# **STEREO IMPACT**

PROBLEM REPORT PR-3017 Reichenthal 7/27/05

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: HVPS **Component/Part Number:** Serial Number: FM1/FM2 **Originator:** Reichenthal **Organization: UMd** Phone: 301-286-5634 Email: Lillian.S.Reichenthal@nasa.gov **Failure Occurred During (Check one**  $\sqrt{}$ ) □ Functional test □ Qualification test □ S/C Integration  $\Box$  Launch operations **Environment when failure occurred:** x Ambient □ Vibration □ Acoustic □ Shock □ Thermal □ Vacuum □Thermal-Vacuum □ EMI/EMC

#### **Problem Description**

The 9 pin MDM connector on the SIT HVPS is not seated fully. There is approximately a 0.050 gap from a full connector engagement. This is due to the fact that the length of the jack post head protrudes past the connector shell. This problem is seen on both flight units. The jack post cannot easily be replaced because the hardware is terminated with nuts inside of the HVPS box. It would be a major effort to disassemble the SIT unit to disassemble the HVPS box.

#### **Analyses Performed to Determine Cause**

Calculations of the worst case pin engagement due to the 0.062 gap is (0.012) worst case and (0.065) best case. In addition, without full connector engagement, the connector becomes more susceptible to humidity. This is not acceptable for flight.

#### **Corrective Action/ Resolution**

 $\Box$  Reworkx Repair $\Box$  Use As Is $\Box$  ScrapThe flange of the MDM connector of the mating harness was modified to allow for the jack post head to<br/>not protrude past the connector shell. Removed the clip (0.015") and milled the flange (0.025"). (Prior to<br/>milling the flange was 0.090"). The mounting hardware along with the area that was modified on the<br/>connector was covered with Uralane 5753. See attached pictures. The connectors on both flight units are<br/>now fully engaged.

 Date Action Taken:\_\_7/29/2005\_\_\_\_ Retest Results:\_n/a

 Corrective Action Required/Performed on other Units
 □ Serial Number(s): \_the corrective action was performed on both FM1 and FM2.

#### **Closure Approvals**

Subsystem Lead: \_\_\_\_\_\_ IMPACT Project Manager: \_\_\_\_\_ IMPACT QA: \_\_\_\_\_ NASA IMPACT Instrument Manager: \_\_\_\_\_

 Date:
 Date
 Date:
 Date:
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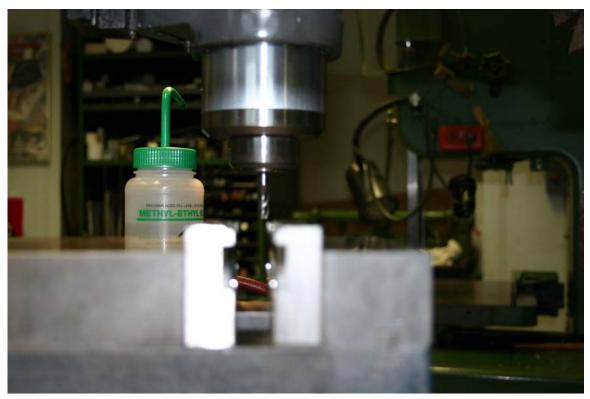
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