

CRITICAL ITEMS LIST

ASSY NOMENCLATURE: SILVER-ZINC BATTERY CHARGER

Page 1 of 1

Asy P/N: 528-20769

FUNCTION	FMEA		CRIT	FAILURE MODE AND CAUSE	FAILURE EFFECT	RATIONALE FOR ACCEPTANCE
	REF	REV				
Charges Silver Zinc Battery using 28V Orbiter Power Supply	FM3	N/C	2/2 A - N/A B - N/A C - N/A	<p>MODE:</p> <p>Output current exceeds 1.55 amps.</p> <p>CAUSES:</p> <p>Failure of DC power supply control circuit.</p> <p>Failure of Electronic Component</p> <p>Electrical Short or Open Circuit</p>	<p>End Item Output current over 1.55 amps</p> <p>GFE Interface Independent 2 amp over current protection will "ERROR." Terminate the charge.</p> <p>Mission Loss of Mission Objectives</p> <p>Crew/Vehicle None</p> <p>Time to Effect Immediate</p>	<p>1. DESIGN</p> <p>The 1.55 amp current control circuit and the 2 amp over current protection circuits are of similar design but totally independent from each other. No single failure can cause loss of both circuit. Both circuits employ established reliability parts, printed wiring board is fabricated to NHB 530 (3-1) standards. Electrical stress analysis has been performed to verify no component in either circuit is stressed beyond 50% of rating.</p> <p>2. TEST</p> <p>The 1.55 amp control circuit and the 2 amp overcurrent protection circuits are each in process during the manufacturing of the SZBC. PDA in accordance with Document # P528/ATP-01001 and PIA in accordance with Document # P528/PIA-01001 test quantitatively record the actual setting each circuit.</p> <ul style="list-style-type: none"> • Certified in accordance with Document # P528-CERT-01001, Para 4.2.3.6. <p>3. INSPECTION</p> <p>PDA in accordance with Document # P528/ATP-01001 and PIA in accordance with Document # P528/PIA-01001 test results are verified by Quality Assurance.</p> <p>4. FAILURE HISTORY This is a new item. There is no failure history to date</p>

DATE: 3/16/92

REVISION: BASIC

Prepared By: M. MELGARES/C. GOLDEN