User Manual

EZ2000 Plus/ EZ6000 Plus

GODEX

P/N. 920-011911-05
Rev. C, 02.2011

FCC COMPLIANCE STATEMENT
FOR AMERICAN USERS

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

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 EN 55022:1998+A1:2000+A2:2003, CISPR 22 , Class A EN 55024:1998+A1:2001+A2:2003, IEC 61000- 4 Series EN 61000-3-2 / 2000 & EN 61000-3-3 / 1995. The equipment has also been tested and passed in accordance with the European Standard EN55022 for the both Radiated and Conducted emissions limits.

EZ PLUS SERIES
TO WHICH THIS DECLARATION RELATES
IS IN CONFORMITY WITH THE FOLLOWING STANDARDS

EN55022 : 1998,CLSPR 22, Class A / EN55024 : 1998IEC 61000-4 Serial / EN61000-3-2 : 2000 / EN 6100-3-3 : 1995 / CFR 47, Part 15/CISPR 22 3rd Edition : 1997, Class A / ANSI C63.4 : 2001 / CNS 13438 / IEC60950-1 : 2001 / GB4943 : 2001 / GB9254 : 1998 / GB17625.1 : 2003 /EN60950-1 : 2001

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

Specifications are subject to change without notice.

Safety instructions

Please read the following instructions carefully.

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. Make sure the printer is off before plugging the power connector into the power jack.

4. It is recommended that you connect the printer to a surge protector to prevent possible transient overvoltage damage.

5. Be careful not to get liquid on the equipment to avoid electrical shock.

6. For safety and warranty reasons, ONLY qualified service personnel should open the equipment.

7. Do not repair or adjust energized equipment under any circumstances.

1. BARCODE PRINTER 4

1-1. Box content 4

1-2. Specifications 4

1-3. Interfaces 8

1-4. Getting to know your printer 11

2. PRINTER SETUP 13

2-1. Loading the label roll 13

2-2. Loading the ribbon 16

2-3. Connecting the printer to the host computer 17

2-4. Installing the driver 18

3. OPERATOR PANEL 20

3-1. Operator panel – introduction 20

3-2. Function buttons – introduction 20

3-3. Settings mode 22

3-4. Self test 27

3-5. Dump mode 28

3-6. Label size calibration 28

3-7. Keyboard mode 29

3-8. Error alerts 32

3-9. Instructions for using the CF card 33

4. ACCESSORIES 34

4-1. Internal rewinder (EZ2000 Plus) 34

4-2. Installing the rewinder guide (EZ2000 Plus) 36

4-3. Label dispenser (EZ2000 Plus) 37

4-4. Internal rewinder for EZ6000 Plus 39

4-5. Installing the label dispenser (EZ6000 Plus with rewinder) 44

4-6. Installing the cutter 47

4-7. Installing the parallel / PS/2 adapter 49

4-8. Installing the applicator interface 51

5. MAINTENANCE AND ADJUSTMENT 56

5-1. Installing / removing the print head module 56

5-2. Adjusting the print line 57

5-3. Adjusting the ribbon tension 58

5-4. Cleaning the thermal print head 59

5-5. Adjusting the balance and print head tension 60

5-6. Ribbon shield settings 61

5-7. Cutter settings 62

5-8. Troubleshooting 63

1. Barcode printer

1-1. Box content

Please check that all of the following items are included with your printer:

- Barcode printer
- Power cord
- USB cable
- Label stock
- Ribbon
- Empty ribbon core
- Quick reference guide
- CD (with QLabel label software / user manual)

1-2. Specifications

EZ2000 Plus series

Model	EZ2200 Plus	EZ2300 Plus
Print Method	Thermal Transfer / Direct Thermal	
Resolution	203 dpi (8 dot/mm)	300 dpi (12 dot/mm)
Print Speed	7 IPS (177 mm/s)	6 IPS (150 mm/s)
Print Width	4.09” (104 mm)	
Print Length	Min. 0.16” (4 mm)** Max. 180” (4572 mm)	Min. 0.16” (4 mm)** Max. 85” (2159 mm)
Memory	4MB Flash (2MB for user storage) ; 16MB SDRAM	
Sensor Type	Adjustable reflective sensor and transmissive sensor, left aligned	
Media	Types: Continuous form, gap labels, black mark sensing, and punched hole; label length set by auto sensing or programming Width (Tear): 1” (25.4 mm) Min. - 4.64” (118 mm) Max. Width (Cutter): 4.61” (117 mm) Max. Width (Label Dispenser / Rewind): 4.64” (118 mm) Max. Thickness: 0.003” (0.06 mm) Min. - 0.01” (0.25 mm) Max. Label roll diameter: Max. 8” (203.2 mm) with 3" (76.2 mm) core / Max. 6” (152.4 mm) with 1.5" (38.1 mm) core Core diameter: 1.5” (38.1 mm) - 3” (76.2 mm)	
Ribbon	Types: Wax, wax/resin, resin Length: 1471’ (450 m) Width: 1.18” Min - 4.33” (30 mm - 110 mm) Max Ribbon roll diameter.: 2.99“ (76 mm) Core diameter: 1” (25.4 mm) Auto ink inside and ink outside	

Printer Language	EZPL, GEPL (Godex Eltron® Printer Language), GZPL (Godex Zebra® Printer Language)
Software	Label design software: QLabel-IV (for EZPL only) Driver & DLL: Windows 2000, XP and Vista
Resident Fonts	Bitmap fonts: 6, 8, 10, 12, 14, 18, 24, 30, 16X26 and OCR A & B Bitmap fonts 90°, 180°, 270° rotatable, single characters 90°, 180°, 270° rotatable Bitmap fonts 8 times expandable in horizontal and vertical directions Scalable fonts 90°, 180°, 270° rotatable
Download Fonts	Bitmap fonts 90°, 180°, 270° rotatable, single characters 90°, 180°, 270° rotatable Asian fonts 90°, 180°, 270° rotatable and 8 times expandable in horizontal and vertical directions Scalable fonts 90°, 180°, 270° rotatable
Barcodes	1-D Bar codes: Code 39, Code 93, Code 128 (subset A, B, C), UCC/EAN-128 K-Mart, UCC/EAN-128, UPC A / E (add on 2 & 5), I 2 of 5, I 2 of 5 with Shipping Bearer Bars, EAN 8 / 13 (add on 2 & 5), Codabar, Post NET, EAN 128, DUN 14, HIBC, MSI (1 Mod 10), Random Weight, Telepen, FIM, China Postal Code, RPS 128 and GS1 DataBar
	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 Unicode (UTF8, UTF16)
Graphics	Resident graphic file types are BMP and PCX, other graphic formats are downloadable from the software
Interfaces	Serial port: RS-232 (DB-9) USB port (default on) 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(EMC), FCC Class A, CB, cUL, CCC
Dimension	Length: 20.15” (512 mm) Height: 11.45” (291 mm) Width: 10.78” (274 mm)
Weight	33 lbs (15Kg) ,excluding consumables
Options	Cutter Module Internal Rewinder with Label Dispenser (peel) Parallel port (Centronics 36-pin) and PS2 port Applicator Interface (1 input, 3 outputs, power 500mA @ 5V) 802.11 b/g wireless print server (Default off; disables USB when in use. Must remove Ethernet card to install) External label roll holder for 10” (250 mm) O.D. label rolls External label rewinder

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

*** Minimum print height specification compliance can be dependent on non-standard material variables such as label type, thickness, spacing, liner construction, etc. Godex is pleased to test non-standard materials for minimum height printing capability.*

EZ6000 Plus series

Model	EZ6200 Plus	EZ6300 Plus
Print Method	Thermal Transfer / Direct Thermal	
Resolution	203 dpi (8 dot/mm)	300 dpi (12 dot/mm)
Print Speed	6 IPS (150 mm/s)	4 IPS (102 mm/s)
Print Width	6.61” (168 mm)	
Print Length	Min. 0.16” (4 mm)** Max. 118” (3000 mm)	Min. 0.16” (4 mm)** Max. 54” (1371 mm)
Memory	4MB Flash (2MB for user storage) ; 16MB SDRAM	
Sensor Type	Adjustable reflective sensor and transmissive sensor, left aligned	
Media	Types: Continuous form, gap labels, black mark sensing, and punched hole; label length set by auto sensing or programming Width (Tear): 2” (50.8 mm) Min. - 7” (178 mm) Max. Width (Cutter): 6.5” (165 mm) Max. Width (Heavy duty cutter): 6.8” (172 mm) Max. Width (Label Dispenser / Rewind): 7” (178 mm) Max. Thickness: 0.003” (0.06 mm) Min. - 0.01” (0.25 mm) Max. Label roll diameter: Max. 8” (203.2 mm) with 3" (76.2 mm) core / Max. 6” (152.4 mm) with 1.5" (38.1 mm) core Core diameter: 1.5” (38.1 mm) - 3” (76.2 mm)	
Ribbon	Types: Wax, wax/resin, resin Length: 1471’ (450 m) Width: 2.36” Min - 6.85” (60 mm - 174 mm) Max Ribbon roll diameter.: 2.99“ (76 mm) Core diameter: 1” (25.4 mm) Auto ink inside and ink outside	
Printer Language	EZPL (Firmware upgradable)	
Software	Label design software: QLabel-IV (for EZPL only) Driver & DLL: Windows 2000, XP and Vista	
Resident Fonts	Bitmap fonts: 6, 8, 10, 12, 14, 18, 24, 30, 16X26 and OCR A & B Bitmap fonts 90°, 180°, 270° rotatable, single characters 90°, 180°, 270° rotatable Bitmap fonts 8 times expandable in horizontal and vertical directions Scalable fonts 90°, 180°, 270° rotatable	
Download Fonts	Bitmap fonts 90°, 180°, 270° rotatable, single characters 90°, 180°, 270° rotatable Asian fonts 90°, 180°, 270° rotatable and 8 times expandable in horizontal and vertical directions Scalable fonts 90°, 180°, 270° rotatable	

Barcodes	1-D Bar codes: Code 39, Code 93, Code 128 (subset A, B, C), UCC/EAN-128 K-Mart, UCC/EAN-128, UPC A / E (add on 2 & 5), I 2 of 5, I 2 of 5 with Shipping Bearer Bars, EAN 8 / 13 (add on 2 & 5), Codabar, Post NET, EAN 128, DUN 14, HIBC, MSI (1 Mod 10), Random Weight, Telepen, FIM, China Postal Code, RPS 128 and GS1 DataBar
	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 Unicode (UTF8, UTF16)
Graphics	Resident graphic file types are BMP and PCX, other graphic formats are downloadable from the software
Interfaces	Serial port: RS-232 (DB-9) USB port (default on) 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(EMC), FCC Class A, CB, cUL, CCC
Dimension	Length: 20.31” (516 mm) Height: 11.22” (285 mm) Width: 13.58” (345 mm)
Weight	36.8 lbs (16.7Kg) ,excluding consumables
Options	Cutter Module Internal Rewinder with Label Dispenser (peel) Parallel port (Centronics 36-pin) and PS2 port Applicator Interface (1 input, 3 outputs, power 500mA @ 5V) 802.11 b/g wireless print server (Default off; disables USB when in use. Must remove Ethernet card to install) External label roll holder for 10” (250 mm) O.D. label rolls External label rewinder

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

*** Minimum print height specification compliance can be dependent on non-standard material variables such as label type, thickness, spacing, liner construction, etc. Godex is pleased to test non-standard materials for minimum height printing capability.*

1-3. Interfaces

Parallel port

Handshaking : DSTB is sent to the printer, BUSY to the host computer
Interface cable : Parallel cable compatible with IBM computers
Pinout : See below

Pin No.	Function	Transmitter
1	/Strobe	Computer / printer
2-9	Data 0-7	Computer
10	/Acknowledge	Printer
11	Busy	Printer
12	/Paper empty	Printer
13	/Select	Printer
14	/Auto-Linefeed	Computer / printer
15	N/C	
16	Signal Gnd	
17	Chassis Gnd	
18	+5V, max 500mA	
19-30	Signal Gnd	Computer
31	/Initialize	Computer / printer
32	/Error	Printer
33	Signal Ground	
34-35	N/C	
36	/Select-in	Computer / printer

Serial port

Default settings : Baud rate 9600, no parity, 8 data bits, 1 stop bit, XON/XOFF protocol and RTS/CTS

RS232 housing (9-pin to 9-pin)

DB9 socket		DB9 plug
---	1 ——— 1	+5V, max 500mA
RXD	2 ——— 2	TXD
TXD	3 ——— 3	RXD
DTR	4 ——— 4	N/C
GND	5 ——— 5	GND
DSR	6 ——— 6	RTS
RTS	7 ——— 7	CTS
CTS	8 ——— 8	RTS
RI	9 ——— 9	N/C
Computer		Printer

【Note】 The total current to the parallel and serial ports may not exceed 500 mA.

USB port

Connector type : Type B

Pin No.	1	2	3	4
Function	VBUS	D-	D+	GND

PS/2 port

Pin No.	1	2	3	4	5	6
Function	DATA	N/C	GND	VCC	CLOCK	N/C

PS/2 computer-to-printer interface

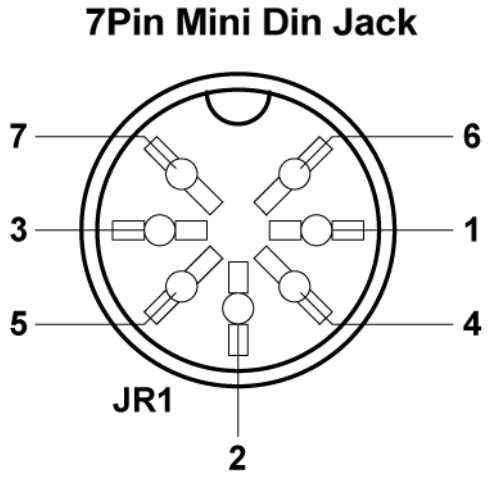
Printer		Keyboard
DATA	1 — 1	DATA
N/C	2 — 2	N/C
GND	3 — 3	GND
VCC	4 — 4	VCC
CLOCK	5 — 5	CLOCK
N/C	6 — 6	N/C

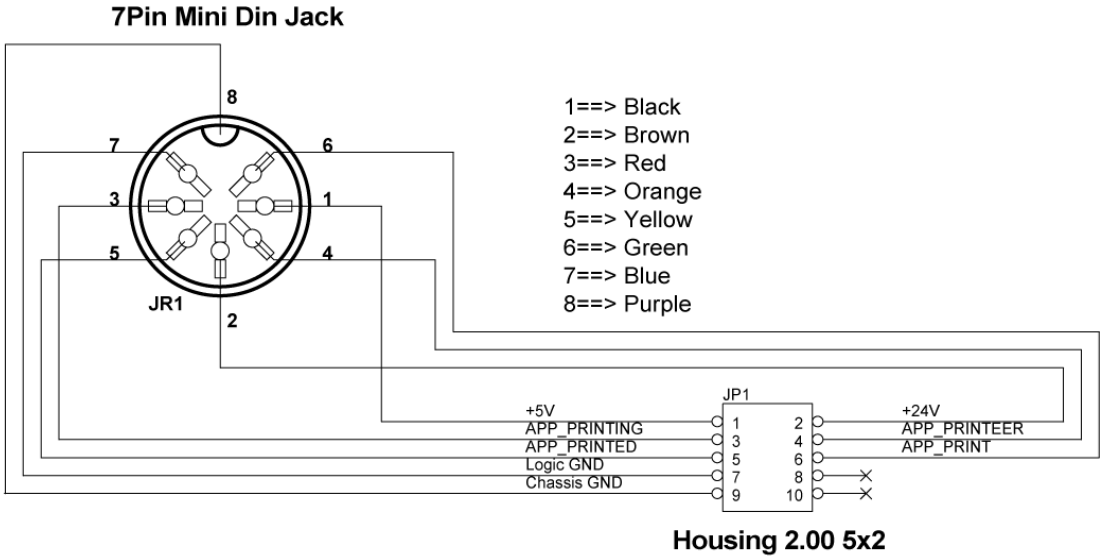
Internal interface

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		Add-on 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
N.C	7 — 7	N.C
RTS	8 — 8	CTS
N.C	9 — 9	N.C
+5V	10 — 10	+5V
GND	11 — 11	GND
+5V	12 — 12	+5V

Applicator wafer			Applicator module
+5V	1	1	+5V
+24V	2	2	+24V
Printing (out)	3	3	Printing
Print error (out)	4	4	Print error
Printed (out)	5	5	Printed
Print (in)	6	6	Print
GND	7	7	GND
N.C	8	8	
GND	9	9	
N.C	10	10	



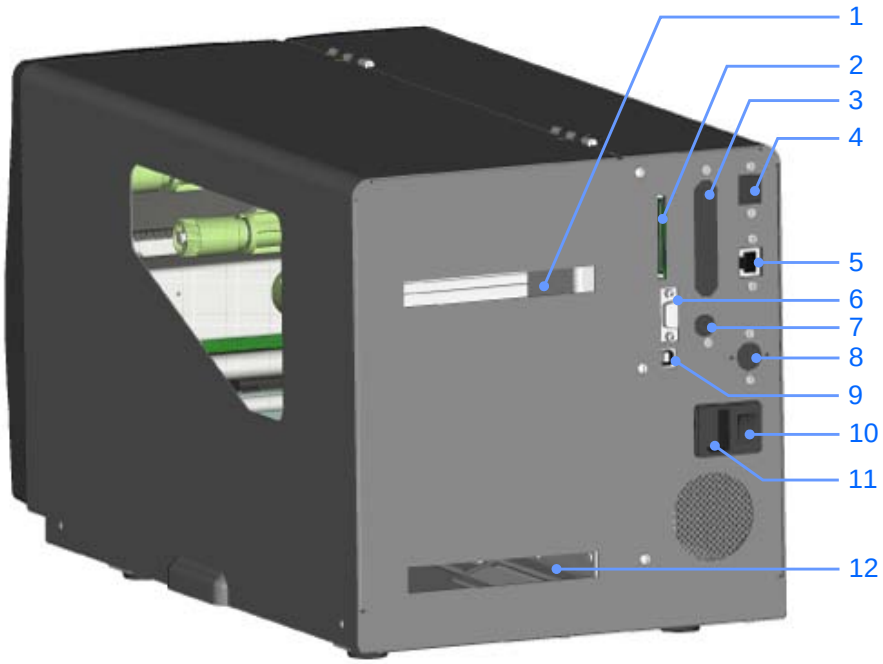


Housing 2.00 5x2

1-4. Getting to know your printer

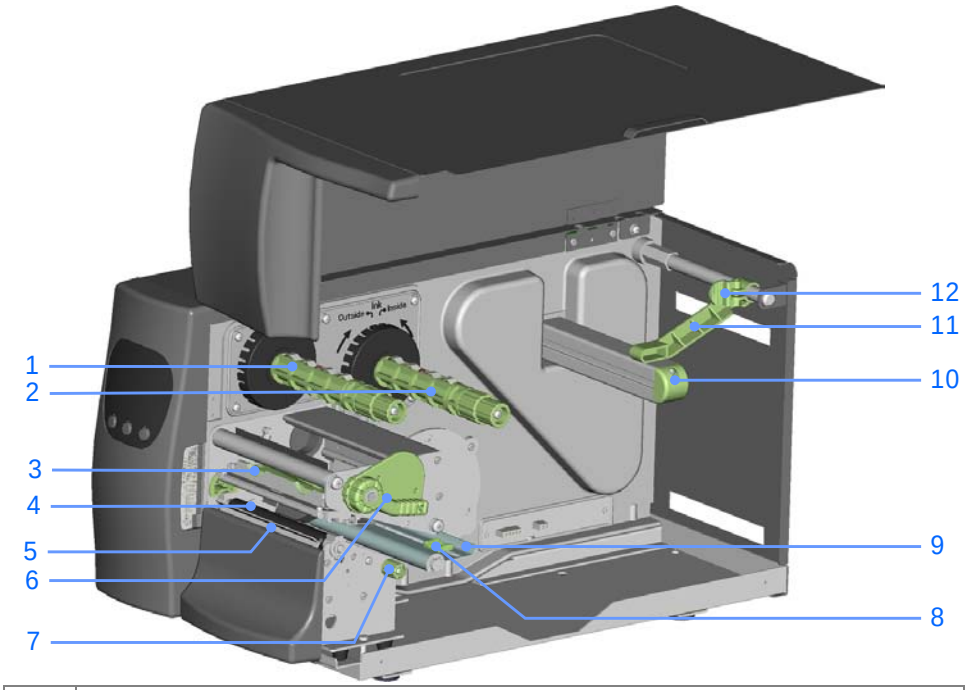
External view

1.	Operator panel with LCD display
2.	Lower cover plate
3.	Viewing window
4.	Printer cover

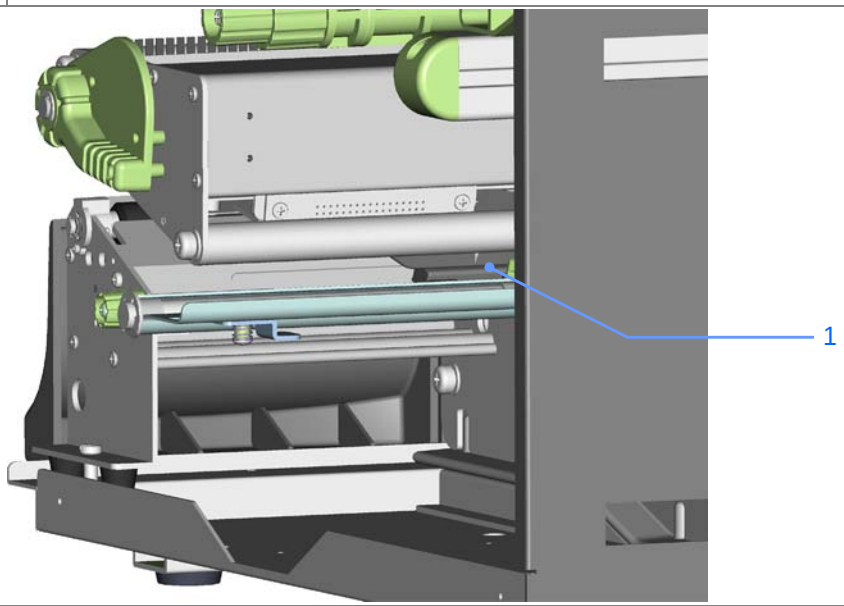


1.	Feed slot for continuous labels
2.	CF card slot
3.	Parallel port (optional)
4.	WLAN antenna interface (optional)
5.	Ethernet port
6.	Serial port (DB-9)
7.	PS/2 port (optional)
8.	Applicator interface (optional)
9.	USB port
10.	On/Off switch
11.	Power jack
12.	Feed slot for continuous labels

Internal view



1.	Ribbon rewind hub
2.	Ribbon supply hub
3.	Print mechanism
4.	Platen roller
5.	Tear-off plate
6.	Release lever for print head
7.	Adjustment wheel for sensor
8.	Paper guide
9.	Label tension guide
10.	Label supply hub
11.	Label roll guide
12.	Release catch



1.	Movable sensor

2. Printer setup

This printer supports the following printing methods:

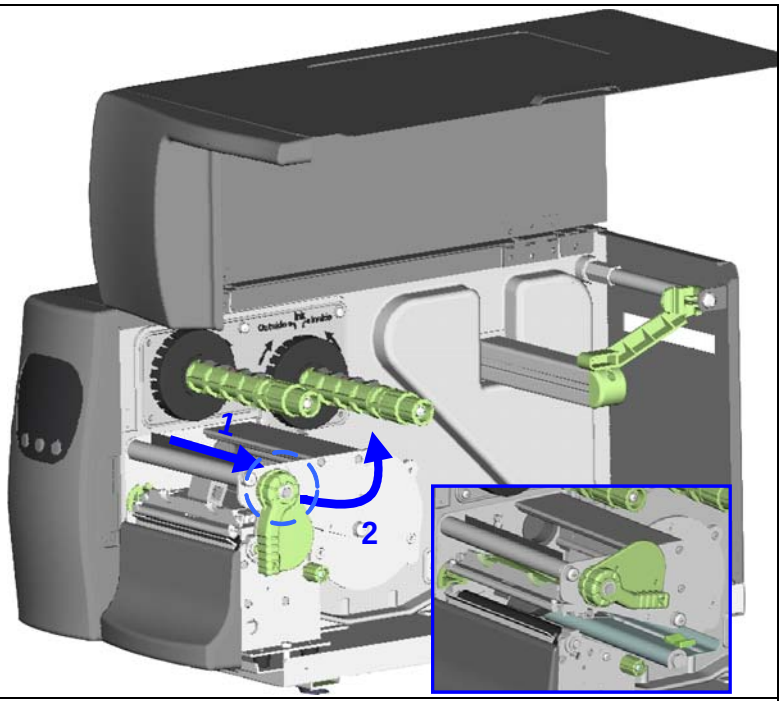
Thermal transfer printing (TTP)	Requires a ribbon for transferring a printed image to a medium.
Direct thermal printing (DTP)	Does not require a ribbon, only thermal paper.

Please check which printing method you are using and alter the settings accordingly in the printer driver, printer menu, and/or software.

2-1. Loading the label roll

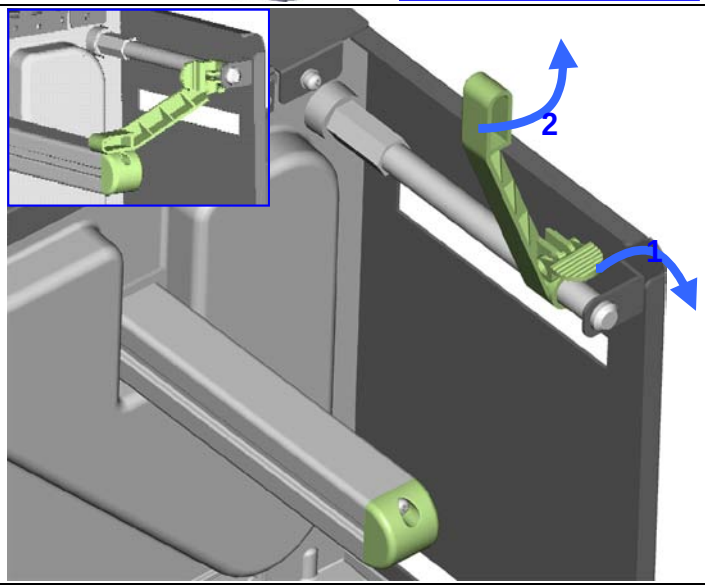
1. Place the printer on a flat surface and open the printer cover.

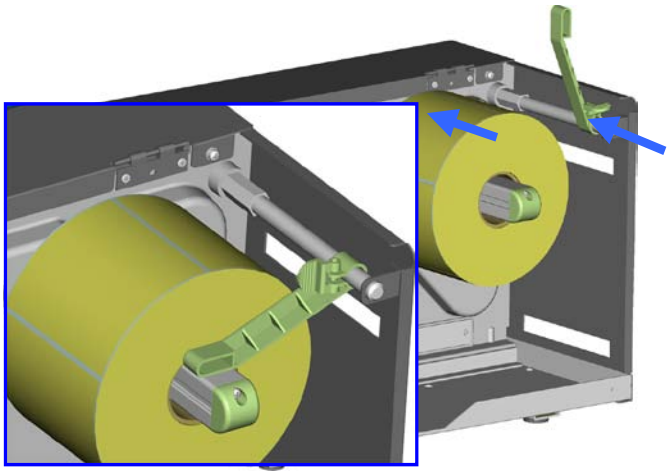
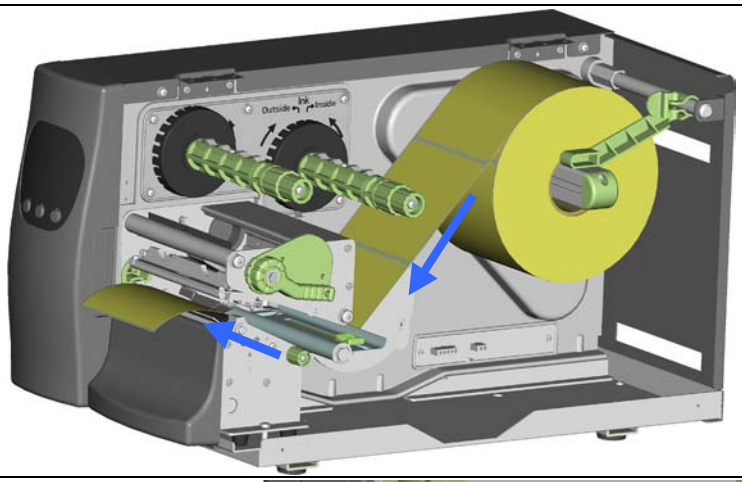
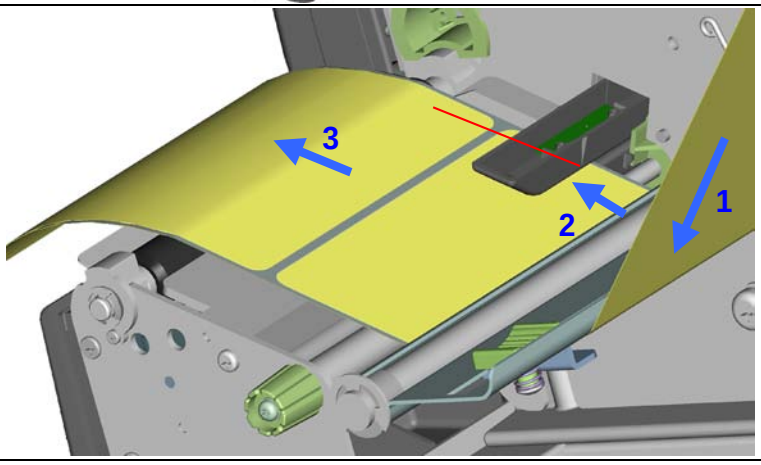
2. Pull out the print head release lever as shown in the illustration (1) and turn it anticlockwise to a top right position (2).



3. Pull the release catch for the label roll guide to the right as shown by the blue arrow 1.

4. Now slide the label roll guide forward and fold it up as shown by the blue arrow 2.



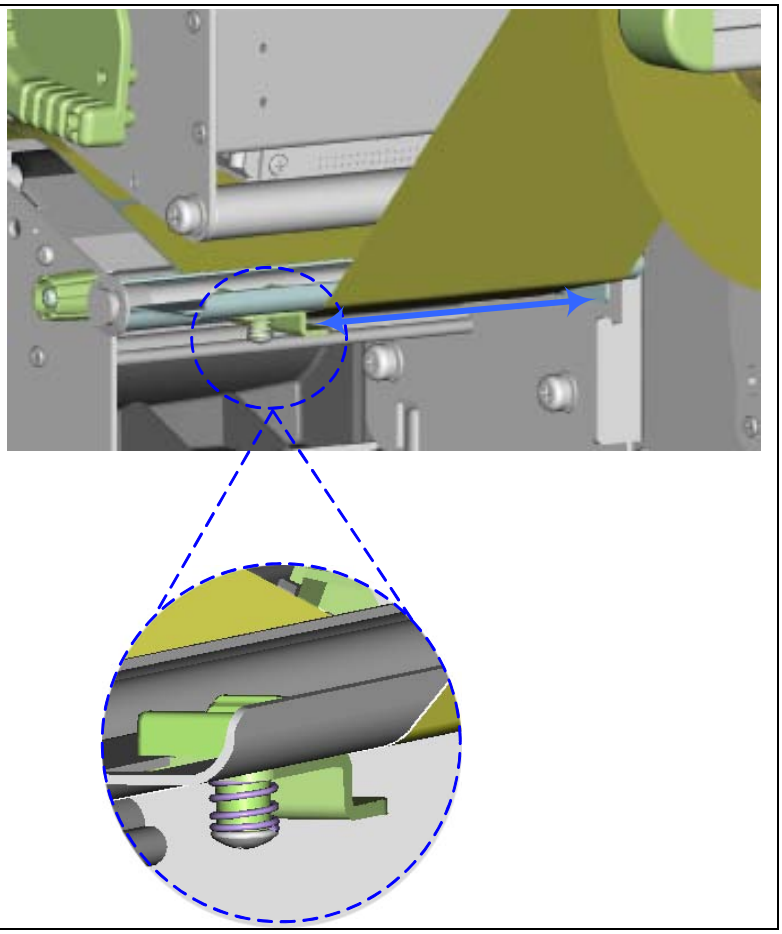
5. Place the label roll on the label supply hub, pushing it right up to the printer housing. (Do not apply too much pressure to avoid damaging the label stock.) 6. Fold the label roll guide back down and push it against the label roll. *【Note】* *When moving the label roll guide, hold it only by the end that is attached to the bracket, not by its top.*	
7. Load the label roll into the printer as shown in the illustration. Pass it through the printer as indicated by the blue arrows.	
8. Pass the label stock through the sensor and up to the tear-off plate. *【Note】* *Remember to set the movable sensor to gap, black mark, or tag hole by changing the position of the sensor with the adjustment wheel.*	

9. The labels pass between the wall of the printer housing and the adjustable paper guide.

【Note】
Pass the labels through the printer as shown in the illustration.

10. Return the print head release lever to its original position.

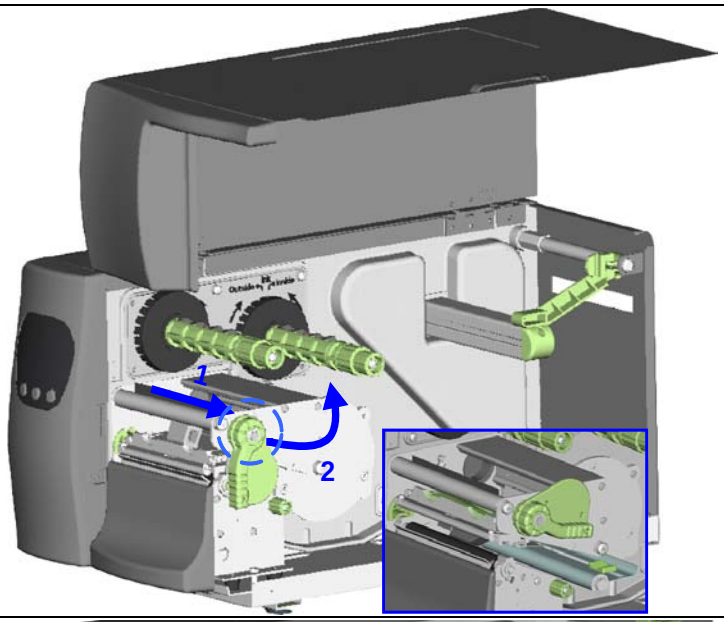
11. Then close the printer cover.



2-2. Loading the ribbon

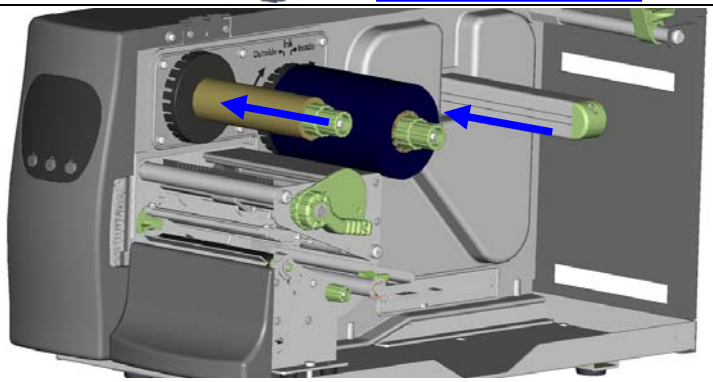
1. Place the printer on a flat surface and open the printer cover.

2. Pull out the print head release lever as shown in the illustration (1) and turn it anticlockwise to a top right position (2).

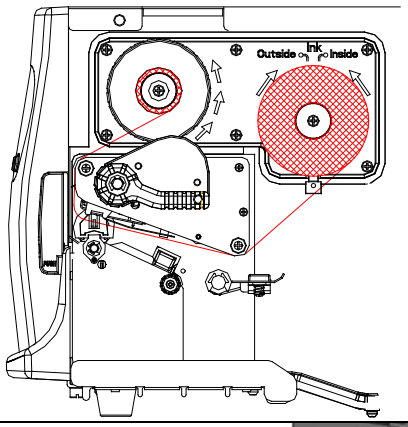


3. Place a new ribbon on the ribbon supply hub. Then place an empty ribbon core on the ribbon rewind hub.

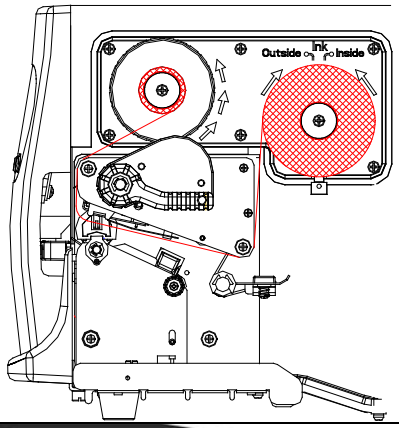
4. The two illustrations on the right show you how to install the ribbon depending on the ribbon type (ink side in or out).



Ink side out

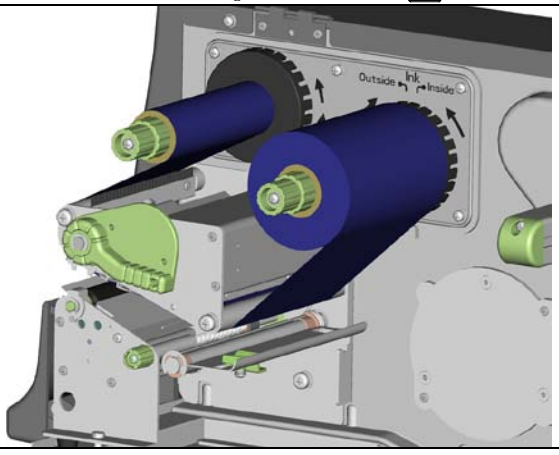


Ink side in



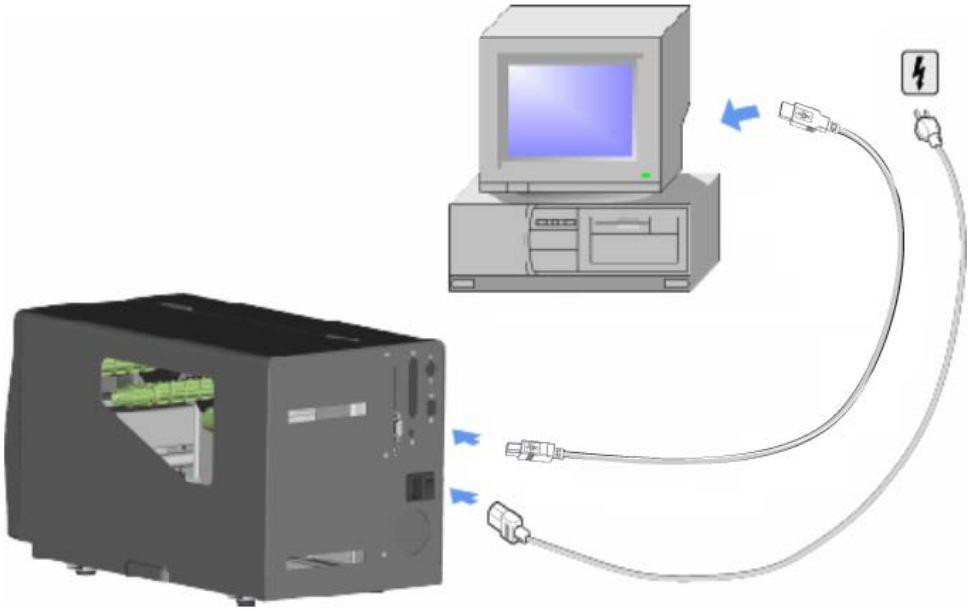
5. Pass the ribbon under the print head and back up on the other side. Attach it to the empty ribbon core.

【Note】
Do not pass the ribbon under the sensor.



2-3. Connecting the printer to the host computer

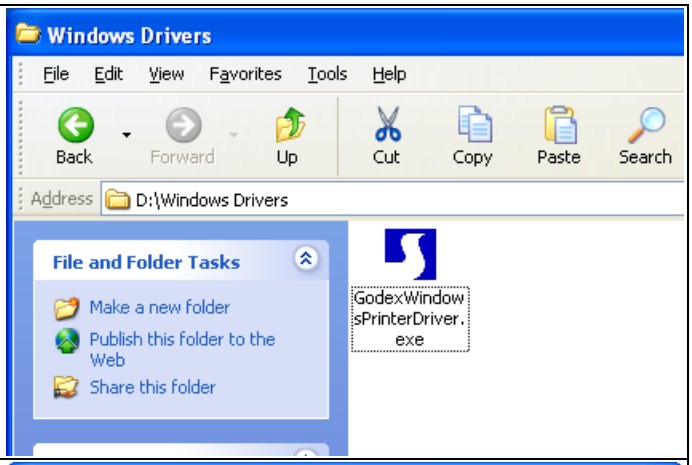
1. Please make sure that the printer is switched off.
2. Connect the power cord to the AC adapter and connect the adapter to the printer.
3. Connect the USB cable to the printer and host computer.
4. Switch on the printer. The operator panel should now light up.



2-4. Installing the driver

1. Insert the product CD in the CD/DVD drive of the host computer and open the "Windows Drivers" folder on the CD.

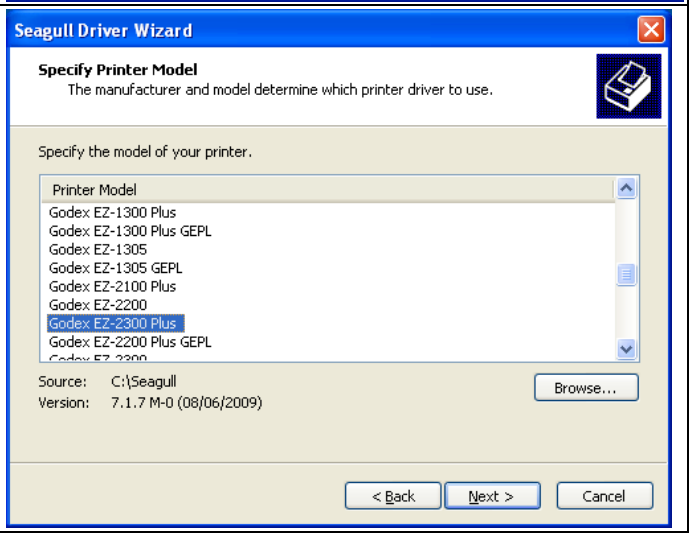
2. Select the icon for the driver file and click it to start the installation.

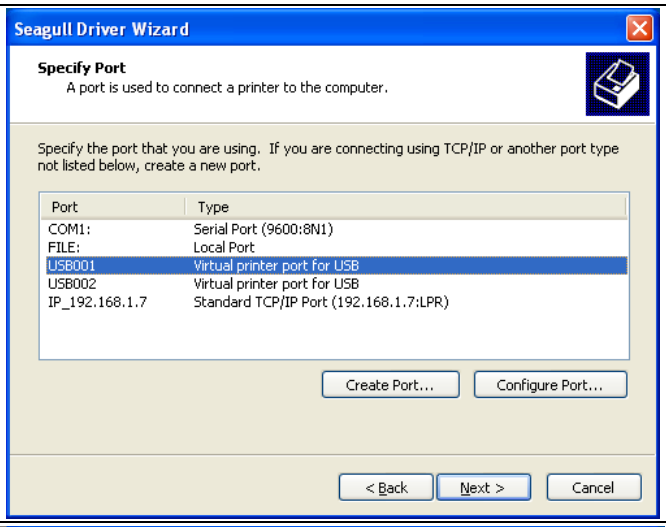
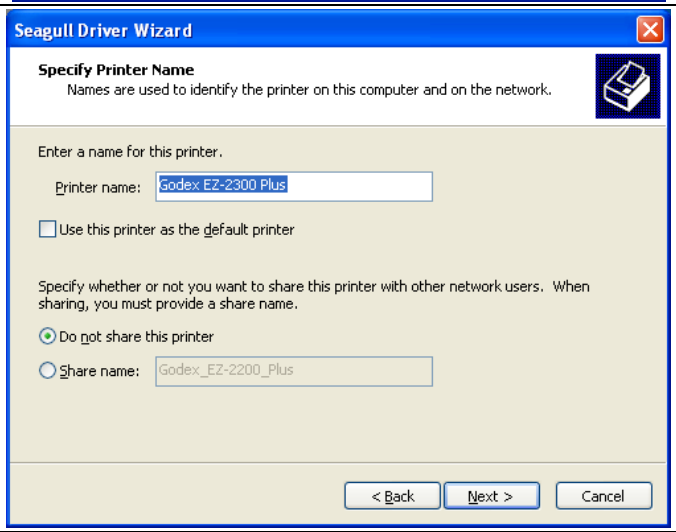
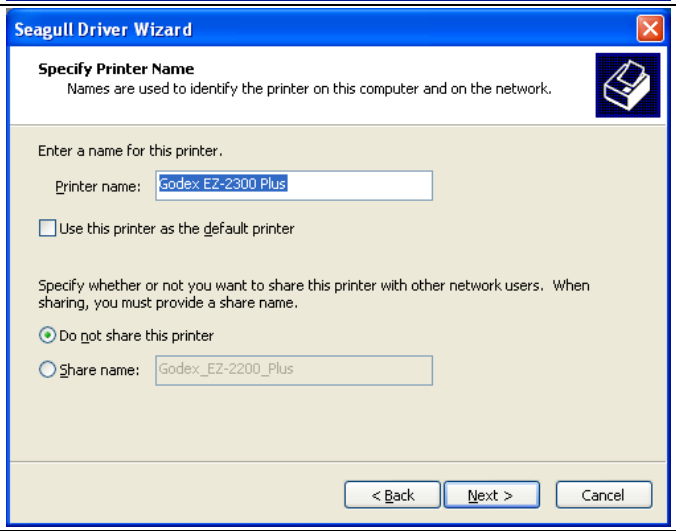
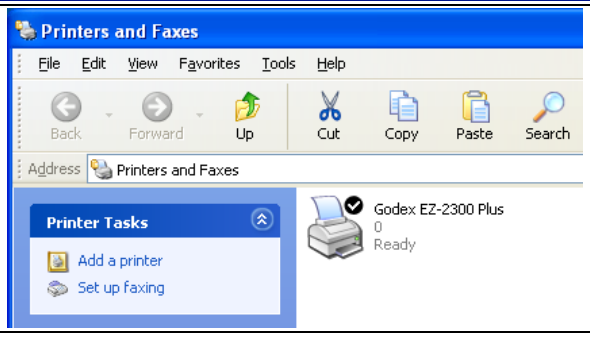


3. Follow the instructions on the screen. The Driver Wizard guides you through the installation procedure.

4. Select "Install printer drivers".

5. Specify your printer model.



6. Specify the port used to connect the printer to the host computer.	
7. Enter a printer name and assign the appropriate rights.	
8. Once the installation is complete, a summary of the printer settings is displayed. 9. Check whether the printer settings are correct and click "Finish" to start copying the driver files. 10. Wait until copying is complete, then finish the installation.	
11. Once the driver installation is complete, the new printer should be visible in the "Printers and Faxes" folder.	

3. Operator panel

3-1. Operator panel – introduction

Function buttons	
▷	FEED
❙❙	PAUSE
□	CANCEL
LED indicators	
POWER	The POWER (Ready) LED lights up when the printer has started up and is ready to print.
RIBBON	Ribbon status indicator
MEDIA	Media status indicator

3-2. Function buttons – introduction

▷ FEED button

When you press the FEED button, the printer moves the label to the defined stop position. If you are using continuous labels, pressing the FEED button will move label stock until you release the button again. If you are using individual labels, pressing the FEED button will move only one label. If the label does not stop at the correct position, you need to run the auto-detection function on the label stock (**see Section 3-6**).

❙❙ PAUSE button

Pressing the PAUSE button while the printer is in standby mode will set the printer to pause mode. The message "Pause" is shown on the LCD display. In this mode, the printer can receive commands, but it can only process them when it is reset to standby mode. Pressing the PAUSE button again will reset the printer to standby mode.

Pressing the PAUSE button during printing will interrupt printing. When the PAUSE button is pressed again, the printer resumes printing. Example: While a 10-label print job is running, you press the PAUSE button to pause the printer. Two of the labels have been printed. To resume printing and print the remaining eight labels, you press the PAUSE button again.

□ CANCEL button

Pressing the CANCEL button during printing cancels a print job. The message "Print job cancelled" is shown on the LCD display. The current print job is cancelled. Example: While a 10-label print job is running, you press the CANCEL button. Two of the labels have been printed. The print job is cancelled and the remaining eight labels are not printed.

You can combine the FEED, PAUSE and CANCEL buttons in a number of ways to perform different printer functions:

Function	Button	Beeps	LCD display	Description
Self test	▷ + Power On	3 beeps	Self test	Switch on the printer and keep the ▷ button pressed until you hear 3 beeps.
Dump mode	▷ + Power On	3 beeps→ 1 beep	Now in Dump Mode	After the self test, keep the ▷ button pressed until you hear a beep.
Auto-detection	❙❙ + Power On	3 beeps	Auto Sensing Mode	Switch on the printer and keep the ❙❙ button pressed until you hear 3 beeps.
Factory settings	▷ + □ + Power On	2x2 beeps	Go to default	Switch on the printer and keep the ▷ and □ buttons pressed until you hear 2 beeps. This resets the printer to the factory settings.
Download mode	□ + Power On	1 beep	DL Mode Vx.xx	Switch on the printer and keep the □ button pressed until you hear a beep. This mode is for download of the firmware only.
Settings mode	☰	3 beeps	Setting mode	Switch on the printer and keep the ☰ button pressed for about 3-4 seconds, until you hear 3 beeps.

3-3. Settings mode

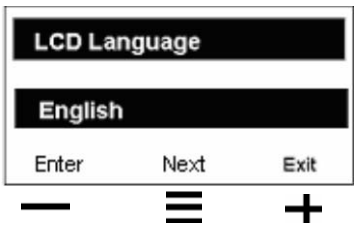
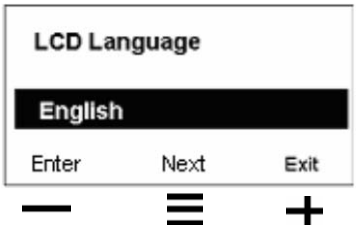
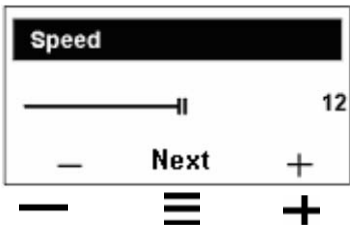
In settings mode, you can change different settings, such as the printing mode, accessories / options, or media type.

1. Switch on the printer and make sure that the message "Ready" is shown on the display.
2. Press the PAUSE button and keep it pressed for about 3-4 seconds until you hear 3 beeps and the message "Settings" is shown on the display.
3. In settings mode, the buttons have the following functions:

— : Minus / Enter
☰ : Menu / Next
+ : Plus / Exit

4. Before you exit settings mode, the printer will prompt you to save the changes you have made. Once you have saved or discarded your changes, the printer will switch back to standby mode.

Press the ☰ button and keep it pressed for about 3-4 seconds until you hear 3 beeps and the message "Settings" is shown on the display. The options available are shown in the lower section of the display.

	In settings mode, the first line always shows the name of a setting, the second line the current selection or value.
	To change the current selection or value, press the ENTER button. The current selection or value is highlighted.
	When you change a setting, the first line shows the name of the setting, the second line the current selection. Plus: The + button increases the value. Minus: The — button reduces the value. Next: The ☰ button switches to the next settings option.

The following table lists descriptions of the available settings and options:

Darkness	**Default: 10** Sets the temperature during printing. Values range from 0 to 19, the default setting is 10.
Speed	Sets the print speed (inches per second (ips))
Stop position	**Default: 12** The stop position determines how far the printed label is moved out (tear-off position / cut-off position)
Adjust stop position	**Default: 0** Adjusts the printer's stop position. Values range from 0 to 10. This value changes the stop position, irrespective of the driver or software settings.
Vertical position	**Default: 0** Sets the 0 position of the print head. Values range from -100 to 100.
Printing mode	**Default: Thermal transfer** **Thermal transfer:** Requires a ribbon to transfer a printed image to a label. **Direct thermal:** No ribbon is required for printing, but a direct thermal print medium must be loaded.
Accessories / options	**Default: Option disabled** **Dispenser mode:** Select to enable the dispenser mode. **Cutter mode:** Select to enable the cutter mode. **Option disabled:** Select this setting to disable both options.
Paper settings	**Default: Die-cut labels** **Black marks:** For labels or normal paper with black marks on the reverse side. **Die-cut labels:** For die-cut labels on label liner or labels with tag holes **Continuous medium:** For continuous label stock
RS232 (serial) settings	**Baud rate:** **Default: 9600 bps (bits per second)** 4800 bps 9600 bps 19200 bps 38400 bps 57600 bps 115200 bps
	Parity: **Default: None** None Odd Even
	Data length: **Default: 8 bits** 7 bits 8 bits
	Stop bit: **Default: 1 bit** 1 bit 2 bits
Sensor type	**Default: Automatic** **Automatic:** Automatic detection of label type (labels with black marks, die-cut labels, or continuous label stock) and label height **Gap mode:** For die-cut labels on label liner or labels with tag holes **Reflective mode:** For labels or normal paper with black marks on the reverse side.

LCD language	**Default:** English English Simplified Chinese Traditional Chinese Spanish Italian German French Turkish
Code pages installed	**Default: Code page 850** Code page 850 Code page 852 Code page 437 Code page 860 Code page 863 Code page 865 Code page 857 Code page 861 Code page 862 Code page 855 Code page 866 Code page 737 Code page 851 Code page 869 Windows 1252 Windows 1250 Windows 1251 Windows 1253 Windows 1254 Windows 1255
Keyboard layout	**Default: US** US (International) English (UK) French German Spanish Italian Finnish Dutch Flemish
Keyboard mode	**Retrieve label:** Retrieval of a label from the memory **Keyboard layout:** Layout of the keyboard **Code page setting:** Code page setting **Print option:** Print quantity setting **Clock setup:** Sets the time on the clock shown on the display. **Exit keyboard mode:** Resets the printer to normal mode and ready to receive print jobs from the host computer.
Buzzer	**Default: ON** **ON :** Switches beep signals on or off **OFF**
No backfeed	**Default: OFF** **ON:** This function requires a dispenser or cutter. **OFF**
Password	**Default: OFF** **ON:** When password protection is enabled, you need a password to access the settings. **OFF**
Top of form	**Default: ON** **ON:** Always starts printing at the top of the page. **OFF**

USB / Ethernet	**Default: USB** **USB:** Enables the USB port. **Ethernet:** Enables the Ethernet port.
Preview	Lets you preview and check the settings.
Lock setup	Locks the value(s) of any setting. When a value is locked, it cannot be altered by changes to the driver or by sending a command. You can lock the following values: EVERYTHING (locks all values) DARKNESS SPEED STOP POS AD STOP POS PRINTHEAD POS PRINTING MODE OPTION SETUP SENSOR SETUP COMPORT SETUP AUTO SENSOR LCD LANGUAGE CODEPAGE KEYBOARD BUZZER SMART BACKFEED TOP OF FORM

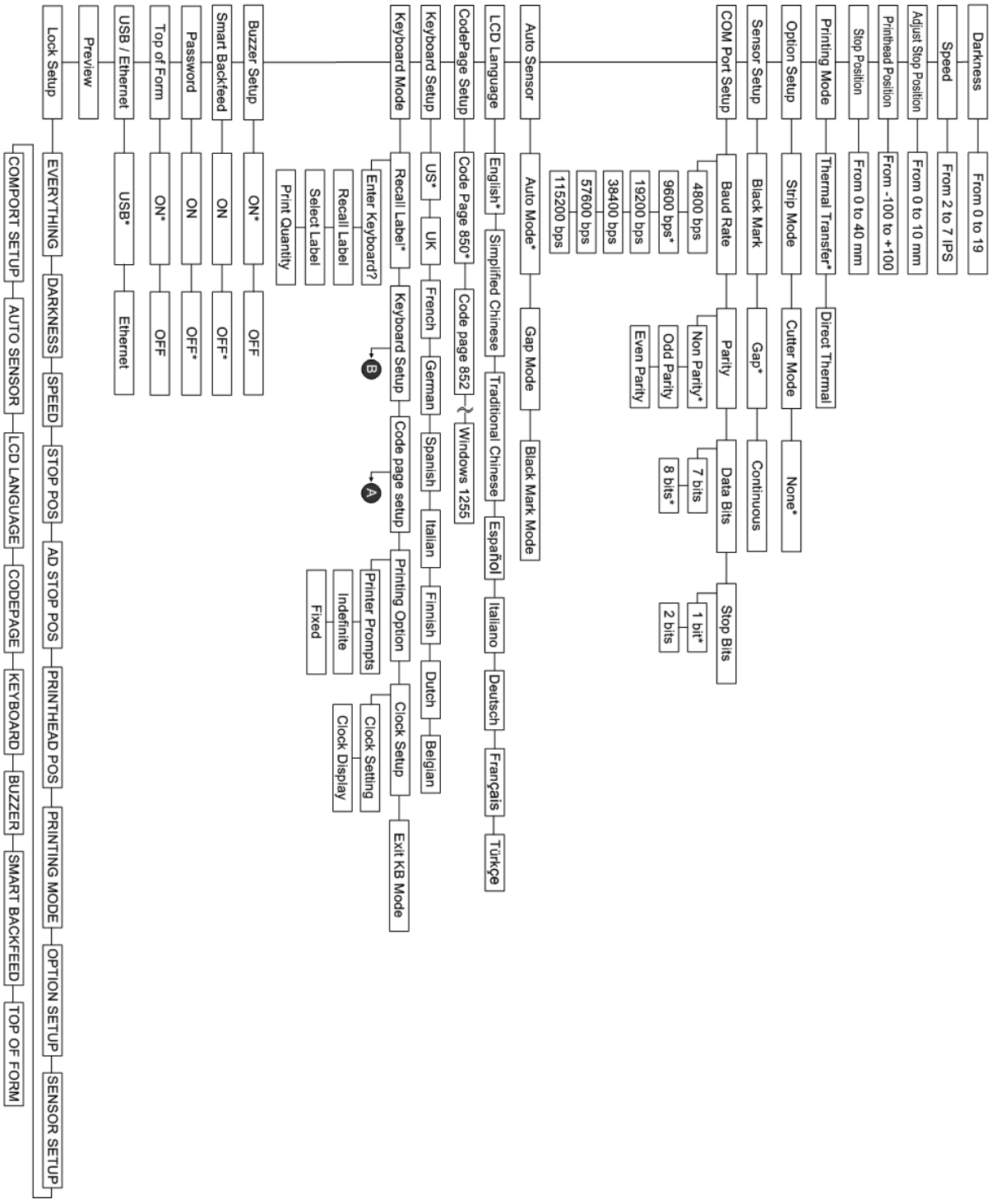
【Note 1】

The default settings are the original factory settings. If you have changed the settings, your current settings will be displayed in settings mode.

【Note 2】

The printer will store your changes even after it is switched off. You can change the settings again in settings mode.

Settings mode diagram

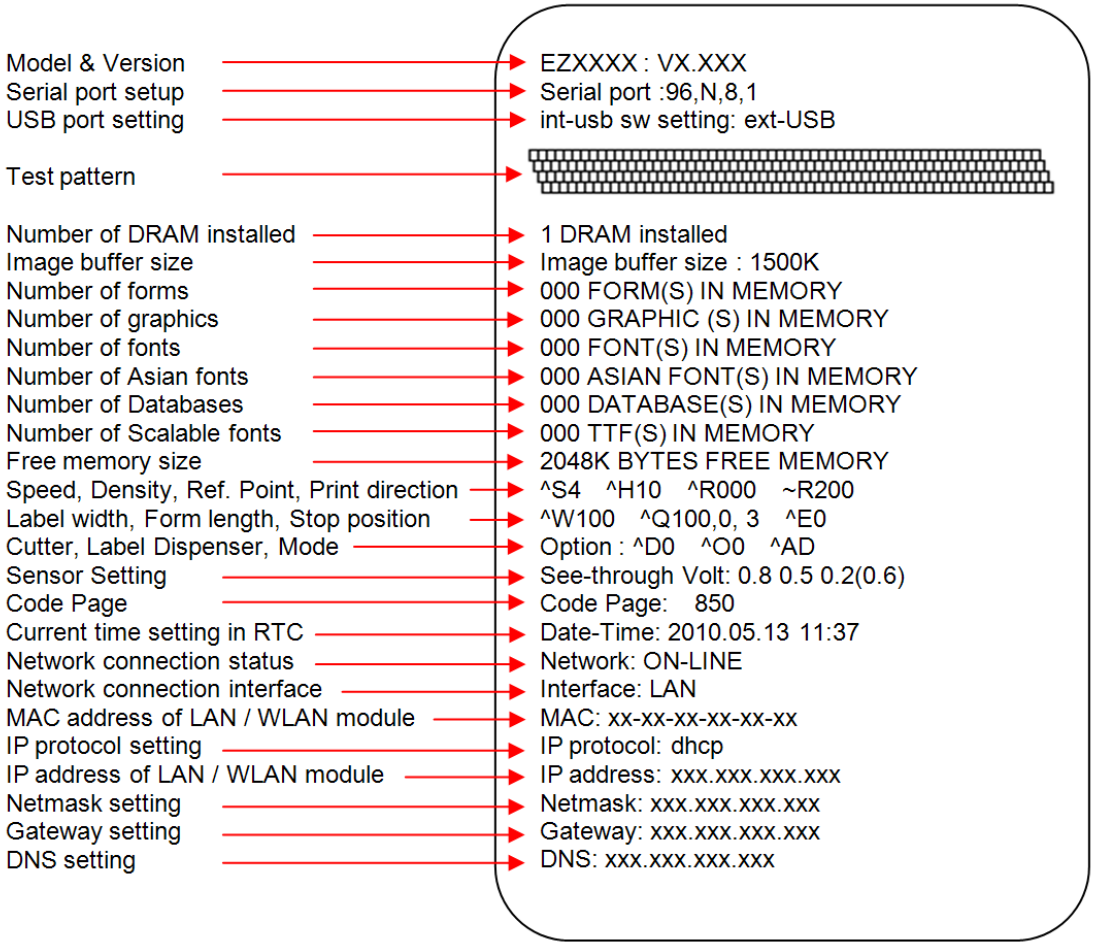


Items marked "*" are the default settings.

3-4. Self test

The self-test function lets you check whether the printer is functioning normally.
Here is how you run a self test:

1. Switch off the printer.
2. Switch on the printer, keeping the FEED button pressed until you hear 3 beeps and the message "Self test" is shown on the display.
3. After about one second, the printer will automatically print out the list below. That means the printer is functioning normally.



3-5. Dump mode

If the label settings do not match the printer output, you should switch the printer to dump mode to check whether an error has occurred during the transfer between printer and host computer. In dump mode, the unprocessed raw data are sent to the printer and printed. This shows you quickly whether any data are sent to the printer at all.
Here is how you switch to dump mode:

1. Switch off the printer.
2. Switch on the printer, keeping the FEED button pressed.
3. When the message "Dump Mode" appears on the display, release the FEED button. The printer will automatically print "Dump Mode Begin". That means the printer is now in dump mode.
4. Send commands to the printer and check whether they match the printer output.

To exit dump mode, press the FEED button. The printer will automatically print "Out Of Dump Mode" and switch to standby mode. Alternatively, you can switch off the printer to exit dump mode.

3-6. Label size calibration

The printer can automatically detect and store label height.
That means the host computer does not need to transmit the label height to the printer.

1. Check that the label sensor is positioned correctly.
2. Switch off the printer.
3. Switch on the printer, keeping the PAUSE button pressed. When you hear 3 beeps and the message "Auto Sensing Mode" appears on the display, release the PAUSE button. The printer will now automatically measure the label size and store this information.
4. The label height in mm is shown on the display.

After displaying the label height, the printer switches back to standby mode.

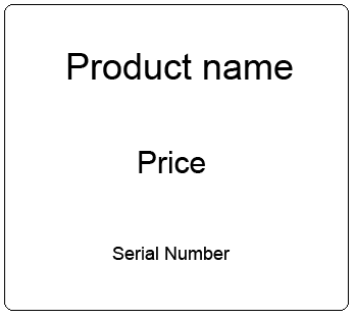
3-7. Keyboard mode

The printers of the EZ2000 Plus and EZ6000 Plus series support keyboards with a PS/2 interface, provided the parallel/PS/2 adapter is installed. Here is how you connect a PS/2 keyboard:

1. Switch off the printer and plug the PS/2 connector into the appropriate printer port.
2. Switch on the printer. The message "Keyboard mode [Y/N]" is shown on the display. Press the FEED button on the printer or the ENTER key on the keyboard to switch to keyboard mode.

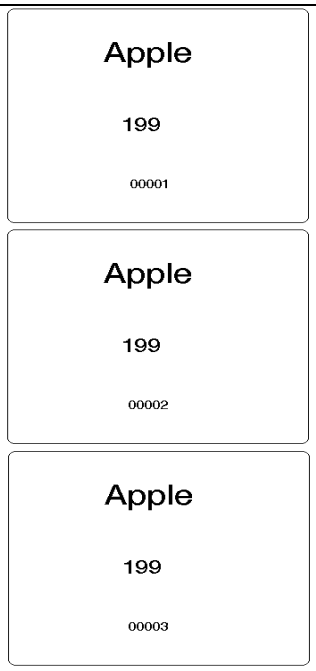
In keyboard mode, you can go back to the previous page at any time by pressing the ESC key on the keyboard or the CANCEL button on the printer. If you keep going back, you will eventually be prompted to exit keyboard mode. To exit keyboard mode, press the ENTER key on the keyboard or the FEED button on the printer when the message "Exit keyboard mode? [Y/N]" appears on the display. To switch back to keyboard mode, either start up the printer again or select "Keyboard mode" in settings mode. If you wish to make any changes to the keyboard settings, please refer to the "Settings diagram" (in **Section 3.3**).

Printing a stored label in keyboard mode

<table>
<tr>
<td>^FTEST1
^Q100,3
^W100
^H10
^P1
^S2
^AD
^C1
^R0
~Q+0
^O0
^D0
^E12
~R200
^L
Dy2-me-dd
Th:m:s
C0,00001,+1,Serial Number
V00,16,Product Name,jc0
V01,16,Price,jc0
AF,330,566,1,1,0,0,^C0
AH,212,168,1,1,0,0,^V00
AG,308,396,1,1,0,0,^V01
E</td>
<td> 

1. At least one form must be stored in the printer. To create a sample label as shown above, copy the commands in the left-hand column and send them to the printer using QLabel or HyperTerminal.
2. The sample form contains 2 variables and a serial number: "Product name", "Price" and "Serial Number". Printing will start only when values have been set for all 3 variables.</td>
</tr>
<tr>
<td>
</td>
<td>3. Switch off the printer, connect the PS/2 keyboard to the PS/2 printer port and switch the printer on again.
4. Press "ENTER" to switch to keyboard mode.</td>
</tr>
<tr>
<td>
</td>
<td>5. Press "ENTER" to select a file.
*Note: Press ↑or ↓to select the previous or next form in the list.</td>
</tr>
</table>

	6. The input form for the serial number is now shown on the display. 7. Specify a start value (example: 00001).
	8. The input form for the first variable is now shown on the display.
	9. Specify a product name (example: Apple).
	10. The input form for the second variable is now shown on the display.
	11. Specify a random value (example: 199).
	12. The input form for the print quantity is now shown on the display. 13. Specify a quantity (example: 3).

	14. The printer will print three labels with the values for the two variables and the serial number specified.

3-8. Error alerts

In the event of a problem that prevents normal functioning of the printer, you will see an error message on the display and hear some beep signals. The LED indicators above the display will also light up.

Fast flashing Slow flashing Light on

Error message displayed	LED above the display			Beeps	Description	Solution
	RIBBON	MEDIA				
Print head is open			Both LEDs light up	4x2 beeps	The print mechanism is not closed.	Please make sure that the print mechanism is closed correctly.
Entering cooling process			Both flashing		The print head is too hot.	Once the print head has cooled down, the printer switches to standby mode.
Out of ribbon				3x2 beeps	No ribbon is loaded.	Please make sure that the printer is set to thermal direct mode.
					The ribbon is finished or the ribbon roll is not moving.	Replace the ribbon roll.
Out of media				1x2 beeps	Unable to detect the paper.	Please make sure that the gap sensor is positioned correctly. If that does not fix the problem, run the auto-detection function again.
					The labels are finished.	Replace the label roll.
					Paper jam.	Possible reason: paper feed problem.
CF card not formatted			Both flashing	2x2 beeps	The CF card is not formatted.	Please follow the instructions in Section 4-4 to format the CF card.

Memory full				2x2 beeps	The memory is full.	Delete data you no longer need from the memory or use a CF card.
File name not found				2x2 beeps	Unable to find file.	Use the "~X4" command to print all file names and check whether the file exists in the memory.
File name already exists				2x2 beeps	The file name already exists.	Change the name of the file and try storing it again.

3-9. Instructions for using the CF card

All EZ2000 Plus and EZ6000 Plus series printers will recognise the CF card. If the printer's internal memory is not sufficient to store label formats, graphics or fonts, you can use the CF card as an external memory to increase the storage capacity.

Please follow these instructions when using the CF card:

1. Remember to switch off the printer before installing the CF card or removing it from the card slot.
2. The CF card must be formatted to FAT16 before you can use it as external memory for the printer. When an unformatted CF card is detected, the printer beeps three times and the STATUS indicator flashes orange.
3. To format the CF card, press the FEED button. The printer then formats the card to FAT16. When formatting is complete, the LED indicator lights up green.
4. If you do not wish to format the CF card, press the CANCEL button.
5. Once formatting is complete, a folder "Godex" is created. This folder including its content (formats, images and fonts) is managed by the printer. Do not edit it manually.
6. The following CF cards are supported:
   - CompactFlash Type I
   - CompactFlash (CF) v1.4 specification
   - Capacity: 128 MB–1 GB
   - File system: FAT16

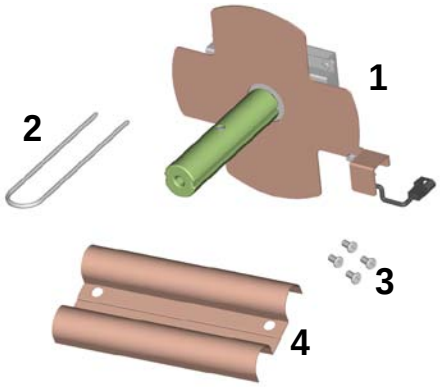
4. Accessories

4-1. Internal rewinder (EZ2000 Plus)

1	Rewinder
2	Retention clip
3	Screws (set of 4)
4	Rewinder guide

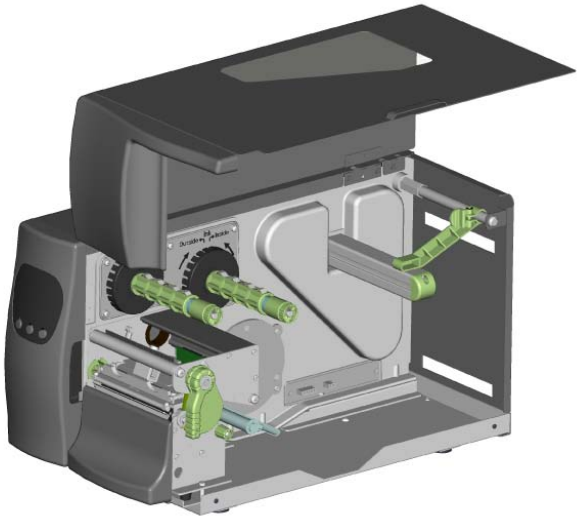
【Note】
Maximum height of the rewound medium: 118 mm

【Suggestion】
Medium thickness: 0.06 mm–0.25 mm

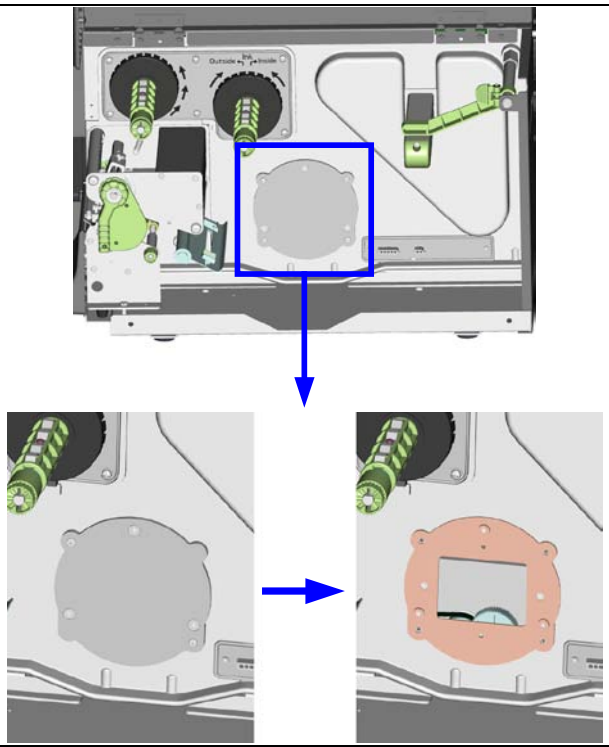


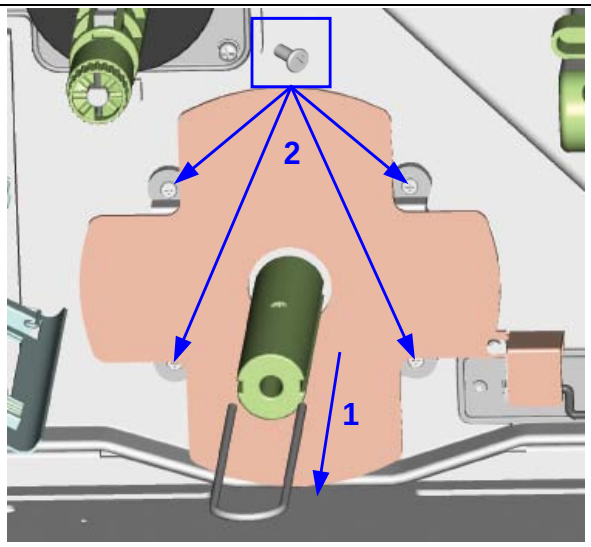
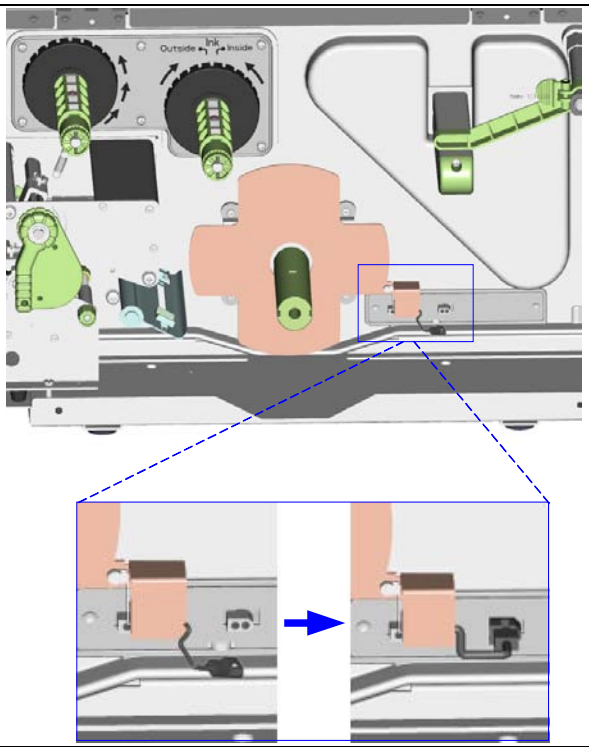
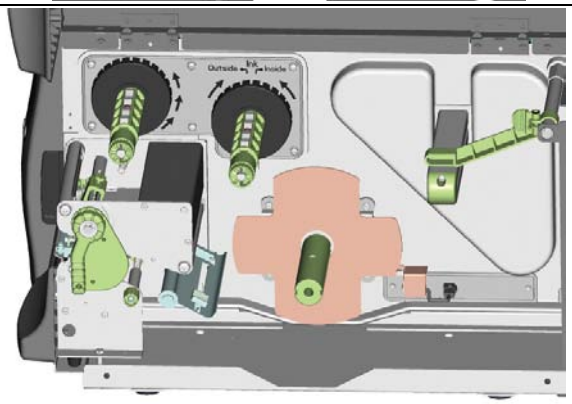
1. Place the printer on a flat surface and open the printer cover.

【Note】
Remember to switch off the printer before starting the installation.

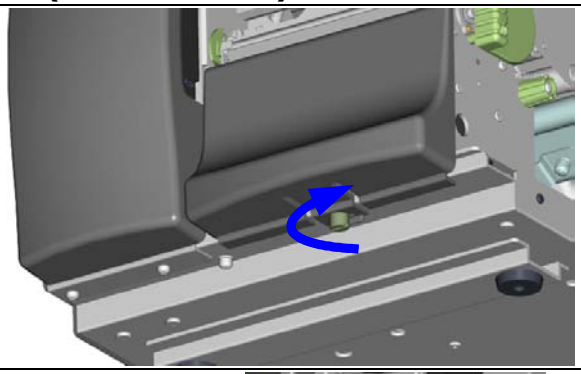
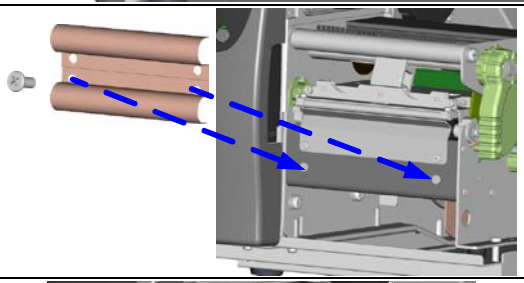
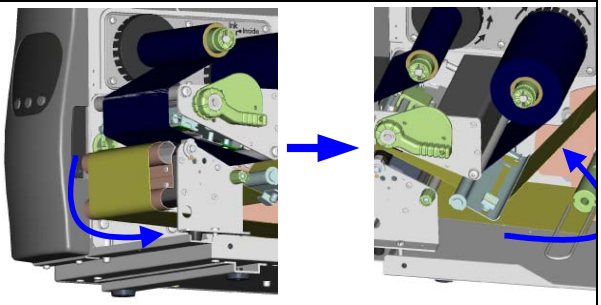
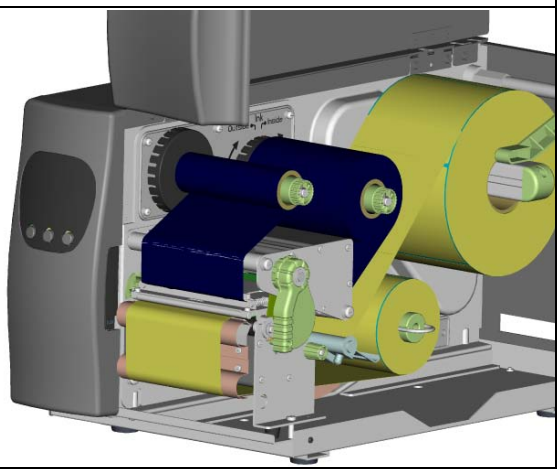


2. Remove the cover for the rewinder module.

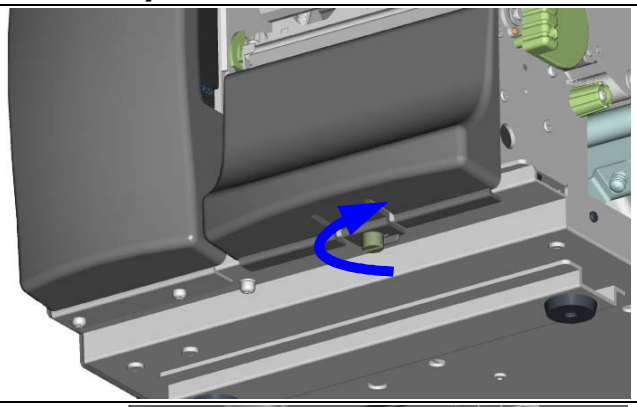
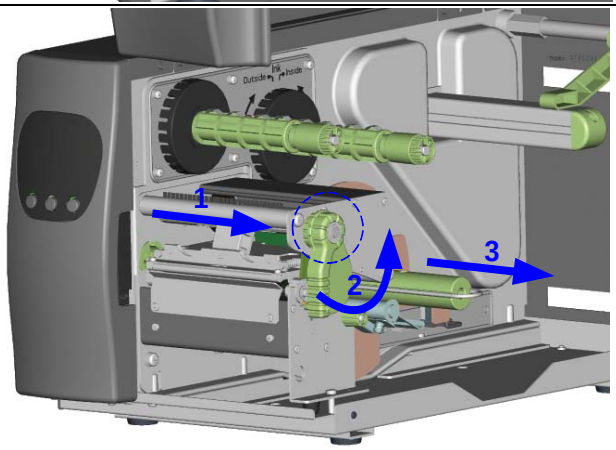
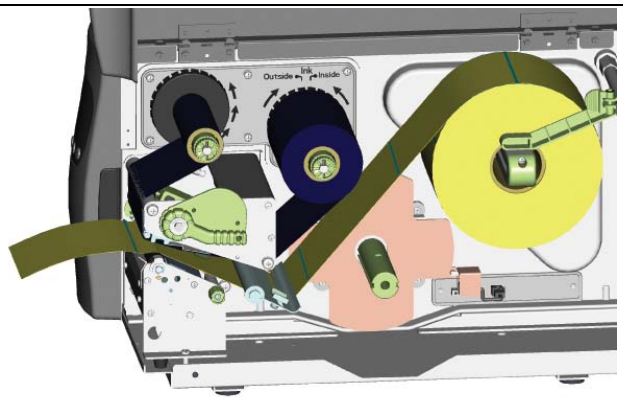
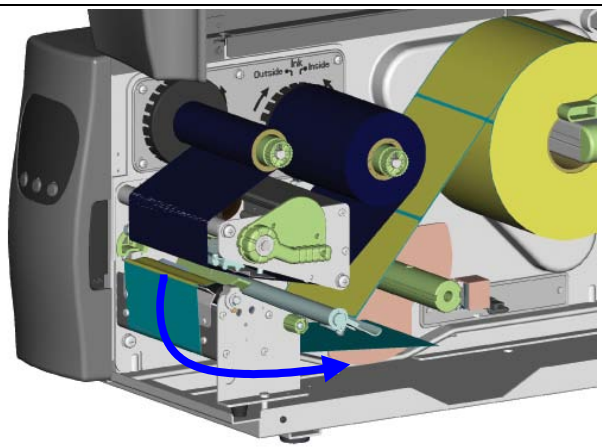


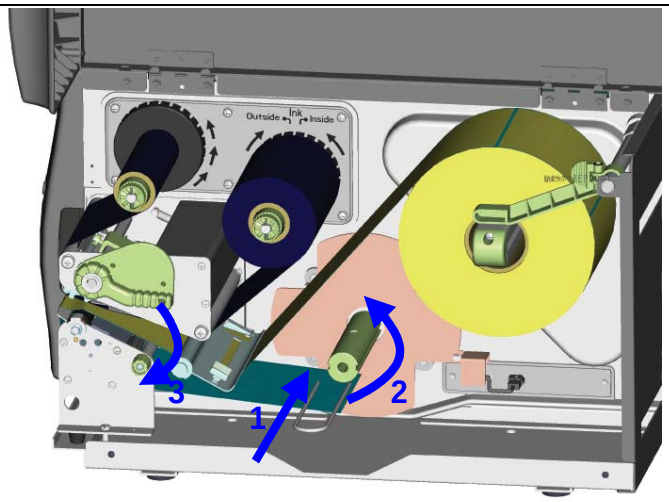
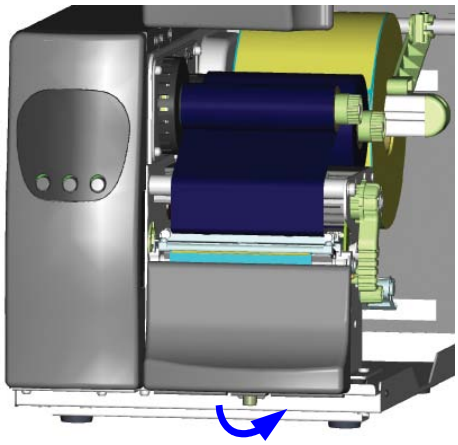
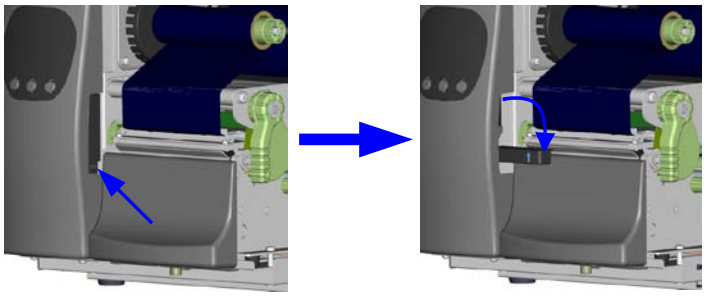
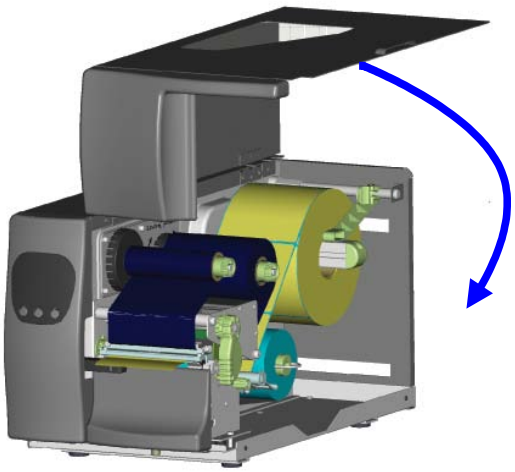
3. Remove the retention clip from the rewinder. 4. Secure the rewinder on the printer housing using the four screws supplied.	
5. Now connect the rewinder cable to the printer housing.	
6. Installation of the rewinder module is now complete.	

4-2. Installing the rewinder guide (EZ2000 Plus)

1. Unscrew the screw marked in the illustration on the front of the printer, which secures the lower cover plate. 2. Remove the lower cover plate. *【Note】* *Switch off the printer before starting the installation.*	
3. Mount the rewinder guide on the print mechanism and secure it with screws.	
4. Installation of the rewinder guide is now complete.	
5. Now load the label stock. 6. Pass the label stock through the rewinder from the bottom up. Secure the label stock on the rewinder using the retention clip. *【Note】* *Make sure you choose the correct rewind direction.*	
7. Close the printer cover to complete the installation. *【Note 1】* *Before you start using the rewinder, please make sure that you have carried out all the steps as shown in the illustrations.* *【Note 2】* *To use the label dispenser, you have to remove the rewinder guide again.*	

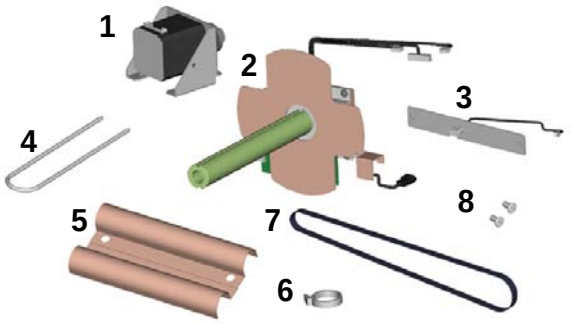
4-3. Label dispenser (EZ2000 Plus)

1. Unscrew the screw marked in the illustration on the front of the printer, which secures the lower cover plate. 2. Remove the lower cover plate. *【Note】* *Switch off the printer before starting the installation.*	
3. Place the printer the right way up again. 4. Pull out the print head release lever as shown in the illustration (1) and turn it anticlockwise to a top right position (2). 5. Remove the retention clip.	
6. Now load the label roll into the printer. *【Note】* *A label liner thickness of 0.06 mm ± 10%, a weight of 65 g/㎡ ± 6% and a label height of 20 mm are recommended.* *【Suggestion】* *When using the label dispenser, you should set the stop position to 12 mm.*	
7. Strip a few labels off the label liner (approx. 400 mm). Then pass the label liner through the print mechanism and from the bottom up onto the rewinder.	

8. Wind the label liner around the rewinder and secure it using the retention clip. 9. Return the print head release lever to its original position. *【Note】* *Please make sure that the label stock rewinds the right way onto the rewind hub.*	
10. Replace the lower cover plate on the printer and secure it with screws	
11. Press the lower part of the stripper sensor to fold it out. 12. The sensor locks in a horizontal position.	
13. Close the printer cover to complete installation of the dispenser.	

4-4. Internal rewinder for EZ6000 Plus

1	Motor
2	Rewinder
3	Rewinder connector bracket
4	Retention clip
5	Rewinder guide
6	Cable tie
7	Belt
8	Screws (set of 10)

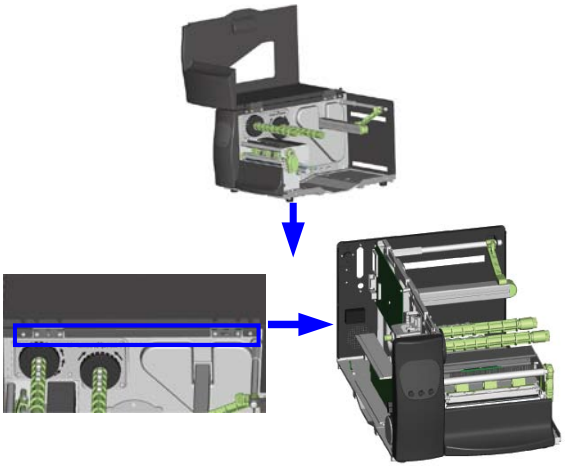


【Note】
For EZ-6200 Plus, the printing speed will be limited to 4 IPS when the rewinder or label dispenser is enabled.

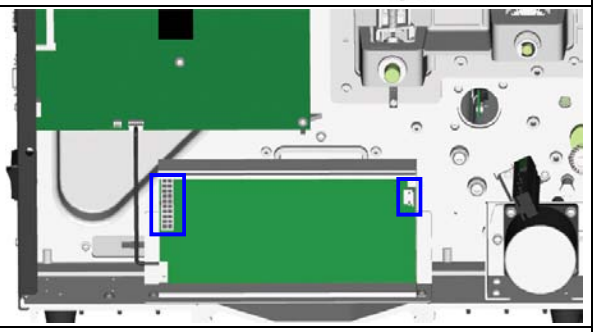
1. Place the printer on a flat surface and open the printer cover.

2. Remove the screws securing the left-hand part of the housing and the printer cover and remove these two parts of the housing.

【Note】
Remember to switch off the printer before starting the installation.

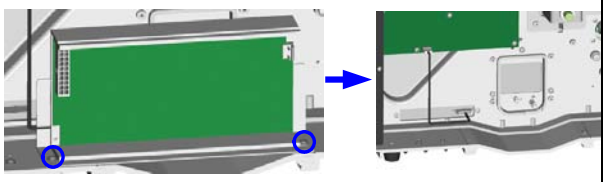


3. Remove the connectors from the power supply unit in the two places marked.

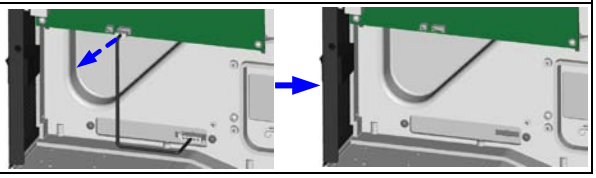


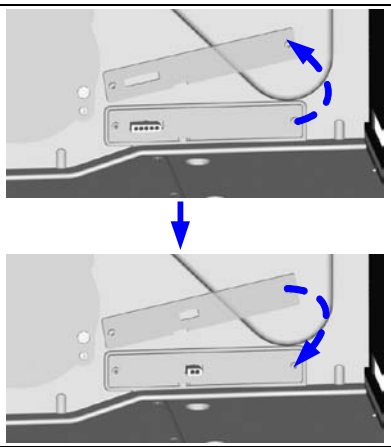
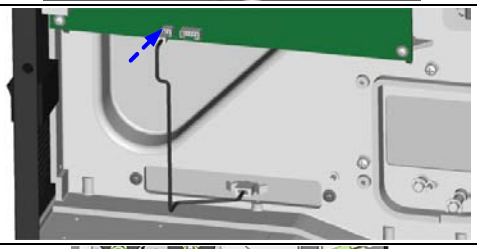
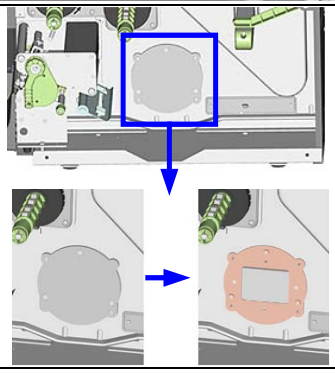
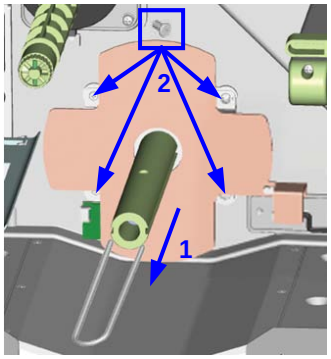
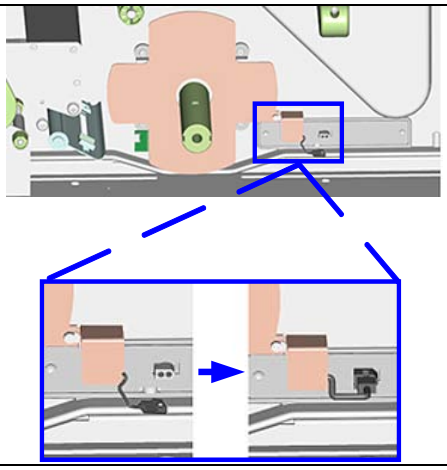
4. Remove the two screws that secure the power supply unit on the bottom of the printer housing.

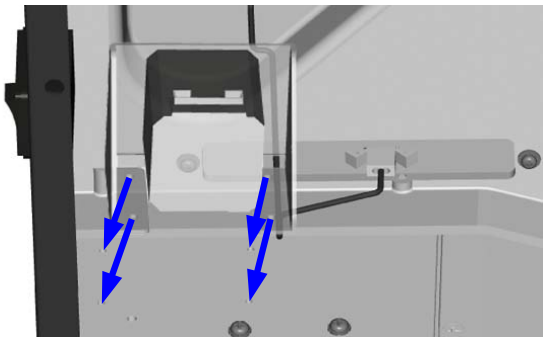
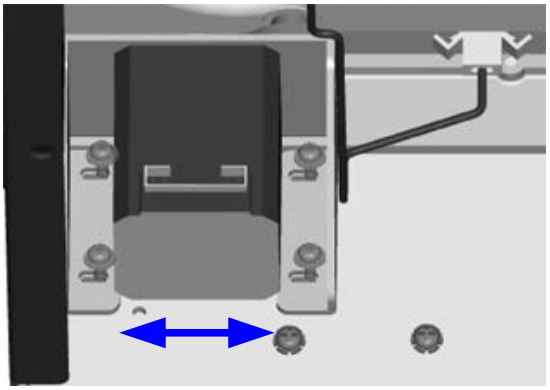
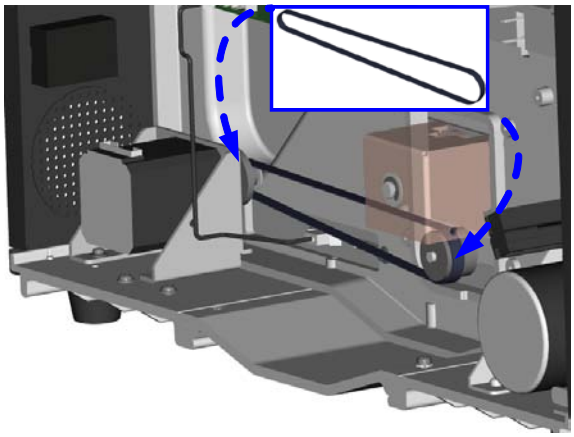
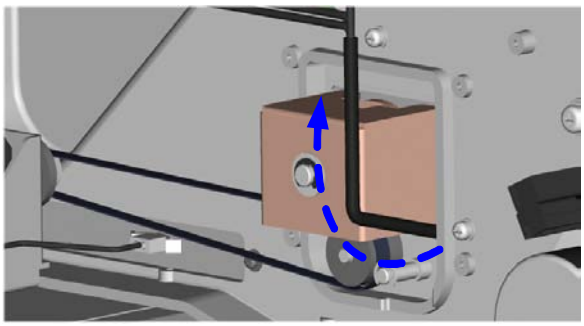
5. Remove the power supply unit.

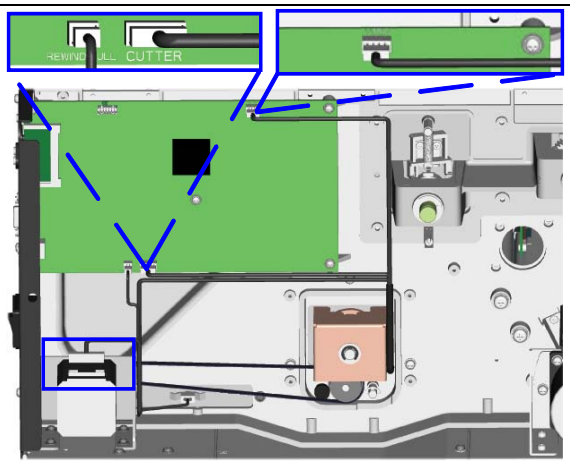
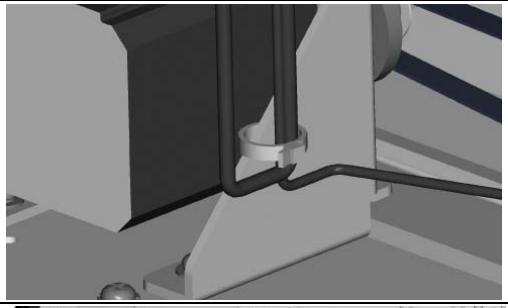
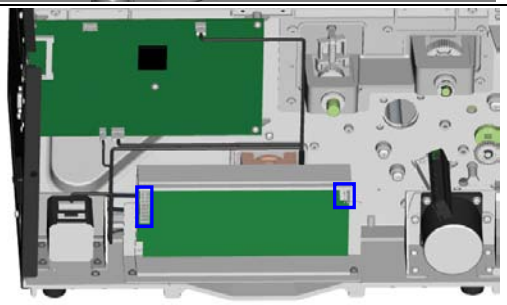
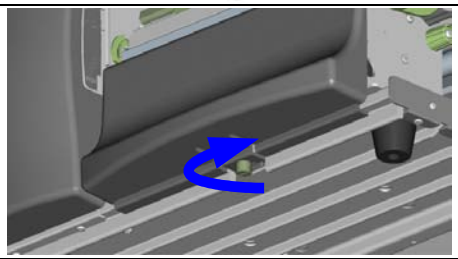
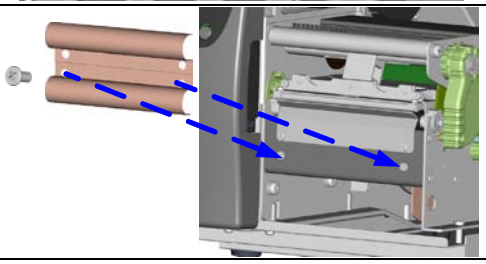


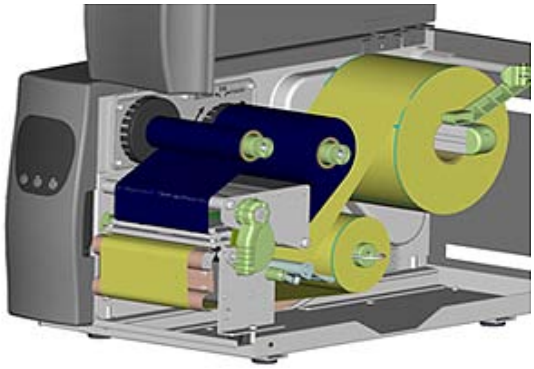
6. Remove the cable connecting the motherboard and the connector bracket.



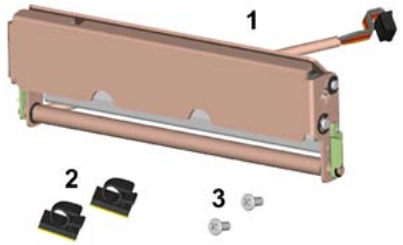
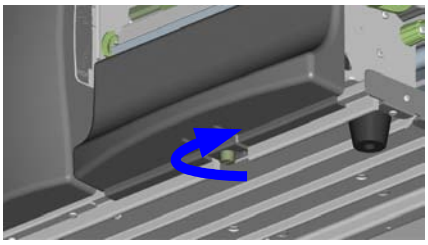
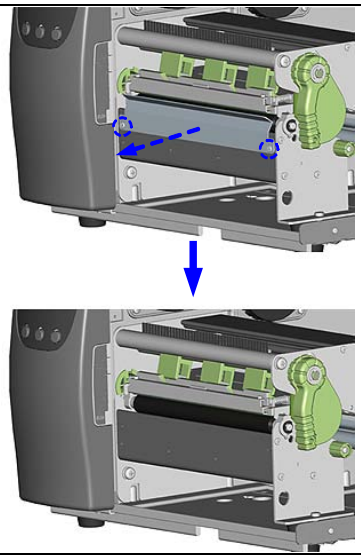
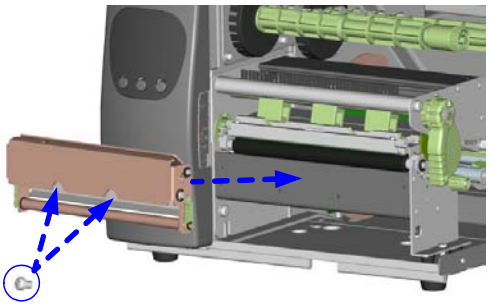
7. Remove the two screws securing the connector bracket from the inside of the printer housing. 8. Now attach the rewinder connector bracket supplied.	
9. Connect the rewinder connector bracket to the motherboard as shown in the illustration.	
10. Remove the cover for the rewinder module.	
11. Remove the retention clip from the rewinder. 12. Secure the rewinder on the printer housing using the four screws supplied. *【Note】* *Please make sure that all rewinder cable connectors are arranged on the side of the motherboard before you tighten the screws that secure the rewinder.*	
13. Connect the "Rewinder full" switch to the jack on the rewinder connector bracket.	

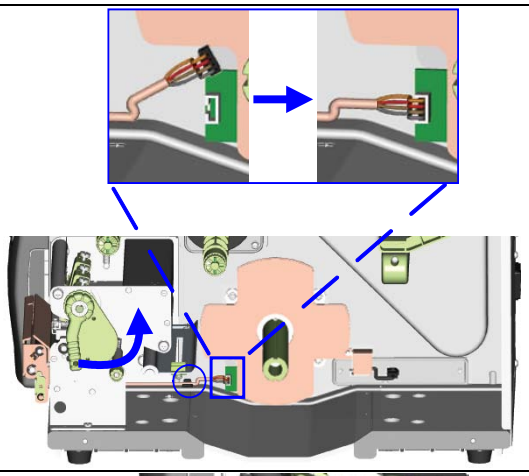
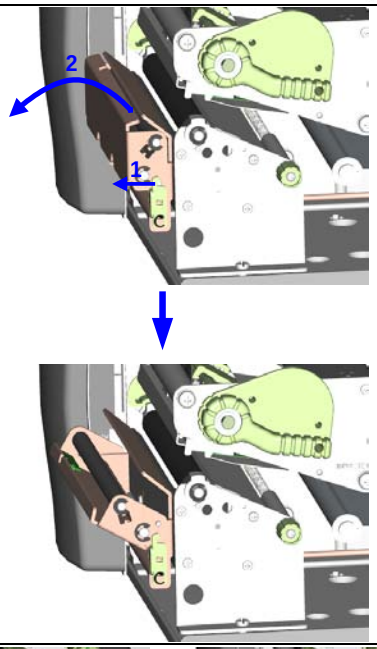
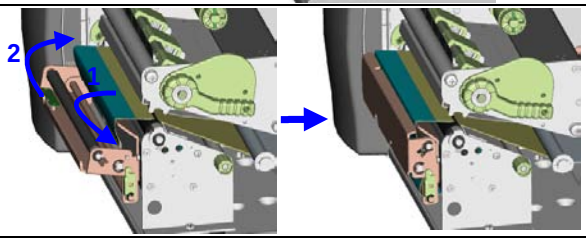
14. Install the motor in the back section of the printer housing and align it with the 4 screw holes.	
15. Do not tighten the screws fully, to leave room for installing the belt.	
16. If required, adjust the position of the motor during installation of the belt. 17. Now tighten the screws securing the motor.	
18. Gently pull the rewinder connection cables so they are fully inside the printer housing.	

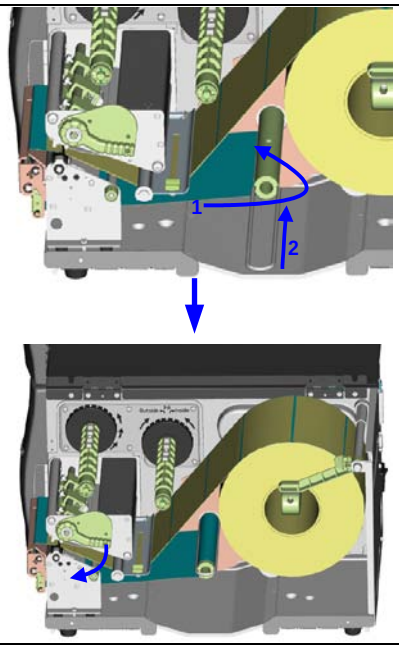
19. Connect the cable with the 5-pin connector to the jack marked "CUTTER" on the motherboard. 20. Connect the cable with the 4-pin connector to the jack marked "STRIP" on the motherboard. Connect the remaining connector to the motor.	
21. Attach the motor cable and the "Rewinder full" cable to the motor bracket using the cable tie. *【Note】* *You should position the "Rewinder full" cable underneath the belt to avoid possible faults.*	
22. Now replace the power supply unit and connect it to the motherboard.	
23. Replace the left-hand part of the printer housing and secure it with screws	
24. Remove the lower cover plate from the front of the printer by unscrewing the screw marked in the illustration. 25. Remove the lower cover plate.	
26. Mount the rewinder guide on the print mechanism and secure it with screws.	

27. Now load the label stock. 28. Pass the label stock through the rewinder from the bottom up. Secure the label stock on the rewinder using the retention clip. *【Note】* *Make sure you choose the correct rewind direction.*	
29. Replace the printer cover to complete the installation. *【Note 1】* *Before you start using the rewinder, please make sure that you have carried out all steps as shown in the illustrations. Then send the command "^XSET,REWINDER,1" to the printer to enable the rewind function.* *【Note 2】* *To use the label dispenser, you have to remove the rewinder guide again.*	

4-5. Installing the label dispenser (EZ6000 Plus with rewinder)

1	Dispenser module	
2	Cable clips (set of 2)	
3	Screws (set of 2)	
【Note】 *For EZ-6200 Plus, the printing speed will be limited to 4 IPS when the rewinder or label dispenser is enabled.*		
1. Unscrew the screw marked in the illustration on the front of the printer, which secures the lower cover plate. 2. Remove the lower cover plate. *【Note】* *Switch off the printer before starting the installation.*		
3. Remove the two screws securing the tear-off plate, then remove the tear-off plate.		
4. Secure the dispenser module on the printer using two screws.		

5. Connect the dispenser cable connector to the rewinder jack. 6. Route the connection cable along the bottom of the printer housing using the cable clips. 7. Pull out the print head release lever and turn it anticlockwise to a top right position.	
8. Using the lever shown in the illustration (1), fold out the dispenser module in the direction indicated by the arrow (2).	
9. Strip a few labels off the label liner (approx. 400 mm) and pass the label liner through the dispenser module. 10. Close the dispenser module again.	

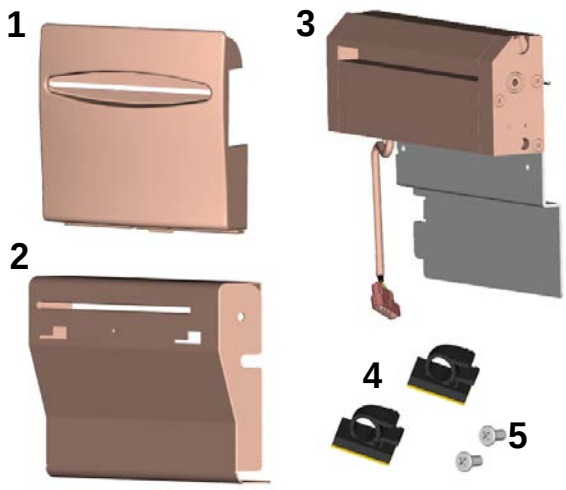
11. Wind the label liner around the rewinder and secure it using the retention clip. 12. Return the print head release lever to its original position. *【Note】* *The dispenser can only be used with labels of a minimum height of 20 mm.* *【Suggestion】* *When using the label dispenser, you should set the stop position to 25 mm.*	
13. Close the printer cover to complete installation of the dispenser. *【Note】* *Before you start using the rewinder, send the command "^XSET,REWINDER,1" to the printer to enable the rewind function.*	

4-6. Installing the cutter

1	Cutter cover (EZ2000 Plus)
2	Cutter cover (EZ6000 Plus)
3	Cutter module
4	Cable clips
5	Screws (set of 4)

【Note 1】
Remember to switch off the printer before installing the cutter.

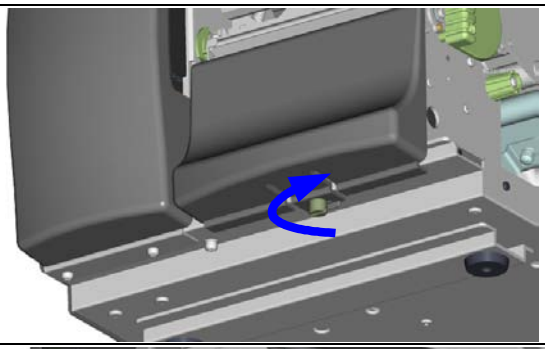
【Note 2】
Do not use to cut adhesive labels! Glue residue will be left on the cutter blade and impair its functioning. The cutter has a blade life of 500,000 cuts when using paper weighing 160 g/m² and 250,000 cuts when using paper weighing 200 g/m².



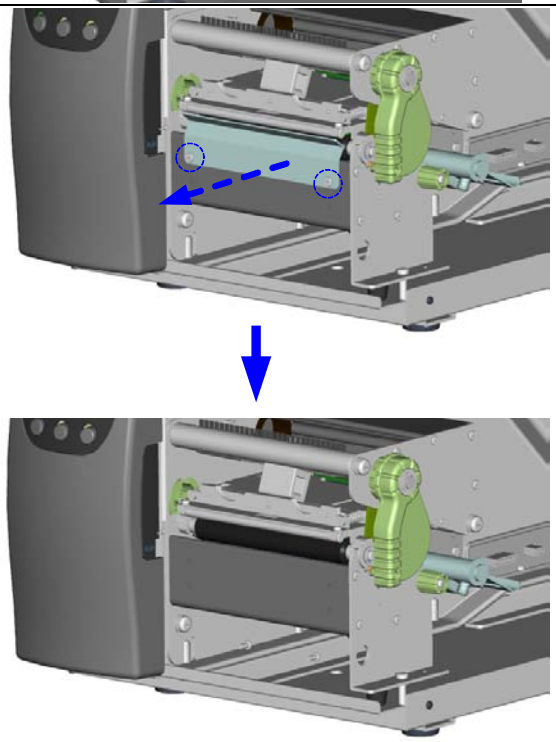
1. Unscrew the screw marked in the illustration on the front of the printer, which secures the lower cover plate.

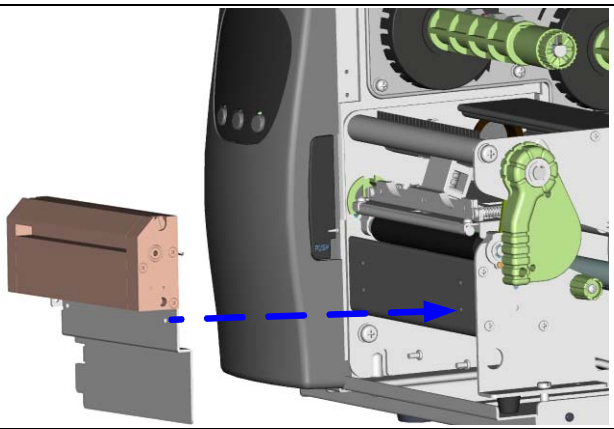
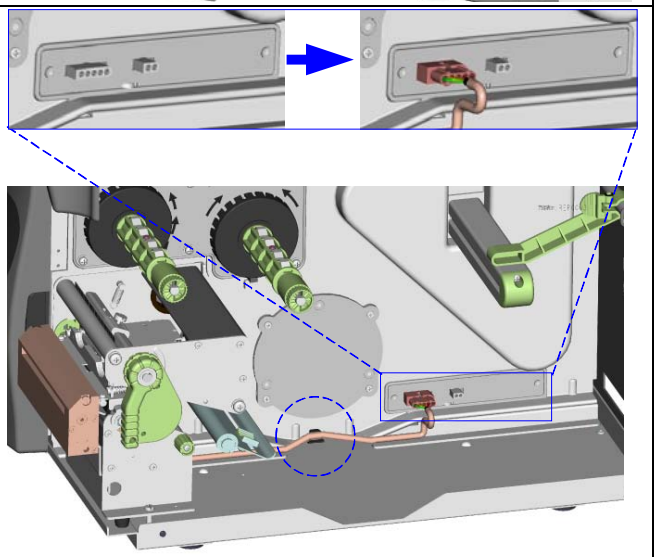
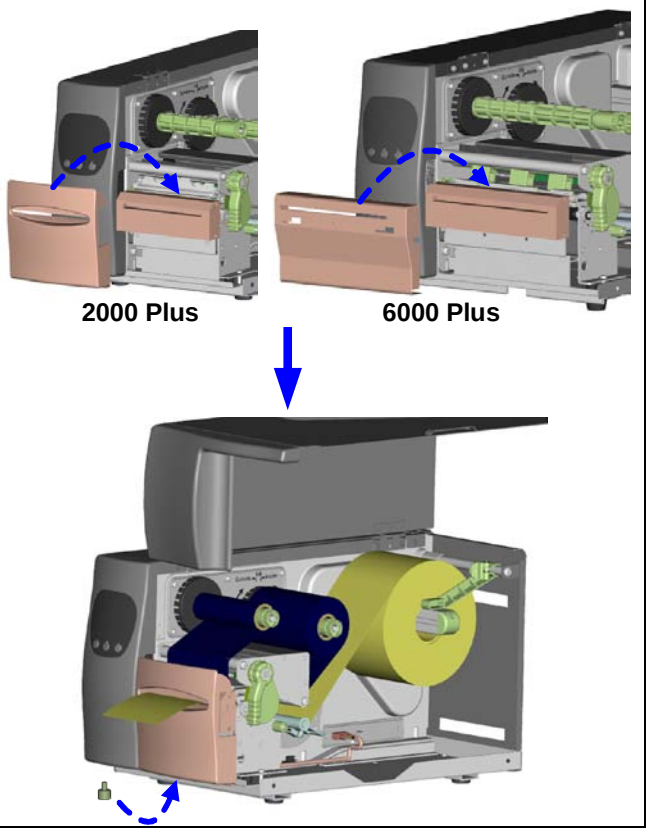
2. Remove the lower cover plate.

【Note】
Switch off the printer before starting the installation.



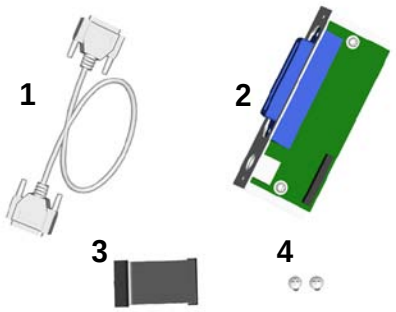
2. Remove the two screws securing the tear-off plate, then remove the tear-off plate.



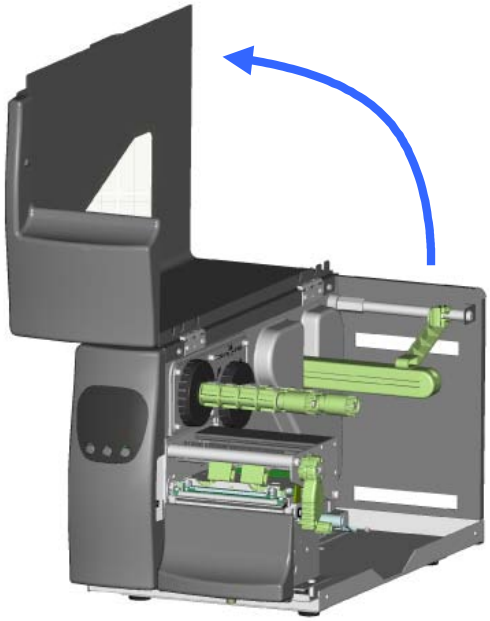
3. Secure the cutter module on the printer housing using the screws.	
4. Connect the cutter cable connector to the cutter jack on the printer. 5. Route the connection cable along the bottom of the printer housing using the cable clips.	
6. Place the cutter cover over the cutter module and secure it using the screw you removed from the lower cover plate. 7. Now load the label roll into the printer and close the printer cover. *【Note 1】* *Check whether the cutter function is enabled in the printer.* *【Note 2】* *Labels or paper should be at least 30 mm high.* *【Suggestion】* *After installation of the cutter module, set the stop position to 26 mm (EZ2000 Plus) or 30 mm (EZ6000 Plus).*	 **2000 Plus** **6000 Plus**

4-7. Installing the parallel / PS/2 adapter

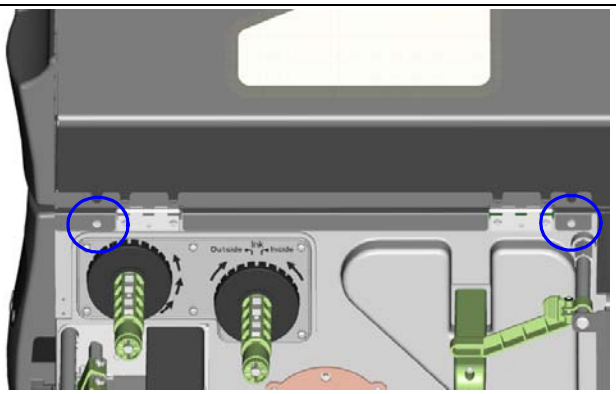
1	Parallel cable
2	Parallel / PS/2 adapter
3	Connection cable
4	Screws (set of 2)



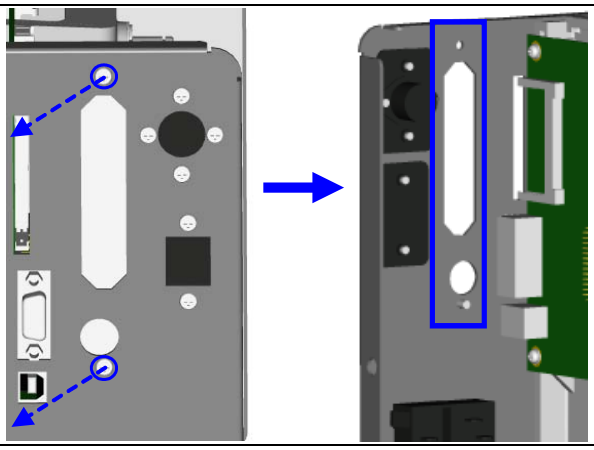
1. Check whether the printer is switched off. Place the printer on a flat surface and open the printer cover.

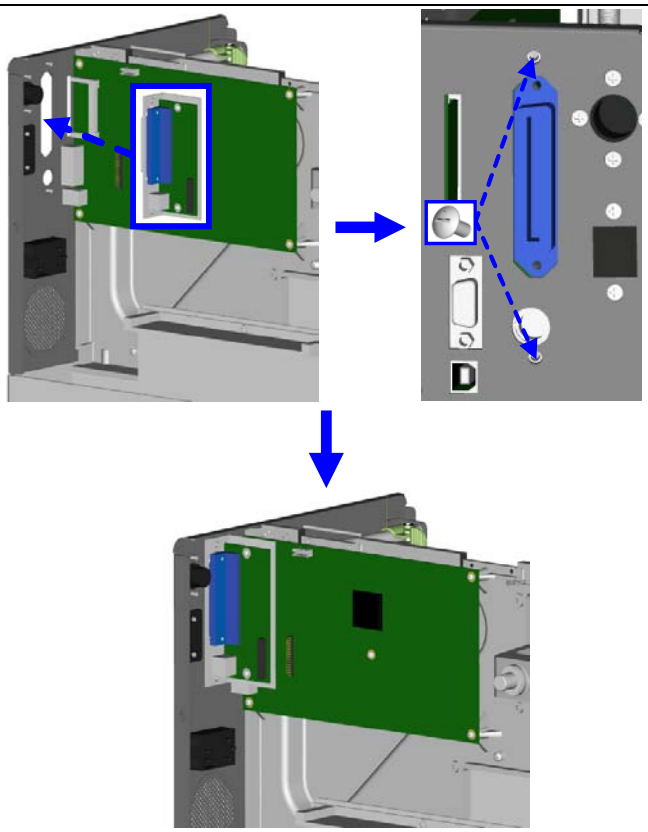
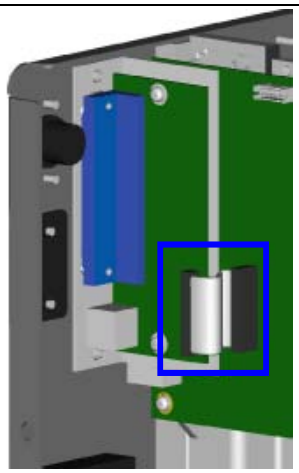
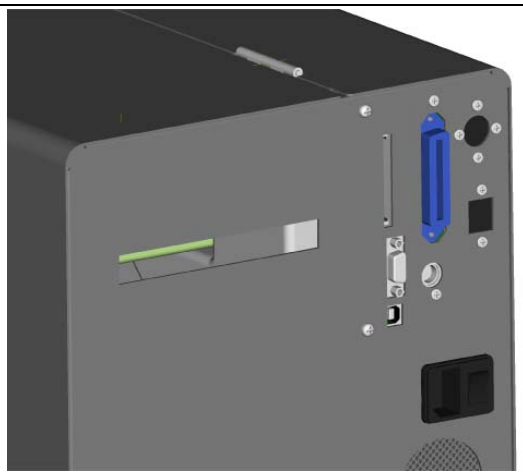


2. Unscrew the two screws marked in the illustration on the right and remove the left-hand side of the printer housing.



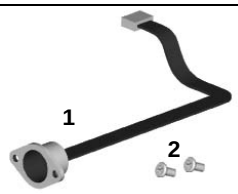
3. Unscrew the screws on the parallel port cover and remove the cover.



4. Install the parallel/PS/2 adapter in its place and secure it on the housing with screws.	
5. Connect the 30-pin connection cable to the motherboard.	
6. Replace the left-hand part of the printer housing and secure it with the screws you removed earlier. 7. Installation of the parallel/PS/2 adapter is now complete.	

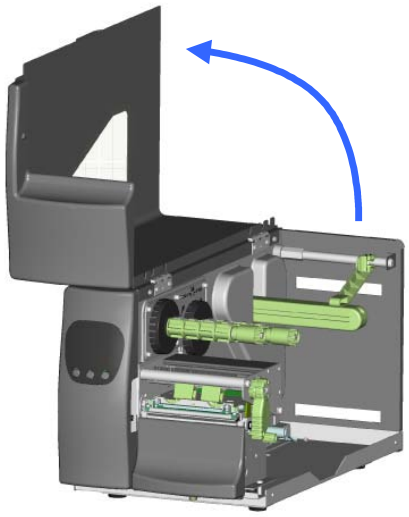
4-8. Installing the applicator interface

1	Applicator interface
2	Screws (set of 2)

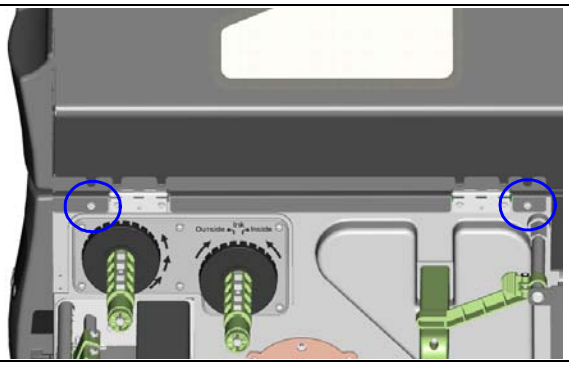


1. Place the printer on a flat surface and open the printer cover.

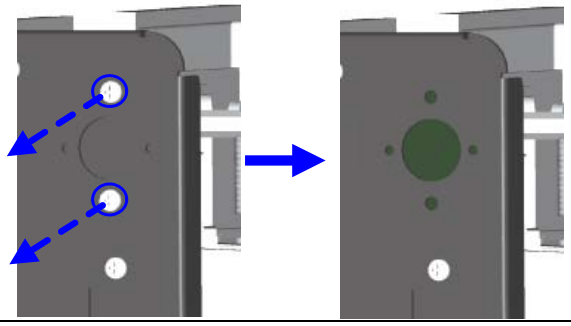
【Note】
Remember to switch off the printer before starting the installation.

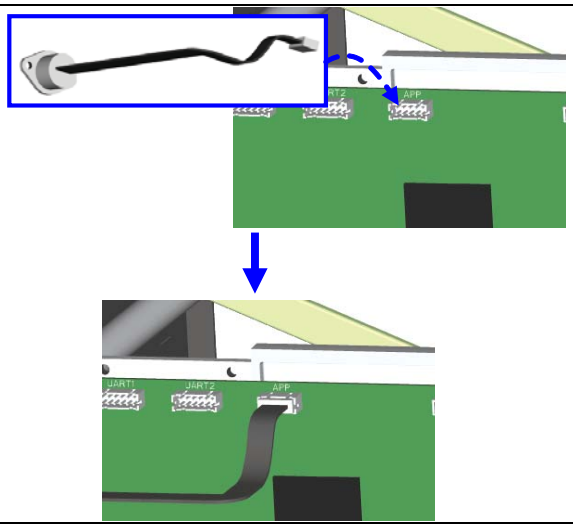
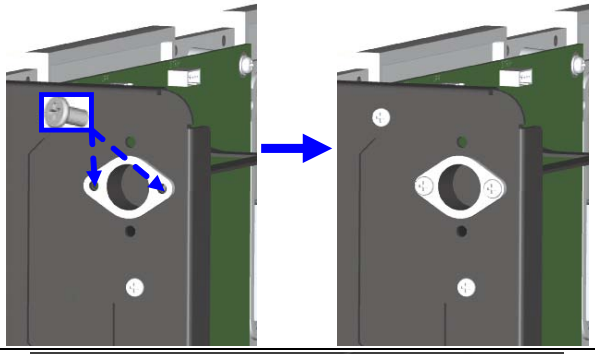
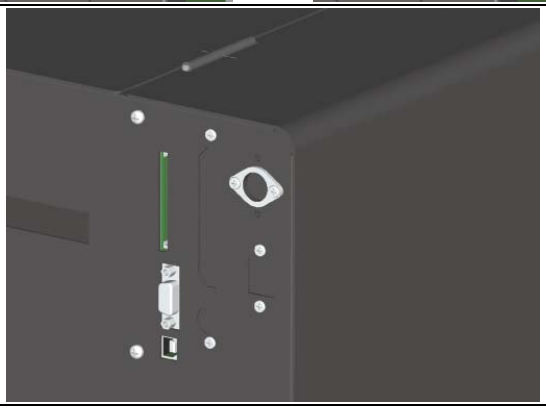


2. Unscrew the two screws marked in the illustration on the right and remove the left-hand side of the printer housing.

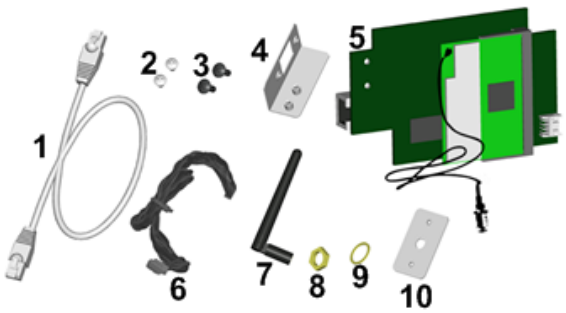
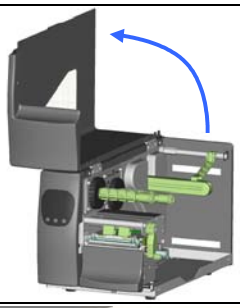
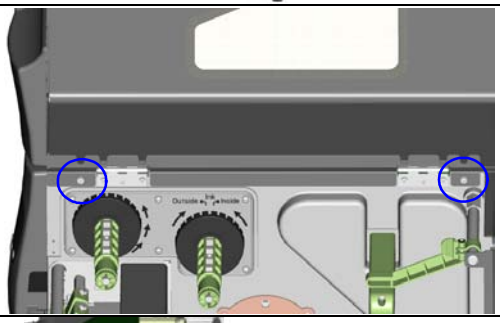
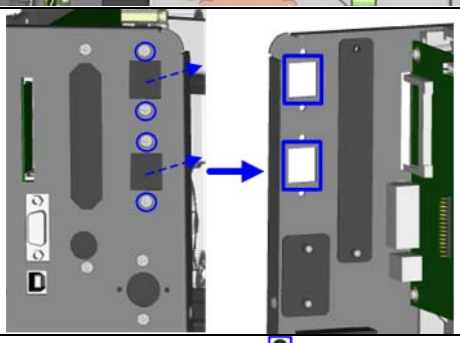
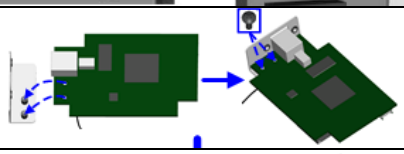
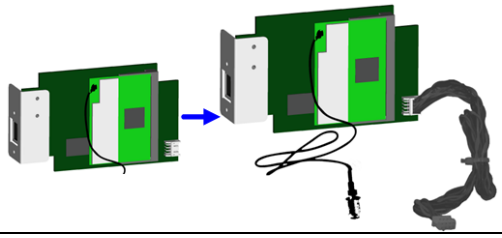


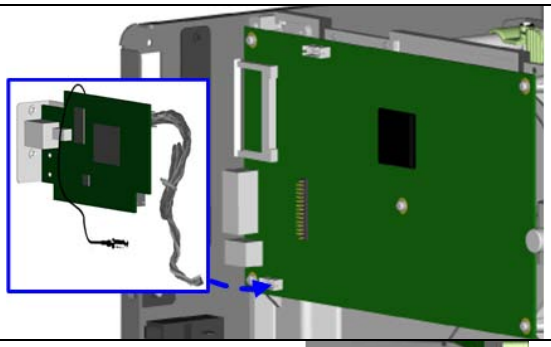
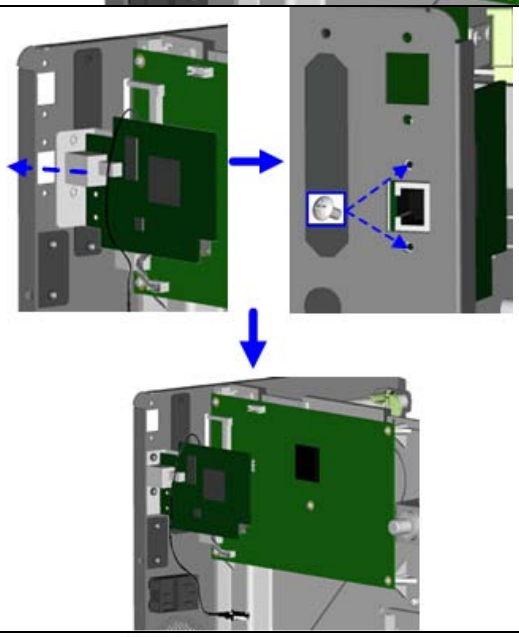
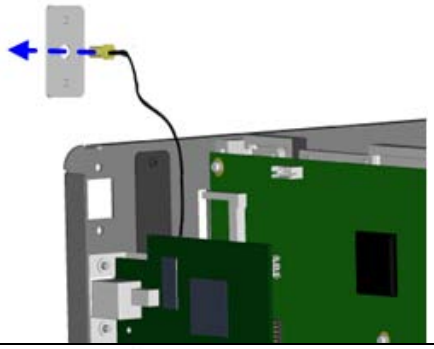
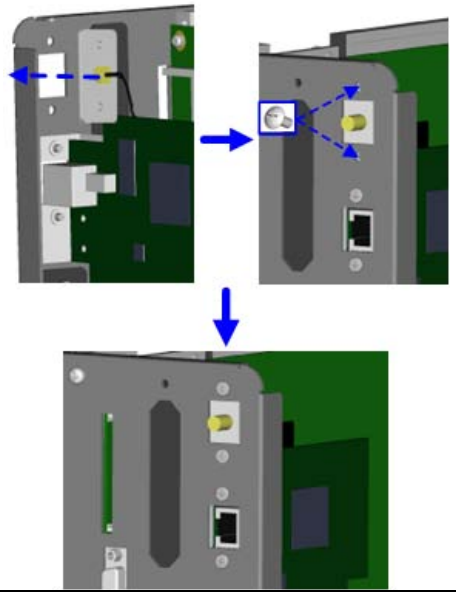
3. Unscrew the screws on the applicator interface cover and remove the cover.

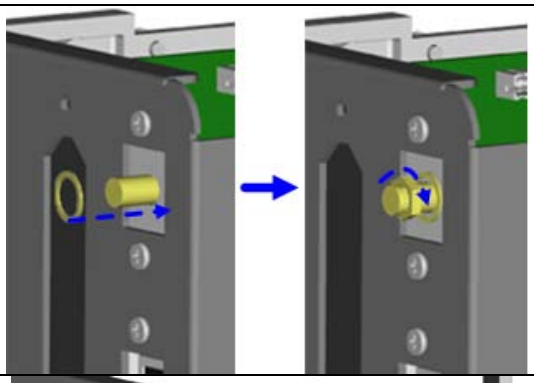
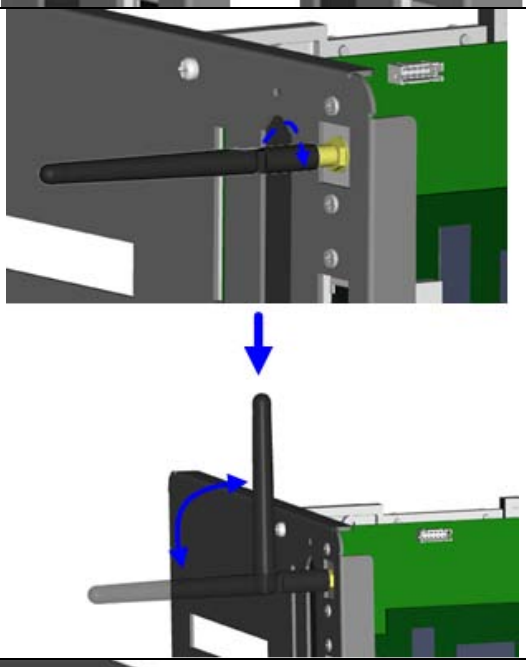


4. Pass the applicator cable through the opening into the housing. 5. Connect the applicator cable to the jack marked "APP" on the motherboard.	
6. Secure the applicator interface using two screws.	
7. Replace the left-hand part of the printer housing and secure it with the screws you removed earlier to complete the installation.	

4-9. Installing the WLAN module – EZ2000 Plus / EZ6000 Plus

1	Ethernet cable, 1.8 m	
2	Fastening screws (set of 2)	
3	Screws for Ethernet module (set of 2)	
4	Bracket	
5	WLAN module	
6	Connection cable (module to motherboard)	
7	WLAN antenna	
8	Nut	
9	Washer	
10	Antenna bracket	
1.	Make sure that the printer is switched off and the power cord disconnected from the printer. Place the printer on a clean flat surface and open the printer cover.	
2.	Remove the left-hand part of the printer housing.	
3.	Remove the covers from the network interface and antenna jack.	
4.	Secure the Ethernet module on the bracket.	
5.	Now plug the cable connector into the network card socket.	

6. Plug the other end of the connection cable into the motherboard socket.	
7. Secure the module bracket on the inside of the printer housing at the back.	
8. Push the antenna connector through the antenna bracket.	
9. Attach the antenna bracket to the back of the printer.	

10. Put the washer on the antenna connector and secure the connector on the antenna bracket using the nut.	
11. Screw the antenna onto the antenna connector. You can now adjust the angle of the antenna as required.	
12. Replace the left-hand part of the printer housing to complete the installation.	

【Note 1】

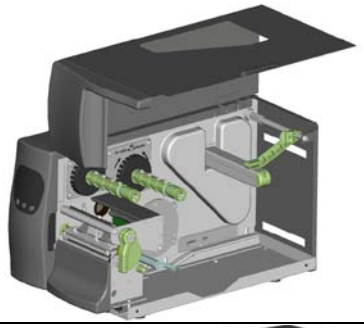
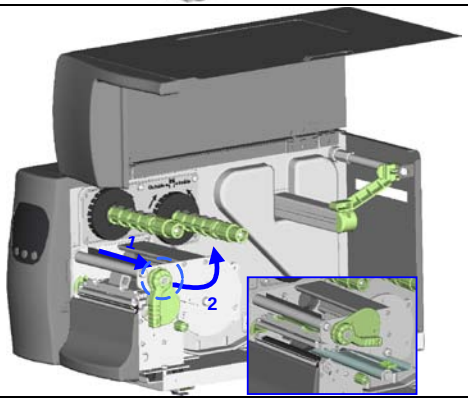
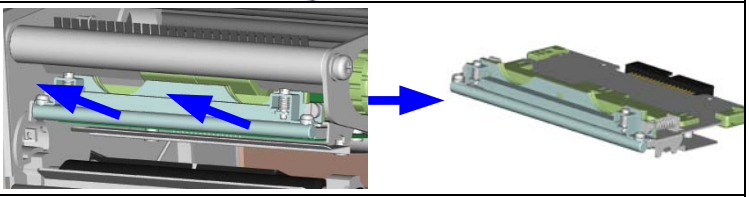
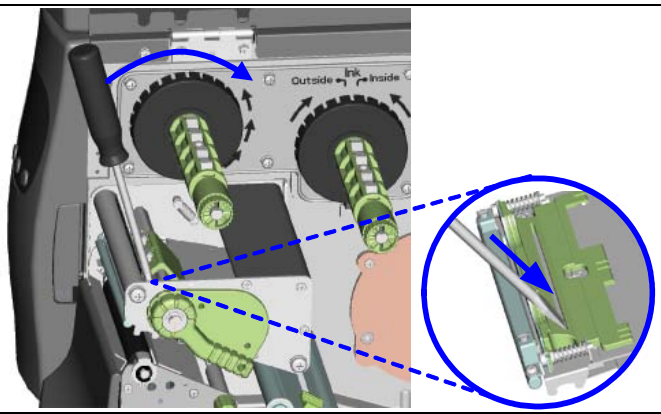
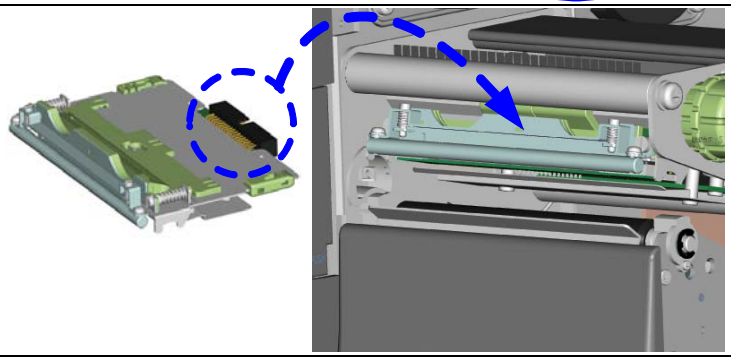
Once you have finished installing the Ethernet module, the command "^XSET,USBETHERNET,1" must be sent to the printer to enable the Ethernet module. While the Ethernet module is enabled, the USB port is disabled. To enable it again, send the command "^XSET,USBETHERNET,0" to the printer.

【Note 2】

The wireless network must be configured via a network cable.

5. Maintenance and adjustment

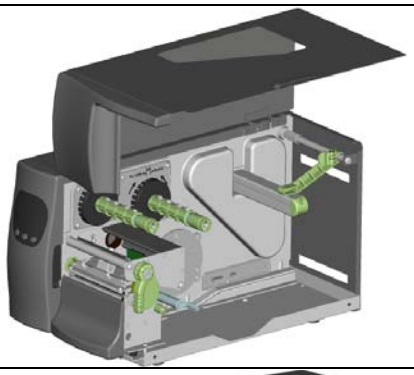
5-1. Installing / removing the print head module

1. Open the printer cover. *【Note】* *Remember to switch off the printer before removing the print head module.*	
2. Pull out the print head release lever as shown in the illustration (1) and turn it anticlockwise to a top right position (2).	
3. Hold the print head module at the front and gently pull it out.	
4. If you cannot remove the module by gently pulling it, use a screwdriver as shown in the illustration.	
5. Hold the module at the front and slide it into the printer along the guide rails. Firmly press the module in so the contacts are fully connected.	

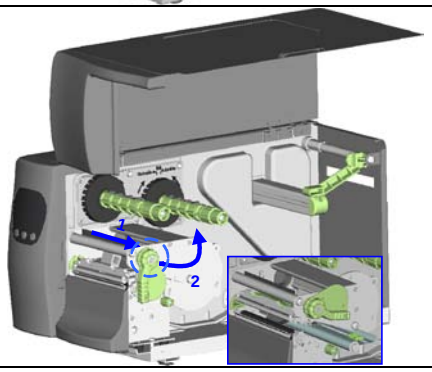
5-2. Adjusting the print line

Please contact your local dealer for technical support.

1. Open the printer cover.

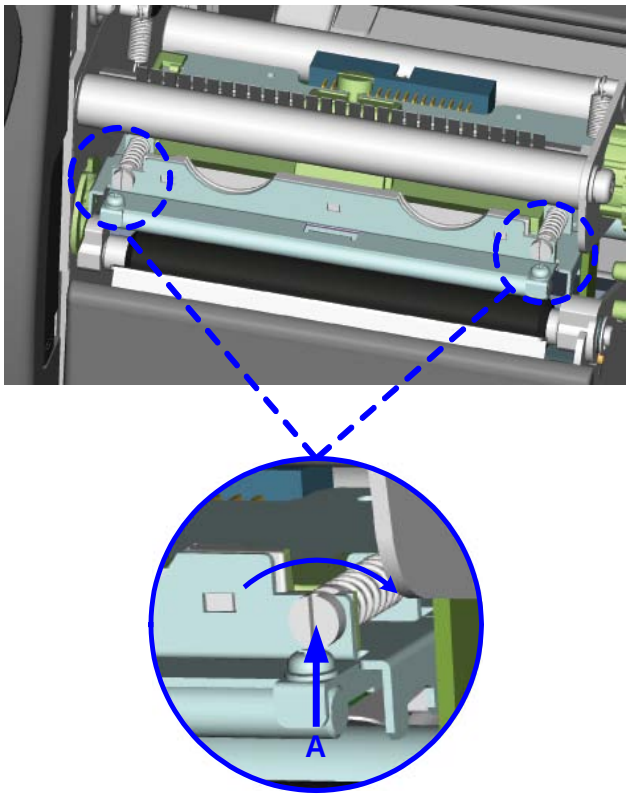


2. Pull out the print head release lever as shown in the illustration (1) and turn it anticlockwise to a top right position (2).



3. TPH print line adjustment:

- When printing is slow or when printing on thick label stock, the print line must be moved to the front (in paper feed direction) for a better print result. Using a flat-head screwdriver, turn the screws clockwise to move the TPH forward.
- The two screws on the left and right must be adjusted to the same position to ensure the print line and feed roller are in parallel.
- One turn of the screw moves the print head by 0.5 mm. To keep track of the change in quality, you should adjust the screws by ¼ turn at a time.
- If no improvement is visible, gently turn the screws clockwise as far as possible, then restart the adjustment process from there.

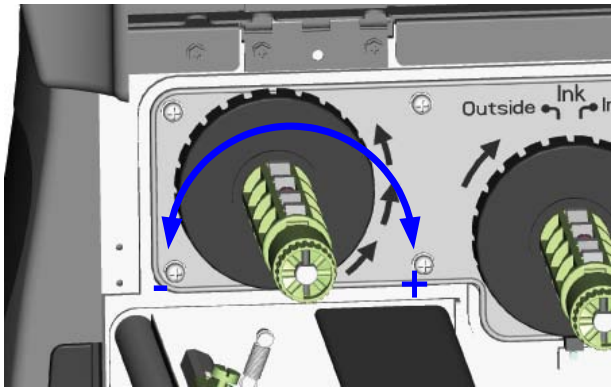


5-3. Adjusting the ribbon tension

You can adjust the ribbon tension by turning the ribbon shaft knob (green wheel at the base of the ribbon supply hub – see illustration) clockwise or anticlockwise. There are 4 possible settings, which are marked on the knob of the ribbon rewind hub and the ribbon supply hub. When set to 1, the tension is highest, while the tension is lowest at 4. If the tension is so low that the ribbon does not move forward, you need to reduce the tension of the ribbon supply hub or increase the tension of the ribbon rewind hub. To set the tension, press in the knob and turn it clockwise or anticlockwise as required.

Increasing the tension of the ribbon rewind hub will remove any wrinkling of the ribbon during printing, which results from the use of different ribbon materials. (For details about the wrinkling/creasing of ribbons, see Section 5-6.)

If you are using a very narrow ribbon, the printer may not move the label stock forward (particularly with a ribbon that is less than 2" wide). In that case, reduce the tension by turning the knob of the ribbon supply hub anticlockwise. If the tension is too high, the ribbon core may be crushed and thus impossible to remove. In that case, reduce the tension of the ribbon supply hub and the ribbon rewind hub by turning the knobs anticlockwise.



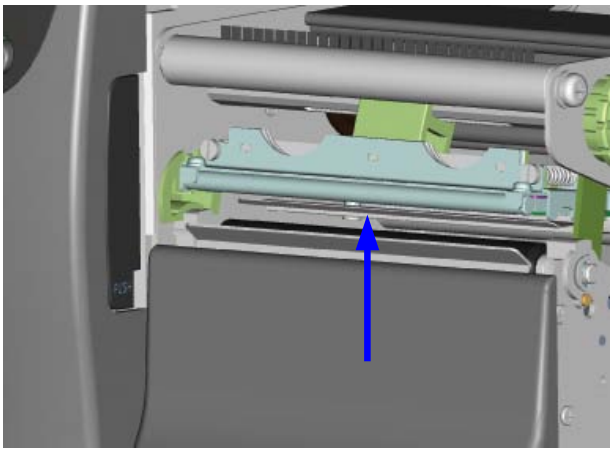
5-4. Cleaning the thermal print head

Dirt on the print head or ribbon may result in inadequate print quality (no printed image on part of the label). The printer cover should therefore be kept closed whenever possible. Keeping dirt and dust away from the paper or labels ensures a good print quality and a longer lifespan of the print head. Here is how you clean the print head:

1. Switch off the printer.
2. Open the printer cover.
3. Remove the ribbon.
4. Release the print head by turning the print head release lever.
5. To remove any label residue or other dirt from the print head (see blue arrow), please use a soft lint-free cloth dipped in alcohol.

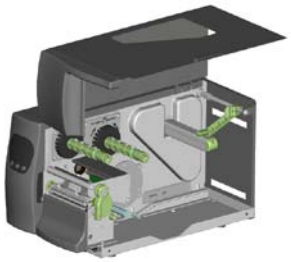
【Note 1】
The print head should be cleaned once a week.

【Note 2】
Please make sure that there are no metal fragments or other hard particles on the soft cloth used to clean the print head.

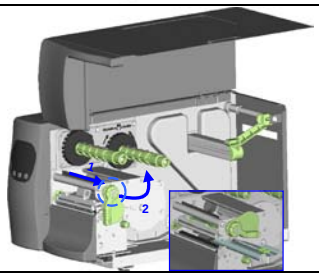


5-5. Adjusting the balance and print head tension

1. Open the printer side cover.



2. Pull out the print head release lever as shown in the illustration (1) and turn it anticlockwise to a top right position (2).

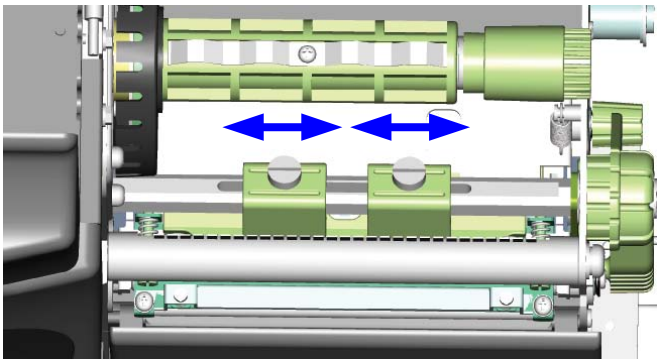


When using a variety of label stock and ribbons, the ink may not be evenly distributed. If there is no printed image on one side of the paper, or the ribbon wrinkles, the print head pressure must be readjusted using the TPH spring boxes.

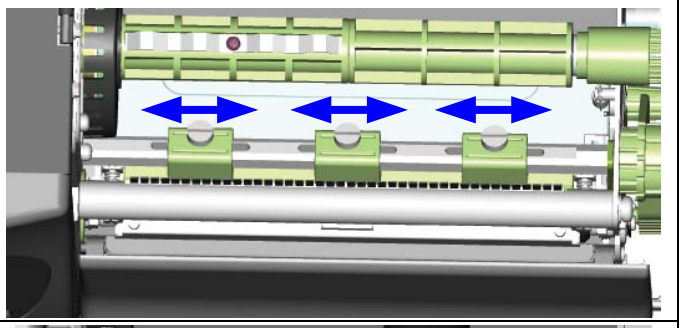
3. Move the TPH spring boxes as shown in the illustration to change the print head pressure. The wider the medium you are using, the further out the TPH spring boxes must be moved.

If there is no quality improvement, you need to change the pressure on the TPH spring boxes.

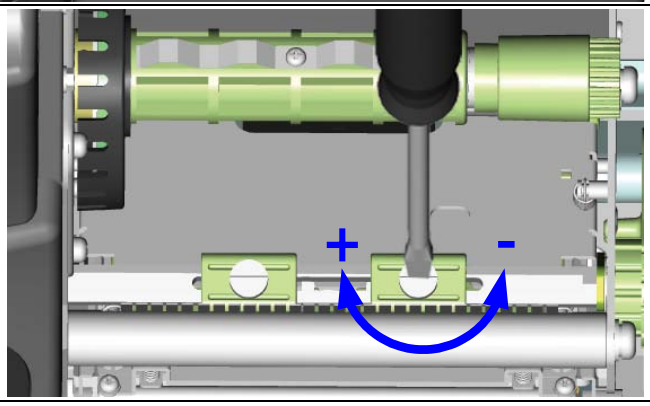
EZ2000 Plus



EZ6000 Plus



4. Turning the screw clockwise increases the pressure, while turning it anticlockwise reduces the pressure.



5-6. Ribbon shield settings

1. The use of different ribbon materials may cause wrinkling of the ribbon, which in turn affects the print result as illustrated by the examples in (a) and (b). To change the print quality, you can adjust the ribbon shield screws.

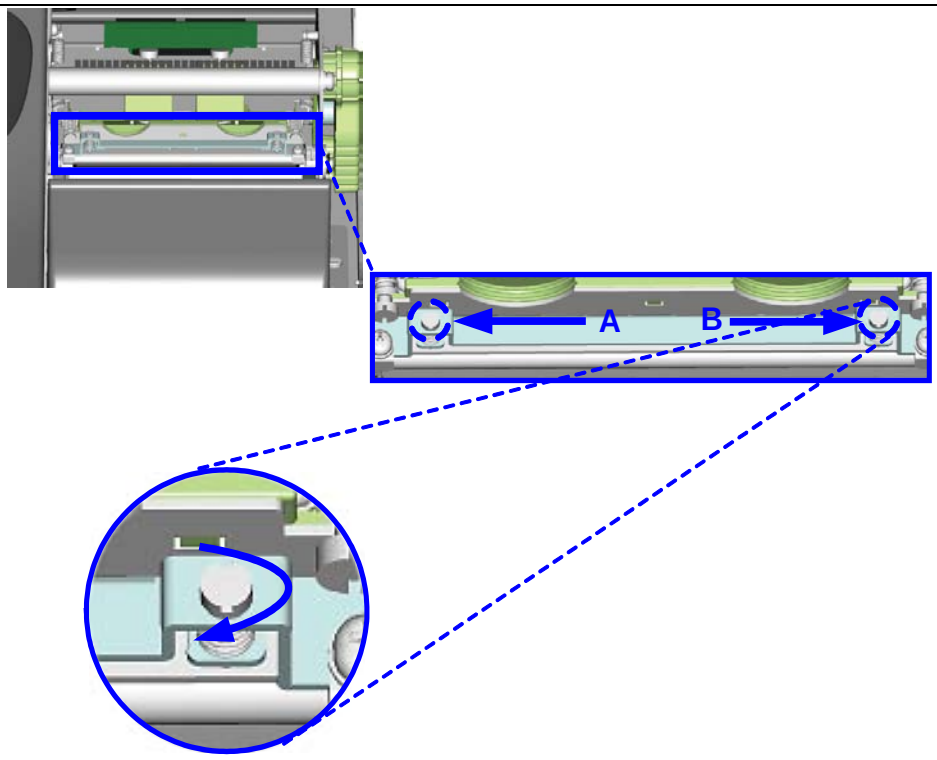
If your print result looks like the example in (a), you need to turn ribbon shield screw A clockwise. If your print result looks like the example in (b), you need to turn ribbon shield screw B clockwise.

(a)

(b)

2. To keep track of the change in print quality, you should adjust the screws by half a turn at a time. Print a test page. If there is no improvement in the print result, turn the screw by another half turn. Do not turn the adjustment screw more than two full turns.

【Note】
If you adjust the screw by more than two full turns, the paper feed may no longer function correctly. In that case, unscrew the ribbon shield screws fully and restart the adjustment process.



5-7. Cutter settings

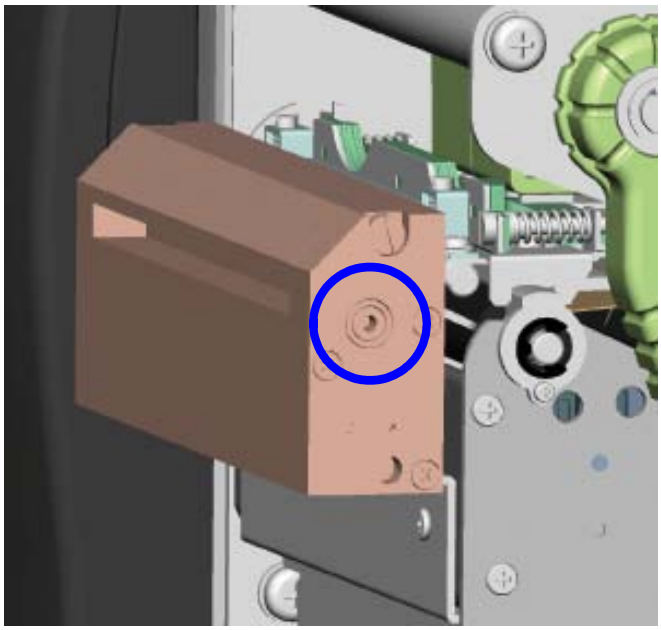
1. Socket head screws for adjusting the cutter are located on both sides of the cutter.

2. In the event of a paper jam, the cutter will no longer function correctly. Switch off the printer and use a hex key (#M3) to turn the socket head screw.

3. Turn the key anticlockwise to remove the jammed paper.

4. When you have removed the jammed paper, you can switch the printer back on. The cutter will automatically reset.

【Note】
The label medium should be at least 30 mm long to ensure correct functioning of the cutter.



5-8. Troubleshooting

Problem	Solution
The printer is switched on but the display does not light up.	♦ Check the power supply.
One or both LEDs light up red and printing is interrupted.	♦ Check the software settings (driver settings) or command codes. ♦ Look for the error alert in the table in Section **3-8. Error alerts**. ♦ Check whether the cutter is functioning normally and whether it is cutting at all. (Only if a cutter is installed.)
The label stock passes through the printer but no image is printed.	♦ Please make sure that the label stock is loaded the right way up and that it is suitable material. ♦ Please make sure that the ribbon is loaded correctly.
The label stock jams during printing.	♦ Clear the paper jam. Remove any label material left on the thermal print head and clean the print head using a soft lint-free cloth dipped in alcohol.
There is no printed image on part of the label or the image is blurred.	♦ Check the thermal print head for dust or other dirt (label material or ribbon residue). ♦ Check for errors in the application software. ♦ Check the ribbon for wrinkles. ♦ Check the power supply. ♦ Run a self test (**Section 3-4.**) and check the test print pattern to see whether the print head prints over the entire width of the medium. ♦ Check the quality of the print medium.
The printed image is positioned incorrectly or a label is missed out during printing.	♦ Run the auto-detection function. (**Section 3-6.**) ♦ Check the label height setting. ♦ Check whether there is paper or dust covering the sensor. ♦ Check the paper guide settings.
The cutter does not cut off the labels in a straight line.	♦ Check whether the label stock is positioned straight.
The cutter does not cut off the labels completely.	♦ Check whether the label is more than 0.16 mm thick.
When using the cutter, the labels are not fed through or cut off incorrectly.	♦ Check whether the cutter has been correctly installed. ♦ Check whether the paper guides are functioning correctly.
The label dispenser is not functioning normally.	♦ Check whether there is dust on the label dispenser. ♦ Check whether the label stock is positioned correctly.

【Note】

If any problems occur that are not described here, please contact your dealer.