

| NAME P/N QTY | CRIT | FAILURE MODE & CAUSES | FAILURE EFFECT | RATIONALE FOR ACCEPTANCE |
|--|------|---|--|--|
| ----- | | | | |
| SHEAR PLATE ASSEMBLY, ITEM 115 (PIVOTED, PLANAR) ----- SV778540-56 (1) | 2/2 | 115FM17 Filter clogs (DCM end fitting or fill fitting). Contamination. | END ITEM: Reduction or inability to pass O2 through fill line. | A. Design - Upstream of these 25 micron filters are three 25 micron filters which minimize any particles in this portion of the charge circuit. B. Test - Component Acceptance Test - None. |
| OR (ORU) ----- SV824133-8 (1) | | | GFE INTERFACE: Increase in charge time or inability to charge primary oxygen bottles. MISSION: Unable to fully charge EMU. Loss of use of one EMU. CREW/VEHICLE: None. | PDA Test - An inability to charge bottles would be detected at PDA. Certification Test - Certified for a useful life of 20 years from the date of manufacture. Successful refurbishment will extend useful life to 30 years max. (ref EMUM1-0491, EMUM1-0027). C. Inspection - Details are 100% inspected per drawing dimensions and surface finish characteristics. Details are manufactured from material with certified physical and chemical properties. All details, gases and test facilities are cleaned and inspected to HS3150 EM50A to preclude contamination clogging. D. Failure History - None. |
| | | | TIME TO EFFECT /ACTIONS: Minutes. | E. Ground Turnaround - Tested for non-EET processing per FEMU-R-001, Item 113D and 113 E regulation. FEMU-R-001 Para 8.2 EMU Preflight KSC Checkout for EET processing. |
| | | | TIME AVAILABLE: N/A | F. Operational Use - Crew Response - Pre/PostEVA: No response if still able to fully charge EMU. Otherwise trouble shoot problem. If no success, EMU is no go for EVA. Consider use of third EMU if available. |
| | | | TIME REQUIRED: N/A | Training - No training specifically covers this failure mode. |
| | | | REDUNDANCY SCREENS: A-N/A B-N/A C-N/A | Operational Considerations - Flight rules define go/no go criteria related to EMU pressure regulation. |

EXTRAVEHICULAR MOBILITY UNIT
SYSTEMS SAFETY REVIEW PANEL REVIEW
FOR THE
I-115 SHEAR PLATE ASSEMBLY
CRITICAL ITEM LIST (CIL)

EMU CONTRACT NO. NAS 9-97150

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