**SX-5 Starburst Searchlight Service Bulletin #SL0110**

Issue Date: February 2010

**WARNING:** TO AVOID POTENTIAL PROPERTY DAMAGE, ENSURE THAT THE AFFECTED MATERIAL IS INSPECTED AND / OR REPLACED AS DESCRIBED IN THIS BULLETIN.

**Subject:** This Bulletin is to alert owners and operators of SX-5 searchlights of potential xenon lamp overheating.

**Affected Products:**
All SX-5 Starburst Searchlight Assemblies

Dear Valued SX-5 Searchlight User,

Over the past year Spectrolab has noticed a trend in premature 500 watt xenon lamp failures. These failures are believed to be caused by inadequate internal airflow provided from the blower causing the cathode base of the lamp to overheat. The lamp manufacturer requires anode and cathode end cap temperature to be less than 225 ºC. The current configuration blower in some cases cannot maintain temperatures below 250 ºC. This situation can worsen if the intake fan filter is dirty or the light baffle (air exhaust) is misaligned or both.

**What you should do:**

**Inspection of the Lamp:**
Inspection of the lamp cathode can detect this problem. On a good lamp, the anode and the cathode are the same color as opposed to the overheating results in a blue discoloration on the cathode base. This is a sign of a lack of airflow for cooling.

![Cathode Base Good Lamp](Image)

![Anode Over Heated Lamp](Image)
Spectrolab, Inc. Safety and Service Bulletin # SL0110 (continued)

Remove Baffle (P/N 031103) from the SX-5 Starburst Searchlight
1. Locate the Baffle between the Front Window Assembly and the Searchlight housing.

2. Remove 3 screws around the Front Window Assembly.
3. Remove the Front Window Assembly. Carefully face the Searchlight face down since arc lamp is exposed. Peel the Baffle away from the Searchlight Housing. Use a razor to remove excess adhesive from the Searchlight Housing then, clean up with isopropyl alcohol (IPA).

**Caution**

Removing the Front Window Assembly will expose the arc lamp. Protective gear such as; face shield, heavy leather jacket, and gloves should be worn.

4. Secure the Front Window Assembly to the Searchlight Housing with 3 screws previously removed.
Remove the SX-5 Starburst Searchlight Air Filter (P/N 025153-4)

1. Locate and remove the 3 screws fastening the Blower Cover.

2. Lift off the Blower Cover, and remove the Air Filter Assembly from the Cooling Blower.
3. On the Air Filter Assembly, remove the 3 screws to separate the Retainer Ring, Screen, and the Air Filter.

4. Attach the two halves of the Retainer Ring without the Air Filter and screen then, fasten with the 3 screws.

5. Place Retainer Ring on the Cooling Blower and fasten with 3 Blower Cover screws previously removed in step 2.
If you require assistance, the unit may be returned to Spectrolab for immediate service and compliance.

**Searchlight Operation Advisory:**
After use of Searchlight, it is advised that the Searchlight’s Cooling Blower always be reactivated to effectively cool the lamp. The following procedure should be used:

1. When the Xenon lamp is on, place the Start/On/Off switch in the Off (lower) position to turn off the xenon lamp.
2. When the lamp is extinguished, place the Start/On/OFF switch on the On position to turn the fan on to cool the interior of the searchlight.
3. When the Searchlight has finished cooling (approximately 5 minutes), place the Start/On/Off switch in the off position.

The removal of these two items and the proper turn off sequence will prevent overheating of the lamp. Replacement Air Filters (P/N 025153-4) and Baffles (P/N 031103) are currently available. However, operating the Searchlight with the Air Filter and Baffle installed will risk the lamp warranty.

The frequency of cleaning the collector and front window will increase with the filter removed and shall be dependent on the environment the Searchlight is operating.

**What is included in this service bulletin:**

1. Document #SL0110 – (This letter)

**Compliance:**
Immediate

Sincerely,

[Signature]

Ed Ringo
Manager, Business Operations
Spectrolab, Inc.