

LLL
CRITICAL ITEMS LIST
FILE: CIL-PLSS/2

NAME P/N QTY	CREW	FAILURE MODE & CAUSES	FAILURE EFFECT	RATIONALE FOR ACCEPTANCE
EVA POSITION SWITCH ITEM 114 SV722408-2 111	2/2 PRE AND POST EVA	114-FN02B1 FAILS CLOSED. CAUSE: CONTACT WELD CAUSED BY ARCING OR A FAILURE OF THE HERMETIC SEAL AND EXPOSURE TO VACUUM, JAMMING, SHORTING DUE TO CONTAMINATION.	END ITEM: CONTINUOUS INDICATION THAT THE O2 ACTUATOR IS IN THE EVA POSITION. GFR INTERFACE: CMS FAILS TO DETECT IF O2 ACTUATOR MOVES OUT OF THE EVA POSITION. MISSION: NONE. CREW/VEHICLE: NONE FOR SINGLE FAILURE. POSSIBLE LOSS OF CREWMAN FOR MULTIPLE FAILURES RESULTING IN REQUIRED SOP OPERATION AND O2 ACTUATOR OUT OF EVA POSITION.	A. DESIGN - THE SWITCH IS A STANDARD HERMETICALLY SEALED, WELDED CONSTRUCTION MICROSWITCH CONTROLLED PER MS-8005/B. ELECTRICAL LEADS ARE SOLDERED TO THE SWITCH TERMINALS (GLASS BEAD PASS THROUGH) AND THEN POTTED TO PROVIDE PROTECTION FROM EXTERNAL MECHANICAL LOADS AND CONTAMINATION. B. TEST - COMPONENT ACCEPTANCE TEST - THE VENDOR SUBMITS A CERTIFIED REPORT FOR BMT ACCEPTANCE TEST. THE SWITCH POSITION IS SET AND VERIFIED DURING SHEAR PLATE ASSEMBLY. PQA TEST - COMPLETIVITY (HARNESSE LEVEL) SV722408-1 OF SHEET 070. CALIBRATION (SHEAR PLATE LEVEL) SV770640 OF SHEET 0330. CERTIFICATION TEST - THE ITEM COMPLETED (33) YEARS NORTH (1,323 CYCLES) OF HIS CYCLE CERTIFICATION REQUIREMENT DURING 1/00. ENGINEERING CHANGE 42004-029 (ACTUATION TEST ON SEMI LEVEL) HAS BEEN INCORPORATED AND CERTIFIED SINCE THIS CONFIGURATION HAS CERTIFIED. (HOWEVER, THIS CHANGE DOES NOT PERTAIN TO THIS FAILURE MODE, (FAILED CLOSED). C. INSPECTION - ANY ELECTRICAL FAILURE IS DETECTED BY VENDOR TESTING AND INSPECTION PER REQUIREMENTS (INCLUDING CLEAN DRESS) OF MIL-S-8895/B FOR P/N MS 27214-6. THE VENDOR SUBMITS A CERTIFIED REPORT FOR LOT ACCEPTANCE, INCLUDING CHECKS FOR CONTACT RESISTANCE AND HERMETIC SEAL. D. FAILURE HISTORY - NONE. E. GROUND TURNAROUND - GROUND TURNAROUND TESTED PER FEMD-N-001, O2 ACTUATOR POSITION SWITCH CHECK. F. OPERATIONAL USE - CREW RESPONSE - EVA: NO RESPONSE; SINGLE FAILURE UNDETECTABLE BY CREW OR GROUND, TRAINING - NO TRAINING SPECIFICALLY COVERS THIS FAILURE MODE. OPERATIONAL CONSIDERATIONS - EVA CHECKLIST PROCEDURES MENTION

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