



USERGUIDE

OD9

OPAL – Your AutoID System Integrator



Version: 1.3

Datum: 5/3/2023

Release Notes

Version	Date	Description
1.0	02.10.2010	Document completed
1.1	30.07.2014	Driver Windows compatibility extended and download tool revised
1.2	06.06.2018	Add Compliance EMC AS/NZS CISPR 32:2015 Class A, EN550322 and Driver Windows compatibility extended. Optional WI-FI interface removed from the document. The WI-FI interface is EOL.
1.3	02.05.2023	Media specification adapted and approvals expanded

EMS AND EMI COMPLIANCE STATEMENT

FOR EUROPEAN USERS

This equipment has been tested and passed with the requirements relating to electromagnetic compatibility based on the standards EN50081-1 (EN55022 CLASS A) and EN61000-4-2/-3/-4/-5/-6/-8/-11 (IEC Teil 2,3,4). The equipment also tested and passed in accordance with the European Standard EN55022 for the both Radiated and Conducted emissions limits. Australian/New Zealand Standard AS/NZS CISPR 32:2015. The energy emitted by this equipment was passed both Radiated and conducted Emissions Class A limits. The equipment was passed the test performed according to European standard EN55032:2012/AC:2013(Class A).

THE OD9 THERMAL PRINTER TO WHICH THIS DECLARATION RELATES IS IN CONFORMITY WITH THE FOLLOWING STANDARDS

EN55022 : 1998, CISPR 22 , Class A / EN55024 : 1998 IEC 61000-4 Serial / EN61000-3-2 : 2000 / EN 61000-3-3 : 1995 / CRF 47, Part 15/CISPR 22 3rd Edition : 1997, Class A / ANSI C63.4 : 2001 / CNS 13438, CISPR 22(Class A) / IEC60950 3rd Edition (1999) / GB4943 : 2001 / GB9254 : 1998 / GB17625.1 : 2003. EN55032, CISPR 32:2015(Class A),

CAUTION :

Danger of explosion if battery is incorrectly replaced
Replace only with the equivalent type recommended by the manufacture.
Dispose of used batteries according to the manufacturer's instructions.

Only use with power supply adapter model: WDS060240.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Specifications are subject to change without notice.

Safety Instructions

Bitte die Sicherheitshinweise sorgfältig lesen und für später aufheben.

1. Die Geräte nicht der Feuchtigkeit aussetzen.
2. Bevor Sie die Geräte ans Stromnetz anschließen, vergewissern Sie Sich, dass die Spannung des Geräts mit der Netzspannung übereinstimmt.
3. Nehmen Sie das Gerät bei Überspannungen (Gewitter) vom Netz. Das Gerät könnte sonst Schaden nehmen.
4. Sollte versehentlich Flüssigkeit in das Gerät gelangen, so ziehen sofort den Netzstecker. Anderenfalls besteht die Gefahr eines lebensgefährlichen elektrischen Schlags.
5. Wartungs- und Reparaturarbeiten dürfen aus Sicherheitsgründen nur von autorisierten Personen durchgeführt werden.
6. Bei Wartungs- und Reparaturarbeiten müssen die Sicherheitsvorschriften der zuständigen Berufsverbände und Behörden unbedingt eingehalten werden.
7. Bei Verletzungen unbedingt den Arzt aufsuchen und die gegebenenfalls die zuständigen Stellen benachrichtigen. Unterlassung kann zum Verlust der Versicherungsleistungen führen.

Safety Instructions

Please read the following instructions seriously.

1. Keep the equipment away from humidity.
2. Before you connect the equipment to the power outlet, please check the voltage of the power source.
3. Disconnect the equipment from the voltage of the power source to prevent possible transient over voltage damage.
4. Don't pour any liquid to the equipment to avoid electrical shock.
5. ONLY qualified service personnel for safety reason should open equipment.
6. Don't repair or adjust energized equipment alone under any circumstances. Someone capable of providing first aid must always be present for your safety
7. Always obtain first aid or medical attention immediately after an injury. Never neglect an injury, no matter how slight it seems.

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1. Barcode Printer

1-1. Printer Accessories

After unpacking, please check the accessories that come with the package, and store appropriately.

- ◆ Barcode printer
- ◆ Power cord
- ◆ Switching Power
- ◆ USB Cable
- ◆ Label
- ◆ Ribbon
- ◆ Empty Ribbon Roll
- ◆ Label Roll Core
- ◆ Label Stop Plate
- ◆ Quick Start Guide

1-2. General Specifications

Model	OD9
Print Method	Thermal Transfer / Direct Thermal
Resolution	203 dpi (8 dot/mm)
Print Speed	6 IPS (150 mm/s)
Print Width	4.25" (108 mm)
Print Length	Min. 0.39" (10 mm); Max. 68" (1727 mm) It is suggested to be at least 0.98" (25mm) when printing with stripper.
Memory	4MB Flash (2MB for user storage) ; 8MB SDRAM
Sensor Type	Adjustable reflective sensor. Fixed transmissive sensor, central aligned
Media	Types: Continuous form, gap labels, black mark sensing, and punched hole; label length set by auto sensing or programming Width: 1" (25.4 mm) Min. - 4.64" (118 mm) Max. Thickness: 0.003" (0.06 mm) Min. - 0.01" (0.25 mm) Max. Label roll diameter: max. 127 mm (5") with a label core diameter of 25.4 mm and 38 mm (1" and 1.5") max. 110 mm (4.3") with a label core of 76 mm (3") Core diameter: 25.4 mm and 38.1 mm (1" and 1.5") max. labels roll diameter 127 mm 76 mm (3") max. label diameter 110 mm
Ribbon	Types: Wax, wax/resin, resin Length: 360' (110 m) Width: 1.18" Min - 4.33" (30 mm - 110 mm) Max Ribbon roll diameter.: 1.57" (40 mm) Core diameter: 0.5" (12.7 mm)
Printer Language	EPL
Software	Seagull Bartender Evaluation DLL & Driver: Microsoft Windows NT 4.0, 2000, XP, Windows Vista, Windows 7, Windows 8, 8.1 Windows 10, Windows Server 2008, 2008 R2, 2012, 2012 R2 und 2016.32-Bit und 64-Bit (x64)-Versionen.
Barcodes	1-D Bar codes: Code 39, Code 93, Code 128 (subset A, B, C), UCC/EAN 1282, UPC A / E (add on 2 & 5), UPC Interleaved 2 of 5, I 2 of 5, EAN 8 / 13 (add on 2 & 5), Codabar, German Post Code, Postnet 5, 9, 11 & 13 digit1, Planet 11 & 13 digit1 and GS1 DataBar (RSS-14) 2-D Bar codes: PDF417, Datamatrix code, MaxiCode, QR code and Micro QR code
Code Pages	CODEPAGE 437, 850, 851, 852, 855, 857, 860, 861, 862, 863, 865, 866, 869, 737 WINDOWS 1250, 1251, 1252, 1253, 1254, 1255
Interfaces	Serial port: RS-232 (DB-9)

	USB port (default on) Parallel port: Centronics 36-pin PS2 port CF Card socket Ethernet 10/100Mbps print server (default off; disables USB when in use)
Control Panel	Backlit graphics LCD display: 128 x 64 dots or 4 lines x 16 characters Three mono-color status-LEDs: Power on, Ribbon out, Media out Control keys: FEED, PAUSE and CANCEL
Real Time Clock	Standard
Power	Auto Switching 100-240VAC, 50-60Hz
Environment	Operation temperature: 41°F to 104°F (5°C to 40°C) Storage temperature: -4°F to 122°F (-20°C to 50°C)
Humidity	Operation: 30-85%, non-condensing. Storage: 10-90%, non-condensing.
Agency Approvals	CE and UKCA
Dimension	Length: 11.2" (285 mm) Height: 6.8" (171 mm) Width: 8.9" (226 mm)
Weight	6.6 lbs (3.0Kg) ,excluding consumables
Standard Accessory	Stripper Module Ethernet 10/100Mbps print server (default off; disables USB when in use)
Options	External label roll holder for 10" (250 mm) O.D. label rolls External label rewinder 802.11 b/g wireless print server (Default off; disables USB when in use. Must remove PS2 port and Ethernet card to install)

Specifications are subject to change without notice. All company and/or product names are trademarks and/or registered trademarks of their respective owners.

1-3. Communication Interface

Parallel Interface

Handshake : DSTB connects to the printer, BUSY connects to the host
Interface cable : Parallel cable compatible to IBM PC
Pin out : See below

PIN NO.	FUNCTION	TRANSMITTER
1	/Strobe	host / printer
2-9	Data 0-7	host
10	/Acknowledge	printer
11	Busy	printer
12	/Paper empty	printer
13	/Select	printer
14	/Auto-Linefeed	host / printer
15	N/C	
16	Signal Gnd	
17	Chasis Gnd	
18	+5V,max 500mA	
19-30	Signal Gnd	host
31	/Initialize	host / printer
32	/Error	printer
33	Signal Ground	
34-35	N/C	
36	/Select-in	host / printer

Serial Interface

Serial Default : 9600 baud rate, no parity, 8 data bits, 1 stop bit, XON/XOFF protocol and
Setting : RTS/CTS.

RS232 HOUSING (9-pin to 9-pin)

DB9 SOCKET		DB9 PLUG
---	1	+5V,max 500mA
RXD	2	TXD
TXD	3	RXD
DTR	4	N/C
GND	5	GND
DSR	6	RTS
RTS	7	CTS
CTS	8	RTS
RI	9	N/C
PC		PRINTER

[Note] The total current output from parallel port and serial port altogether can not exceed 500mA.

USB Interface

Connector Type : Type B

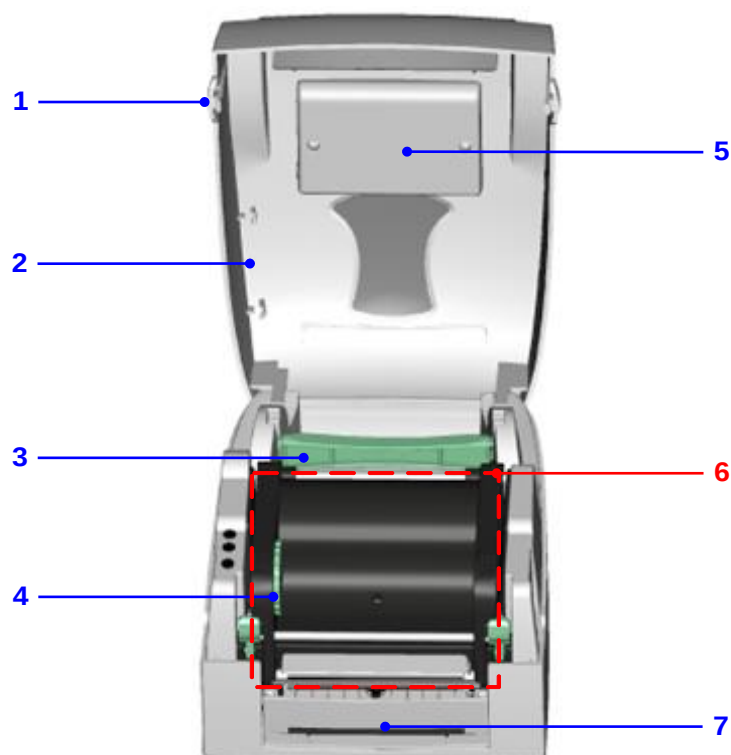
PIN NO.	1	2	3	4
FUNCTION	VBUS	D-	D+	GND

Internal Interface

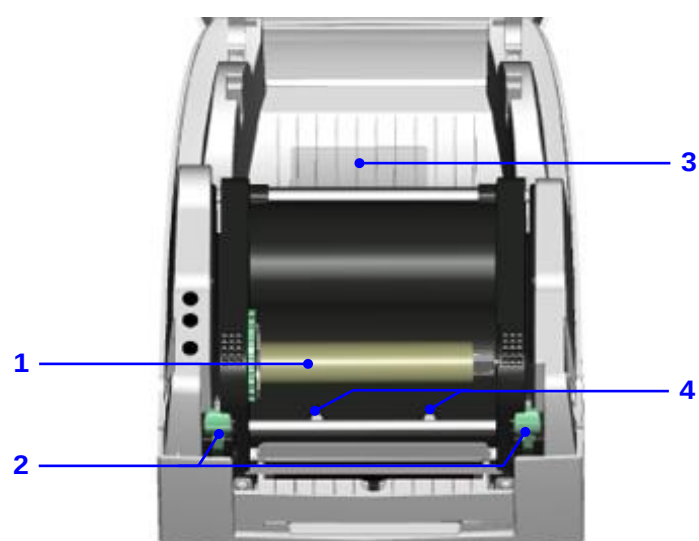
UART1 wafer			Ethernet module
N.C	1	1	N.C
TXD	2	2	RXD
RXD	3	3	TXD
CTS	4	4	RTS
GND	5	5	GND
RTS	6	6	CTS
E_MD	7	7	E_MD
RTS	8	8	CTS
E_RST	9	9	E_RST
+5V	10	10	+5V
GND	11	11	GND
+5V	12	12	+5V

UART2 wafer			Expansion module
+5V	1	1	+5V
CTS	2	2	RTS
TXD	3	3	RXD
RTS	4	4	CTS
RXD	5	5	TXD
GND	6	6	GND

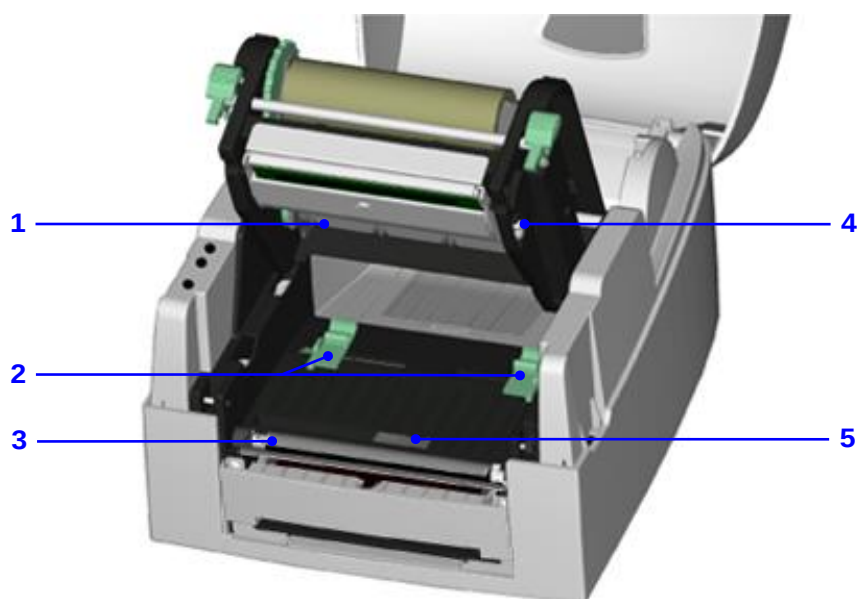
1-4. Printer Parts



1.	Cover Open Button
2.	Top Cover
3.	Label Roll Core
4.	Ribbon Rewind Wheel
5.	LCD Module Case
6.	Printing Mechanism
7.	Stripper



1.	Ribbon Rewind Shaft + Empty Ribbon Roll
2.	Locking Tenon (left/right)
3.	CF Card Slot Cover
4.	Print Head Pressure Adjustment Screw (left/right)



1.	Ribbon Supply Shaft
2.	Label Guide
3.	Platen Roller
4.	Print Line Adjustment Gear
5.	Label Sensor



1.	LCD Control Panel
2.	Fan-Fold Label Insert
3.	Connection Port for PS2 / Wireless LAN Antenna (Optional)
4.	Power Switch
5.	Ethernet Port
6.	USB Port
7.	Parallel Port
8.	Serial Port (RS-232)
9.	Power Socket

* The communication ports may vary depending on product types.

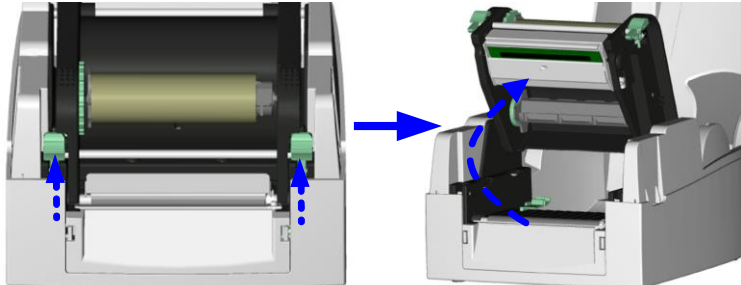
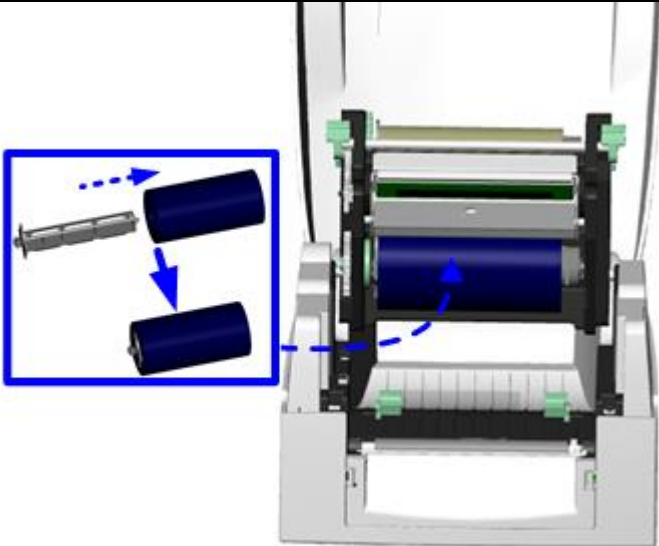
2. Printer Installation

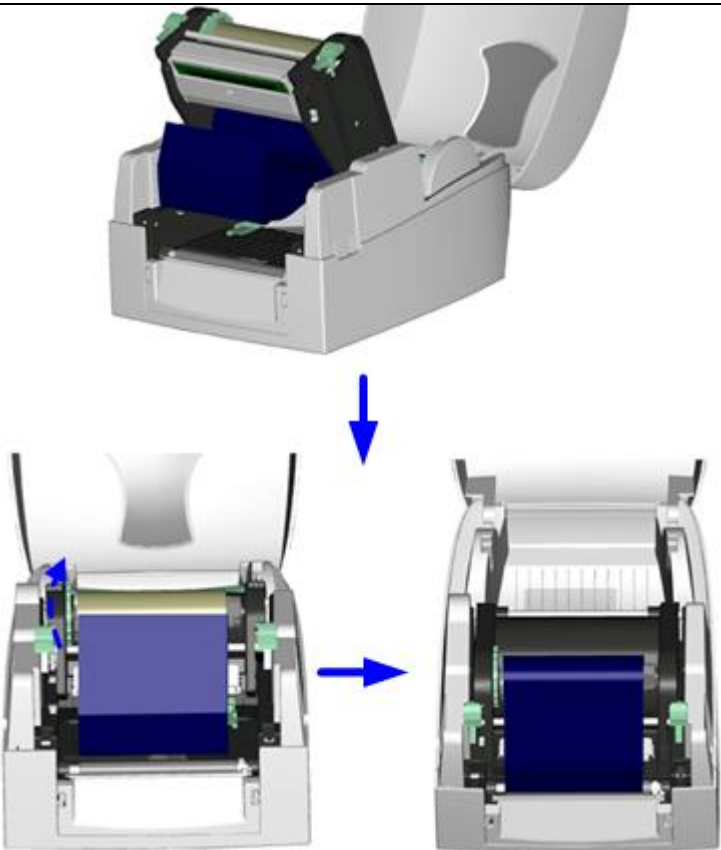
This printer model has the following print modes:

Thermal Transfer (TT)	When printing, ribbon must be installed to transfer the print contents onto the media.
Direct Thermal (DT)	When printing, no ribbon is necessary; it only requires direct thermal media.

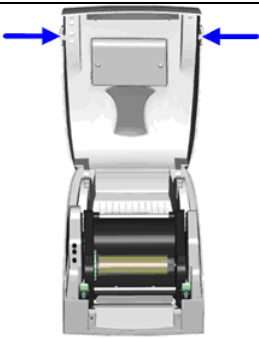
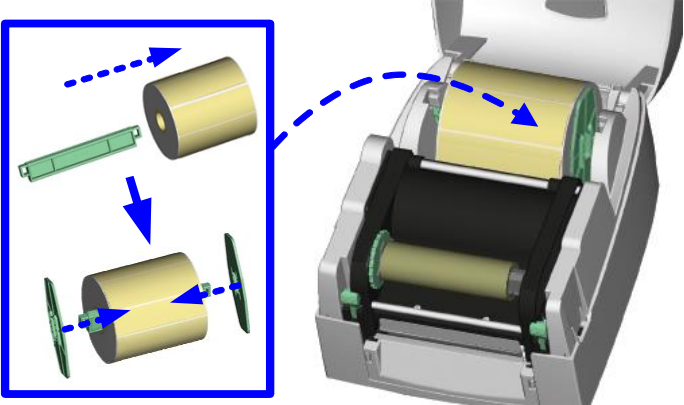
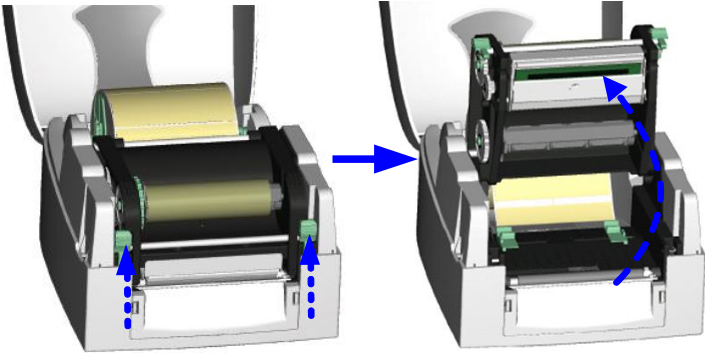
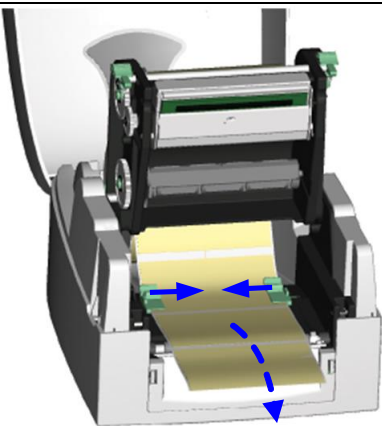
Please check which print mode you will use and then go into the Setting Mode to change the print mode setting if necessary.

2-1. Ribbon Installation

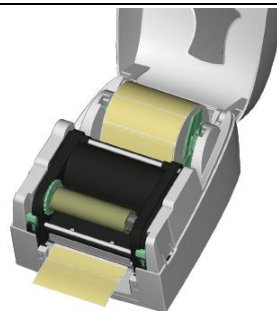
1. Place the printer on a horizontal surface, and open the top cover by pressing the Cover Open Buttons on both sides.	
2. Loosen and then lift the printing mechanism by pressing the locking tenons.	
3. Place a new ribbon roll onto the ribbon supply shaft.	

4. Feed the ribbon from the Ribbon Supply Shaft under the Print Head. 5. Wrap the ribbon around the Ribbon Shaft and stick the ribbon onto the Empty Ribbon Roll Core.	
6. Firmly close the printing mechanism.	

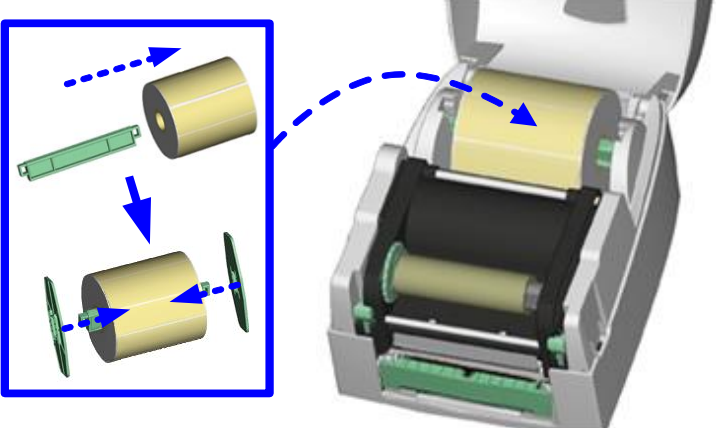
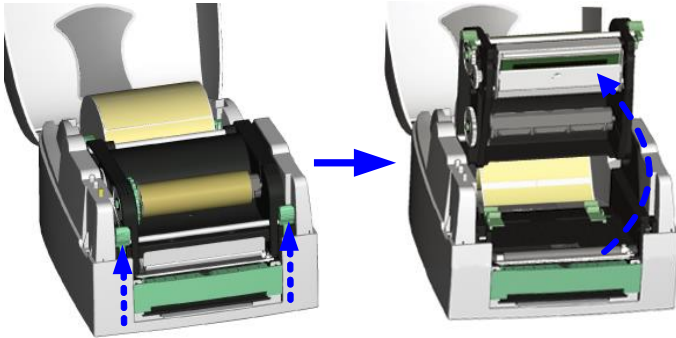
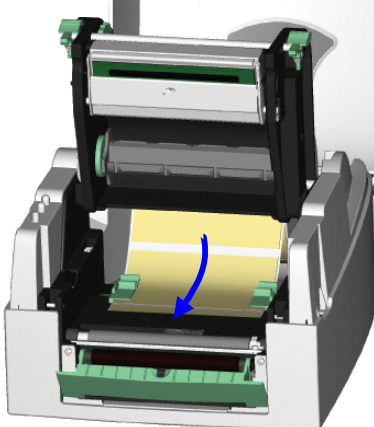
2-2. Label Installation

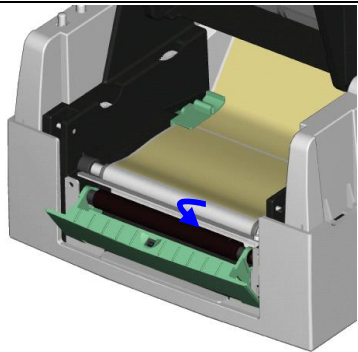
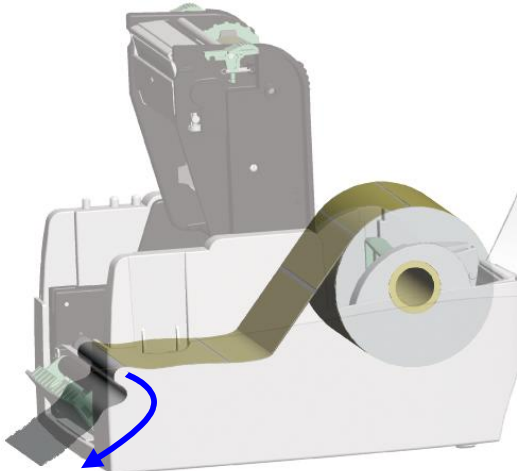
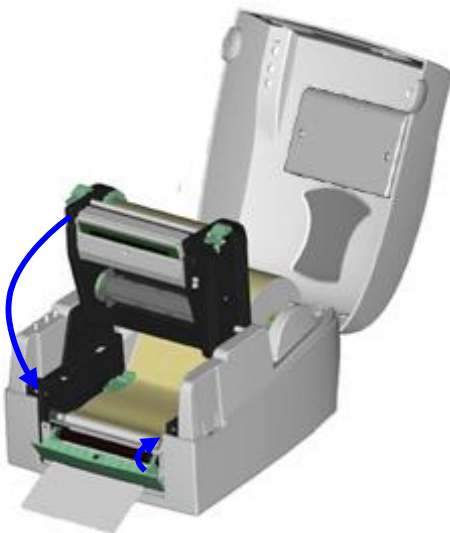
1. Open the top cover by pressing the Cover Open Buttons on both sides.	
2. Insert the Label Roll Core into the label roll. 3. Assemble the Label Stop Plates on both sides of label roll. 4. Place the label roll into the printer.	
5. Loosen and lift the printing mechanism by pressing the locking tenons.	
6. Feed the label through the two Label Guides to the Tear-off Bar. 7. Align the label guides to the edge of label.	

8. Close the printing mechanism from the top to finish label installation.



2-3. Label Installation with Stripper

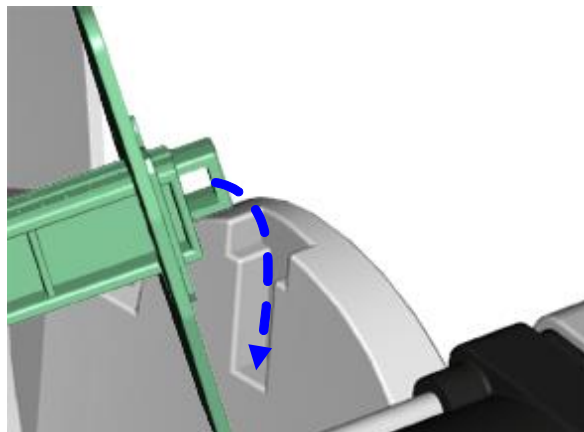
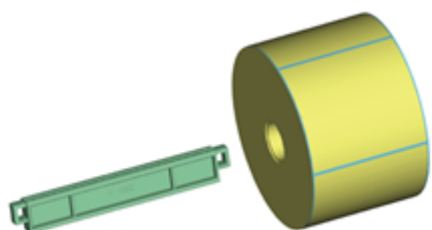
1. Open the top cover by pressing the Cover Open Buttons on both sides.	
2. Place the label roll onto the Label Roll Core.	
3. Loosen and lift the printing mechanism by pressing the locking tenons.	
4. Feed the label through the Label Guides. 5. Align the Label Guides to the label edge.	

6. Peel off the first label, and feed the liner through the roller and the Tear-off Bar.	
7. Follow the direction as shown in figure to feed the liner across the stripper.	
8. Close the printing mechanism and the stripper.	
9. Press the FEED key to adjust the position of label and complete the installation. <i>【Note1】 Label liner thickness is recommended to be 0.06mm $\pm$ 10% with basic weight 65g/ m^2 $\pm$ 6%.</i> <i>【Note2】 The label / paper used for stripper is suggested to be at least 25mm in height.</i>	

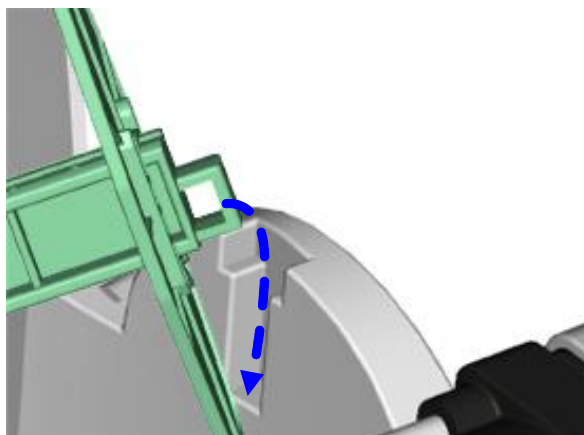
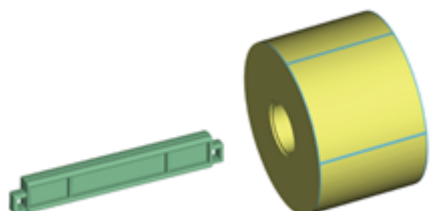
<i>【Note3】</i> The max width for stripper is 110mm.	
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2-4. Label Roll Core Installation Instruction

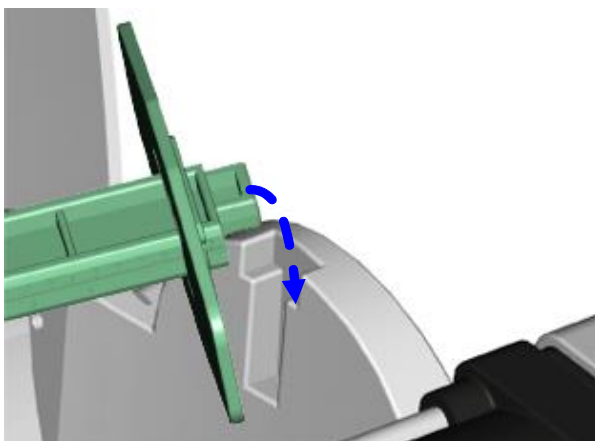
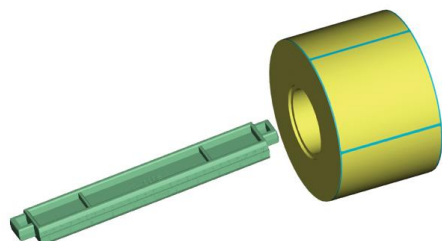
(A) 1" roll core installation



(B) 1.5" roll core installation

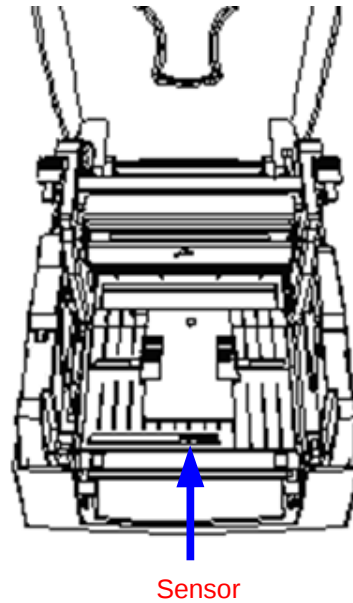
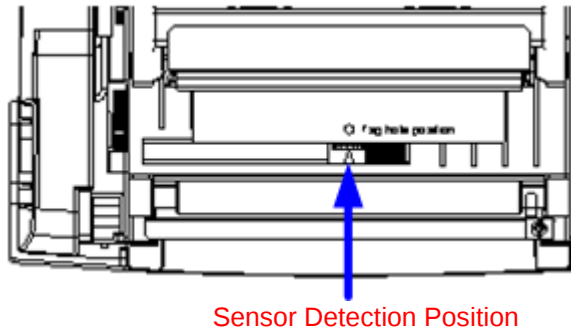


(C) 3" roll core installation



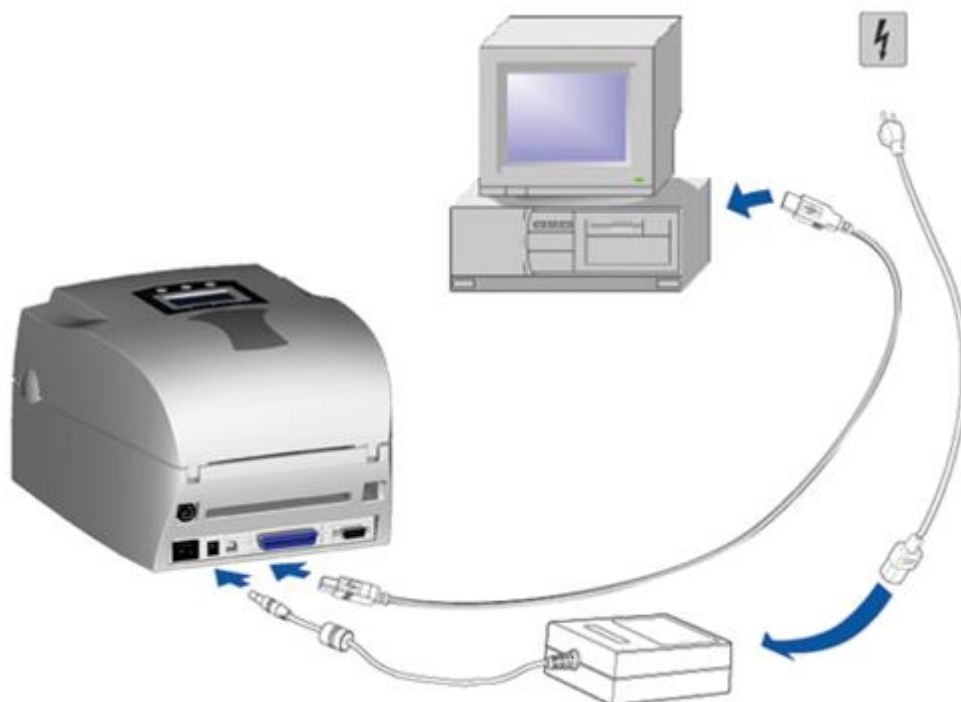
2-4. Card / Hang tags Installation

When installing cord tags, the tag hole must align with the sensor arrow (as indicated in figure), then use the Label Guide to secure the tags.

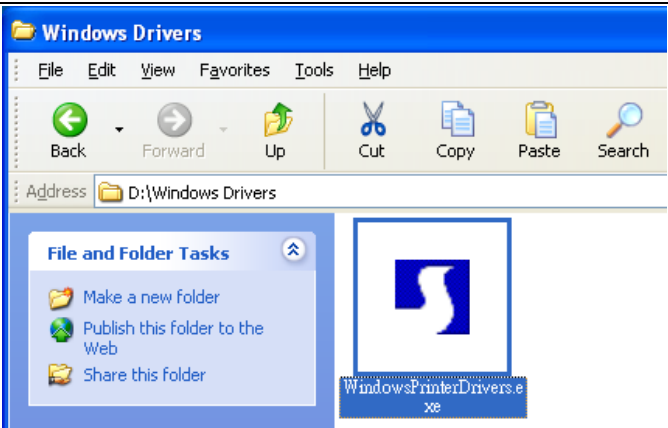
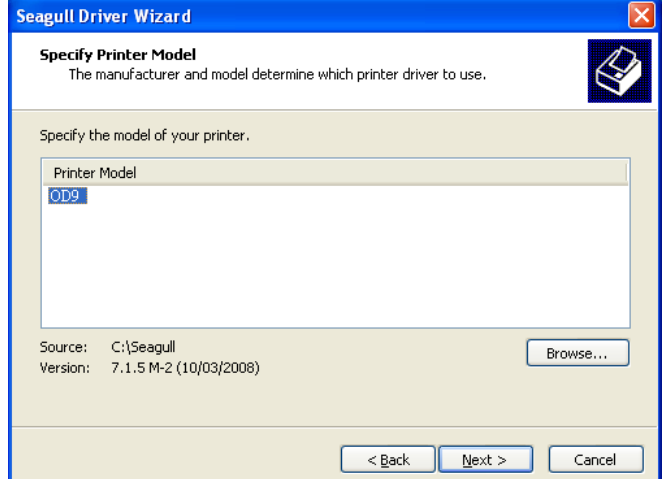


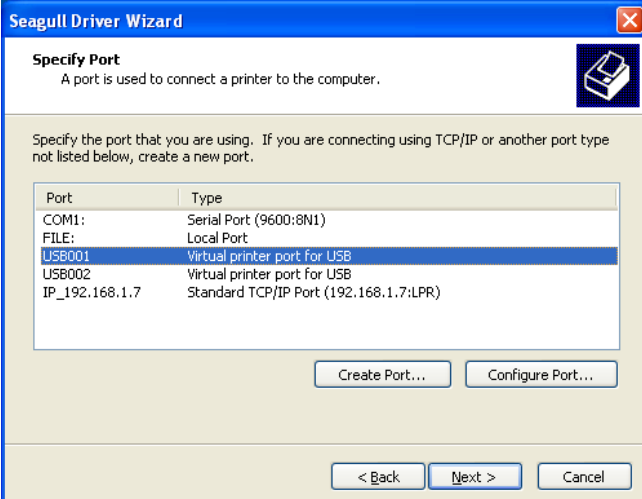
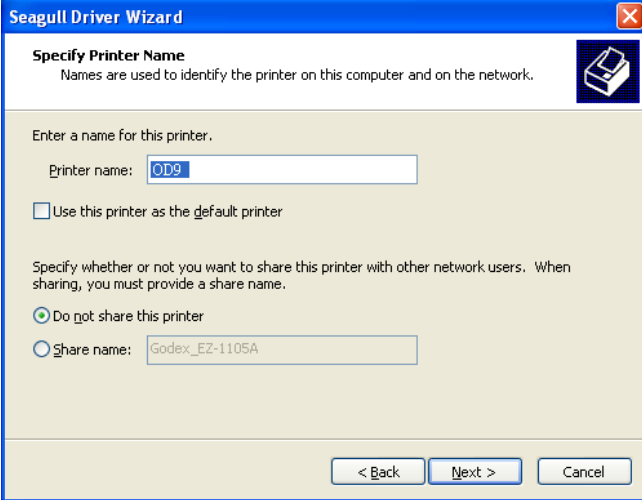
2-5. PC Connection

1. Please make sure the printer is powered off.
2. Take the power cable, plug the cable switch to the power socket, and then connect the other end of the cable to the printer power socket.
3. Connect the cable to the USB/parallel port on the printer and on the PC.
4. Power on the PC and the printer, then the printer's LED light will start to flash.



2-6. Driver Installation

1. Insert product CD to your computer's CD Drive and find the "Windows Drivers" folder. 2. Select the icon of driver file and click it to start the installation.	
3. Follow the instruction on screen to keep the installation going. Then the Driver Wizard utility should run automatically. 4. Select "Install printer drivers".	
5. Select printer model.	

6. Select connection port.	 The 'Specify Port' window in the Seagull Driver Wizard. It shows a list of ports: COM1 (Serial Port), FILE (Local Port), USB001 (Virtual printer port for USB), USB002 (Virtual printer port for USB), and IP_192.168.1.7 (Standard TCP/IP Port). The 'USB001' port is selected. Buttons for 'Create Port...', 'Configure Port...', '< Back', 'Next >', and 'Cancel' are visible.
7. Enter the printer name and set printer sharing option.	 The 'Specify Printer Name' window. It shows the printer name 'OD9' entered in the 'Printer name' field. The 'Use this printer as the default printer' checkbox is unchecked. Under 'Specify whether or not you want to share this printer', the 'Do not share this printer' radio button is selected. A 'Share name' field contains 'Godex_EZ-1105A'. Navigation buttons are at the bottom.
8. A description page of printer settings will be displayed after all settings are completed. 9. Check if all printer settings are correct and then press Finish to start copying driver files. 10. Wait for file copying finished and complete the installation.	 The 'Completing the Seagull Driver Wizard' window. It displays a summary of settings: Name (OD9), Share name (<Not Shared>), Port (USB001), Default (No), Manufacturer (Barcode Printer), Model (OD9), and Version (7.1.7 M-0 (08/06/2009)). It instructs the user to click 'Finish' to begin the driver installation process. Buttons for '< Back', 'Finish', and 'Cancel' are at the bottom.
11. After the driver installation is complete, there should be a new printer model on Windows "Printer and Faxes" setting.	 A screenshot of the Windows 'Printers and Faxes' control panel window. It shows a list of installed printers. At the bottom, a printer icon is shown with the name 'OD9' and the status 'Ready'. The 'Printer Tasks' pane on the left includes an 'Add a printer' link.

3. Control Panel

3-1. Control Panel Introduction

	Control keys	
		FEED
		PAUSE
		CANCEL
	LED indicators	
	Power (Ready)	The Power (Ready) light is to indicate the power on status and the printer is ready to print.
	Ribbon	Ribbon status indication
	Media	Media status indication

3-2. Control Keys Introduction

FEED Key

After pressing the FEED key, printer will send the media (according to media type) to the specified stop position. When printing with continuous media, pressing the FEED key will feed media out to a certain length. When printing with gap labels, pressing the FEED key will feed one label at a time. If the label is not sent out to a correct position, please proceed to do the Auto Sensing (see page31).

Pause Key

When pressing the Pause key in standby mode (ready to print), the printer will go into the Pause Mode, and LCD Display will indicate "Pause". At this status, printer is not able to receive any command. Then pressing the Pause key once again, the printer will get out of the Pause mode and go back to standby mode.

Pressing the Pause key while printing, printer will suspend the print job. When the Pause key is pressed one more time, the printer will continue with the rest of the print job. For example, when printing with a print job that contains 10 labels and then press the Pause key to suspend the print job after 2 labels are printed out. If the Pause key is pressed again, the printer will print out remaining 8 labels to complete the print job.

Cancel Key

The Cancel key is used to cancel current print job. The LCD Display will show "Print job is cancelled" when pressing the Cancel key during printing. For example, when printing with a print job that contains 10 labels and then press the Cancel key after 2 labels are printed out. The remaining 8 labels will not be printed, and the printer goes back to standby mode.

With different combinations of FEED PAUSE and CANCEL keys, the printer can perform various functions as follows:

Item	Key	Beep	LCD Message	Description
Self test	 + Power on	3 beeps	Self test	Press and hold  key and turn on the printer until the buzzer beeps 3 times.
Dump mode	 + Power on	3 beeps → 1 beep	Now in Dump Mode	After entering Self test Mode, keep holding  key until the buzzer beep once.
Auto sensing	 + Power on	3 beeps	Auto sensing Mode	Press and hold  key and turn on the printer until the buzzer beeps 3 times.
Go to default	 +  + Power on	2 beeps twice	Go to default	Press and hold  &  keys and turn on the printer until the buzzer beeps 2 times. The printer setting will go to default.
Download mode	 + Power on	1 beep	DL MODE Vx.xx	Press and hold  key and turn on the printer until the buzzer beeps once. This mode is only for firmware downloading.
Setting mode		3 beeps	Setting mode	When Power on, press and hold  key about 3 to 4 seconds until the buzzer beep 3 times.

3-3. Setting mode

In the Setting Mode, changes can be made according to requirement on the printing mode, options, media type, and parallel interface (printer can only go into setting when connected to PC by parallel cable, USB cable, or serial cable).

1. Power on the printer and make sure it is on "Ready to print" status.
2. Press and hold Pause key about 3 to 4 seconds until the buzzer beep 3 times, and then the LCD will display "Setting Mode".
3. In the Setting Mode, the keys have the following functions:

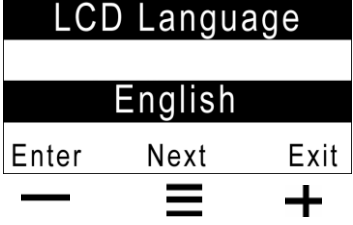
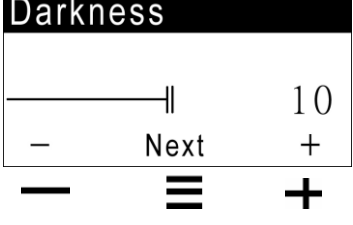
— : MINUS / Enter

≡ : MENU / NEXT

+ : PLUS / Exit

4. Before exiting the Setting mode, the LCD will prompt to ask whether save the settings or not. After user's response on whether do or do not save the settings, printer will exit from Setting mode and return to standby mode.

Press and hold **≡** key about 3 to 4 seconds until the buzzer beep 3 times and LCD shows Setting mode. The LCD monitor will show different options on the bottom.

	After entering to Setting mode, the first line on LCD display indicates the setting item and the second line is current value of setting.
	Press "Enter" key to enter into one of setting item, the current setting value will be marked in black and other unselected values will be listed in normal font.
	In adjustment type of setting items, the first line indicates the current item and the second line indicates current value. Plus: press + key to increase the value Minus: press — key to decrease the value Next: press ≡ key to go to next item

Below are general descriptions of setting items.

Darkness	Default: 15 Set the darkness of printing result. The setting value is from 0 to 19 and the default value is 15.
Speed	Set the speed of printing.
Adjust Stop Position	Default: 0 Set the stop position of printing. The setting value is from 0 to 10.
Printhead Position	Default: 0 Set the position of print head when printing. The setting value is from -100 to 100.
Printing mode	Default: Thermal Transfer Thermal Transfer: when printing, a ribbon must be installed to transfer the print contents onto the media. Direct Thermal: when printing, no ribbon is necessary; it only requires direct thermal media.
Option Setup	Default: Option OFF Strip Mode: turn on the stripper function Cutter Mode: turn on the cutter function None: select this to turn off the stripper and cutter functions.
Sensor Setup	Default: Gap paper Black Mark: for label or plain paper with black mark in the back Gap: for labels with liner and gap, or hang tags. The default is set to be gap paper. Continuous: for continuous paper
COM Port Set	Baud Rate: Default - 9600 bits 4800 bits 9600 bits 19200 bits 38400 bits 57600 bits 115200 bits
	Parity: Default - None Parity None Parity Odd Parity Even Parity
	Data Bits: Default - 8 bits 7 bits 8 bits
	Stop Bits: Default - 1 bit 1 bits 2 bits
Auto Sensor	Default: Auto Mode Auto Mode: auto sense the label type (black mark, gap & plain paper) and length Gap Mode: detects gap paper Black Mark Mode: detects black mark label
LCD Language	Default: English English Simplified Chinese; Traditional Chinese Spanish Italian Deutsch French Turkish

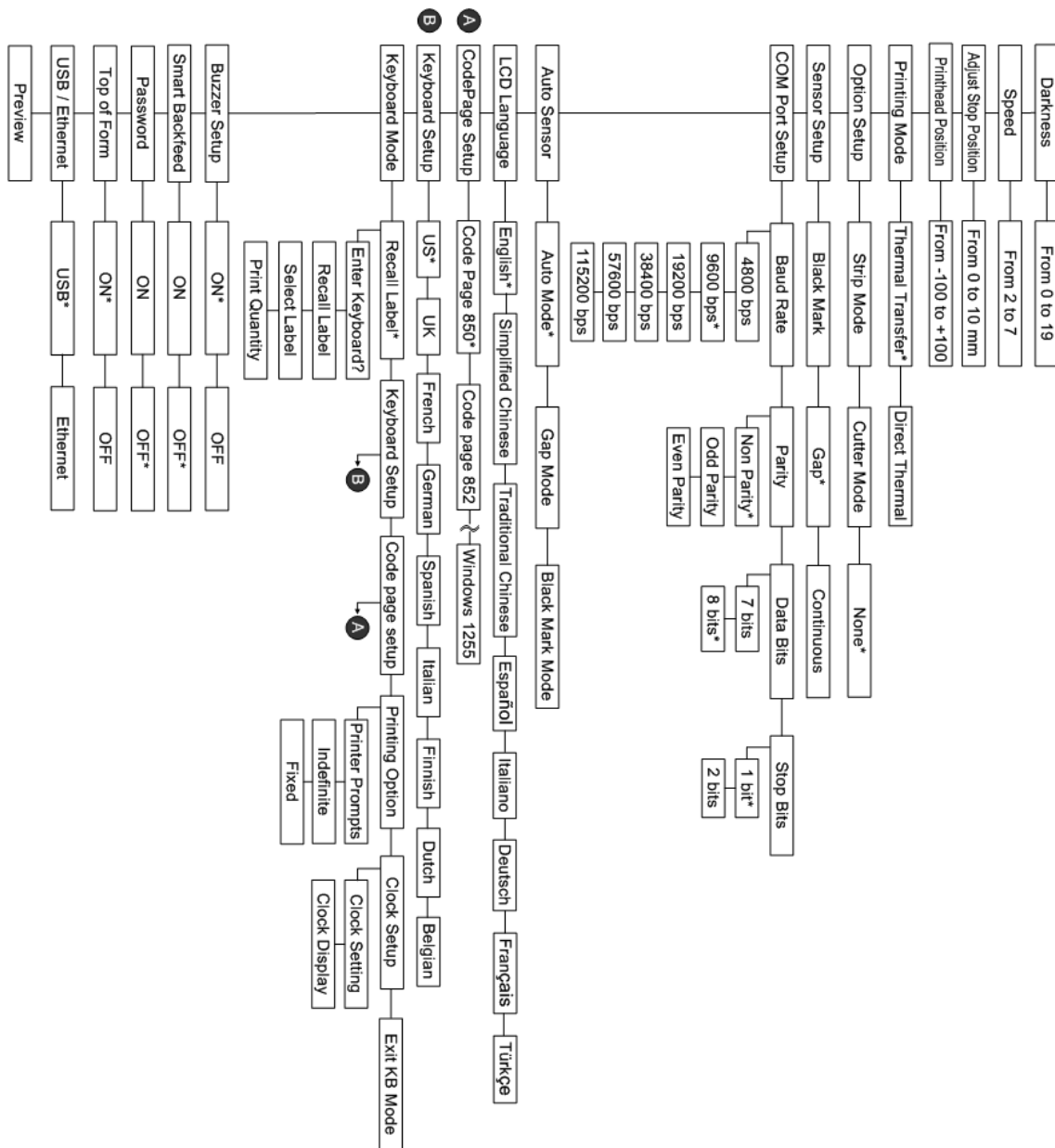
Code Page	Default: Code Page 850 Code Page850 Code Page852 Code Page437 Code Page860 Code Page863 Code Page865 Code Page857 Code Page861 Code Page862 Code Page855 Code Page866 Code Page737 Code Page851 Code Page869 Windows 1252 Windows 1250 Windows 1251 Windows 1253 Windows 1254 Windows 1255
Keyboard Setup	Default: US US UK French German Spanish Italian Finnish Dutch Belgian
Keyboard Mode	Default: Recall Label Recall Label : Recall label from memory card. Keyboard Setup : Setting the keyboard. Code page Setup : Setting the code page. Printing Option : Set the print quantity. Clock Setup : Set the clock and clock display. Exit KB Mode : Exit PS2 KB Mode.
Buzzer Setup	Default: ON ON OFF
Smart Backfeed	Default: ON ON : This function must install stripper or cutter. OFF
Password	Default: OFF ON : When password protect enable, the password is required for entering Setting Mode. OFF
Top of Form	Default: ON ON : Start each printing from the Top-of-Form position. OFF
USB / Ethernet	Default: USB USB : Set the USB port as active port. Ethernet : Set the Ethernet port as active port.
Preview	Preview and check all settings.

***[Note 1]** "Default Setting" is the original settings from the factory, if other changes are made on the settings, then follow the new settings.*

***[Note 2]** Printer will store the previous settings after power off, thus if settings are to be*

changed again, please enter the Setting Mode to reset.

The diagram of Setting Mode

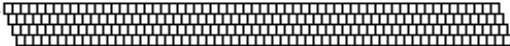


- ◆ To enter the Setting mode, please press and hold the Pause key about 3 to 4 seconds until the buzzer beeps 3 times and LCD shows "Setting mode".
- ◆ Item with the "*" sign is default setting.

3-4. Self-Test

The Self-Test function will help user to check whether the printer is operating normally. The printer will go back to standby mode after printing a Self-Test page. Below are the Self-Test procedures:

1. Power off the printer, press and hold the FEED key.
2. Power on the printer while still holding the FEED key until the printer beeps 3 times and the LCD Display would show "Self Test", and then release the FEED key.
3. After about 1 second, printer would automatically print out a Self-Test page as follow. This means the printer is working properly.

Model (printhead resolution)	→	Model: OD9 (8 dot/mm)
Firmware version, Checksum of the F/W (F8C3)	→	Version: E3.0D3, F8C3
Serial Port setting	→	Serial port : 96.N.8.1.XON/XOFF
Printhead test pattern	→	
Cash-memory for print jobs	→	DRAM size : 1500K
Available memory for forms, fonts and graphics	→	User Memory: 2046K
Number and size of forms	→	Fmem: Used 000K, 000 Form(s)
Number and size of graphics	→	Gmem: Used 000K, 000 Graphic(s)
Number and size of fonts	→	Emem: Used 000K, 000 Font(s)
Number and size of Asian fonts	→	Amem: Used 000K, 000 AsianFont(s)
Code Page (Standard 850)	→	Code Page: 850
Printing speed	→	Speed: 3 Inch
Printing darkness	→	Darkness: 10
Label Width (640 dot / 8dot = 80mm)	→	Width: 640 dot
Label Length (809 dot / 8dot = 101.1mm)	→	Length: 809 dot
Label Gap (23 dot / 8dot = 2.9mm)	→	Gap: 23 dot
Print Mode: Thermal Transfer or Direct Thermal	→	Print Mode: Thermal Transfer
Label Sensor: on/off (recognize label: ok/not ok)	→	Reflective Sensor: ON (Detect OK)

3-5. Dump Mode

When the print result doesn't match the label setting, it's recommended to go into the Dump Mode to check whether there is a mistake in data transmission between the printer and the PC. For example, when printer receives 8 commands, yet without processing these commands, only printed out the contents of the commands, this will confirm whether the commands were received correctly. Test procedures to enter the Dump Mode are as follows:

1. Power off the printer, press and hold the FEED key.
2. Power on the printer (while still holding the FEED key).
3. When LCD Display shows "DUMP MODE BEGIN," then release the FEED key. Printer will automatically print "DUMP MODE BEGIN." This means the printer is already in Dump Mode.
4. Send commands to the printer, and check if printed content matches the commands that just be sent.

To cancel (get out of) the Dump Mode, please press the FEED key, and then the printer will automatically print "OUT OF DUMP MODE." This indicates that the printer is back to the standby mode.

3-6. Auto Sensing

Printer can automatically detect the paper length and record it. By this way, users do not need to set the paper length and the printer can accurately detect the position of paper gap.

1. Check if the paper is loaded properly.
2. Power off the printer, press and hold the Pause key.
3. Power on the printer while still holding the Pause key until the printer beeps 3 times and the LCD Display shows "Auto Sensing mode," then release the Pause key. The printer will automatically detect the label size/length and record the information.
4. LCD Display shows the results of measurement.

The printer will be back to standby mode after displaying the result of Auto Sensing.

3-7. Keyboard Mode

OD9 can support keyboard with PS2 interface. To connect the PS2 keyboard, please do as follows:

1. Please be sure the printer power is on and is showing no error message.
2. Power off the printer and then plug the PS2 keyboard connector into the socket in the back of printer.
3. Power on the printer, the message "Enter keyboard Mode [y/n]" will be displayed on the LCD. Press FEED key on LCD control panel or press "Y" on PS2 keyboard to enter the Keyboard Mode.

While in the keyboard mode, you may press "Esc" key (or press CANCEL key on LCD panel) anytime to go back to the previous page, and at the end you will be prompted to exit the keyboard mode. When "Exit Keyboard Mode [y/n]" message is displayed on the LCD, enter "y" (or press FEED key on LCD panel) to leave the PS2 keyboard mode. To re-enter the keyboard mode, just restart the printer or select the "Keyboard mode" function in setting mode. To change the keyboard setting, please refer to the "Setting Mode diagram" in Chapter 3.3 .

3-8. Error Messages

If problems occur that prevent the printer printing normally, the printer will beep as warning, and error messages will be displayed.



Quickly blinking



Slowly blinking



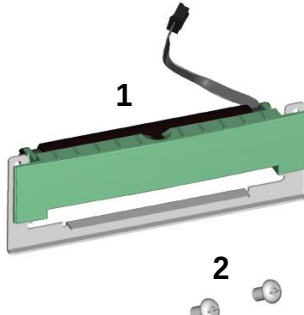
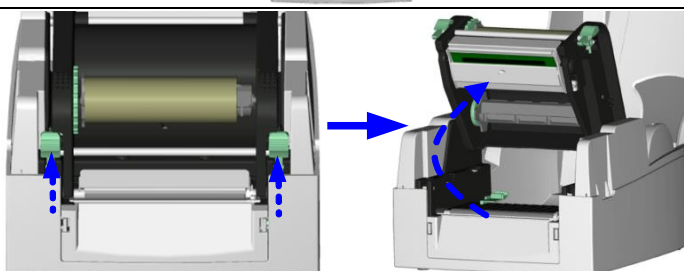
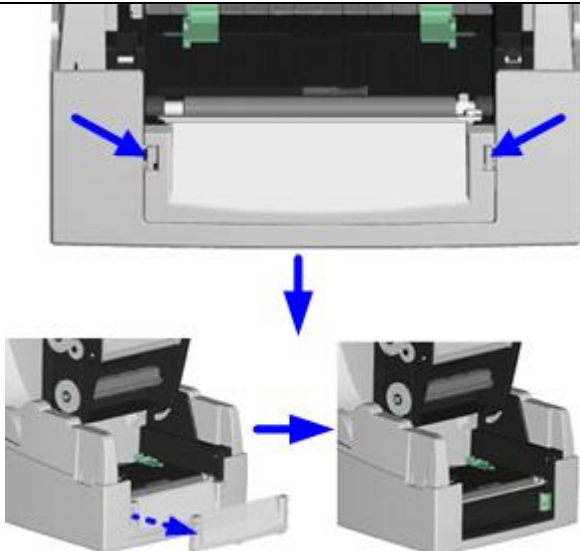
Light is on

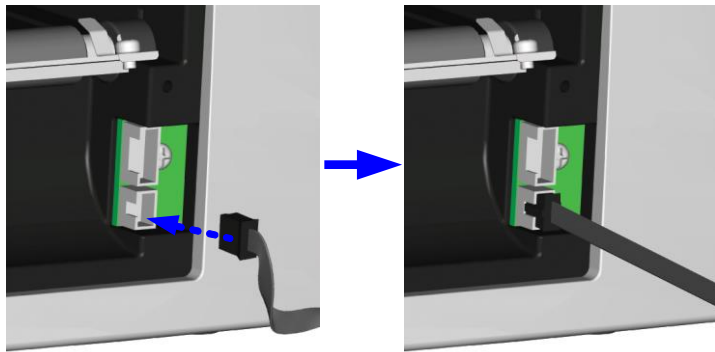
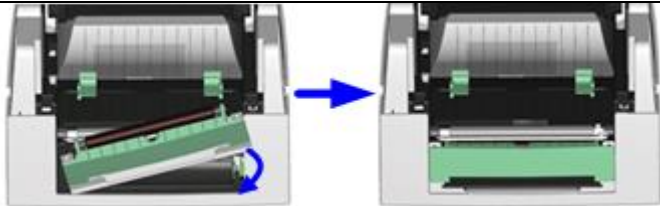
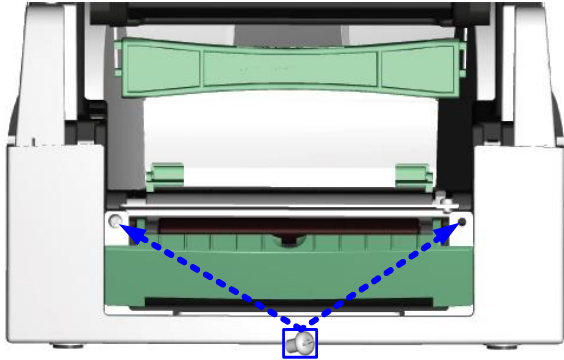
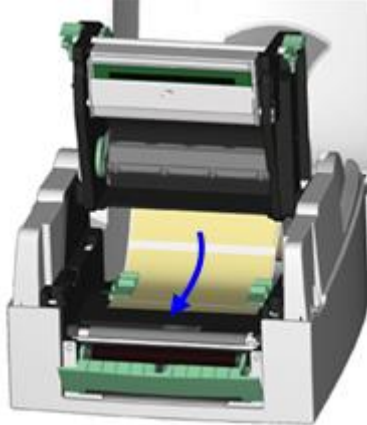
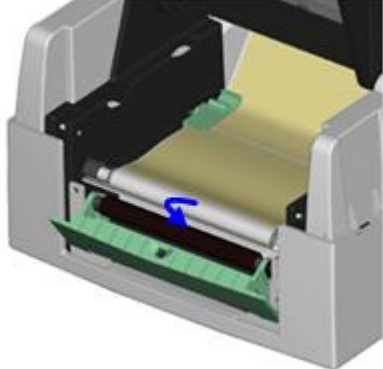
LCD Message Display	LED Message Light			Beep	Description	Solution
	Ribbon	Media				
Print Head is opened			both lights are on	4 beeps twice	Thermal Print Head is not firmly closed.	Re-open the Thermal Print Head and make sure it is closed tightly.
Entering the Cooling Process			blinking simultaneously		Thermal Print Head temperature high.	Printer goes back to standby mode after cooling.
Out of ribbon or check ribbon sensor				3 beeps twice	Ribbon not installed, and printer shows error message.	Make sure the printer is in the Direct Thermal mode.
					Ribbons used up or ribbon supply shaft not moving.	Replace with new ribbon roll.
Out of media or check media gap sensor				2 beep twice	Unable to detect paper.	Make sure the movable sensor mark is at the correct position, if the sensor is still unable to detect paper, and then go through Auto Sensing again.
					Label used up.	Replace with new label roll.
Check paper setting				2 beep twice	Paper jam.	Possible causes: card tags, paper falling into the gap behind the platen roller, can't find label gap/black mark, black mark paper out. Please adjust according to actual usage.
CF Card not found			blinking simultaneously	2 beeps twice	CF Card is not formatted.	Please follow the instruction on Chapter 4-5 to format the CF Card.

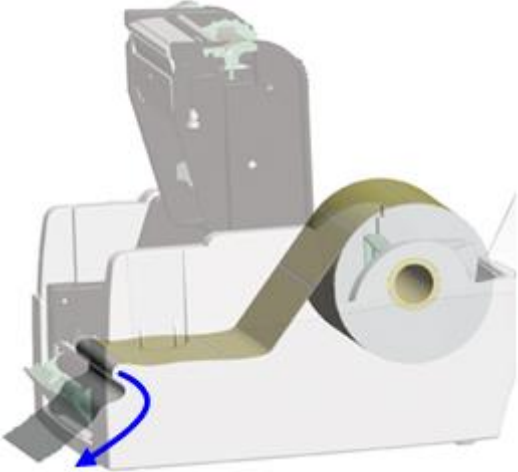
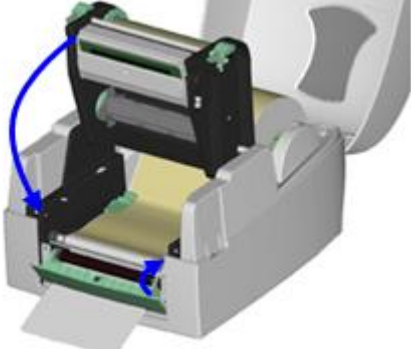
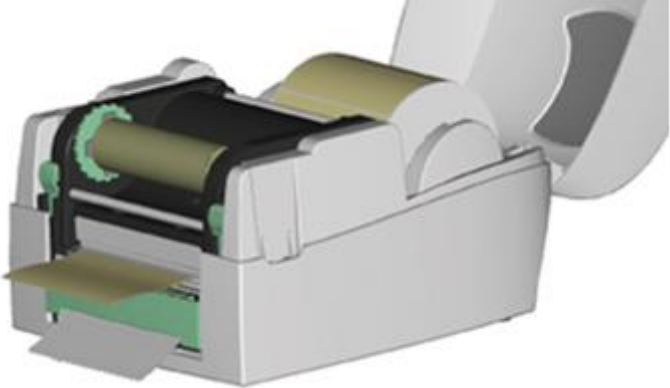
Memory Full				2 beeps twice	Memory is full	Delete unnecessary data in the memory or use CF Card.
Filename can not be found				2 beeps twice	Can't find the file	Use "~X4" command to print out all the files, then check whether the file exist and the names are correct.
Filename repeated				2 beeps twice	File name is repeated	Change the file name and download again.

4. Accessory

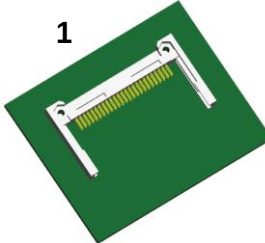
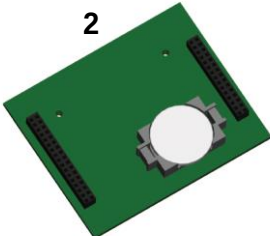
4-1. Stripper Installation

1	Stripper Module	
2	Screw (TAP 3*8) x 2pcs	
Note1 Please power off the printer before installing the stripper module. Note2 Label liner thickness is recommended to be 0.06mm $\pm$ 10% with basic weight 65g/m² $\pm$ 6%. Note3 The max width for stripper is 110mm		
2.	Open the top cover by pressing the Cover Open Buttons on both sides.	
2.	Loosen and then lift the printing mechanism by pressing the locking tenons.	
3.	Unlock the front cover piece by pushing locks inward.	
4.	Lift/take off the front cover piece according to the direction shown in the figure.	

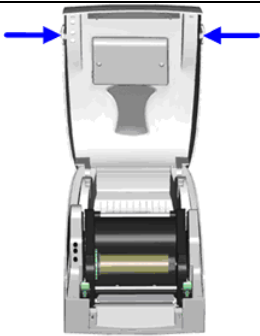
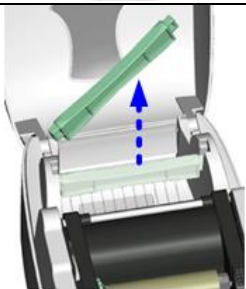
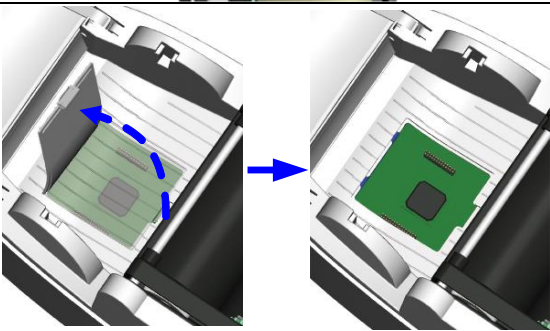
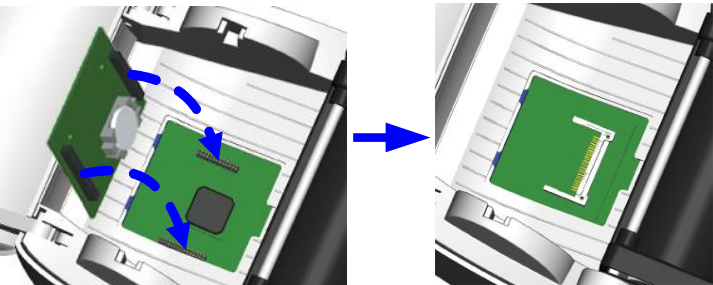
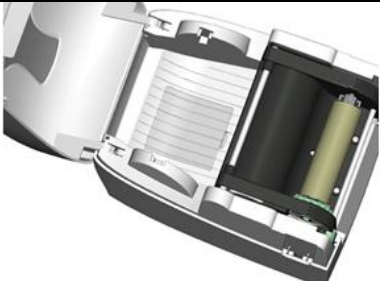
5. Plug in the stripper connector onto the switchboard socket. (refer to right figure) <i>【Note】</i> There are 2 sockets on the converting boards (one is for stripper installation, and another one is for cutter), before plug the connector into socket, please check the pin first.	
6. Place the left side of the stripper first, and then fit the right side.	
7. Hold the stripper module and tighten the screws.	
8. Feed the label through the Label Guides. <i>【Note】</i> The label / paper used for stripper is suggested to be at least 25mm in height. <i>【Suggestion】</i> When printing with stripper module, it is suggested to set the stop position to 9.	
9. Peel off the first label, and feed the liner through the roller and the Tear-off Bar.	

10. Follow the direction as shown in figure to feed the liner across the stripper.	
11. Close the printing mechanism and the stripper.	
12. Press the FEED key to adjust the position of label and complete the installation.	

4-3. CF Card Adapter Installation

1	CF Card Adapter (Front)	1  2 
2	CF Card Adapter (Back)	

[Note]
Please power off the printer before installing the CF Card Adapter.

1. Open the top cover by pressing the Cover Open Buttons on both sides.	
2. Take off the label roll core.	
3. Open and remove the plastic cover from the inner base.	
4. Check the correspondent pins and sockets to plug the adapter card onto the main board. <i>[Note] Please make sure the sockets and the pins are match, otherwise the pins may get damaged.</i>	
5. Close the plastic cover.	

4-4. CF Card Instruction

OD9 can read the CF Card after installed the CF Card Adapter. If the built-in memory is insufficient for storing label formats, graphics or fonts, users can use CF Card as external memory to provide more memory space.

When using the CF card, please follow the instruction as below:

1. Please power off the printer before installing or removing CF Card from the card slot.
2. The CF Card cannot be used for printer's external memory until it is formatted in FAT16. When the printer has detected that the CF card is not formatted in FAT16, it will beep 3 times and the Status led light will flash orange.
3. If user wants to format the CF Card, just press the "FEED" key, and then the printer will start to format the CF Card in FAT16. When the format is complete, the LED light will turn to green.
4. If choose not to format the CF Card, just open the Top Cover of printer and wait for the turn-on procedure complete.
5. After the format is complete, a file folder named "CF" would be created automatically. This folder is for storing all the data from the printer, please don't do any change on it.
6. The specification of CF Card that is supported by the printer is as follow:
 - Compact Flash Type I
 - Compact Flash (CF) v1.4 specification
 - Capacity: 128MB ~ 1GB
 - File system: FAT16

5. Maintenance and Adjustment

5-1. Thermal Print Head Cleaning

Unclear printouts may be caused by dusty print head, ribbon stain or label liner glue. Therefore when printing, it's necessary to keep the top cover closed. Also, check and prevent paper/label from being stained or dusty to ensure print quality and to prolong the print head life. Print head cleaning instructions are as follows:

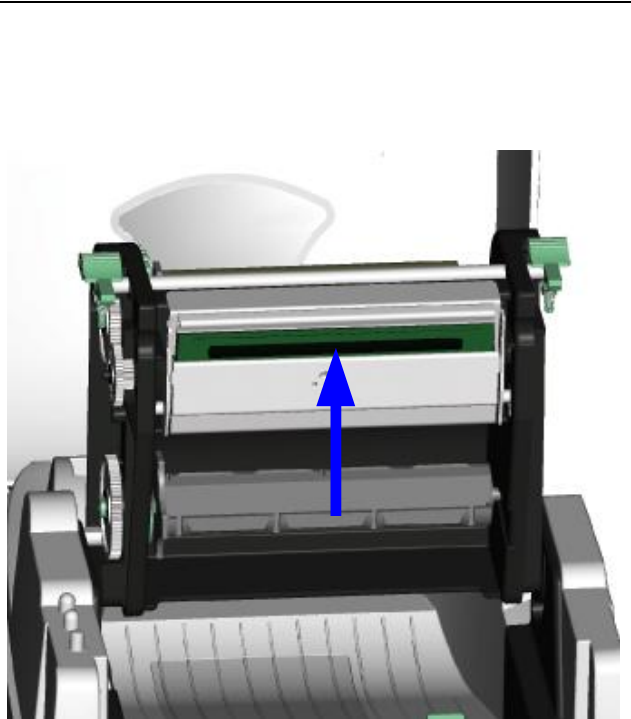
1. Power-off the printer.
2. Open the top cover.
3. Take out the ribbon.
4. Open the print head by pressing the locking tenons.
5. If on the print head (see blue arrow) there's label pieces or other stain, please use a soft cloth with industrial use alcohol to wipe away the stain.

[Note1]

Weekly cleaning on the print head is recommended.

[Note2]

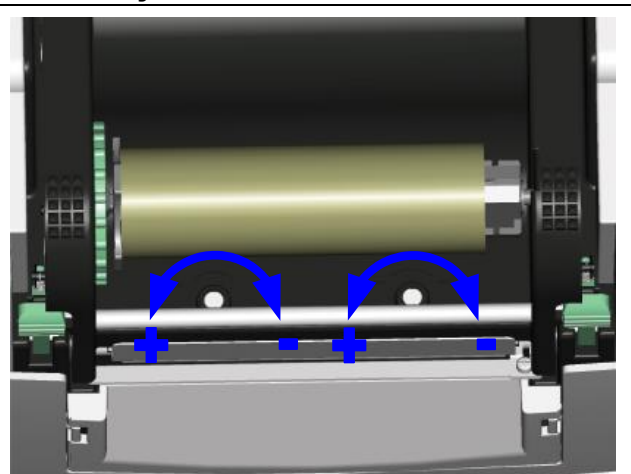
When cleaning the print head with soft cloth, make sure there is no any metal or hard particles attached on it.



5-2. Thermal Print Head Balance Adjustment

When printing with different label materials or using different ribbon types, unbalanced print quality may occur due to the media material differences, thus it's necessary to adjust the Thermal Print Head pressure.

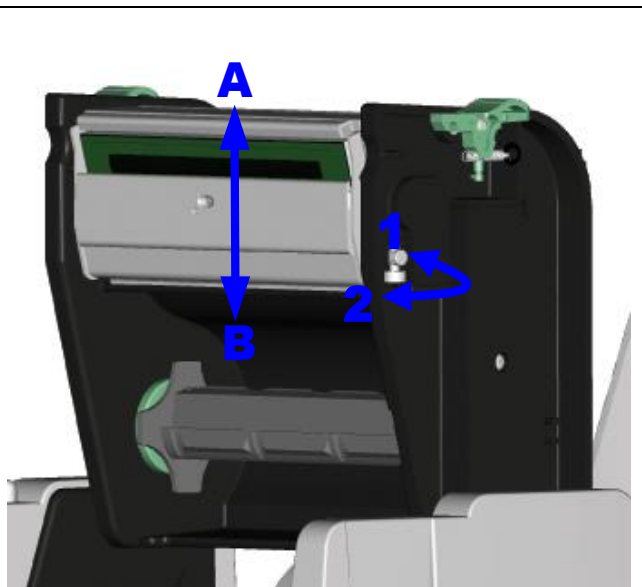
1. Open the top cover.
2. Take out the ribbon.
3. Turning the print head adjustment screws slightly by screwdriver to increase or decrease print head pressure.



5-3. Print Line Adjustment

To get better printing balance and quality, use print head adjusting gear to adjust the contacting surface between print head and label.

1. When turning print head adjusting gear counter-clockwise (as arrow 1 shows), print head would move in the direction where arrow A shows.
2. When turning print head adjusting gear clockwise (as arrow 2 shows), print head would move in the direction where arrow B shows.

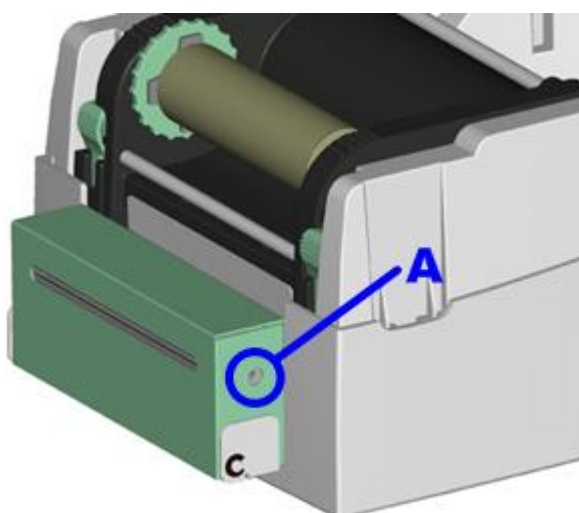


5-4. Adjust the cutter

1. A cutter-adjusting hole is present on the side of cutter (where A is pointing to).
2. The cutter will not work properly if there is a paper jam. Turn the power off and use a #M3 hexagon wrench inserted into the hole "A", and then turn it counter-clockwise.
3. Power on the printer after clearing the paper jam, the cutter will reset automatically.

[Note]

The label / paper used for cutting is suggested to be at least 30mm in height.



5-5. Troubleshooting

Problem	Recommended Solution
Power on the printer, but the LED does not light up	◆ Check the power connector is plugged correctly
LED light turns red (power/status) after printing stops	◆ Check for software setting or program command errors ◆ Replace with suitable label or ribbon ◆ Check if label or ribbon is all out ◆ Check if label is jammed/tangled up ◆ Check if mechanism is not closed (Thermal Print Head not positioned correctly) ◆ Check if sensor is blocked by paper/label ◆ Check for abnormal cutter function or of no actions (if cutter is installed)
Printing started, but nothing was printed on the label	◆ Check if label is placed upside down or if label is not suitable for the application ◆ Select the correct printer driver ◆ Select the correct label and print type
When printing, label is jammed/tangled up	◆ Clean the label jam, and if label is stuck on Thermal Print Head, please remove it by using soft cloth with alcohol
When printing, only part of the contents were printed	◆ Check if label or ribbon is stuck on the Thermal Print Head ◆ Check if application software has errors ◆ Check if start position setting has errors ◆ Check if ribbon has wrinkles ◆ Check if ribbon supply shaft is creating friction with the platen roller. If the platen roller needs to be replaced, please contact your reseller for more information ◆ Check if power supply is correct
When printing, part of the label wasn't printed completely	◆ Check if Thermal Print Head is stained or dusted ◆ Use internal command "~T" to check Thermal Print Head can print completely ◆ Check the media quality
Printout not in desired position	◆ Check if sensor is covered by paper or dust ◆ Check if liner is suitable for use, please contact reseller for more information ◆ Check if label roll edge is aligned with Label Width Guide
When printing, page skipping occurs	◆ Check if error occurs on label height setting ◆ Check if the sensor is covered by dust
Unclear printout	◆ Check print darkness setting ◆ Check if Thermal Print Head is covered with glue or stain
When using cutter, label wasn't cut straight	◆ Check if label is set up straight
When using cutter, label wasn't cut successfully	◆ Check whether label thickness exceeds 0.2mm
When using cutter, label couldn't feed or abnormal cutting occurs	◆ Check if the cutter is installed properly ◆ Check if the label is installed properly
When using stripper, abnormal function occurs	◆ Check if stripper sensor is covered with dust ◆ Check if label is installed properly

[Note]

Your dealer is knowledgeable about printers, printing software, and your unique system.
Please contact your local dealer for further technical support.