PFR-186 Title:Thermal Blanket Velcro Adhesion Failure

Assembly : Probe	**SubAssembly : Thermal Blankets**	
Component : Tank Insert Blanket	**Units Affected:**	**Units fixed:**
Originator: Christopher Smith	X X X X X X	X X X X X X
Organization: SSL	**Date: 31 May 06**	
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Failure Occurred During (Check one √)

□ Functional test □ Qualification test X S/C Integration □ Launch operations □ Other

Environment when failure occurred:

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

Problem Description

The top deck tank inserts have MLI blankets on them that are attached using four Velcro patches. These patches are bonded directly to the painted surface of the tank inserts with epoxy. When the blankets were removed from P2 following thermal vac testing. The epoxy adhesion was great but it peeled the paint off of the inserts and therefore removed the Velcro patches.

Analyses Performed to Determine Cause

None, cause was obvious..

Corrective Action/ Resolution

The Velcro on P2 was re-attached with epoxy essentially gluing the paint on to the titanium insert. These tank insert blankets are now held down with 966 adhesive as well as the original Velcro which should me more than sufficient for the task.

Acceptance:

MAM: Ron Jackson_____; MSE: Ellen Taylor_____

PM: Peter Harvey_____; Cognizant Engineer_____

Date of Closure_____