



**PFR-212 Title: ESA Radiation Source not installed correctly for F3/4 TV Test**

<b>Assembly :</b> GSE	<b>SubAssembly :</b> ESA									
<b>Component :</b> Radiation Source	<b>Units Affected:</b>					<b>Units fixed:</b>				
<b>Originator:</b> Ellen Taylor	-	-	x	x	-	-	-	-	x	x
<b>Organization:</b> UCB	<b>Date:</b> 7/26/06 (date found)									
<b>Phone:</b> (510) 643-4054	<b>Email :</b> ertaylor@ssl.berkeley.edu									

**Failure Occurred During (Check one ✓)**

☒ Functional test   ☐ Qualification test   ☐ S/C Integration   ☐ Launch operations   ☐ Other (Flight Assy)

**Environment when failure occurred:**

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

**Problem Description**

The ESA radiation source was not seen on the detectors during the ESA HV test in T-Vac on Probes 3 and 4.

**Analyses Performed to Determine Cause**

After the tank was opened up, the placement of the radiation source was examined. It was determined that the sources were not installed correctly and were actually pointed towards the Thermal Box exterior, not the sensors.

**Corrective Action/ Resolution**

Even without the source, the ESA HV test proved that the ESA Instruments on Probes 3 and 4 were operating as expected. A scientist familiar with the installation of the particle sources (Davin Larson) was present at JPL when the sources were placed for the subsequent Probe 1 and 5 TV Test. The ESA response was as expected for the subsequent test.

Acceptance:

MAM: Ron Jackson \_\_\_\_\_; MSE: Ellen Taylor \_\_\_\_\_

PM: Peter Harvey \_\_\_\_\_; Cognizant Engineer \_\_\_\_\_

Date of Closure \_\_\_\_\_