

HELPFUL HINTS ON LAMPS

by Alan Schwartz, President of Caprock Developments Inc. 475 Speedwell Avenue/Morris Plains NJ 07950 Tel. (800)-222-0325 / FAX (973)-292-0614 e-Mail: info@caprockdev.com / Web Site: www.caprockdev.com

Proper maintenance of your exposure systems assures you'll derive the greatest productivity and value from your equipment. Care and replacement of your lamps is an integral part of this process. Here are my recommendations for obtaining the best and most efficient usage from your lamps.

Why you should replace your lamps even if they still light

Your lamps gradually loose intensity over time. The gases and the special additives inside the lamp become inert, resulting in longer startup time, while the ultraviolet (UV) output diminishes. This results in longer, inconsistent exposure times.

You may not be aware of the change, because your integrator compensates for the difference. I suggest that you make a weekly test of the number of seconds that correspond to the number of "units" for your standard exposure. This will give you a good idea of how much strength your lamp has lost.

When you first turn on the power to your equipment (cold-strike), it provides a high voltage until the lamp lights. This strains the power supply, the starting circuitry and the quartz (glass) of the lamp. If you allow excessive start time to cold-strike and expose with old lamps, you risk equipment failure and even breakage.

Unreliable and inconsistent lighting causes makeovers and wastes time and materials.

I suggest that you replace your lamp **before it burns out** and save your old one as a reliable spare. Your new lamp will give you faster exposures, and your equipment will operate at maximum efficiency.

If you have a graphic arts camera or camera/platemaker, replace all the lamps at the same time (most use four). You'll get more even lighting, not to mention saving maintenance time, because when one burns out, the others are likely to follow.

How to make your lamps last longer

Here are some simple steps you can take to get the most from your investment in new lamps:

wClean the reflectors to obtain the maximum reflected light and benefit of the higher output.

wUse the cotton gloves and alcohol wipes we provide to install new lamps. If you handle them

with the gloves, and clean them before use, you'll avoid the oils and other contaminants that can cause premature failure due to the high operating temperatures in your exposing equipment.

wDon't use lamps with bare wire ends. We install the correct connectors to assure you of a proper electrical connection.

wCheck for pitting or corrosion of the electrical contacts, which can cause arcing and failure of the lamp or equipment. Tighten or replace the mounting clips and/or springs to make certain that good electrical contact is made.

wWhen you insert lamps into clips, apply pressure at the ceramic or metal ends, never to the quartz in the middle. The seals at the ends of the lamp are its most delicate and easily damaged parts. If there is a filling tip, make sure it points upwards or to the side, never downward.

wlf the light head has a cooling fan, clean the blades, lubricate the motor bearings as needed, and check that the fan is operating properly. The vents must be clean and free of obstruction to allow for maximum ventilation and unrestricted airflow. A cooler lamp lasts longer.

How to get the most value from your new lamps

wMake sure that you are using the lamp that is most efficient for the emulsion you are exposing. Many exposure systems let you use lamps with different spectral output. If you change types, make sure your equipment has been adjusted for the new lamp.

wRecord the date, exposure time, life-hours and part number when you change lamps. This simple record will help you to establish an effective maintenance and replacement schedule.

wDon't be intimidated by equipment makers who insist that you must use only their brand of lamp. The lamp simply "receives" the output from the power supply, so it cannot harm your equipment. Just be certain to buy from a reliable supplier who will make sure you get the correct lamp for your equipment, and help you if a problem should arise.