

POINTS TO PAY ATTENTION TO WHEN USING LASER ENGRAVING MACHINE

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There are many points that need to be paid attention to in daily use of [laser engraving machines](#). If you do not pay attention to these matters, the service life of laser engraving machines will be greatly reduced. Here is a summary of what the laser engraving machine needs to know during daily use; these are the main components of the laser engraving machine: carbon dioxide laser, laser power supply, control panel, flat workbench, optical path system, cooling system, and smoke exhaust system.

1. The laser engraving machine should be placed horizontally on the table and should not be tilted.
2. The laser engraving machine should prevent strong vibration. When moving, the cart and trolley should be fixed to prevent the optical path from shifting or the laser crack caused by vibration.
3. The fulcrum of the laser tube installation should be reasonable, and the fulcrum should be at $1/4$ of the total length of the laser tube, otherwise it will cause the laser tube spot pattern to deteriorate, and some light spots will work for a period of time. It becomes several points, causing the laser power to drop and fail to meet the requirements, resulting in constant tube replacement.
4. The cooling system should be grounded, and the water tank and waterway should be cleaned frequently. The temperature control point of the cooling temperature control water tank should be reasonable, otherwise the laser tube will be easily damaged and the dew condensation power will drop, the cold water head of the tube will fall off, the service life will be greatly shortened, and sometimes it will not work, causing Change tubes constantly.
5. The suction device should be checked and cleaned regularly, and the air duct of the fan should be cleaned, otherwise a lot of smoke and dust will not be discharged, which will pollute the lens and laser tube, and make the mechanical and electronic components easy to oxidize and cause poor contact.
6. Inspection of the focusing mirror and reflector. The frame is heated during work, the surface of the lens is discolored and rusted, and the cracking of the film is all objects to be replaced. In particular, many customers use air pumps and air compressors, which are very difficult on the focusing lens. Water accumulates quickly, so it is necessary to check the cleanliness and quality of the optical system of the lens (laser tube light outlet) on time.

7. There is high voltage inside the laser engraving machine, and non-professional technicians are not allowed to open the casing for maintenance to prevent electric shock.

8. When the laser engraving machine is working, it is necessary to prevent the staff or other personnel from reaching out or watching with their eyes to prevent the laser from hurting the skin and eyes.