g GE Energy	**Functional Testing Specification**
Parts & Repair Operations ***Louisville, KY***	**LOU-GED-44C372657**

Test Procedure for a 44C372651G01, Generex Card

DOCUMENT REVISION STATUS: Determined by the last entry in the "REV" and "DATE" column

REV.	DESCRIPTION	SIGNATURE	REV. DATE
A	Initial release	G. Chandler	3/11/2014
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DATE	**DATE**	**DATE**	**DATE**
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1. SCOPE

1.1 This is a functional testing procedure for a 44C372657G01Card.

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 Check board's electronic folder for more information.

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
3		Fluke 87 DMM (or Equivalent)
2		+/- 15 Volt Power Supplies
1		500 ohm 1 Watt Resistor

6. TESTING PROCESS

6.1 Testing Procedure

6.1.1 This card is made up of 4 individual circuits with power supply common to all.

6.1.2 Apply +15vdc +/- .05vdc to pin 1.

6.1.3 Apply -15vdc +/- .05vdc to pin 5

6.1.4 Connect commons to pin 3.

6.1.5 Verify 5.6vdc +/- .3vdc at anode of diode 1Z.

6.1.6 Use Table 1 to test circuits 1-4. Once circuit 1 is completed, go to circuit 2, etc.

Table 1

	CIRCUIT 1	CIRCUIT 2	CIRCUIT 3	CIRCUIT4
LOAD RESISTOR	PIN 14	PIN 17	PIN 23	PIN 29
IN	TP101	TP201	TP301	TP401
OUT	TP102	TP202	TP302	TP402
NON INVERTING	PIN 12	PIN 16	PIN 21	PIN 27
INVERTING	PIN11	PIN15	PIN 19	PIN 25

6.1.7 Install a 500 ohm 1W resistor from load resistor pin to common.

6.1.8 With meter from load resistor to common, verify Zero pot at 0vdc +/- .01vdc at full CCW and 11vdc +/-.55vdc at full CW. Set Zero pot for 2vdc +/- .005vdc.

6.1.9 Apply +5vdc +/- .005vdc between (+) non inverting input and (-) inverting input.

6.1.10 Adjust Span pot for 10vdc +/- .005vdc at load resistor.

6.1.11 Verify -5vdc +/- .1vdc at (in) to common.

6.1.12 Verify +5vdc +/-.05vdc at (out) to common.

6.2 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.

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

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

*6.3 ***TEST COMPLETE ****

7. NOTES

7.1 None at this time.

8. ATTACHMENTS

8.1 None at this time.