



HESSI SPACECRAFT PRE-ENCAPSULATION CLOSEOUT

HSI_MIT_046B

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DAVE CURTIS

DRAFT

As Run on: _____ (Date/Time)

By _____ (Test Conductor)

DOCUMENT REVISION RECORD

Rev.	Date	Description of Change
A	2000-11-8	Original draft
B	2000-11-9	Add detail on the Imager red & green tags. Also add spectrometer pump port cap.

Western Range/NASA Safety: _____ Date _____

Project Manager: _____ Date _____
 Peter Harvey

System Engineer: _____ Date _____
 David Curtis

QA: _____ Date _____
 Ron Jackson

1. INTRODUCTION

1.1 Purpose

This document describes the physical configuration of the spacecraft prior to spacecraft encapsulation in the launch vehicle fairing. This procedure is divided into two parts; those closeouts that can get done prior to integration with the launch vehicle (but after the final pre-mate functional), and those that must be done late in the flow as contamination sensitive surfaces will be exposed.

2. PRE_MATE CLOSEOUTS

These must be done after the final pre-mate functional test at building 1555, but before mating to the launch vehicle. They should be done prior to rolling over the spacecraft and installation on the Byrd-mobile.

2.1 Items to Remove

- | | |
|--|-------------|
| 1. Battery Relay Box (Bus should be OFF) | Verify_____ |
| 2. TAC to GSE connector | Verify_____ |
| 3. Umbilical to GSE connector | Verify_____ |
| 4. Battery Cell Monitor Box | Verify_____ |
| 5. Solar Array first motion fixture tabs (16x) | Verify_____ |
| 6. Imager Grid Tray tooling balls (18) | Verify_____ |
| 7. RAS tooling balls (4) | Verify_____ |
| 8. Reference tooling ball at center ring | Verify_____ |
| 9. TMS Alignment Laser on Imager front | Verify_____ |
| 10. TMS Scaffold on imager front | Verify_____ |
| 11. Lifting Fixture and lifting fixture guides on Imager | Verify_____ |
| 12. Battery Flight Plug (BFP) | Verify_____ |
| 13. Flight Enable Plug (FEP) | Verify_____ |
| 14. RAS Stimulus Cover | Verify_____ |
| 15. FSS Stimulus head | Verify_____ |
| 16. RF Antenna hats (4x) | Verify_____ |
| 17. TMS Shorting plug | Verify_____ |
| 18. Vacuum Valve GSE | Verify_____ |
| 19. Spectrometer LN2 feed GSE | Verify_____ |

QA Verify:

2.2 Items to Install / Verify

- 1. RAS dust cover Verify_____
- 2. PMT dust cover Verify_____
- 3. FSS dust cover Verify_____
- 4. Actuator Enable Plug (mated) Verify_____
- 5. Vacuum Valve Plug (mated) Verify_____
- 6. HV Enable plug (mated) Verify_____
- 7. Upper Grid Tray Scaffold with thermal blankets Verify_____
- 8. Battery cell voltage monitor connector dust cover (TBR) Verify_____
 (also unused SEM and IDPU connectors - TBR)
- 9. Spectrometer LN2 feed support Verify_____

QA Verify:

2.3 Other closeouts

- 1. Cage Spectrometer Attenuator Actuators Verify_____
- 2. Close RAS aperture shutter Verify_____
- 3. Thermal Blankets closed out Verify_____
- 4. Inspect blankets and harnesses near solar array to ensure clearance Verify_____

QA Verify:

3. PRE-ENCAPSULATION CLOSEOUTS

This step is to be done just prior to encapsulation. First re-verify all items from step 2. Then perform the final closeouts below. Take photographs of all locations.

3.1 Items to Remove

- 1. Fine Sun Sensor Cover Verify_____
- 2. CSS Dust Covers (8) Verify_____
- 3. RAS Dust Cover Verify_____
- 4. PMT Dust Cover Verify_____
- 5. SAS lens covers (3) Verify_____
- 6. SAS tape dust covers (lower grid tray, note the number on the tapes) (3)
 Numbers: _____ Verify_____
- 7. Solar Array Wing dust covers (4) Verify_____

QA Verify:

3.2 Items to Install / Verify

- 1. Umbilical pigtail from UMB to PAF Verify_____
- 2. Spectrometer pump port cap Verify_____

QA Verify:

3.3 Other closeouts

- 1. Thermal Blankets closed out Verify_____
- 2. Inspect cleanliness of RAS and SAS lenses. Clean it in case of excessive dust or contamination Verify_____

QA Verify: