

STEREO IMPACT

PROBLEM REPORT

PR-2003

LET L1 Detector

4/7/2005

PR Numbers: 1xxx=UCB, 2xxx=Caltech/JPL, 3xxx=UMd, 4xxx=GSFC/SEP, 5xxx=GSFC/Mag,
6xxx=CESR, 7xxx=Keil, 8xxx=ESTEC, 9xxx=MPAe

Assembly: SEP	SubAssembly: LET FM2
Component/Part Number: L1 detector	Serial Number: L1-40
Originator: Branislav Kecman	Organization: Caltech
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Failure Occurred During (Check one)

Functional test Qualification test S/C Integration Launch operations

Environment when failure occurred:

Ambient Vibration Shock Acoustic
 Thermal Vacuum Thermal-Vacuum EMI/EMC

Problem Description

The L1-40 detector in the FM2 LET instrument (L1B2) has been displaying a high and growing leakage current over time.

Analyses Performed to Determine Cause

See data plots attached.

Corrective Action/ Resolution

Rework Repair Use As Is Scrap

Replaced the L1B2 in LET FM1 from S/N L1-40 to S/N L1-37 prior to the start of environmental testing. Functional testing of the unit was successfully and all of the detector leakage currents continue to be trended throughout the entire test program. The leakage current trended throughout acoustic and vibe testing remains nominal.

No additional retesting on the assembly is required due to this change.

Date Action Taken: 4/12/2005 Retest Results: success

Corrective Action Required/Performed on other Units Serial Number(s): n/a

Closure Approvals

Subsystem Lead: Branislav Kecman _____ Date: 8/31/05
IMPACT Project Manager: _____ Date: _____
IMPACT QA: _____ Date: _____
NASA IMPACT Instrument Manager: _____ Date: _____

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