8cm DIPOLE RECEIVING INSPECTION AND WARM MEASUREMENTS TRAVELER

Cognizant Engineer: _____

Electrical Engineering: _____

Magnetic Measurements: _____

Quality Assurance: _____

Reference Documents:
RHIC-MAG-Q-1004 Rev. C
RHIC-MAG-R-7536 Rev. A
RHIC-MAG-R-7538 Rev. A
RHIC-MAG-R-7228 Rev. C
RHIC-MAG-R-7242 Rev. B
RHIC-MAG-R-7320 Rev. C
RHIC-MAG-R-7543 Rev. A
RHIC-MAG-R-7750 Rev. A
RHIC-MAG-R-7735 Rev. A

Part Name:					Part No:				Rev.	P/L Rev.
DIPOLE MAGNET ASSEMBLY					12065000 - *				Y	AC
Serial No.	QTY	1 ECN No.	Rev	P/L Rev	2 ECN No.	Rev	P/L Rev	3 ECN No.	Rev	P/L Rev
DRG										

Comments: _____

OP No.	AREA	OPERATION DESCRIPTION	REFERENCE PROCEDURE	NAME	LIFE No.	DATE	DR No.
10	1	Identify Magnet I.D. DRG _____ *Circle assembly dash number: -01 -02 -03 -04 Record: Arrival Date: _____ Arrival Time: _____ Travel Time: _____ Outside Ambient Temperature: _____ ° F.	RHIC-MAG-R-7536-3.3.1.2				
20	1	Record Mechanical / Visual inspection: FUNCTION: APPROVAL (✓) Seller's packaging. Part No., Revision letter, & Serial No. verified. Protective covers (2) are properly installed. Shipping port covers (3) are properly installed. Accelerometer is properly mounted. Temperature probe is properly mounted. Foreign matter and general cleanliness.	RHIC-MAG-R-7536-3.3.1.5				
30	1	Disconnect PAL Instrumentation Box and N2 supply line.	RHIC-MAG-R-7536-3.3.1.6 - 3.3.1.8				
40	1	Confirm magnet identification "LEAD END". Attach pre-printed labels.	RHIC-MAG-R-7536-3.3.4				

OP No.	AREA	OPERATION DESCRIPTION	REFERENCE PROCEDURE	NAME	LIFE No.	DATE	DR No.
50	1	Deliver vendor "End Item Documentation" to the MDC.					
60	1	Record Mechanical / Visual inspection: FUNCTION: APPROVAL (✓) Condition of wiring (routing, plastic tubing). ☐ Condition/cleanliness inside helium pipes & beam tube. ☐	RHIC-MAG-R-7536-3.3.3				
70	1	Remove shipping port covers (3) and restraint.	RHIC-MAG-R-7536-3.3.5				
80	1	Record Mechanical / Visual inspection: FUNCTION: APPROVAL (✓) Condition/cleanliness inside vacuum vessel legs. ☐ Presence of cracks in support posts. ☐ Presence of debris from shipping restraint. ☐	RHIC-MAG-R-7536-3.3.6				
90	1	Magnet sliding post outboard stopper clearance. Acceptance: (✓) Lead End _____ (.030 MAX.) Non Lead End _____	RHIC-MAG-R-7536-3.3.7				
100	1	Install (3) insulating baffles and (3) port covers.	RHIC-MAG-R-7543-				
110	1	Inspect and clean beam tube and He lines.	RHIC-MAG-R-7536-3.3.11				
120	1	Complete coarse alignment check with mask per drawing 12065088, and verify lengths. Accept: (✓) LEAD END RETURN END LENGTH He SUPPLY LINE _____ _____ _____ He RETURN LINE _____ _____ _____ UTILITY LINE _____ _____ _____ SHIELD LINE _____ _____ _____ END VOLUME _____ _____ _____	RHIC-MAG-R-7536-3.3.12				
130	2	Complete magnet temperature check. Record acceptable readings: Ambient: _____ °F Lead End: _____ °F Non-Lead End: _____ °F	RHIC-MAG-R-7536-				

OP No.	AREA	OPERATION DESCRIPTION	REFERENCE PROCEDURE	NAME	LIFE No.	DATE	DR No.
140	2	Measure and record Scale Bar **Temperature:** _____	RHIC-MAG-R-7538-				
150	2	Complete survey of fiducial balls. Attach printouts.	RHIC-MAG-R-7538-				
160	2	Complete survey for Datum A plane. Attach printouts.	RHIC-MAG-R-7538-				
170	2	Verify cold mass position in vacuum vessel agrees with position from N.G.C. inspection, (No shift due to shipping) (✓) Acceptance: _____	RHIC-MAG-R-7538-				
180	2	Locate cold bore tube and pipes. Verify length.	RHIC-MAG-R-7538-				
190	2	Measure and record Scale Bar Temperature: _____ °F	RHIC-MAG-R-7538-				
200	3	Perform electrical tests: OpCode DESCRIPTION Check (✓) HYPOT, R, TO GND @ 5kV: 120 ALL COILS & UPPER BUS 122 UPPER DIPOLE BUS TO LOWER BUS 124 QUAD BUS - BOTH BUS LEADS 126 QUAD BUS - UPPER TO LOWER HYPOT INDIV. WARM-UP HTRS TO GND @ 2.kV 131 #1 BRN 132 #2 RED 133 #3 ORN 134 #4 YEL HYPOT INDIV. (6) & ALL WIRES TO GND @ 5kV. 136 DIPOLE V TAP, VIO 138 QUAD BUS V TAP, WHT 140 QUAD BUS TRIM S/C, YEL DC CONTINUITY DC RES. INDIVDUAL WIRES (6) 142 DIPOLE BUS V TAP, VIO 144 QUAD BUS V TAP, WHT 146 QUAD BUS TRIM S/C, YEL ELECTRICAL TESTS CONTINUED ON SHEET 4.	RHIC-MAG-R-7536- 7228, 7242, 7243, 7320				

OP No.	AREA	OPERATION DESCRIPTION	REFERENCE PROCEDURE	NAME	LIFE No.	DATE	DR No.
200 cont.	3	Perform electrical tests, continued: OpCode DESCRIPTION Check (✓) R, L & Q CHECKS @ 1AMP / 120Hz 150 FULL MAGNET, FORWARD POLARITY 151 FULL MAGNET, REVERSE POLARITY 156 INDIVIDUAL COILS DC RESISTANCE WARM-UP HEATERS @ 1 AMP 161 #1 BRN 162 #2 RED 163 #3 ORN 164 #4 YEL DC RESISTANCE @ 1 AMP V TAP (B) TO END 166 INDIVIDUAL BLUE WIRE DC CONTINUITY 200Ω RESISTOR CHECK 171 #1 (A) RED, #2 (B) WHT, #3 (C) BLK V TAP / BUS SERIES V DROP TEST @ 1 AMP 175 SERIES VOLTAGE DROPS / TAP	RHIC-MAG-R-7536- 7228, 7242, 7243, 7320				
210	3	Complete integral field measurements. Record: Run No. _____	RHIC-MAG-R-7750-				
220	3	Complete Z-Scan, attach summary sheets, transfer data. Record: Run No. _____	RHIC-MAG-R-7750-				
230	3	Authorized approval of operations: CONTROL ROOM: _____ ELECTRO / MECHANICAL: _____ MECHANICAL SUPPORT GROUP: _____					