

*If you are using a printed copy of this procedure, and not the on-screen version, then you **MUST** make sure the dates at the bottom of the printed copy and the on-screen version match. The on-screen version of the Collider-Accelerator Department Procedure is the Official Version. Hard copies of all signed, official, C-A Operating Procedures are available by contacting the **ESSHQ Procedures Coordinator, Bldg. 911A***

C-A OPERATIONS PROCEDURES MANUAL

15.10.1.1 Procedure for Making the Test Laser Source High Voltage Area Safe for Entry and Return to Operation

Text pages 2 through 4

**Hand Processed Changes**

<u>HPC No.</u>	<u>Date</u>	<u>Page Nos.</u>	<u>Initials</u>
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Approved: \_\_\_\_\_ **Signature on File** \_\_\_\_\_  
Collider-Accelerator Department Chairman                      Date

A. Etkin

### **15.10.1.1 Procedure for Making the Test Laser Source High Voltage Area Safe for Entry and Return to Operation.**

The purpose of this procedure is to assure that the HV platform is properly grounded before access to the enclosed area or before leaving the experimental room.

- A) Only personnel authorized in this procedure are allowed to secure the area for subsequent entry.
- B) After the ground stick is attached and is placed at the designated position on the HV stage, authorized person may enter the enclosure for quick routine operations.
- C) Ground strap should be fastened securely for maintenance or repairs.
- D) Before closing the gate, all the enclosed area should be swept and it should be confirmed that no one is in the area, also check that all equipment in the area is properly grounded.

In order to become an authorized user and use this procedure, personnel must be designated by J. Alessi or M. Okamura and read, sign and date this document below. The designator must initial the signature in the space provided to validate the authorization. Authorized users may enter the enclosure and install the ground strap. After that, unescorted entry into the gated area by users not authorized by this procedure is allowed.

**WARNING**  
**Operation of the Lock Out Disconnect or Use of the Ground Stick  
requires all personnel within 5 feet to be using safety glasses.**

Procedure for entry:

1. Set the High Voltage power supply to zero output.
2. Turn off the main power supply power switch on the HV power supply and confirm that the meter on the HV supply panel indicates zero volt.
3. Turn off the power supply lock box, shutting power off to the supply, and secure the handle with the Kirk lock.
4. Verify that the HV light is off.
5. Remove the appropriate Kirk key to open the gate into the high voltage enclosure.

6. Use the long shorting stick, located at the gate, to insure that the high voltage platform is not energized. First touch to the marked contact point on the plasma target chamber with the tip of the stick, (which has a resistor to ground).
7. Hang the shorting stick on the plasma target chamber contact point. Only quick service by the authorized personnel is allowed.
8. For longer accesses and access by none authorized personnel use the grounding strap located near the gate to connect the HV terminal to the laboratory copper ground cable. Verify the strap is securely installed.

Procedure for turn HV on.

1. Disconnect the ground strap and the shorting stick.
2. Sweep all the enclosed area.  
Verify that the doors leading out of the room and the gate to the injection kiker test pulsar [under the laser cover are locked.  
Verify that all the equipment appropriately grounded.
3. Lock all the gates with the Kirk keys
4. Using the Kirk keys unlock the HV power supply disconnect.
5. Close the disconnect for the HV power supply.
6. Verify the warning light is ON.

Procedure for leaving the experimental room unattended.

1. Follow “procedure for entry.”
2. The ground strap is installed with a wrench by an authorized person.

**C-A-OPM 15.10.1.1 Revision 00  
December 28, 2007**

**Authorized Personnel List  
(Procedure for Making the Test Laser Source High Voltage Area Safe for Entry)**

Name: \_\_\_\_\_

Signature \_\_\_\_\_

Date: \_\_\_\_\_

Designator Initials: \_\_\_\_\_

Date: \_\_\_\_\_

Name: \_\_\_\_\_

Signature \_\_\_\_\_

Date: \_\_\_\_\_

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