

NAME P/N QTY	CRIT	FAILURE MODE & CAUSES	FAILURE EFFECT	RATIONALE FOR ACCEPTANCE
COMMON MULTIPLE CONNECTOR, ITEM 330 ----- SV778872-26 (1)	2/2	330FM19 Restricted cooling water flow. Coolant water filter clogging.	END ITEM: Coolant water passageway restricted or blocked. GFE INTERFACE: Insufficient cooling during maximum load periods. MISSION: Terminate EVA due to crewman discomfort (hot). CREW/VEHICLE: None. TIME TO EFFECT /ACTIONS: Minutes. TIME AVAILABLE: N/A TIME REQUIRED: N/A REDUNDANCY SCREENS: A-N/A B-N/A C-N/A	A. Design - The water filter screen is constructed from 304L stainless steel with a 140 micron absolute rating. This material selection prevents potential of corrosion particles. The filter is designed to be removed as required. B. Test - Component Acceptance: A water flow test is performed. Per Airlock Inc. ATP9619-08. At 240 lb/hr minimum with 45 degree F water, a mated connector shall exhibit a 0.75 psid maximum pressure drop while in unmated bypass, a maximum drop of 0.25 psid shall be observed. PDA: A flow test is performed on the water passages per SEMU- 60-005. With a flow rate of 240 lb/hr at 150 psid and 50 degrees F, in unmated bypass, the associated pressure drop is 0.75 psid max. When mated, pressure drops of 0.9 psid max across P5-T5 and 0.75 psid max. across T6-P6. Certification: Certified for a useful life of 15 years. C. Inspection - A cleanliness level of HS3150 EM50A is maintained during assembly and testing of the item. This level requires a mandatory inspection for verification. D. Failure History - None. E. Ground Turnaround - Tested for non-EET processing per FEMU-R-001, Cooling Control Valve and Common Connector Flow/Delta P Test. None for EET processing. F. Operational Use - Crew Response - PreEVA: Trouble shoot problems, if no success, consider use of third EMU if available. Otherwise EMU no go for EVA. Training. - Standard EMU training covers this failure mode. Operational Considerations - EVA checklists procedures verify hardware integrity and systems operational status prior to EVA.

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

Prepared by: *J. Auman, Jr. 3/22/02*
HS - Project Engineering

Approved by: *RMB 4/22/02*
NASA - SSA/SSM
235

M. Snyder
HS - Reliability

W. Blawie
NASA - EMU/SSM

Alan Boyd for KHC
HS - Engineering Manager

Chris 6/26/02
NASA - S & MA

Frank Sw 6/27/02
NASA - MOD

[Signature] 7/1/02
NASA - Crew

Jonathan S. Miller 7-1-02
NASA - Program Manager
for
Brian Johnson