

SHUTTLE CRITICAL ITEMS LIST - ORBITER

SUBSYSTEM :ELECT POWER DIST & CONT FMEA NO 05-6 -2233 -1 REV:05/03/88

ASSEMBLY :PNL R1A1				CRIT.FUNC: 2
P/N RI :ME452-0102-7103				CRIT. HDW: 2
P/N VENDOR:		VEHICLE	102 103 104	
QUANTITY :1		EFFECTIVITY:	X X X	
:ONE,PNL R1A1		PHASE(S):	PL LO X OO X DO X LS	
:				

REDUNDANCY SCREEN: A-N/A B-N/A C-N/A

PREPARED BY:	APPROVED BY:	APPROVED BY (NASA):
DES R PHILLIPS	DES <u>R. Busman</u>	SSM <u>R. Costigan 5/12/88</u>
REL M HOVE	REL <u>John D. Clifton 5-6-88</u>	REL/D <u>John D. Clifton 5/11/88</u>
QE J COURSEN	QE <u>J.J. Courson 5/4/88</u>	QE <u>R. Phillips</u>

ITEM:

SWITCH, TOGGLE, SPDT - CABIN PAYLOAD POWER

FUNCTION:

PROVIDES MANUAL CONTROL FOR CONNECTING EITHER MAIN BUS A OR B POWER TO CABIN PAYLOADS BUSES LOCATED ON DISTRIBUTION PANELS AT PAYLOAD STATION AND MISSION STATION IN FLIGHT DECK AREA. 32V7JAL1S25

FAILURE MODE:

FAILS OPEN, SHORTS TO GROUND

CAUSE(S):

PIECE PART STRUCTURAL FAILURE, CONTAMINATION, MECHANICAL SHOCK, VIBRATION, PROCESSING ANOMALY

EFFECT(S) ON:

(A)SUBSYSTEM (B)INTERFACES (C)MISSION (D)CREW/VEHICLE (E)FUNCTIONAL CRITICALITY EFFECT:

(A) LOSS OF CAPABILITY TO PROVIDE PAYLOAD CABIN POWER TO MISSION STATION OR PAYLOAD STATION DISTRIBUTION PANELS.

(B) LOSS OF CAPABILITY TO CONTROL PAYLOADS.

(C) LOSS OF MISSION OBJECTIVES.

(D) FIRST FAILURE - NO EFFECT.

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DISPOSITION & RATIONALE:

(A)DESIGN (B)TEST (C)INSPECTION (D)FAILURE HISTORY (E)OPERATIONAL USE:

(B,C,D) DISPOSITION AND RATIONALE

REFER TO APPENDIX A, ITEM NO. 1 - TOGGLE SWITCH

) GROUND TURNAROUND TEST

VERIFY MAIN DC BUS A AND B VOLTAGE AT PAYLOAD STATION AND MISSION STATION POWER DISTRIBUTION PANEL. CYCLE CABIN PAYLOAD BUS A/BUS B ON/OFF SWITCH AND MONITOR STIMULI COMMANDS, DISCRETE EVENTS, AND BUS VOLTAGE. APPLICABLE FOR ALL FLIGHTS CONTINGENT ON MISSION REQUIREMENTS.

) OPERATIONAL USE

NONE