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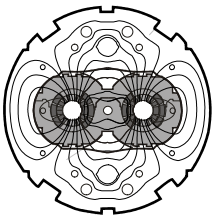

the **Large Hadron Collider** project

LHC Project Document No.	*CERN Part Identifier (19 chars)*
LHC-LQX-TP-0001 rev. 0.1	HCLQXB_001-FL000001
CERN Div/Group or Supplier/Contractor Doc No	*Test Procedure Number*
TD/FNAL/USA	LQXB_Test_Plan
EDMS Document No.	
408010	

Nonconformity Report

IDENTIFICATION	
1. Originator's Name: Rodger Bossert	6. Date: 22-Jan-2004
2. Contractor/Supplier: Fermilab	7. Part description: LQXB (Q2) Inner Triplet
3. Contract No: N/A	8. Qty: 1
4. Project Engineer: Jim Kerby	9. Dwg No: 5520-ME-390206 rev. C
5. Quality Manager: Jamie Blowers	

10. Found during what activity:

☐ Incoming inspection	☐ Final inspection
☒ In-process inspection	☐ Other:

11. Description of nonconformity (use continuation page if necessary)

Heater circuit "b" on Q2B (YT1142 on cold mass MQXB01) has a ~ 30 Mohm short to the coil. This was discovered during an electrical inspection during step 7.8 of Cryostat Final Assembly TR-333644. This means that sections 2.1.5 and 2.2.2 of the Acceptance Plan are not fully satisfied.

12. Action taken to prevent misuse (use continuation page if necessary)

YT1142 has been disconnected from the Hypertronics connector.

IMPORTANCE		
13.	☒ Non critical	☐ Critical

DISPOSITION					
14.	☒ Use-as-is	☐ Repair	☐ Reject	☐ Rework	☐ Return to supplier

Description of proposed action (use continuation page if necessary)

This is a redundant heater, and the other heater is fully functioning. Therefore we believe this device should be used as-is.

CORRECTIVE/PREVENTIVE ACTION

15. Description of proposed action (use continuation page if necessary)

The Module Assembly (TR-333643), which is prior to Cryostat Final Assembly, now includes a 5kV hipot before installing the Hypertronics connections. This should detect problems early enough so they can easily be corrected.

APPROVAL OF NON CRITICAL NONCONFORMITIES		
16	Project Engineer: Jim Kerby	Date: 15-Mar-2004

APPROVAL OF CRITICAL NONCONFORMITIES		
17	Project Management:	Date:

CLOSURE OF THE NONCONFORMITY

Planned actions have been completed and corrective/preventive actions have been initiated

	For non critical nonconformities Quality Manager or Project Engineer	For critical nonconformities Project Engineer
18	Name: Jamie Blowers Date: 15-Mar-2004	Name: Date:

NONCONFORMITY CONTINUATION PAGE

INSTRUCTIONS FOR COMPLETING THE NONCONFORMITY REPORT

1. Originator	Name of the person who identifies the nonconformity
2. Contractor/Supplier	Organisation where the nonconformity is detected
3. Contract No	CERN's contract or order No
4. Project Engineer	Name of the CERN or Institute engineer in charge of the contract
5. Quality Manager	Name of the person responsible for quality control
6. Date	Date when the nonconformity is identified
7. Part description	Name of the part such as it appears on drawing or contract or order
8. Qty	Number of parts or lots affected
9. Dwg No	Part drawing number and revision index
10. Found during what activity	Tick the appropriate box. If ticking *Other* explain the circumstances
11. Description of the nonconformity	Describe the problem, identify the requirements that are not met, give references to specifications, procedures etc. If possible describe the possible causes of the nonconformity, such as inadequate procedure, wrong test set-up and so on.
12. Action taken to prevent misuse	Describe what steps have been taken to ensure that the item is segregated from the normal production while the nonconformity remains unresolved.
13. Importance	P.E. to decide if the nonconformity is critical or not and tick appropriate box
14. Disposition	P.E. to decide on disposition, tick appropriate box and outline the details of the proposed actions.
15. Corrective/preventive action	P.E. to decide what action should be taken with the design, the manufacturing process, the testing procedure or any other circumstance to prevent the reoccurrence of the problem.
16. Approval of non critical nonconformities	Complete with the name of the Project Engineer and the date of approval.
17. Approval of critical nonconformities	Complete with the name of the Project Manager, the name of the approval list if appropriate, and the date of approval.
18. Closure of the nonconformity	For a non critical NC, complete with the name of the Quality Manager and the date of the verification. For a critical NC, complete with the name of the CERN Project Engineer and the date of the verification.

Note that points 16, 17 and 18 may be left blank for all nonconformities that are tracked using the EDMS system as described in chapter 3 of document LHC-PM-QA-611.00 "Management of Nonconformities"