

SHUTTLE CRITICAL ITEMS LIST - ORBITER

SUBSYSTEM : EPJ&C - COMM. & TRACK. FMEA NO 05-6PK-20211 -1 REV:12/9/87

ASSEMBLY : PNL R15 CRIT. FUNC: 2  
P/N RE : MC454-0026-2030 CRIT. HDW: 2  
P/N VENDOR: VEHICLE 102 103 104  
QUANTITY : 2 EFFECTIVITY: X X X  
: ONE PHASE(S): PL LO OO X OO LS  
:

REDUNDANCY SCREEN: A- B- C-  
PREPARED BY: APPROVED BY: APPROVED BY (NASA):  
DES *ASD* R DAVIS DES *[Signature]* 12/17/87 SSM *[Signature]*  
REL *APR.* M ALVAREZ REL *[Signature]* 12-18-87 REL *[Signature]*  
QE J COURSEN QE *[Signature]* QE *[Signature]* 12/18

ITEM:  
CIRCUIT BREAKER CBSJ, STBD FWD PAN/TILT HEATER POWER (STBD MANIPULATO  
ARM).

FUNCTION:  
PROVIDES +28VDC OVERCURRENT PROTECTION FROM MAIN BUS A TO STBD FWD PAN  
TILT UNIT HEATER. 32V71A15CB33.

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) LOSS OF POWER TO STBD FWD PAN/TILT UNIT HEATER.  
(C) LOSS OF CRITICAL VIDEO COULD RESULT IN LOSS OF MISSION.  
(D) NO EFFECT.

DISPOSITION & 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.