

CRITICAL ITEMS LIST

ASSY NOMENCLATURE: SILVER-ZINC BATTERY CHARGER

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Assy P/N: 528-20269

FUNCTION	FMEA		CRIT	FAILURE MODE AND CAUSE	FAILURE EFFECT	RATIONALE FOR ACCEPTANCE
	REF	REV				
Charges Silver-Zinc Battery using 28V Orbiter Power Supply	FM1	N/C	2/2 A - N/A B - N/A C - N/A	<p>MODE: Charger fails to Power on Reset</p> <p>CAUSES:</p> <ul style="list-style-type: none"> • Connector/wire damage • Short or Open Circuit • Malfunction of supply side OVP. • Failure of Electronic Component 	<p><u>End Item</u> No Input Power</p> <p><u>GFE Interface</u> Loss of Battery Charger Function</p> <p><u>Mission</u> Loss of Mission Objectives</p> <p><u>Crew/Vehicle</u> None</p> <p><u>Time to Effect</u> Immediate</p>	<p>1. <u>DESIGN</u></p> <ul style="list-style-type: none"> - Wire is sized based on a maximum continuous current of 10 amps while the charger will draw approximately 2 amps. - The input OVP is set to trigger @ 37 volts which is significantly above the maximum input voltage. Input filtering provides transient immunity. Its purpose is to protect the charger prior being connected to an inappropriate power source. <p>2. <u>TEST</u></p> <p>The wiring is in process tested during fabrication. The assembly is PDA tested in accordance with Document # P528/ATP-01001 for OVP performance. The assembly is PIA tested in accordance with Document # P528/PIA-01001 to verify operation of Max input voltage.</p> <ul style="list-style-type: none"> • Certified in accordance with Document # P528 CERT-01001, Para. 4.2.2.4. <p>3. <u>INSPECTION</u></p> <p>All test results are QA verified in accordance with Document # P528/ATP-01001. Each assembly preflight inspected in accordance with Document # P528/PIA-01001.</p> <p>4. <u>FAILURE HISTORY</u> This is a new item. There is no failure history to date.</p>

DATE: 3/16/92 REVISION: BASIC

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