



TORUS

THOMAS JEFFERSON NATIONAL ACCELERATOR FACILITY

12000 Jefferson Avenue
Newport News, VA 23606








HALL B PROCEDURE NO.:
B00000-04-01-P017 Rev -

TITLE: Torus Low Current Voltage Tap Check Procedure	DATE: April 6, 2016
BY: Probir Ghoshal	
CHK: Josh Ballard	
APP: Ruben Fair	

Since the magnet is cold
at 4.2K, magnet is
superconducting, the voltage
across the coils are
negligible.
No test at 4.2K
B Ghoshal
13th July
2016

1

REV.	DESCRIPTION	BY	CHK.	APP.	APP.	DATE
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Item	Checked by:	Date
Establish whether the Torus has a ground fault or via another procedure (<i>carried out normally leakage current test</i>)		
Measure "Voltage Drops" @ Current Limiting Resistor Boxes	NA	
Current Limiting Resistor Boxes connected on the feedthroughs out on the hex beam		
Cable connected to the Current Limiting Resistor Boxes on the feedthroughs out on the hex beam.		
Attach the negative lead of the Multimeter/Volt Meter to Positive Lead of the Torus		
Run current through the Torus with "floating" supply at <60 V with installed resistor / diode safety discharge circuit (Positive Voltage to Positive Lead).		
Using the positive lead of the Volt meter ~ Measure the values at connections at terminal strip and "Primary" Voltage Taps (VT1- VTXX and VTXXr) cascade at the pins of terminal FRONT PANEL after the Current Limiting Resistor Box on the coil VT feedthrough on hex beam (See B00000-09-00-0180 RevA).		
Record on a new set of dated columns on spread sheet for "Primary" Voltage Tap readings on M drive: shared drive Tab: Magnet Voltage Readings (Primary Column) Saved at the following location- M:\hallb_eng\CLAS12\Magnets\Torus\JLab Torus\C&I_Torus\Installation_HallB\Tests in Hall\Inductance & Res Measurement_HallB\Hall Torus Voltage Tap Wiring Checkouts v1_Low current measurement.xlsx		
Log the results		
Slowly discharge voltage from power supply by decreasing voltage to zero and remove test leads.	NA	