

SHUTTLE CRITICAL ITEMS LIST - ORBITER

SUBSYSTEM : EPD&C - COMM. & TRACK. FMEA NO 09-6PK-20214 -2 REV:12/9/87

ASSEMBLY : PNL A7A1
 P/N RI : ME452-0102-7105
 P/N VENDOR:
 QUANTITY : 1
 : ONE
 :

VEHICLE	102	103	104
EFFECTIVITY:	X	X	X
PHASE(S):	PL	LO	CO X DO LS

CRIT. FUNC: 2
 CRIT. HDW: 2

PREPARED BY:
 DES *RED* R DAVIS
 REL *MA* M ALVAREZ
 QE C COURSEN

REUNDANCY SCREEN: A- B- C-
 APPROVED BY:
 DES *[Signature]* 12/7/87
 REL *[Signature]* 12/9/87
 QE *[Signature]* 12/9/87

APPROVED BY (NASA):
 SSM *[Signature]*
 REL *[Signature]*
 QE *[Signature]* 12/9/87

ITEM:
 SWITCH, TOGGLE, SPDT, TV CAMERA TILT COMMAND, POSITIONS ARE UP-CTR-DOWN (MOMENTARY).

FUNCTION:
 THE MOMENTARY UP POSITION PROVIDES A SIGNAL TO THE RCU WHICH COMMANDS THE PAN/TILT UNIT OF THE ASSIGNED CAMERA TO ROTATE UP. THE SWITCH RETURNS TO THE CENTER (CTR) POSITION UPON RELEASE AND STOPS CAMERA MOTION. THE MOMENTARY DOWN POSITION SIGNALS THE RCU WHICH COMMANDS THE PAN/TILT UNIT OF THE ASSIGNED CAMERA TO ROTATE DOWN. 36V73A7A1S43.

FAILURE MODE:
 FAILS CLOSED, PREMATURE CLOSED, SHORT TO GROUND, CONTACT TO CONTACT SHORT.

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

EFFECT(S) ON:
 (A) SUBSYSTEM (B) INTERFACES (C) MISSION (D) CREW/VEHICLE
 (A, B) LOSS OF PANEL CONTROL FOR THE TILT FUNCTION.
 (C) LOSS OF MISSION CRITICAL VIDEO RESULTING 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 A, ITEM #1, TOGGLE SWITCH.
 (B) TEST
 GROUND TURNAROUND TEST - VERIFY TV CAMERA TILT CONTROL FROM THE DS PANEL - PERFORMED TO SUPPORT FLIGHT MANIFEST.

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(E) OPERATIONAL USE

WHERE POSSIBLE, PROCEDURES SHOULD BE DESIGNED SO THEY CAN BE ACCOMPLISHED WITHOUT CCTV.