

Problem/Failure Report THM PFR 0

Problem/Failure Report



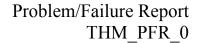
THM PFR 128

Title: Antenna Coax Interferes with FGB

Assembly: Probe Harness			SubAssembly: Antenna Coax		
Component:		Units Affected:	Units fixed:		
Originator: Paul Turin		000000	0 0 0 0 0		
Organization: SSL		Date: 12/20/05			
Phone:510-845-2418		Email:pturin@ssl.berkeley.edu			
Failure Occurred During (Check one $\sqrt{\ }$)					
\Box Functional test \Box Qualification test X S/C Integration \Box Launch operations \Box Other (Flight Assy)					
Environment when failure occurred:					
□ Ambient	□ Vibration		□ Shock	□ Acoustic	
□ Thermal	□ Vacuum		□ Thermal-Vacuum	□ EMI/EMC	

During integration of the FGM Boom onto Probe 2 it was discovered that the antenna coax interferes with one of the FGM boom tubes. The coax was laced to the end of one ear of the bonded clip, pushing the coax fairly far from the AXB tube. We rotated the coax and tie-wrap around the clip to move it inward, but this still did not provide enough clearance:

Problem Description







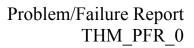
Both the FGM tube and the AXB tube (over the coax) will be blanketed, worsening the interference.

Analyses Performed to Determine Cause

N/A

Corrective Action/ Resolution

We cut the coax to AXB tie-wraps, removed the staking material attaching the coax to the deck opening, pulled out some of the slack stored in a loop near the transponder, and replaced the coax as shown:







Staking material will be reapplied where the coax passes through the AXB flange and deck. This routing provides enough room for the FGB and the blankets. Swales should dress the harnesses in this fashion on the remaining probes.

Acceptance: MAM: Ron Jackson	; MSE: Ellen Taylor
PM: Peter Harvey	; Cognizant Engineer
Date of Closure	