

Connecting the ECU Hardware to the Flight Dewar and Probe B

GRAVITY PROBE B PROCEDURE

P Doc Number: P0328

Operation Number: _____

INSTALLATION AND CONNECTION OF THE ECU HARDWARE TO THE FLIGHT DEWAR AND PROBE B FOR GTU-2 TESTING

1/24/10

Approvals:

Program Responsibility	Signature	Date
Dave Meriwether Satellite Operations and Testing		
M. Taber GTU Test Director		
J. Kasdin GP-B System Engineering		
B. Taller GP-B Quality Assurance		
J. Turneure GP-B Hardware Manager		

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Revision Record:

Rev	Rev Date	ECO #	Summary Description

Hardware/Software Required

Commercial test equipment

Manufacturer	Model	Serial Number	Calibr. Exp. Date

Special test equipment

Description	Part No.	Rev. no.	Serial No.

Currency:

- **Originator, date created:** H.D. Meriwether, 9/2/97
- **Review interval:** 1 year
- **Reviewed by, date reviewed:**
- **Revised by, date time revised:** H.D.Meriwether, 1/24/10 1:21 PM

Description:

This procedure describes and details how to connect the ECU to the Flight Dewar and Probe B during GTU-2.

Level of QA required during performance of this procedure:

___QA Rep.

Notes:

A second person should be observing the performance of this procedure to independently verify the cable connection

Authority:

- Only Bob Ajitomi and John Thatcher have full authority to run these procedures. Uncertified personnel do not have the authority to run this procedure.
- Authority to red-line this document (make minor changes during execution of this procedure): *D. Meriwether*

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Settings\kstahl.PLID98\Desktop\Bob_Kahn\DOC_FILES\LATEST_VERSION_ONLY\PO328.doc

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- Mike Tabor or Dave Murray are authorized to act as QA Rep.

Warnings:

- Failure to properly carry out a procedure may result in Flight Hardware damage.
- The ECU connectors are similar in shape and color. Care must be taken when connecting the cables to ensure that they are attached at their proper location.

Electrical mating and demating of flight hardware connectors

- A.1.1 *Connection and disconnection shall be performed only when the equipment involved is in a powered-down state.*
- A.1.2 *Connector savers are to be used unless otherwise specified.*
- A.1.3 *Connectors shall be inspected for contamination and for bent, damaged, or recessed pins prior to mating.*
- A.1.4 *Grounded wrist straps are to be worn prior to removal of connector caps or covers and during mating/demating operations.*
- A.1.5 *ESD-protective caps or covers are to be immediately installed after demating of connectors.*
- A.1.6 *Aluminum foil can be used for ESD Caps*

Step #	Steps to be performed:
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1. Mount the forward ECU onto the plumbing pallet using four (4) each #8-32 0.5" long socket head screws.
2. Hook up Aft ECU cables P-11, -12, -13 & -14 between Aft and Forward ECU.
3. Hook up Forward ECU cables I-1, -2, -3, -5, -6 & -7 to the Top Hat.
 - 3.1. Connector savers are not required for the ECU test set during GTU-2
 - 3.2. Cable I-1 and I-3 also connects to the Forward SRE, do not connect cable I-1 or I-3 to the Forward SRE during GTU-2.
4. Verify the latest Probe B GTU-2 wire list.
5. Connect I-1, -2, -3, -5, -6 & -7 to the forward ECU.

Cable designation on Probe	Cable ID	Cable designation on Forward ECU
I-1	GTU2-1002	J-1
I-3	GTU2-1003	J-3
I-5	GTU2-1005	J-5
I-6	GTU2-1006	J-6
I-7	GTU2-1007	J-7

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Test completed.

Completed by: _____

Witnessed by: _____

Date: _____

Time: _____