

CRITICAL ITEMS LIST

ASSY NOMENCLATURE: SILVER-ZINC BATTERY CHARGER

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Assy P/N: 52B-20769

FUNCTION	FMEA		CRIT	FAILURE MODE AND CAUSE	FAILURE EFFECT	RATIONALE FOR ACCEPTANCE
	REF	REV				
Charges Silver-Zinc Battery using 28V Orbiter Power Supply	FM4	N/C	2/2 A - N/A B - N/A C - N/A	<p>MODE: Output current below 1.55 amps.</p> <p>CAUSES: Failure of DC power supply. Failure of Electronic Components Electrical Short or Open Circuit</p>	<p>End Item Low output current</p> <p>GFE Interface May not display a charged indication LED</p> <p>Mission Loss of Mission Objectives</p> <p>Crew/Vehicle None</p> <p>Time to Effect Immediate</p>	<p>1. DESIGN Power conversion assembly is optimized to produce efficiency above 80% combined with conduction cooling. This results in low device operating temperature. Switching transistors and rectifier diodes are operated at less than 7% of current rating. Established reliability parts are employed in all power conversion circuitry.</p> <p>2. TEST Output of 1.55 amps is verified during in process testing during the assembly of the SZBC. PDA accordance with Document # P52B/ATP-01001 and PIA in accordance with Document # P52B/F 01001 quantitatively record the constant current setting of the SZBC.</p> <ul style="list-style-type: none"> • Certified in accordance with Document # P52B-CERT-01001, Para 4.2.3.6. <p>3. INSPECTION PDA in accordance with Document # P52B/ATP-01001 and PIA in accordance with Document # P52B/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

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