

Label the following diagrams:
Ellipsoidal Reflector Spotlight

1.

2.

3.

4.

5.

6.

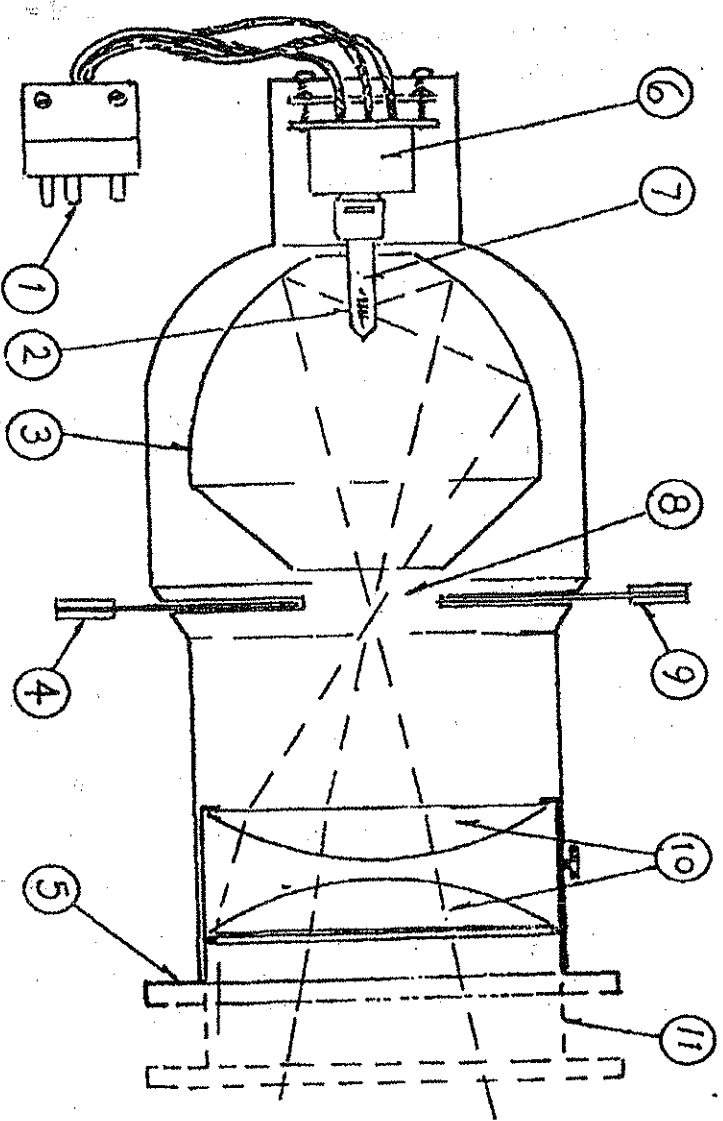
7.

8.

9.

10.

11.



Ellipsoidal Reflector Spotlight

This instrument derives its name from the shape of the reflector. It produces a very hard-edged beam of light. Different versions of the E.R.S. can be used from the catwalk, and the grid.

1. Connector- A three pin connector, like the twist lock, can only be inserted one way. It is impossible to plug this connector in incorrectly. Unlike the twist lock the three pin can easily become unplugged.
2. Monoplane filament- Each instrument uses a specific lamp because the center of the filament must be positioned in the correct placement within the reflector to produce the maximum amount of light.
3. Ellipsoidal Reflector- This reflector harnesses the law of reflection to create a very hard-edged beam.
4. Bottom shutter- Metal flaps within the instrument allows you to shape the beam of light. Since you are dealing with reflected light you must remember to use the bottom shutter to shape the top of the light.
5. Gel frame holder- The slot where the gel frame and a gel can be placed to change the color of the light.
6. Base- The ceramic base into which the lamp is set. It will only allow the lamp to be inserted one way.
7. Lamp- Tungsten Halogen Lamp is a highly efficient lamp that uses a chemical reaction to produce clear true light. The halogen gas inside the bulb reacts with the tungsten filament causing it to redeposit onto itself instead of the inside of the bulb.
8. Gate- The light which has reflected off of the ellipsoidal reflector will converge into a conjugate focal point. This is where the light is the strongest within the instrument. The shutters are positioned at the gate for maximum efficiency. This is also where a gobo can be placed to project a patterned beam.
9. Top Shutter- Metal flaps within the instrument allows you to shape the beam of light. Since you are dealing with reflected light you must remember to use the top shutter to shape the bottom of the light.
10. Plano-Convex Lenses- The lens harnesses the law of refraction to create a strong hard-edged beam of light.
11. Alternate lens position- The barrel of the instrument can be moved forward or back. This movement brings the lenses closer to or farther away from the lamp and reflector. By moving the barrel the light will become either harder or softer edged.