

NAME P/N QTY	CRIT	FAILURE MODE & CAUSES	FAILURE EFFECT	RATIONALE FOR ACCEPTANCE
COMMON MULTIPLE CONNECTOR, ITEM 330 ----- SV778872-26 (1)	2/2	330FM15 Shorted EMU voltage sense line. Contamination, causing shorted wire or connection.	END ITEM: Excessive current drawn from vehicle. GFE INTERFACE: Excessive current will be drawn from vehicle. Current limiter will open vehicle power circuit. EMU will not operate from vehicle power. MISSION: EMU will not operate from vehicle power. Loss of use of one EMU. CREW/VEHICLE: None. TIME TO EFFECT /ACTIONS: Seconds. TIME AVAILABLE: N/A TIME REQUIRED: N/A REDUNDANCY SCREENS: A-N/A B-N/A C-N/A	A. Design - Electrical connections are brush conformal coated to minimize the probability of contamination bridging conductors and causing an electrical short. The electrical leads are protected from mechanical damage by a cover and are bundled together and laced. Short line lengths and bundling of the electrical lines prevent mutual chafing. B. Test - In-Process Test - Continuity testing between J1-12 and J1-13 is performed per operation 130 of the DCM External Wiring Assembly (SV774161-1) Operation Sheets. Resistance specification is 0.160 ohm maximum. Component Acceptance Test - Not applicable. PDA Test - Not applicable. Certification Test - Certified for a useful life of 15 years. C. Inspection - The DCM External Wiring Assembly (SV774161-1) conformal coating, is visually inspected for uniformity and completeness of coverage per Step 10 of Operation 150. The DCM External Wiring Assembly is visually inspected at final inspection per Operation 170. D. Failure History - None. E. Ground Turnaround - Tested for non-EET processing per FEMU-R-001, V1103.02 Orbiter Checkout. FEMU-R-001 Para 8.2 EMU Preflight KSC Checkout for EET processing. F. Operational Use - Crew Response - Pre/PostEVA: Troubleshoot problem, if no success continue EVA operations. Deactivate airlock power supply, operate EMU on battery power, perform battery swap as required. Training - Standard EMU training covers this failure mode. Operational Considerations - EVA checklist procedures verify hardware integrity and systems operational status prior to EVA. Flight rules define go/no go criteria related to SCU power.

EXTRAVEHICULAR MOBILITY UNIT
SYSTEMS SAFETY REVIEW PANEL REVIEW
FOR THE
I-330 COMMON MULTIPLE CONNECTOR
CRITICAL ITEM LIST (CIL)

EMU CONTRACT NO. NAS 9-97150

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