



PFR-223 Title: RCS Inhibit Status incorrect on EGSE

Assembly : PCA EGSE	SubAssembly : Cable	
Component :	Units Affected:	Units fixed:
Originator: Ellen Taylor	<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"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Organization: UCB	Date: 8/16/06 (date found)	
Phone: (510) 643-4054	Email : 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

(See S. Harris e-mail; Subject: PCA EGSE status; Date: 8/18/06)

On 8/18/06, a PCA EGSE safe-to-mate was run on all five probes. One anomaly was encountered.

Anomaly: On P1, "RCS Inh Status", the voltage measured between pins 43 and 63 measured 0.0V, instead of 2.5V. As a result, P1 was left disconnected, with a note saying that it did not pass safe-to-mate.

Analyses Performed to Determine Cause
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(See C. Scholz e-mail; Subject: Re: PCA EGSE status; Date: 8/22/06)

On 8/22/06, Chris Scholz inspected the harness and connectors and determined a broken wire at the feed thru connector, soldered. A new short length of wire into the solder cup and then solder to the end of the broken wire and covered with shrink tubing. Retesting of the connections showed a resistance reading of approximately 2 ohms between pin 43 on the 78 pin connector and pin 3 on the PCA connector and also 2 ohms between pin 63 on the 78 pin connector and pin 31 on the PCA connector.

Corrective Action/ Resolution

On 8/30/06, the PCA EGSE to Probe 1 Safe-to-Mate was completed. The harness fix was verified and Probe 1 connected.

Acceptance:

MAM: Ron Jackson _____; MSE: Ellen Taylor _____

PM: Peter Harvey _____; Cognizant Engineer _____

Date of Closure _____