

SHUTTLE CRITICAL ITEMS LIST - ORBITER

SUBSYSTEM : EPD&C - ATCS/FCL FMEA NO 05-6WD-3001 -2 REV:06/10/88

ASSEMBLY : PANEL 017	CRIT. FUNC: 2
P/N RI : ME452-0102-7203	CRIT. HDW: 2
P/N VENDOR:	VEHICLE 102 103 104
QUANTITY : 2 (TWO),	EFFECTIVITY: X X X
: ONE REQUIRED	PHASE(S): PL LO X OO X DO LS

PREPARED BY:	REDUNDANCY SCREEN:	A-	B-	C-
DES J BROWN	APPROVED BY:	APPROVED BY (NASA):		
REL M HOVE	DES <i>[Signature]</i>	SSM		
QE J COURSEN	REL <i>[Signature]</i>	REL <i>[Signature]</i>		
	QE <i>[Signature]</i>	QE <i>[Signature]</i>		

rel to [Signature] 6/21/88
EPDC SSM [Signature] 6/21/88

ITEM:
SWITCH, TOGGLE. FREON SIGNAL CONDITIONER.

FUNCTION:
PROVIDES POWER SWITCHING FROM AC BUS 2 OR AC BUS 3 TO FREON SIGNAL CONDITIONERS A AND B. 33V73A17S10,S11

FAILURE MODE:
SHORT TO CASE (GROUND) (TWO CONTACTS)

CAUSE(S):
PIECE PART STRUCTURAL FAILURE, MECHANICAL SHOCK, VIBRATION, CONTAMINATION, PROCESSING ANOMALY

EFFECT(S) ON:
(A) SUBSYSTEM (B) INTERFACES (C) MISSION (D) CREW/VEHICLE

(A) LOSS OF BOTH SIGNAL CONDITIONERS.
(B) LOSS OF BOTH FREON COOLANT LOOP MEASUREMENTS.
(C) ABORT DECISION - FOR LOSS OF BOTH SETS OF MEASUREMENTS.
(D) NO EFFECT

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

(A-D) DISPOSITION AND RATIONALE
REFER TO APPENDIX A, ITEM NO. 1 - TOGGLE SWITCH.

(B) GROUND TURNAROUND TEST
SWITCH AND FREON SIGNAL CONDITIONERS ARE VERIFIED PRIOR TO EACH FLIGHT.

(E) OPERATIONAL USE
EARLY END OF MISSION DUE TO THE INABILITY TO MONITOR STATUS OF FREON LOOPS.

05-6WD-8