

BROOKHAVEN NATIONAL LABORATORY NATIONAL SYNCHROTRON LIGHT SOURCE	Number: LS-SDL-0015	Revision: B
	Effective: 25-May-2000	Page 1 of 2
Subject: Working on Power Supplies powered by 480 Vac and 220Vac		
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SDL POWER SUPPLY POWERED BY 480Vac & 220Vac

1. Only Lock-Out Tag-Out (LOTO) **Responsible** or **Knowledgeable** Personnel may perform work on this type of equipment.
2. Before starting any work you must have the power supply schematic and/or operating manual for reference.
3. Locate and turn off the AC line disconnect for the power supply.
4. LOTO the power supply in accordance with **BNL ES&H Standard 1.5.1**.
5. Verify that the power to the supply has been removed by observing the indicator lamps when the power supply is switched 'ON' and off.
6. Check and make sure that AC power is not present inside the power supply with the appropriate meter (refer to schematic for AC input location).
7. Verify that all energy storage devices are at zero potential (refer to the schematic for these devices).
8. Power section signals of the supply can be examined by attaching test leads to the points of interest after steps 4,5 & 6 have been completed. Before enabling the power supply for testing (removing LOTO) ensure that all access panels are attached and all doors are closed. For each point of interest steps 4,5 & 6 must be performed before connecting test leads.
9. Low level signals can be examined with a multi-meter or viewed with a scope by turning off the power switch for the supply, attaching test leads to points of interest and then turning on power supply.
10. When testing a power supply with a load connected (e.g. magnet systems) the location of the load (usually the LINAC enclosure) should be secured.
11. After all work is completed and the power supply has been returned to service, log the faults and repairs in the SDL operations log.
12. Return schematics or manual to file.

Revision Log Table

Revision Number	Date Approved	Pages Affected	Description of Revision
A	02 Feb 00		First Issue
B	25-May-00	1	Editorial corrections