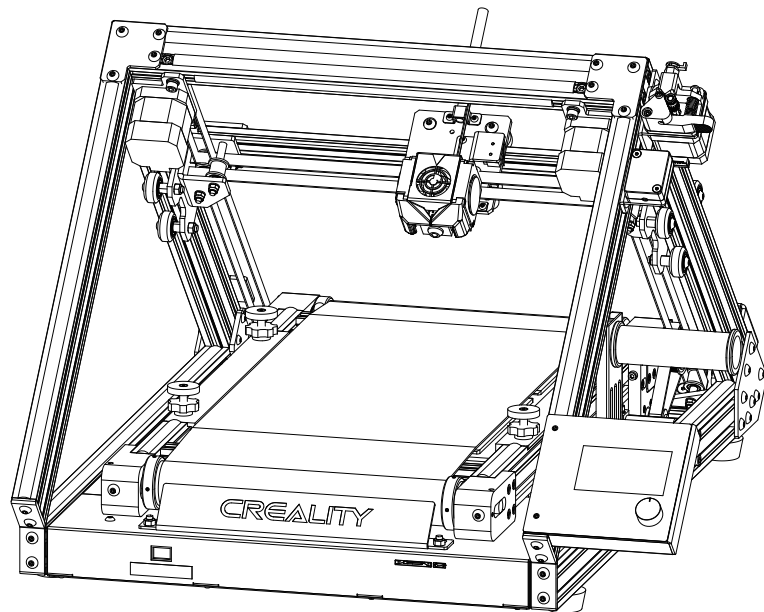# CREALITY

3DPrintMill

3D打印机使用说明书

3D Printer User Manual

V2.0

Content 目录

Dear Consumers,
Thank you for choosing our products. For the best experience, please read the instructions before operating the Printer. Our teams will always be ready to render you the best services. Please contact us via the phone number or e-mail address provided at the end when you encounter any problem with the Printer.
For a better experience in using our product, you can also learn how to use the Printer in the following ways:
View the accompanied instructions and videos in the storage card.
Visit our official website www.creality.com to find relevant software/hardware information, contactdetails and operation and maintenance instructions.

尊敬的创想三维用户：

感谢您选择、使用创想三维的产品。为了您使用方便，请您在使用之前仔细阅读该说明书，并严格按照说明书的指示进行操作。

创想三维团队时刻准备为您提供优质的服务。在使用过程中无论遇到什么问题，请按照说明书结尾所提供的电话、邮箱与我们进行联系。

为了您能够更好地体验我们的产品，您还可以从以下方式获取设备操作知识：

随机使用说明：你可以在存储卡内找到相关使用说明及视频。

创想三维官网：www.cxsw3d.com 您可以登陆创想三维官网寻找相关软硬件、联系方式、设备操作、设备保养等信息。

NOTES 使用须知

1.Do not use the printer any way other than described herein in order to avoid personal injury or property damage.

2.Do not place the printer near any heat source or flammable or explosive objects. We suggest placing it in a well-ventilated, low-dust environment.

3.Do not expose the printer to violent vibration or any unstable environment, as this may cause poor print quality.

4.Before using experimental or exotic filaments, we suggest using standard filaments such as ABS or PLA to calibrate and test the machine.

5.Do not use any other power cable except the one supplied. Always use a grounded three-prong power outlet.

6.Do not touch the nozzle or printing surface during operation as they may be hot. Keep hands away from machine while in use to avoid burns or personal injury.

7.Do not wear gloves or loose clothing when operating the printer. Such cloths may become tangled in the printers moving parts leading to burns, possible bodily injury, or printer damage.

8.When cleaning debris from the printer hotend, always use the provided tools. Do not touch the nozzle directly when heated. This can cause personal injury.

9.Clean the printer frequently. Always turn the power off when cleaning, and wipe with a dry cloth to remove dust, adhered printing plastics or any other material off the frame, guide rails, or wheels . Use glass cleaner or isopropyl alcohol to clean the print surface before every print for consistent results.

10.Children under 10 years of age should not use the printer without supervision.

11.This machine is equipped with a security protection mechanism. Do not manually move the nozzle and printing platform mechanism manually while booting up, otherwise the device will automatically power off for safety.

12.Users shall comply with related nation and region's laws, regulations and ethical codes where the equipment or produced prints by it is used, and users of our product shall not use aforesaid products to print any end-use products,objects,parts or components or any other physical prints that violate the national or regional laws, regulations and ethical codes where herein referred product and produced prints by it is located.

1、请勿尝试任何使用说明中没有描述的方法来使用本机,避免造成意外的人身伤害和财产损失;

2、请勿将本机放置在易燃易爆物品或高热源附近,请将本机放置在通风、阴凉、少尘的环境内;

3、请勿将打印机放置在振动较大或者其他不稳定的环境内,机器晃动会影响打印机打印质量;

4、建议使用厂家推荐耗材,以免造成挤出头堵塞和机器损坏;

5、请勿在安装过程中使用其他产品电源线代替,请使用本机附带的电源线,电源插头需接插在带有地线的三孔插座上;

6、请勿在打印机工作时接触喷嘴以及热床,以防止出现高温烫伤,造成人身伤害;

7、请勿在操作机器时佩带手套或缠绕物,以防可动部件对人身部件造成卷入挤压和切割伤害;

8、在打印完毕后及时利用喷头的余温借助工具将喷头上的耗材清理干净,清理时请勿直接用手触摸喷头,以防出现烫伤;

9、常做产品维护,定期在断电的情况下,用干布对打印机做机身清洁,拭去灰尘和粘结的打印材料、导轨上的异物;

10、年龄在10岁以下的儿童,请勿在没有人员监督的情况下使用本机,以免造成人身伤害;

11、本机设有安全保护机制,请勿在开机状态下手动快速移动喷头及打印平台机构,否则设备会自动断电关机保护;

12、使用者应遵守设备打印产品与设备所在地及相应国家及地区法律、法规,恪守职业道德,严禁使用我司产品打印有违设备打印产品与设备所在地及相应国家、地区法律禁止的任何产品或物件。

Introduction 设备简介
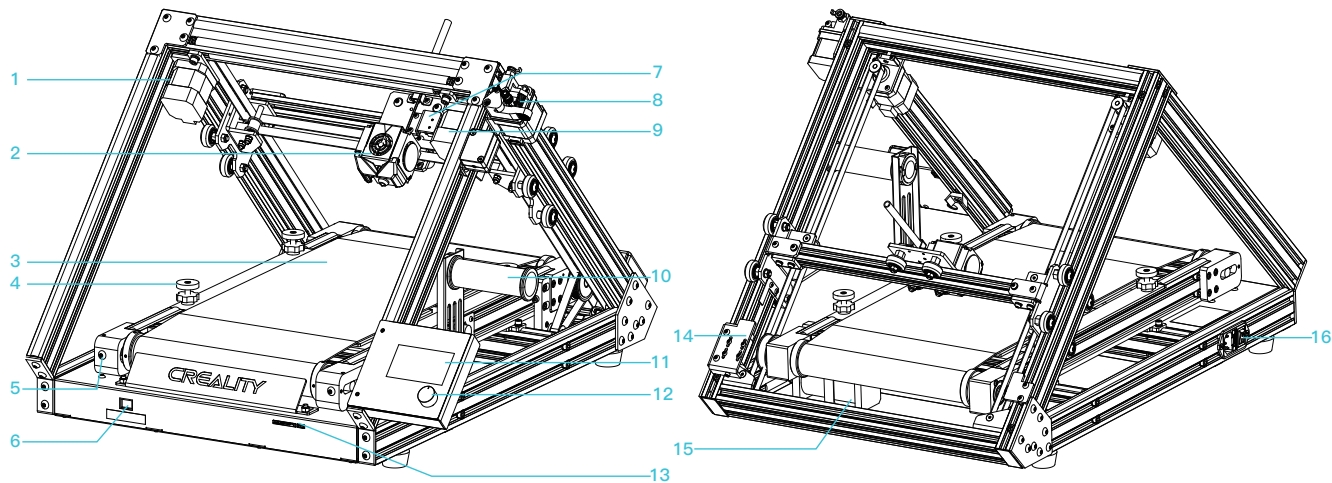
1 X motor X电机	**2** Nozzle kit 喷头套件	**3** Printing platform 打印平台	**4** Bed leveling nut 调平螺母
5 Belt tensioning screw 皮带张紧螺丝	**6** Manual power switch 手拨电源开关	**7** X axis limit switch X轴限位开关	**8** Extruder 挤出机
9 Y motor Y电机	**10** Material rack and material tube 料架及料管	**11** Knob screen 旋钮屏	**12** Knob 旋钮
13 Storage card slot and USB socket 存储卡槽及USB插口	**14** Y-axis limit adjustment component Y轴限位调节组件	**15** Z axis belt motor Z轴皮带电机	**16** Power cable connection 电源组合开关

Parameters 设备参数

| Basic Parameters 基本参数	
Model | 型号	3DPrintMill
Print size | 成型尺寸	无限长*200*170mm（长*宽*高） | Infinite length*200*170mm (length*width*height)
Molding technology | 成型技术	FDM
Number of nozzle | 喷头数量	1
Layer thickness | 打印层厚	0.1mm-0.4mm
Nozzle diameter | 喷嘴直径	Standard | 标配 0.4mm
XY axis precision | 精度	±0.1mm
Filament | 打印材料	PLA/TPU/PETG
File format | 支持格式	STL/OBJ/AMF
File transfer | 打印方式	Storage card |存储卡脱机打印
Compatible slicing software | 可兼容切片软件	CrealityBelt
Power specification | 电源规格	Input | 输入：100-120/200-240V 50/60Hz Output | 输出：24V/14.6A
Total power | 总功率	350W
Hotbed temperature | 热床温度	0-100℃
Nozzle temperature | 喷嘴温度	0-240℃
Resume printing function | 断电续打	Yes | 有
Filament sensor | 断料检测	Yes | 有
Dual z-axis screws | 双Z轴丝杆	No | 不支持
Language switch | 语言切换	English | 中文
Computer operating system| 电脑操作系统	Windows XP/Vista/7/10
Print speed | 打印速度	≤180mm/s, 30-60mm/s normally | ≤180mm/s,正常为30-60mm/s

Parts List 零部件清单
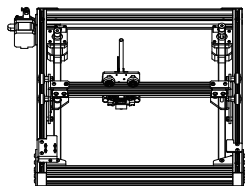
1 X/Y axis belt assembly x 1
X/Y轴皮带组件
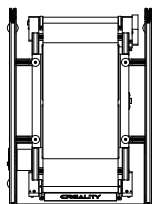
2 Bottom belt assembly x 1
底部皮带组件
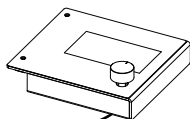
3 Display kit x 1
显示屏组件

4 Spool holder 料架 x 1

5 Filament 耗材 x 1

6 Profile bracket 1 x 1
型材支架1

7 Profile bracket 2 x 1
型材支架2

✂ Accessory tool list 配件工具清单

8 Storage card and card reader x 1
存储卡和读卡器

9 Diagonal pliers x 1
剪钳

10 Cable tie x 10
扎带

11 Needle x 1
通针

12 Blue line claw x 2
蓝色线夹

13 Pneumatic connector x 2
气动接头

14 Power cord x 1
电源线

15 Wrenches and screwdrivers x 1
扳手和螺丝刀

16 M5T nuts x 6
M5 T型螺母

17 Photoelectric switch line x 1
光电开关线

18 Hexagon socket flat round head screw M5X8 x 6
内六角平圆头螺钉M5X8

19 Hexagon socket flat round head screw M5X12 x 6
内六角平圆头螺钉M5X12

20 Hexagon socket flat round head screw M5X18 x 10
内六角平圆头螺钉M5X18

21 Hexagon socket head spring washer combination screw M5X45 x4
内六角圆柱头弹垫组合螺钉M5X45

22 Hexagon socket head spring washer combination screw M5X12 x 4
内六角圆柱头弹垫组合螺钉M5X12

23 Teflon tube x 1
铁氟龙管

24 Nozzles x 2
喷嘴

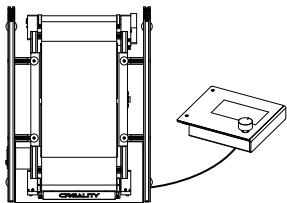**25** Socket wrench x 1
套筒扳手

26 Feeler x 1
塞尺

*Tips: the above accessories are for reference only, please refer to the physical accessories! 注意：以上配件仅供参考，请以实物为准！
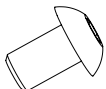
1 Install the Profile Support Frame
安装型材支撑架

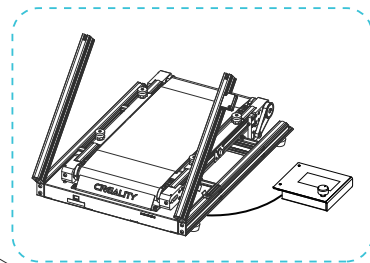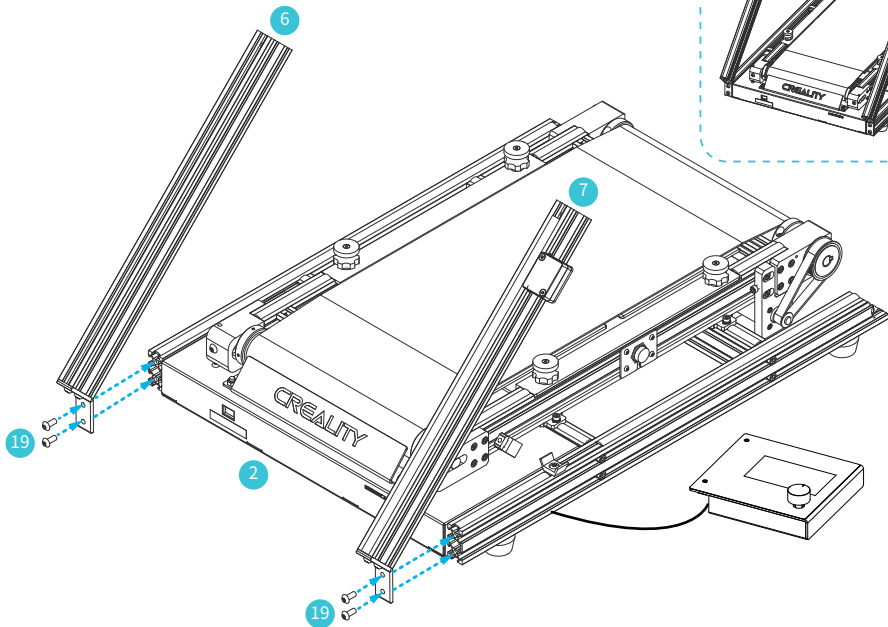
② Bottom belt assembly x 1
底部皮带组件

⑥ Profile bracket 1 x 1
型材支架1

⑦ Profile bracket 2 x 1
型材支架2

⑲ Hexagon socket flat round
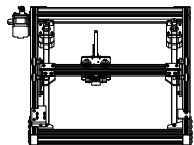head screw M5X12 x 4
内六角平圆头螺钉M5X12

Step: Install the profile support 1 and profile support 2 to the bottom of machine with four hexagon flat head screws M5x12 (As shown in the figure above).

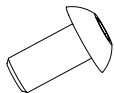步骤：用4颗内六角平圆头螺钉M5X12将型材支撑架1和型材支撑架2安装到底部组件上（如上图）。
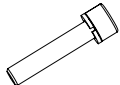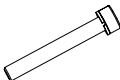
2 Install X/Y Axis Belt Assembly
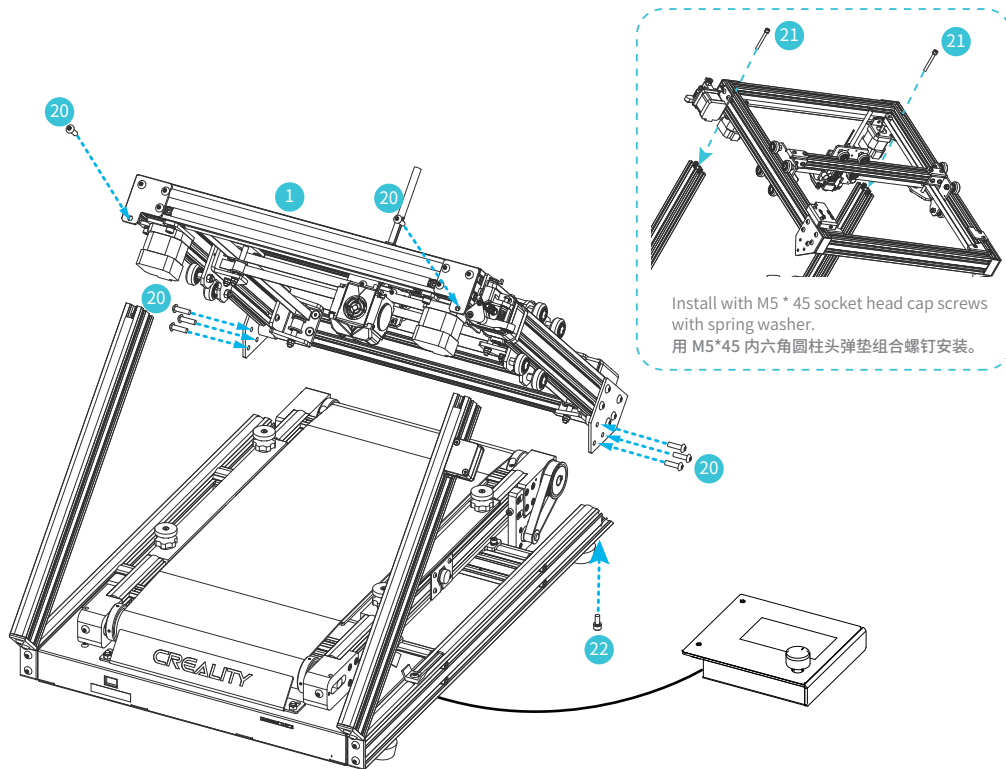
安装X/Y轴皮带组件

① X/Y axis belt assembly x 1
X/Y轴皮带组件

⑳ Hexagon socket flat round head
screw M5X18 x 8
内六角平圆头螺钉M5X18

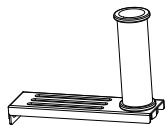㉒ Hexagon socket head spring
washer combination screw M5X12 x 2
内六角圆柱头弹垫组合螺钉M5X12

㉑ Hexagon socket head spring washer
combination screw M5X45 x2
内六角圆柱头弹垫组合螺钉 M5X45

Install with M5 * 45 socket head cap screws
with spring washer.
用 M5*45 内六角圆柱头弹垫组合螺钉安装。

3 Install the Spool Holder
安装料架

4 Spool holder料架 x 1

16 M5T nuts M5 T型螺母 x 2
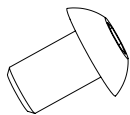
18 Hexagon socket flat round head screw M5X8 x 2
内六角平圆头螺钉M5X8

4 Install the Display
安装显示屏
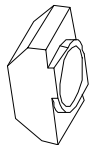
16 M5T nuts M5 T型螺母 x 2
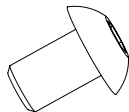
18 Hexagon socket flat round head screw M5X8 x 2
内六角平圆头螺钉M5X8
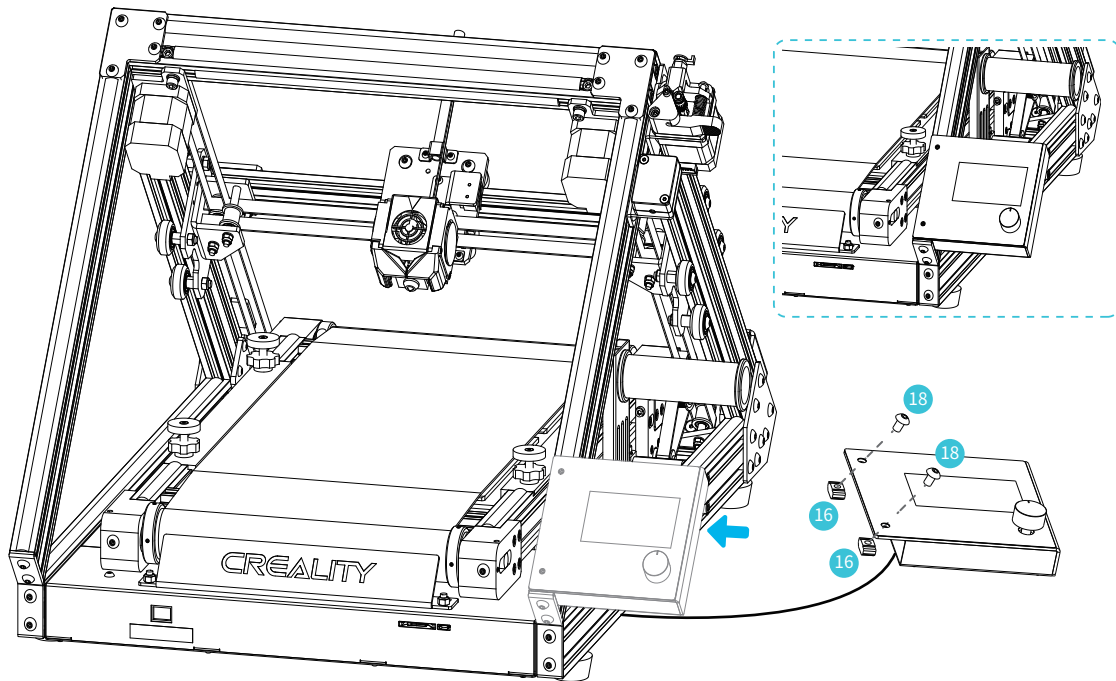
Step: Lock the display assembly with two M5X8 flat head screws and two M5 T-nuts, as shown in the figure above;
步骤：用2颗M5x8的平圆头螺丝跟2颗M5 T型螺母将显示屏组件锁住，如上图示；

5 Cable Connection
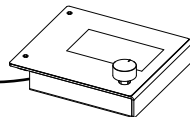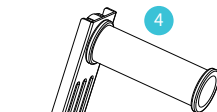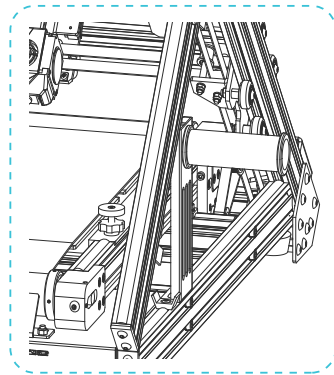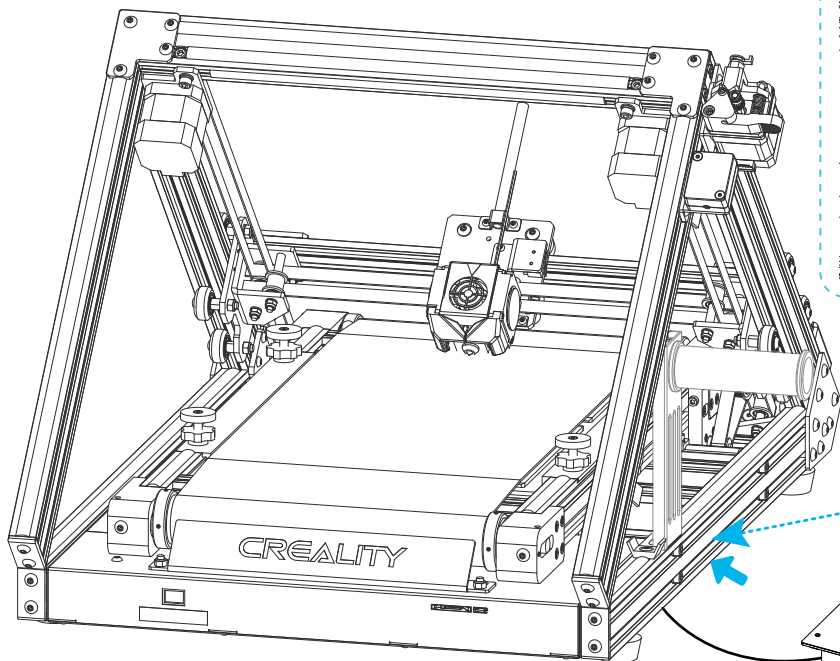设备接线

14 Power cord x 1
电源线
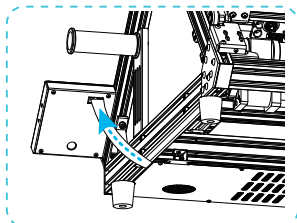
After the display is installed, please connect the display cable.
显示屏安装完成后，请将显示屏连接好。
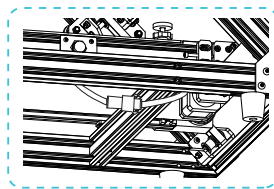
Connect the Y-axis limit line.
连接Y轴限位线。
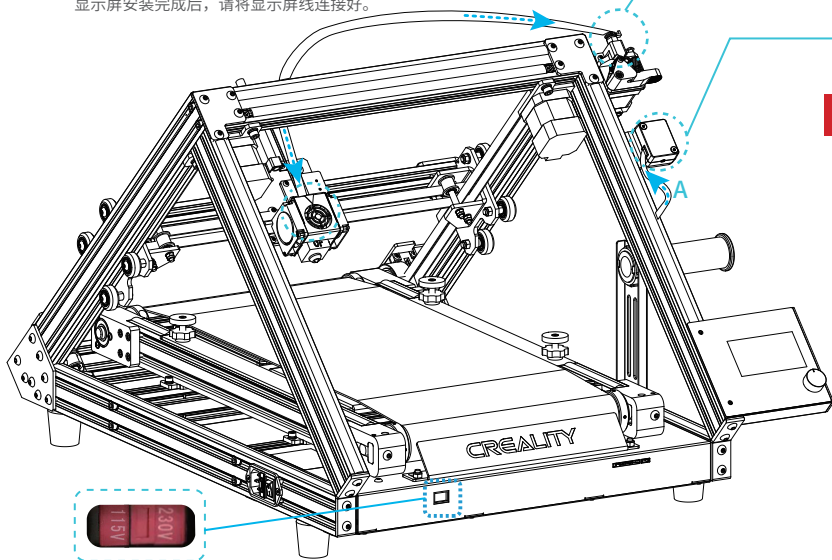
Insert the Teflon tube into the pneumatic connector (also insert the blue wire clamp)
将铁氟龙管插入气动接头(同时插入蓝色线夹)

Connect the broken detection line as shown in Figure A . | 按图示A连接断料检测线。

A

⚠ Caution

● Select the correct input voltage match your local power. (115/230V)
● Damage can occur if voltage is set incorrectly.
● Connect the power cord to turn the power switch on.
● 选择正确的输入电压以匹配您的本地电源。(115/230V)
● 如果电压设置不正确，可能会造成损坏。
● 连接电源线打开电源开关。

Do not connect or disconnect the cables when the machine is powered on.
当机器通电时，请勿连接或断开连接线。

6 Leveling 调平

1.First move the X axis to the contact part between the nozzle and the belt (slightly press the nozzle onto the belt) . 2.Push the two limit switches against the X sliding block to lock the limit; 3. Press back on the screen to get the printer back to the origin; adjust the Y axis end-stop adjusting screw according to the position of the nozzle relative to the belt after back to the origin in order to make sure the nozzle contacting with the belt rightly; then tighten the Y axis end-stop screw, leveling finished; 4. if there is any seam or over contact between the nozzle and the belt, adjust the leveling nut slightly. ｜1.先把X轴移动到喷嘴与皮带接触位置(喷嘴微压皮带) 2.将两个限位开关顶着X滑动块锁紧。3.点击屏幕中的回原点，使得机器自动回原点，根据回原点后喷嘴与皮带的相对位置调节Y轴限位调节螺丝; 使得回原点后喷嘴正好与皮带接触，锁紧Y轴限位安装螺丝，调平完成。4.如果发现喷嘴与皮带有间隙或者接触过多，可微调调平螺母调节。
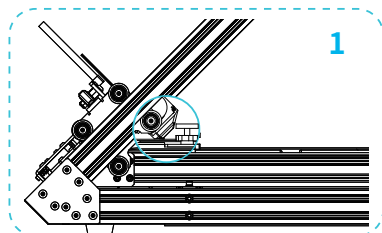
1
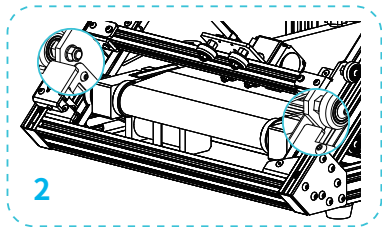
2
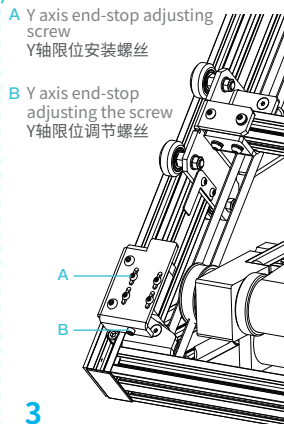
A Y axis end-stop adjusting screw
Y轴限位安装螺丝

B Y axis end-stop adjusting the screw
Y轴限位调节螺丝

A

B

3

4

The nozzle is too far away from the platform, so the consumables can not adhere to the platform.
喷嘴离平台太远,耗材无法粘附在平台上。

The even filament adheres right on the platform.
耗材挤出饱满均匀, 刚好贴在平台上。

The nozzle is too close to the platform, the consumables are not extruded enough, and the nozzle outlet is damaged.Causes a plug and scratches the belt.
喷嘴离平台太近,耗材挤出不足,喷嘴出口损伤,造成堵头,刮伤皮带。

7 Preheating
预热

Method 1
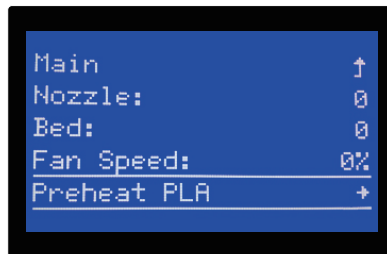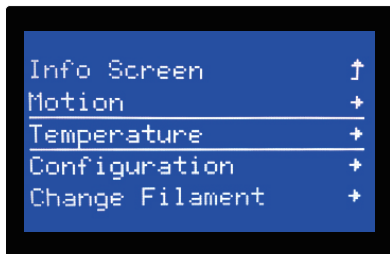

```
Info Screen        ↕
Motion             →
Temperature        →
Configuration      →
Change Filament    →
```



```
Main               ↕
Nozzle:            0
Bed:               0
Fan Speed:         0%
Preheat PLA        →
```

方法1


```
信息屏             ↕
运动               →
温度               →
配置               →
更换丝料           →
```



```
主菜单             ↕
喷嘴:              0
热床:              0
风扇速率:          0%
预热 PLA           →
```

Notes: The UI information is only for reference, the actual UI may be different.
注意：界面仅供参考，实际以UI为准。

12

Preheating

预热

Method 2

```
Info Screen        ↕
Motion             →
Temperature        →
Configuration      →
Change Filament    →
```

```
Main               ↕
Nozzle:            0
Bed:               0
Fan Speed:         0%
Preheat PLA        →
```

```
Nozzle:          200
```

方法2

```
信息屏             ↕
运动               →
温度               →
配置               →
更换丝料           →
```

```
主菜单             ↕
喷嘴:              0
热床:              0
风扇速率:          0%
预热 PLA           →
```

```
喷嘴:            200
```
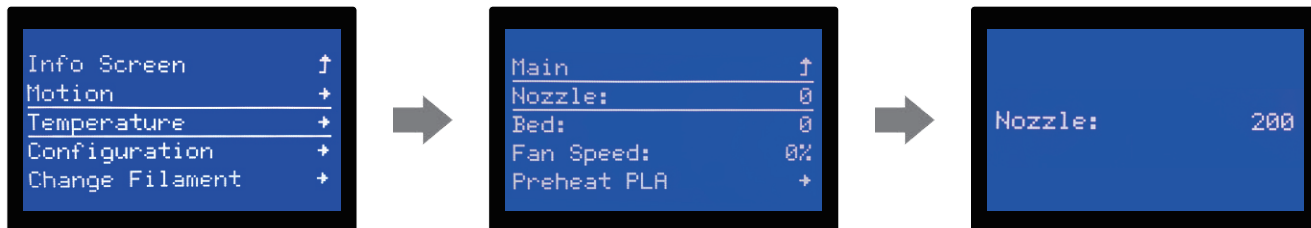
Notes: The UI information is only for reference, the actual UI may be different.
注意：界面仅供参考，实际以UI为准。

8

When you wait for the temperature to rise, hang the filament over the filament holder.

当您等待温度上升时, 把耗材挂在料架上。

45°
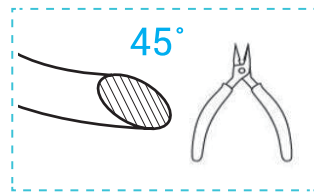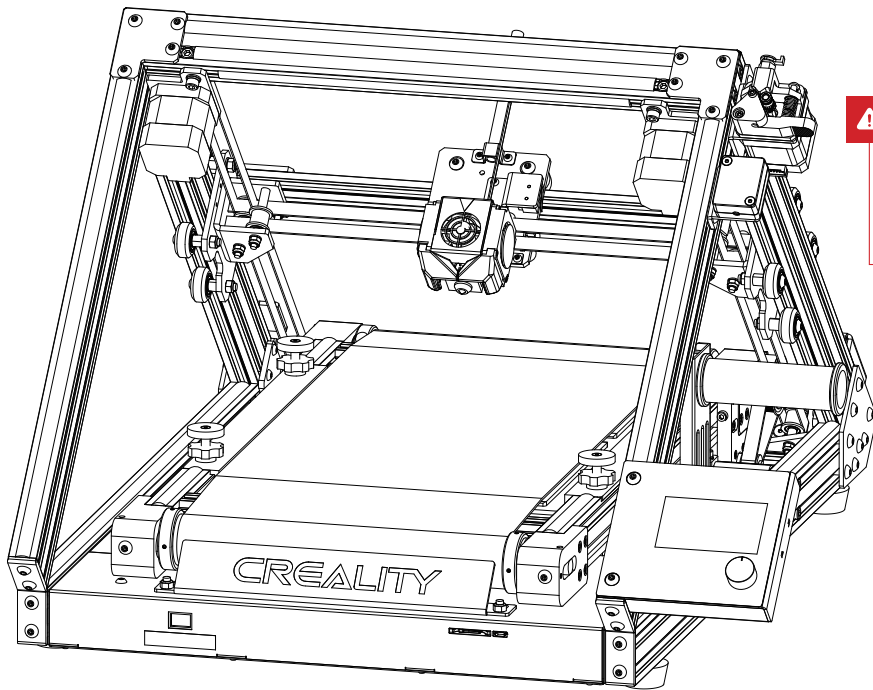
For smoother printing, the end of the filament should be placed as shown above.

为了顺利完成打印, 耗材的末端位置应如图所示。
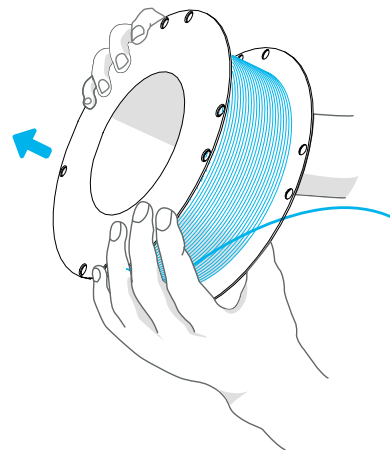
9 Load Filament 装料

When the current temperature reaches the target temperature, press and hold the spring of the extruder and insert the consumables into the charging detection hole one by one，then insert the consumables into the small hole of the extruder until the nozzle position. | 当前温度达到目标温度时,按住挤出机弹簧，将耗材依次插入装料检测孔，再将耗材插入挤出机小孔直至喷嘴位置。
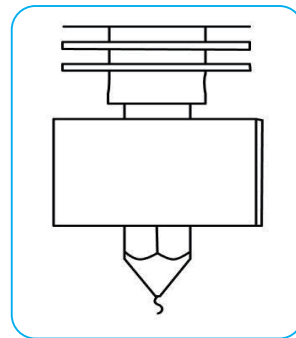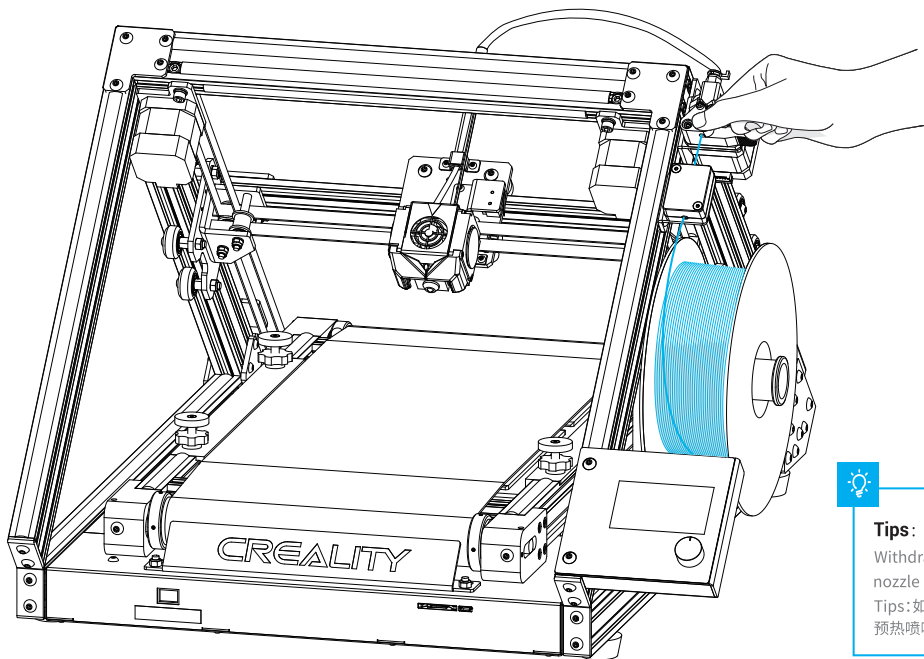
Tips： How to Replace the Filament?

Withdrawing the filament quickly and feeding the new faliment after nozzle preheated and filament pushed a little forward.

Tips:如何更换耗材?

预热喷嘴后,将耗材往前推进一下后,迅速抽出耗材,将新耗材送入。

10 Start Printing
开始打印
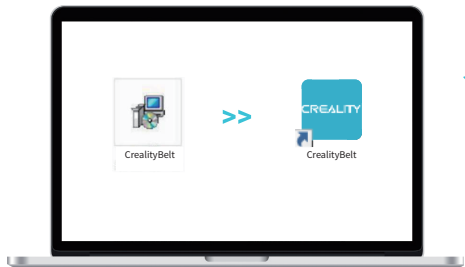
1. Double click to install the software. | 安装软件

2、Double click to open the software. | 打开软件

CrealityBelt >> CrealityBelt
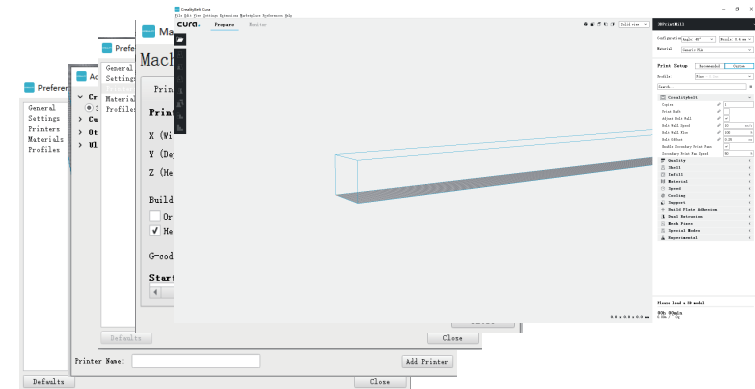
3. Select language→close→setting→add corresponding model→printer setting→close→customize→ confi guration→number of prints to complete the setting.
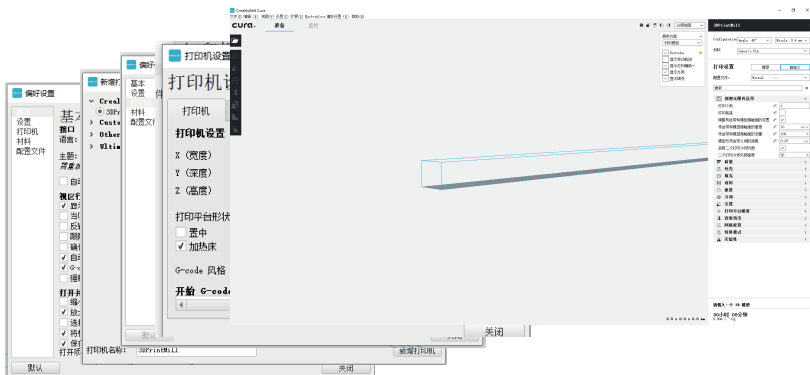
3.依次选择语言→关闭→设置→新增对应机型→打印机设置→关闭→自定义→Confi guration→打印个数, 完成设置。

10 Start Printing
开始打印
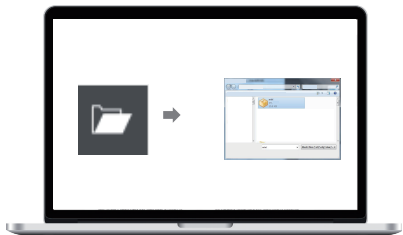
4. Open the file in turn → select the file.
依次打开文件→选择文件。
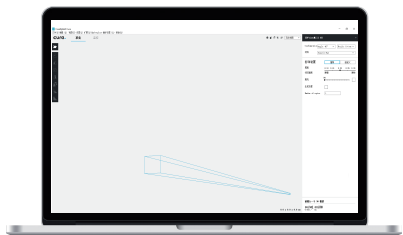
5.Generate G-code, and save the gcode file to storage card.
生成G代码→保存到存储卡。
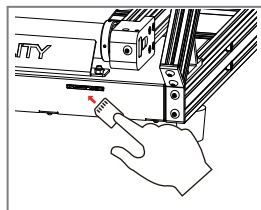
6.Insert the storage card→ print from card→select the file to be printed.
插入存储卡→从存储卡上打印→选择要打印的文件。

```
Configuration      →
Change Filament    →
Language           →
Release Card       →
Print from Card    →
```

>>

```
Main               ↕
QRefresh
45_04_PLA_20200804-0
45_04_Generic_jianzh
45_04_Generic_wofo.g
```

```
配置                →
更换丝料            →
Language           →
释放存储卡          →
从存储卡上打印      →
```

>>

```
主菜单              ↕
Q刷新
45_04_Generic_eyu2.g
45_04_Generic_dongwu
45_04_Generic_eyu.gc
```

⚠️ File names must be Latin letters or numbers, not Chinese characters or other special symbols.
文件名需为拉丁字母或数字，不能为汉字或其他特殊符号。

💡 Notes: For details on the software instructions, please refer to the slicing software manual in the storage card!
温馨提示：软件使用说明详情，请见存储卡内切片软件使用手册！

Circuit Wiring

电路接线

X-axis motor port
X轴电机接口

Y-axis motor port
Y轴电机接口

Z-axis motor port
Z轴电机接口

E-axis motor port
E轴电机接口

Storage card slot
存储卡卡槽

Micro USB port
Micro USB接口

Nozzle fan
喷头风扇

Motherboard fan
主板风扇

12864 screen
12864屏幕

Y axis limit
Y轴限位

Power input
电源输入

Hot bed wire port
热床线接口

Heating pipe interface
加热管接口

Controllable nozzle fan
喷头可控风扇

X axis limit switch
X轴限位开关

Hot bed thermal
热床热敏

Nozzle thermistor
喷头热敏

Broken material detection
断料检测

Trouble-Shooting

Workflow	Fault diagnosis	Fault cause	Fault handling	Result feedback

Workflow column:
- Start
- Play by memory card Seal
- Y/N
- Return "Home"
- Y/N
- Heat the hot bed
- Y/N
- Heat the nozzle
- Y/N
- Printing when filament-push
- Y/N
- Finish

Fault diagnosis:
- File identification or not
- Display error codes or not
- Other documents are printed normally or not
- Print or not
- Beyond "Home"
- Hot bed is heated or not
- The display of temp is normal or not
- The nozzle is heated or not
- The display of humidity is normal or not
- Dislocation or not
- Filament-push or not
- The E motor rotates or not
- The gear rotates or not
- The filament is normal or not

Fault cause:
- Storage-card
- File naming
- Slicer
- Shaft motor
- Limit switch
- Hot bed
- Thermistor
- Heating tube
- Thermistor
- Slicer\Synchronous belt
- Coupling
- Others
- Filament
- E motor

Fault handling:

Fault cause	Fault handling
Storage-card	1. Wipe Storage-card 2. Format Storage-card 3. Replace Storage-card
File naming	Change the file name to English and number format
Slicer	1. Move model position and slice again 2. Using repair software to repair the model
Shaft motor	1. Reconnect circuit 2. Check by substitution
Limit switch	1. Reconnect circuit 2. Check by substitution
Hot bed	1. Reconnect circuit
Thermistor	1. Reconnect circuit
Heating tube	1. Reconnect circuit
Thermistor	1. Reconnect circuit and lock the screws of thermistor
Slicer\Synchronous belt	1. Slice again 2. Adjusting the tension of synchronous belt
Coupling	1. Fasten the coupling
Others	
Filament	1. Remove surface defects of filaments 2. Replace the filament
E motor	1. Reconnect circuit 2. Check by substitution

Result feedback:
- Process result
- Problem solved
- Component damage, replace continuously
- Unknown malfunction, please contact the after-sales

故障检修

工作流程	故障诊断	故障原因	故障处理	结果反馈

工作流程：
开始 → 由存储卡打印 → 是／否 → 回零 → 是／否 → 热床加热 → 是／否 → 喷嘴加热 → 是／否 → 出丝打印 → 是／否 → 完成

故障诊断：
- 文件是否识别
- 是否运动
- 热床是否加热
- 喷嘴是否加热
- 是否出料
- E电机是否转动
- 是否乱码
- 越过零点
- 温度是否正常
- 温度显示是否正常
- 是否错位
- 挤出齿轮是否转动
- 其他文件是否打印正常
- 耗材是否正常

故障原因：
- 存储卡
- 文件名
- 切片
- 轴电机
- 限位开关
- 热床
- 热敏电阻
- 加热管
- 热敏电阻
- 切片/同步带
- 联轴器
- 其他
- 耗材
- E电机

故障处理：
- 存储卡：1.擦拭存储卡 2.格式化存储卡 3.更换存储卡
- 文件名：1.文件名修改为英文和数字格式
- 切片：1.移动模型位置并重新切片 2.使用修复软件修复模型
- 轴电机：1.检查电机、线路 2.用替换法检查
- 限位开关：1.检查限位开关、线路 2.用替换法检查
- 热床：1.检查线路
- 热敏电阻：1.检查线路
- 加热管：1.检查线路
- 热敏电阻：1.检查线路、松紧锁定热敏电阻螺钉
- 切片/同步带：1.重新切片 2.调整同步带松紧
- 联轴器：1.紧固联轴器
- 耗材：1.去除耗材表面瑕疵 2.更换耗材
- E电机：1.检查线路 2.用替换法检查

结果反馈：
处理结果 →
- 解决故障
- 部件损坏连续更换
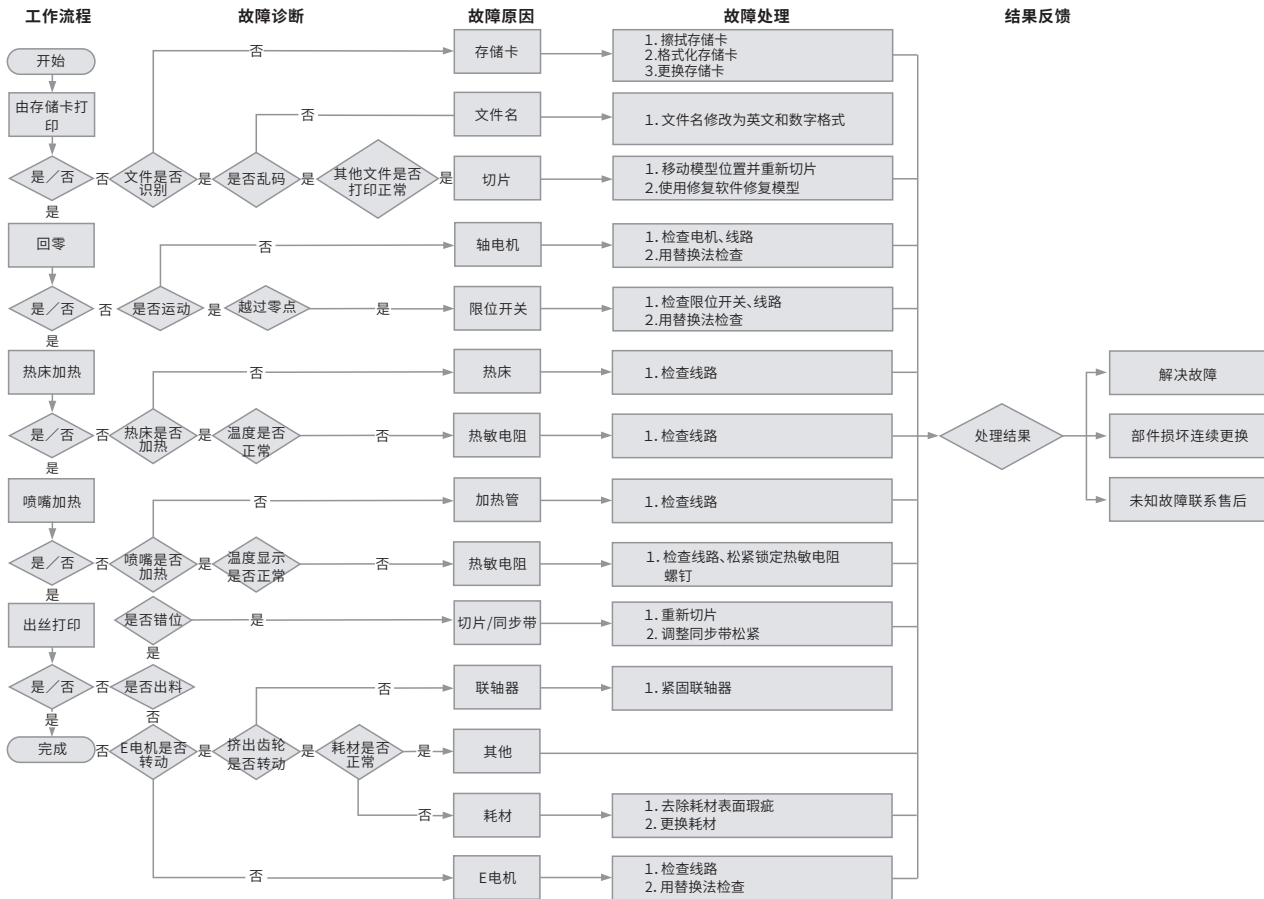- 未知故障联系售后

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