

**FAILURE MODES EFFECTS ANALYSIS (FMEA) - CIL HARDWARE
NUMBER: 05-6S-BFUS4 -X**

**SUBSYSTEM NAME: EPD&C-DATA PROC. SYSTEM, & COMPUTERS (05-5)
REVISION: 3 07/18/90**

PART DATA

	PART NAME VENDOR NAME	PART NUMBER VENDOR NUMBER
LRU	: PANEL F6A5	V07D-730257
SRU	: FUSE, PLUG-IN TYPE	ME451-0018-0100

**EXTENDED DESCRIPTION OF PART UNDER ANALYSIS:
FUSE, 1 AMP, ENGAGE DRIVER CIRCUITRY.**

**REFERENCE DESIGNATORS: 34V73A6A5F9
34V73A6A5F10
34V73A6A5F11**

**QUANTITY OF LIKE ITEMS: 3
THREE**

**FUNCTION:
PROVIDES SHORT CIRCUIT PROTECTION BETWEEN BFC DISENGAGE SWITCH AND
CONTROL BUSES CA1 AND AB3.**

FAILURE MODES EFFECTS ANALYSIS FMEA - CIL FAILURE MODE

NUMBER: 05-6S-BFU84-01

REVISION#: 3 04/11/96

SUBSYSTEM NAME: EPD&C-DATA PROC. SYSTEM, & COMPUTERS (05-5)

LRU: PANEL F6A5

CRITICALITY OF THIS

ITEM NAME: FUSE, PLUG-IN TYPE

FAILURE MODE: 1R2

FAILURE MODE:

FAILS TO OPEN, FAILS TO CONDUCT

MISSION PHASE:

LO LIFT-OFF

DO DE-ORBIT

VEHICLE/PAYLOAD/KIT EFFECTIVITY:	102	COLUMBIA
	103	DISCOVERY
	104	ATLANTIS
	105	ENDEAVOUR

CAUSE:

STRUCTURAL FAILURE, CONTAMINATION, VIBRATION, MECHANICAL SHOCK,
PROCESSING ANOMALY, THERMAL STRESS.

CRITICALITY 1/1 DURING INTACT ABORT ONLY? NO

REDUNDANCY SCREEN	A) PASS
	B) FAIL
	C) PASS

PASS/FAIL RATIONALE:

A)

B)

FAILS SCREEN "B" BECAUSE FUSES ARE NOT INSTRUMENTED.

C)

- FAILURE EFFECTS -

(A) SUBSYSTEM:

BFS (PRE-ENGAGE) - LOSS OF ABILITY TO ENGAGE BFS.

BFS (POST-ENGAGE) - NO EFFECT SINCE ALREADY ENGAGED.

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NUMBER: 05-6S-BFUS4- 01

(B) INTERFACING SUBSYSTEM(S):

BFS (PRE-ENGAGE) - LOSS OF ABILITY TO ENGAGE BFS.
BFS (POST-ENGAGE) - NO EFFECT SINCE ALREADY ENGAGED.

(C) MISSION:

NO EFFECT FIRST FAILURE

(D) CREW, VEHICLE, AND ELEMENT(S):

BFS - (POST ENGAGE) - NO EFFECT SINCE ALREADY ENGAGED.
NO EFFECT FIRST FAILURE.

(E) FUNCTIONAL CRITICALITY EFFECTS:

CRITICALITY 1R2 BECAUSE OF LOSS OF ABILITY TO ENGAGE BFS AFTER A GENERIC
HARDWARE/SOFTWARE FAILURE(S) IN THE PRIMARY SYSTEM RESULTS IN LOSS OF
VEHICLE CONTROL.

-DISPOSITION RATIONALE-

(A) DESIGN:

REFER TO APPENDIX D, ITEM NO. 4 - FUSE.

(B) TEST:

REFER TO APPENDIX D, ITEM NO. 4 - FUSE.

GROUND TURNAROUND TEST: ALL TURNAROUND CHECKOUT TESTING IS
ACCOMPLISHED IN ACCORDANCE WITH OMRSD.

(C) INSPECTION:

REFER TO APPENDIX D, ITEM NO. 4 - FUSE.

(D) FAILURE HISTORY:

CURRENT DATA ON TEST FAILURES, FLIGHT FAILURES, UNEXPLAINED ANOMALIES, AND
OTHER FAILURES EXPERIENCED DURING GROUND PROCESSING ACTIVITY CAN BE
FOUND IN THE PRACA DATABASE

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(E) OPERATIONAL USE:
NONE.

- APPROVALS -

EDITORIALLY APPROVED	: RI	<i>[Signature]</i>
EDITORIALLY APPROVED	: JSC	<i>[Signature]</i>
TECHNICAL APPROVAL	: VIA APPROVAL FORM	: 96-CIL-013_056S