

## **Objective**

To connect a Photron Super lamp Power Supply to a GBC SensAA.

## **Materials**

GBC SensAA AAS

- Photron 3 volt super lamp power supply P200
- Photron P205-SensAA adapter kit

## **Procedures**

Warning: When powered, lamp circuitry runs at high voltage.

- 1. Turn off power to instrument and unplug.
- 2. Remove cover from AA.
- 3. Unscrew the rear octal cover from lamp socket.
- 4. Note the 2 black wires soldered to pins 1 and 3 of the octal socket.
- 5. With tape or similar, mark each black wire with its pin numbers 1 and 3.
- 6. Unsolder each black wire from the octal socket.
- 4. Note the 2 black wires soldered to pins 5 and 7 of the octal socket.
- 5. With tape or similar, mark each black wire with its pin numbers 5 and 7.
- 6. Unsolder each black wire from the octal socket.
- 8. Solder black wire "1" to the black wire on adapter.
- 9. Solder black wire "3" to the red wire on adapter.
- 10. Solder black wire "5" to the brown wire on adapter.
- 11. Solder black wire "7" to the light blue wire on adapter.
- 12. Insulate both of these connections with 2 layers of heat shrink tubing.
- 13. Solder the white wire on the adapter to pin 3 of the octal socket.
- 14. Solder the blue wire on the adapter to pin 1 of the octal socket.
- 15. Solder the violet wire on the adapter to pin 7 of the octal socket.
- 16. Solder the orange wire on the adapter to pin 5 of the octal socket. It is best to cut the wire so they are only as long as they need to be to minimize filament current voltage drops.
- 17. Connect octal plug P1 to octal socket on flying lead from Superlamp Power Supply.
- 18. Connect octal socket S1 to octal plug mounted on rear of Superlamp Power Supply
- 19. Remove top cover of Photron Superlamp Power Supply.
- 20. Locate trimpot on the smaller filament control PCB.
- 21. Connect multimeter leads to pins 5 and 7 of lamp socket with a superlamp plugged in.
- 22. Adjust trimpot until voltage equals 2.4 Volts DC.
- 23. Replace covers
- 24. The switch should only be changed in position when the instrument is turned off.

Lamp position 1 will only operate as a Superlamp.