

THOMAS JEFFERSON NATIONAL ACCELERATOR FACILITY 12000 Jefferson Avenue Newport News, VA 23606

HALL D PROCEDURE NO.: D00000-04-02-P006 Rev A

TITLE: Hall D Solenoid System Hi-Pot Procedure

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REV.	DESCRIPTION	BY	СНК.	APP.	APP.	DATE

Instructions

Perform the Hi-Pot items below with the Bertram Power Supply. Upon Completion, scan and insert into the Solenoid Test Log.

Item	Checked by:	Date
Solenoid Hi Pot		
Disconnect Ground Fault Detector connection to		
the center of the Dump Resistor by pulling fuse F1		
out of Module 11 inside of door 1. Remove Module		
Кб.		
Disconnect the main current leads from the Vapor		
Cooled Leads (VCCL) by lifting the 535MCM pigtail		
jumpers up off the bus bars in the gray junction		
boxes.		
Unplug the connectors between the VCCL and the		
Newport Controller by disconnecting all of the		
circular connectors from the VCCL Lexan box. (This		
also disconnects the ice management controllers).		
Disconnect the voltage tap connectors from the		
tops of the resistor boxes. (now including the PXi		
system and the Newport controllers). Hi pot		
magnet to 135 V with the Bertram power supply.		
Log the leakage current.		
With the magnet full of liquid helium and all of the		
covers and access panels restored Hi pot magnet to		
135 V with the Bertram power supply (through the		
High-pot banana jacks installed in the VCCL Box).		
Log the leakage current.		
Power Supply Hi Pot		
Hi pot the <u>Danfysik</u> power supply, main output		
current copper leads (internal to the <u>Hunley</u>		
junction boxes) to 135 V with the Bertram power		
supply. Log the leakage current.		
System Hi Pot		
Reconnect (and torque to 75 ft-lbs) the 535 MCM		
leads from the vapor cooled leads at the gray		
junction boxes to the junction plates. Hi pot the		
entire magnet system to 135 V with the Bertram		
power supply. Log the leakage current.		
System Back Together		
Reinstall ground fault detector monitoring by re-		
installing fuse F1 into Module 11. Re-install Module		

K6. Check continuity through the Ground Fault	
Detector fuse.	
Reconnect the voltage tap connectors (now	
including the PXi system and the Newport	
controllers).	
Replug the connectors between the VCCL and the	
Newport Controller by connecting all of the circular	
connectors from the VCCL Lexan box. (This also	
connects the ice management controllers).	