

SHUTTLE CRITICAL ITEMS LIST - ORBITER

SUBSYSTEM : EFD&C - COMM. & TRACK. FMEA NO 05-SPK-20252 -2 REV:12/9/87

ASSEMBLY : PNL A7A1  
P/N RI : ME492-0102-7105  
P/N VENDOR:  
QUANTITY : 1  
: ONE  
: 1

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

PREPARED BY: APPROVED BY: REDUNDANCY SCREEN: A- B- C-  
DES R DAVIS DES APPROVED BY (NASA):  
REL M ALVAREZ REL *[Signature]* 11/17/87 SSM *[Signature]*  
QE J COURSEN QE *[Signature]* 12-18-87 REL *[Signature]*  
*[Signature]* 1-21-82

ITEM:  
SWITCH, TOGGLE, SPDT, TV CAMERA IRIS COMMAND, POSITIONS AF OPEN-CTR-CLOSE (MOMENTARY).

FUNCTION:  
THE OPEN SIGNAL OPENS THE IRIS DIAPHRAGM INCREASING THE LIGHT THROUGH THE APERTURE. THE SWITCH RETURNS TO THE CENTER (CTR) POSITION UPON RELEASE AND ALLOWS OPERATION CONSISTENT WITH THE LAST COMMAND. THE CLOSE POSITION DECREASES LIGHT THROUGH THE APERTURE. 36V73A7A1S42.

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 IRIS 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 TURN AROUND TEST - VERIFY TV CAMERA IRIS CONTROL FROM THE D1 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.