

FMEA  
EMU FAILURE MODE, EFFECT ANALYSIS

01/02/90 SUPERSEDES / /

ANALYST:

Page: 1  
Date: 06/08/90

NAME P/N QTY	FUNCTION	FAILURE MODE & CAUSE	MISSION PHASE	FAILURE EFFECT	FAILURE DETECTION FLIGHT/GROUND	TIME TO EFFECT/ ACTIONS	EXIT	REMARKS/ HAZARD	REF
DUAL MODE RELIEF VALVE, ITEM 120B ----- SV725844-12 (1)	High mode relieves the water gas pressure to the suit when the pressure increases above 16 psid. Low mode permits faster water charging by releasing the water reservoir gas pressure.	120B/FM4: Fails to open, high mode relief valve.  CAUSE: Contamination causes return plunger to jam, clog the inlet filter or produce diaphragm leakage.	PREEVA  EVA	END ITEM: Unable to flow O2 from the water tank cavity to the suit.  QFE INTERFACE: Unable to provide backup relief in the event the water pressure regulator fails open.  MISSION: None.  CREW/VEHICLE: None for single failure. Possible loss of oxygen with loss of 120E regulator and SOP.	FLIGHT: No.  GROUND: Yes. FEMU-R:DOT, Para. 7.3.3.2.1.1.7. Item 120A orifice flow and Item 120B Relief Valve/Relief and Reset Check.	None.  TIME AVAILABLE: N/A  TIME REQUIRED: N/A	3/18  A-PASS B-N/A C-PASS	The reservoir pressure (sensors 132A & 132B) is displayed in the CWS status sequence. This failure mode can only be detected by visually detecting the pressure increase during airtank depress. There is no overpressure warning message. Redundant path is the Item 132E regulator and SOP. This item is standby redundant. The "B" screen does not apply.	