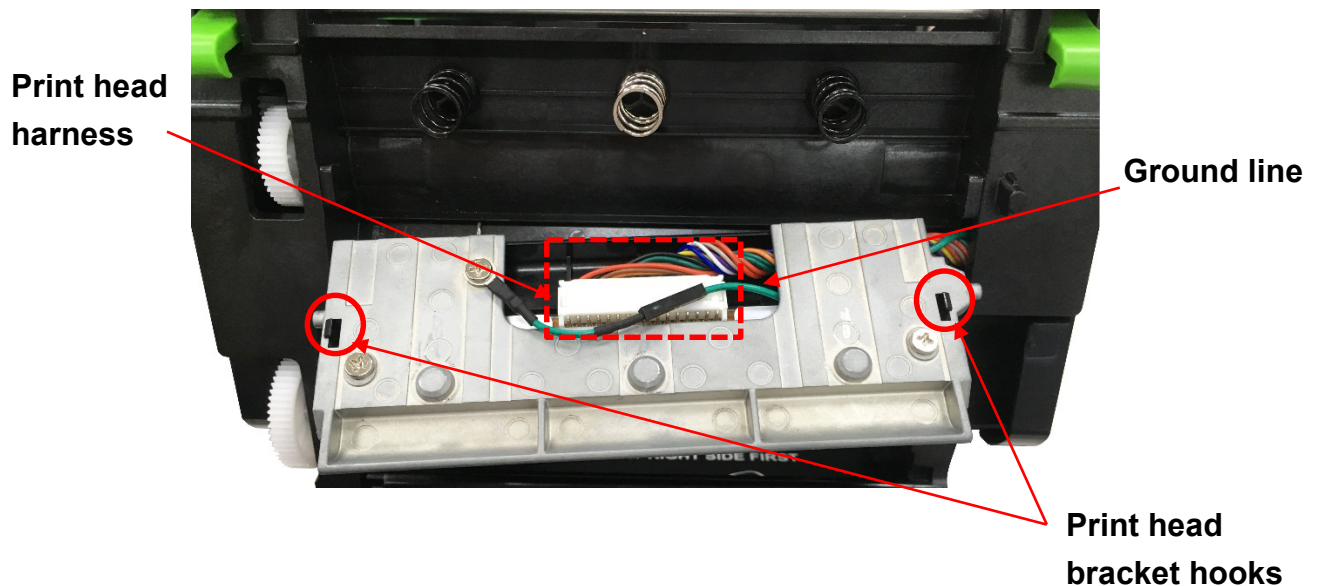


Slots

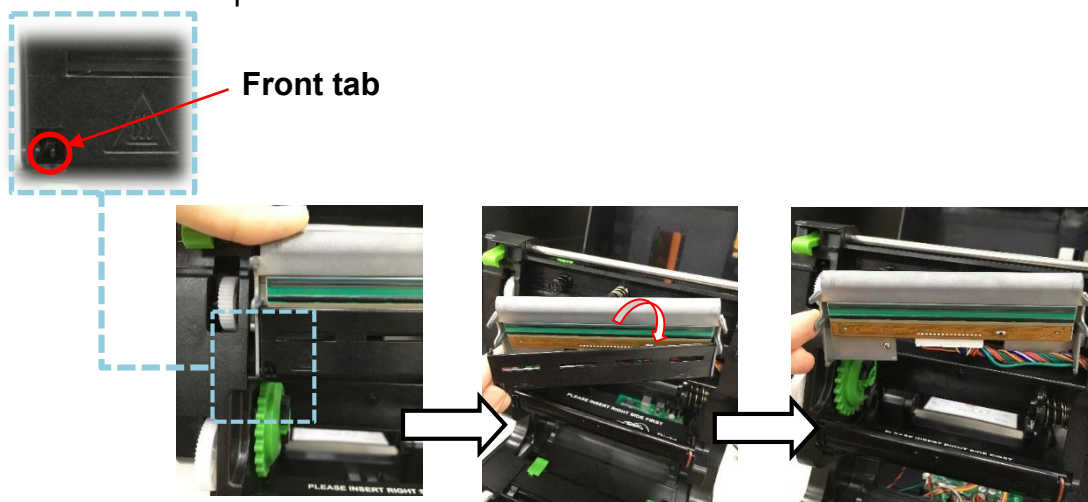
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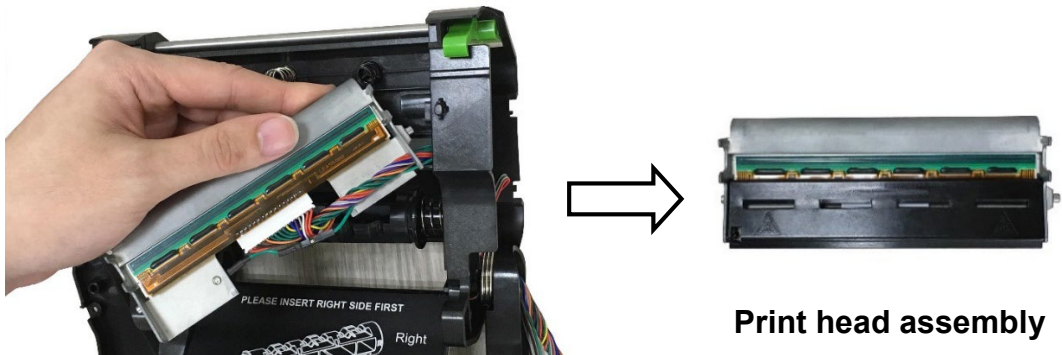
3. Disconnect the ground line (green cable) and print head harness.
4. Push down and release the print head bracket hooks as indicated.



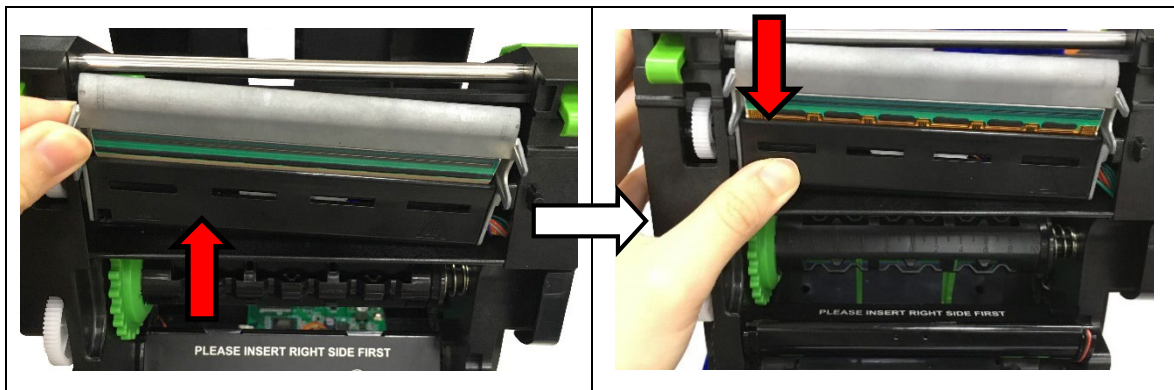
5. Push the front tab of the print head bracket to the right side and open the print head bracket as pictured.



6. Remove/Replace the print head assembly.



7. Reassemble the parts in the reverse procedures.



Note: If the print quality became poor after changed the print head, please switch the calibration on the print head engine to adjust the print quality.

3.8 Installing the Cutter Module (TE210/TE310 Series option)



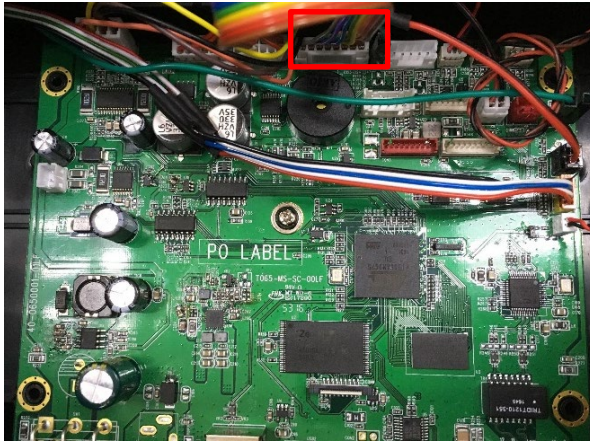
1. Open the printer top cover by pressing the top cover open tabs located on each side of the printer.



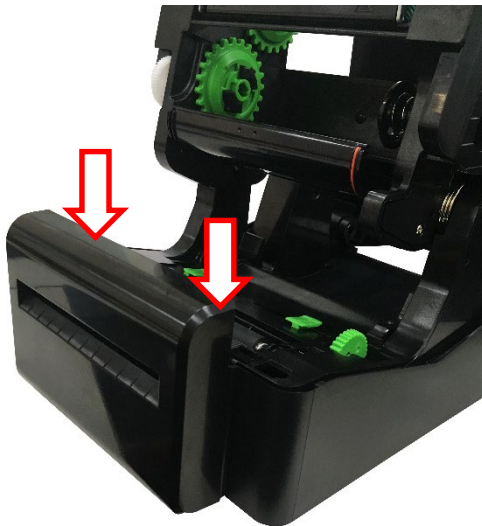
2. Push the print head release button to open the print head mechanism.
3. Remove the lower front panel.



4. Insert the cable and ground line of cutter module through the hole as indicated to the main board.
5. Remove the four screws on media holder and disengage it.



6. Connect the cable and ground line to the socket on main board as indicated.



7. Push down the cutter module and fix on the lower front panel location hole.



8. Complete the installation of cutter module.
9. Reassemble the parts in the reverse procedures.

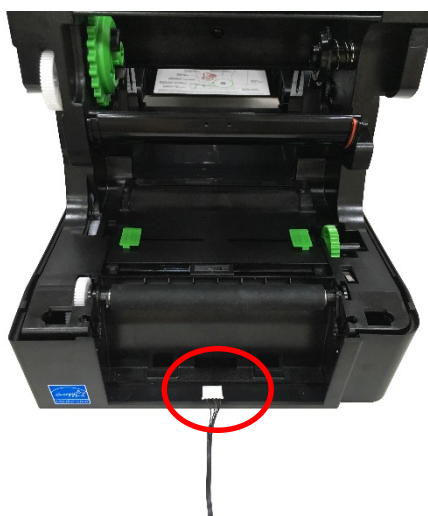
3.9 Installing the Peeler Module (TE210/TE310 Series option)



1. Open the printer top cover by pressing the top cover open tabs located on each side of the printer.

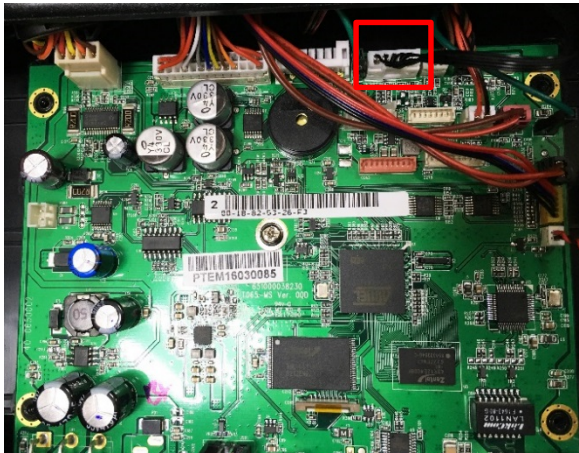


2. Push the print head release button to open the print head mechanism and remove the lower front panel.

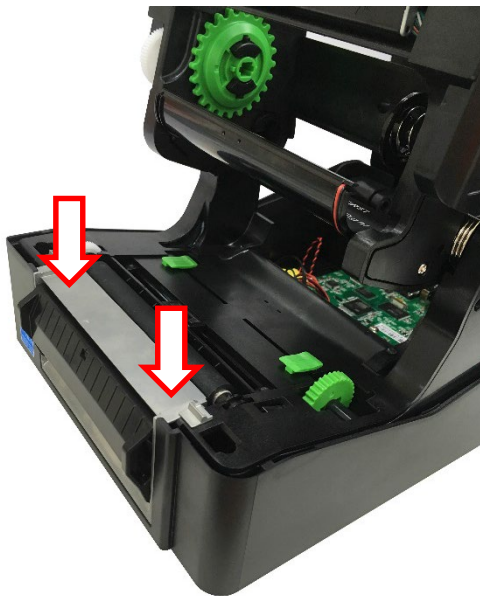


3. Insert the cable of peeler module through the hole as indicated to the main board.
4. Remove the four screws on media holder and disengage it.

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5. Connect the cable to the socket on main board as indicated.



6. Push down the peeler module and fix on the lower front panel location hole.
7. Close the print head mechanism and printer cover.



8. Close the media cover and complete peeler module installation.
9. Reassemble the parts in the reverse procedures.

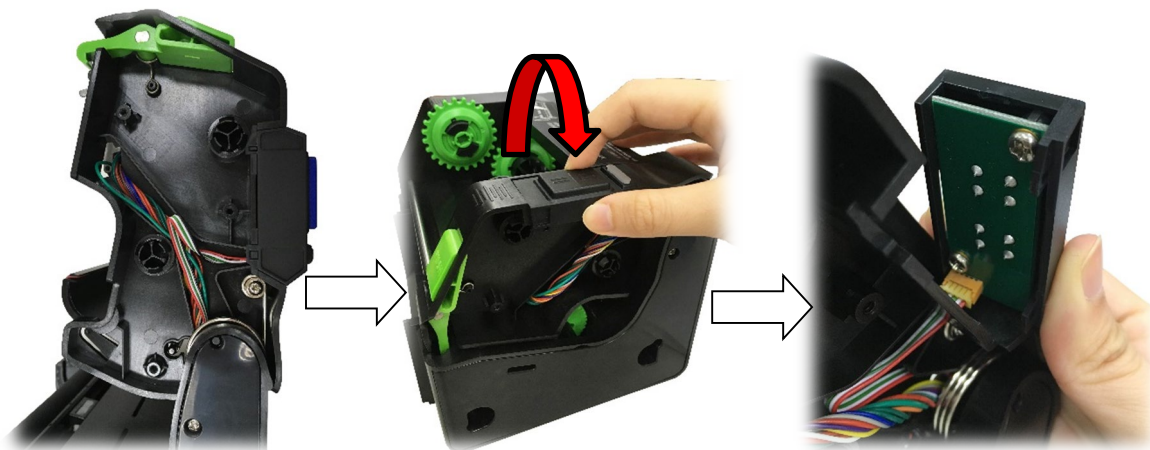
3.10 Replacing the Key Module (LED Module/Option)



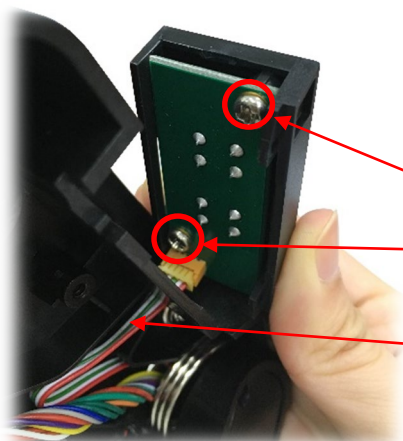
1. Please refer to the [section 3.1](#) to take out the print engine mechanism.
2. Remove the three screws on right side upper cover and open it.

Screws

3. After the right side upper cover opened, please disengage the LED module.



4. Remove the two screws and cable on the LED key module.
5. Remove/replace the LED key module.




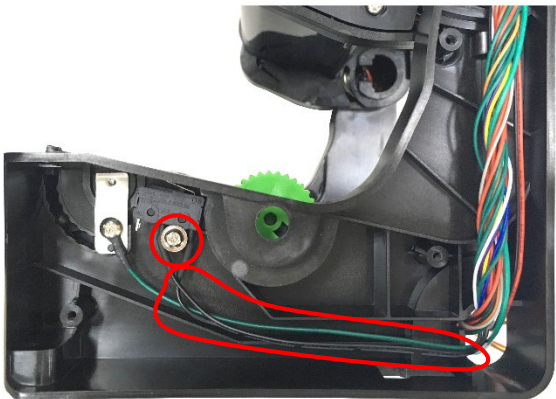
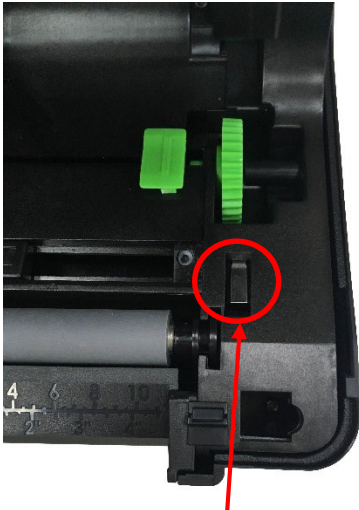
Screws

Cable


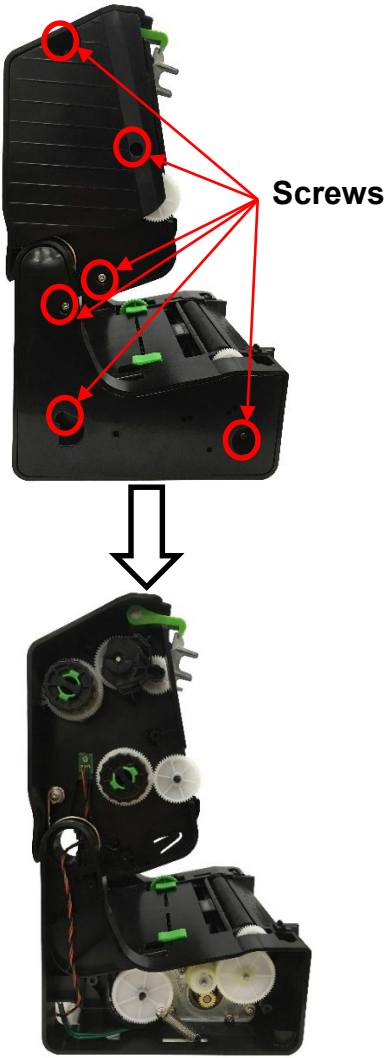


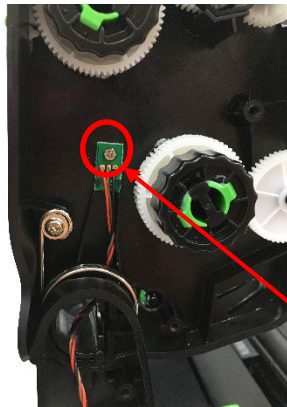
6. Reassemble the parts in the reverse procedures.

3.11 Replacing the Print Head Open Sensor Assembly

 <p>A photograph of the right side of a TSC bar code printer. The right side lower cover is partially detached. Three screws are circled in red, and red arrows point from the word 'Screws' to each of them.</p>	<ol style="list-style-type: none">1. Please refer to the section 3.1 to remove the print engine.2. Disconnect the three screws to remove the right side lower cover.
 <p>A photograph showing the internal components of the printer. A screw is circled in red, and a red arrow points from the word 'Screws' to it. A black cable is also indicated by a red arrow.</p>	<ol style="list-style-type: none">3. Remove the print head open sensor by disengage the screw and cable (black) as indicated.
 <p>A photograph showing the internal components of the printer. A green plastic component is circled in red, and a red arrow points from the word 'Print Head Open Sensor' to it.</p>	<ol style="list-style-type: none">4. Reassemble the parts in the reverse procedure.

3.12 Replacing the Encoder Assembly

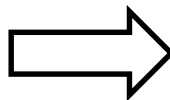
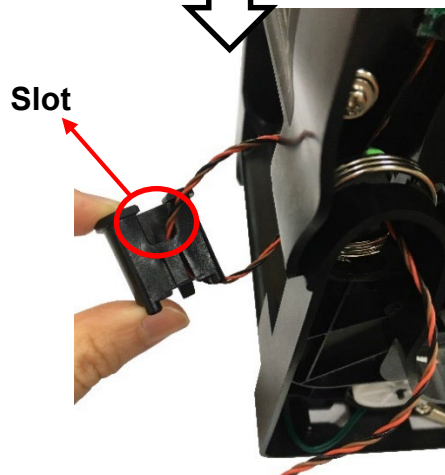
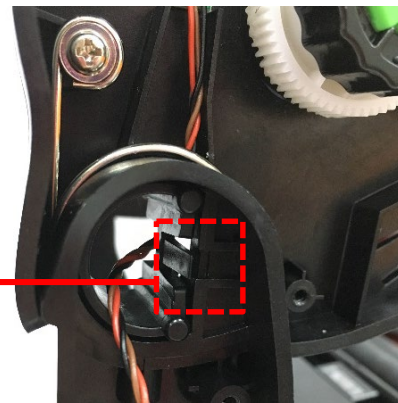
	<ol style="list-style-type: none">1. Please refer to Ch.3.1 to uninstall the print engine mechanism.
	<ol style="list-style-type: none">2. Open the print engine mechanism, and then turn to left side to disconnect six screws as indicated to remove upper and lower cover.



Screw

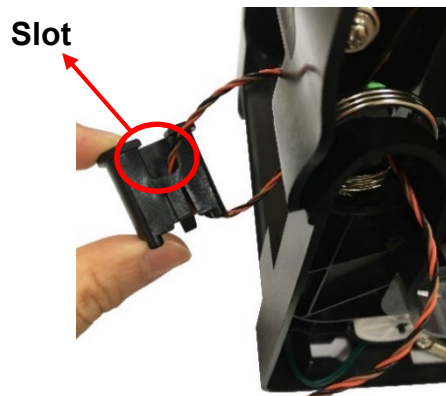
3. Remove the screw on the Encoder assembly.

4. Push the latch on ribbon base hinge to left side, pull out the ribbon base hinge and remove the Encoder assembly.





Loading path

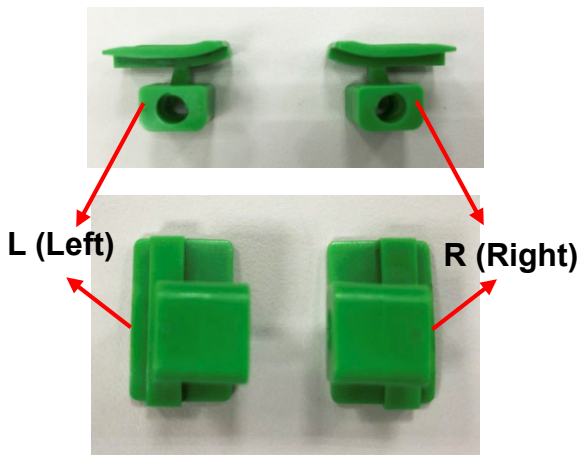
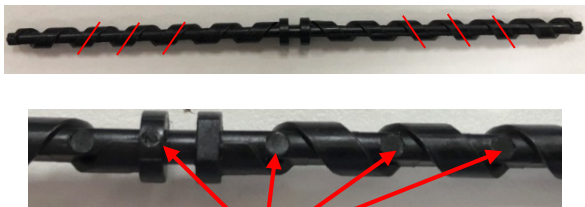
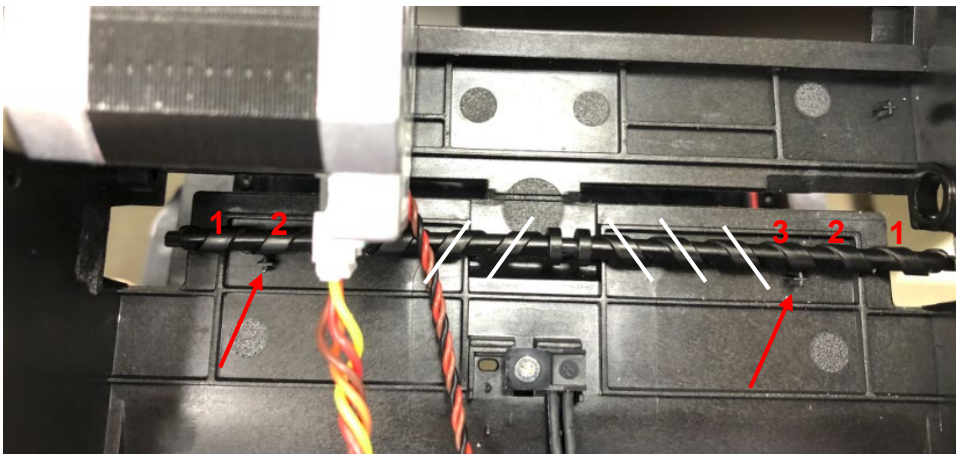


5. Reassemble the parts in the reverse procedure.

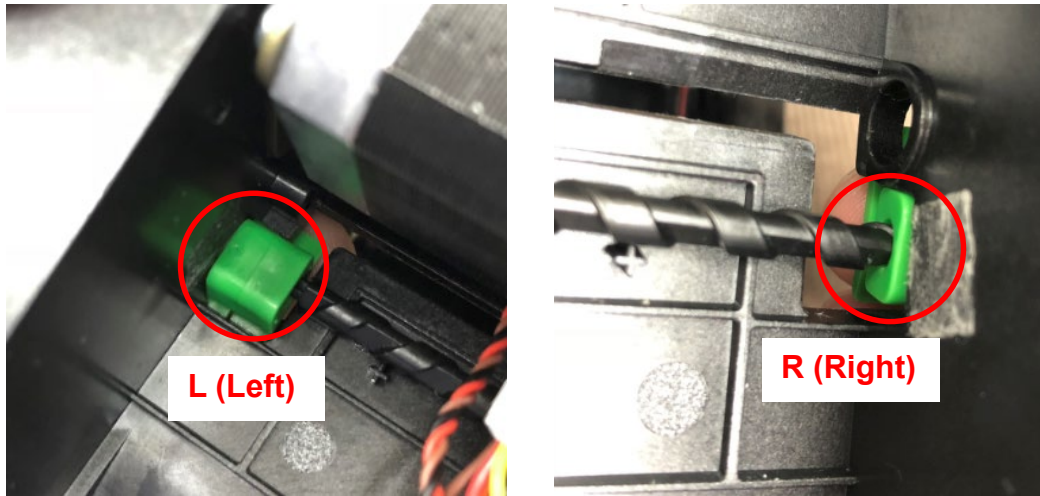
Note:

1. Please install the Encoder assembly through the loading path as indicated.
2. When installing ribbon base hinge, please insert the cable across the slot as indicated.

3.13 Replacing the Label Guide Module

 <p>L (Left) R (Right)</p>	<p>1. Please check the direction of label guide (L: Left; R: Right).</p>
<p>Label guide shaft:</p>  <p>Bottom of label guide shaft</p>	<p>2. Check label guide shaft direction. The bottom side has round marks as indicated.</p>
<p>3. Place the label guide shaft as below. The round mark is at the bottom side. Please notice about the placement position 1, 2, and 3 at right side and left side.</p> 	

4. Push the label guide R and L to the shaft.



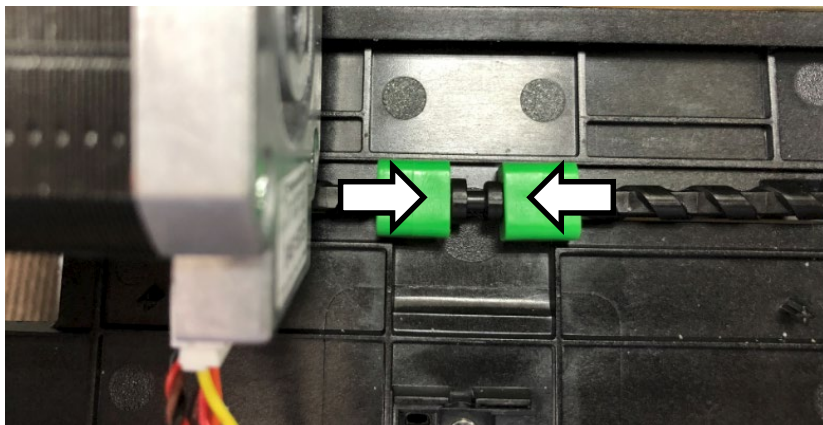
5. Push the label guide R and L to the shaft and touch the cover.



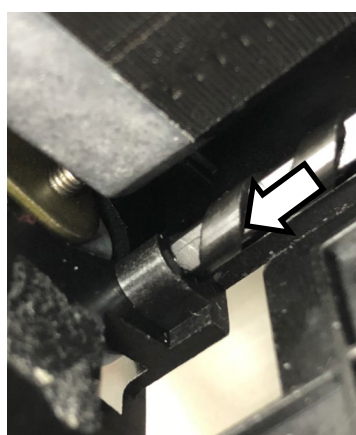
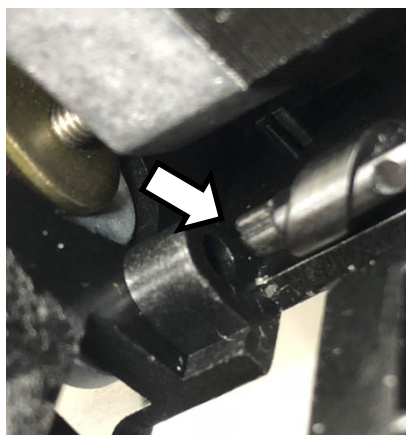
6. Push the label guide R and L upward.



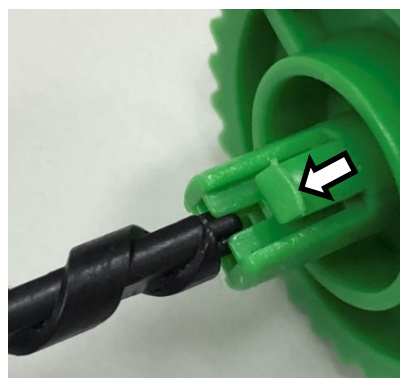
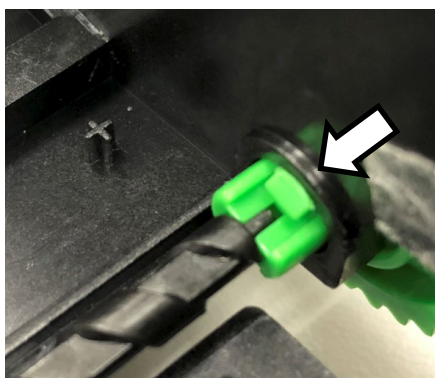
7. Push the label guides to the end of center.



8. Check if the shaft is fit to the fix hole of the mechanism.



9. Install the knob to the shaft.



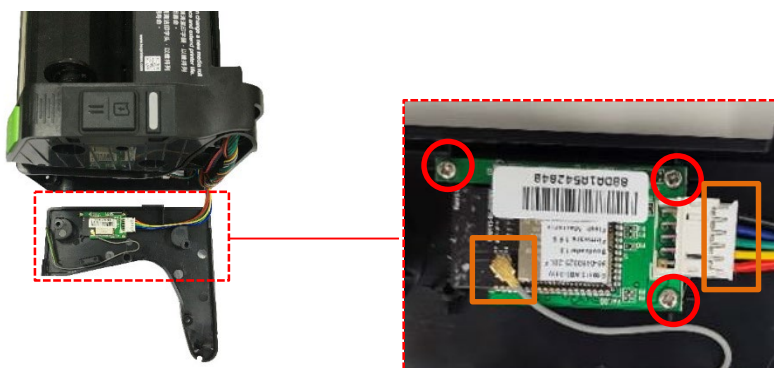
3.14 Replacing the Wi-Fi module Assembly (TE210/TE310 Series option)



1. Please refer to the [section 3.1](#) to remove the print engine.
2. Remove the three screws on lower print engine right side cover as indicated and open it.

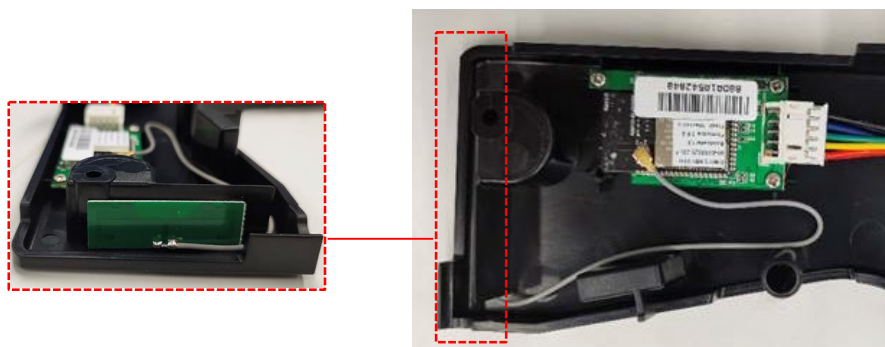
Screws

3. Remove the three screws on Wi-Fi module assembly and disconnect the connectors. Remove/Replace the Wi-Fi module assembly. Reassemble the parts in the reverse procedure.



Note:

- The Wi-Fi module and bluetooth module are not coexistence.
- When install the Wi-Fi module assembly, please follow the cable loading path as shown.



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	* Turn on the power switch. * Check if the green LED is lit on power supply. If it is not lit on, power supply is broken. * 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.
Solid Green	ON	The printer is ready to use.	* No action necessary.
Green with blinking	Pause	The printer is paused.	* Press the FEED button to resume for printing.
Red with blinking	Error	The out of label or ribbon or the printer setting is not correct.	1. Out of label or ribbon * Load a roll of label and follow the instructions in loading the media then press the FEED button to resume for printing. * Load a roll of ribbon and follow the instructions in loading the ribbon then press the FEED button to resume for printing. 2. Printer setting is not correct * Initialize the printer by instructions in "Power on Utility" or "Diagnostic Tool".

Note:

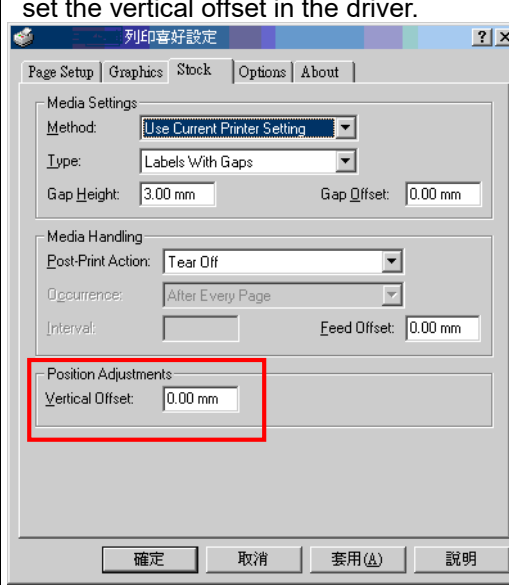
Printer status can be easily shown on the Diagnostic Tool. For more information about the Diagnostic Tool, please refer to the quick start guide of diagnostic utility on [TSC official website](#).

4.2 Print Quality

Problem	Possible Cause	Recovery Procedure
Not Printing	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.
No print on the label	Label or ribbon loaded not correctly.	Follow the instructions in loading the media or loading the ribbon.
	Ribbon run out.	Loading the ribbon.
Continuous feeding labels	The printer setting may go wrong.	Please do the initialization and gap/black mark calibration.
- The printer status from DiagTool shows " Paper Jam ".	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.
Poor Print Quality	<ul style="list-style-type: none"> * Ribbon and media is loaded incorrectly * Dust or adhesive accumulation on the print head. * Print density is not set properly. * Printhead element is damaged. * Ribbon and media are incompatible. * The printhead pressure is not set properly. 	<ul style="list-style-type: none"> * Reload the supply. * Clean the print head. * Clean the platen roller. * Adjust the print density and print speed. * Run printer self-test and check the print head test pattern if there is dot missing in the pattern. * Change proper ribbon or proper label media. * The print head mechanism does not latch the print head properly.
Power indicator does not illuminate	The power cord is not properly connected.	Plug the power cord in printer and outlet.
		Switch the printer on.
- The printer status from DiagTool shows " Head Open ".	The printer carriage is open.	Please close the print carriage.

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- The printer status from DiagTool shows “ Ribbon End Err. ” Or “ Ribbon Encoder Err. ”	Running out of ribbon.	Supply a new ribbon roll.
	The ribbon is installed incorrectly.	Please re-install the ribbon.
- The printer status from DiagTool shows “ Out of Paper ”.	Running out of label.	Supply a new label roll.
	The label is installed incorrectly.	Please reinstall the label roll.
	Gap/black mark sensor is not calibrated.	Calibrate the gap/black mark sensor.
Memory full (FLASH / DRAM)	* The space of FLASH/DRAM is full.	* Delete unused files in the FLASH/DRAM.
MicroSD card is unable to use	* microSD card is damaged. * microSD card doesn't insert correctly. * Use the non-approved microSD card manufacturer.	* Use the supported capacity microSD card. * Insert the microSD card again. * The supported microSD card spec and the approved microSD card manufacturers, please refer to section 1.3.
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.
The printing position of small label is incorrect	* Media sensor sensitivity is not set properly. * Label size is incorrect. * The parameter Shift Y in the LCD menu is incorrect. * The vertical offset setting in the driver is incorrect.	* Calibrate the sensor sensitivity again. * Set the correct label size and gap size. * If using the software BarTender, please set the vertical offset in the driver. 
Missing printing on the left or right side of label	* Wrong label size setup.	* Set the correct label size.

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Wrinkle problem	<ul style="list-style-type: none">* Ribbon installation is incorrect.* Media installation is incorrect.* Print density is incorrect.* Media feeding is incorrect.	<ul style="list-style-type: none">* Please set the suitable density to have good print quality.* Make sure the label guide touch the edge of the media guide.
Gray line on the blank label	<ul style="list-style-type: none">* The print head is dirty.* The platen roller is dirty.	<ul style="list-style-type: none">* Clean the print head.* Clean the platen roller.
Irregular printing	<ul style="list-style-type: none">* The printer is in Hex Dump mode.	<ul style="list-style-type: none">* Turn off and on the printer to skip the dump mode.

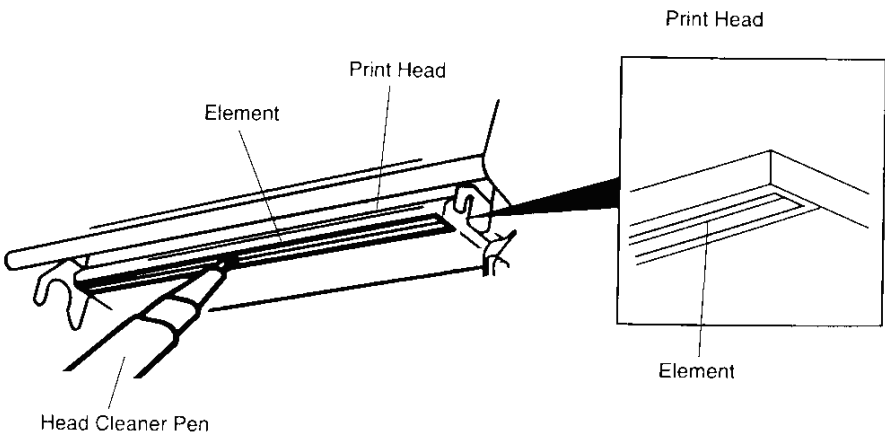
5. MAINTENANCE

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
Print Head	1. Always turn off the printer before cleaning the print head. 2. Allow the print head to cool for a minimum of one minute. 3. Use a cotton swab (Head cleaner pen) and 100% ethanol to clean the print head surface.	Clean the print head when changing a new label roll
		
Platen Roller	1. Turn the power off. 2. Rotate the platen roller and wipe it thoroughly with 100% ethanol and a cotton swab, or lint-free cloth.	Clean the platen roller when changing a new label roll
Tear Bar/Peel Bar	Use the lint-free cloth with 100% ethanol to wipe it.	As needed
Sensor	Compressed air or vacuum	Monthly

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Exterior	Wipe it with water-dampened cloth	As needed
Interior	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.
- The maximum printing ratio per dot line is 15% for this printer. To print the full web black line, the maximum black line height is limited to 40 dots, which is 5mm for 203 DPI resolution printer and 3.3mm for 300 DPI resolution printer.

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UPDATE HISTORY

Date	Content	Editor
2018/3/1	Add Ch.3.12 Replacing the Encoder Assembly	Kate
2018/5/4	Add Ch.3.13 Replacing the Label Guide Assembly	Kate
2018/6/5	Add Ch.3.14 Replacing the Wi-Fi module Assembly (TE210/TE310 Series option)	Kate
2018/9/10	Revise Ch.3.8 Installing the Cutter Module (TE210/TE310 Series option) Revise Ch.3.9 Installing the Peeler Module (TE210/TE310 Series option)	Kate
2019/3/21	Add note on Ch. 5. MAINTENANCE	Kate
2020/4/21	Modify Ch. 3.14 (Replacing the Wi-Fi module Assembly)	Camille
2020/5/11	Modify Ch. 3.3 (Replacing the Stepping Motor Module)	Camille

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