

**FAILURE MODES EFFECTS ANALYSIS (FMEA) - CIL HARDWARE  
NUMBER: 05-6-2294 -X**

**SUBSYSTEM NAME: ELECTRICAL POWER DISTRIBUTION & CONTROL  
REVISION: 0 05/03/88**

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**PART DATA**

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	<b>PART NAME VENDOR NAME</b>	<b>PART NUMBER VENDOR NUMBER</b>
LRU	: FWD PCA 1	V070-763320
LRU	: FWD PCA 2	V070-763340
LRU	: FWD PCA 3	V070-763360
SRU	: FUSE, HIGH CURRENT	ME451-0016-2035

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**EXTENDED DESCRIPTION OF PART UNDER ANALYSIS:**

FUSE, 35 AMP, HIGH CURRENT - MAIN DC BUS A (B, C), FORWARD PCA 1 (2, 3) TO FORWARD LCA 1 (2, 3)

**REFERENCE DESIGNATORS:** 81V76A22F5  
82V76A23F4  
83V76A24F4

**QUANTITY OF LIKE ITEMS:** 3  
THREE - ONE PER EACH FWD PCA 1, 2, AND 3

**FUNCTION:**

CONDUCTS CIRCUIT CURRENT AND PROVIDES OVERLOAD PROTECTION FOR MAIN DC BUS A (B, C) BETWEEN THE FORWARD POWER CONTROLLER ASSEMBLY NO. 1 (2, 3) AND FORWARD LOAD CONTROLLER ASSEMBLY NO. 1 (2, 3).



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**LOSS OF INTERFACE REDUNDANCY - LOSS OF LOADS SUPPLIED BY THE MAIN DC BUS IN THE ASSOCIATED FORWARD LCA**

**(C) MISSION:  
POSSIBLE EARLY MISSION TERMINATION**

**(D) CREW, VEHICLE, AND ELEMENT(S):  
NO EFFECT - FIRST FAILURE**

**(E) FUNCTIONAL CRITICALITY EFFECTS:  
POSSIBLE LOSS OF CREW OR VEHICLE DURING ASCENT OR ENTRY DUE TO LOSS OF ABILITY TO EXTINGUISH A FIRE IN ONE OF THREE AVIONICS BAYS. A FAILURE CAUSING THE FIRE MUST OCCUR BEFORE THE USE OF THE EMERGENCY FIRE SUPPRESSION SYSTEM IS REQUIRED.**

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**-DISPOSITION RATIONALE-**

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**(A) DESIGN:  
REFER TO APPENDIX D, ITEM NO. 3 - FUSE, HIGH CURRENT**

**(B) TEST:  
REFER TO APPENDIX D, ITEM NO. 3 - FUSE, HIGH CURRENT**

**GROUND TURNAROUND TEST  
ANY TURNAROUND CHECKOUT TESTING IS ACCOMPLISHED IN ACCORDANCE WITH OMRSD.**

**(C) INSPECTION:  
REFER TO APPENDIX D, ITEM NO. 3 - FUSE, HIGH CURRENT**

**(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 DATA BASE.**

**(E) OPERATIONAL USE:  
USE HAND-HELD FIRE EXTINGUISHER ON ORBIT IF FIRE DETECTED. DISCHARGE HAND-HELD FIRE EXTINGUISHER IN AVIONICS BAY JUST PRIOR TO DEORBIT.**

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**- APPROVALS -**

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EDITORIALLY APPROVED  
TECHNICAL APPROVAL

: BNA  
: VIA APPROVAL FORM

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