

CSL
CRITICAL ITEMS LIST
FILE: CIL7/1

NAME P/N QTY	CRIT	FAILURE MODE & CAUSES	FAILURE EFFECT	RATIONALE FOR ACCEPTANCE
NEGATIVE PRESSURE RELIEF VALVE ITLN 147 SV705027-2 111 FC157-1 42	2/2	147FM02; FAILS TO CLOSE. CAUSE: FAILURE, JAMMING.	END ITEM: SUIT GAS LEAKAGE TO AIRCRAFT. O/E INTERFACE: EXCESSIVE CONSUMPTION OF PRIMARY OXYGEN SUPPLY. MISSION: TERMINATE EVA. CREW/VEHICLE: NONE.	A. DESIGN - ONE ITEM POPPET IS GUIDED BY TEFLON SLEEVES AT EACH END. THE TEFLON SLEEVES PROVIDE LOW FRICTION AND MINIMIZE JAMMING. B. TEST - COMPONENT ACCEPTANCE: A RESEAT TEST IS PERFORMED PER AIRLOCK ATP-49001-02. FOR THE RESEAT TEST, THE PRESSURE ON THE OPEN VALVE IS GRADUALLY REDUCED UNTIL A FLOW OF .14 ± .01 LB/MIN. (402) 70 DEGREE F IS REACHED. THE PRESSURE MUST BE MORE THAN .20 PSID, WITH THE RELIEF OUTLET AT 0 PSID. PDA: THE RELIEF VALVE UNDERGOES A CYCLING TEST PER SEMI-60-010 TO VERIFY THE VALVE IS NOT JAMMED. A FLOW OF 59.4 LB3/HR AIR AT A MAXIMUM PRESSURE OF 0.8 PSID IS SET TO OPEN THE VALVE. THE PRESSURE AND FLOW ARE THEN SET TO ZERO TO CLOSE THE VALVE. THIS IS REPEATED FOR A TOTAL OF 20 OPEN-CLOSE CYCLES. A LEAKAGE TEST IS THEN PERFORMED IN WHICH THE VENT LOOP IS PRESSURIZED WITH GOWEN TO 10.9 TO 19.8 PSIA. LEAKAGE IS NOT TO EXCEED 4.66 SCC/MIN. CERTIFICATION: THE ITEM COMPLETED 1215 CYCLES DURING 11/83. THIS IS SEVEN (7) TIMES THE CYCLE CERTIFICATION REQUIREMENT OF 142. C. INSPECTION - THE VALVE IS VISUALLY INSPECTED AT AIRLOCK FOR BURNS AND OTHER FLAWS. NS SOURCE INSPECTION VISUALLY EXAMINES THE VALVE AT FINAL INSPECTION. AIR LOCK INC. DIMENSIONALLY INSPECTS ALL DETAIL PARTS PRIOR TO ASSEMBLY.

CEL
 CRITICAL ITEMS LIST
 P1001 C10170

NAME P/N QTY	COST	FAILURE MODE & CAUSE	FAILURE EFFECT	RATIONALE FOR ACCEPTANCE
NEGATIVE PRESSURE RELIEF VALVE RMM 143 QTY00027-1 113 PC102-E 1	271	FAILURE: FAILS TO CLOSE.		<p>D. FAILURE HISTORY - RMM 1-000-047-1001 10/20/81 REPORTED LEAKAGE CAUSED BY A DAMAGED FILTER SCREEN WHICH RESTRICTED THE MOVEMENT OF THE POPPET RESULTING IN THE IMMEDIATE SHUT VALVE TO FULLY CLOSE. A "VERIFY TAG" NOTICE WAS ISSUED TO THE CAUTION BUILT IMMEDIATELY.</p> <p>RMM J-000-147-002 11/24/81 DOCUMENTED AN OXYGENIC PROBLEM, A BURNED DESIGN RESTRICTION VALVE POPPET ASSEMBLY. VERIFYING THE ISSUE WAS HAS ISSUED TO INSTALL A VERIFY PROTECTION CAP (520 3010206-101) FROM THE IMPACT SHIELD WAS REMOVED. IMPACT SHIELD INVESTIGATION PROGRAMME (EPSO-2-80) WAS INITIATED TO INSPECT THE FILTER SCREEN FROM TO DETERMINATION OF THE IMPACT SHIELD.</p> <p>E. GROUND PURIFICATION - TESTED PER FORM-N-006, GAS STRUCTURAL AND LEAKAGE.</p> <p>F. OPERATIONAL USE - CDM RESPONSE PRE EVA: EODMIE-SHOOT PROBLEM, IF NO SUCCESS, EMERGEN CDM 2 IS AVAILABLE. CDM NO GO FOR EVA. POST EVA: NONE REQUIRED TRAINING STANDARD OBI TRAINING COVERS THIS FAILURE MODE. OPERATIONAL CONSIDERATIONS ISSUES MUST BE IN THE OBTAIN OR OTHERWISE RELATED TO EVA SHUT PRESSURE REGULATION. FLIGHT RULES REQUIRES TERMINATION OF EVA UPON ACTIVATION OF SCF. EVA CHECKLIST AND P/F PROCEDURES VERIFY MINIMUM UTILITY AND SYSTEM OPERATIONAL STATUS PRIOR TO EVA. DISE THE DATA SYSTEM ALONG COMMON MONITORING OF THE SYSTEMS</p>

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