

IMEA  
EMU FAILURE MODE, EFFECT ANALYSIS

01/02/90 SUPERSEDES / /

ANALYST:

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Date: 03/10/90

NAME P/N QTY	FUNCTION	FAILURE MODE & CAUSES	MISSION PHASE	FAILURE EFFECT	FAILURE DETECTION FLIGHT/GROUND	TIME TO EFFECT/ ACTIONS	CRIT	REMARKS/ HAZARD	REF
PURGE VALVE, ITEM 314 6V207027-3 (1)	The valve is used to initiate a suit purge when ventilation or cooling is lost during an EVA; or to purge the nitrogen from the suit during the EMU donning sequence.	<p>SYMPTOM: Falls to open, restricted flow.</p> <p>CAUSE: Failure, button or plunger jamming, contamination, inlet filter clog, temperature, freezing during EVA due to entrained water.</p>	EVA	<p>EMU ITEM: Unable to provide effective purge in the event suit cooling or ventilation is lost.</p> <p>GPE INTERFACE: Unable to purge EMU with 314 valve. Helmet purge valve (1050) available for EMU purge.</p> <p>MISSION: None for single failure.</p> <p>CREW/VEHICLE: None for single PLS component failure. None for loss of helmet purge valve (1050). Possible loss of crewmen with loss of 314 purge valve.</p>	<p>FLIGHT: No.</p> <p>GROUND: See IEMU-R-001, Para. 7.3.3.2.1.4, 14 DCM Purge Valve Actuation and Flow.</p>	<p>None.</p> <p>TIME AVAILABLE: N/A</p> <p>TIME REQUIRED: N/A</p>	3/LR  A-PASS B-N/A C-PASS	The operation of the purge valve is verified during the #2 purge sequence. The filter is replaceable. The redundant path for this failure is the 1050 helmet purge valve. Valve is a standby item during EVA.	None.