

SHUTTLE CRITICAL ITEMS LIST - ORBITER

SUBSYSTEM : EPD&C - COMM. & TRACK. FMEA NO 05-6PK-20114 -1 REV: 12/9/87

ASSEMBLY : PNL R15 CRIT. FUNC: 2
 P/N RI : MC454-0026-2010 CRIT. HDW: 2
 P/N VENDOR: VEHICLE 102 103 104
 QUANTITY : 1 EFFECTIVITY: X X X
 : ONE PHASE(S): PL LO OO X DO LS

REDUNDANCY SCREEN: A- B- C-
 PREPARED BY: APPROVED BY: APPROVED BY (NASA):
 CES *MA* R DAVIS DES *Richard 12/7/87* SSM *Ronald Embury*
 REL *MA* M ALVAREZ REL *Richard 12/8-87* REL *J. L. K. ...*
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ITEM:
 CIRCUIT BREAKER CB36, STBD AFT BAY PAN/TILT HEATER.

FUNCTION:
 PROVIDES +28VDC OVERCURRENT PROTECTION FROM MAIN BUS A TO STBD AFT PAN/TILT UNIT HEATER 32V73A15CB36.

FAILURE MODE:
 FAILS OPEN, FAILS TO CONDUCT, FAILS TO CLOSE.

CAUSE(S):
 VIBRATION, THERMAL STRESS, MECHANICAL SHOCK, CONTAMINATION, PROCESSING ANOMALY, STRUCTURAL FAILURE.

EFFECT(S) ON:
 (A) SUBSYSTEM (B) INTERFACES (C) MISSION (D) CREW/VEHICLE
 (A,B) WORST CASE - LOSS OF PAN/TILT CONTROL.
 (C) LOSS OF ABILITY TO POSITION CAMERA PROPERLY COULD RESULT IN LOSS OF MISSION.
 (D) NO EFFECT.

POSITION & RATIONALE:
 (A) DESIGN (B) TEST (C) INSPECTION (D) FAILURE HISTORY (E) OPERATIONAL USE
 (A,B,C,D) REFER TO APPENDIX D, ITEM #1, CIRCUIT BREAKER.

(B) TEST
 GROUND TURNAROUND TEST - VERIFIES CCTV PAYLOAD BAY MISSION CRITICAL VIDEO. PERFORMED WHEN FLIGHT MANIFEST REQUIRES USE OF MISSION CRITICAL VIDEO.

(E) OPERATIONAL USE
 WHERE POSSIBLE, PROCEDURES SHOULD BE DESIGNED SO THEY CAN BE ACCOMPLISHED WITHOUT CCTV.