



PFR-182 Title: P3 T1 Thruster/Rollover Cart Interference

Assembly : F3 T1 Thruster	SubAssembly : Sensor	
Component : Detector	Units Affected:	Units fixed:
Originator: Gregory Dalton	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Organization: SSL	Date: 23 May 2006	
Phone: 510-643-9240	Email : gdalton@ssl.berkeley.edu	

Failure Occurred During (Check one √)

☐ Functional test ☐ Qualification test ☐ S/C Integration ☐ Launch operations ☒ Other Rollover

Environment when failure occurred:

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

Problem Description

While rotating the F3 probe in the Rollover Fixture, the T1 Thruster Cover (a red-tag item) came in contact with the rollover fixture. Greg Dalton and Chris Scholz were performing the rollover, and Rommel Zara was observing the clearance.

Analyses Performed to Determine Cause
--

The probe was oriented in the rollover fixture with the ESA and SST's near the pivot points. The probe had been oriented in the same position at JPL before thermal vacuum testing. However, there was not an issue since the covers had been removed for TVAC testing.

Corrective Action/ Resolution

Per THM-MINT-PROC-056, step 9.e.6, rotate the probe, "...carefully observing Probe-Fixture clearance..." For future rollover procedures, careful care must be taken to ensure this step is strictly observed. QA will observe the clearance with authorized personnel performing the rollover.

T1 Thruster alignment will be verified against spacecraft reference coordinates. This will be performed with the Faro Arm at JPL, but no misalignment is expected.

Acceptance:

MAM: Ron Jackson _____; MSE: Ellen Taylor _____

PM: Peter Harvey _____; Cognizant Engineer _____

Date of Closure _____