# Maintenance Manual

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P2200/P2500 Series

Monochrome Laser Printer

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# Pantum Monochrome Laser PrinterMaintenance Manual

**Model： P22**/P25**/S2000 ("*"represent any number or letter )**

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The product can only be used safely in the non-tropical areas at an altitude no higher than 2,000 meters.

# Safety Information

Please carefully read and understand the following safety and precautions prior to maintenance.

### Key Precautions

As the product may be damaged by the maintenance of non-professionals, the Company strongly recommends the maintenance by technical staff trained by the company. The user must bear the risks of personal injury and damage to the product while repairing the product or parts in this manual. Please carefully read this manual prior to maintenance, to ensure correct operation and maintenance.

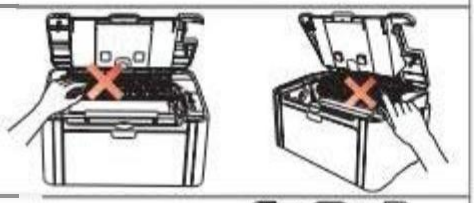
Please keep this manual properly for future maintenance.
Warnings, notes and explanations:
*Please follow the warnings to avoid personal injury.
* Please follow the warnings for proper maintenance of the printer, in order to avoid damage.
* Please pay attention to relevant prompts in maintenance of the printer.
* “Warnings” are listed below:

**Warning**

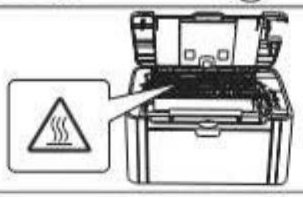
There is high-voltage electrode inside the printer. Before cleaning the printer. make sure the power is turned off!

Plugging and unplugging the power cord plug with a wet hand can result in an electric shock.

The fuser unit is hot when and after printing. Touching the fuser unit (the shaded area as shown) may cause bums!



The fuser unit is attached with a high temperature warning label. Please do not remove or damage this label.

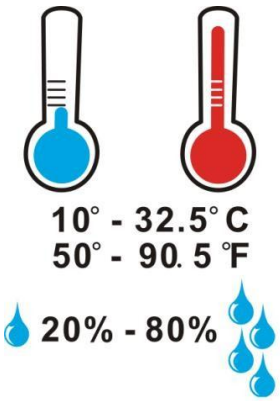


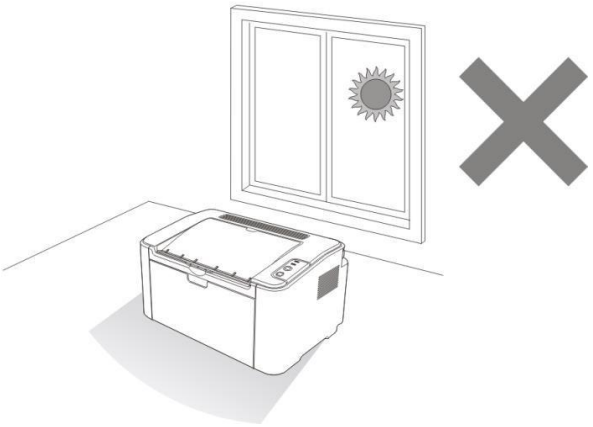
## Installation Location

Place the machine on a flat, stable surface away from sources of vibration and from people, such as a desktop. Place the machine next to a standard and grounded electrical socket. The ambient temperature of the installation site should be between 50 to 90℉ (10 to 32.5℃), with relative humidity between 20% and 80%.

Cautions:

- Do not install the printer in crowded areas.
- Do not place the printer near heaters, refrigerators, air conditioners, or fluid and chemical products.
- The printer must not be exposed to direct sunlight or installed in overheated, damp, and dusty areas.
- Do not connect the printer to a wall socket or power supply outlet controlled by an autotimer.
- A power failure will cause loss of the information in the device memory.
- Do not connect the printer to a power supply outlet that shares the same circuit with high-power appliances or other devices which could cause power failure.
- Avoid placing the printer near interference sources, such as speakers, cordless telephone docks, etc.
- Ensure adequate ventilation while using the printer for long periods or printing in bulk in a poorly ventilated room.



## Laser Safety

Laser radiation is harmful to the human body. To avoid laser radiation, please do not disassemble the printer without reading the Maintenance Manual!

The printer follows the provisions of Class 1 laser products under the CFR standard. The printer has a Class III b laser diode, which has no laser radiation among the laser components.

The following label is attached to the laser components inside the printer:

## Legal Information

| | |
|---|---|
| | This symbol indicates that, at the end of your product's life, it must not be discarded as domestic waste. Instead, you should dispose of your used equipment at a designated collection point for the recycling of waste electrical and electronic equipment. |
| | This product is suitable for indoor use only. |
| CE | European Community (EC) directives conformity<br>This product complies with the protection requirements of EC directives 2004/108/EC and 2006/95/EC on the approximation and harmonization of the laws of the Member States relating to electromagnetic compatibility and safety of electrical equipment designed for use within certain voltage limits.<br>The manufacturer of this product is: Zhuhai Seine Technology Co., Ltd., No. 63, Mingzhu North Road, Xiangzhou District, Zhuhai, Guangdong, China.<br>A declaration of conformity to the requirements of the Directives is available upon request from the Authorized Representative.<br>This product satisfies the Class B limits of EN 55022 and safety requirements of EN 60950. |
| | This printer is fully compliant with the ROHS Directive 2009/95/EC and the requirements of the revised Directive 2011/65/EU for managing toxic and hazardous substances. |
| | This product can only be used safely in non-tropical areas. |
| | The product can only be used safely in areas at an altitude no higher than 2,000 meters. |

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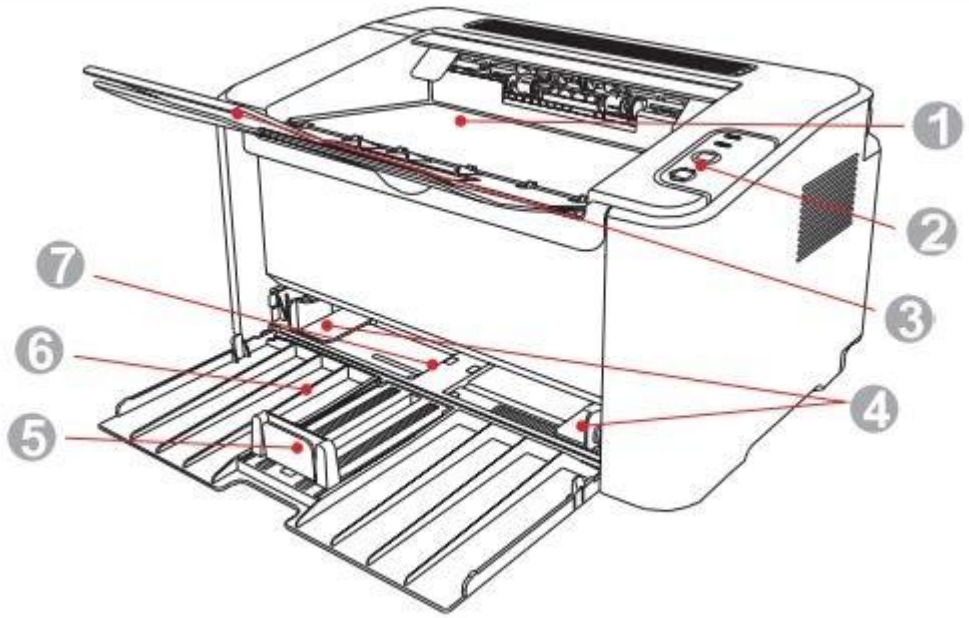
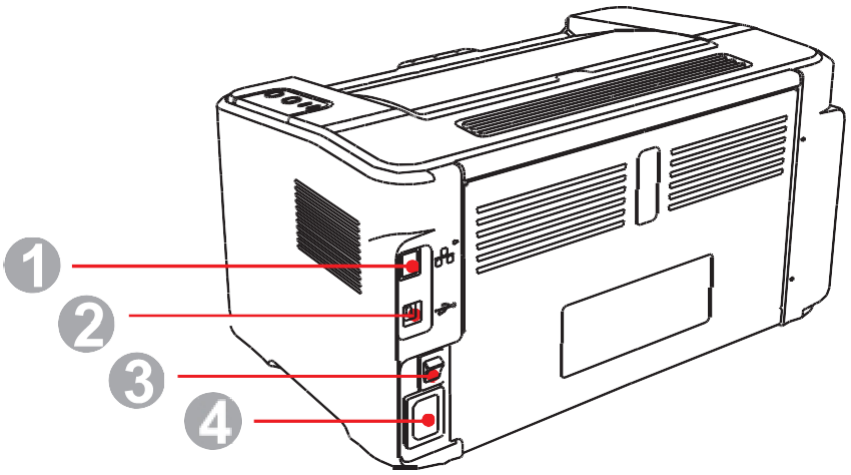
## 1.1 Overview

### 1.1.1 Front View




| | |
|---|---|
| 1 | Output Bin |
| 2 | Control Panel |
| 3 | Output Tray |
| 4 | Automatic Feed Guide |
| 5 | Paper Stop |
| 6 | Feeder Tray |
| 7 | Automatic Feeder Tray |

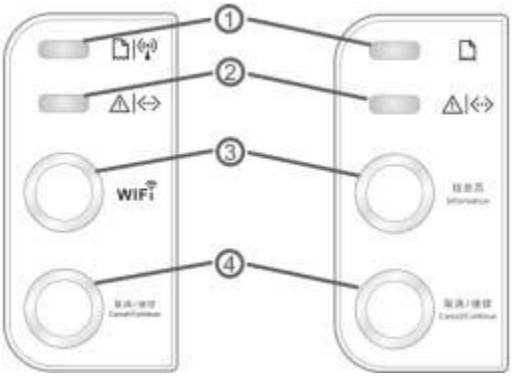
### 1.1.2 Rear View




| | |
|---|---|
| 1 | Network Interface |
| 2 | USB Interface |
| 3 | Power Switch |
| 4 | Power Interface |

### 1.1.3 Overview of the Control Panel

The printer control panel contains two buttons and two dual color LED indicators, as shown below: the control panel of the model with WIFI on the left, and the control panel of the model without WIFI on the right.




| Serial Number | Name | Functions | |
|---|---|---|---|
| | | The Printer with WIFI | The Printer without WIFI |
| 1 | LED Indicator 1 | Red and green dual color LED indicator for paper error and WIFI signal:<br>Red indicator stays on: A paper jam error occurred<br>Red indicator flashes: The printer is out of paper or a feed jam occurred<br>Green indicator stays on: WIFI is successfully connected<br>Green indicator flashes: Searching for WIFI signal | Red LED indicator for paper error status<br>Red indicator stays on: A paper jam error occurred<br>Red indicator flashes: The printer is out of paper or a feed jam occurred |
| 2 | LED Indicator 2 | Red and green dual color LED indicator for data and toner cartridge:<br>Red: The red indicator stays on when a critical error occurs, including engine related errors.<br>Orange: The orange indicator indicates the status of the toner cartridge, including cartridge related errors or the warning of low toner level.<br>Green: The green indicator indicates a normal status, including Printing, Warming up, Sleep Mode, Ready, Cancel | |

| | | | |
|---|---|---|---|
| | | job, etc. | |
| 3 | Button 1 | WIFI Function<br>Turns on or off WIFI or WIFI push button connect (WPS), or cancels WIFI searching See more instructions in 1.1.3.1 | Print Information Page ( For Printer with USB ) |
| 4 | Button 2 | Test Print Page (Not for Printers without WIFI), Continue printing, Cancel printing, Wake up the printer or Restore factory defaults.<br>See more instructions in 2.1.1 | |

#### 1.1.3.1 WIFI Searching Button Functions

1) When there's no connection, you can short press this button to start WIFI connection and search for WIFI hotspot AP (Access Point, Wireless Access Point, a session or access bridge). The searching stops if no access AP can be found within 2 minutes.
2) When there's no connection, you can long press this button to start WPS connection. Then press the WPS button on the wireless router within 2 minutes. The WPS connection stops if the WIFI connection is not yet established after 2 minutes.
3) When the WIFI or WPS searching or connection is going on, you can long press this button to cancel the WIFI or WPS searching or connection.
4) When there is a WIFI connection and no current WIFI print job, you can long press this button to disconnect the WIFI connection.
5) When there is a WIFI connection and a current WIFI print job, you can long press this button to disconnect the WIFI connection when the job completes.

**Note:** The printer automatically connects the WIFI in the following cases.

- You turn off the printer and restart it again when the WIFI is successfully connected
- You turn off the access AP (or the wireless router) and turn it on again when the WIFI is successfully connected.

For printers without WIFI, you can long press this button to print the test page from the local.

#### 1.1.3.2 Cancel/Continue Button Functions

| Printer status | | Operation | Printer action |
|---|---|---|---|
| Sleep Mode | | Short press or long press button 2 | Wake up from the sleep mode |
| Error | The printer is out of paper or a feed jam occurred | Short press button 2 | Continue printing |
| | A print job exists | Long press button 2 | Cancel the current print job |
| Ready | | Long press button 2 | Print the test page (Not for printers without WIFI) |
| Printing | | Long press button 2 | Cancel the current print job (The job pages of which the numbers have been received by the printer will still be printed out while those waiting to be received will be canceled from printing. |
| Shutdown State | | Press button 2 | Only for printers with WIFI, you can turn on the printer, then press and hold button 2 for at least 5 seconds to restore the printer's factory defaults (resetting the IP address, admin password, etc.).<br>Printers without WIFI do not respond to this action. |

### 1.1.4 Indicators

#### 1.1.4.1 LED1 Indicator Status Display

| Serial Number | Dual color LED1 Status Display for paper/WIFI | Description(For printers with WIFI) | Description(For printers without WIFI) |
|---|---|---|---|
| 1 | | No WIFI connection, no paper error<br>**LED1 off** | No paper error<br>**LED1 off** |
| 2 | | Paper related errors are not indicated if they occur when you are searching for WIFI or WPS.<br>**LED1** green indicator flashes quickly | Without this state |
| 3 | | WIFI is successfully connected, no paper error<br>**LED1** green indicator stays on | Without this state |
| 4 | | Paper jam error，WIFI is successfully connected or not connected<br>**LED1** red indicator stays on | Paper jam error<br>**LED1** red indicator stays on |
| 5 | | The printer is out of paper or a feed jam occurred.<br>**LED1** red indicator flashes quickly | The printer is out of paper or a feed jam occurred<br>**LED1** red indicator flashes quickly |

### 1.1.4.2 LED2 Indicator Status Display

| Serial Number | Dual color LED2 Status Display for data/toner cartridge | **Description** ( For printers with USB and WIFI interfaces and printers with USB interface) |
|---|---|---|
| 1 | | Warming up when you turn on the printer, wake it up from sleep mode or open or close the lid.<br>**LED2** green indicator flashes quickly |
| 2 | | The printer is ready<br>**LED2** green indicator stays on |
| 3 | | Sleep Mode<br>**LED2** green indicator flashes slowly |
| 4 | | Printing<br>**LED2** green indicator flashes quickly |
| 5 | | Warning of low toner level (when the printer is ready)<br>**LED2** orange indicator flashes quickly |
| 6 | | Cartridge error (cartridge is not installed, mismatched or exhausted)<br>**LED2** orange indicator stays on |
| 7 | | A serious error occurred with the printer (abnormal Heating Roller, abnormal laser motor, communication error or unclosed lid)<br>**LED2** red indicator stays on |
| 8 | | Job is canceled from the Panel<br>**LED2** green indicator flashes quickly |

### 1.1.4.3 Indicator Status Display

The following table describes the indicator status display for abnormalities with this printer.

| Serial Number | Status | | Description |
|---|---|---|---|
| | LED1 | LED2 | |
| 1 | | | Warning of low toner level (The printer only detects the level of tone when it gets ready, but not when it is in the sleep mode or printing).<br>WIFI printer: WIFI is successfully connected, green indicator of the Dual color LED1 stays on<br>searching for WIFI or connecting WPS, green indicator of the Dual color LED1 flashes<br>USB printer: LED1 off |
| 2 | | | |
| 3 | | | |
| 4 | | | Cartridge error (cartridge is not installed, mismatched or exhausted)<br>WIFI printer: WIFI is successfully connected, green indicator of the Dual color LED1 stays on<br>searching for WIFI or connecting WPS, green indicator of the Dual color LED1 flashes<br>USB printer: LED1 off |
| 5 | | | |
| 6 | | | |
| 7 | | | The printer is out of paper<br>LED1 red indicator flashes quickly, LED2 off |
| 8 | | | Paper jam<br>LED1 red indicator stays on, LED2 off |
| 9 | | | A serious error occurred with the printer (abnormal Heating Roller, abnormal laser motor, communication error or unclosed lid)<br>LED1 off, LED2 red indicator stays on |

**Note:** LED1: Paper/WIFI(Dual color); LED2: Data/cartridge(Dual color)

## 1.2 Product Specifications

### 1.2.1 General Specifications

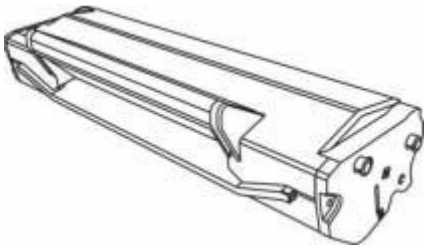
| | | |
|---|---|---|
| Processor | | 600MHZ |
| Memory | | 128MB |
| Power Supply | | 220V Model: AC 220-240V, 50/60Hz, 3.0A<br>100V Model: AC 100-127V, 50/60Hz, 6.0A<br>(**Note:** See the nameplate on the back of the printer to learn the appropriate power supply and voltage to use with this printer.Please strictly follow the product specifications on power type.) |
| Communication Interface | | Hi-Speed USB 2.0;<br>WIFI 802.11b/g/n<br>100Base-Tx Ethernet;(NET) |
| Supported operating systems | | Microsoft Windows Server2003/Server2008/Server2012/XP/Vista/Win7 /Win8/Win8.1<br>MacOS X 10.6/10.7/10.8/10.9<br>Linux |
| Operating Environment | Optimal printing temperature | 10-32.5℃ |
| | Operating humidity range | 20 to 80% RH |
| Product Size （W*D*H) | | Approx. 337mm*220mm*178mm |
| Weight | | Approx. 5.1kg (including the cartridge provided) |
| Control Panel | | Two buttons and two indicators |

### 1.2.2 Printing Specifications

| | | |
|---|---|---|
| Print Speed | A4 | 22ppm |
| | Letter | 23ppm |
| First Page Print Time | | <8 s |
| Print Language | | GDI |
| Maximum Print Size | | Legal(216mm*355.6mm) |
| Durability | Recommended monthly print amount | 700 pages |
| | Month print load | 15000 pages |
| Paper input capability | Standard Tray | 150 sheets（80g/$m^2$） |
| Paper output capacity | Print-side down | 100 sheets（80g/$m^2$） |
| Print Media | Media Type | Plain, thin, thick, transparency, card, label, envelope |
| | Media size | A4, A5, JIS B5, IS0 B5 , A6, Letter, Legal,Executive, Folio, Oficio, Statement, Japanese Postcard, Monarch Env, DL Env, C5 Env, C6 Env, No.10 Env, ZL, Big 16K, Big 32K, 16K, 32K, B6 |
| | Media Grammage | 60~163g/$m^2$ |

### 1.2.3 Consumables Specifications

Cartridge Service Life

| Series Name | P2500 Series |
|---|---|
| Image |  |
| Type | Average print volume |
| Standard capacity cartridge | Approx. 1600 pages<br>(The data is based on ISO/IEC 19752 standard) |
| High capacity cartridge | None |

**Note:**

- Model additions are subject to change without notice.
- Consumables capacity may vary depending on different types used.
- For optimal print quality, please use only original Pantum products.
- The warranty excludes any damage caused by using non-Pantum original consumables.

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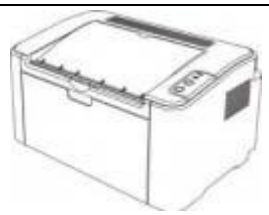
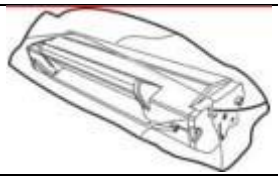
## 2.1 Packing List

When you open the package, verify whether the following parts are included in the carton:

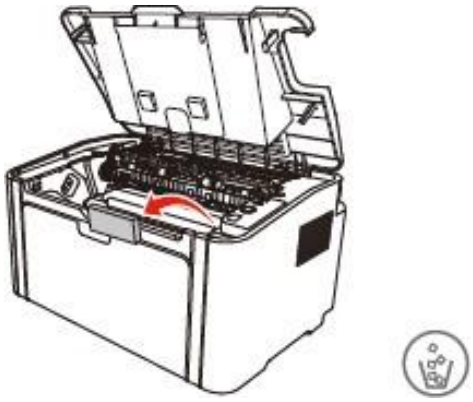
| | | |
|---|---|---|
|  | Printer | 1 |
|  | Toner Cartridges | 1 |
| | USB cable | 1 |
| | power cord | 1 |
| | CD-ROM | 1 |
| | Quick Installation Guide | 1 |
| | Warranty Certificate | 1 |
| | Delivery Tray | 1 |

## 2.2 Machine Installation

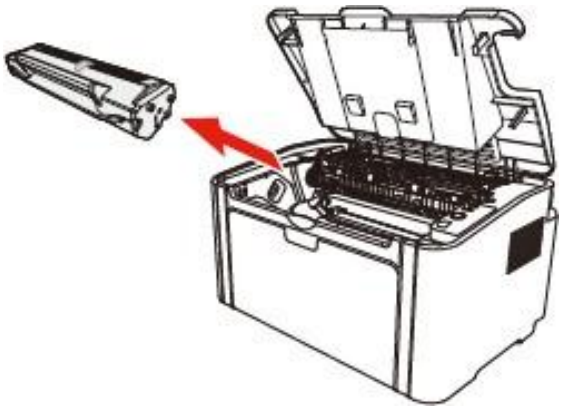
### 2.2.1 Install the Cartridge

1. Remove the removal seal on the printer, and open the output bin.

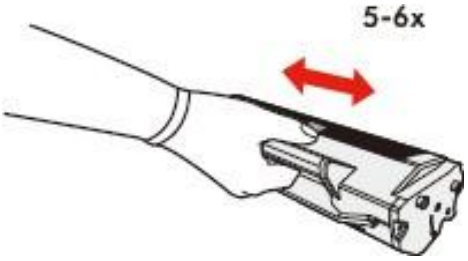
2. Take out the plate for fixing the toner cartridge.



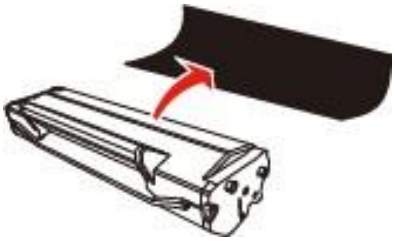
3. Remove the toner cartridge



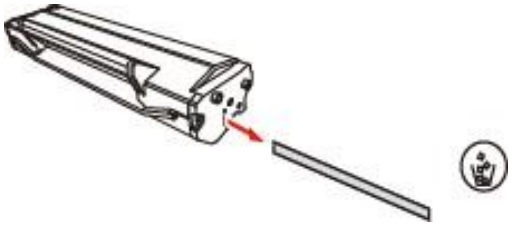
4. Hold the handle of the cartridge and shake gently (horizontally) 5-6 times, so as to evenly distribute the toner inside the cartridge.



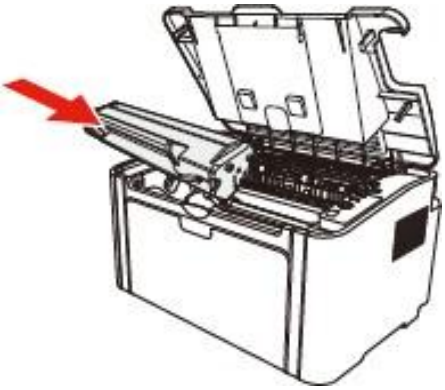

5. Remove the black paper protecting the cartridge.



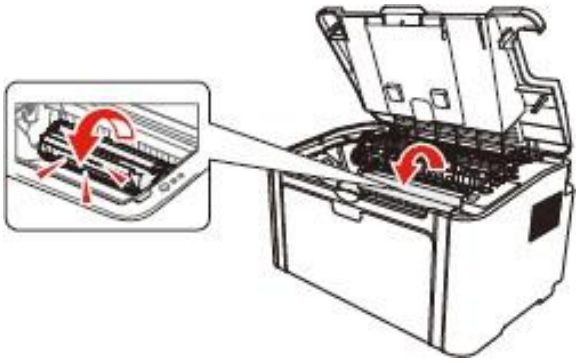
6. Remove the seal.



7. Load the cartridge along the guides.



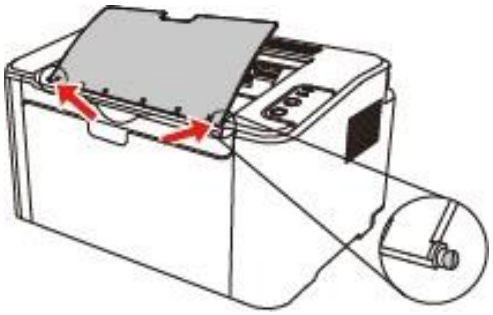
8. Push it firmly in the direction of the arrow until you hear it click. This means that the cartridge is fully inserted.



9. Close the output bin

### 2.2.2 Install the Output Tray

Install the output tray by placing the dowels at both ends of the output tray into the holes in the output bin.



## 2.3 One-click Installation

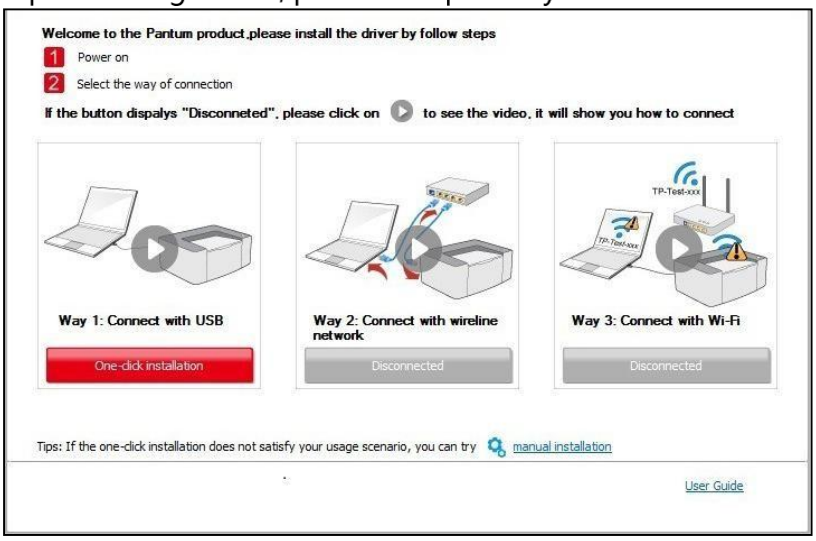
One-click installation provides three methods of installation: connect the printer via USB cable, connect the printer via wired network, and connect the printer via wireless network. You can choose one of them according to your habit.

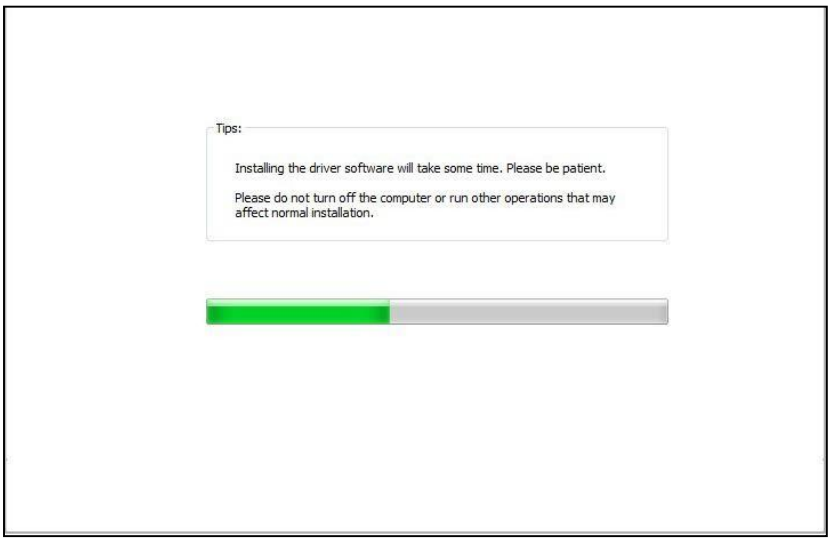
### 2.3.1 Method I: Connect the printer via USB cable

Connect the printer to computer via USB cable, power the printer and computer on.
Place the attached installation CD in the computer CD-ROM:
Windows XP system: automatically run the installation procedure.
Windows 7/Vista/Server 2008 system: Pop up "Autoplay" interface, click "Autorun.exe" to run the installation procedure.
Windows 8 system: When the "DVD RW driver" window pops up from the right top corner of computer desktop, click anywhere in the pop-up window, then click "Autorun.exe" to run the installation procedure.
Windows 10 system: When the "DVD RW driver" window pops up from the right top corner of computer desktop, click anywhere in the window, then click "Autorun.exe" to run the installation procedure.

Note: • Some computers may be unable to auto play the CD because of system configuration. Please double click "Computer" icon, find "DVD RW driver", then double click "DVD RW driver" to run the installation procedure.

1. Click on the "I agree" button on the right button corner after reading the license agreement and enter into driver installation interface.
2. Click on the "One-click installation" button in Method I and enter into the installation process. The process may need some time, and the duration is related to your computer configuration, please wait patiently.





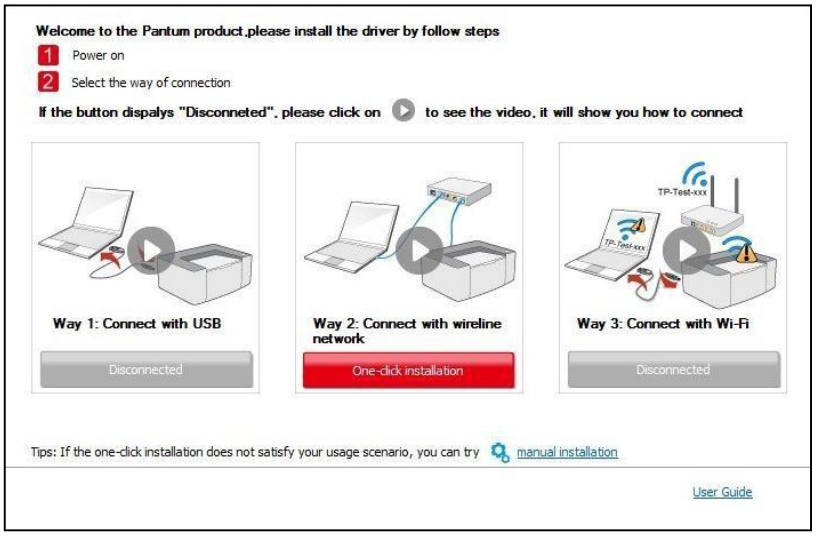

3. After the installation, click "Print &Test Page" button. If your printer prints the test page successfully, it means that you have installed the driver correctly.

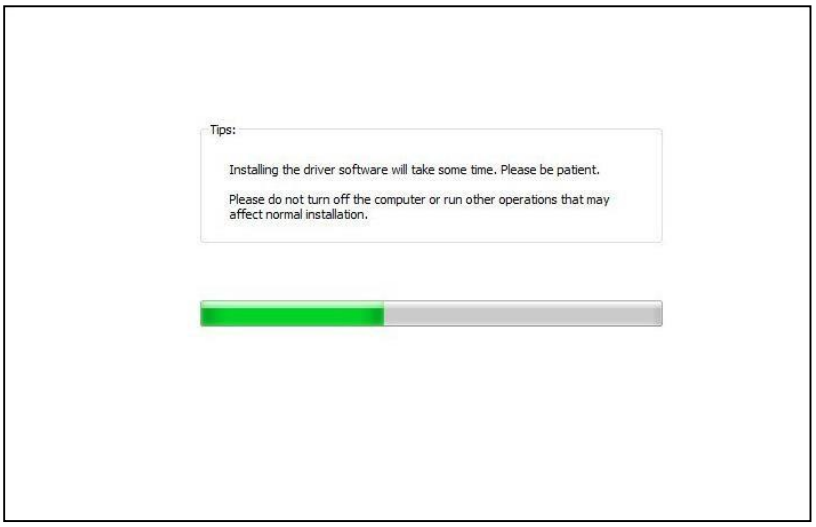
### 2.3.2 Method II: Connect the printer via wired network

1. Turn the power of printer and computer on.
2. Connect the computer to wired network.
3. Connect network cable to the network interface of printer, to make sure the printer is connected to computer network.
4. Place the attached installation CD in the computer CD-ROM:
   - Windows XP system: automatically run the installation procedure.
   - Windows 7/Vista/Server 2008 system: Pop up "Autoplay" interface, click "Autorun.exe" to run the installation procedure.
   - Windows 8 system: When the "DVD RW driver" window pops up from the right top corner of computer desktop, click anywhere in the pop-up window, then click "Autorun.exe" to run the installation procedure. Windows 10 system: When the "DVD RW driver" window pops up from the right top corner of computer desktop, click anywhere in the window, then click "Autorun.exe" to run the installation procedure.

Note: • Some computers may be unable to auto play the CD because of system configuration. Please double click "Computer" icon, find "DVD RW driver", then double click "DVD RW driver" to run the installation procedure.

5. Click on the "I agree" button on the right button corner after reading the license agreement and enter into driver installation interface.
6. Please click on the "One-click installation" button in Method II and install driver software.




Note :• You can put your mouse cursor in the “One-click installation” button to check the popup information in order to confirm if the current printer is the one you need to install through IP address before you click the button.

Click on the “One-click installation” button to enter installation process if your software has searched only one printer. The process may need some time, and the duration is related to your computer configuration. Please wait patiently.

• If your software has searched several printers, click on the “ One-click installation” button, and the printer list interface will pop up. Please select the printer that you need according to your printer wired network IP address or host ID.

7. After the installation, click "Print &Test Page" button. If your printer prints the test page successfully, it means that you have installed the driver correctly.

### 2.3.3 Method III: Connect the printer via wireless network

Please check if the printer is connected with wireless network when installing the printer driver software.

---

Note: • You can print "Network configuration page" to confirm printer network connection status to see if printer is connected with network.

---

#### 2.3.3.1 Configure wireless network via USB cable and install driver

Since some computers are not provided with wireless network function, this section is divided into "Connect computer to router via Wi-Fi" and "Connect computer to router via wired connection" to introduce installation process.

#### 2.3.3.2 Connect computer to router via Wi-Fi

1. Computer is already connected to router via Wi-Fi.
2. Connect the printer to computer via USB cable, then power the printer on.
3. Place the attached installation CD in the computer CD-ROM:

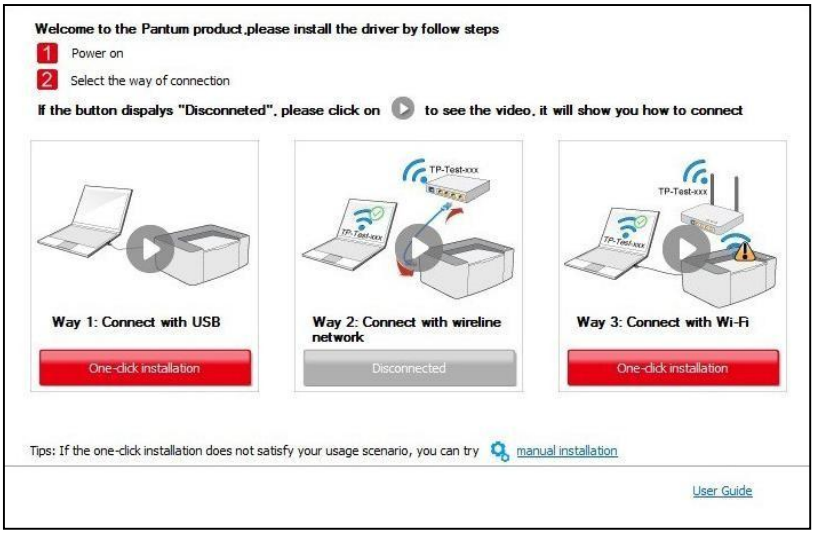
- Windows XP system: automatically run the installation procedure.
- Windows 7/Vista/Server 2008 system: Pop up "Autoplay" interface, click "Autorun.exe" to run the installation procedure.
- Windows 8 system: When the "DVD RW driver" window pops up from the right top corner of computer desktop, click anywhere in the pop-up window, then click "Autorun.exe" to run the installation procedure.
- Windows 10 system: When the "DVD RW driver" window pops up from the right top corner of computer desktop, click anywhere in the window, then click "Autorun.exe" to run the installation procedure.

---

Note: • Some computers may be unable to auto play the CD because of system configuration. Please double click "Computer" icon, find "DVD RW driver", then double click "DVD RW driver" to run the installation procedure.

---

4. Click on the "I agree" button on the right button corner after reading the license agreement and enter into driver installation interface.
5. Click the "One-click installation" button in Method III to install driver software.



If your software has searched several printers, click “One-click installation” button, and the printer list interface will pop up. Please select “Configure printer with Wi-Fi via USB an install” and select USB printer, click “Confirm” button and enter into installation process complete automatic network configuration and driver installation

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Note: • When the printer IP address changes under printer driver installed with host ID, you can also directly print without re-installing the driver. If you need to install the printer driver with the host ID, please check the option "Install the printer in the list with host ID".

---

6. After the installation, click “Print &Test Page” button. If your printer prints the test page successfully, it means that you have installed the driver correctly.

#### 2.3.3.3 Connect computer to router via network cable

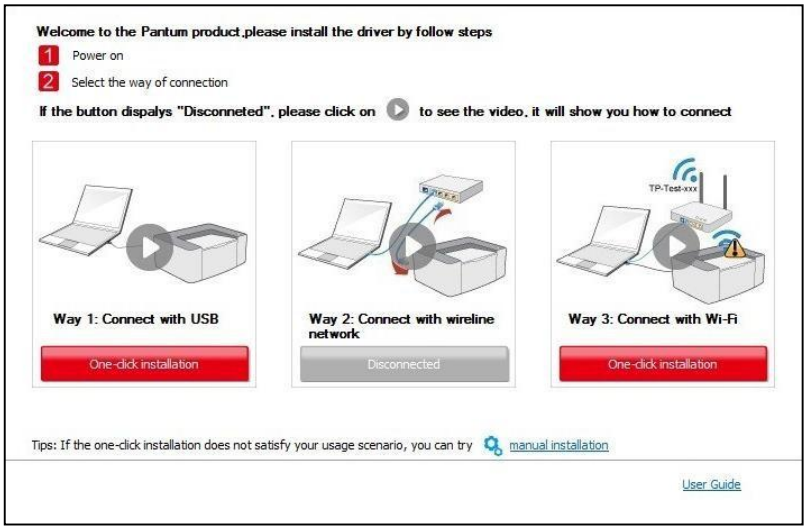
1. Connect computer to router via network cable.
2. Connect the printer to computer via USB cable, then power the printer on.
3. Place the attached installation CD in the computer CD-ROM:

• Windows XP system: automatically run the installation procedure.
• Windows 7/Vista/Server 2008 system: Pop up "Autoplay" interface, click "Autorun.exe" to run the installation procedure.
• Windows 8 system: When the "DVD RW driver" window pops up from the right top corner of computer desktop, click anywhere in the pop-up window, then click "Autorun.exe" to run the installation procedure.
• Windows 10 system: When the "DVD RW driver" window pops up from the right top corner of computer desktop, click anywhere in the window, then click "Autorun.exe" to run the installation procedure.

Note:• Some computers may be unable to auto play the CD because of system configuration. Please double click "Computer" icon, find "DVD RW driver", then double click "DVD RW driver" to run the installation procedure.

4. Click on the "I agree" button on the right button corner after reading the license agreement and enter into driver installation interface.
5. Please click on the "One-click installation" button in Method III and install driver software.

Note:• You can put your mouse cursor in the "One-click installation" button to check the popup information in order to confirm if the current printer is the one you need to install



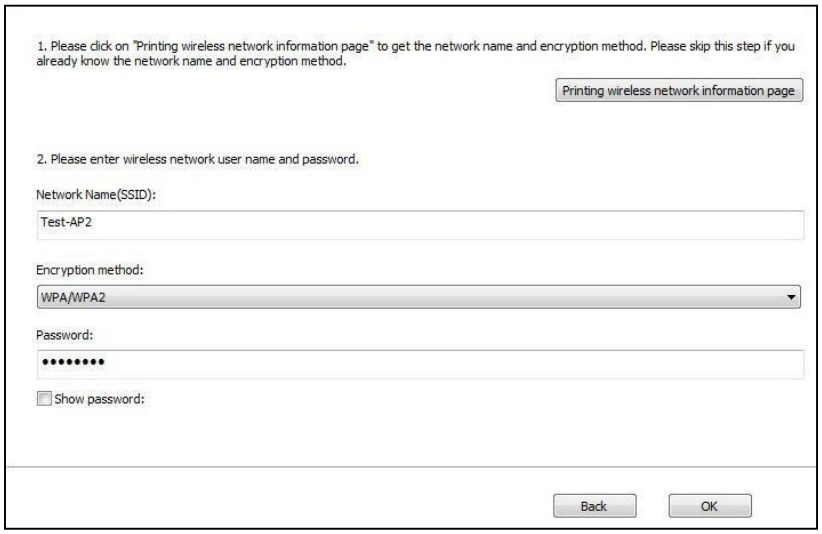
through IP address before you click the button.

Note:• When the printer IP address changes under printer driver installed with host ID, you can also directly print without re-installing the driver. If you need to install the printer driver with the host ID, please check the option "Install the printer in the list with host ID".

6. After the installation, click "Print &Test Page" button. If your printer prints the test page successfully, it means that you have installed the driver correctly.

#### 2.3.3.4 Connect computer to printer via Wi-Fi direct and install the driver

Connect the computer to printer via a direct Wi-Fi connection. It is applicable to wireless



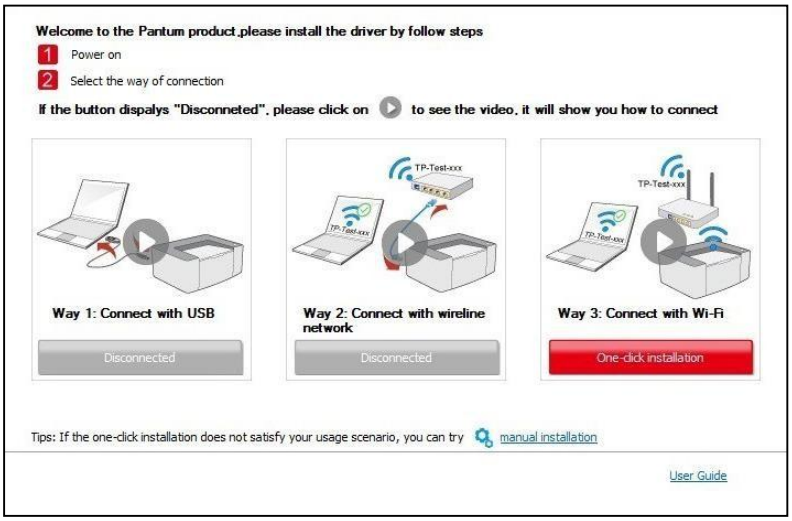

network without infrastructure mode, but it still needs scenario of temporary use of printer via wireless network. You can directly connect the computer that has wireless function to the printer to realize printing function.

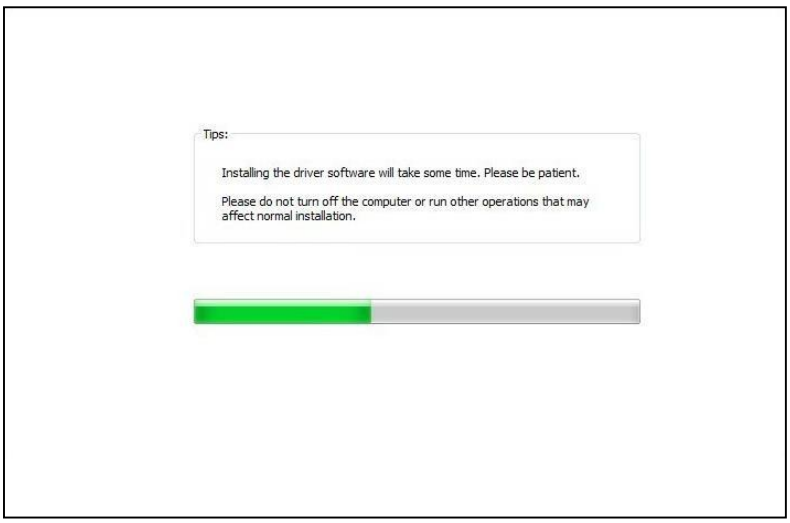
1. Turn the power of printer and computer on.
2. Connect computer to the Wi-Fi Direct network of the printer.
3. Place the attached installation CD in the computer CD-ROM:

- Windows XP system: automatically run the installation procedure.
- Windows 7/Vista/Server 2008 system: Pop up "Autoplay" interface, click "Autorun.exe" to run the installation procedure.
- Windows 8 system: When the "DVD RW driver" window pops up from the right top corner of computer desktop, click anywhere in the pop-up window, then click "Autorun.exe" to run the installation procedure.
- Windows 10 system: When the "DVD RW driver" window pops up from the right top corner of computer desktop, click anywhere in the window, then click "Autorun.exe" to run the installation procedure.

Note:• Some computers may be unable to auto play the CD because of system configuration. Please double click "Computer" icon, find "DVD RW driver", then double click "DVD RW driver" to run the installation procedure.

4. Click on the "I agree" button on the right button corner after reading the license agreement and enter into driver installation interface.
5. Click on the "One-click installation" button in Method III, and enter into installation process. The process may need some time, and the duration is related to your computer configuration please wait patiently.



6. After the installation, click "Print &Test Page" button. If your printer prints the test page successfully, it means that you have installed the driver correctly.

#### 2.3.3.5 The printer is already connected to wireless network

1. The printer is already connected to wireless network, you can print the "Network configuration page" to check.
2. Connect the computer to printer network.
3. Place the attached installation CD in the computer CD-ROM:

- Windows XP system: automatically run the installation procedure.
- Windows 7/Vista/Server 2008 system: Pop up "Autoplay" interface, click "Autorun.exe" to run the installation procedure.
- Windows 8 system: When the "DVD RW driver" window pops up from the right top corner of computer desktop, click anywhere in the pop-up window, then click "Autorun.exe" to run the installation procedure.
- Windows 10 system: When the "DVD RW driver" window pops up from the right top corner of computer desktop, click anywhere in the window, then click "Autorun.exe" to run the installation procedure.

---

Note:• Some computers may be unable to auto play the CD because of system configuration. Please double click "Computer" icon, find "DVD RW driver", then double click "DVD RW driver" to run the installation procedure.

---

4. Click on the "I agree" button on the right button corner after reading the license agreement and enter into driver installation interface.
5. Click the "One-click installation" button in Method III to install driver software.

---

Note:• You can put your mouse cursor in the "One-click installation" button to check the popup information in order to confirm if the current printer is the one you need to install through IP address before you click the button.

- You can check the printer IP address through "Network configuration page".

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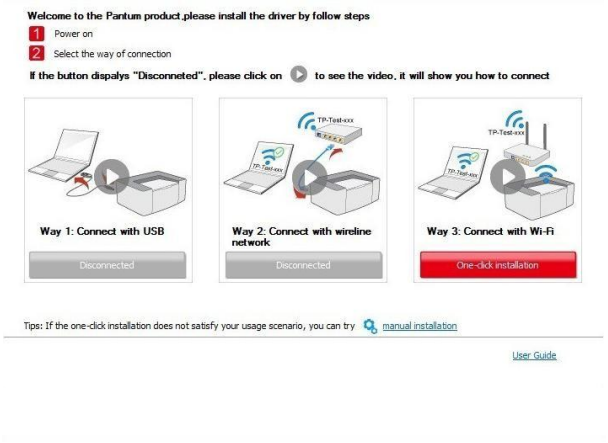
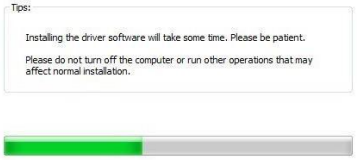
6. After the installation, click "Print &Test Page" button. If your printer prints the software has searched only one printer. The process may need some time, and the duration is related to your computer configuration. Please wait patiently.




7. After the installation, click "Print &Test Page" button. If your printer prints the test page successfully, it means that you have installed the driver correctly.

## 2.4 Manual installation

- Before installing the drive, you need to learn about printer model by printing printer information page out and check the product name.

### 2.4.1 Installation via USB connection

1. Connect the printer to computer via USB cable, power the printer and computer on.
2. Place the attached installation CD in the computer CD-ROM:

- Windows XP system: automatically run the installation procedure.
- Windows 7/Vista/Server 2008 system: Pop up "Autoplay" interface, click "Autorun.exe" to run the installation procedure.
- Windows 8 system: When the "DVD RW driver" window pops up from the right top corner of computer desktop, click anywhere in the pop-up window, then click "Autorun.exe" to run the installation procedure.

• Windows 10 system: When the "DVD RW driver" window pops up from the right top corner of computer desktop, click anywhere in the window, then click "Autorun.exe" to run the installation procedure.

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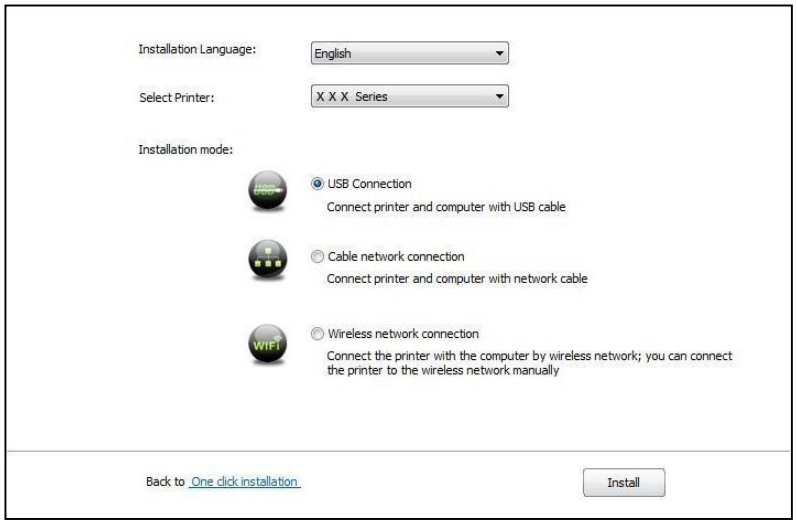
•

• Note:• Some computers may be unable to auto play the CD because of system configuration. Please double click "Computer" icon, find "DVD RW driver", then double click "DVD RW driver" to run the installation procedure.

3. Click on the "I agree" button on the right button corner after reading the license agreement and enter into driver installation interface.
4. Click on the "Manual installation" at the bottom of driver installation interface, and enter into manual installation interface.
5. Please select installation language and printer model.
6. Select "Connect via USB" and click on "Install".




7. The software installs the driver automatically and the installation process may need some time. The duration is related to your computer configuration, please wait patiently.
8. After the installation, click "Print &Test Page" button. If your printer prints the test page successfully, it means that you have installed the driver correctly.

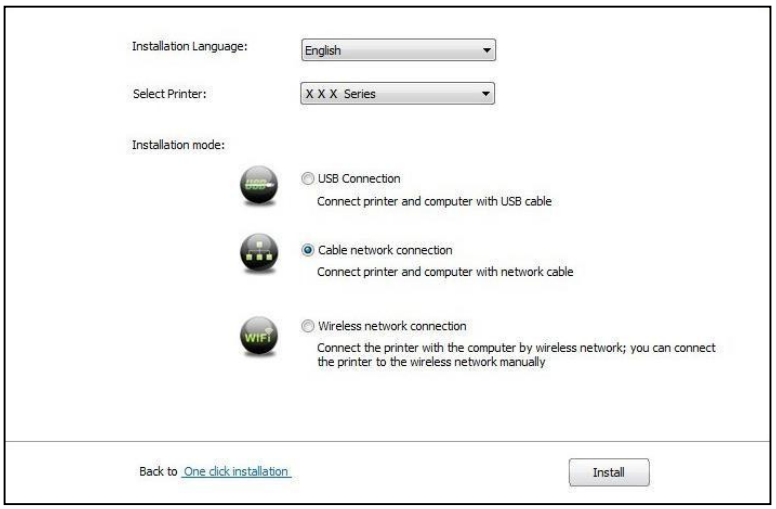
### 2.4.2 Installation via wired network connection

1. Turn the power of printer and computer on.
2. Connect the computer to wired network.
3. Connect network cable to the network interface of printer, to make sure the printer is connected to computer network.
4. Place the attached installation CD in the computer CD-ROM:

- Windows XP system: automatically run the installation procedure.
- Windows 7/Vista/Server 2008 system: Pop up "Autoplay" interface, click "Autorun.exe" to run the installation procedure.
- Windows 8 system: When the "DVD RW driver" window pops up from the right top corner of computer desktop, click anywhere in the pop-up window, then click "Autorun.exe" to run the installation procedure.
- Windows 10 system: When the "DVD RW driver" window pops up from the right top corner of computer desktop, click anywhere in the window, then click "Autorun.exe" to run the installation procedure.

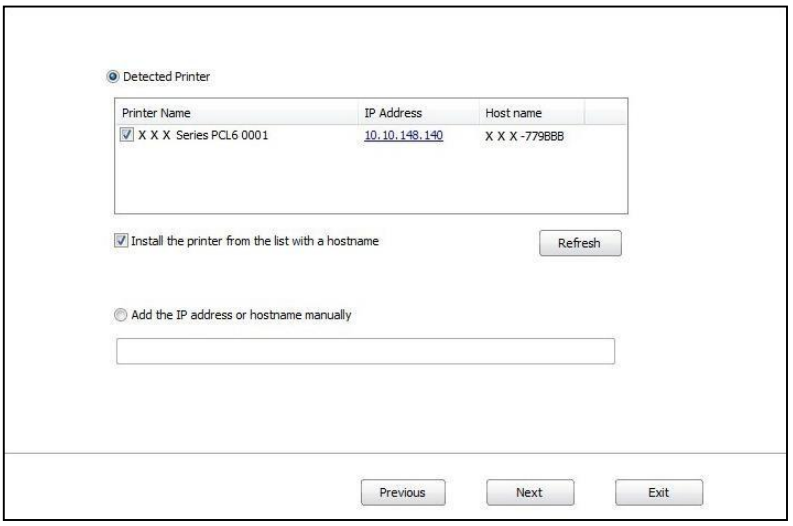
Note:• Some computers may be unable to auto play the CD because of system configuration. Please double click “Computer” icon, find “DVD RW driver”, then double click “DVD RW driver” to run the installation procedure.

5. Click on the “I agree” button on the right button corner after reading the license agreement and enter into driver installation interface.
6. Click on the “Manual installation” at the bottom of driver installation interface, and enter into manual installation interface.
7. Please select installation language and printer model.




Select “Wireless network connection” and click on “Install”

8. The installation software will search the printer automatically and the searching process may need some time.
9. After finishing searching, select the printer that needs to be connected and click “Next”




Note: • If the printer you need to connect is not in the list of printers searched, please click “Refresh” to search again.

- When the printer IP address changes under printer driver installed with host ID, you can also directly print without re-installing the driver. If you need to install the printer driver with the host ID, please check the option "Install the printer in the list with host ID".
- If IP address or host name is added manually, you need to know the IP address of the printer connected or host name.

10. The software installs the driver automatically and the installation process may need some time. The duration is related to your computer configuration, please wait patiently.
11. After the installation, click “Print &Test Page” button. If your printer prints the test page successfully, it means that you have installed the driver correctly.

### 2.4.3 Installation by wireless network connection mode

Wireless network connection type is divided into basic structure mode and Wi-Fi Direct mode

#### 2.4.3.1 Installation in basic structure mode

1. Connect computer to access point (wireless router).
2. Connect the printer to computer via USB cable, then power the printer on.
3. Place the attached installation CD in the computer CD-ROM:

- Windows XP system: automatically run the installation procedure.
- Windows 7/Vista/Server 2008 system: Pop up "Autoplay" interface, click "Autorun.exe" to run the installation procedure.
- Windows 8 system: When the "DVD RW driver" window pops up from the right top corner of computer desktop, click anywhere in the pop-up window, then click "Autorun.exe" to run the installation procedure.
- Windows 10 system: When the "DVD RW driver" window pops up from the right top corner of computer desktop, click anywhere in the window, then click "Autorun.exe" to run the installation procedure.

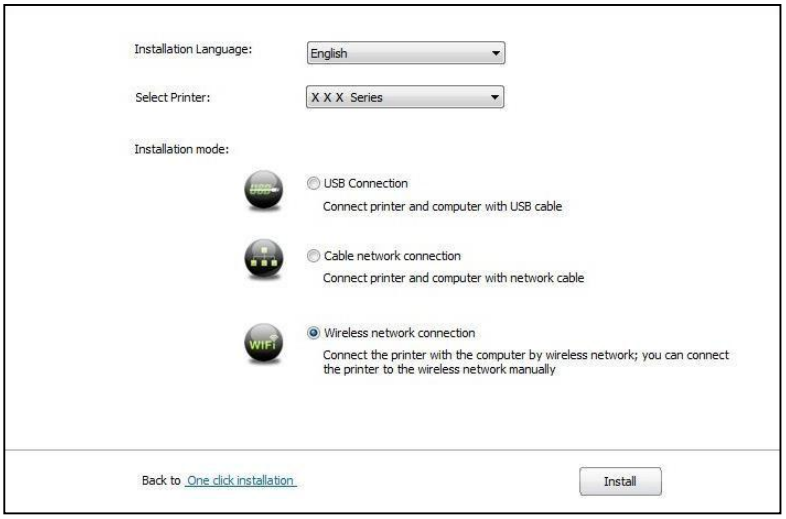
---

Note:• Some computers may be unable to auto play the CD because of system configuration. Please double click "Computer" icon, find "DVD RW driver", then double click "DVD RW driver" to run the installation procedure.

---

4. Click on the "I agree" button on the right button corner after reading the license agreement and enter into driver installation interface.
5. Click on the "Manual installation" at the bottom of driver installation interface, and enter into manual installation interface.
6. Please select installation language and printer model.
7. Select "Wireless network connection" and click on "Install".

Select "Yes, I want to configurate the printer's wireless network" on the wireless setup

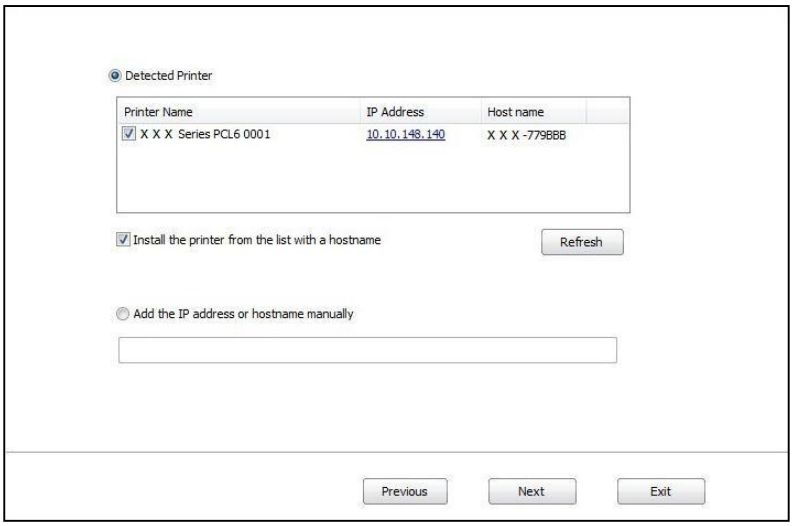


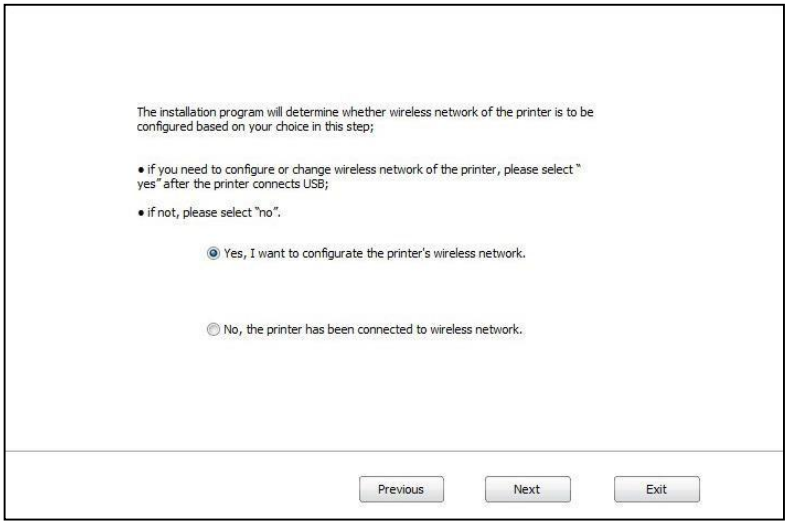

window popped out, and operate according to the prompts to set up the printer to wireless network.

8. The installation software will search the printer automatically after wireless

network is configured successful. The search process may need sometime.

9. Select the printer needs to be connected and click "Next".




Note: • If the printer you need to connect is not in the list of printers searched, please click "Refresh" to search again.

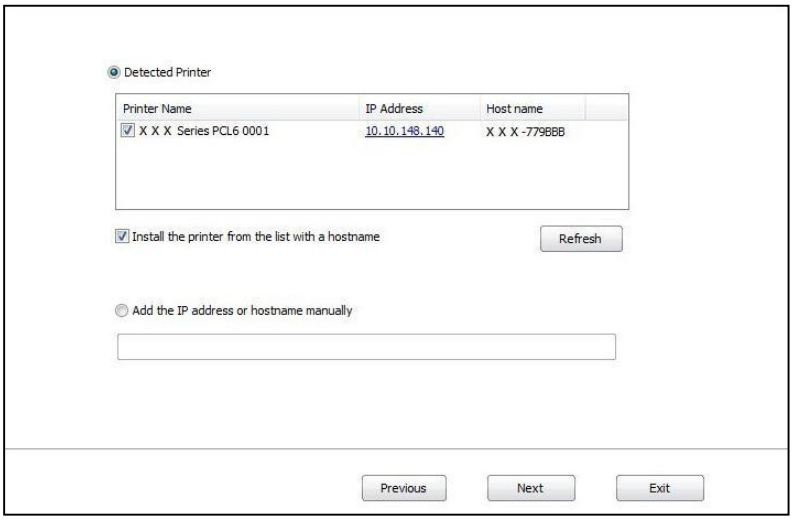
- When the printer IP address changes under printer driver installed with host ID, you can also directly print without re-installing the driver. If you need to install the printer driver with the host ID, please check the option "Install the printer in the list with host ID".
- If IP address or host name is added manually, you need to know the IP address of the printer connected or host name. If they are not made clear, please printthe

10. The software installs the driver automatically and the installation process may need some time. The duration is related to your computer configuration, please wait patiently.
11. After the installation, click "Print &Test Page" button. If your printer prints the test page successfully, it means that you have installed the driver correctly.

#### 2.4.3.2 Installation in Wi-Fi Direct mode

1. Turn the power of printer and computer on.
2. Connect computer to the Wi-Fi Direct network of the printer.
3. Place the attached installation CD in the computer CD-ROM:

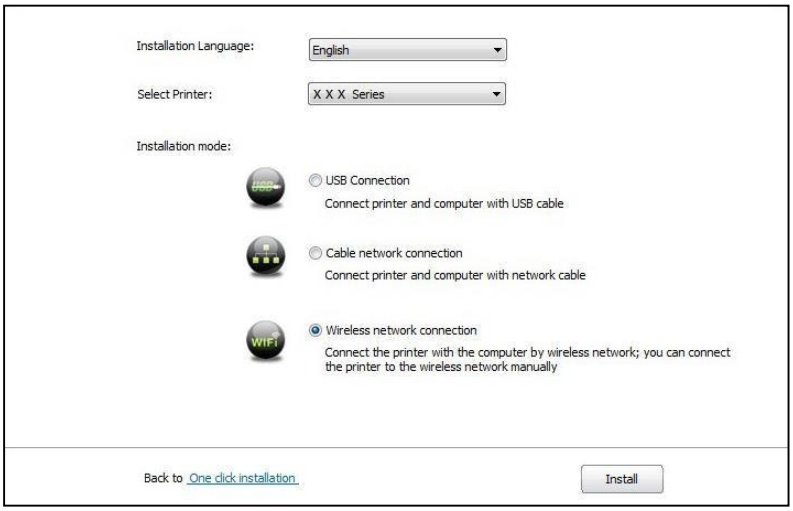
- Windows XP system: automatically run the installation procedure.
- Windows 7/Vista/Server 2008 system: Pop up "Autoplay" interface, click "Autorun.exe" to run the installation procedure.
- Windows 8 system: When the "DVD RW driver" window pops up from the right top corner of computer desktop, click anywhere in the pop-up window, then click "Autorun.exe" to run the installation procedure.
- Windows 10 system: When the "DVD RW driver" window pops up from the right top corner of computer desktop, click anywhere in the window, then click "Autorun.exe" to run the installation procedure.



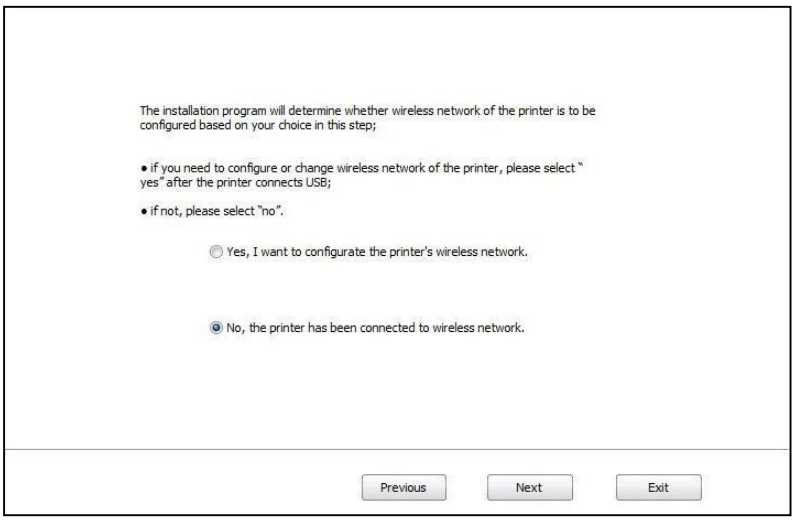

Note:• Some computers may be unable to auto play the CD because of system configuration. Please double click "Computer" icon, find "DVD RW driver", then double click "DVD RW driver" to run the installation procedure.

4. Click on the "I agree" button on the right button corner after reading the license agreement and enter into driver installation interface.

5. Click on the "Manual installation" at the bottom of driver installation interface, and enter into manual installation interface.
6. Please select installation language and printer model.
7. Select "Wireless network connection" and click on "Install".




8. Select "No, the printer has been connected to wireless network" on the wireless setup window popping out, and then click "Next".
9. The installation software will search the printer automatically and the searching process may need some time.




10. Select the printer needs to be connected and click "Next".
11. The software installs the driver automatically and the installation process may need some time. The duration is related to your computer configuration, please wait patiently.
12. After the installation, click "Print &Test Page" button. If your printer prints the test page successfully, it means that you have installed the driver correctly.

#### 2.4.3.3 Method of driver uninstallation

Windows 7 is taken as the example in the following operation. The information on your computer screen may differ because of multiple operating systems.

1. Click the Start menu of computer and then click All programs.
2. Click Pantum, and then Click Pantum XXX Series. Pantum XXX Series where XXX represents product model.
3. Click uninstall to delete the driver according to instructions on uninstall window.
4. Restart computer after finishing unloading

### 2.5 Mac system driver installation

- Driver installation under Mac system is divided into 2 steps, driver installation and adding a printer. If you are going to print in AirPrint mode, there is no need to install a driver and you just need to add a printer directly.
- When you are installing a driver with wired or wireless network, you may need to know the Bonjour name of printer. Please print the "Network setup page" to view it.

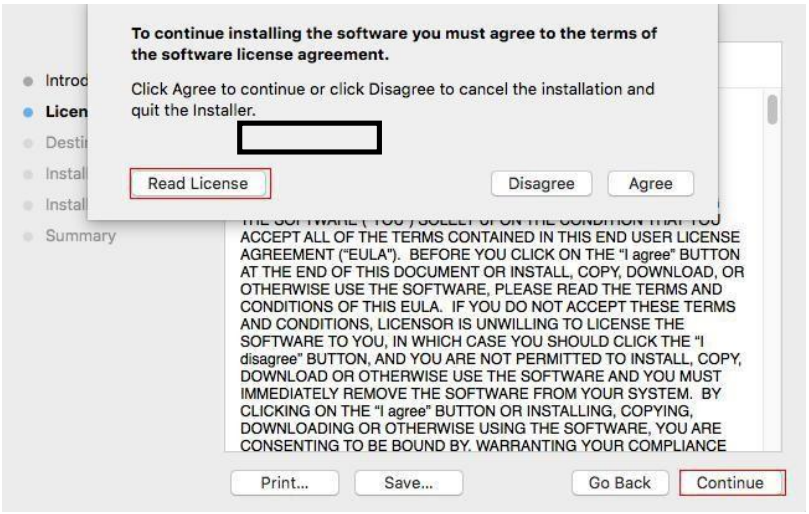
### 2.6 Add printer to Mac system

#### 2.6.1 Driver installation

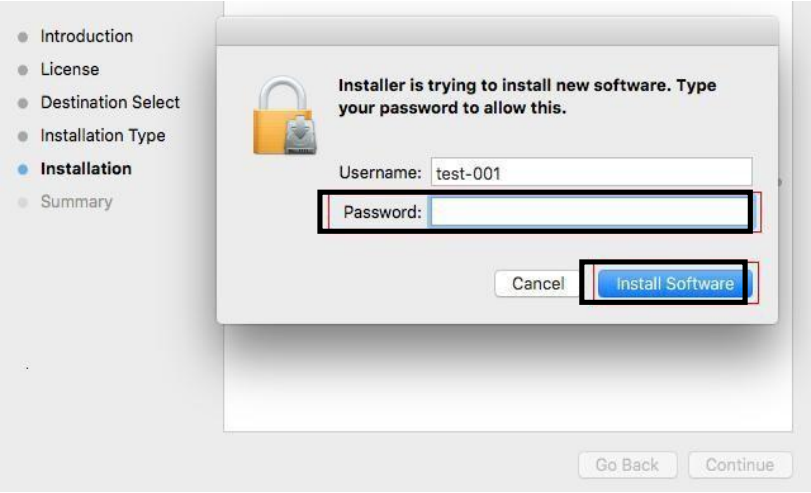
Mac 10.11 is taken as the example in the following operation. The information on your computer screen may differ because of multiple operating systems.

1. Turn the power of printer and computer on.
2. Insert the CD companying with printer in the CD driver of your computer, and double click Pantum XXX Series installation package. (XXX in Pantum XXX Series represents product model.)

3. Click "Continue".




4. Read licensing agreement and then click "Continue".
5. Click "Agree" on the prompt window popping out to accept the licensing agreement.
6. Click "Install".
7. Input computer password and click "Install Software".




8. Click "Continue Installation" on the prompt window popping out.
9. The system will finish driver installation automatically.

• If using a USB cable to connect a computer with a Wi-Fi model printer, a wireless network configuration prompt window will pop up during driver installation, as shown in following picture.

### 2.6.2 Add up the printer via USB

1. Connect the printer to computer with USB cable and then turn power on.
2. Enter the "System Preferences" – "Printers & Scanners" of computer.
3. Click + button to select "Add Printer or Scanner".
4. Select printer and then select the corresponding printer mode from the "Use"

menu popping out.

5. Click "Add".

### 2.6.3 Add up the printer via wireline connection

1. Turn the power of printer and computer on.
2. Connect the computer to wired network.
3. Connect the network cable to the network interface of printer, and make sure the printer is connected to the computer network.
4. Enter the "System Preferences" – "Printers & Scanners" of computer.
5. Click + button to select "Add Printer or Scanner".
6. Select printer and then select the corresponding printer mode from the "Use" menu popping out.
7. Click "Add".

### 2.6.4 Add up the printer via wireless connection

1. Turn the power of printer and computer on.
2. Make sure the wireless network connection between computer and printer is set up.

---

Note: • In case of basic structure mode, connect wireless network printer to the access point (wireless router).

• In case of Wi-Fi Direct mode, connect wireless client to wireless network printer directly.

---

3. Enter the "System Preferences" – "Printers & Scanners" of computer.
4. Click + button to select "Add Printer or Scanner".
5. Select printer and then select the corresponding printer mode from the "Use" menu popping out.
6. Click "Add".

### 2.6.5 Add AirPrint printer

1. Turn the power of printer and computer on.
2. Make sure the connection between printer and computer is set up (USB connection or network connection).
3. Enter the "System Preferences" – "Printers & Scanners" of computer.
4. Click + button to select "Add Printer or Scanner".
5. Select printer and select "Secure AirPrint" (data encryption) or "AirPrint" (no encryption) in the "Use" option box.
6. Click "Add".

## 2.7 Test Print

**Offline Self-test Page Print**

The offline configuration page can be set from the operation panel using the following steps:

1. Power on, making sure the indicator display status reads as Ready.
2. To print the test page on a printer with WIFI, press down the Control Panel (Cancel/Continue) for three seconds. To do that on a printer without WIFI, press down the Information Page button for three seconds.

**Note:**

1. Configuration pages differ on different models, for example, there is the network configuration information page for models with network whereas there is the WIFI configuration information page for models with WIFI.
2. The model appears on the demo page and the configuration page differs depending on the model.

PANTUM

The New Era for Printing

# P2500 Series

Monochrome Laser Printer

Up to 22ppm (A4)/
23ppm (Letter)

Compact Size &
Sleek Design

WIFI Connectivity &
Mobile Printing

* P2500W only

Convenient One
Step Installation

[ Sample Test ]

ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQ RSTUVWXYZ
ABCDEFGHIJKLMNOPQ RSTUVWXYZ
ABCDEFGHIJKLMNOPQ RSTUVWXYZ
ABCDEFGHIJKLMNOPQ RSTUVWXYZ
ABCDEFGHIJKLMNOPQ RSTUVWXYZ
ABCDEFGHIJKLMNOPQ RSTUVWXYZ

(Demo Page)

# P2500W Series

PANTUM

[Printer Information Page] [Page 1]

## Pinter Information

| | |
|---|---|
| Product Name | :Pantum P3100DL |
| USB Vender ID | :232B |
| Firmware Version | :1.0.1.7 |
| Memory Size | :128MB |
| Printing Mode | :GDI |
| Product Serial No. | :AA2A000000 |

## Cartridge Information

| | |
|---|---|
| Cartridge Model | :PD-210 |
| Remaining Amount of toner | :0% |
| Actual Pages Printed | :0 |
| Average Coverage | :0% |
| Expected Pages Printed | :0 |

## Print Information

| | |
|---|---|
| Total Pages Printed | :564 |
| Pages Printed With Different Paper Types | |
| A5 | :1 |
| A4/LETTER | :512 |
| Legal/Folio | :1 |
| B5/Executive | :1 |
| Others | :49 |

(Print Information Page)

P2500W Series

PANTUM

[Network Configuration Information Page] [Page 2]

## Basic Information

| | |
|---|---|
| Connection Status | :Disconnected |
| Network Used | :Wifi |
| Host Name | :Pantum-55511A |
| Hardware Address | :44 : 33 : 4c : 55 : 51 : 1a |
| Total Packets Received | :0 |
| Bad Packets Received | :0 |
| Framing Errors Received | :0 |
| Total Packets Transmitted | :0 |

## IPv4 Configuration Information

| | |
|---|---|
| IPv4 Configured By | :Auto |
| IPv4 Address | :0 . 0 . 0 . 0 |
| Ipv4 Subnet Mask | :0 . 0 . 0 . 0 |
| IPv4 Default Gateway | : |
| Bonjour Name | :P2500W series[55511A] |
| DHCP Server Address | :0 . 0 . 0 . 0 |

## IPv6 Configuration Information

| | |
|---|---|
| IPv6 Status | :On |
| IPv6 Link-Local Address | ::: |
| IPv6 Stateless Address | ::: |
| IPv6 Stateful Address | ::: |

(Network Configuration Information Page)

P2500W Series

PANTUM

[WiFi Configuration Information] [Page 3]

## Basic Information

| | |
|---|---|
| Wireless Status | :On |
| Communication Mode | :Basic Connection Mode |
| Network Name(SSID) | :belkin.f6e |
| BSSID | : |
| Authentication Type | :WPA2_PSK |

## Wireless Hotspot Information

| | |
|---|---|
| Wireless | :On |
| SSID | :Pantum-AP-55511A |
| Hotsopt IP Address | :192.168.223.1 |
| Subnet Mask | :255.255.255.0 |
| DHCP Service Status | :On |
| Starting Address for IP Address Pool | :192.168.223.100 |
| Ending Address for IP Address Pool | :192.168.223.199 |
| Lease Time | :30m |
| Primary DNS Server Address | :192.168.223.1 |
| Secondary DNS Server Address | :0.0.0.0 |
| Authentication Type | :None |

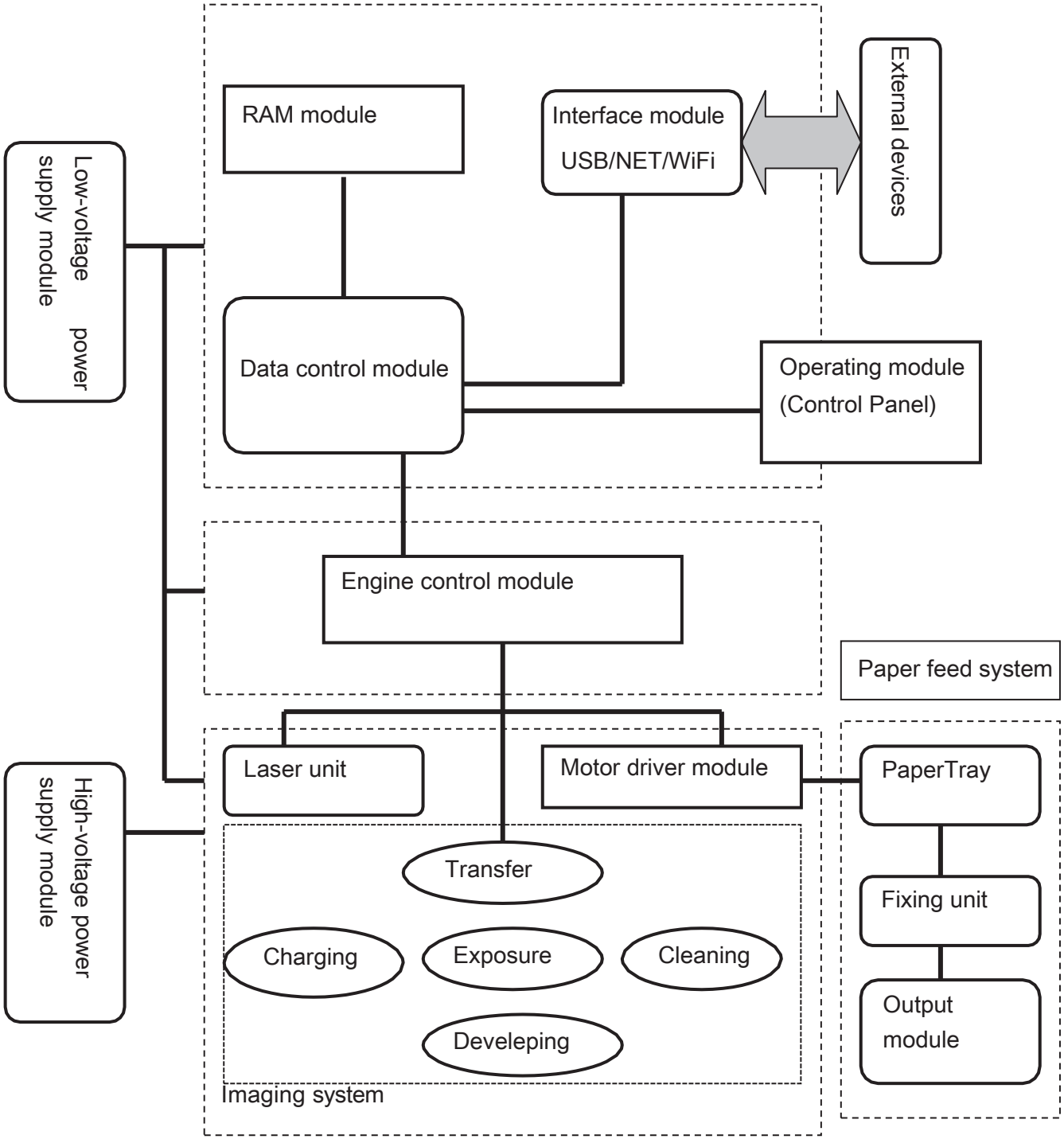
(WIFI Configuration Information Page)

# Operating Principles

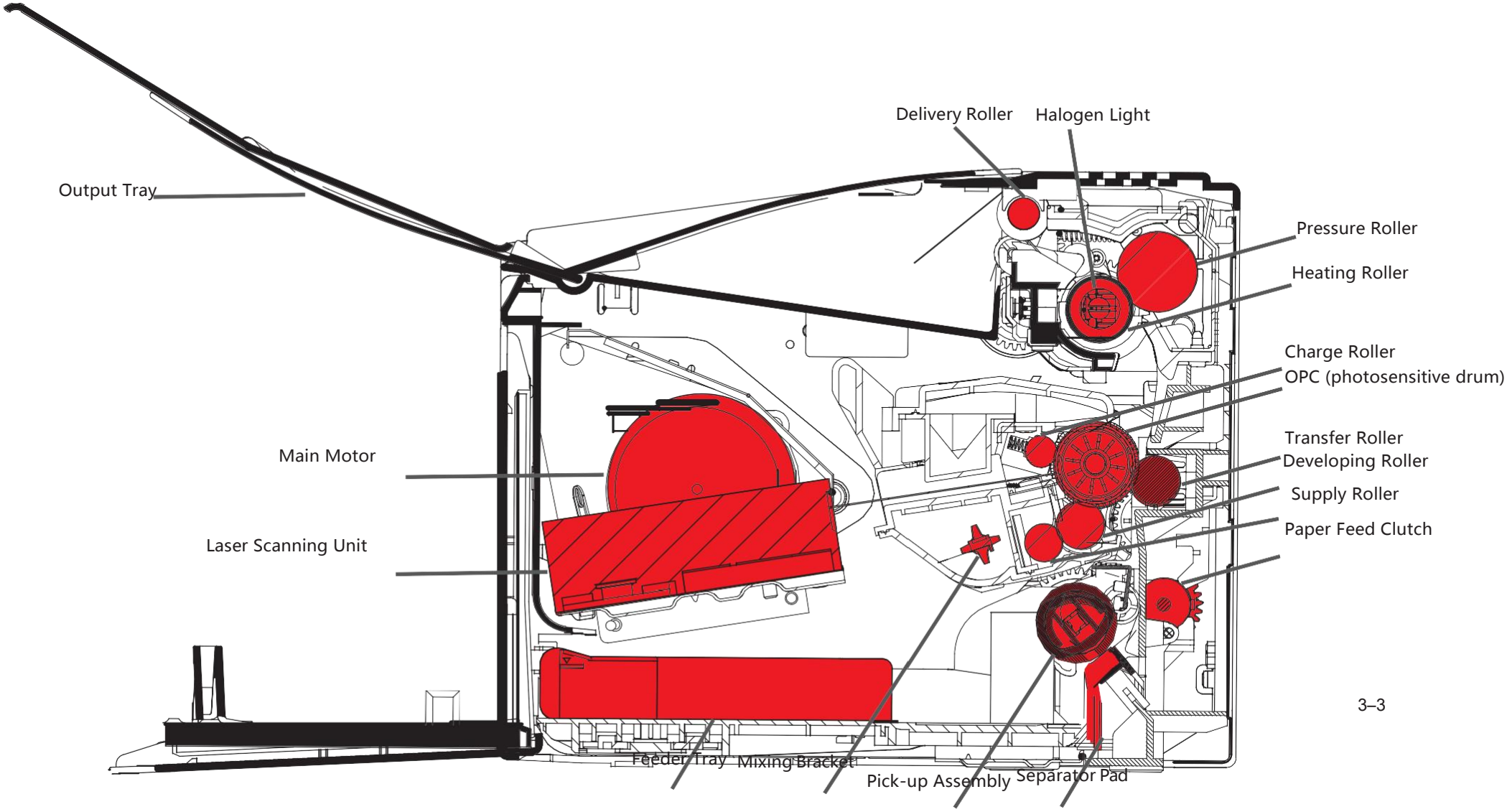
3.1 COMPONENTS SUMMARY ..... 3–2
3.2 MECHANICAL STRUCTURAL DIAGRAM ..... 3–3
3.3 FEEDER CIRCUIT DIAGRAM ..... 3–4
3.4 PRINT PRINCIPLES ..... 3–5
3.4.1 CHARGING ..... 3–5
3.4.2 EXPOSURE ..... 3–5
3.4.3 DEVELOPMENT ..... 3–6
3.4.4 PRINT TRANSFER ..... 3–6
3.4.5 CLEANING ..... 3–7

## 3.1 Components Summary

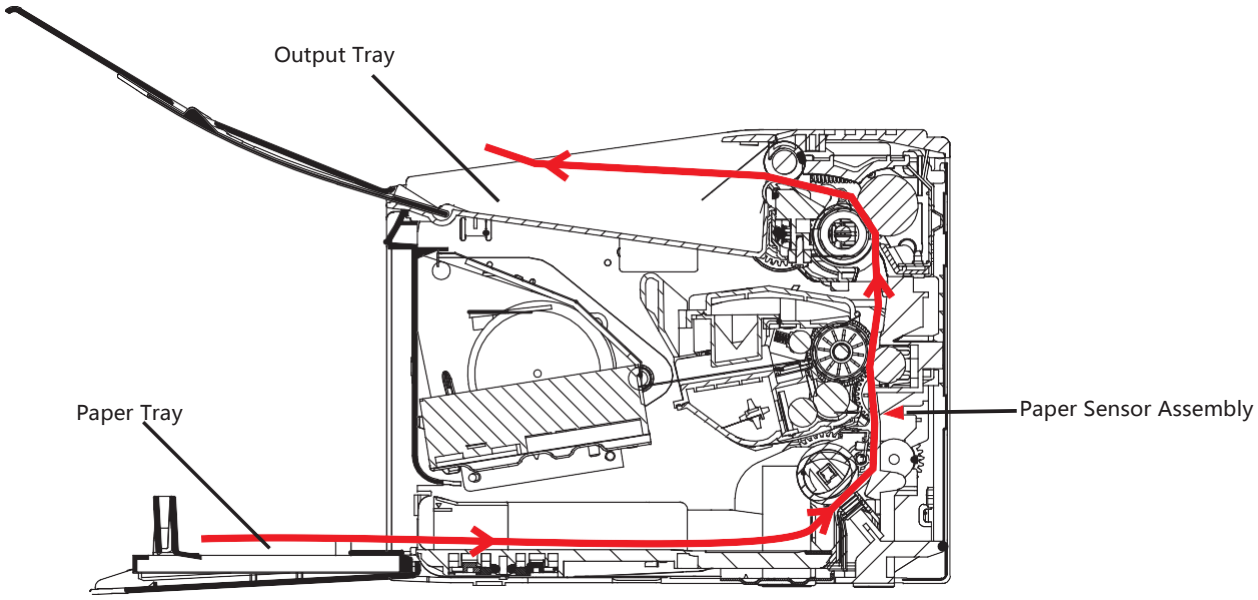
The following diagram shows the summary of the composition .



## 3.2 Mechanical Structural Diagram



## 3.3 Feeder Circuit Diagram




This printer uses the "C" type of feeder circuit.

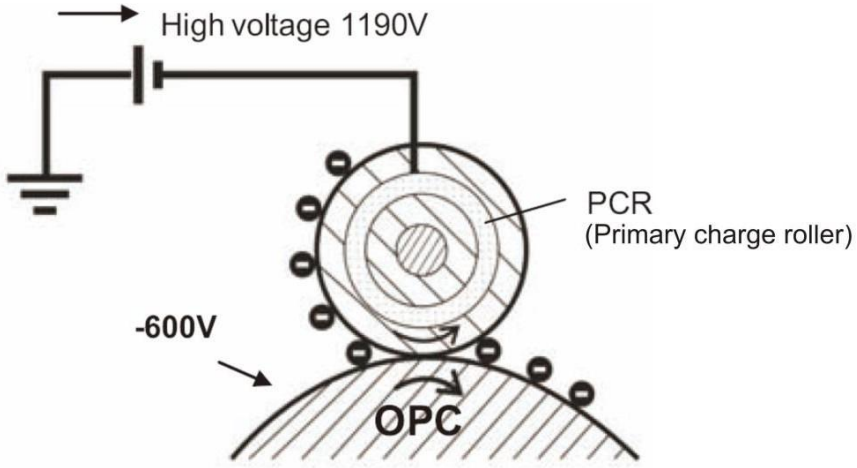
The feeder system consists of the following components:

1. Pickup Roller:
   Feeds the paper to the print area through friction.
2. Electromagnet:
   Works with the clutch gear to control the movement of the pickup roller.
3. Paper Feed Clutch :
   Works with the electromagnet to control the movement of the pickup roller.
4. Separator Component:
   Feeds individual sheets through friction.
5. Paper Sensor Assembly
   Detects whether the paper arrives at the print area within the specified time range.
6. Damper
   Supports the paper before it arrives at the pickup roller and separator.

## 3.4 Print Principles

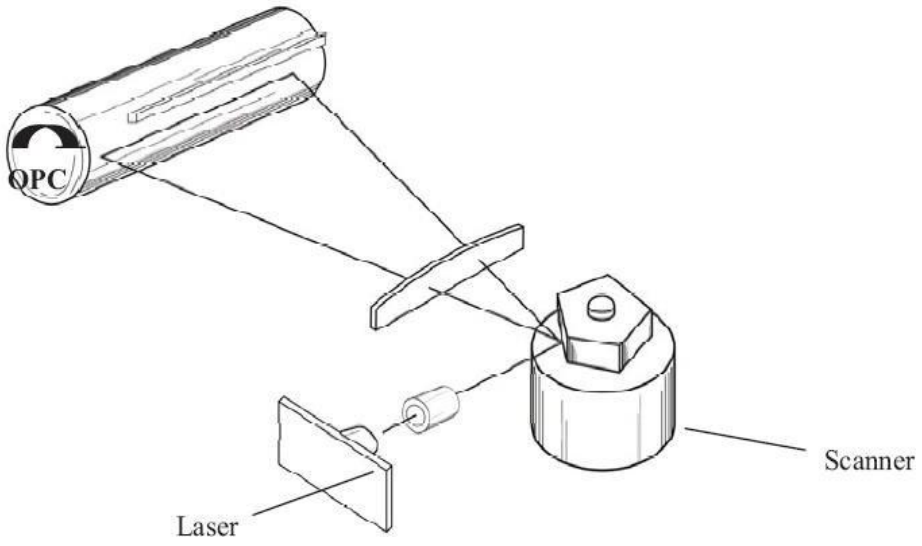
### 3.4.1 Charging

Using DC high voltage, the steel shaft of the charge roller will evenly charge the surface of the OPC with a negative 600V charge.



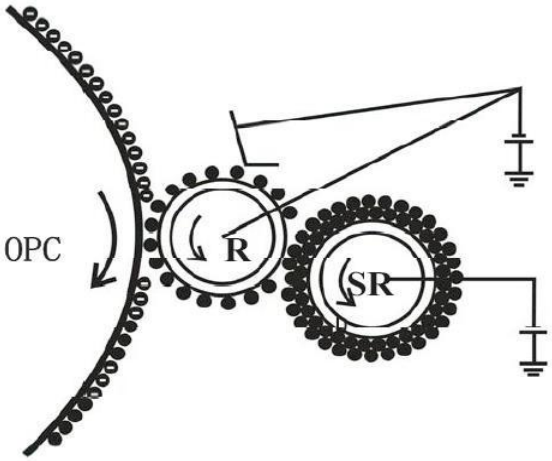

### 3.4.2 Exposure

When the light conductor is scanned by the laser beam, the irradiated portion meets the conductive layer of the photosensitive drum. This results in the removal of the electric charge. Conversely, the non-irradiated surface retains its electric charge, creating a potential difference image. This is often referred to as the "electrostatic latent image."



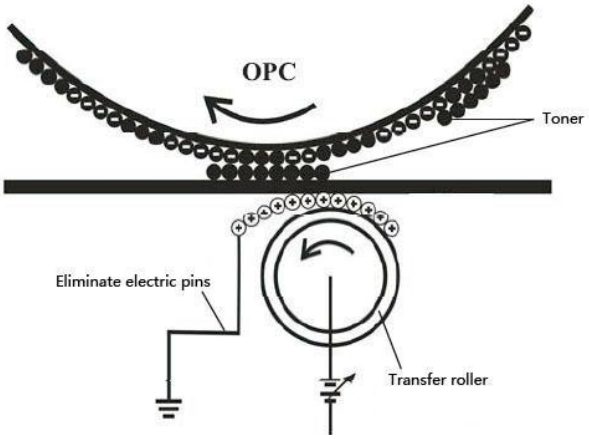
### 3.4.3 Development

When the toner has been moved through under friction between the Developing Roller (DR) and Supply Roller (SR), the surface of the Developing Roller will be covered with a layer of charged toner. After exposure, as the OPC goes through the DR, it will transmit the developing voltage to the DR. This voltage is greater than that of the exposed portion of the OPC and less than that of the unexposed portion. Toner will be attracted to the exposed area of the OPC due to the electrostatic field between the OPC and DR, and a visible image will form.




### 3.4.4 Print Transfer

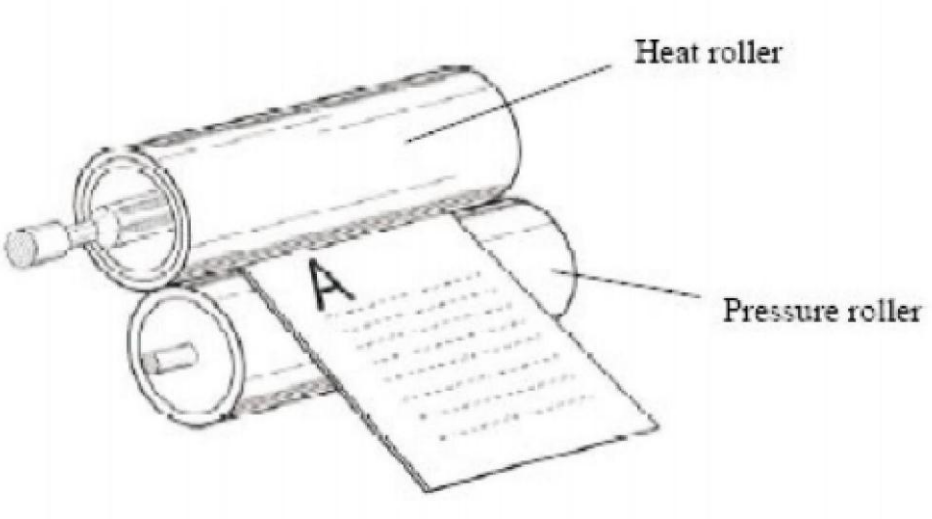
When the paper moves through the interlayer between the Transfer Roller (TR) and the photosensitive drum (OPC), the TR will gain high pressure opposite to the toner charge polarity. The toner will therefore be affected by the TR's electrical field, transferring toner to the surface of the paper. After moving through the TR, the back of the paper is positively charged. This causes the toner, separated by the OPC, to be attracted to the paper until the next stage. There is also an anti-static needle to discharge extra charge that may be produced throughout the process by the electric field and the friction of the paper and the toner.



### 3.4.5 Fusing

When the paper moves onto the heating roller, the toner is melted at a specific temperature . The pressure poller (PR) then presses the toner into the paper fibers, curing it to the paper.

**N o t e :** If the fusing temperature is too high or too low, toner fusing results will be affected.




### 3.4.6 Cleaning

As the toner on the surface of the OPC is not completely transferred to the paper, it must then be cleaned by a blade before the next round of the imaging process.

Disassembling and Installation

4.1 Parts ..... 4–2
4.1 Disassembling Step Figure ..... 4–3
4.2 Disassembly Steps ..... 4–4
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4.2.8 Motor ..... 4–11
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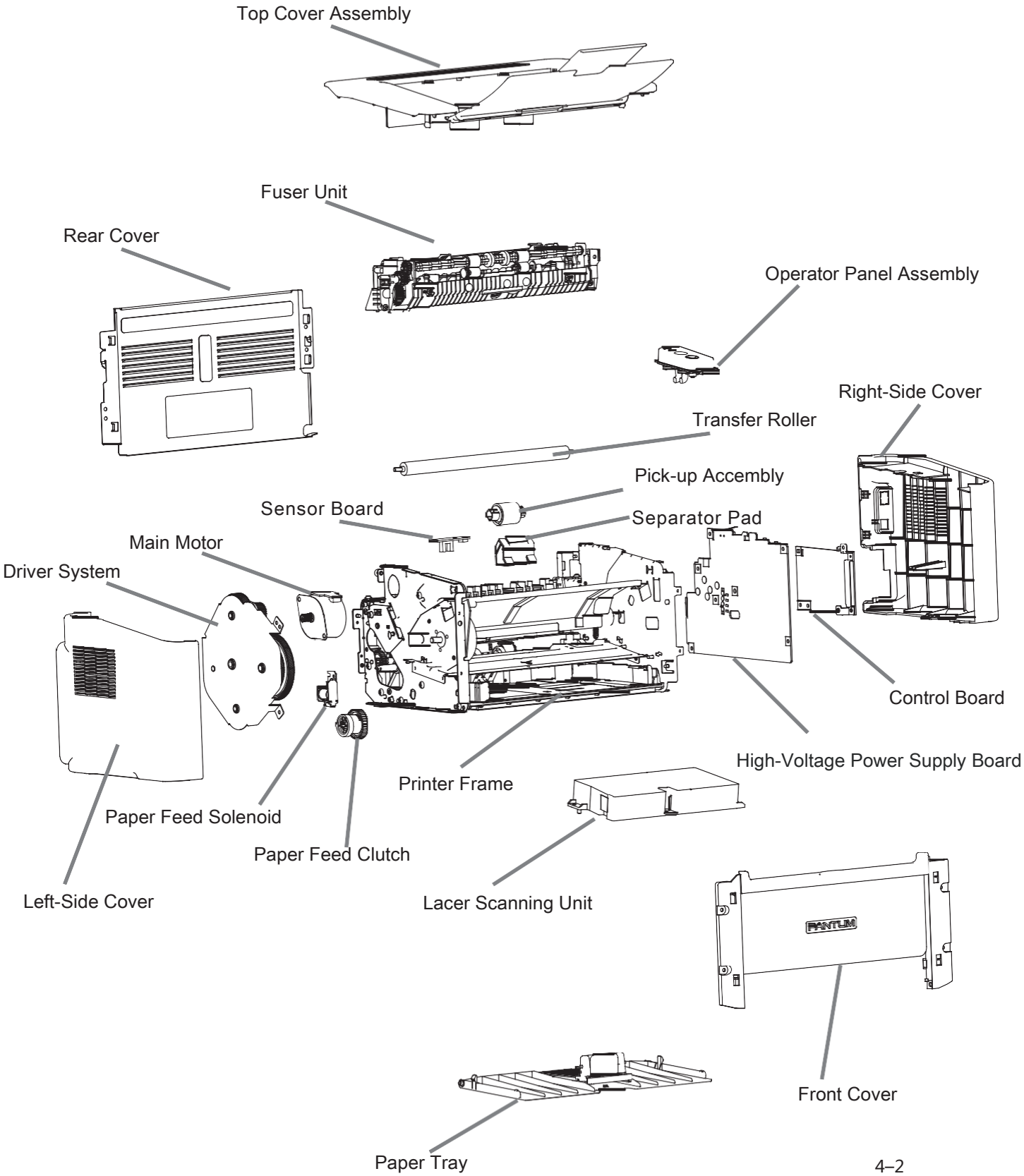
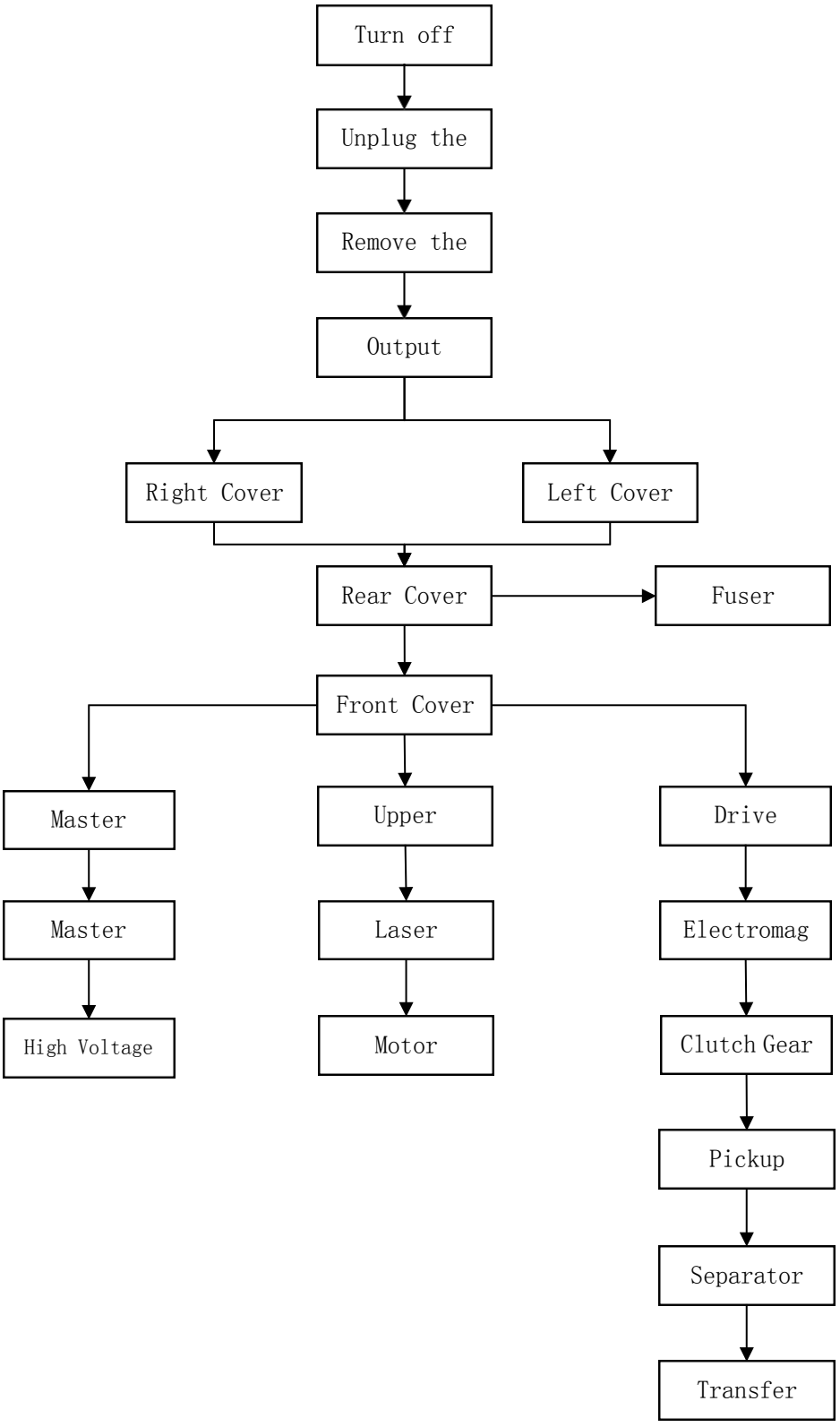
4.2.10 Clutch Gear ..... 4–13
4.2.11 Pickup Roller ..... 4–13
4.2.12 Separator Component ..... 4–14
4.2.13 Transfer Roller ..... 4–14

## 4.1 Parts


Top Cover Assembly
Fuser Unit
Rear Cover
Operator Panel Assembly
Right-Side Cover
Transfer Roller
Pick-up Accembly
Sensor Board
Separator Pad
Main Motor
Driver System
Control Board
High-Voltage Power Supply Board
Printer Frame
Paper Feed Solenoid
Paper Feed Clutch
Left-Side Cover
Lacer Scanning Unit
Front Cover
Paper Tray

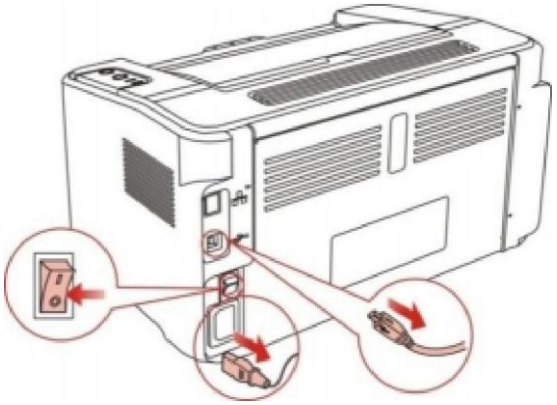
## 4.2 Disassembling Step Figure



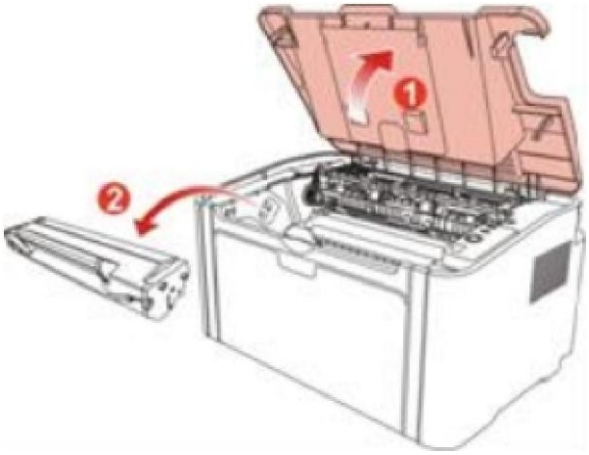
## 4.3 Disassembly Steps

### 4.3.1 Preparation for Disassembly

1. Before disassembling, please disconnect the printer and unplug the connecting wires.



2. Remove the paper and close the feeder tray and the output tray.
3. Open the output bin and remove the cartridge.



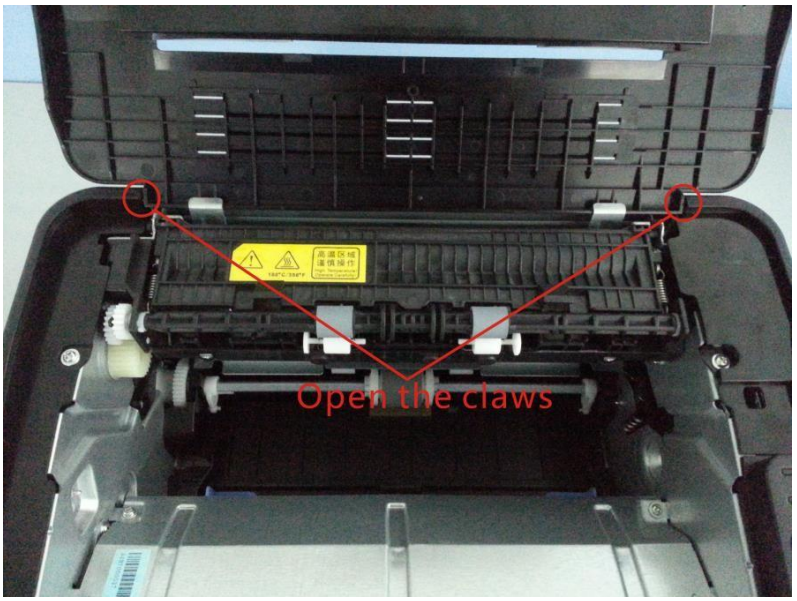

**Note:**

- When removing the cartridge, put it in a protective bag or wrap it in thick paper to avoid damaging the photosensitive drum by exposing it to light.

### 4.3.2 Exterior Component

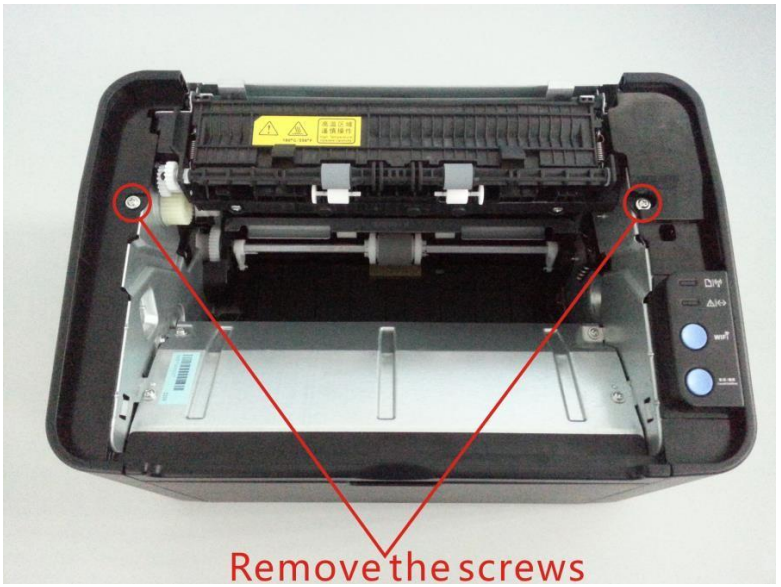
#### 4.3.2.1 Output Bin Component

Open the claws on both sides and remove the output bin.



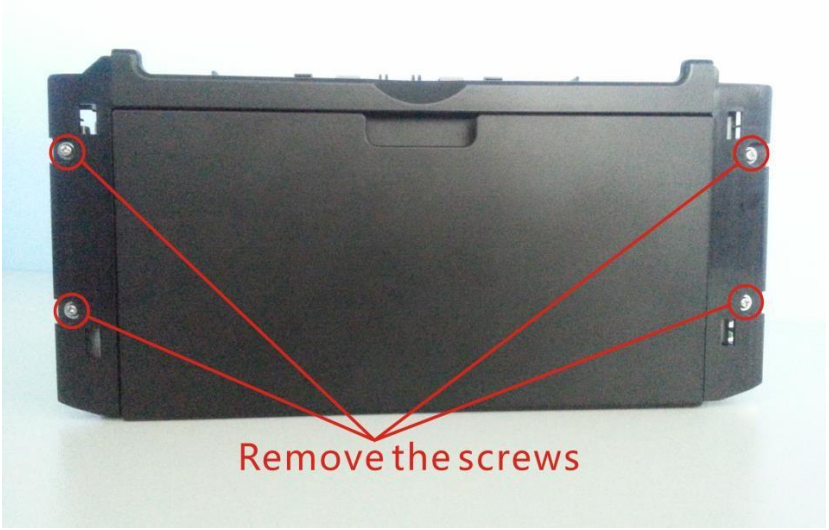

#### 4.3.2.2 Left Cover and Right Cover

1. Remove the screws as shown below:



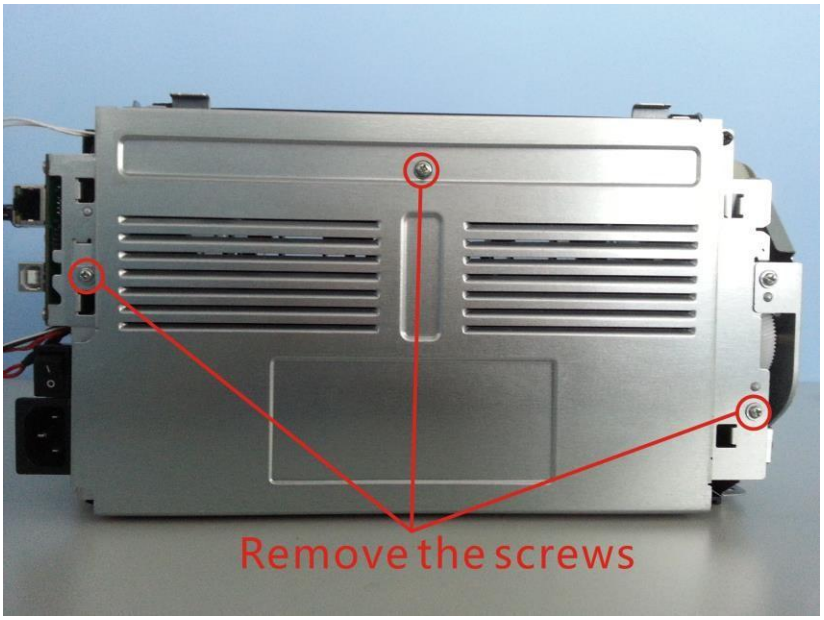
#### 4.3.2.3 Front Cover

Remove the screws as shown below, and remove the front cover.

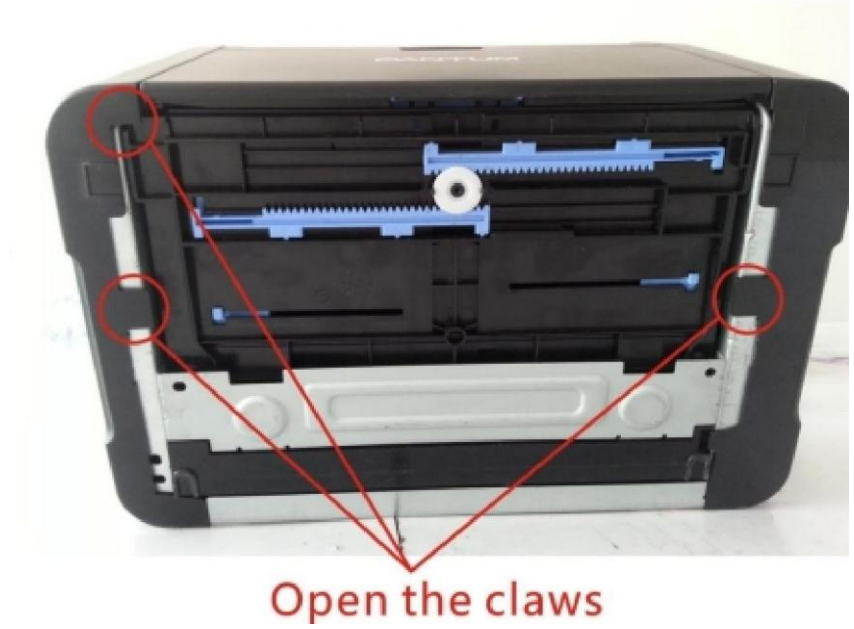


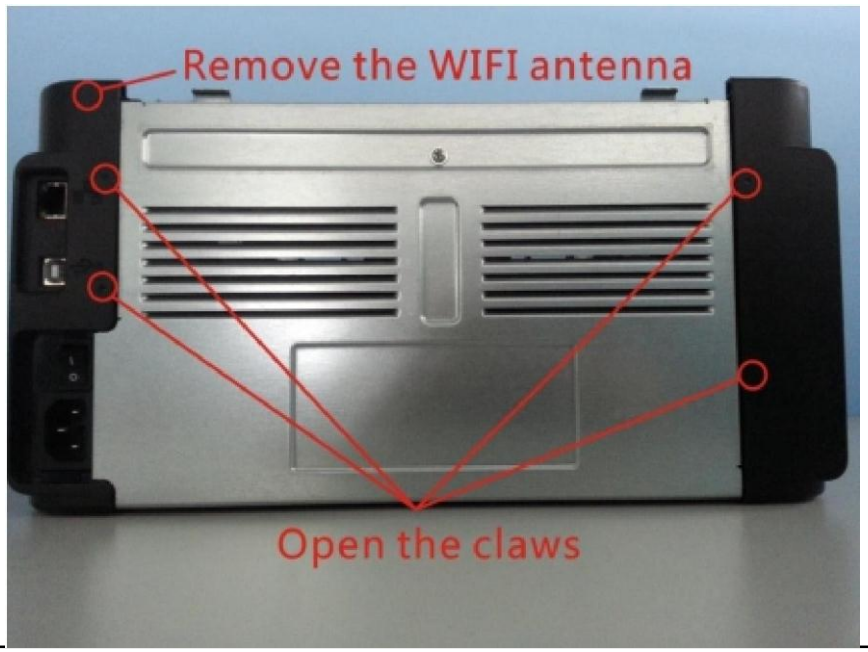

#### 4.3.2.4 Rear Cover

Remove the screws as shown below, and remove the rear cover.



2. Open the jaws as shown in the figure, and remove the left and right covers.



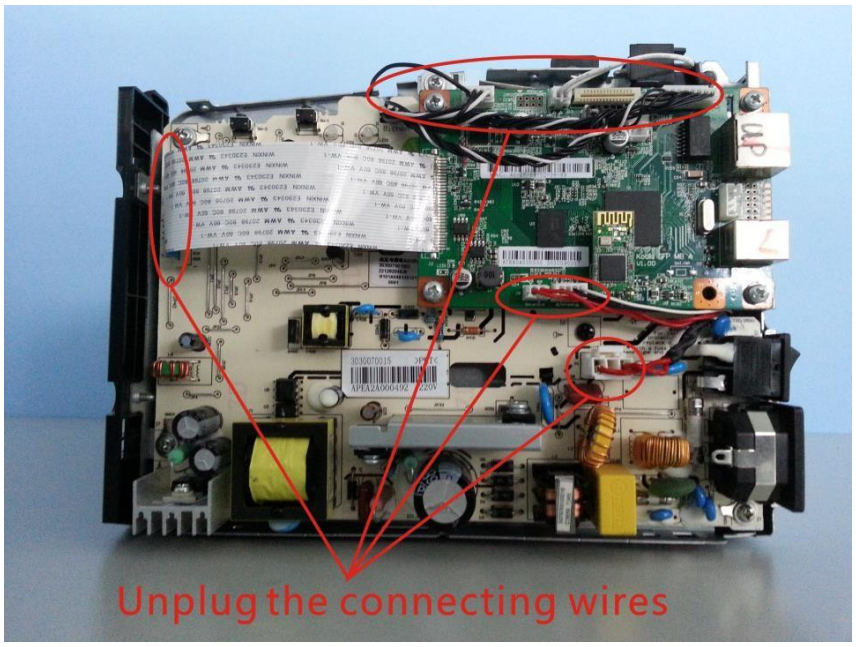




**Note:**

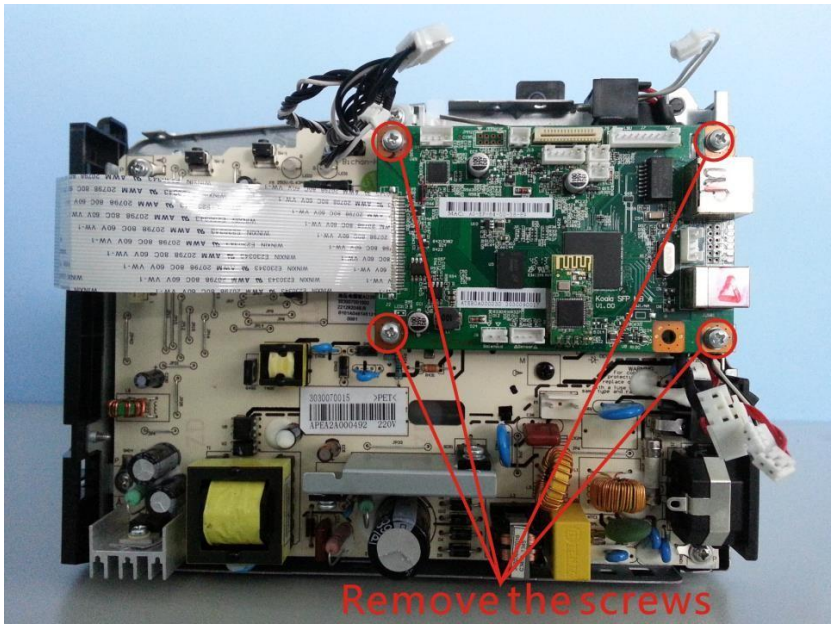
The WIFI antenna of P2500W printers is located on the right cover. Pry open the jaws , remove the WIFI antenna, and then remove the right cover.

### 4.3.3 Control Board

1. Remove the exterior components and unplug the baseplate cable.

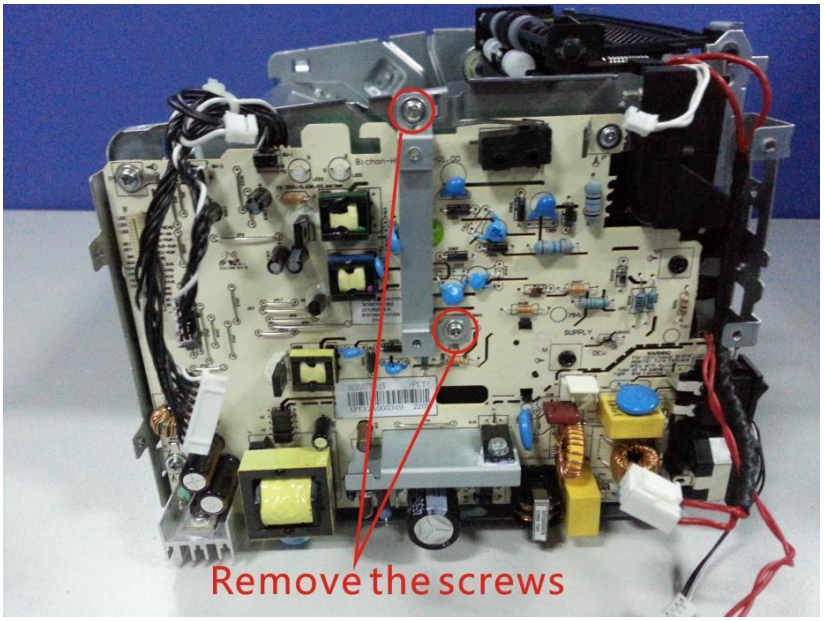



2. Remove the screws as shown below, and remove the master board.

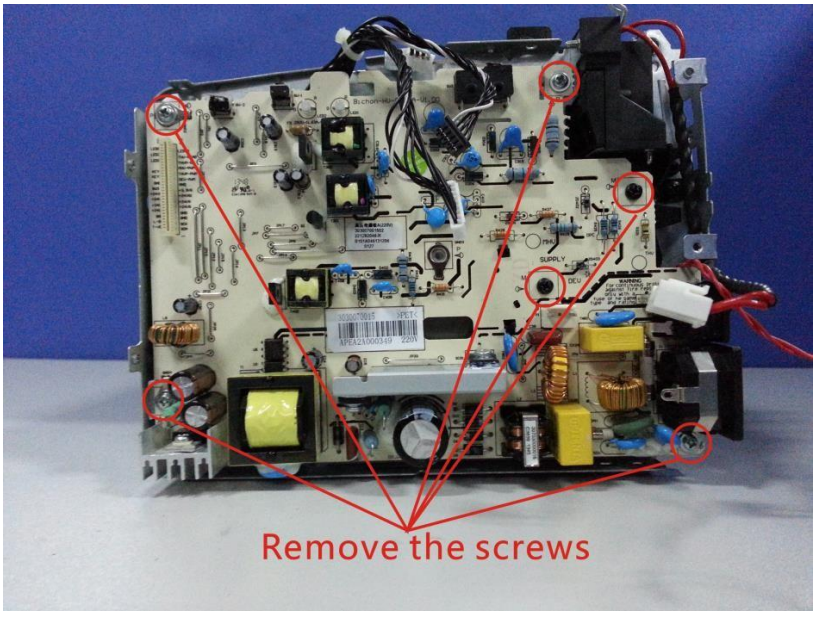


### 4.3.4 High-Voltage Power Supply Board

1. Remove the screws as shown below, and remove the master board bracket.

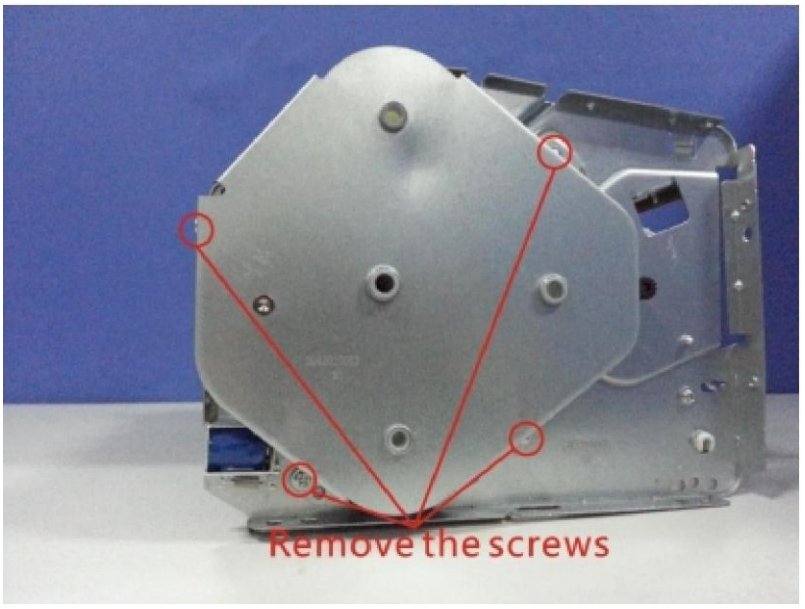



2. Remove the screws as shown below, and remove the high voltage power board.



### 4.3.5 Gear Drive System

Remove the screws as shown below, and remove the gear drive system.

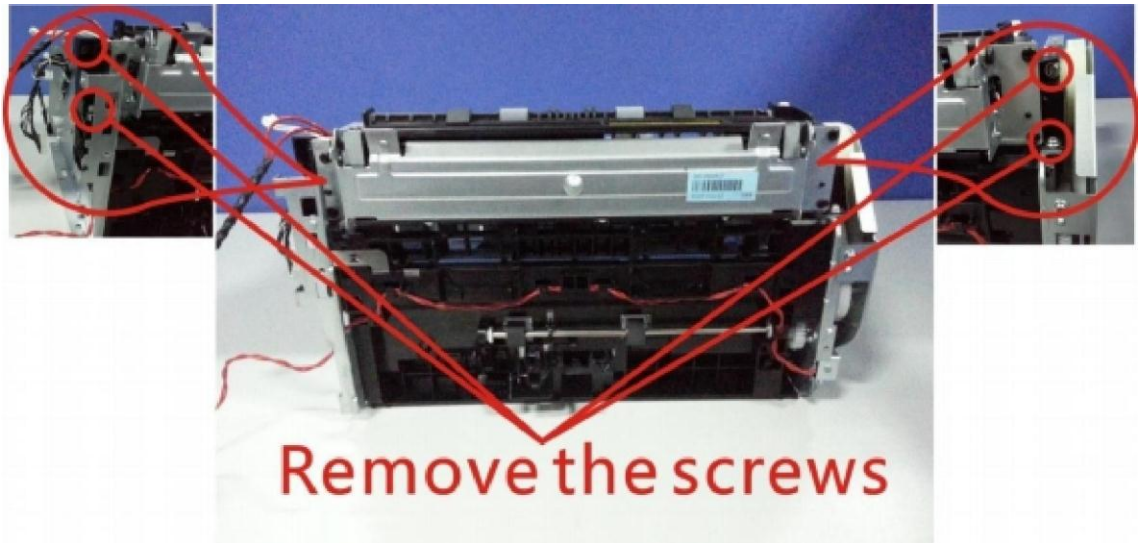



**Note:**

When removing the gear drive system, make sure the gear is well protected from falling which may damage the engine.

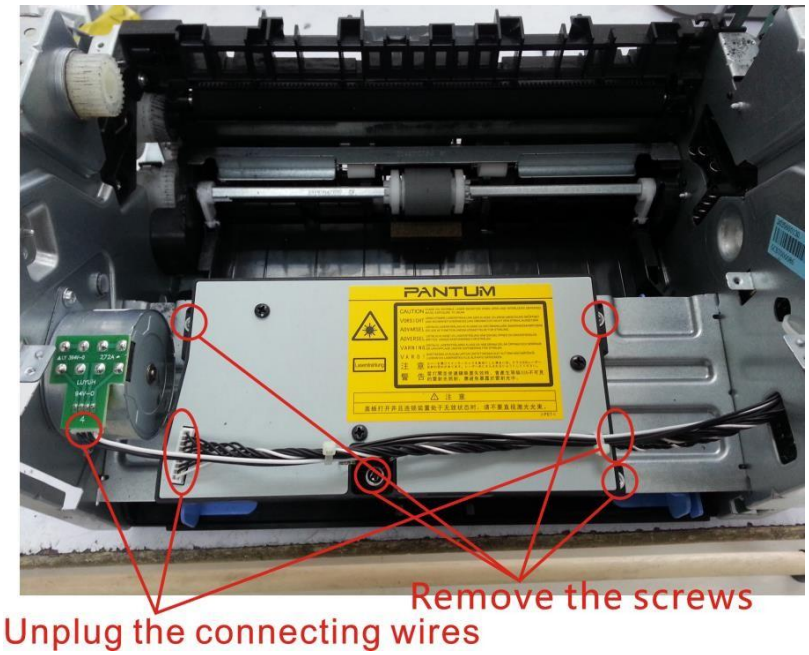
### 4.3.6 Fuser Unit

Remove the screws as shown below, and remove the fuser component.



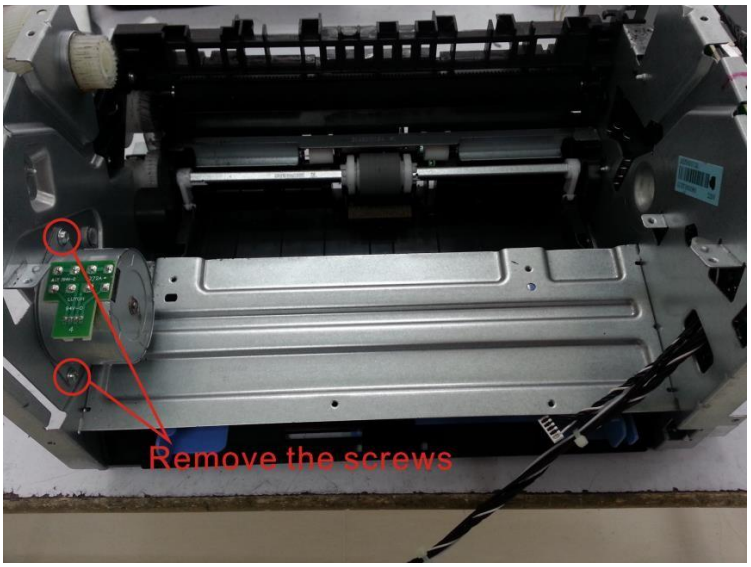
### 4.3.7 Laser Scanning Unit

Remove the connecting wires and the screws as shown below, then remove the laser.



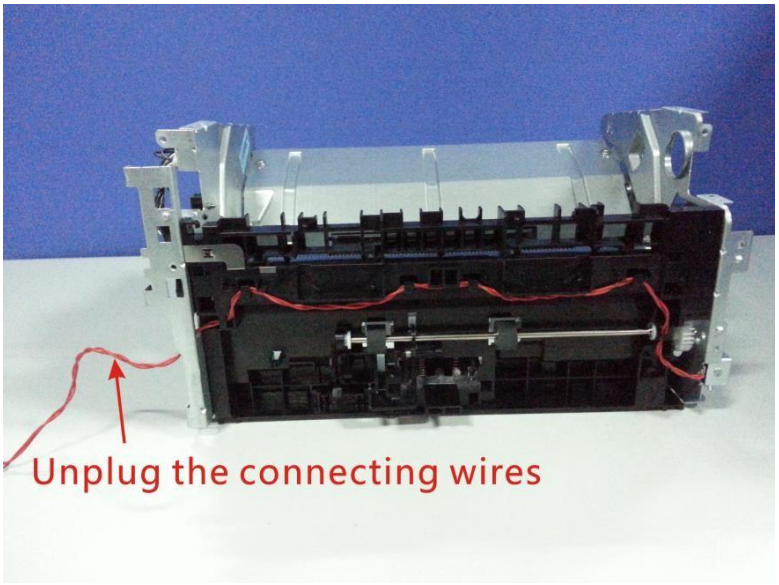

### 4.3.8 Main Motor

When you have removed the laser, remove the fixing screws as shown below, and remove the motor.

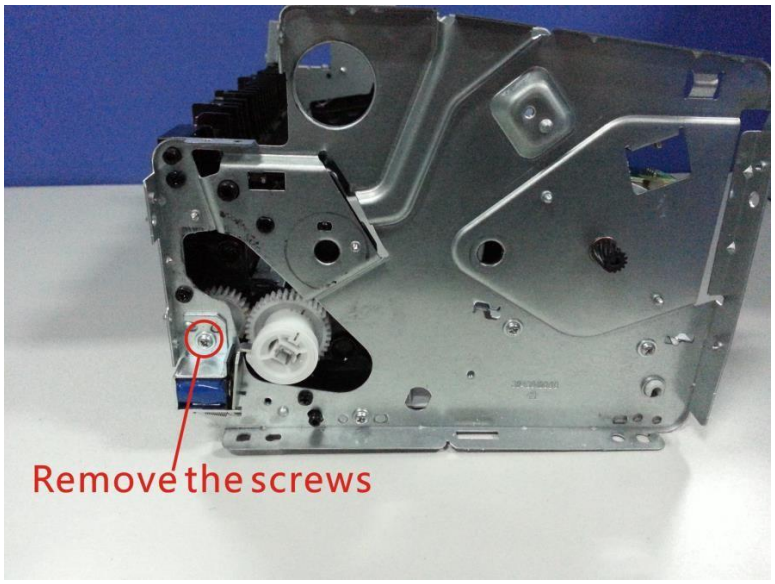


### 4.3.9 Electromagnet

1. Remove the connecting wires from the card slot, as shown below.

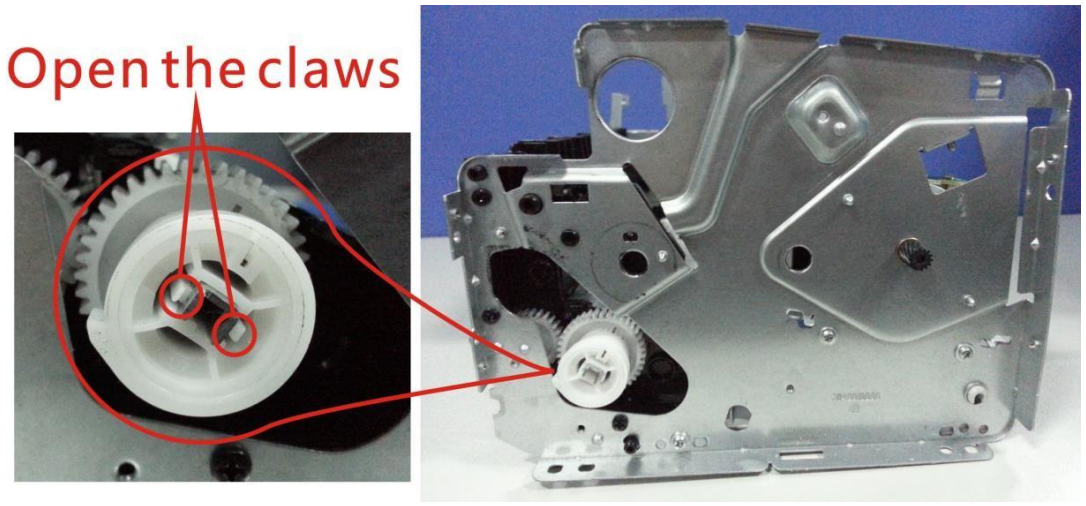



2. Remove the screws as shown below, and remove the electromagnet.



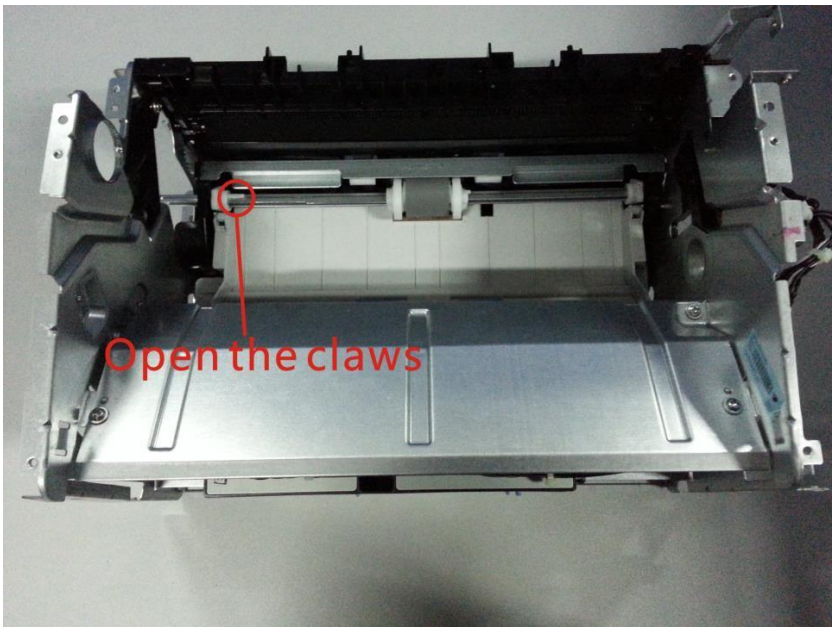
### 4.3.10 Clutch Gear

Open the clutch gear jaws as shown below, and remove the clutch gear by pulling it out.

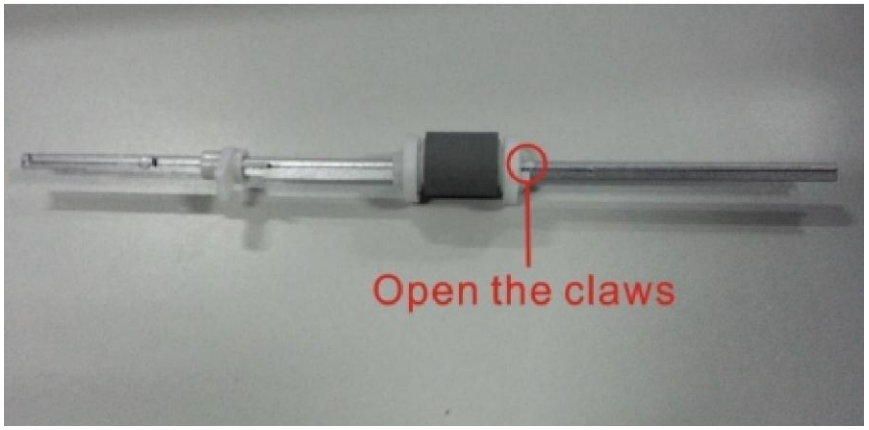



### 4.3.11 Pick-up Assembly

1. Open the jaw on the cam of the paper feed shaft, and remove the paper feed shaft assembly by pulling it in the direction of the pickup roller.



2. Open the jaw on the pickup roller, and remove it by pulling it in the direction opposite to the cam.

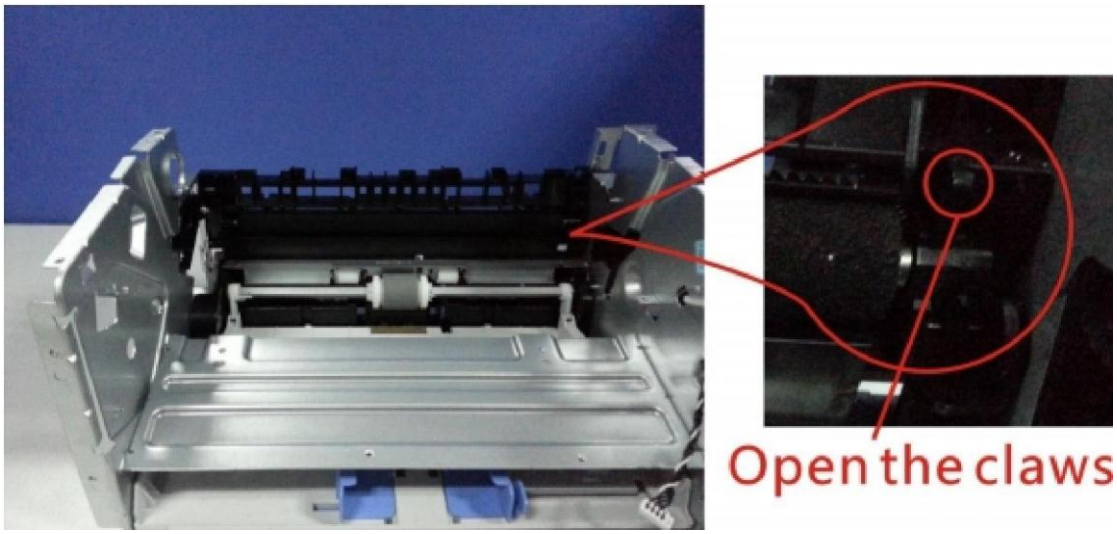



#### 4.3.12 Separator Component

When you have removed the pickup roller, remove the separator component. Take caution to protect the spring from falling.

#### 4.3.13 Transfer Roller

Open the claw as shown below, remove the bearing of the transfer roller and remove the transfer roller.




**Note:**

When you remove the transfer roller, do not touch the transfer roller sponge to avoid causing printing abnormalities.

# Maintenance

5.1 Cleaning ..... 5–2
5.2 Consumables ..... 5–5
5.2.1 About Consumables ..... 5–5
5.2.2 Replacement of Consumables ..... 5–5

## 5.1 Cleaning

**Note:**

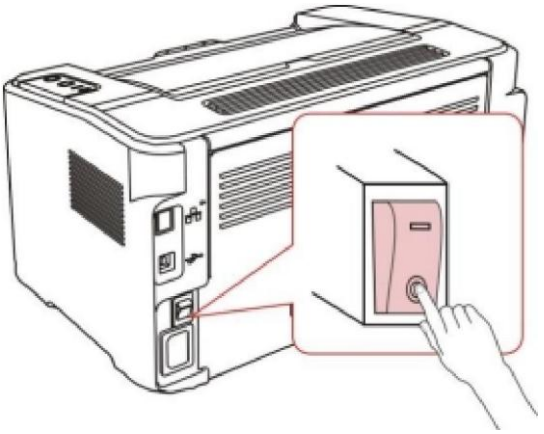
Please use mild detergents.

Do not use strongly corrosive liquids such as thinners or benzene for cleaning, as these will damage the surface of the device.

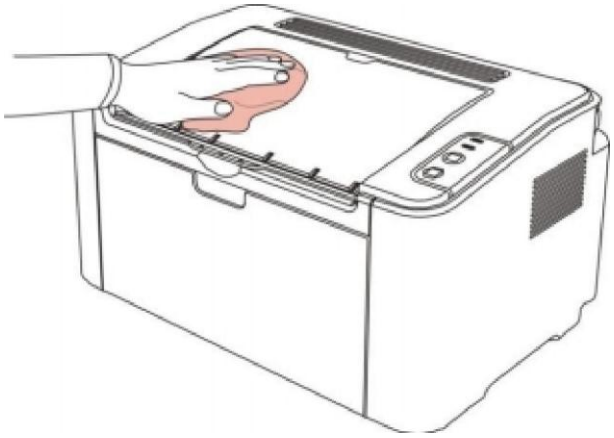
Do not use cleaning materials containing ammonia.

Do not use isopropanol to remove dust from the control panel, as it may crack the panel.

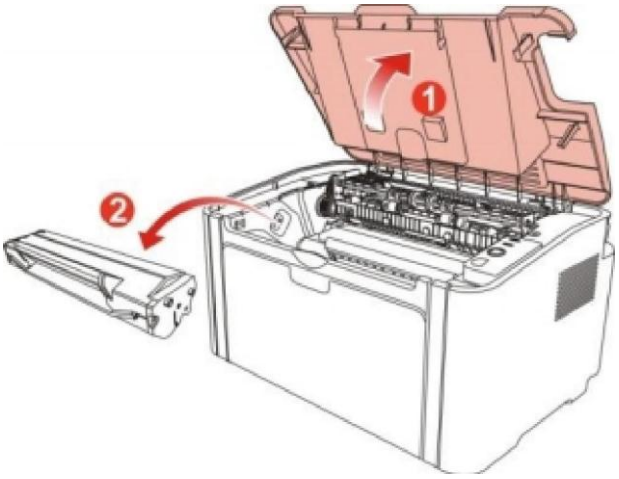
1. Disconnect the main power switch, and unplug the power cord and the USB interface cable.



2. Use a soft duster to clean the printer surface.



3. Open the upper cover and remove the cartridge

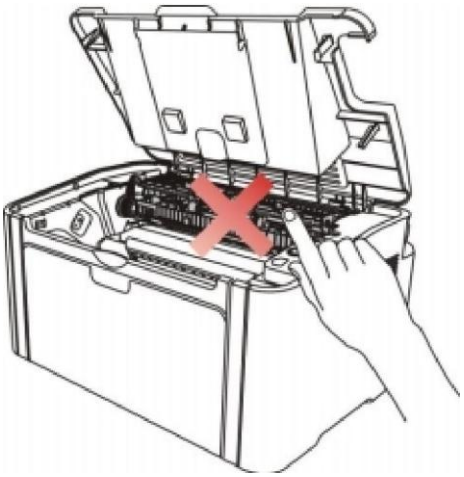



**Note:**

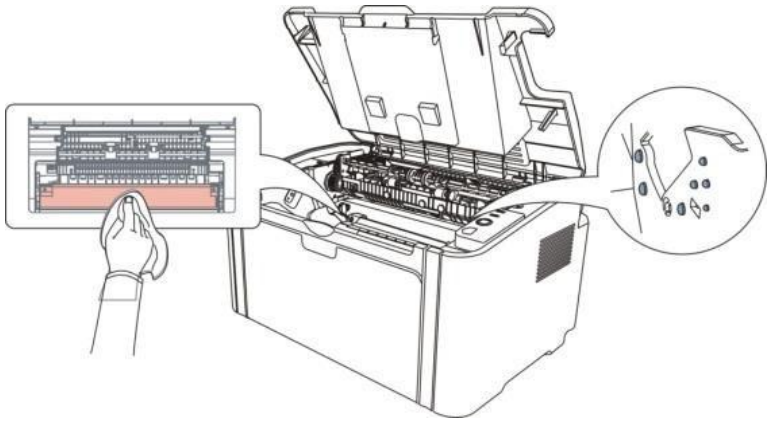
Please remove metal objects, such as watches or bracelets before removing the cartridge, as they may damage the inside of the machine.

When removing the cartridge, put it in a protective bag or wrap it in thick paper to avoid damaging it under direct light.

After removing the cartridge, do not touch the shaded area with your hands. Some parts of the printer may still be hot for a short time after use. When opening the front covers to clean inside the printer, please do not touch anything in the shaded area shown in the following figure.

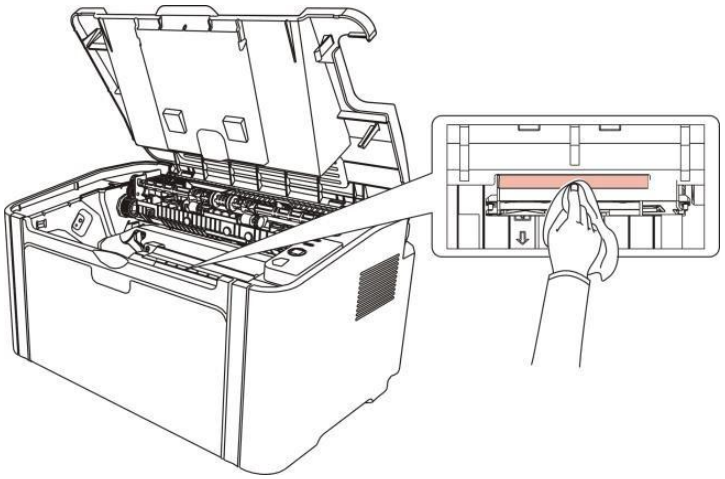


4. Clean the inside of the printer by using a dry and lint-free cloth to gently wipe the shaded area shown in the following figure.



5. Gently clean the glass on the laser with a piece of cotton or duster slightly damped with alcohol.

   The laser is an important part of the imaging system. Once the laser glass get contaminated with the toner or other dirt, it may result in print quality issues. Therefore, cleaning the laser glass is an indispensable part in daily use and maintenance of the printer.



## 5.2 Consumables

### 5.2.1 About Consumables

(1) Utilization of consumables

Please only use genuine Pantum consumables.

(2) Cartridge Maintenance and Protection

To maximize toner use, please bear the following guidelines in mind:

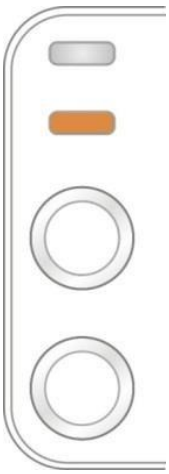
- Do not remove the cartridge from its packaging until you need to use it.
- The warranty excludes damage caused by refilling the cartridge.
- Store the cartridge in the same environment as that of the printer.
- To avoid damage, do not expose the cartridge to sunlight.

(3) Cartridge Service Life

The service life of the cartridge depends on the amount of toner required for print jobs. A new cartridge can print an average of 700 or 1600 pages, with 5% coverage, on A4 paper. The actual number of pages may vary according to print density, and is affected by the operating environment and print interval, as well as the type and size of media to be printed. The cartridge may need to be changed frequently if printing numerous graphs.

### 5.2.2 Replacement of Consumables

When the orange printer indicator flashes, as shown in the following figure, this indicates that the toner is low or has run out. The cartridge must be replaced to ensure continued print quality.



**Note:**

The cartridge surface may contain toner. Please remove it carefully to avoid spillage.

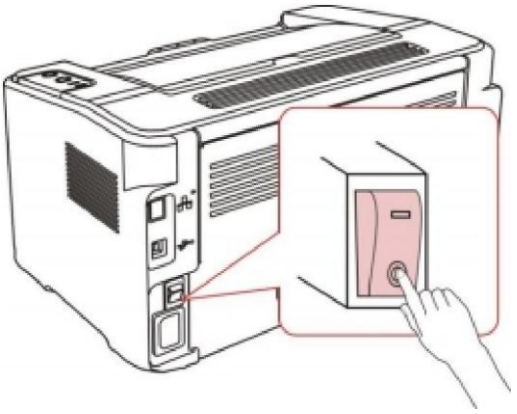
Put the empty cartridge on a piece of paper to avoid accidental toner spillage.

After removing the protective cover, please immediately install the cartridge in the printer, so as to avoid damaging the photosensitive drum as result of exposure to too much direct sunlight or indoor lighting.

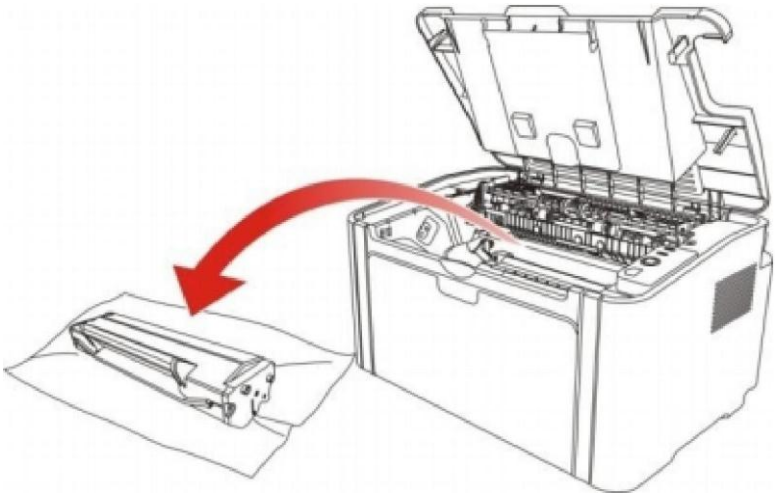
When installing, do not touch the surface of the cartridge to avoid scratching it.

**Follow the steps below to replace the cartridge:**

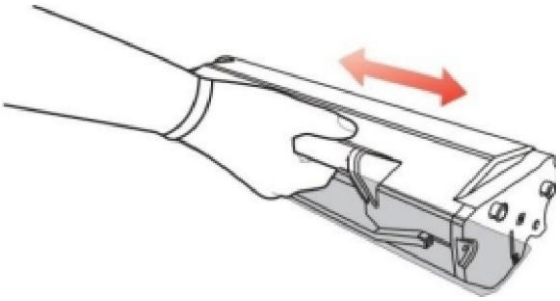
1. Power off the printer.



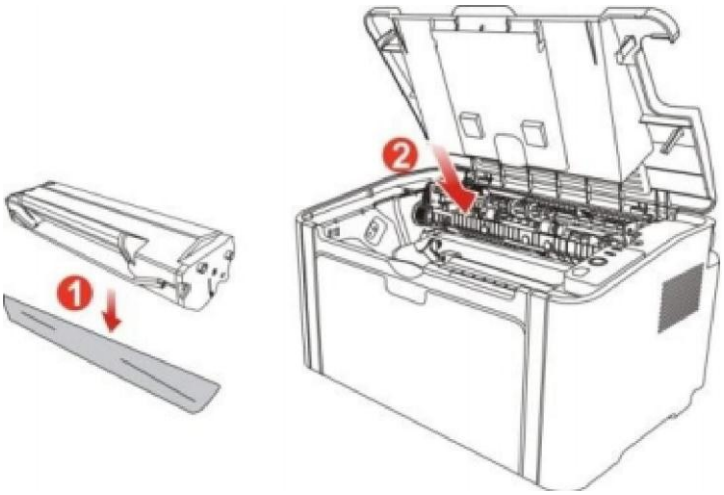
2. Open the front cover and remove the cartridge along the guides.



3. Take the new cartridge out of its packaging, hold the cartridge handle and shake it gently (horizontally) 5-6 times so as to evenly distribute the toner inside the cartridge.

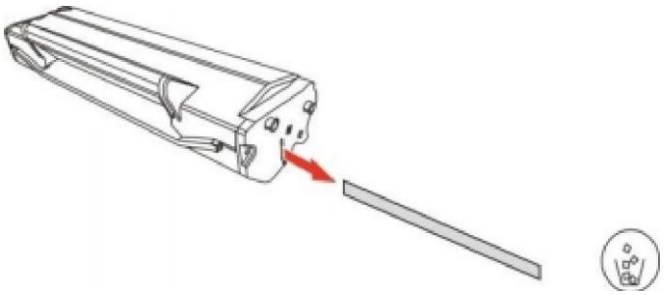


4. Remove the cartridge protector, and place the cartridge into the printer along the guides.

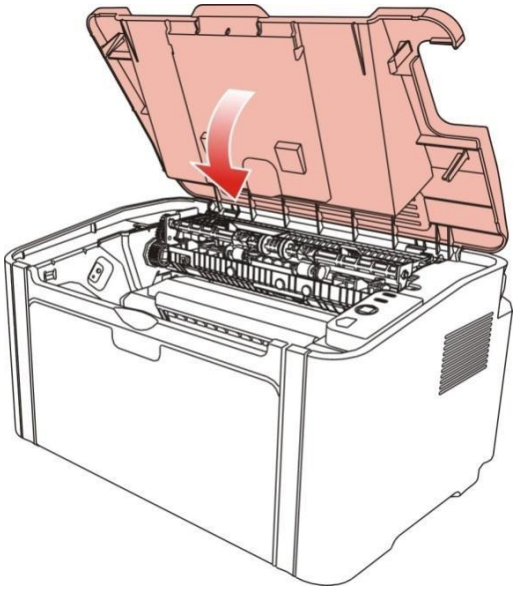



**Note:**

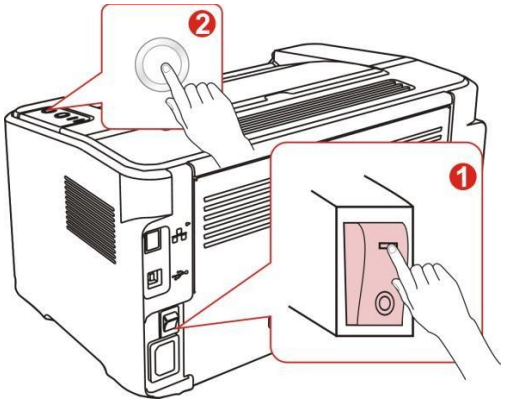
Please check whether there is a seal before putting toner cartridge into the printer. If you find a seal, please tear off the seal before installation.



5. Fully close the upper cover



6. Restart the printer, press down the Control Panel button for three seconds, and print a test page.



# Error Display and Troubleshooting

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## 6.1 Pre-maintenance Check

### 一、Environment

1. The power voltage must be in the range of 220~240 VAC, depending on the model.
2. Place the equipment on a flat, stable surface.
3. Room temperature is maintained between 10°C and 32.5°C. Relative humidity should be between 20% and 80%.
4. Do not expose the equipment to dust.
5. Do not expose the equipment to ammonia or other noxious gases.
6. Avoid exposing the equipment to heat or moisture (e.g. near water or a humidifier).
7. Avoid exposing the equipment to direct sunlight.
8. Use the printer in a well-ventilated room.
9. Make sure the printer's air vent is not blocked.

### 二、About paper

1. Check whether the paper used is within the specified range. [Printing with paper that is too thick, too thin, or curled may result in paper jams, feed problems or poor print quality]
2. Do not use damp or wet paper. [If paper is damp or wet, please replace with dry paper and check to see if the quality improves]
3. Do not use short-grained paper or acid paper. [If you use short-grained paper or acid paper, it can cause print quality problems]

### 三、Consumables

1. Replace the cartridge when the indicator on the printer control panel flashes yellow.
2. Check that the specified Pantum cartridge is being used. For more information, please see 5.2"Consumables" .

## 6.2 Error Information

| Error | Cause | Solution |
|---|---|---|
| The printer is not connected | 1. The USB cable or power cord is not connected<br>2. Master board failure | 1. Connect the USB cable and the power cord correctly.<br>2. Replace the master board |
| The printer's upper cover is open. | The upper cover has not been fully closed. | Close the upper cover. |
| Feed jam | 1. Check if the printer is out of paper.<br>2. The print paper is loaded incorrectly.<br>3. The feeder roller is dirty or aging. | 1. Make sure the feeder tray is loaded with paper.<br>2. Correctly load the print paper.<br>3. Clean or replace the pickup roller. |
| Jam in the middle of the printer | 1. The print paper is loaded incorrectly.<br>2. The pickup roller is dirty.<br>3. Top of the page sensor failure. | 1. Correctly load the print paper.<br>2. Clean the pickup roller.<br>3. Check and replace the top of the page sensor. |
| Cartridge is not installed | 1. The cartridge is not installed or has been installed incorrectly.<br>2. The cartridge chip contact is dirty or damaged.<br>3. The cartridge chip is damaged. | 1. Install the cartridge correctly.<br>2. Replace the engine baseplate.<br>3. Replace the cartridge with a new one. |
| Cartridge model mismatch. | 1. The toner cartridge model is mismatched. | Replace the cartridge. |
| The cartridge is empty. | The cartridge is empty. | Replace the cartridge. |

## 6.3 Error Code

| Code | Cause | Solution |
|---|---|---|
| NO.000 | The main motor is faulty | 1. Make sure that the main motor cable is connected correctly if the cable connection is faulty.<br>2. Replace the main motor if it is faulty;<br>3. Replace the high voltage power board if it is faulty. |
| NO.001 | The LSU line synchronizing signal is abnormal | 1. Replace the laser if there is a fault in the LSU laser motor;<br>2. Replace the high voltage power board if there is a fault in its LSU laser motor control gear.<br>3. Make sure that the motor cable is connected correctly if the motor cable connection is faulty.<br>4. Replace the high voltage power board if it is faulty |
| NO.002 | A fault is detected in the LSU motor | |
| N0.003-012 | | 1. Check the fuser component cable, and make sure the cable is properly connected.<br>2. Replace the fuser component if it is faulty;<br>3. Replace the high voltage power board if it is faulty; |

| | | |
|---|---|---|
| Internal error 32 of printer<br>Please call the customer service staff. | Data transfer error | 1. Check the cable between the engine board and the data board, and make sure that the connection is normal.<br>2. Replace the engine board if there is a fault.<br>3. Replace the data board if there is a fault |
| Internal error 33 of printer<br>Please call the customer service staff. | The full power heating time is too long | 1. Replace the fuser component if there is a fault.<br>2. Replace the engine board if there is a fault.<br>3. Replace the power board if there is a fault. |
| Internal error 34 of printer<br>Please call the customer service staff. | The heating roller is too slow to heat up. | |
| Internal error 35 of printer<br>Please call the customer service staff. | Abnormal thermistor of heating roller | |
| Internal error 36 of printer<br>Please call the customer service staff. | The heating roller is too slow to cool down. | |
| Internal error 37 of printer<br>Please call the customer service staff. | Abnormal temperature of heating roller | |

| | | |
|---|---|---|
| Internal error 38 of printer<br>Please call the customer service staff. | The heating roller does not reach the starting temperature of the laser. | 1. Replace the laser if there is a fault in the LSU laser motor.<br>2. Replace the engine board if there is a fault in the LSU laser motor control gear.<br>3. Faulty connection of the motor cable. Make sure that the motor cable is connected correctly.<br>4. Replace the engine board if there is a fault. |
| Internal error 39 of printer<br>Please call the customer service staff. | Heating roll does not reach the temperature of paper rubbing | |
| Internal error 40 of printer<br>Please call the customer service staff. | Main motor fault | 1. Faulty main motor cable. Make sure that the main motor cable is connected correctly. Replace the main motor if it is faulty.<br>2. Replace the engine board if it is faulty. |
| Internal error 41 of printer<br>Please call the customer service staff. | EC-system failure | 1. Make sure that the cable between the engine board and the data board is connected correctly.<br>2. Replace the data board if it is faulty.<br>3. Replace the engine board if it is faulty. |
| Internal error 42 of printer<br>Please call the customer service staff. | External memory failure | |

## 6.4 Clearing Jammed Paper

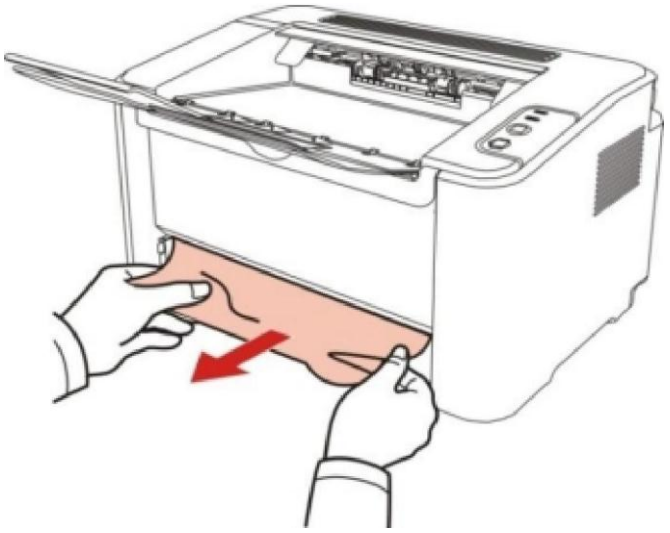
**Note:**

- Remove the jammed paper with the following steps: close the upper cover and tidy the paper in the paper tray, then the printer will automatically resume printing. If the printer does not automatically start printing, please press the Control Panel button.
- If the printer still does not start printing, please check whether all the jammed paper inside the printer has been cleared.
- If you can not remove the jammed paper yourself, please contact your local

  Pantum authorized repair center or send the printer to the nearest Pantum authorized service center for repair.

### 6.4.1 Feed jam

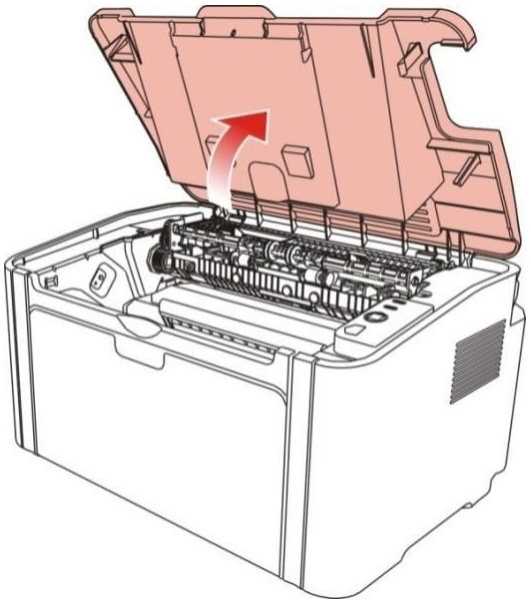
Gently draw the jammed paper out.



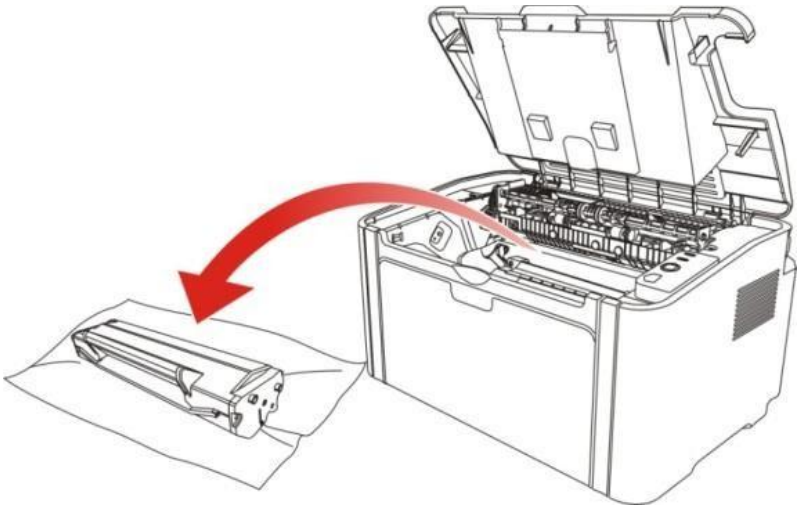
If the paper does not move when you draw it or there is no paper in this area, check the inside of the printer.

### 6.4.2 Inside Jam

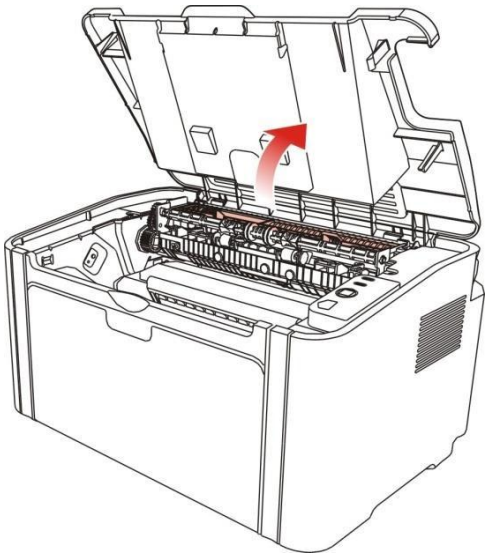
1) Open the upper cover.



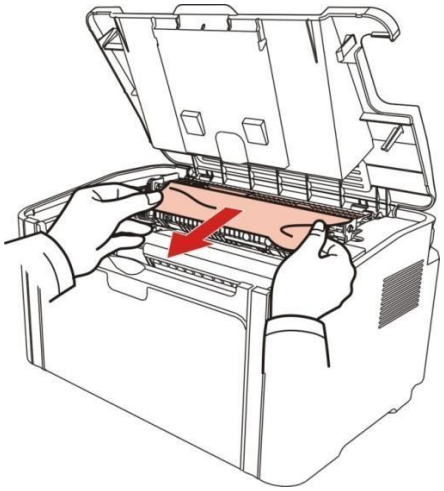
2) Remove the cartridge along the guides



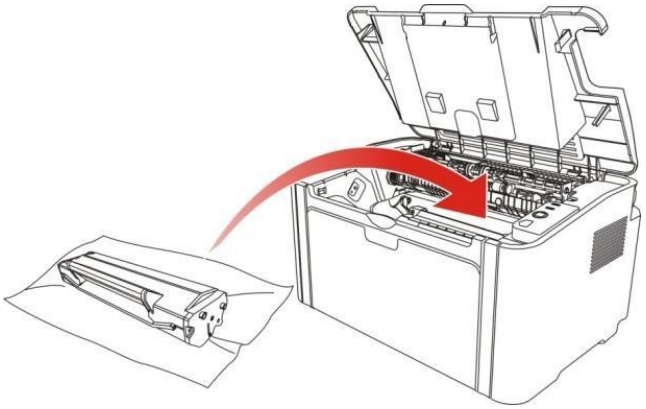
3) Open the fuser component's upper guide plate to reduce the pressure on the pressure spring.



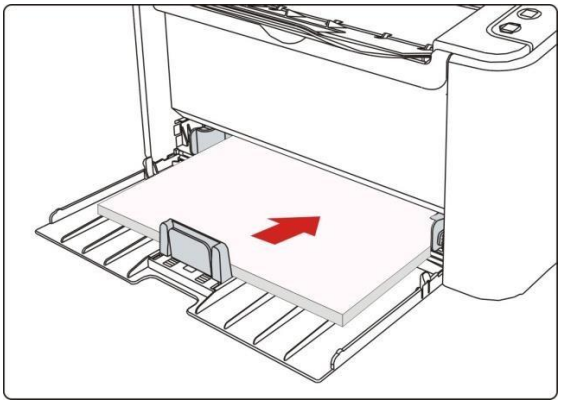
4) From the fuser unit, gently draw the jammed paper out along the output direction.



5) After removing the jammed paper, insert the cartridge into the printer along the guides until you hear a click assuring you that the cartridge is fully inserted.



6) Put the paper in the tray neatly to carry out next print when the indicator resumes print-ready status.



## 6.5 Troubleshooting

### 6.5.1 Feed Paper Failure

Initial Check: Please conduct an initial check when there is a paper feed failure.

| Check | Solution |
|---|---|
| Do the print media meet product specifications? | Replace the print media. |
| Is the paper curled, wrinkled, or wet? | Replace the paper and tell users how to protect the paper. |
| Is the paper path deformed, dirty, or blocked up? | Clean the paper path and replace relevant accessories, if needed. |
| Is the separation claw dirty, deformed, or damaged? | Replace the fuser component. |
| Are the pickup roller and separation component dirty, deformed or, damaged? | Clean the pickup roller and separation component, and replace them, if needed. |
| Is the tray detent correctly placed to feed paper? | Slide the tray detent closer to the edge of the paper stack. |
| Is the clutch gear rotating properly? | Adjust or replace the clutch gear. |
| Is the electromagnet working properly? | Replace the electromagnet. |

**M1 Paper feed failure**

| Possible cause | Solution |
|---|---|
| There is no electromagnet signal. | Check the electromagnet signal input to ensure that the electromagnet signal line is normal. |
| The pickup roller is dirty. | Clean or replace the pickup roller. |
| Pickup roller wears down. | Replace the pickup roller. |

**M2 Continuous paper feed**

| Possible cause | Solution |
|---|---|
| Electromagnet signal error. | Check the electromagnet signal input to ensure that the electromagnet signal line is normal. |
| The electromagnet spring hook is not powerful enough. | Replace the electromagnet. |
| Incorrect assembly phase of the clutch single set assembly. | Check the clutch single set to ensure that the assembly phase is right. |

**M3 Tilt Feeding**

| Possible cause | Solution |
|---|---|
| The feeder channel is dirty. | Check the feeder channel to ensure that the channel is clear. |
| The pickup roller is dirty. | Clean the pickup roller. |

**M4 Resend**

| Possible cause | Solution |
|---|---|
| Paper is placed incorrectly. | Confirm that the paper is placed correctly. |
| The separator is contaminated or worn. | Clean or replace the separator. |

### 6.5.2 Common failures

**P1 No AC power supply**

| Possible cause | Solution |
|---|---|
| The voltage is unsuitable. | Ensure suitable voltage from the power supply. |
| The power cord is not connected to the outlet correctly. | Make sure that the power cord is connected to the outlet correctly. |
| The fuse has blown. | Replace the high voltage power board |

**P2 No DC power supply**

| Possible cause | Solution |
|---|---|
| There is no AC power supply. | Make sure the AC power supply is normal. |
| The low-voltage power supply is faulty. | Replace the high voltage power board |

**P3 Motor Failure**

| Possible cause | Solution |
|---|---|
| The motor cable is faulty. | Make sure that the cable is connected correctly and there are no quality problems. |
| The main motor is faulty. | Replace any other motors, ensure that the main motor is working normally, and replace it if it is not. |
| Master board failure | Replace the master board |

**P4 Fuser Unit Failure**

| Possible cause | Solution |
|---|---|
| There is a poor connection to the thermistor plug wire. | Reconnect the wire. |
| The temperature relay has burnt out. | Replace the fuser component. |
| Halogen heating light failure. | Replace the fuser component. |
| The temperature control from the master board is faulty. | Replace the master board |

**P5 Heating light doesn't work**

| Possible cause | Solution |
|---|---|
| The high-voltage power supply circuit board is disconnected. | Reconnect the plug wire and ensure that the AC power supply is working normally. |
| There is jammed paper inside of the printer. | Check the printer and remove the jammed paper inside of it. |
| Thermistor failure. | Replace the fuser component. |
| The temperature relay is disconnected. | Replace the fuser component. |
| The temperature control from the master board is faulty. | Replace the master board |
| The high voltage power board is faulty. | Replace the high voltage power board. |

**P6 Laser scanning failure**

| Possible cause | Solution |
|---|---|
| The cable is not connected correctly or is broken. | Reconnect it correctly or replace it. |
| The laser is damaged. | Replace the laser. |
| The master board is faulty. | Replace the master board. |

**P7 Paper supply failure**

| Possible cause | Solution |
|---|---|
| Separator/pickup roller failure. | 1) Clean the surface of the separator or pickup roller.<br>2) Replace the separator or pickup roller. |
| The electromagnet cable is not connected properly. | Make sure that the electromagnet cable is connected properly. |
| Electromagnet failure. | Replace the electromagnet. |
| The clutch gear is displaced. | Adjust the limits for the clutch gear or replace the clutch gear. |
| The master board is faulty. | Replace the master board. |

**P8 Abnormal high-voltage output**

| Possible cause | Solution |
|---|---|
| The power cord is not plugged in or is damaged. | Make sure the power cord is connected correctly. |
| The high-voltage contact is dirty. | Clean the high-voltage contact. |
| The high voltage power board is faulty. | Replace the high voltage power board. |

**P9 USB cannot be identified by the PC**

| Possible cause | Solution |
|---|---|
| The power cord is not plugged in, is poorly connected, or is damaged. | Make sure the power cord is connected correctly. |
| USB cable is poorly connected or damaged. | Make sure the USB cable is connected correctly. |
| The USB interface of the master board is faulty | Replace the master board. |
| The master board is faulty. | Replace the master board. |

**P10 Page prints gibberish or whole page is dark**

| Possible cause | Solution |
|---|---|
| USB cable is loose or damaged | Make sure the USB cable is connected correctly. |
| FFC cable connection between the high voltage power board and the master board is bad or unreliable. | Replace the master board |
| The master board is damaged. | Replace the master board. |

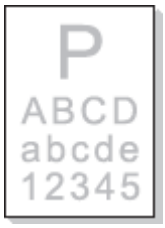
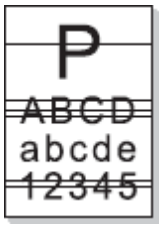
**P11 No image printed**

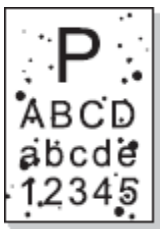
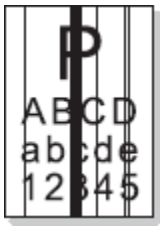
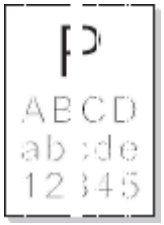
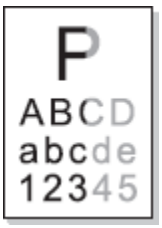
| Possible cause | Solution |
|---|---|
| The USB cable and power cord are not connected correctly | Check the USB cable and power cord to ensure the correct connection. |
| FFC cable connection between the high voltage power board and the master board is bad or unreliable. | Replace the master board |
| The high voltage power board is damaged. | Replace the high voltage power board with a new one. |
| The master board is faulty. | Replace the master board. |
| Cartridge faulty. | Replace the cartridge. |
| The laser is faulty. | Replace the laser. |

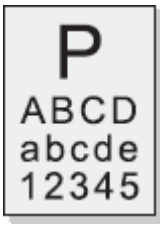
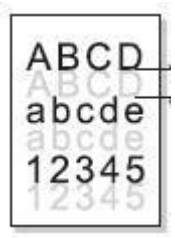
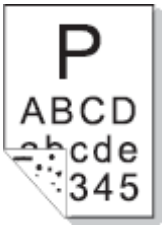
**P12 The cartridge cannot be identified**

| Possible cause | Solution |
|---|---|
| The cartridge is not installed correctly. | Ensure correct installation of the cartridge. |
| Cartridge chip failure. | Replace the cartridge with a new one. |
| The high-voltage chip contact is dirty | Clean the chip contact. |
| The high-voltage chip contact is damaged | Replace the high voltage power board. |
| The high voltage power board is faulty | Replace the high voltage power board |

## 6.6 Image Defects

| Status | Cause | Recommended Solutions |
|---|---|---|
| Lightly exposed image   | ● The carbon powder in the cartridges is running out.<br>● Poor connection at the high-voltage contact of the high voltage power board due to contaminated toner.<br>● The high-voltage output of the high voltage power board is faulty. | ● Replace the cartridge.<br>● Clean the area contaminated with toner.<br>● Clean the high-voltage contacts of the engine or replace the high voltage power board. |
| Whole page is dark | ● The high-voltage charge output of the high voltage power board is faulty.<br>● The charge roller is faulty.<br>● The laser is faulty. | ● Clean the high-voltage charge contacts or replace the high voltage power board.<br>● Replace the cartridge.<br>● Replace the laser. |
| Horizontal stripes   | ● Poor connection between the high-voltage contact and the cartridge.<br>● The developing roller is contaminated; OPC or charge roller is damaged.<br>● Paper pickup skidding. | ● Clean the high-voltage contact or replace the engine baseplate.<br>● Replace the cartridge.<br>● Clean or replace the pickup roller. |

| | | |
|---|---|---|
| Black/white spots<br>  | ● Some areas of the cartridge are contaminated or the OPC is damaged.<br>● If there are 45.2mm cyclical spots appearing on the image, it means that the high-voltage transfer is abnormal or the transfer roller is damaged. | ● 1. Replace the cartridge.<br>● 2. Clean the transfer high-voltage contact or replace the transfer roller.<br>● 3. Clean up paper scraps and dirt from inside of the printer regularly. |
| Vertical stripes<br>  | ● The blade is chipped or deformed.<br>● The OPC is damaged.<br>● There is a blockage between the developing roller and the doctor blade. | ● Replace the cartridge. |
| White vertical stripes<br>  | ● The window glass of the laser is dirty.<br>● There is a blockage or toner particles between the developing roller and the doctor blade.<br>● The fuser component is faulty. | ● Clean the window glass of the laser.<br>● Replace the cartridge.<br>● Clean or replace the fuser component. |
| There is an area of lightly exposed image on the page<br>  | ● The doctor blade is damaged.<br>● The spring pressures on the left and right side of the transfer roller are uneven; the spring is damaged; the transfer roller is installed improperly or the transfer roller sleeve is damaged.<br>● Laser failure. | ● Replace the cartridge.<br>● Replace the transfer roller sleeve.<br>● Replace laser. |

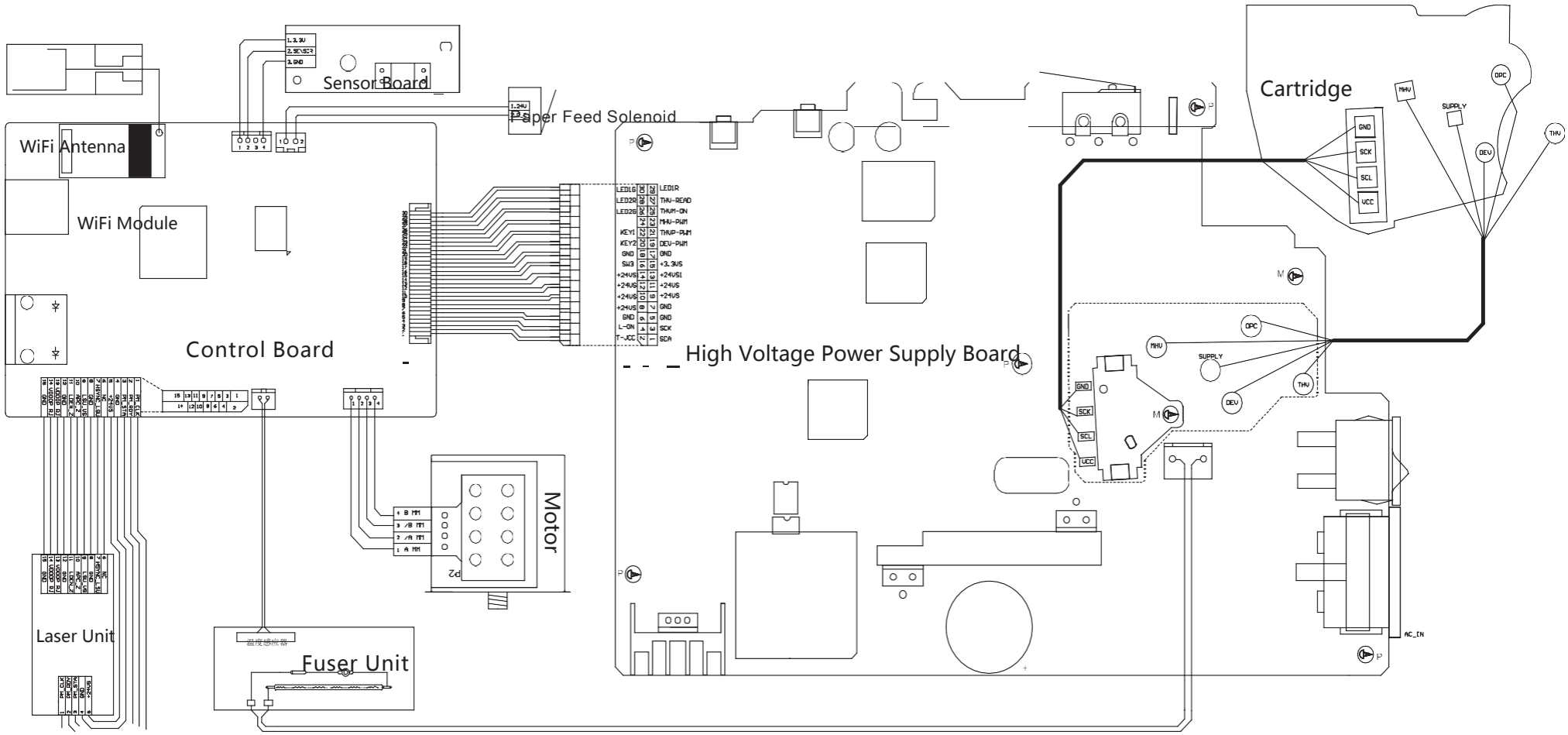
| | | |
|---|---|---|
| Black background<br>  | ● Print media used are beyond the specified range.<br>● The cartridge is empty.<br>● The high-voltage output of the high voltage power board is faulty. | ● Please use print media within the specified range.<br>● Replace the cartridge.<br>● Clean the high-voltage contacts or replace the high voltage power board. |
| Periodic image ghosting<br>  | ● If periodic 75.4mm image ghosting appears, it indicates that the OPC is damaged.<br>● If periodic 62.3mm image ghosting appears, it means that the surface of the heating roller is contaminated.<br>● The high-voltage output of the high voltage power board is faulty. | ● Replace the cartridge.<br>● Clean the surface of the heating roller or replace the fuser component if the problem continues.<br>● Replace the high voltage power board. |
| The back of the sheet is dirty<br>  | ● The transfer roller is contaminated.<br>● The fuser pressure roller is contaminated. | ● Clean or replace the transfer roller.<br>● Clean the fuser pressure roller or replace the fuser component. |
| Whole page is white<br> | ● Bad electricity elimination of the OPC.<br>● The laser is damaged.<br>● The transfer voltage is abnormal. | ● Clean the high-voltage contact or replace the engine baseplate. If the problem continues, replace the cartridge.<br>● Replace the laser.<br>● Replace the high voltage power board. |

Appendix 1 Circumference of Each Roller in This Device

| Name | Circumference (mm) |
|---|---|
| Transfer roller | 45.2 |
| Heating roller | 62.3 |
| Pressure roller | 75.4 |
| OPC (photosensitive drum) | 75.4 |
| Developing roller | 35.2 |
| Supply roller | 47.5 |
| Charge Roller | 37.7 |

The reason for relevant periodical image exception can be determined in accordance with the circumference of each roller above

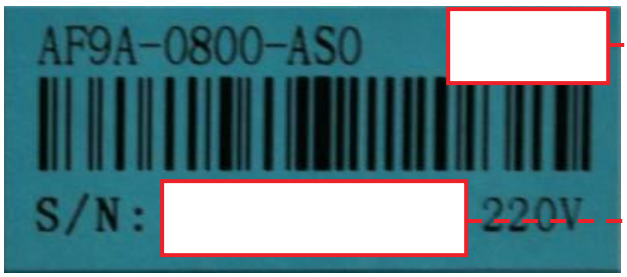
Appendix 2 Wiring Diagram



Appendix 3 Product Serial Numbers

There is a serial number label on each product. Please see below for the meaning of the product serial number and its location.

Meaning of the code:




Date of Manufacture

Product Serial No.

AF4 A 000001 7DC 01

Serial No. (6 numbers)

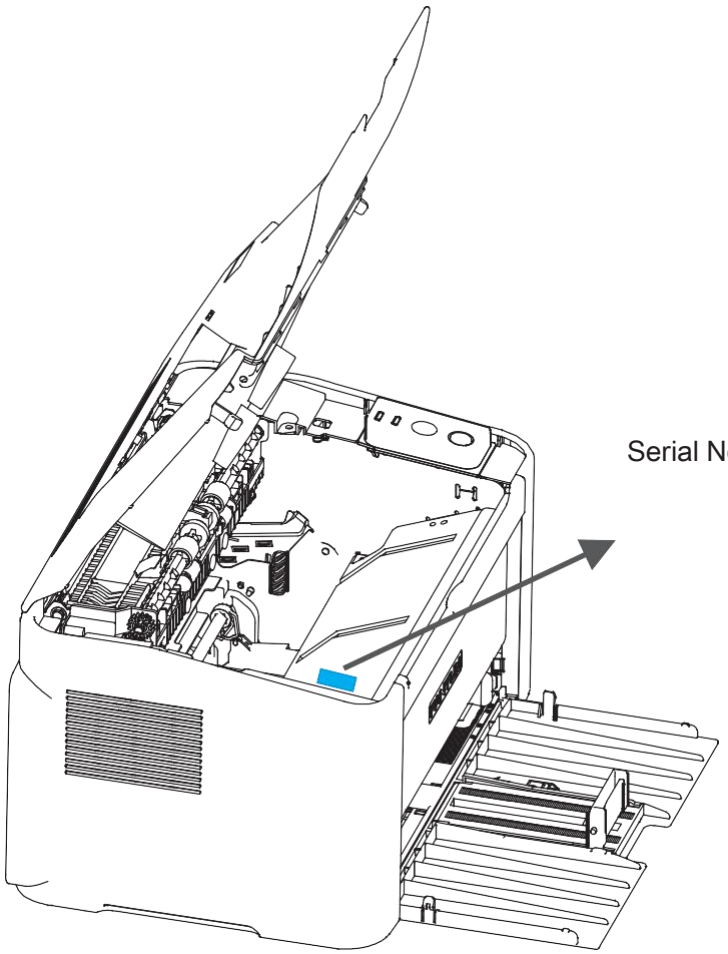
Product line No.

Device Model

Month, Written as (01~12)

Year, in hexadecimal

Label Location: inside the device



Serial No. Label

## Appendix 4 Terminology

The following table shows the terminology used in this manual.

| **Terminology** | **Explanation** |
|---|---|
| CFR | A type of safety standard for laser products |
| WIFI | Wireless network |
| AP | Wireless Access Point, a session or access bridge |
| WPS | WIFI Protected Setup |
| dpi | The number of dots per inch |
| PPM | Pages printed per minute |
| auto run | Run automatically |
| OPC | Photosensitive drum |
| PCR | Primary Charge Roller |
| Laser | Laser source |
| DR | Developing roller |
| TR | Transfer roller |
| PR | Pressure roller |
| LSU | Laser |
| FFC | Master board cable |