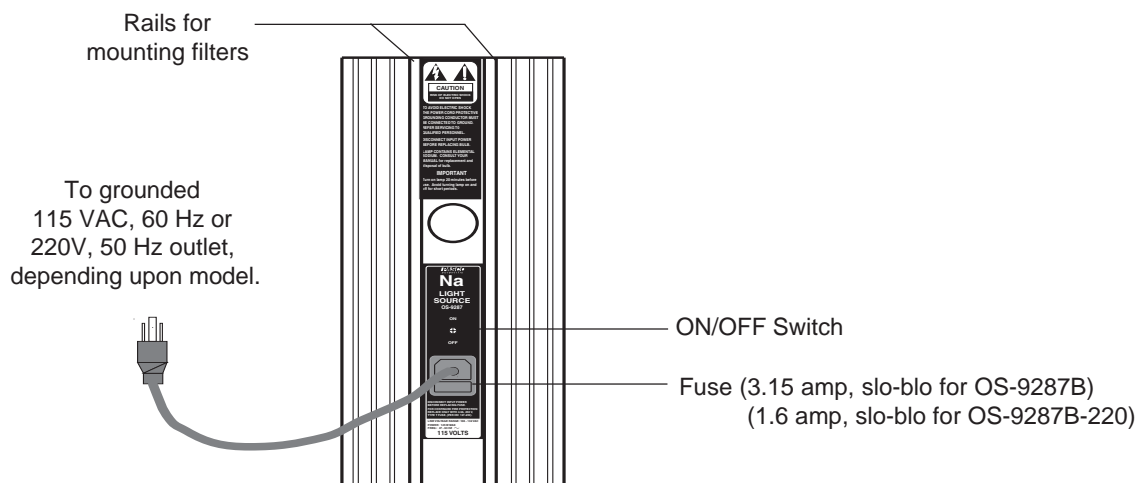


**Instruction Sheet
for the PASCO
Model OS-9287B**

Sodium Light Source



Introduction

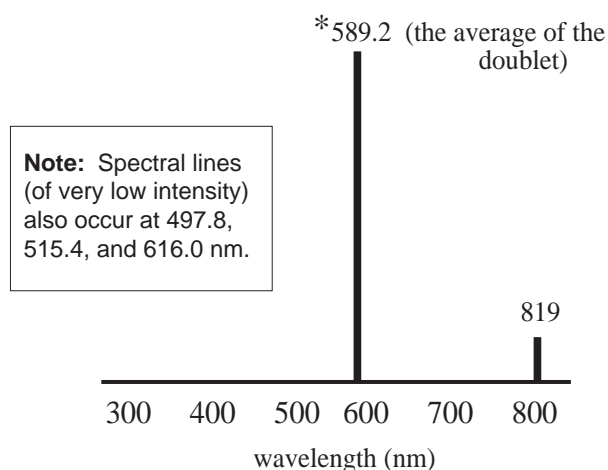
The PASCO scientific Model OS-9287B Low Pressure Sodium Light Source provides 6 candela/cm², with better than 99.5% of the visible output in the 5889 and 5895 angstrom spectral lines. The light source comes with a built-in power supply so the unit can be powered from a standard 115 VAC, 60 Hz or 220 VAC, 50 Hz outlet, depending upon the model. Cooling fins and air vents on the sturdy aluminum case ensure cool, safe operation. The rails on the front and rear of the case allow easy mounting of standard 2-inch by 2-inch filters.

To operate the light source, simply plug it into a grounded 115 VAC outlet; then flip the switch on the front of the light source to On. Allow approximately 20 minutes warm-up time. (The first time you use your light source, you will need to install the sodium lamp. See the following page for initial setup instructions.)

► **Important Note**—For maximum lamp life:

1. Always operate the light source in its upright position. Operation in other orientations will severely reduce the life of the lamp.
2. If you are going to use the light source more than once during the day, leave it on. Lamp wear results more from turning the light source on and off than from steady operation.

The spectrum for the lamp is shown below. Better than 99.5% of the visible output is in the sodium doublet at 5889* and 5895* angstroms. Slight impurities (1% neon and argon) are added to the sodium gas to improve operating efficiency. Because of this, the lamp is not recommended for use with instruments having a resolving power in excess of 1 part in 10⁴. The sodium pressure in the lamp is 5 microns Hg.



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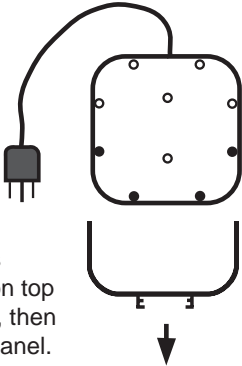
This instruction sheet edited by: Dave Griffith

Initial Setup

Before using the Light Source for the first time, you will need to install the lamp. To do this, just follow the numbered instructions shown below.

➤ **CAUTION--HIGH VOLTAGE:** Do not open the light source with the unit plugged in.

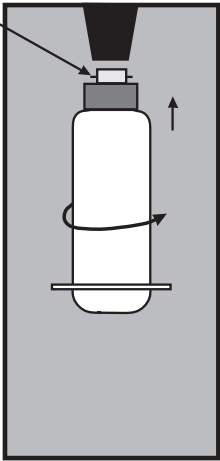
(1) Remove 4 screws (shown shaded) on top and bottom panel, then remove the rear panel.



(2) Align pins to fit lamp in socket

(3) Push up and twist to mate lamp with socket.

(4) Reverse procedure to remove lamp.



CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION:
TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE BACK COVER. NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead, within an equilateral triangle, is intended to alert the user of the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user of the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Maintenance

The light source lamp, when used correctly (see the note on the front panel of the unit), can be expected to provide 14,000+ hours of trouble free operation. However, if the light at any time fails to come on, first check the fuse on the front of the light source case. If the fuse is not blown, you may need to replace the lamp. In rare cases, the problem may be with the ballast. However, ballast replacement should be performed only by experienced personnel. If the fuse is intact and replacing the bulb does not restore operation, we recommend you return the unit to PASCO scientific for repair.

Only the following replacement parts should be used:

Item	PASCO Part #
Fuse (3.15 amp)	530-033
Fuse (1.6 amp)	530-034
Lamp	526-034
110 volt Ballast	322-042
220 volt Ballast	322-05440
220 volt Ignitor	550-05441

Replacing the Sodium Lamp:

► **Caution—High Voltage:** Do not open the light source with the unit plugged in.

1. Unplug the light source, and allow several minutes for the sodium lamp to cool.
2. Remove the rear panel and replace the lamp as shown in the Initial Setup instructions above.
3. Replace the rear panel.

► **Caution—Disposing of the Sodium Lamp:** The sodium lamp contains a small quantity of metallic sodium which produces heat when dampened. To dispose of a used lamp, wrap the lamp in several rolls of dry paper, then place it in a dry container. Then, in a dry atmosphere, break the lamp carefully into smaller pieces. Finally, stand back and fill the container with water. Within a few minutes the metallic sodium will be deactivated. Dispose of the lamp pieces as you would any broken glass.

► **Note:** If additional maintenance is required, it should be performed only by qualified personnel (see the schematic on the following page.)

Other PASCO Spectral Equipment

PASCO scientific offers a variety of spectral light sources, and a precision student spectrometer for accurate spectral measurements in the student lab. For more information, check our catalog, or call toll-free at 1-800-772-8700.

Limited Warranty

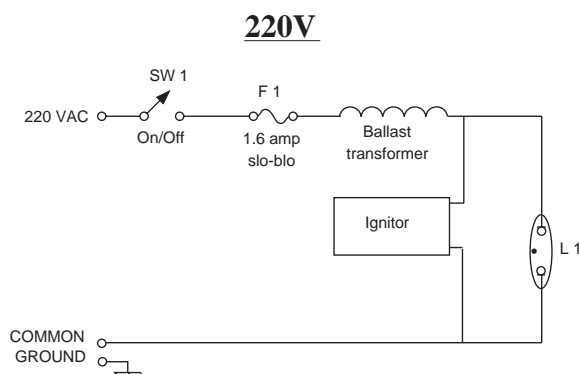
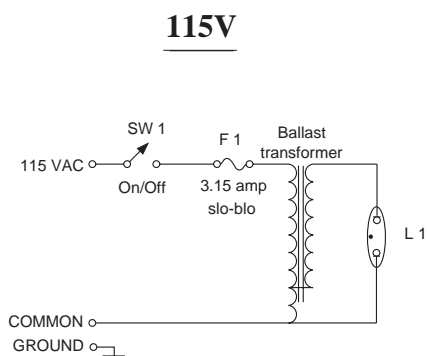
PASCO scientific warrants this product to be free from defects in materials and workmanship for a period of one year from the date of shipment to the customer. PASCO will repair or replace, at its option, any part of the product which is deemed to be defective in material or workmanship. This warranty does not cover damage to the product caused by abuse or improper use. Determination of whether a product failure is the result of a manufacturing defect or improper use by the customer shall be made solely by PASCO scientific. Responsibility for the return of equipment for warranty repair belongs to the customer. Equipment must be properly packed to prevent damage and shipped postage or freight prepaid. (Damage caused by improper packing of the equipment for return shipment will not be covered by the warranty.) Shipping costs for returning the equipment, after repair, will be paid by PASCO scientific.

Equipment Return

Should this product have to be returned to PASCO scientific, for whatever reason, notify PASCO scientific by letter or phone BEFORE returning the product. Upon notification, the return authorization and shipping instructions will be promptly issued.

► **NOTE: NO EQUIPMENT WILL BE ACCEPTED FOR RETURN WITHOUT AN AUTHORIZATION.**

Schematic



Notes: