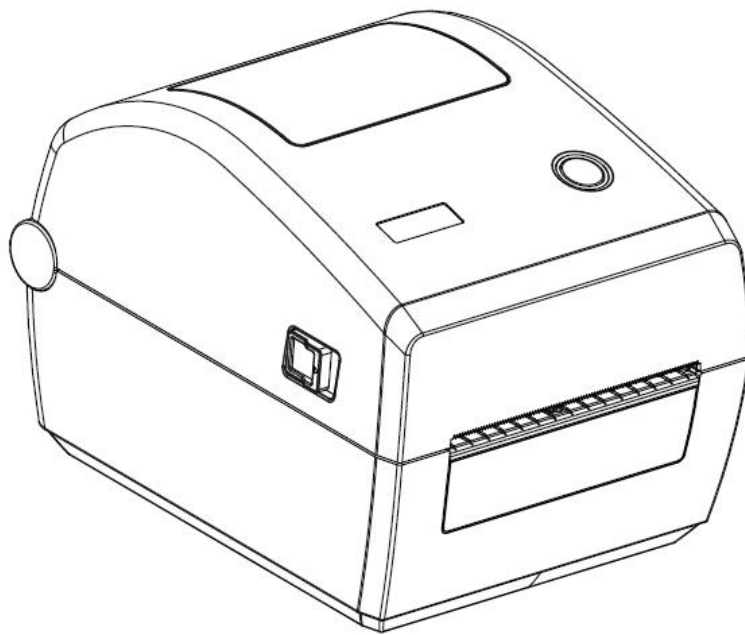




# BP4206d

## Label Printer



*Service Manual*

# Change Record

| REV. | Date       | Summary of Changes |                |
|------|------------|--------------------|----------------|
|      |            | Item               | Description    |
| 1.0  | 2025.11.12 | -                  | First Edition. |
|      |            |                    |                |
|      |            |                    |                |
|      |            |                    |                |
|      |            |                    |                |

# Foreword

This manual describes the label printer — BP4206d.

It is designed for use as a reference for periodic inspections and maintenance procedure to be executed by service person. It is not intended for the general user. Users of this manual should have a basic knowledge and understanding of English language.

This manual is divided into the following sections:

CHAPTER 1 Parts Replacement

CHAPTER 2 Troubleshooting

CHAPTER 3 Parts List

## Important Information

Note the following precautions during work.

**Note:**

***Always wear safety gloves to prevent an injury as well as to prevent rust developing on the device.***

***Never start a service when your hands are wet. This will prevent an electric shock as well as rust developing on the device.***

***Always wear a wristband to prevent a damage by electrostatic discharge.***

Note

The contents of this manual are subject to change without notice.

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# Chapter 1 Parts Replacement/Module Purchase List for Service

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This chapter explains disassembly and reassembly of the printer. Note the following precautions during disassembly and reassembly.

- 1) Turn off the power supply before disassembling the printer.
- 2) Always wear safety gloves to prevent an injury as well as to prevent rust developing on the device.
- 3) Never start a service when your hands are wet. This will prevent an electric shock as well as rust developing on the device.
- 4) Always wear a wrist strap to prevent the damage by electrostatic discharge.

**Assembly is the reverse of disassembly unless otherwise specified.**

## CONTENT

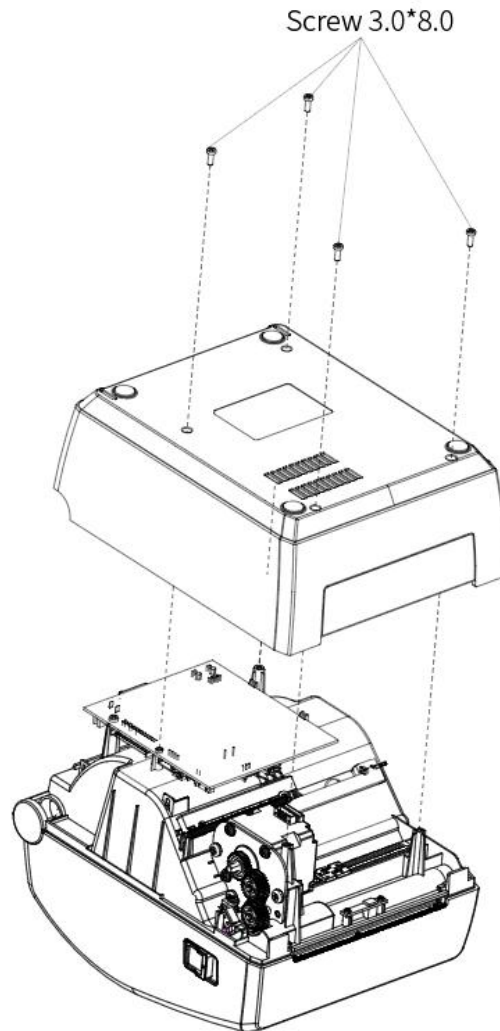
|                               |  |
|-------------------------------|--|
| 1.1 Lower Cover               | 1.9 Lower Photoelectric Module         |
| 1.2 Print Header Module       | 1.10 Micro switch Module               |
| 1.3 Platen Module             | 1.11 Left and Right Roll Holder Module |
| 1.4 Motor Module              | 1.12 Window                            |
| 1.5 Control Main Board Module | 1.13 Power Cord                        |
| 1.6 Button and Upper Cover    | 1.14 Power Adapter                     |
| 1.7 Hook Module               | 1.15 External Paper Roll Stand         |
| 1.8 Upper Detection Module    |  |

## ● Parts Replacement

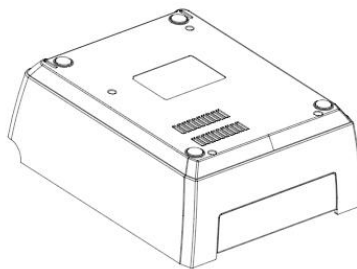
### 1.1 Lower Cover

1. Firstly, unscrew four 3.0\*8.0 screws to separate lower cover from lower bracket.

Disassembling the lower cover:



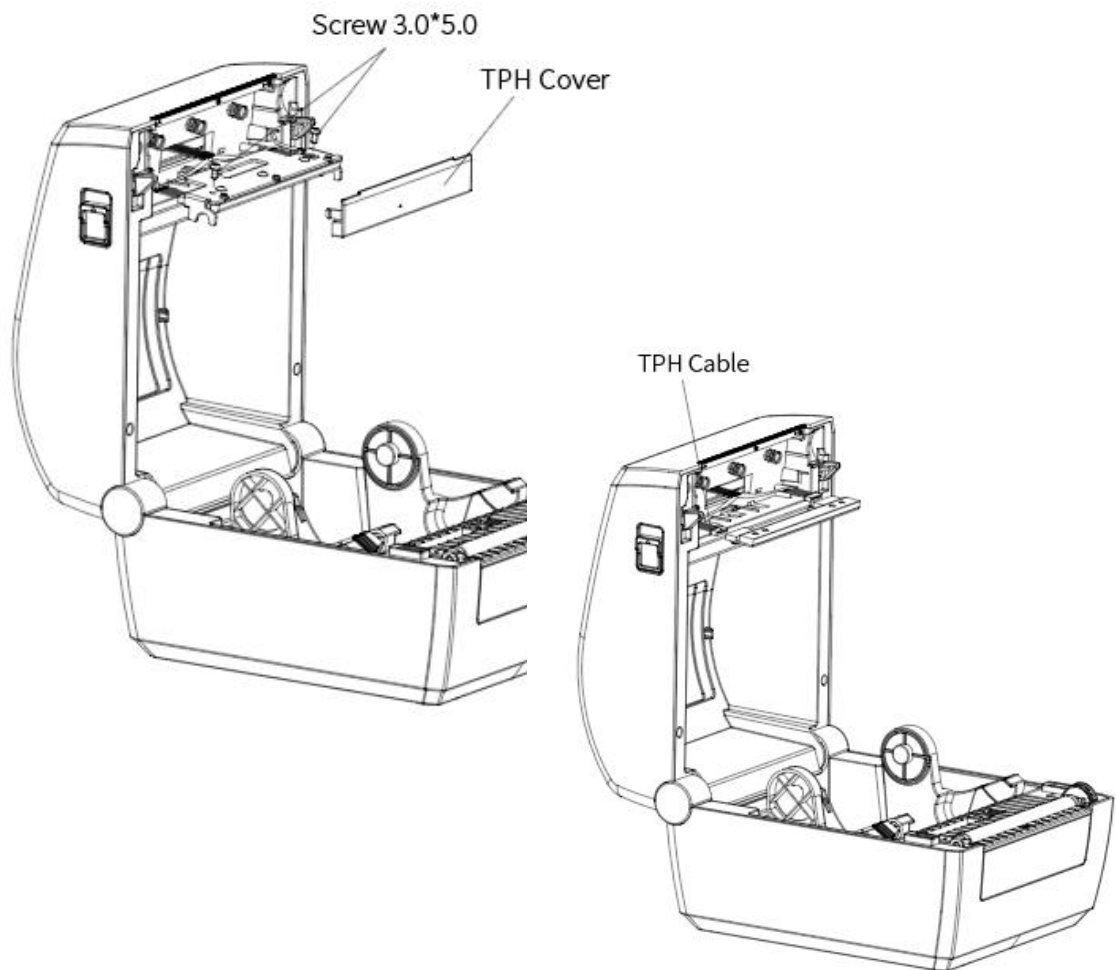
Replacing the lower cover:



## 1.2 Print Header Module

1. Firstly, open the top cover and remove the THP cover. Then press the TPH print header inward by hands and slide it down.
2. Then, unscrew two 3.0 \* 5.0 screws and separate the TPH bracket from the TPH module.
3. Remove TPH from TPH bracket.

Disassembling the module:



Replacing print header module:

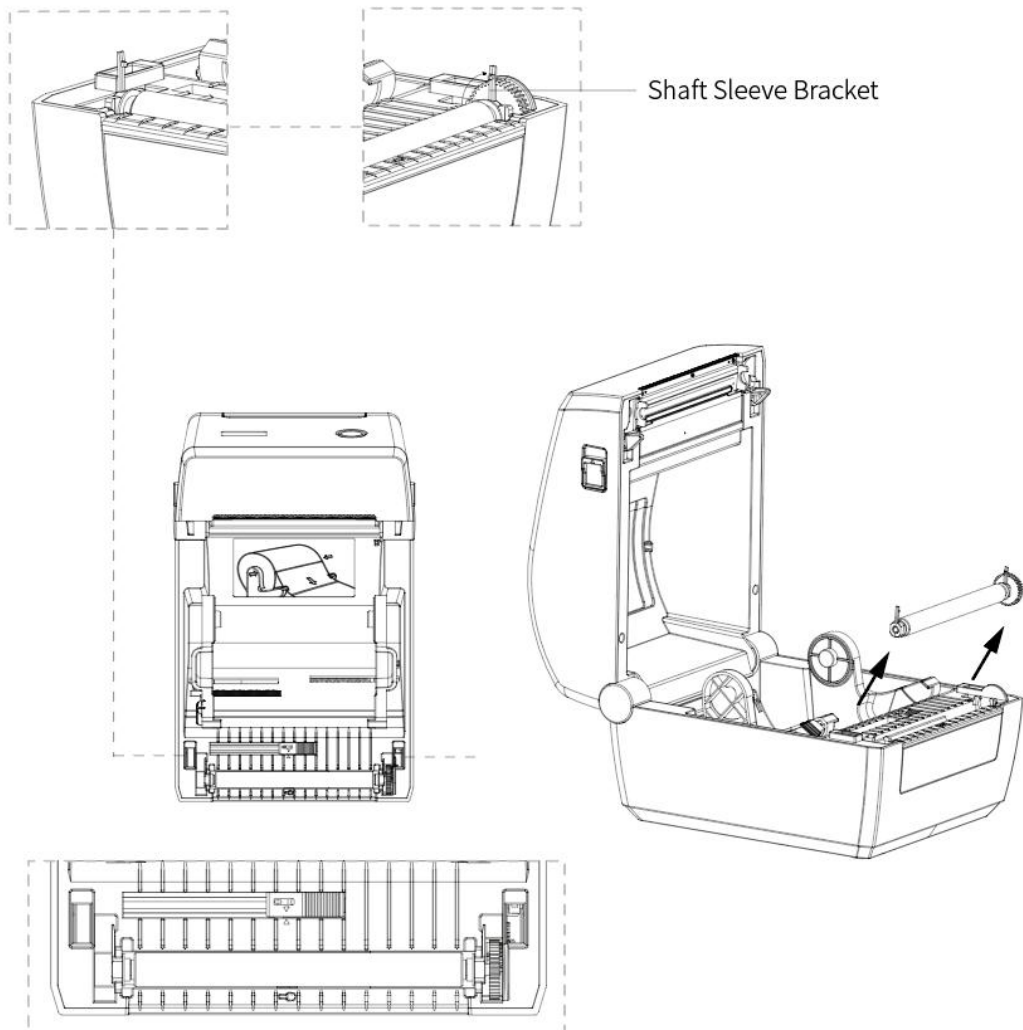


**Caution:** Please do not touch the TPH in case of electric shock for TPH damage during disassembling the print head.

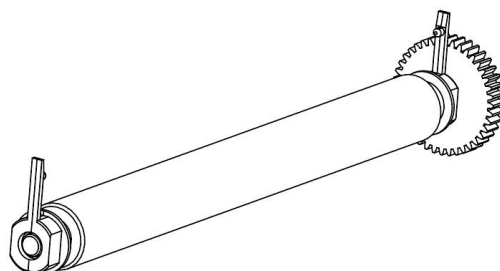
### 1.3 Platen Module

1. Using nippers, remove the tip of platen sleeves from the main body.
2. Rotate the platen roller sleeves 90 degrees counterclockwise, and pull out the two sleeves simultaneously.

#### Disassembling the platen module:



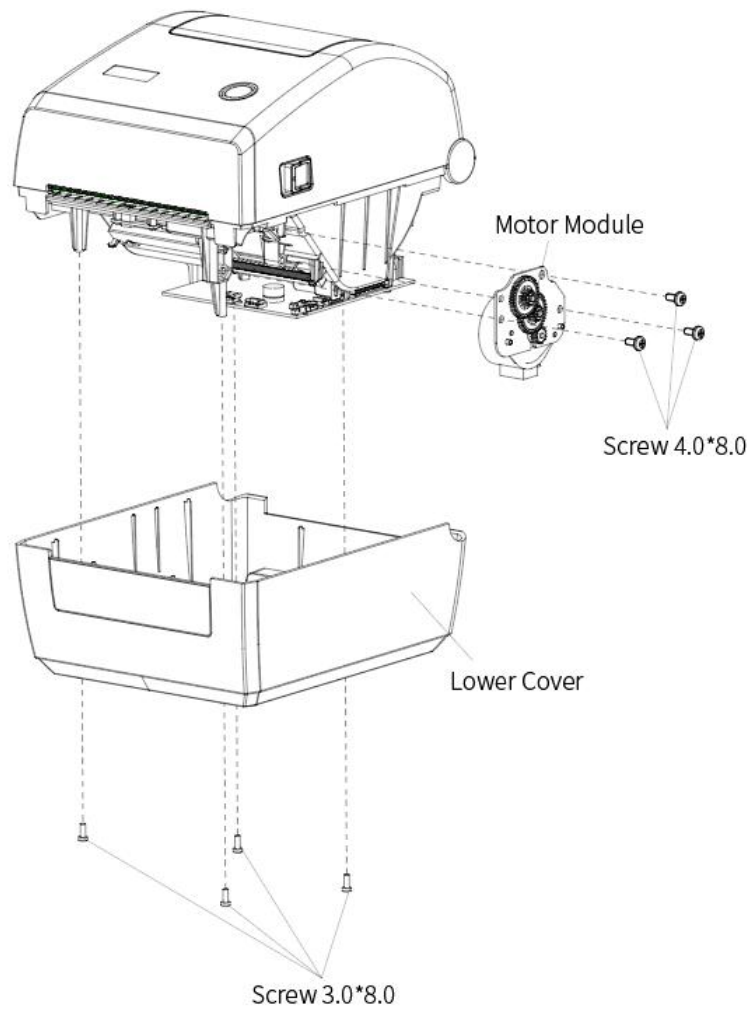
#### Replacing platen module:



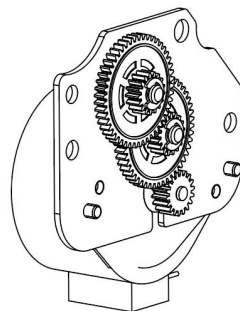
## 1.4 Motor Module

1. Firstly, unscrew four 3.0\*8.0 screws to separate lower cover from lower bracket by cross screwdriver.
2. Secondly, unscrew three 4.0\*8.0 screws to remove motor module.

**Disassembling the motor module:**



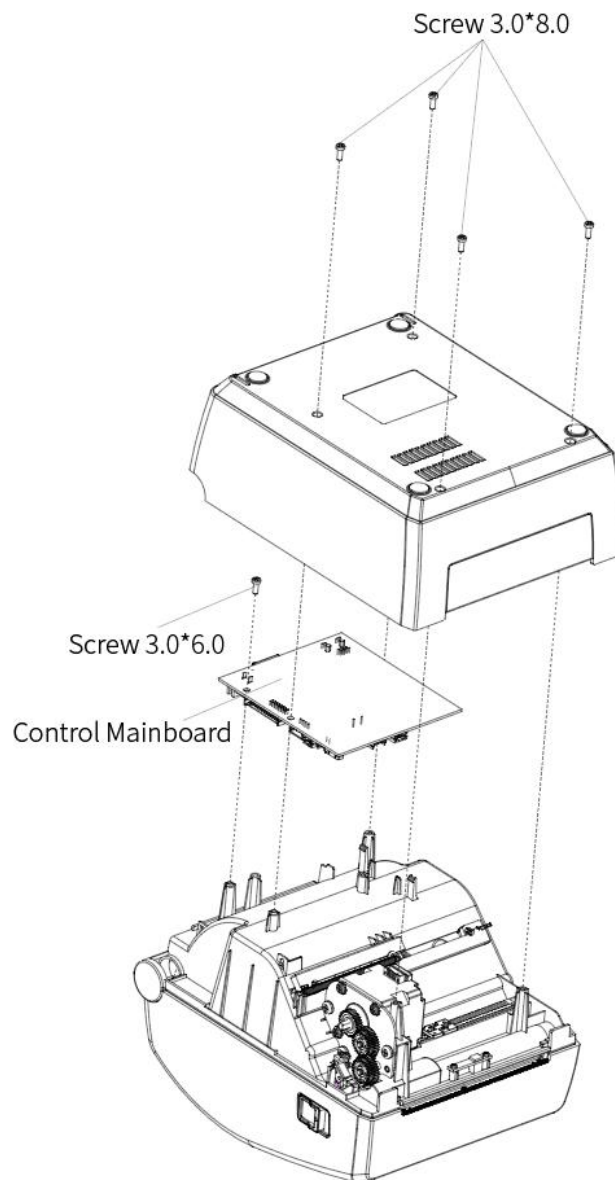
**Replacing motor module:**



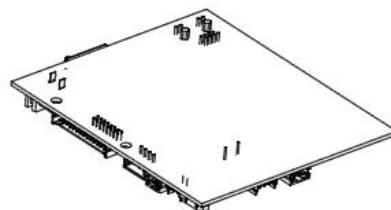
## 1.5 Control Mainboard Module

1. Firstly, unscrew four 3.0\*8.0 screws to separate lower cover from lower bracket by cross screwdriver.
2. Then unscrew one 3.0\*6.0 screw, remove the control mainboard module from lower bracket.

### Disassembling control mainboard:



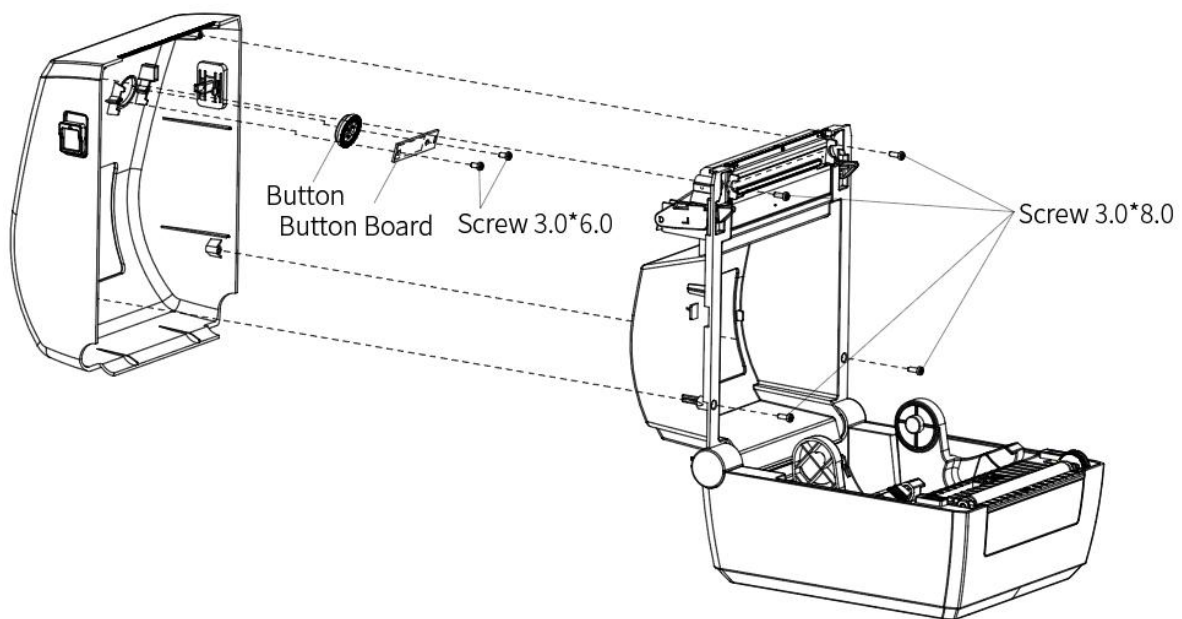
### Replacing mainboard:



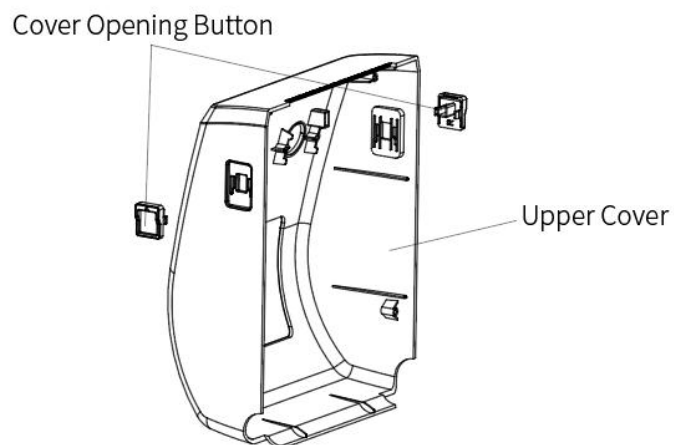
## 1.6 Button and Upper Cover

1. Unscrew four 3.0\*8.0 screws, separate the upper cover from upper bracket.
2. Unscrew two 3.0\*6.0 screws.
3. Separate the button and button board from the top cover.
4. Remove the left and right cover opening buttons and separate the upper cover.

### Disassembling the button:



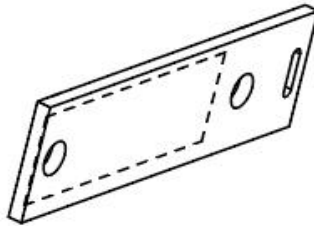
### Disassembling the upper cover:



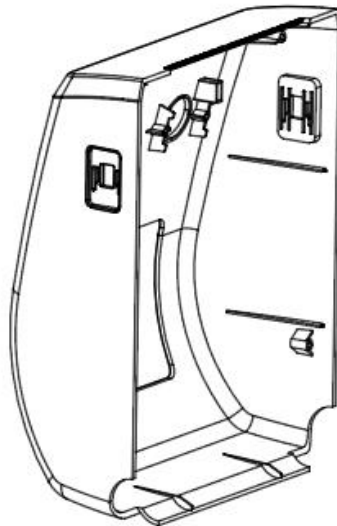
Replacing the button:



Replacing the button board:



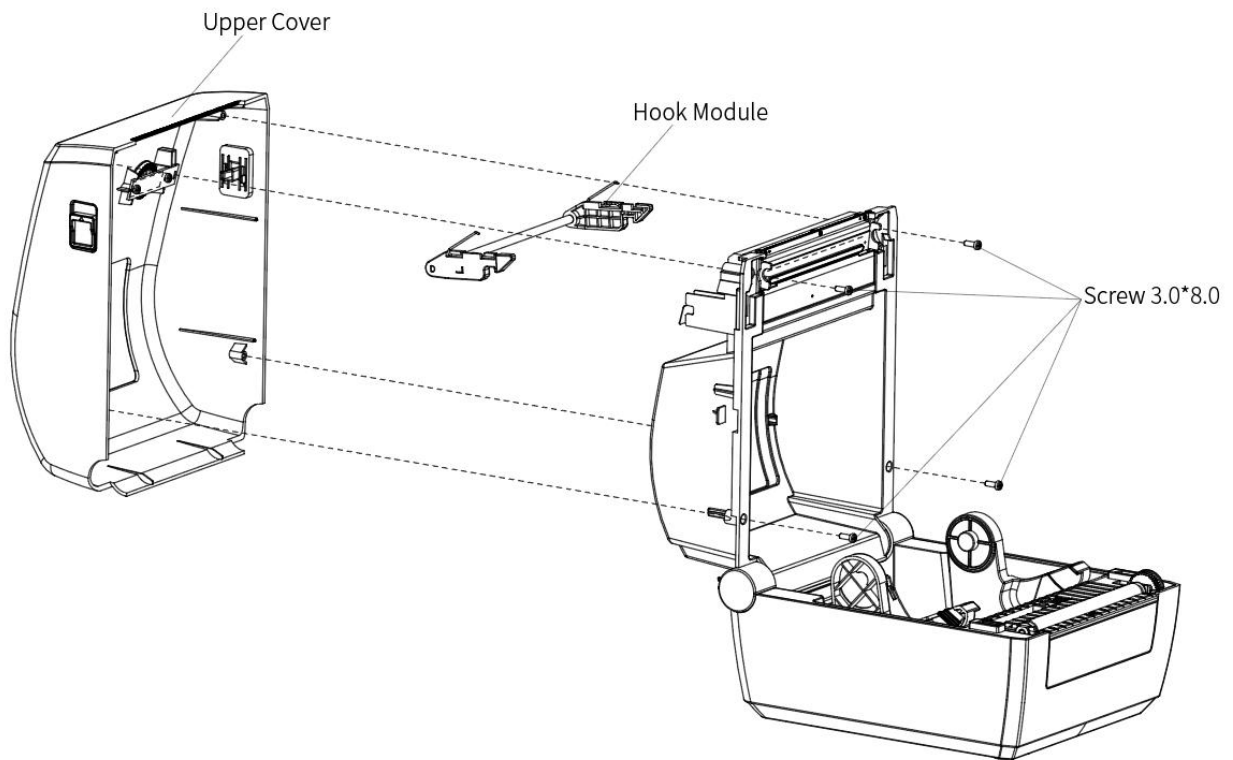
Replacing the upper cover:



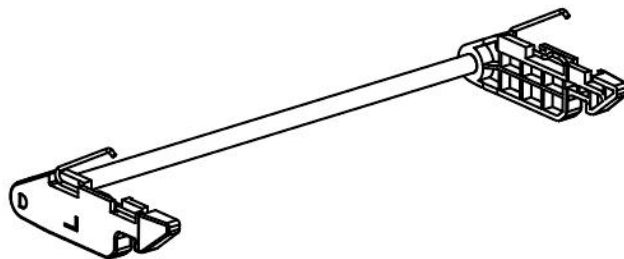
## 1.7 Hook

1. Unscrew four 3.0\*8.0 screws, separate the upper cover from upper bracket.
2. Place your fingers on both sides of the hook module and apply a slight outward force to remove the hook module.

### Disassembling the hook module:



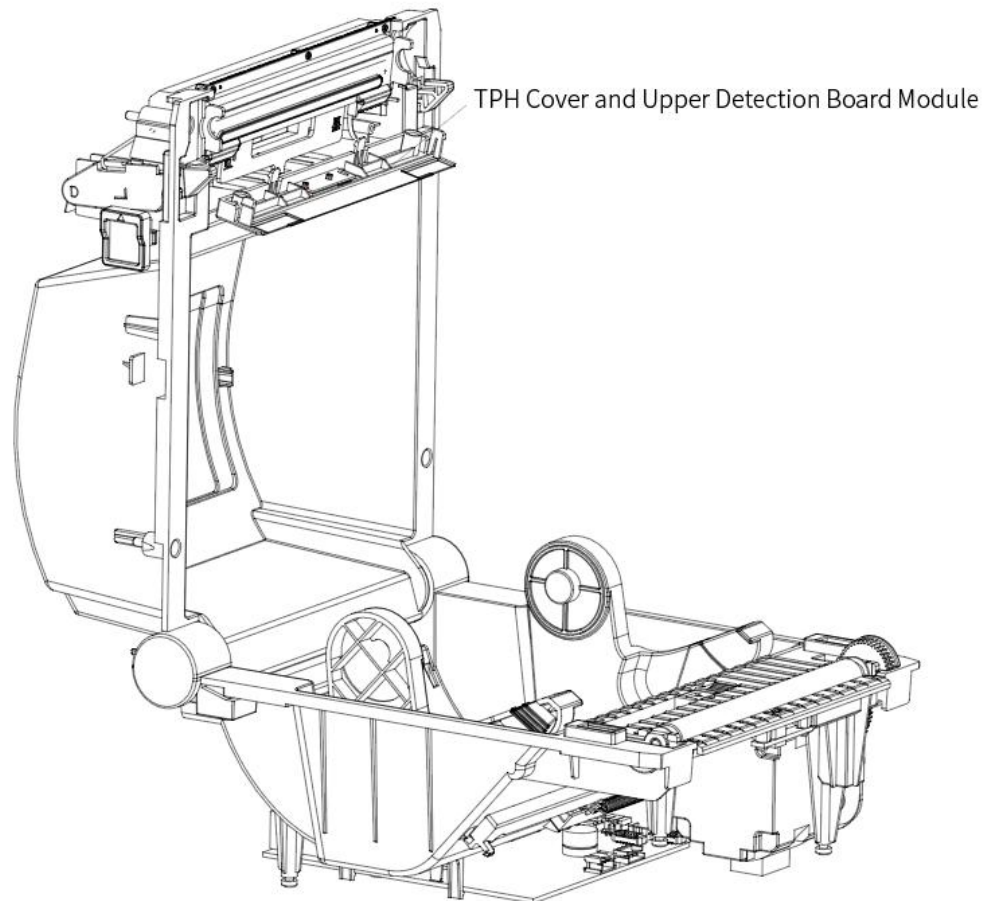
### Replacing the hook module:



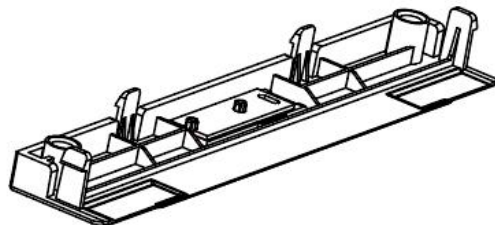
## 1.8 Upper Detection Module

1. [Disassembling the Lower Cover](#).
2. Unscrew four 3.0\*8.0 screws, separate the upper cover from upper bracket.
3. Unplug the cable of the upper detection module from the mainboard.
4. Remove the TPH cover and upper detection board module.

**Disassembling the upper detection module:**



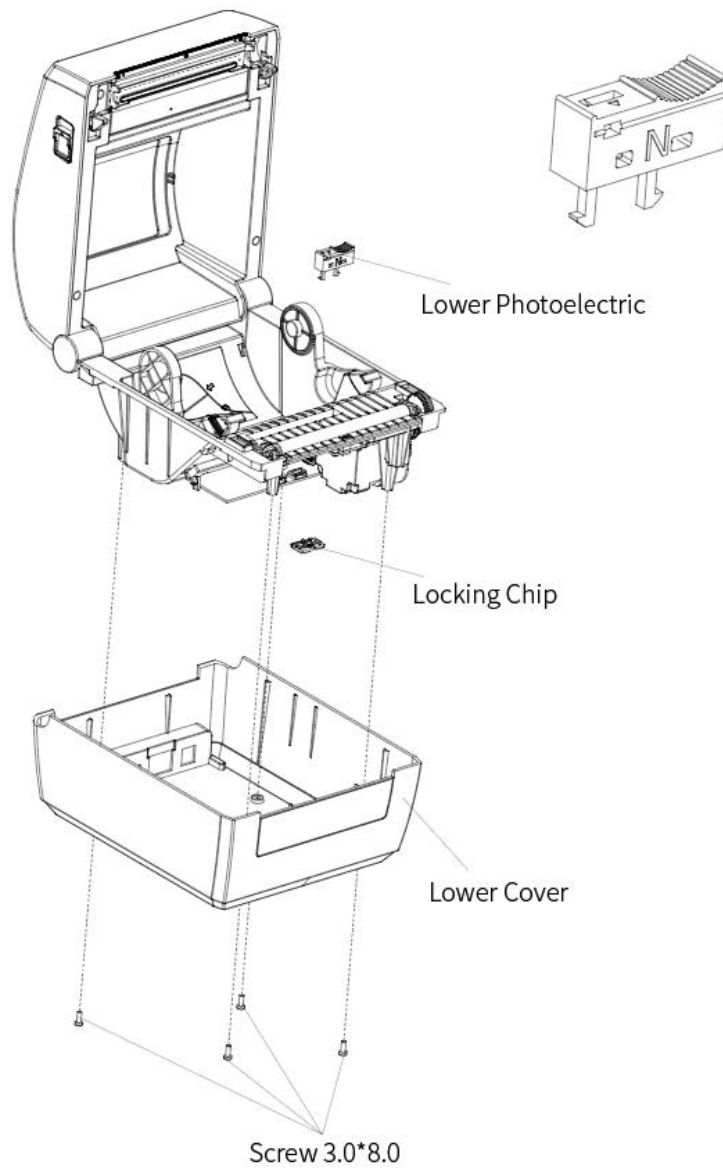
**Replace the upper detection module:**



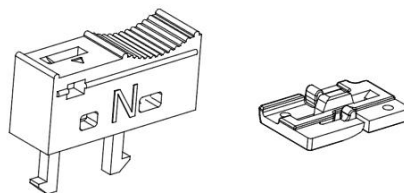
## 1.9 Lower Photoelectric Module

1. Unscrew four 3.0\*6.0 screws, remove the rack cover from lower bracket.
2. Manually remove the lower photoelectric and locking chip.

Disassembling the lower photoelectric module:



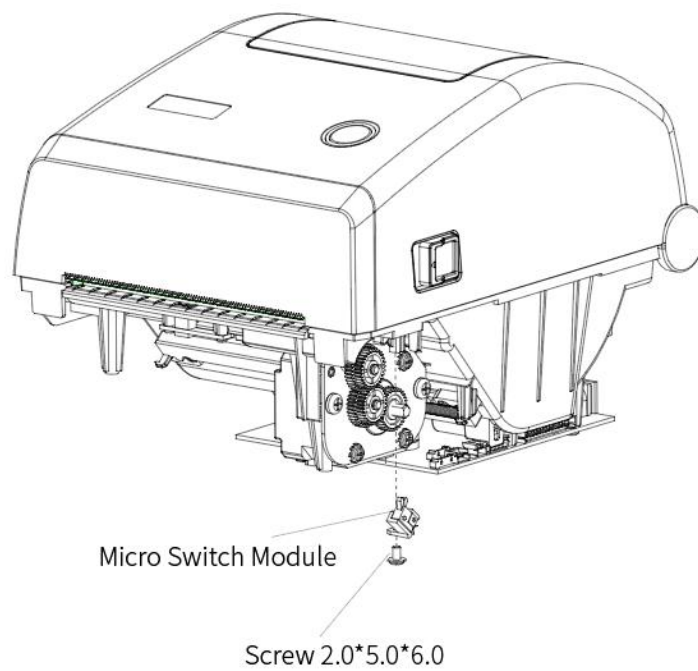
Replacing lower photoelectric module:



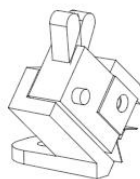
## 1.10 Micro Switch Module

1. [Disassembling the Lower Cover.](#)
2. Unscrew the 2.0\*5.0\*6.0 screw by screwdriver.
3. Manually remove the micro switch module.

**Disassembling the micro switch Module:**



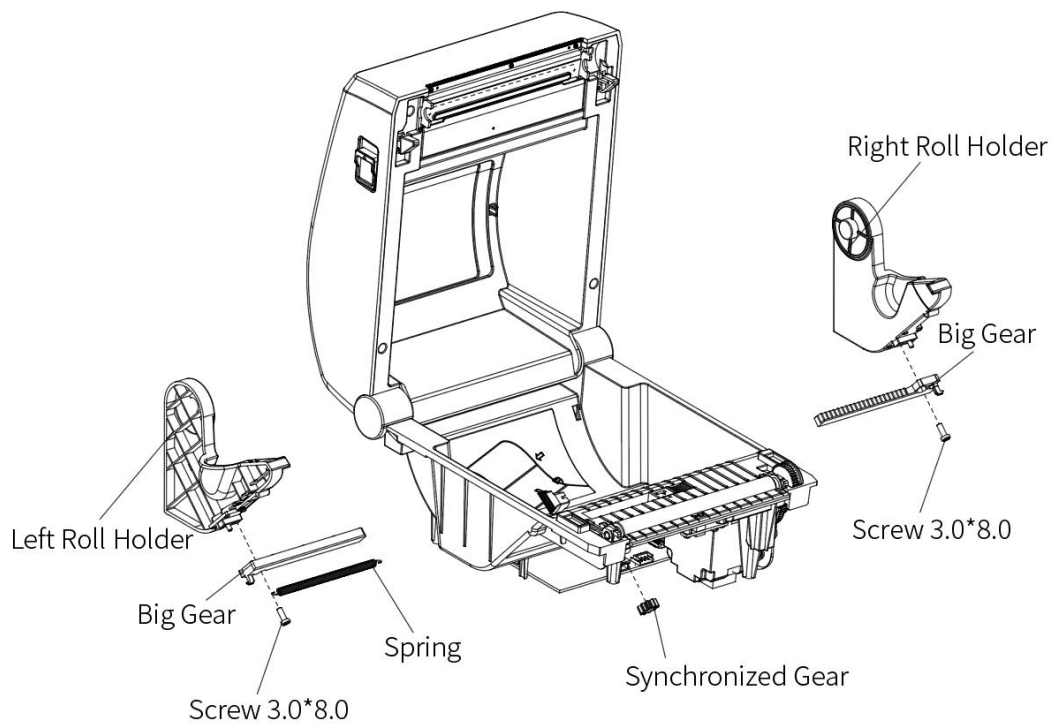
**Replacing micro switch:**



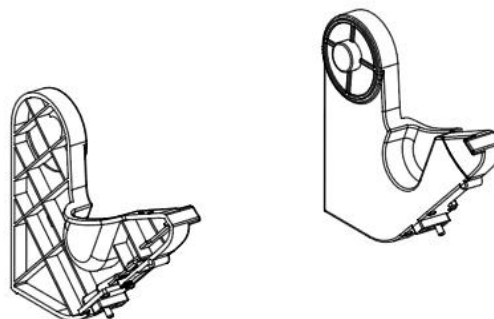
## 1.11 Left and Right Roll Holder Module

1. Put the printer upside down on the desk.
2. Manually remove the spring, then unscrew two 3.0\*8.0 screws to separate the big gear from the roll holder.
3. Place the front of the printer on the desk, manually remove the left and right roll holder.

### Disassembling the roll holder module:



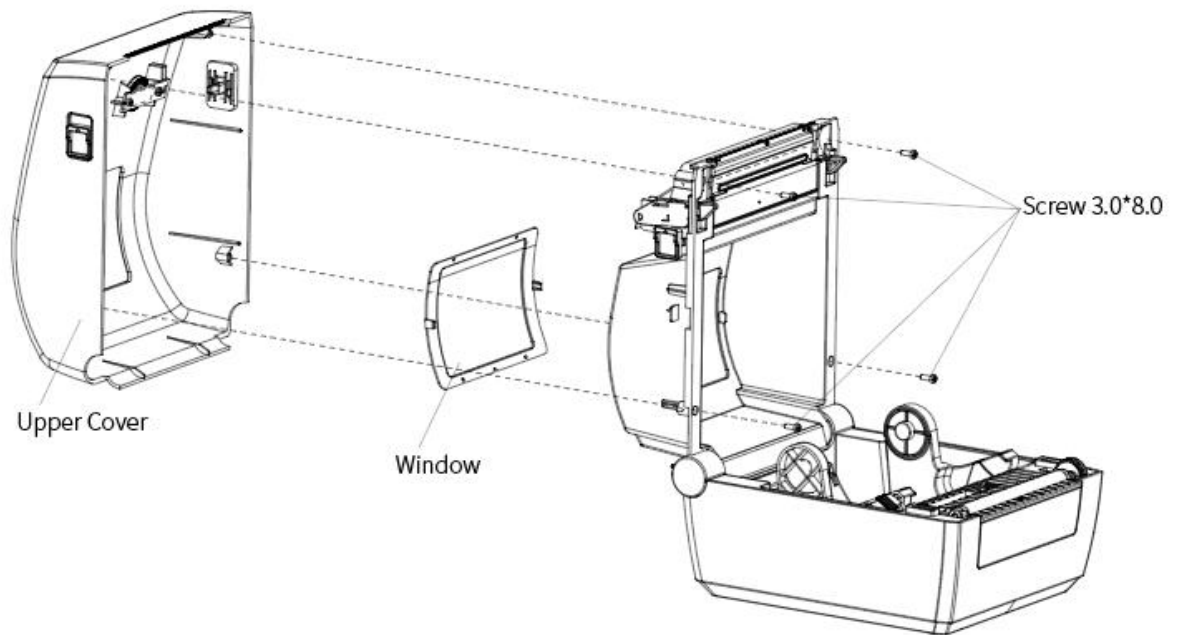
### Replacing the roll holder module:



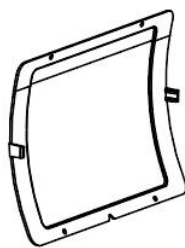
## 1.12 Window

1. Unscrew four 3.0\*8.0 screws, separate the upper cover from upper bracket.
2. Remove the window.

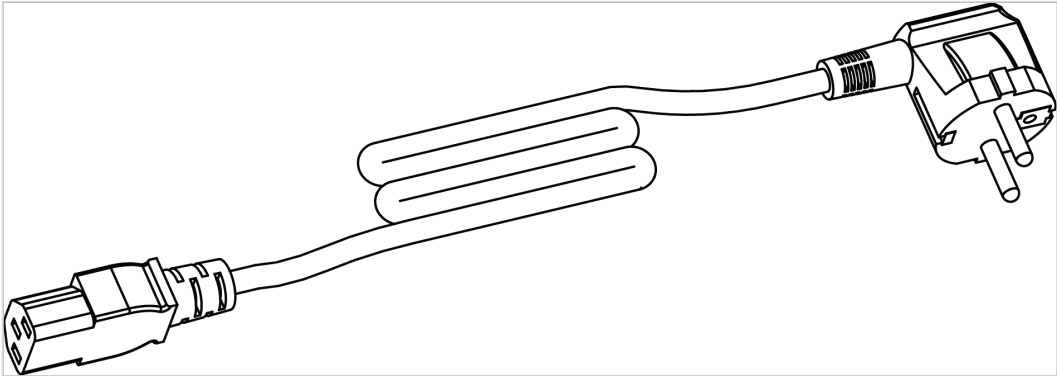
Disassembling the window:



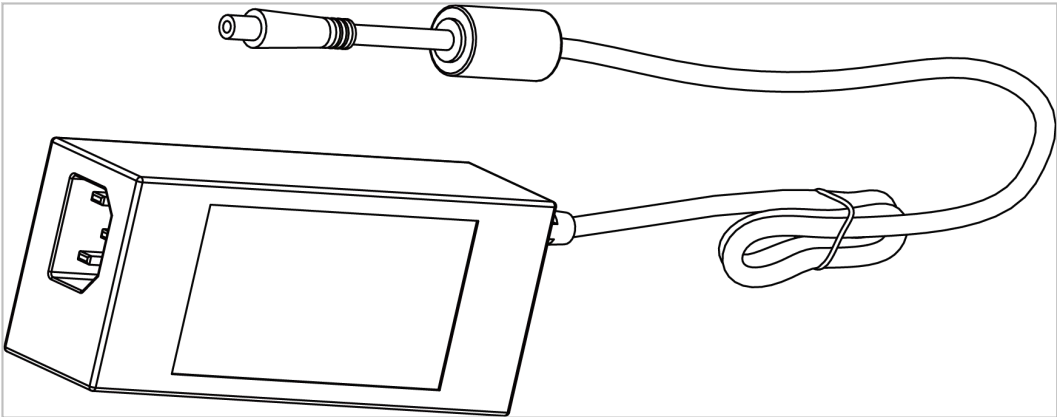
Replacing the window:



**1.13 Power Cord**

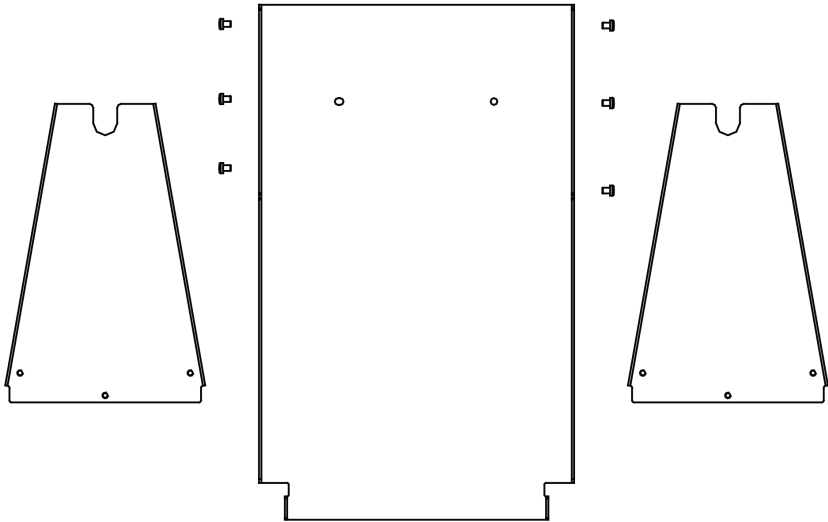
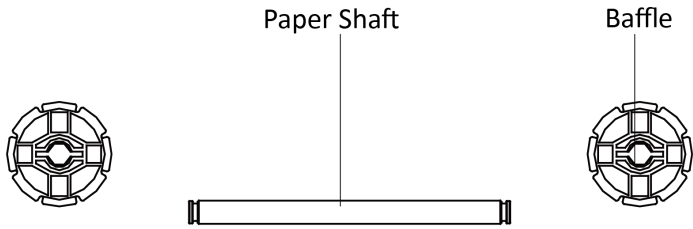
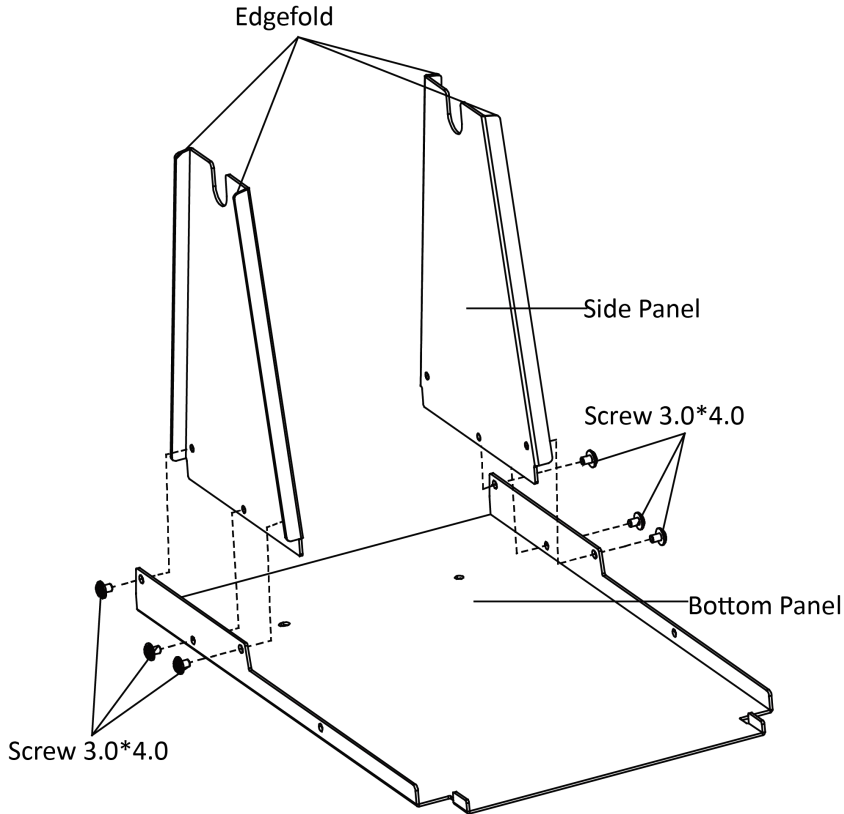


**1.14 Power Adapter**



1.15 Ext. Paper Holder

- 1. Unscrew six 3.0\*4.0 screws by screwdriver.
- 2. Manually remove the side panel from bottom panel.



- **Module Purchase for Service**

## Chapter 2 Troubleshooting

---

### CONTENT

2.1 Troubleshooting Procedure

2.2 Troubleshooting

2.3 Service Process

## 2.1 Troubleshooting Procedure

When the trouble happens, please refer to the troubling guide of 2.2 and 2.3 for repairing the printer according to the phenomenon.

***Phenomenon :***

Find a trouble phenomenon in this column. If there are multiple phenomena, take all the corresponding items into consideration. This allows you to specify a hidden defective part.

***Cause:***

List all the possible causes and judge the trouble cause through the method of detection.

***Check Method:***

Describe the check method of trouble caused.

***Remedy:***

The corresponding remedy of troubleshoot.

**\* By troubleshooting in accordance with the above-mentioned procedure, you can troubleshoot efficiently with fewer misjudgments.**

## 2.2 Troubleshooting

### 1) Power Supply Failure

| Phenomenon                               | Cause                        | Check Method        | Remedy                  |
|--|------------------------------|---------------------|-------------------------|
| No Power<br>(Power Lamp not illuminated) | No Power                     |                     | Connect the power cord. |
|  | The printer is not power on. | Check power Switch. | Switch the Power Button |

### 2) Printing Failure

| Phenomenon                 | Cause  | Check Method  | Remedy  |
|----------------------------|--|---|---|
| No printing                | Failure to load paper roll.                      |   | Install the roll paper properly.                |
|                            | Main Board Unit is broken.                       |   | Replace the Main Board Unit.                    |
|                            | Faulty connection to the thermal head connector. | Check the connection.                                 | Connect the thermal head to connector properly. |
|                            | Thermal head is broken.                          |   | Replace the thermal head.                       |
| Partly not print           | Faulty connection to the thermal head connector. | Connect the thermal head cable to connector properly. | Connect the thermal head to connector properly. |
|                            | Thermal head is broken.                          |   | Replace the thermal head.                       |
| Print blurred<br>Or uneven | Thermal head is broken.                          |   | Replace the thermal head.                       |

|  |   |   |  |
|--|---|---|--|
|  | Foreign substance is adhered to the thermal head. | Check is any foreign body adhered to the thermal head.      | Dip a cotton swab or soft cloth in ethyl alcohol and wipe the foreign substance with them. |
|  | Non-recommended paper is used.                    | Check whether the paper being used meets the specification. | Replace it with the specified paper.   |
|  | Faulty mounting of the platen.                    | Check mounting condition of the platen.                     | Mount the platen properly.   |

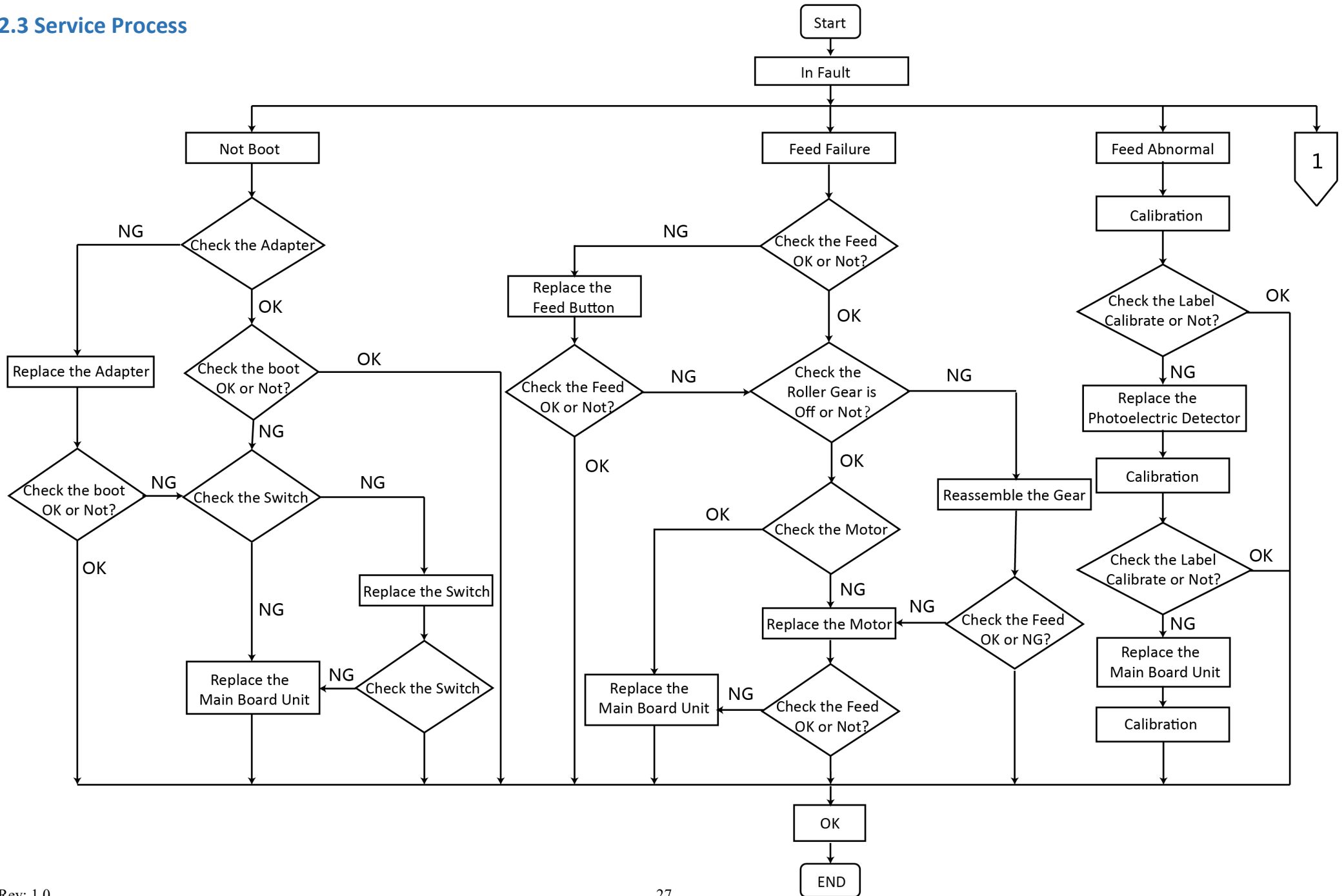
### 3) Faulty Sensor

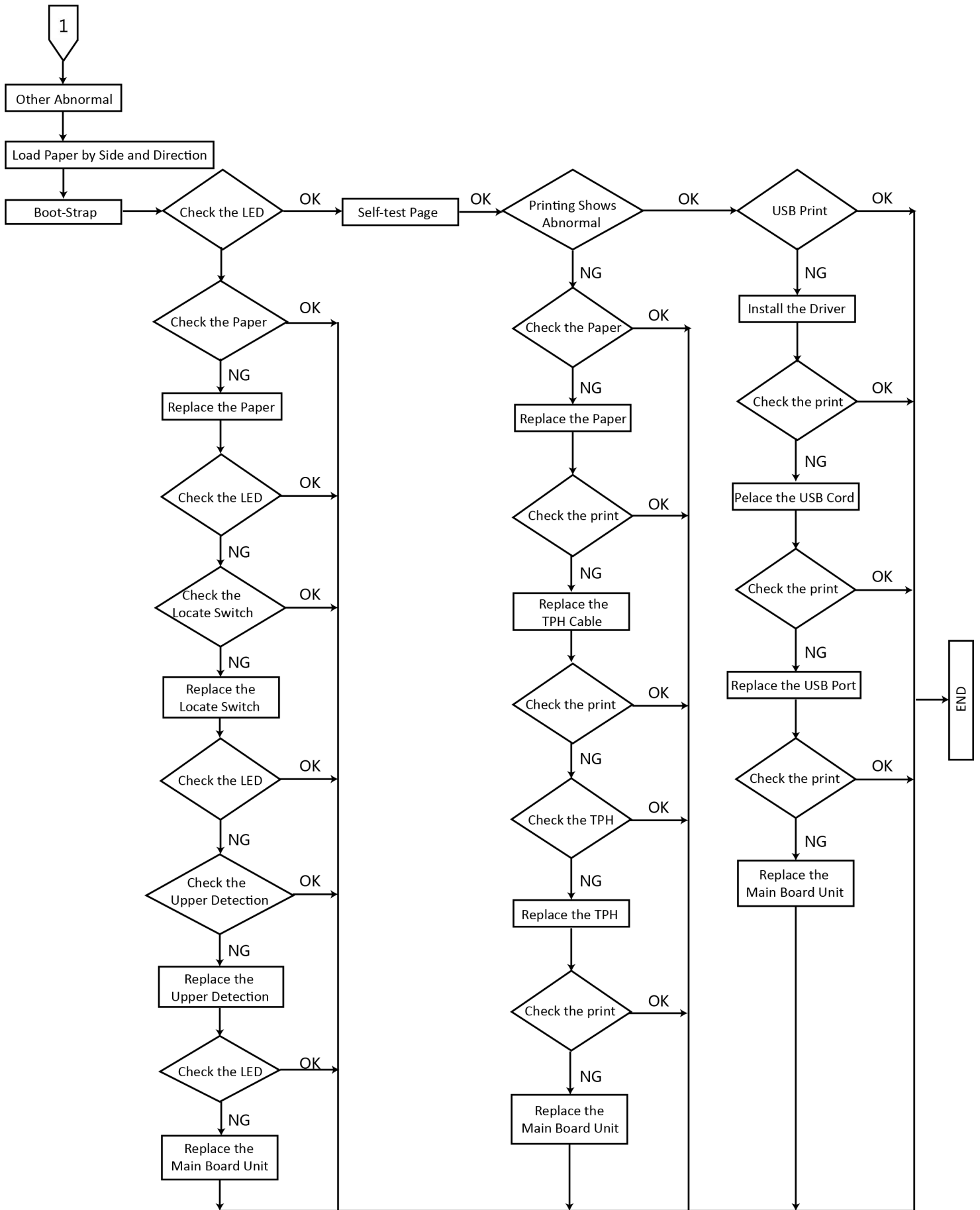
| Phenomenon                         | Cause  | Check Method  | Remedy   |
|------------------------------------|--|---|--|
| Does not detect presence of paper. | Faulty paper sensor.                               | Check whether the ERROR lamp flickers when paper is out.    | Replace the paper sensor.                              |
|                                    | Foreign substance is attached to the paper sensor. | Check whether any foreign body adhered to the paper sensor. | Remove the foreign substance.                          |
|                                    | Faulty connection of the paper sensor connector.   | Check connection of the paper sensor connector.             | Connect the paper sensor cable to connector correctly. |

## 4) Paper Feed Failure

| Phenomenon                          | Cause   | Check Method   | Remedy  |
|-------------------------------------|---|--|---|
| Paper is not fed or fed irregularly | Faulty connection to the motor connector.         | Check the connection of the motor connector.   | Connect the motor cable to connector correctly.                       |
|                                     | Motor breakdown.                                  |  | Replace the motor.  |
|                                     | The motherboard is damaged.                       |  | Replace the Main Board Unit.  |
|                                     | Faulty mounting of the platen.                    | Check mounting condition of the platen.  | Mount the platen properly.  |
|                                     | Paper feed failure                                | Check if the paper is jamming or torn and caught in the paper path.  | Eliminate unnecessary paper in the paper path and set paper properly. |
|                                     | Irregular printing blank label                    | Use light to detect if the light is on.<br>When the light is on, carry out the label learning; when the light is off, replace the photoelectric detection. | Carry out the label learning.   |
|                                     | Foreign substance in the gear.                    |  | Eliminate the foreign body.   |
|                                     | Gear Broken                                       |  | Replace the gear.   |
| Continuous Label Feeding            | Check if the triangle mark is aligned with label. | Aligned the triangle mark to the label.  |   |

## 2.3 Service Process





## Chapter 3 Printer Disassembly Instruction

---

### 1) NO.

This column shows drawing number of the illustration.

### 2) REV.

Obsolete parts in revised version, "x" mark has been entered in this column.

Added parts in revised version, "#" mark has been entered in this column.

### 3) PARTS NAME

Parts names must be indicated when ordering replacement parts.

### 4) QUANTITY

This column shows the number of the part used indicated in the figure.

### 5) REMARK

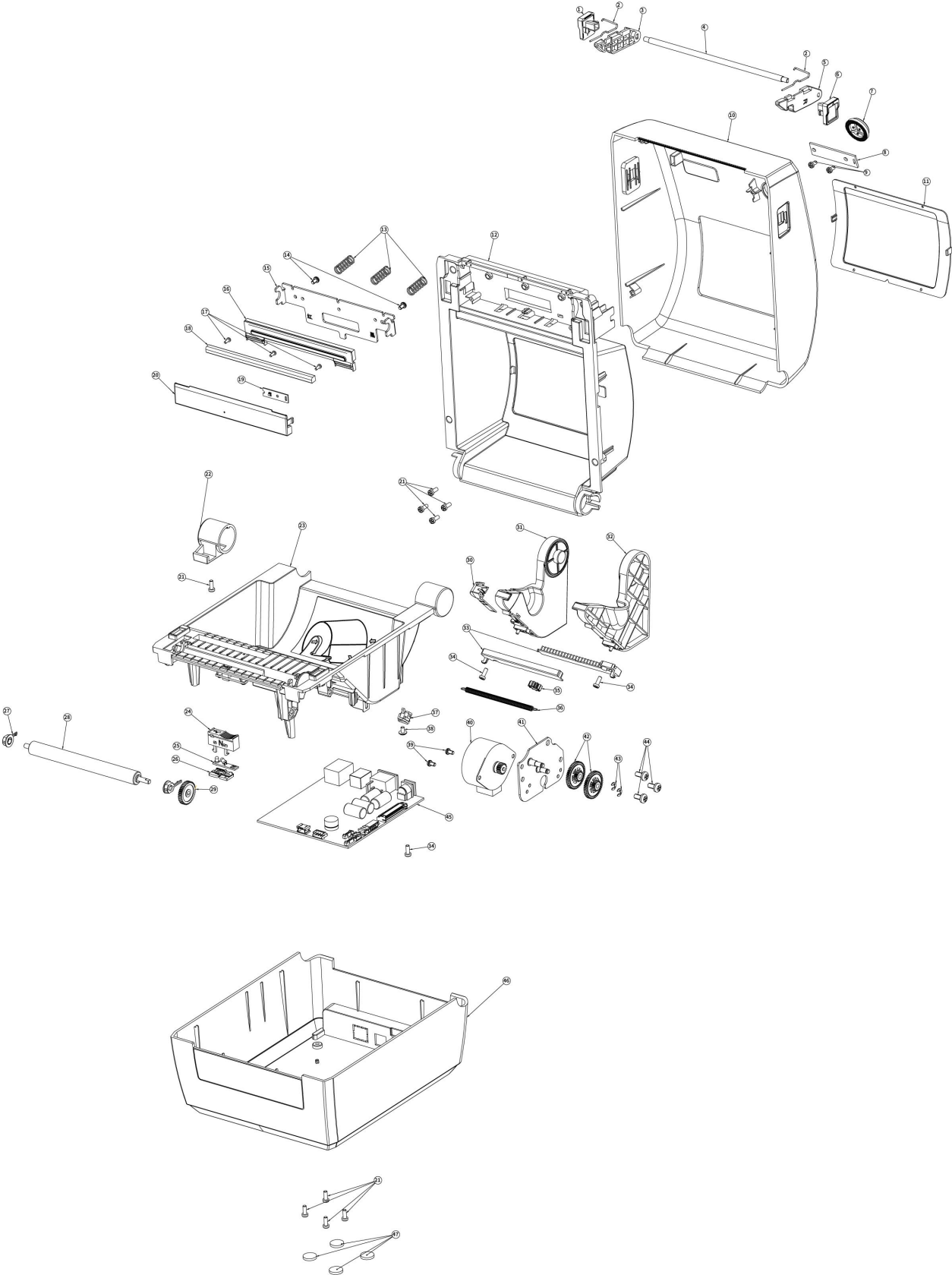
Where there are differences in the specifications of the destinations, etc., the differences are described in words or indicated by two letters.

## CONTENT

### 3.1 The Exploded View for Printer

### 3.2 Disassembling Parts List for Printer

3.1 The Exploded View for Printer



### 3.2 Disassembling Parts List for Printer

| No. | PARTS NAME                 | Q'TY | Remarks  |
|-----|----------------------------|------|--|
| 1   | Left Cover Opening Button  | 1    |  |
| 2   | Hook Spring                | 2    |  |
| 3   | Left Closing Cover Hook    | 1    |  |
| 4   | Hook Shaft                 | 1    |  |
| 5   | Right losing Cover Hook    | 1    |  |
| 6   | Right Cover Opening Button | 1    |  |
| 7   | Button Module              | 1    |  |
| 8   | Keyboard Module            | 1    |  |
| 9   | Screw                      | 2    | Lock button board  |
| 10  | Upper Cover                | 1    |  |
| 11  | Window                     | 1    |  |
| 12  | Upper Bracket              | 1    |  |
| 13  | TPH Spring                 | 3    |  |
| 14  | Screw                      | 2    | Fit TPH  |
| 15  | TPH Bracket                | 1    |  |
| 16  | TPH                        | 1    |  |
| 17  | Screw                      | 3    | To lock guide strip.   |
| 18  | Guide Strip                | 1    |  |
| 19  | Detection Module           | 1    |  |
| 20  | TPH Cover                  | 1    |  |
| 21  | Screw                      | 9    | 4PCS lock upper cover and upper bracket, 4PCS lock lower cover and lower bracket, 1PCS lock rotating shaft |
| 22  | Rotating Shaft             | 1    |  |
| 23  | Lower Bracket              | 1    |  |
| 24  | Lower Detection Bracket -3 | 1    |  |

| No. | PARTS NAME                         | Q'TY | Remarks                                     |
|-----|------------------------------------|------|---|
| 25  | Detection Board PCB                | 1    |   |
| 26  | Locking Tab                        | 1    |   |
| 27  | N31 Platen Shaft Sleeve            | 2    |   |
| 28  | Platen                             | 1    |   |
| 29  | PT562 Gear4                        | 1    |   |
| 30  | Locking Tab                        | 1    |   |
| 31  | Left Roll Holder                   | 1    |   |
| 32  | Right Roll Holder                  | 1    |   |
| 33  | Paper Clip Rack                    | 2    |   |
| 34  | Screw                              | 3    | 2PCS lock large rack, 1PCS lock ground wire |
| 35  | Synchronized Gear                  | 1    |   |
| 36  | Spring                             | 1    |   |
| 37  | Micro Switch Module                | 1    |   |
| 38  | Screw                              | 1    | 1PCS lock micro switch module               |
| 39  | Screw                              | 2    | Fit Motor                                   |
| 40  | Stepper Motor                      | 1    |   |
| 41  | Transmission Bracket - PM<br>Motor | 1    |   |
| 42  | LP1062 Transmission Gear 1         | 2    |   |
| 43  | E-Type Circlip                     | 2    |   |
| 44  | Screw                              | 3    | Lock transmission module                    |
| 45  | Control Main Board                 | 1    |   |
| 46  | Lower Cover                        | 1    |   |
| 47  | Foot Pads                          | 4    |   |