



GE Energy

Functional Testing Specification

*Parts & Repair Services
Louisville, KY*

LOU-GED-44C331891G01

Test Procedure for a 44C331891G01

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DATE 03/13/2008	DATE	DATE	DATE

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1. SCOPE

1.1 This is a functional testing procedure for a Card.

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 Shop Documentation

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, cracked, or loosely connected

4.2.1.2 Terminal strips / connectors - broken or cracked

4.2.1.3 Components - visually damaged

4.2.1.4 Capacitors - bloated or leaking

4.2.1.5 Solder joints - damaged or cold


4.2.1.6 Circuit board - burned or de-laminated

4.2.1.7 Printed wire runs / Traces - 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 87 DMM (or Equivalent)
		Power Supplies

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6. TESTING PROCESS

6.1 Setup

6.1.1 Connect Power supplies +15 volt to Pin 2, -15 volt to Pin 6, Coms to Pin 4.



Note:

6.2 Testing Procedure

6.2.1 Power board. Input +5.0 volts to Pin 15 and connect Pin 12 to Com (Pin 4).

6.2.2 Adjust 2P for –2.50 volts on Pin 20. Verify –2.5 volts on Pin 24.

6.2.3 Remove Pin 12 from Com and connect Pin 12 to Pin 15. Adjust 1P for –7.0 volts on Pin 20. Verify +2.0 volts on Pin 24.

6.2.4 Remove Pin 12 from Pin 15 and reconnect Pin 12 to Com. Turn 3P fully CW. Adjust 4P for –5.30 volts on Pin 22. Adjust 3P for –5.00 volts on Pin 22.

6.2.5 Remove Pin 12 from Com and connect Pin 12 to Pin 15. Verify –7.50 volts on Pin 22.

6.2.6 Connect Pin 14 to Com. Adjust 6P for –2.50 volts on Pin 18. Remove Pin 14 from Com and connect Pin 14 to Pin 15. Adjust 5P for –7.0 volts on Pin 18.

6.3 Post Testing Burn-in Required ☐ Yes ☒ No



Note: All MARK I, II, & III Turbine related cards require a post testing burn-in of 100 hours.

6.3.1 Apply BUS or Operational power to the card for a period of 100 hours.

6.3.2 Re-test card while warm using the above procedure.

6.4 ***TEST COMPLETE***

7. NOTES

7.1

8. ATTACHMENTS

8.1