

LASER ENGRAVING MACHINE MAINTENANCE ADVICE

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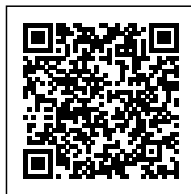
REDSAIL R6090 LASER ENGRAVING / CUTTING MACHINE

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The efficiency and productivity of your [laser engraving/cutting machine](#) depends largely on how well it is maintained. Fumes, dust or residues that build up inside laser systems or mechanical components can cause avoidable problems.

If you only check your machine when it starts to malfunction, you will waste time and energy troubleshooting and fixing the problem. So it's always a good idea to follow the maintenance manual regularly and make sure you're using quality machine parts.

Below are some basic laser machine maintenance recommendations to maintain their high quality output, consistent reliability and prolong product life.

Clean bench and motion system

Power off and unplug the laser.

Use a vacuum with a flexible nozzle to remove dust and debris from work surfaces and motion systems.

Moisten a paper towel or cotton towel with a small amount of all-purpose cleaner, alcohol, or acetone to clean the workbench and motion system rails.

Wait for all cleaning residue to dry completely before plugging in and operating the laser.

notes:

Never pour or spray oil, alcohol, or acetone directly on the work surface, as it may cause a fire or soot buildup if used incorrectly.

Lubrication of the X/Y rail system

Clean and lubricate the X linear guides of the laser machine with 0.1ml of grease in a syringe every two weeks to properly maintain the motion system.

Always clean and lubricate the X and Y rails after working with materials that generate a lot of debris, such as wood.

notes:

Applying too much oil or NSK PS2 grease to the Y-rail will accelerate debris buildup.

clean the mirror

After removing each mirror, you will need to inspect each mirror for scratches, soot or debris.

Hold the mirror with the reflective side up and do not touch the reflective surface of the mirror (do not apply any finger pressure or any other cleaning agents to the mirror surface).

Cover the mirror with a new sheet of lens tissue.

Put a few drops of lens cleaner on the paper towel that covers the mirror (apply enough so that the paper towel absorbs just enough of the solution to cover the surface of the mirror).

Pull the tissue across the mirror in one direction only.

Make sure the mirror is completely dry before reinstalling.

Clean the focal length lens

Recommended lens cleaners are Eclipse Cleaning System Solution from Photography Solutions or HPLC grade methanol.

Clean the focusing lens with a cotton swab and lens cleaner solution. Be sure to clean both sides of the focus lens.

After cleaning, gently dry the focus lens and lens cover with a cotton swab.

notes:

Do not apply any finger pressure or other cleaners to the lens surface.

clean exhaust pipe

Effective exhaust ventilation is critical to laser cut quality. Regular cleaning of the dust buildup on the exhaust duct is recommended as it helps to maintain the ventilation efficiency of the laser machine.