



PFR-058 Title: Mag Booms – SCM Connector Wire Damage

Assembly : THM-SCB-FLT-006	SubAssembly : THM-SCB-MEC-402											
Component : SCM Connector/Harness	Units Affected:						Units fixed:					
Originator: Alec Plauché	-	-	-	-	-	x	-	-	-	-	-	x
Organization: SSL @ UCB	Date: 5/26/05											
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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

One wire at the instrument side on the SCM Boom Harness sustained damage cause the wire to rip free of the SCM Connector leaving the pin in the connector with the remains on the wire still crimped inside.

Analyses Performed to Determine Cause

The F6 booms, the booms formerly know as F1, have undergone excessive transport and handling due to their history and testing locations. The harness and instrument connector were allowed to dangle freely, protected only by a plastic bag. The damage is certainly due to mishandling during transport. The damage originating during vibration is improbable as the connector and harness are secured during vibration testing.

Corrective Action/ Resolution

The wire in question shall be cut, stripped, and crimped on a new pin. To avoid future damage of this unit and the 5 flight units, the connectors shall be placed in bubble-padded plastic bags and taped down to the boom during test AND transport.

Acceptance:

MAM: Ron Jackson _____; MSE: Ellen Taylor _____

PM: Peter Harvey _____; Cognizant Engineer _____

Date of Closure ___ 5/26/05 _____