DISPOSABLE URINE COLLECTION DEVICE

10106-10062-01

CIL CRITICAL ITEMS LIST

9-1-

FMEA REF	REV	NAME, QTY AND DRAWING REF DESIGNATION	CRIT'Y	FAILURE MODE AND CAUSE	FAILURE EFFECT ON END ITEM	RATIONALE FOR ACCEPTANCE
5.7.2a		FLANGED ADAPTOR 10106-20212-01	2/1R	Failure Mode: Leakage between adapter and valve seat Cause: Foreign matter in parts Burrs, flash, or nicks on adapter or valve seat	Urine leakage into cuff with possible leakage into EMU.	1) Design The Flanged Adaptor provides the structure to attach and seal the valve seat used in the one way valve to the bag. The Flanged Adaptor may be molded polyurethane or machined Delrin. The molded adaptors are heat sealed to the bag, the machined adaptors are adhesive bonded. 2) Test a) Acceptance The Flanged Adaptor is leak tested in the DUCD during FIM (at 2 psi) and at PIA (at 2 psig). b) Certification The DUCD was certified by analysis based on review of drawing 10106-10062-01. c) Turnaround Used DUCD's are disposed of. Unused DUCD's are leak tested at PIA at 2 psig, during which a defective Flanged Adaptor would be discovered. 3) Inspection a) Manufacturing The Flanged Adaptor undergoes HSCI visual inspection. b) Turnaround Unused DUCD's undergo visual inspection at PIA. 4) Failure History Leakage between the molded Flanged Adaptors and valve seats have occurred during PIA testing, Ref. EIAR # ILC-H-0063. Corrective action includes: 1) More stringent receiving inspection on molded Flanged Adaptors 2) Replacement of defective molded Flanged Adaptors by vendor. 3) Rework of defective DUCD's. A sealer was added between the valve seat and adaptor per [illegible]. 5) Operational Use a) Effects of Failure Termination of EVA (abort) may be necessary. b) Crew Action Determine extent of problem; continue EVA or return to airlock. c) Crew Training Orientation includes discussion of possible failure, effect on EVA, possible need to abort. d) Mission Constraints None e) In-Flight Checkout None

B-2.2