

C18
CRITICAL ITEMS LIST
FILE: C18/3

8/5/88 SUPERSEDES 6/4/85

NAME P/N QTY	CRT	FAILURE MODE & CAUSES	FATIGUE EFFECT	RATIONALE FOR ACCEPTANCE
SED O2 INLET FILTER AND ORIFICE P/N 428 SV778504-2 (1)	2/R	428FH01 RESTRICTED FLOW. CAUSE: CONTAMINATION.	END ITEM: UNABLE TO PASS O2 THROUGH THE SCM. GFE INTERFACE: UNABLE TO RECHARGE THE PRIMARY O2 BOTTLES. MISSION: UNABLE TO RECHARGE EHW ON SUPPLY O2 FOR DECONTAMINIZA- TION PRIOR TO ATROCK DEPRESSURIZATION UNABLE TO USE ONE EHW. CREW/VEHICLE: NONE.	A. DESIGN - THE FILTER SCREEN IS CONSTRUCTED FROM PURE NICKEL CHEMICAL COMPOSITION PER ASTM # 160.75 (UNS NO Z200) AND IS SEAM WELD ATTACHED TO THE FLANGE OF INCONEL N71 PER QQ-N-201 CLA FOR 1 COND COND DRAWN. THIS NICKEL MATERIAL SELECTION PREVENTS POTENTIAL OF CORROSION PARTICLES. THE ORIFICE IS 0.034 ± 0.002 DIA AND IS PROTECTED BY 25 MICRON HAH GLASS BEAR RATING FILTER. THE FILTER IS DESIGNED TO BE REMOVED AS REQUIRED. B. TEST - COMPONENT: NONE. PDA: A FLOW TEST IS PERFORMED ON THE OXYGEN LINE PER SMU-40-083. WITH AN INLET PRESSURE OF 706-750 PSIA, THE OXYGEN LINE INCLUDING THE FILTER AND ORIFICE, MUST FLOW 5.0 - 5.2 LBS/HR OXYGEN AT A PRESSURE DROP OF 25-45 PSID. CERTIFICATION: THE ITEM COMPLETED FROM DELTA P TESTING AT 5.2 LBS/HR OXYGEN DURING 10/88. SINCE THAT TIME, THE FOLLOWING ENGINEERING CHANGES HAVE BEEN INCORPORATED: 42803-170 (INCORPORATED TEFLOW BACK-UP RINGS THAT DO NOT REQUIRE BATCH CONTROL); AND 42803-455-1 (INCREASED RADIUS OF EXTERNAL EDGES). C. INSPECTION: A CLEANLINESS LEVEL BY MS310 BMS0A IS MAINTAINED DURING ASSEMBLY AND TESTING OF THE ITEM. THIS LEVEL REQUIRES A MANDATORY INSPECTION FOR VERIFICATION. A BUBBLE POINT TEST IS PERFORMED ON THE FILTER TO CHECK FOR ANY GAPS LARGER THAN THE MESH OF THE SCREEN. D. FAILURE HISTORY - N-ENG-408-ADD4 (S-4-88) - THE OXYGEN LINE DELTA PRESSURE WAS HIGH DUE TO A MISSED FILTER ORIFICE FROM STZING OPERATION. A REQUIREMENT HAS BEEN ADDED TO THE RECEIVING INSPECTION PROCEDURE (QMR-304-C-005), SUBSEQUENT TO THE INSPECTION OF THIS LOT OF FASTEN ORIFICES, WHICH REQUIRES INSPECTION PERSONNEL TO DOCUMENT THAT BLUEPRINT NOTES AND REQUIREMENTS HAVE BEEN VERIFIED.

FC247-1

CIL
 CRITICAL ITEMS LIST
 FILE: CILS/1

IME P/N QTY	CRIT	FAILURE MODE & CAUSES	FAILURE EFFECT	RATIONALE FOR ACCEPTANCE
SCM #2 JNIEF FILTER AND ORIFICE ITEM 420 3V770504-2 411	2/2	420FMO1; RESTRICTED FLOW.		<p>E. GROUND TURNAROUND - TESTED PER FEMU-B-001 EFM TO VERIFY CHECKOUT (VIBRO) OXYGEN SYSTEM FUNCTIONAL CHECK.</p> <p>F. OPERATIONAL USE - CDEM RESPONSE - PRE/POSTIVA: PERFORM NORMAL IV OPERATIONS WITH EXCEPTIONS. USE OTHER SCM DURING EFM PURGE OPERATIONS. TOP OFF PRIMARY BE TANKS PRIOR TO AIRLOCK EGRESS USING OTHER SCM. SPECIAL TRAINING - STANDARD EFM TRAINING COVERS THIS FAILURE MODE. OPERATIONAL CONSIDERATIONS - EVA CHECKLIST PROCEDURES VERIFY INMANT INTEGRITY AND SYSTEMS OPERATIONAL STATUS PRIOR TO EVA.</p>
FC247-2 *				