



**PFR-208 Title: F5 SCM sensor connected during magnetics test degauss**

<b>Assembly :</b> Instruments	<b>SubAssembly : SCM</b>	
<b>Component :</b> SCM Preamp	<b>Units Affected:</b>	<b>Units fixed:</b>
<b>Originator:</b> Michael Ludlam	<input type="checkbox"/> <input type="checkbox"/> <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 checked="" type="checkbox"/> <input type="checkbox"/>
<b>Organization:</b> SSL	<b>Date:</b> 13 <sup>th</sup> September 2006	
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**Failure Occurred During (Check one ✓)**

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

**Environment when failure occurred:**

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

**Problem Description**

During the FM5 DC Magnetics testing at JPL the SCM sensor was not disconnected from the SCM preamp during deperming as required in the procedure.

**Analyses Performed to Determine Cause**

Analysis was conducted for the applied field of 15 Gauss at 0.3Hz to see if it could have damaged the SCM preamp. The applied voltage to the SCM preamp was calculated to be 2V, the maximum input voltage the preamp can sustain is 45V.

A functional test of the preamp with the feedback plug attached was conducted and the results showed nominal behavior.

**Corrective Action/ Resolution**

No damage was done to the SCM preamp by not unplugging it from the SCM sensor during the deperming operation. However, personnel were made aware of the requirement and the procedure was reviewed to ensure future tests included the sensor disconnected from the preamp during DC magnetics deperming. This PFR is closed.

Acceptance:

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

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

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