

OPERATING INSTRUCTIONS

High Power Light Source No. 72701-2

1. Introduction

The High Power Light Source is a multi-purpose enclosed lamp that can be set to provide a point source or a line source of light. It is ideal for use with many pieces of PSSC equipment, such as the Coulomb's Law Apparatus (72701-02) and the Ripple Tank Apparatus (72702-01), or in any lab program.

2. Description

The light source comes complete with a 150 watt clear light bulb which fits into a specially-shaped light source shield. A single aperture lets out light as a point or line source, depending on the orientation of the bulb. A socket with power cord is also included, as is an adjustable spring clamp that permits the light source to be positioned at any desired height.

3. Operation

To assemble the light source, open the flap of the light source shield and insert the bulb into the shield. The base of the bulb should pass through the hole in the bottom of the shield, as shown in Fig. 1. Light will pass through the round opening in the side of the shield. Adjust the filament so that it is parallel to this opening for a line source, or so that the end of the filament points toward the opening for a point source. Hold the bulb in the desired position while closing the flap and securing the end of the flap snugly over the base of the light bulb.

While still holding the bulb in position, screw the socket onto the end of the bulb. Fasten the light source to a rod or other support with the spring clamp, and plug in the cord. The light source should come on immediately. If the source fails to function, unplug the cord. Unscrew the line socket and pry up the center tab to make better contact with the bulb.

Note: Never attempt to adjust the bulb or center tab without unplugging the light source first!

The light source is now ready for use.

4. Maintenance

The High Power Light Source needs no special maintenance. If any difficulty develops, contact Central Scientific Company, giving all details of the problem. Do not return this apparatus without written authorization from Central Scientific Company.

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