

*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 kept on file in the C-A ESHQ Training Office, Bldg. 911A.*

C-A OPERATIONS PROCEDURES MANUAL

12.22 Pulsed 860 or PSX-120 Source Wiring

Text Pages 2 through 3

Hand Processed Changes

<u>HPC No.</u>	<u>Date</u>	<u>Page Nos.</u>	<u>Initials</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Approved: _____ *Signature on File* _____
Collider-Accelerator Department Chairman Date

C. Carlson

12.22 Pulsed 860 or PSX-120 Source Wiring

1. Purpose

The purpose of this procedure is to define the sequence of activities required to wire an 860 or PSX-120 source for pulse operation.

2. Responsibilities

It is the responsibility of the person or persons executing this procedure to observe all safety rules.

3. Prerequisites

The person or persons executing this procedure shall have all formal training required of a TVDG Operator.

4. Precautions

4.1 Refer to [C-A-OPM 12.31 "Hazards in the NII"](#) for additional information.

5. Procedure

Checklist (when indicated by "___", initial step upon completion)

- 5.1 ___ Insure that the source is in good operating condition and cesium is available.
- 5.2 ___ Insure that the transformer coupled pulser supply is installed and that the 300 volt limited Cs accel trace supply is used.
- 5.3 ___ Connect boiler power to Magnet Variac using isolation transformer.
- 5.4 ___ Connect trace power to Arc Variac.
- 5.5 ___ Connect ionizer power to Filament Variac using isolation transformer.
- 5.6 ___ Connect thermocouple wire to bottom of boiler.

- 5.7 _____ Connect pulser output to source body.
- 5.8 _____ Connect trace output to pulser supply.
- 5.9 _____ Connect Power to light link.
- 5.10 _____ Connect trigger output from light link to pulser trigger input.
- 5.11 _____ Connect extraction supply to target.
- 5.12 _____ Connect extraction bridge to target.
- 5.13 _____ Connect Extraction and Preaccel water to source.
- 5.14 _____ Connect pulser power to Probe Variac.
- 5.15 _____ Select direction for inflector magnet.
- 5.16 _____ Ensure that all appropriate breakers are on.
- 5.17 _____ Install proper target in source. Insure that no target is used that is capable of generating beams of mass 12 or UNDER.
- 5.18 Supervisor Approval: _____ Date: _____
See a [schematic](#) wiring diagram of pulsed 860 source (10 Kb .gif file)

6. Documentation

Completed checklist shall be maintained in the TVDG Control Room.

7. References

- 7.1 [C-A-OPM 12.31 "Hazards in the NII"](#)
- 7.2 Schematic Wiring Diagram of Pulsed 860 Source.

8. Attachments

None