## **PRECAUTIONS FOR USING LASER CUTTING HEADS**

Posted on 2023-03-31 by redsail

## ×

## Category: Laser Cutter News



Summary of problems with the use of laser cutting heads and protective lenses

The focus adjustment stroke exceeds during the focusing process.

2. Damage of the sealing ring to the protective lens bracket,

Allow auxiliary gas to enter between the focusing module and the protective lens.

Troubleshooting Plan

1. Check whether the focus range has been exceeded.

If the focus is out of range, loosen the locking screw on the left side of the cutting head using the signal amplifier position,

Then try adjusting and retightening the screws.

2. Check whether the steel ring seal under the protective mirror is damaged.

If so, replace the sealing ring.

Is the nozzle temperature too high during processing?

1. Center offset.

2. Protect lenses from contamination.

3. Concentration lens or collimation lens contamination.

4. Optical fiber pollution.

Troubleshooting Plan

1. Check whether the alignment is offset. If there is an offset, adjust it.

2. Take out the protective lens for inspection,

After removal, pay attention to protecting the lens holder. Mask paper must be used to seal the leakage position of the cutting head,

Don't take out the protective lens holder and blow it.

If the protective lens is dirty, we need to clean it.

3. Check the optical lens inside the cutting head.

Lift the cutting head to the highest position, turn on the red light, unscrew the nozzle,

Place a piece of white paper within a range of 20-40mm at the lower end of the ceramic body,

And move up and down to observe the uniform distribution of red light.

When observing red lights, try to block the surrounding red lights,

Ensure a certain degree of contrast and observe more clearly. If there are obvious black spots,

It is possible to determine whether the internal focusing or collimating lens or fiber end face is dirty.

This requires contacting an After Sales Engineer for guidance.

Do not disassemble the laser head without further use to avoid further damage.