

Daily Maintenance

A. Water changing (We advise you change the water at least every month).

Caution: make sure that laser tube is filled with water before restarting the machine. You are advised to add water every 3 to 4 days.

Water quality and the temperature of the cooling water affect the life of the laser tube. You need to use pure (distilled) water and control the temperature below 35 centigrade (95 degree F).

B. Blower cleaning

A blower, used for a long time, will accumulate solid dust, causing it to run noisily and at reduced efficiency. When this happens, disconnect the power to the blower and then the hoses. Clean the blower (and all the vanes) and reconnect.

C. Cleaning of Mirrors.

For the machine to run at maximum capacity, we advise to clean the mirrors before work everyday.

Caution: Make sure the power is off.

The machine has 3 mirrors and a focusing lens. One mirror is the first one from the laser, or in the rear left corner of the machine. The 2nd mirror is mounted to the left end of the gantry and the 3rd mirror is at the top of the focusing head. The focusing lens is mounted to the bottom of the adjustment tube below the focusing head.

The mirrors will easily get dirty, which will cause the laser power to diminish. Laser energy absorbed into a dirty mirror will also heat and destroy the mirror. The cleaning of the first two mirrors is easy as they do not have to be removed from the machine. Just wipe them carefully with lens cleaning paper, dipped in cleaning solution. The mirror in the focusing head and the lens need to be removed, carefully cleaned and reinstalled.

Caution:

A. Mirrors must be wiped carefully in order to avoid destroying their surface plating.

B. Do not touch cleaned mirror and lens surfaces as this will deposit a new layer of oil on them.

C. The concave side of the lens must be on the bottom when installed.

D. Cleaning of the rail (we advise you to clean the rail twice a month, when machine is power off)

Caution: cleaning preparation –dry cotton, lubrication.

E. Checking the Beam Path

The beam path includes 3 mirrors and a focusing lens. To avoid the possibility of stray beam reflections, the beam path should be checked for obstructions before starting the machine.