STEREO IMPACT

PR Numbers: 1xxx=UCB, 2xxx=Caltech/JPL, 3xxx=UMd, 4xxx=GSFC/SEP, 5xxx=GSFC/Mag, 6xxx=CESR, 7xxx=Keil, 8xxx=ESTEC, 9xxx=MPAe **Assembly :** SIT Instrument SubAssembly: N/A **Component/Part Number:** Serial Number: FM1/FM2 **Originator:** Gibb **Organization: GSFC** Phone: 301-286-0213 Email: lgibb@pop400.gsfc.nasa.gov **Failure Occurred During (Check one** $\sqrt{}$) □ Qualification test □ Functional test □ S/C Integration \Box Launch operations **Environment when failure occurred:** x Ambient □ Vibration □ Shock □ Acoustic □ Thermal □ Vacuum □Thermal-Vacuum □ EMI/EMC

Problem Description

- 1. FM1/FM2: HVPS & Pin puller connector designations and Nanohex connector designations are not marked.
- 2. FM1/FM2: Slight damage to VDA/Kapton strip on top of collimator.
- 3. FM1: Missing screw on top cover. An attempt was made to install a screw but it would only spin and then could not be removed.
- 4. FM1/FM2: Ty-straps have not been staked in all locations.
- 5. FM1/FM2: Empty hole (unused location) on telescope back panel.
- 6. FM2: Telescope back panel; One screw (bottom right corner) is broken off and has been staked. Third screw from the bottom (right side) is broken off. Telescope panel (right side) lower front screw is broken off and rim of countersunk hole is burred.
- 7. Scratches on front (center) of HVPS. FM1: Scratches by single Nanohex connector. Caused during epoxy removal for rework operations.
- 8. FM1: Start signal cable shrink tubing is split at the back of the Nanohex connector.

Analyses Performed to Determine Cause

These problems are the result of design oversights and difficulties encountered during assembly and reassembly after rework operations. Some issues are the result of poor handling techniques.

Corrective	Action/	Resolution
COLLCUITE	1 CHOIL	nesolution

X Rewo	rk 🗆 Repair	Use As Is	□ Scrap
1. The high voltage connector is permanently mated, and any marking for the pin puller connector			
	would be hidden by the blanketing that is du	e to be installed. Nanohex co	nnectors are marked on

- each cable. Use-as-is.
- 2. Damage is slight and will not affect form, fit, or function. Use-as-is.
- 3. Fill the counter-bored hole that the screw goes in with Uralane 5753 staking material.
- 4. Use of staking material is to be kept at a minimum due to sensitivity of detectors. Use-as-is.
- 5. Install screw, torque to \sim 32 in/oz and then stake.
- 6. Stake broken screws in place with Uralane 5753. Stake burred hole.
- 7. Will not affect form, fit, or function. Use-as-is.
- 8. Wrap with two layers of Kapton tape and stake in place with Uralane 5753.

 Date Action Taken:
 8/1/2005
 Retest Results:
 Final Inspection completed on both

 FM1/FM2_____
 Corrective Action Required/Performed on other Units
 □ Serial

 Number(s):

Closure Approvals



Subsystem Lead:	Date:
IMPACT Project Manager:	Date
ÎMPACT QA:	Date:
NASA IMPACT Instrument Manager:	Date: