Error code SG001

2.There is no action from carriage and screen shows SG001.
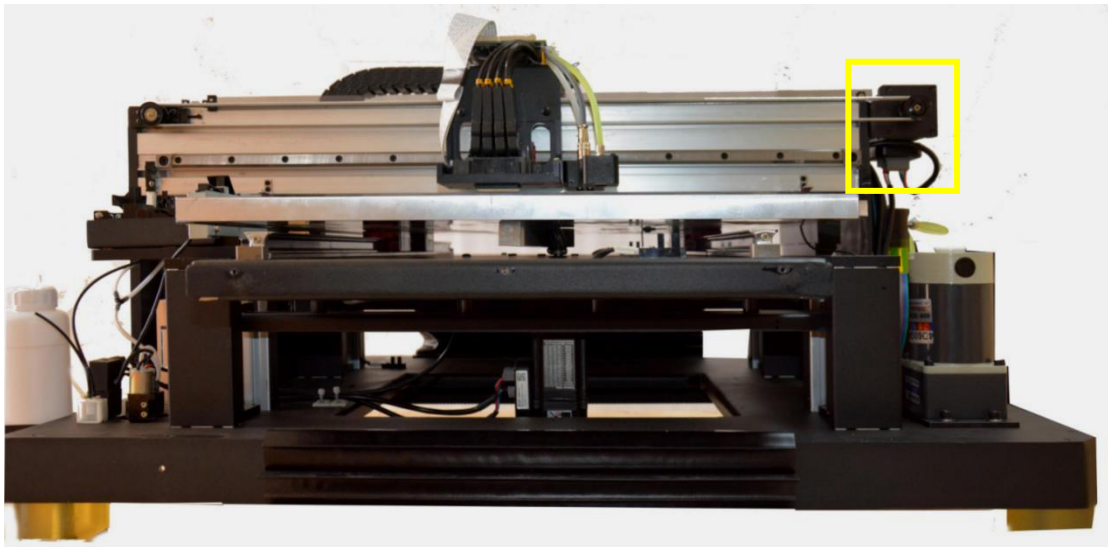**Reason:** The carriage motor(X motor) not get command from mainboard or fails.

Check with following steps:
2-1 Check the carriage motor(X motor) already with power. If carriage can be moved manually, it means the carriage motor not work normally. Next check the power indicator of carriage motor.
If power indicator is red: The carriage motor fails and need to replace.
If power indicator is off: There is no power to carriage motor. Check the power cable of carriage motor is connected.
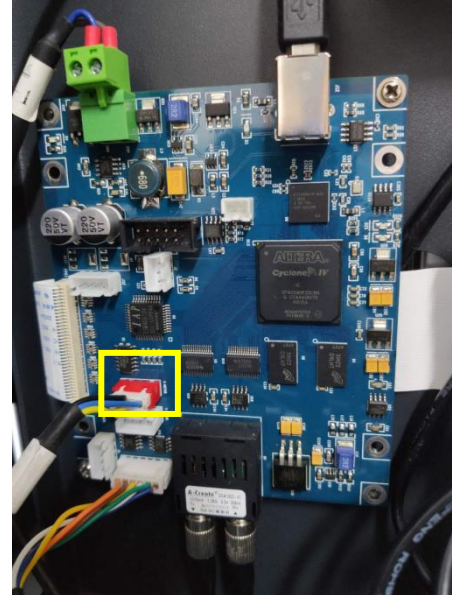

carriage motor

power indicator of carriage motor

2-2 If power indicator of carriage motor (X motor) is green and carriage can not be moved manually.
The data cable connection between mainboard and carriage motor fails.
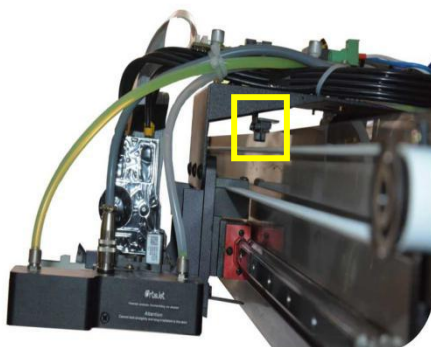Check the data cable connection.

Carriage motor port on mainboard

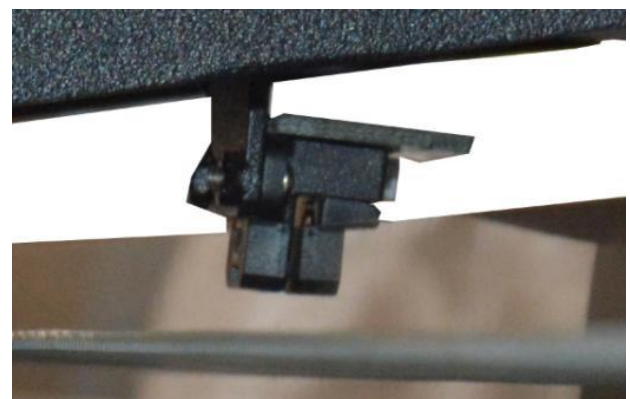3.The carriage moves 5-8cm to the right and screen shows SG001.
Reason:The encoder strip data not read normally.

Check with following steps:
3-1 Check the encoder strip get thorough encoder strip sensor. Or encoder strip out of encoder strip sensor.
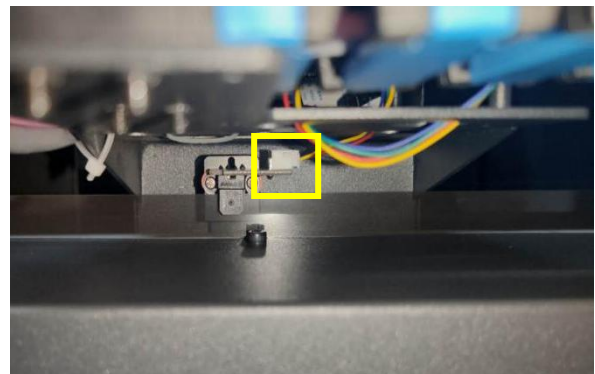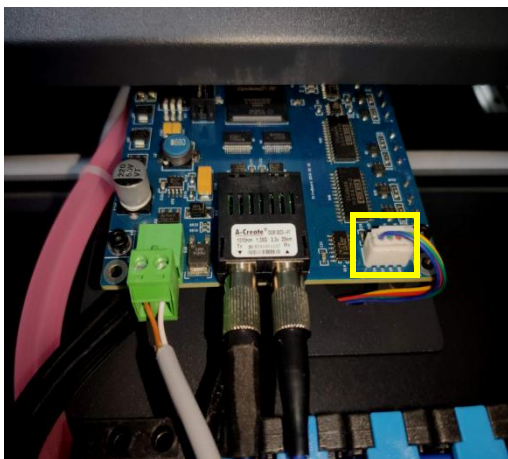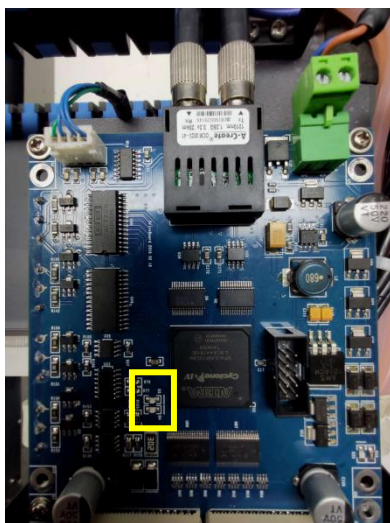

encoder strip sensor

3-2 Check the power indicator of head board is on.

3-3 Check the indicator of encoder strip on head board is flashing when carriage moves to right.
If flash, it means the encoder strip and encoder strip sensor can work normally.
If without flash, check the cable connection between head board and encoder strip sensor is good. Or encoder strip sensor damaged and replace.

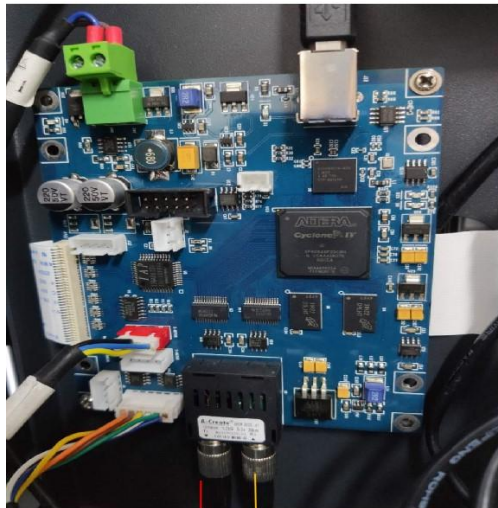cable connection between head board and encoder strip sensor.

indicator of encoder strip on head board

3-4 Check the signal of optical fiber cables between mainboard and head board. Check the indicator of encoder strip on mainboard is flashing when carriage moves to right.
If without flash, check the optical fiber cables connection between mainboard and headboard.
Or switch the optical fiber cables order at end of mainboard and head board to see the cables good or damaged.

Mainboard   Headbaord

TX

RX

RX

TX

Mainboard: TX--> Headbarod: RX
Mainboard: RX-->Headbaord: TX