

NAME P/N QTY	CRIT	FAILURE MODE & CAUSES	FAILURE EFFECT	RATIONALE FOR ACCEPTANCE
		132BFM04		
PRESSURE TRANSDUCER FEEDWATER SUPPLY, ITEM 132B ----- SV767793-7 (1) ----- SV767793-8 (1)	2/1RB	Electrical short. Contamination on the electrical connector, faulty lead wires.	END ITEM: Loss of sensor output. GFE INTERFACE: Increase in battery power consumption. The current is limited in the DCM DC/DC converter to 1.8 +/- 0.25 amps. Shutdown of the DC/DC converter. Loss of CWS, tones and DCM display. MISSION: None for single failure. Terminate EVA with loss of DCM display, CWS and ability to monitor the operational integrity of the EMU. Loss of use of one EMU. CREW/VEHICLE: None for single failure. Possible loss of crewman with loss of CCC, oxygen or low vent flow. TIME TO EFFECT /ACTIONS: Minutes.	A. Design - -5 Conrac and -7 Gulton: The wiper/coil assembly and wiring are sealed in a protective metal case and are protected from the environment by a hermetic seal. Solder joints are encased in potting for additional strain relief. B. Test - Component Acceptance Test - The suit sensor is subjected to random vibration testing (6.1g rms) to ensure there are no workmanship or material problems that would cause shorting problems. The sensor is subjected to calibration testing at high and low temperature (32 degrees F to 120 degrees F) to ensure there are no workmanship problems that would cause a short circuit between the sensor circuit and the case. The sensor is calibration checked during acceptance testing to ensure there are no short circuits. PDA Test - The sensor is calibration checked, as assembled on the shear plate, to ensure there are no short circuits. Certification Testing - Certified for a useful life of 20 years (ref. EMUM1-0084). C. Inspection - The sensor is visually inspected prior to case assembly. The sensor is calibration checked in the assembly process to ensure there are no short circuits. D. Failure History - None. E. Ground Turnaround - Tested for non-EET processing per FEMU-R-001, Transducer and DCM Gage Calibration Check. FEMU-R-001 Para 8.2 EMU Preflight KSC Checkout for EET processing. F. Operational Use - Crew Response - PreEVA: Trouble-shoot problem, if no success consider EMU 3 if available EMU no go for EVA. PostEVA: Not applicable. EVA: When loss of CWS, displays and tones detected, terminate EVA. Training - Standard EMU training covers this failure mode. Operational Considerations - Flight rules define an operational CWS as at least able to monitor a valid status list. EVA checklist procedures verify hardware integrity and systems operational status prior to EVA. Real Time Data System allows ground monitoring of EMU systems.

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TIME
AVAILABLE:
Minutes.

TIME REQUIRED:
Minutes.

REDUNDANCY
SCREENS:
A-PASS
B-FAIL
C-PASS

EXTRAVEHICULAR MOBILITY UNIT
SYSTEMS SAFETY REVIEW PANEL REVIEW
FOR THE
I-132 FEEDWATER SUPPLY PRESSURE SENSOR
CRITICAL ITEM LIST (CIL)

EMU CONTRACT NO. NAS 9-97150

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