## WHAT SHOULD I DO IF THE LASER CUTTING MACHINE DOES NOT EMIT LIGHT?

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During the use of the <u>fiber laser cutting machine</u>, occasionally the laser cutting machine does not emit light. When this kind of failure occurs, the machine must be checked first, and the following steps can be followed:

- 1. Check whether the water circulates normally. If the water protection is broken, you can short-circuit the water protection for use.
- 2. Turn on the preset and see if the ammeter swings. If it does not swing, check whether the laser power supply has 220v power supply. If there is power supply but no light, the power supply may be faulty and needs to be replaced.
  - 3. You can also connect the GND ground wire on the power supply and the P water protection short joint to test whether the water protection is broken, and short-circuit +5v and AIN to check the maximum output power. If there is light, the potentiometer is broken and needs to be replaced.
- 4. If the main program does not light up, you can use an electric meter to measure whether there is a DC voltage above 3v between the 15 (H) or 16 (L) corner and the 14 corner. If there is, it means that the card is normal and there is no possibility of it. signal problem
- 5. There is a sound in the laser power supply, which is generally due to poor contact of the power connector. Re-weld or connect.

## The laser cutting machine does not emit light when it is turned on

- 1. Check whether the laser power switch (green switch) of the machine is on;
- Check whether the chiller is turned on, and check whether the light signal, control signal and water protection signal of the chiller are normal;
- Check whether the light emitted by the laser tube is normal; weak light (purple) is abnormal, and normal is pink; whether the water flow of the laser tube is normal;
- 4. Check whether the laser light path is normal, press the light to check whether the laser tube is

bright, if it is bright but the laser head is not lighted, then there is a problem with the light path;

- 5. Check whether the button panel light is normal, check the machine operation panel, whether the power is correct, or whether the computer software parameters are correct;
- 6. Check whether the fan of the laser power supply is running or not, if not, replace the power supply;
- 7. Check whether the light is emitted directly from the signal of the laser power supply. If the light is emitted, the laser tube and laser power supply are normal; if there is still no light, it means that the laser power supply is broken, and the power supply needs to be replaced;
  - 8. Whether the voltage is lower than 200V.

## The laser cutting machine does not emit light during operation

- 1. Check whether the water tank of the fiber laser cutting machine is alarming.
- (1) To alarm, connect the water inlet and outlet behind the water tank with a water pipe, power on the water tank, and see if it alarms. If the alarm, the water tank is broken. If there is no alarm, it means that the waterway of the fiber laser cutting machine is not smooth. Check whether the water pipe is bent or pressed by something, and whether there is any debris in the water in the water tank (replace the pure water in the water tank).
- (2) No alarm, check whether the power fan of the fiber laser cutting machine is running. The power fan of the fiber laser cutting machine turns, and the laser power supply is short-circuited with a wire.
  - 2. Whether the fiber laser cutting machine emits light.
- (1) If light is emitted, the wire on the motion control card is loose, or the motion control card is broken (replace the board).

(2) If there is no light, the laser power supply is broken. (In rare cases, the fiber laser cutting machine is damaged) (Check whether there is sparking at the high-voltage end of the fiber laser cutting machine, which will easily burn the laser power supply and electronic components of the board). The power fan of the fiber laser cutting machine does not turn. Use an electric pen to test the 220V port of the laser power supply to see if there is electricity. If there is electricity, the laser power supply is broken (repair or replace the power supply); if there is no power, check the power switch and line problems of the fiber laser cutting machine.

The above is a brief analysis of the failure of the fiber laser cutting machine not to emit light, as well as some suggestions. I hope it will be helpful to everyone.