Common issues:

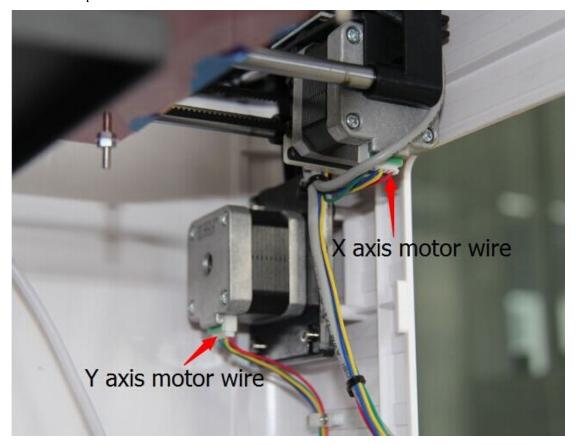
1. Problem: The extruder shakes left and right when printing

Reason: 1. The poor connection of X axis motor wire

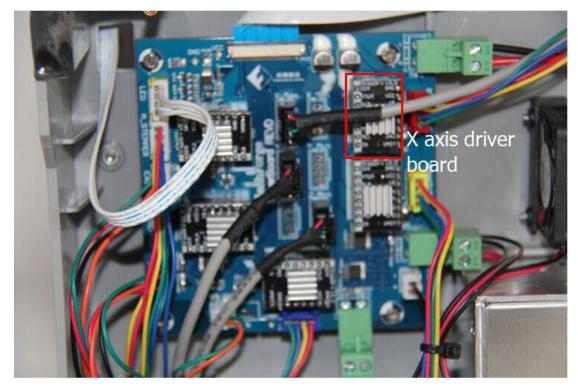
2. X axis driver board is broken

Solution:1.Reconnect the X axis motor wire, if still can not solve the problem, replace it with a new one

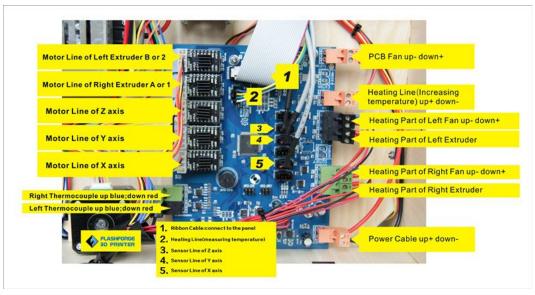
2.Replace the X axis driver board.



Re-plug the X axis motor wire



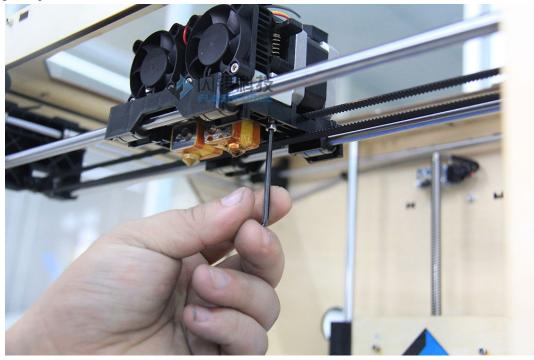
Replace X axis driver board with a new one (Driver Board of Dreamer)



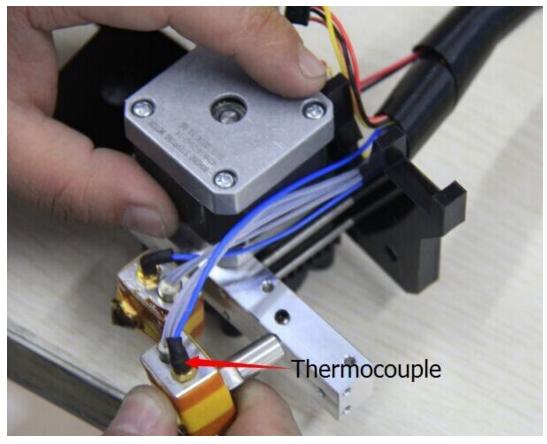
CoreBoard of Creator Pro

- 2. Problem: LCD shows the nozzle temperature is NA or the temperature keeps falling down during heating
- Reason:1. The thermocouple is damaged, or it does not connect well, or in wrong wire sequence (Dreamer seldom or never has this problem)
 - 2. The chip on CoreBoard is burned
- Solution: 1. "shows NA", please re-plug the thermocouple, if still can not solve this problem, replace with a new thermocouple;
 - 2. "Temperature keeps falling down during heating", please check if all cables are in

right sequence



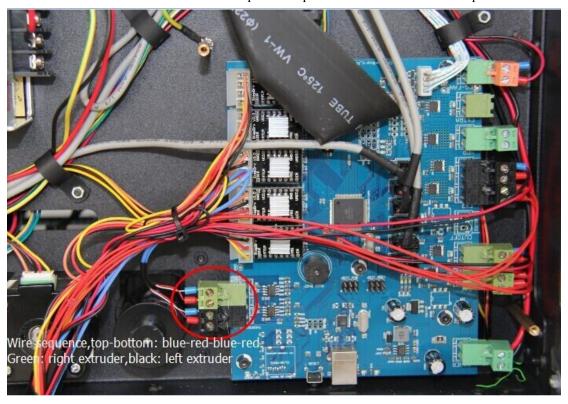
Unscrew the screw that fixed aluminum block



Unscrew the screw that fixed tube



Remove the thermocouple and replace it with a new thermocouple



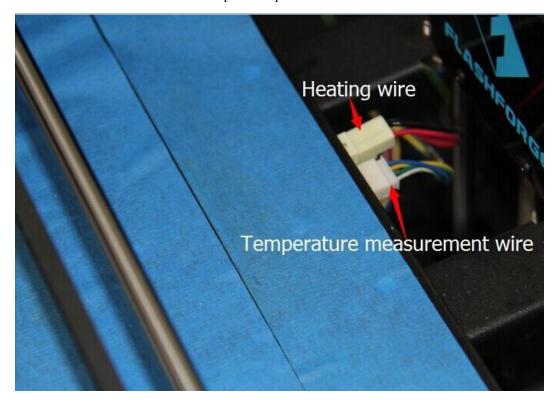
Wire Sequence of thermocouple

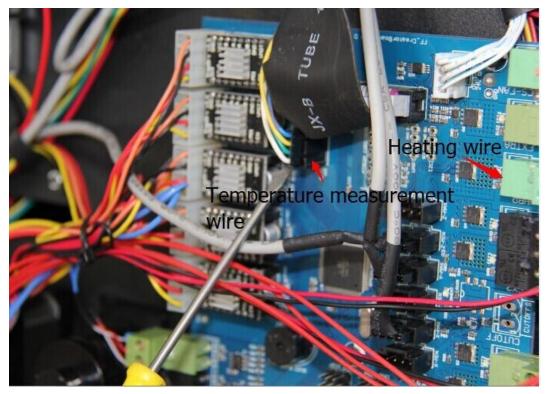
- 3. Problem: LCD/Touch screen shows the temperature of heating plate is NA (Creator, Creator Pro), 160 (Dreamer)
- Reason: 1. There is something wrong with cable connection of the heating plate.
 - 2. There is something wrong with the heating plate's thermistor.

3. The chip on CoreBoard is burned.

Solution: 1. Check the cable connection and reconnect, if still can not solve, then change the cables

- 2. Send the heating plate back to repair or replace with a new one.
- 3.Send the CoreBoard to repair or replace with a new one





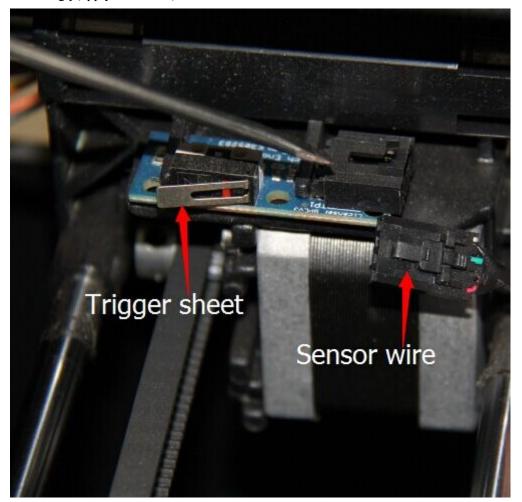
4. Problem: Extruder moves towards right and do not stop while printing

Reason: 1.Sensor wire on X axis is in poor connection or breakdown

- 2. Trigger sheet on X axis sensor board dropped or sensor board breakdown
- 3.X axis rod guide and Y axis rod guide are not vertical so extruder can't reach trigger of sensor board on Y axis when moves towards right

Solution: 1.Reconnect sensor wire or replace with a new one

- 2. Use a new sensor board
- 3. Check if X axis rod guide and Y axis rod guide are vertical or not, if not, adjust accordingly(apply to Creator)



Trigger sheet and sensor wire of x axis





Steps to make x axis to be vertical with y axis

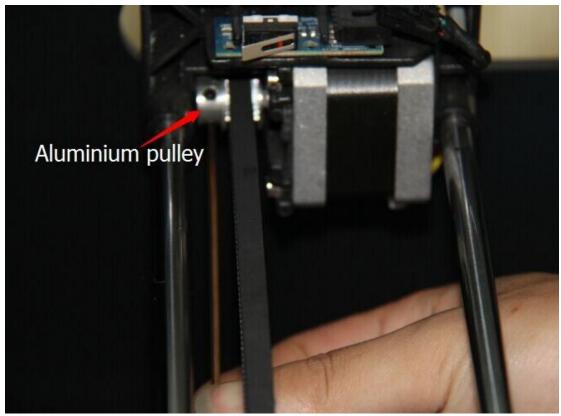
5. Extruder shift along X axis during printing

Reason: 1.Set screw on pulley loose

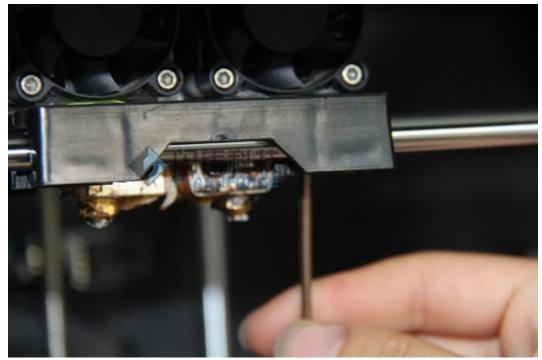
- 2. Timing belt loose
- 3. Motor wire is in bad contact or breakdown
- 4.Driver board breakdown(1 and 2 is for gradual shift, 3 and 4 is for stepped shift and accompany with abnormal sound)

Solution: 1.Fasten the set screw

- 2. Fasten the timing belt
- 3. Reconnect motor wire or use a new one
- 4. Replace with a new driver board



Fasten the set screw



Unscrew the screw on aluminum block



Remove extruder set and fasten timing belt

6. Problem: The motor works regularly, while filament comes out in snatches, or the motor works regularly, but no filament comes out from extruder. The filament can not be loaded in or extruded.

Reason: 1.Using the non-original filament; the filament has impurities, or bubbles.

- 2. The diameter of filament is large, stuck in the teflon tube.
- 3. When the user pulls filament out of the extruder after finishing printing or change

the filament, a portion of the filament is break in teflon tube.

4. When reload the filaments, it is loaded directly before cutting off the former melt and drawing part.

Solution: 1. Disassemble the extruder, and unclog teflon tube. And check whether the drive gear is the new version; if it is not, replace it with the new one. (Note: Serial number after 409006000 had an upgrade drive gear installed, it is recommended for printer shipped before the date to replace the drive gear to the new version.)

2. If the teflon tube is deformed, it needs to be replaced.

 $\underline{https://www.youtube.com/watch?v=gzSF9ptOhYc}$





New driver gear

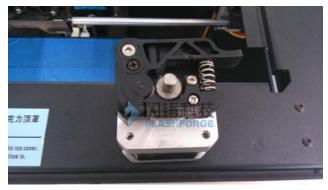
Old driver gear

7. Problem: Driver gear wore out

Reason: 1. Misoperation, load or unload filament violently

2. Beyond life

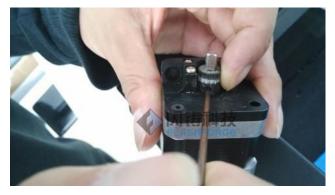
Solution: Replace with a new driver gear.



Remove the motor



Unscrew the screw



Unscrew the set screw



Remove and replace the driver gear

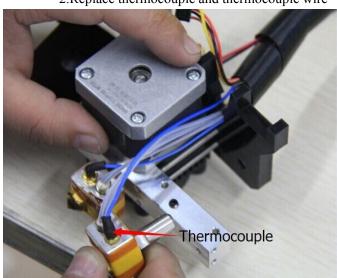
8. Problem: Waves on the surface of model

Reason: 1.Z axis rod guide do not work well with bearing, or Z axis lead screw do not work well with copper bolt

2. Wrong temperature measured by thermocouple

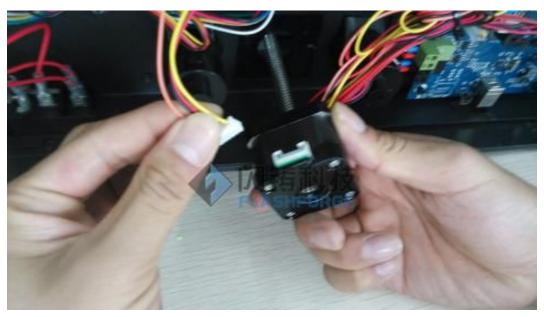
Solution: 1.Replace Z axis motor assembly.

2.Replace thermocouple and thermocouple wire





Unscrew the fixed screw of Z axis motor



Pull off Z axis motor wire



Anticlockwise rotate the motor



Replace with a new motor

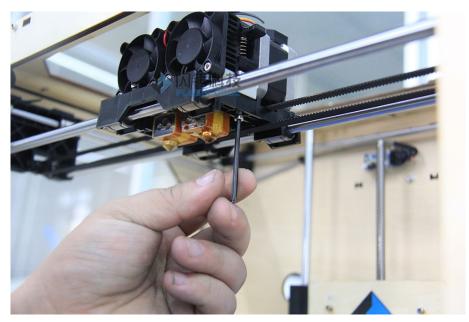
9. Problem: Target temperature is 220 degree, actually can only heat to 180 or other temperature (lower than 220 degree)

Reason: 1.Heat cartridge damaged.

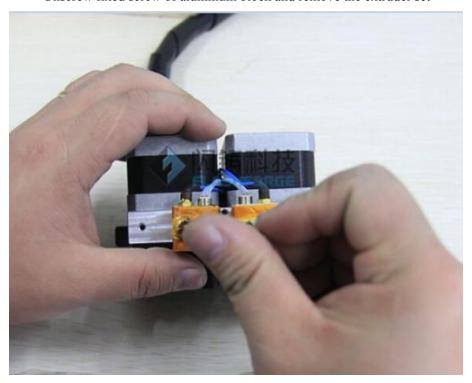
- 2. Thermocouple damaged.
- 3. Power output voltage too low.

Solution: 1.Replace heat cartridge.

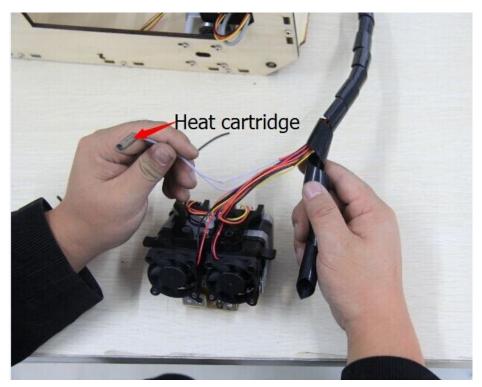
- 2. Replace thermocouple.
- 3. Check power output voltage is 24V or not. If not, please contact sales to help you solve the problem.



Unscrew fixed screw of aluminum block and remove the extruder set



Rotate the set screw of the heat cartridge



Replace a new heat cartridge

10. Problem: Printing model does not match object (e.g.: square->rhombus, round->ellipse) Reason: X axis rod guide is not vertical to Y axis rod guide caused by shipping impact Solution: Adjust X Y axis rod guide

11. Problem: The fan does not work

Reason: 1.Wire cut off.

2.Fan cable looses connection with its connector..

3. The fan gets stuck by object.

4. Wrong wire sequence.

Solution: 1. Replace the fan 2.Reconnect the cable 3.Remove unidentified object 4.Adjust the wire sequence, if not work, replace with a new fan

12. Problem: Filament extruding fails, motor is hot and does not work

Reason: 1.Environment temperature of extruder is too high that filament wraps around the gears 2.

Filament extruding is not fluent, and cause the filament wrapping.

Solution: Clean the drive gear

13. Problem: The extruder fails to stop at the correct position

Reason: The poor connection of sensor wire.

Solution: Loose the ribbon, if it doesn't work, then replace the motor wire or sensor wire. (There was update on connecting the sensor wire and motor wire ,please connect them with the latest way.)

14. Problem: Burning smell and white smoke with light explosive sound occur when the printer is

turned on

Reason: Input voltage varies according to different areas. Wrong input voltage is selected, and burnt the power supply.

Solution: Replace power supply.



Loosen all wires connect power supply



Tightening screws on the power supply (the screws are highlighted in red on the picture)



Replace with the new power supply

15. Problem: There is a noise while Z axis' working

Reason: 1.The Z axis lead screw is crooked

2. One bearings of Z axis rod guide is loose and the other one is too tight

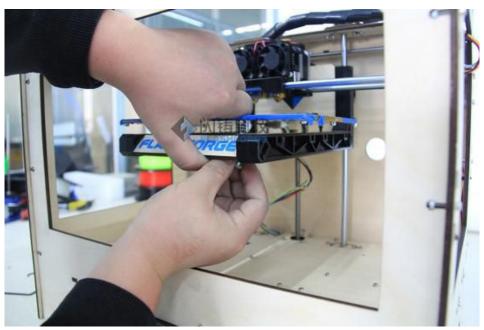
Solution: 1.Replace the motor

2. Replace the bearings

16. Problem: The screen shows the abnormal, higher temperature.

Reason: There is something wrong with the heating plate or mother board

Solution: Send back the heating plate or mother board for maintenance or replace it



Unscrew the 4 screws under the heating plate



Pull out the heating plate wire port



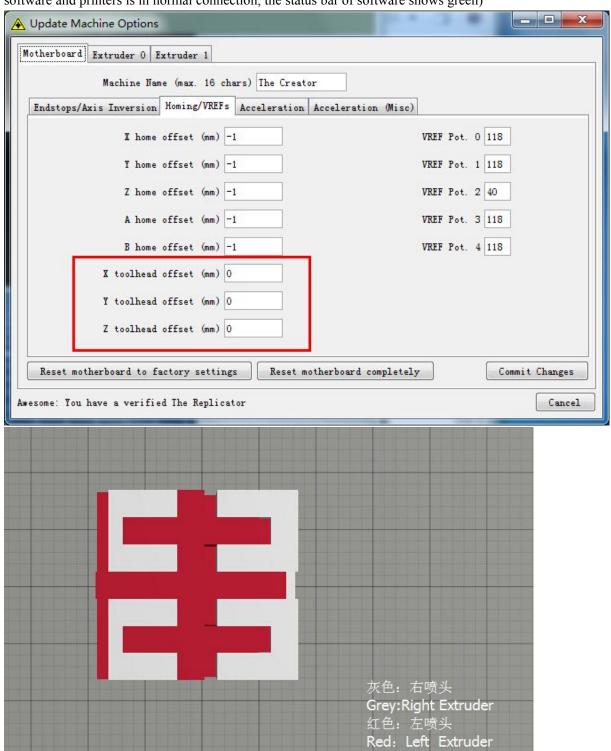
Replace the new heating plate

17. Problem: The printing model is uneven, there are small pits on it

Reason: Nozzle or driver gear clogged Solution: Clean the nozzle and driver gear

18. Problem: There is a model shift happened while printing the two-color model Reason: There is something wrong with the core board setting Solution: The right extruder should be as the criterion, 1) Measure how much shift the model suffers (say the value is 0.5mm), 2) Revise the shift data (if shift to the left, + the value, say + 0.5mm, if shift to right, - the value, say -0.5mm) in the software core board parameter (when the

software and printers is in normal connection, the status bar of software shows green)



Creator Series Problem:

19. Problem: When installing the software and driver for Creator Series printers, get a hint that system can't find the specified files MightyBoard,S3G via Serial, how to solve it? Please check details on our official website:www.ff3dp.com

20. Problem: Interrupt during printing

Reason: 1.Printing via USB cable, shaking during printing, or computer standby cause data transfer interrupt.

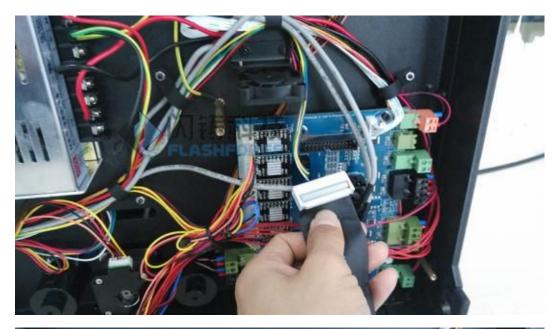
2.Printing via SD card and interrupt during printing, caused by poor connection of flat cable

Solution: 1. You can print small models via USB cable; It is more stable to print large models via SD card.

2.Re-connect the flat cable or replace with a new one.









21. Problem: The LED shows OVER HEAT

Reason: The extruder appeared over heating issue before.

Solution: Replace a new mother board or send it back to Flashforge to maintenance.

22. Problem: Sailfish firmware. When start to print, it run to the printing start position, then return to mechanical origin point again. The temperature shows the current temperature and did not show the target temperature.

Reason: The p-stop setting is not correct in settings

Solution: Setting the Utilities-General Settings-P-Stop ON/OFF to OFF on printer

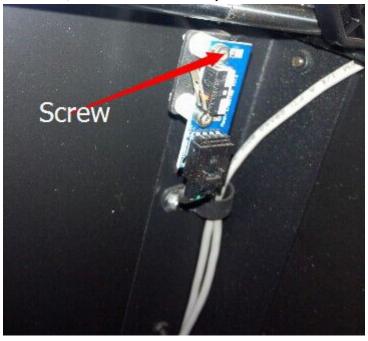




23. Problem: The file was generated by Makerware on Creator, the first filament extruded out at horizontal direction on the heat plate lays 1cm closer to the center.

Reason: The screw that fixed Y axis sensor board was loose, assemble a little inclined towards inner space or damage during shipping

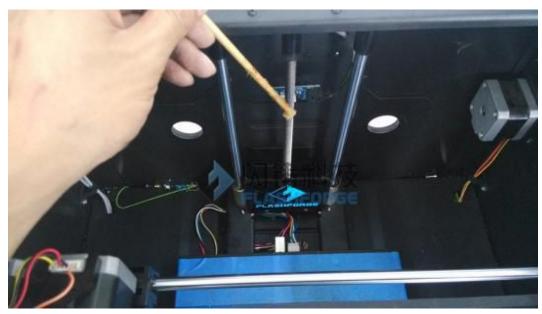
Solution: Tighten the screws, calibrate it to the normal position.



24. Problem: Heat plate can not rise to the printing position lead to print failed.

Reason: Too much resistance while Z axis is rising

Solution: Clean the lead screw of Z axis, and add lubricating oil.





Unscrew the screws



Unplug out the flat cable



Replace with a new button panel

25. Problem: LCD screen shows SD card read error

Reason: Button panel is broken or use the wrong SD card (4G)

Solution: Replace the button panel or try with 2G SD card(some firmware can only read 2G SD

card)

26. Problem: For dual-extruder printer, only one extruder is available on touch screen

Reason: The setting for extruder number of CoreBoard is 1 Solution: Change the extruder number of CoreBoard into 2









27. Dual extruders printing with right extruder, not print in the middle position Reason: The nozzle quantity set 1 in the CoreBoard setting.

Solution: Set the nozzle quantity into 2 in the CoreBoard setting



Dreamer issues:

28. Problem: Touch screen cannot light up, but with a welcome music

Reason: 1.Flat cable looses or is damaged.

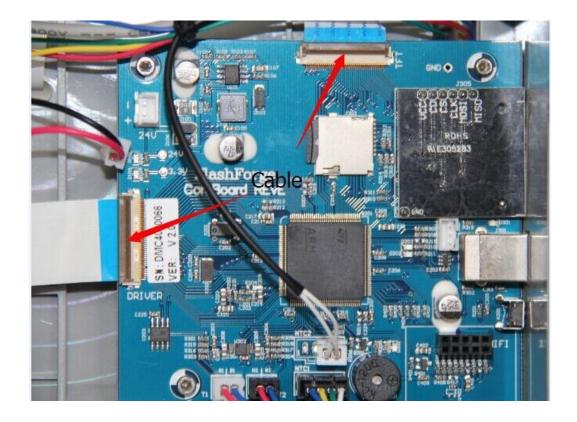
2. Touch screen is damaged.

3. Coreboard is damaged.

Solution: 1.Check whether the flat cable is loose or damaged.

2. Replace a touch screen

3.Replace a core board



29. Problem: Touch screen do not light up and no welcome tone when switch on Reason: 1.The wire that connects CoreBoard and power supply do not connect well and caused no electricity runs through the CoreBoard

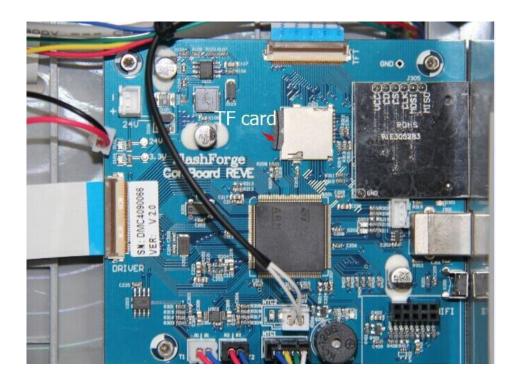
2.CoreBoard is broken.

Solution: 1.Check the light on power supply and CoreBoard is light on or not. If the light on power supply is on, while the light not on on the CoreBoard, please check the wire connects CoreBoard and power supply and reconnects the wire; If the light is not on, please check the fuse on power switch is burned or not.

2. If both the light on power supply and the CoreBoard is on, please replace the CoreBoard.

30. Problem: Dreamer LCD screen flipped vertically Reason: TF card is loose or no files in the TF card

Solution: Plug and unplug the TF card, or recopy the files into TF card



31. Problem: Button is not sensitive

Reason: The fastening screws on the back of the screen is too tight

Solution: Unscrew the fastening screws



Adjust the screw high light in red circle

32. Problem: The size set 40*40*20mm, but X, Y axis of the printed model scale down 1mm-2mm, while no size change on Z axis

Reason: The setting of pulley number is wrong

Solution: Choose the pulley according to the actual situation



33. Problem: Screen shows crack and black line

Reason: Transportation impact or man-made, or the flat cable is loose.

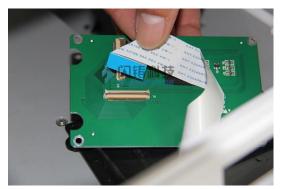
Solution: Replace the screen or reconnect the flat cable.



Unscrew the screw



Plug out the flat cable



Replace with a new touch screen



34. Printing with left extruder, not print in the middle position.

Reason: The problem of CoreBoard data settings

Solution: Factory reset.