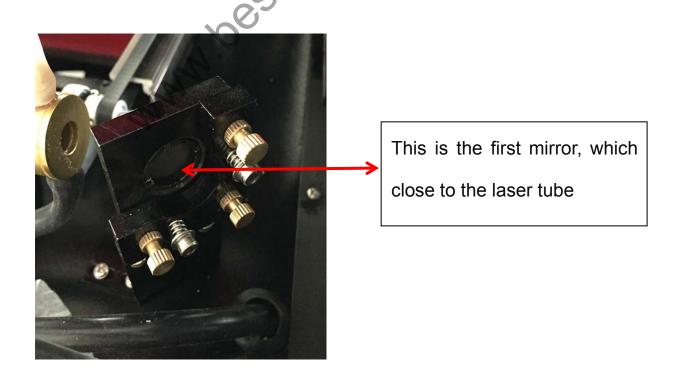
How to adjust the laser path

Note: Before the machine is packed in wooden cases, we will adjust the laser path in advance. After a long period of transportation or using the machine a period of time, the laser path will have some deviation in the process of using. You only need to adjust a little. Usually, the testing power is less than 50% of full power, then laser power won't be too much strong.

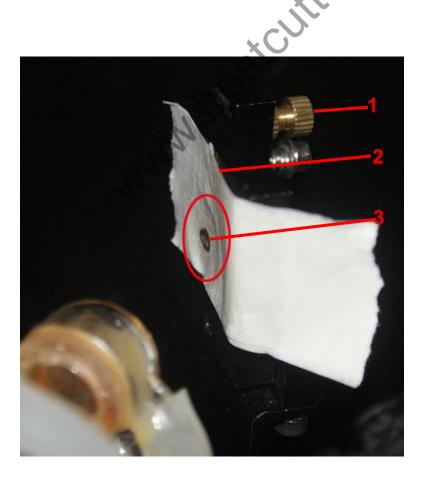
Step1. The adjustment of laser path between the laser tube and the first mirror .

Put masking paper in the front of first mirror, press "Pulse" button. (just press gently and you can see laser pot on the paper)

a.If the laser spot is in the center, this step is OK.







(Picture1)

1. The nut 2. Masking paper 3. Testing spot

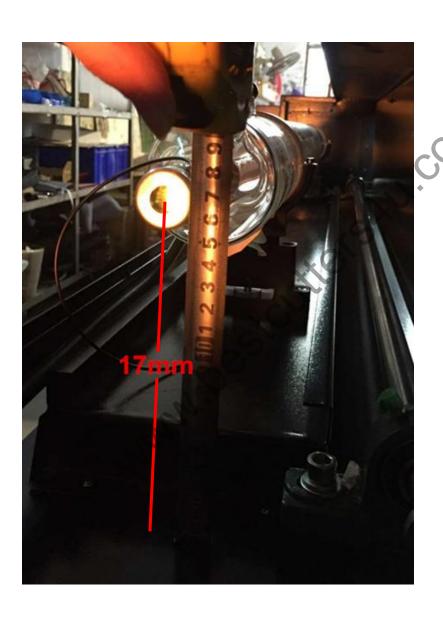
b.If the laser spot is not in the center, we can adjust the position of laser tube to get it. Keeping the laser tube balance and let the light reflect on first mirror.



Note: If your machine is CM series. Please measure the distance from the laser laser light outlet of laser tube to the machine shell.

The distance is about 17cm. The deviation is no more than 0.3mm.

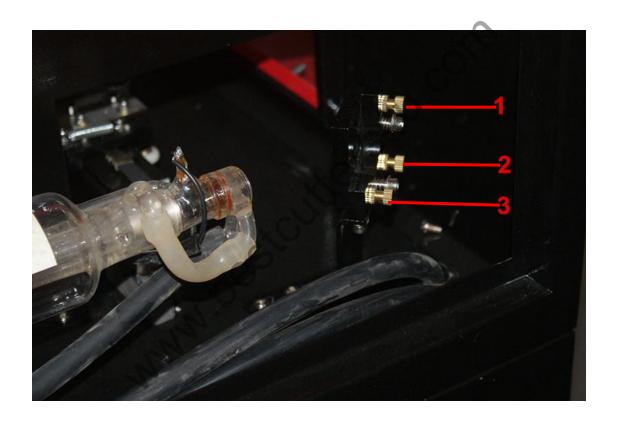
If not, please adjust the distance.



Step2. The adjustment of laser path between the first mirror and the second mirror.

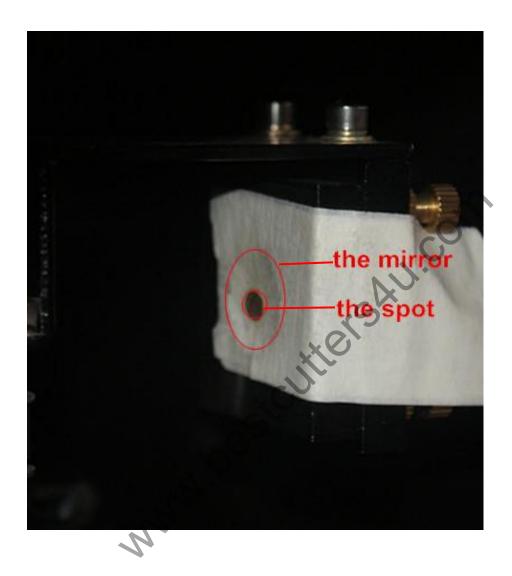
Put masking paper in the front of second mirror, move the guide rail to the left top corner(from the front of machine to see), press "Pulse" button, check the position of laser spot.

a.If the laser spot is not in the center. Please adjust the nut at the back of first reflecting mirror frame until the laser spot is in the center. As the picture shows,



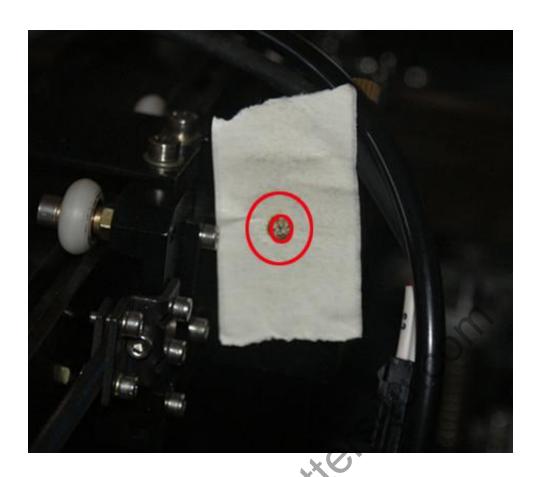
b.If the laser spot is in the center ,then move guide rail to the left back corner. Press "Pulse" button, check the position of laser spot. If the laser spot is in the center and the first test spot and the second spot are coincide. The laser path is good. If the laser spot is not in the center. You can refer to the above step to adjust nuts in

the first frame. Until the first test spot and the second spot are coincide.



Step3. The adjustment of laser path between the second mirror and the third mirror.

Put masking paper in the front of third mirror, move the laser head to the left end of X axis , press "Pulse" button and check the position of laser spot.

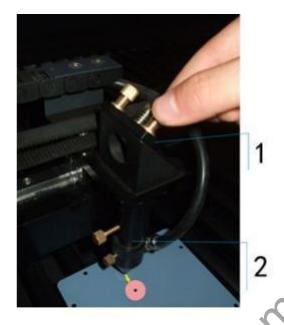


a.If the laser spot is not in the center ,please adjust nuts of second mirror to get it.



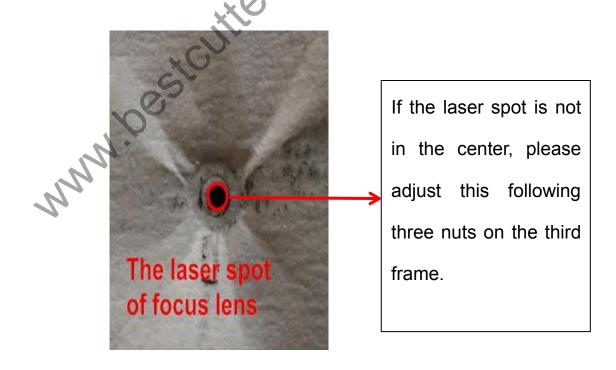
b.If the laser spot is in the center, then move the laser head to right end of X axis . Press "Pulse" button again. Check the position of spot. If the spot is not in the center, please adjust nuts of second mirror to get it (it's same as "a"). To make sure the first spot and the second spot are coincide. Then this step is OK.

Step4. The adjustment of focus lens' laser path .



1.The third reflecting mirror holder 2.Laser head

Put masking paper under the laser head. Press "Pulse" button.





If the laser spot is in the center, the laser path is OK. You can let your machine work again.

Tips: After the machine works, please use cotton swab with alcohol to clean the all mirrors and lens, which can affect the laser path.

