g	GE Industrial Systems	Functional Testing Spe	ecification
Renewal Services Louisville, KY		LOU-GED-193X805xx	
	Test Procedure for a Power A	Amplifier Card	
DOCU	MENT REVISION STATUS: Determined by the last entry in the "REV"	and "DATE" column	
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<b>DATE</b> 7-26-02	<b>DATE</b> 7/1/2009	DATE	<b>DATE</b> 08/09/02

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#### Functional test procedure for a POWER AMPLIFIER card.

#### 1. SCOPE

**1.1** This is a functional testing procedure for a 193X805 (all revisions)

## 2. STANDARDS OF QUALITY

**2.1** Refer to the current revision of the IPC-A-610 standard for workmanship standards.

## 3. APPLICABLE DOCUMENTS

- **3.1** The following document(s) shall form part of this specification to the extent specified herein. Unless otherwise indicated, the latest issue shall apply.
  - 3.1.1 Local File Folder labeled 193X805, there are several revisions.

## 4. **ENGINEERING REQUIREMENTS**

- 4.1 Equipment Cleaning
  - **4.1.1** Equipment should be clean and free of debris prior to applying power unless performing an initial check. Refer to the local documented procedures for cleaning guidelines.
- 4.2 Equipment Inspection
  - **4.2.1** Equipment should be visually inspected for any defects prior to applying power. This inspection should include the following as a minimum:
    - 4.2.1.1 Wires broken or cracked
    - 4.2.1.2 Terminal strips / connectors broken or cracked
    - **4.2.1.3** Loose wires
    - 4.2.1.4 Components visually damaged
    - 4.2.1.5 Capacitors leaking
    - 4.2.1.6 Solder joints damaged or cold
    - 4.2.1.7 Circuit board burned or de-laminated
    - 4.2.1.8 Printed wire runs burned or damaged

## 5. EQUIPMENT REQUIRED

**5.1** The following equipment is required to perform the process requirements. Equipment may be substituted provided that all accuracy's and test ratios are equivalent or better.

Qty	Reference #	Description
1		Fluke 85 DMM (or Equivalent)
1	H033527	Test Fixture (little gray box)
1	?	300W bulb (mounted to plywood base)

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#### 6. TESTING PROCESS

- 6.1 Setup
  - 6.1.1 Attach load (bulb) to fixture using jacks on fixture. Plug fixture into 110V outlet. Plug Unit Under Test (UUT) into fixture. Connect Fluke DVOM to output (load voltage).
- 6.2 Testing Procedure
  - **6.2.1** Turn power on. Turn pot on fixture down to zero. Adjust pot P206 on face of UUT to just get 0Vdc +/-.05Vdc output as read at the meter. If load is fully on with fixture pot at zero try adjusting P206 clockwise to adjust bias on SCR on UUT. See NOTES.
  - **6.2.2** Smoothly turn pot on fixture up to full power. Power at load should come up evenly to 50Vdc+/- 2Vdc.
- 6.3 \*\*\*TEST COMPLETE \*\*\*

## 7. NOTES

Resistor R203, and caps C204, C205A, & C205B short out often. When this happens, component test the entire card before proceeding with test to make sure no other components were damaged.

Card is not to be tested unless faceplate is installed. Had one unit go out to customer with faceplate installed upside down. C. Wade