

GEN Pre Beam Checklist

Date _____ time _____

Last revised 12/24/06

This checklist will be performed after every restricted access to Hall A that maintenance is performed

Person Responsible for checklist _____

People checking list _____

Left Arm (Old Electron)

Spectrometers

- ___ Bogie power is Off
- ___ Check intergen bottles for correct pressure
- ___ Insure that Intergen alarm switch is in the normal position

Right Arm (Old Hadron)

Spectrometers

- ___ Bogie power is Off
- ___ Check intergen bottles for correct pressure
- ___ Insure that Intergen alarm switch is in the normal position

Right Arm (Old Hadron)

Magnet controls

Q1

- ___ Q1 full of liquid (60%)
- ___ open lead flows on Q1 to 80 slm as read from rack #Q172Q
- ___ actual lead flows A_____ B_____
- ___ cctv camera on and focused

D1

- ___ Dipole full of liquid (80%)
- ___ open lead flows on Dipole to 80 slm as read from rack #D172Q
- ___ actual lead flows A_____ B_____

Q2

- ___ Q2 full of liquid (80%)
- ___ open lead flows on Q2 to 60 slm as read from the Q2 instrument rack meter.
- ___ actual lead flows 1_____ 2_____
- ___ Insure that lead heaters are on and operating

Q3

- ___ Q3 full of liquid (80%)
- ___ open lead flows on Q3 to 60 slm as read from the Q3 instrument rack meter.
- ___ actual lead flows 1_____ 2_____
- ___ Insure that lead heaters are on and operating

Right Arm (Old Hadron)

Power supplies

POWER SUPPLY TURN ON PROCEDURES

___ Verify UPSs as operational on all power supply controls (with no current on magnets only)

___ Red rotating beacons on

Q1:

___ Visual inspection of main current leads, dump resistor, and lead flags (for condition, visual shorts, etc.)

___ Unlock power disconnect switch and turn on AC power

___ Visually check power supply for faults

___ When all faults have been cleared, insure that power supply is in remote control

Q2:

___ Visual inspection of main current leads, dump resistor, and lead flags (for condition, visual shorts, etc.)

___ Unlock power disconnect switch and turn on AC power.

___ Turn on both sets of three pole breakers located on power supply.

___ Visually check power supply for faults.

___ When all faults have been cleared, lift lever on lower right side of supply.

___ Insure that power supply is in remote control.

Q3:

___ Visual inspection of main current leads, dump resistor, and lead flags (for condition, visual shorts, etc.)

___ Unlock power disconnect switch and turn on AC power

___ Turn on both sets of three pole breakers located on power supply

___ Visually check power supply for faults

___ When all faults have been cleared, lift lever on lower right side of supply

___ Insure that power supply is in remote control

Dipole:

___ Visual inspection of main current leads, dump resistor, and lead flags (for condition, visual shorts, etc.)

___ Unlock power disconnect switch and turn on AC power

___ Turn on power lever on right upper side of supply.

___ Visually, check power supply for faults on supply and at rack #OD172Q.

___ When all faults have been cleared, insure that power supply is in remote control.

___ Cctv camera on and focused

___ Check power supply for proper polarity positive___ negative___

___ NMR gradient compensation for on and proper polarity

Positive___ negative___

Target

- ___ Insure that all window shielding is installed
- ___ Inspect laser enclosures for possible light leaks and note any anomalies
- ___ Drain He3 air compressor at tank and separator
- ___ Insure that target ventilation system is on,
- ___ Insure that that the laser balcony ladder is secured
- ___ Insure that target is clear of trip hazards and equipment
- ___ Insure that the target camera and light are operational

Exit beam tube

- ___ Diffuser cooler on
- ___ Diffuser water level ok
- ___ Backing pump “on” at pump and operational
- ___ Valve “open” (temp manual at pump)
- ___ Turbo “on” at rack # 1H75B09
- ___ Gages operational
- ___ Convectron “<5” millitorr at rack # 1H75B09
- ___ Actual convectron reading _____
- ___ compensator magnet cooling fan is running

Entrance beam tube

- ___ Insure that Beam line turbo is on and running
- ___ Insure that there is cooling water flow to the Moeller Dipole
- ___ Insure that EP turbo is on and running
- ___ Inspect exit window and note any anomalies _____
- ___ Instrument air compressor functioning normally

___ Call MCC, get the name of the person you talked to and say “I am doing the Hall A pre beam checklist, Please Insure that the Hall A beam line valves are set to close” after they say that they are, say “I am turning the control key from maintenance to operational are you ready” after they say yes, turn key and tell them “**you have control could you please open the valves so that we can verify operability make an e-log entry**”
Name of the operator that you spoke to _____

- ___ **Beam line vacuum valves “open” (visually checked)**

Hall

- ___ Insure that the Big Bite power supply is on and that the lights work
- ___ Insure that the target magnet power supply is on and that the light works

- ___ **All interlocks in rack # 1H75B08 indicate green except target entrance and exit valves**
- ___ **Check 3 Moeller power supplies for on (usually remote)**
- ___ **Insure installation of Ion chambers at EP, target, and 2 at beam dump**
- ___ **Correct LCW flow and pressure (100 psi supply and 60 psi return)**
- ___ **Cctv cameras on and focused**
- ___ **Cctv monitors at X terminal off**
- ___ **Clear of unnecessary equipment**

- ___ **Insure that all lifting slings and safety harnesses are correctly stored and that the storage cage is at least 90 deg from the beam dump and at least 60 ft from the target**

- ___ **Perform pre sweep of run safe boxes.**

- ___ Unnecessary personnel exit Hall.

- ___ **Insure polar crane is positioned over the entrance beam pipe, and that power is off at the power disconnect switch**

- ___ Ensure operability of shield house doors

- ___ Deliver checklist to shift leader or run coordinator
Name of person checklist was delivered to _____