

1 Scope

1.1 Scope

This procedure establishes requirements for the continuity of the back tension plate during module assembly

1.2 Applicability

1.2.1 Applicability

This procedure applies to the process of verifying the continuity of the back tension plate by the Indiana and Duke Production Facilities.

1.2.2 <u>Relation to Other ATLAS Project</u> <u>Requirements</u>

The inspection procedure described by this specification is in addition to other tests and inspections required for module assembly. Module assembly may begin only after acceptable results from this inspection

2 Applicable Documents

2.1 Document List

The following documents of the issue in effect on the effective date of this specification form a part of this specification to the extent specified herein.

2.1.1 <u>ATL-IT-EY-0004</u>, <u>ATLAS</u> <u>U.S.</u> <u>Environmental</u>, <u>Health</u>, <u>and</u> <u>Safety Plan</u>

2.2 Amendments and Revisions

Whenever this procedure is amended or revised subsequent to its effective date, the Revised Version will be placed in the Engineering Data Management System, the Production DataBase displays, and released to the technicians. The Production Engineers will coordinate release to the technicians.

3 Requirements

3.1 Background

When each tension plate is installed the continuity of each capacitor pin needs to be tested. The back tension plate is installed after the front one so the test is from each capacitor pin on the front to the corresponding capacitor pin on the back. The resistances are measured and compared with the group resistance measurement

Appendix A provides a checklist to be used by Technicians performing this procedure.

3.2 Software Interface

(For Indiana production)

Straw Resistance Program

Uses a Wavetek 235 Digital Multimeter (DMM) to sequentially measure the resistance of the straws from one end to the other of a module. The program asks the user to push a button when the meter is set up to measure the next straw. When the operator presses the button, the straw number, the straw location, the module serial number, the date/time, and the resistance are recorded in an output file. The Program then waits for the user to move the leads of the resistance meter to the ends of the next straw. The contents of the output file can be read at a later time to re-inspect just the straws that have been designated as bad by simply copying the file to a new name and deleting the entries for straws that are designated as good using any text editor. The user can also specify which straw ends to measure by entering a list of the standard straw numbers

Preparation for Delivery 4

4.1.1 Storage, Packing , and Shipping Requirements

There are no storage, packing, and shipping requirements applicable to this procedure.

5 Environment, Health, and Safety (EH&S)

5.1.1 EH&S Invoked

This test requires mixing and application of glues that may be subject to special handling appropriate to materials that could involve health hazards. Technicians performing this test must follow the ATLAS U.S. EH&S procedures for glue use and application as described by reference 2.1.1 above.

6 References

- 6.1 ATLITB1 0018, Module 1 **Tension Plate Subassembly**
- 6.2 ATLITB2 0018, Module 2 **Tension Plate Subassembly**
- 6.3 ATLITB3 0011, Module 3 **Tension Plate Subassembly**

Document title

Quality Assurance Procedure for Verifying Tension Plate Continuity

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ATLAS project document no. ATL-IT-QA-0042 Date last modified. 24 May 2001 Approval status Full Production

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Appendix A

Table Name: tblChecklistVerifyContinuityStep Check List Steps

1 Scan the "Quality Assurance Procedurre to Verify Tension Plate Continuity" Product ID Barcode. Start with the FRONT of the Module.

2 Measure and enter the resistance between corresponding capacitor pins of the straw group under test using special pin socket and a digital multi-meter. Do Not Force!

3 If the resistancs are below 20 ohms, enter "Accept". Otherwise contact a supervisor.

4 If the module assembly passed the inspections for all straw groups, enter "Accept". Otherwise enter "Reject", and return the module for rework.

5 Enter "Save" to exit and save the data. Otherwise, enter "Cancel" to exit without saving.



Procedure Part Number



QA Procedure to Verify Back Tension Plate Continuity Product ID Barcode

Approvals			
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