



GE Energy

## Functional Testing Specification

Parts & Repair Services  
Louisville, KY

LOU-GED-872D421G1

### Test Procedure for a 3KHz oscillator.

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

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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 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 site specific SRA's 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)
1		10VDC Adjustable Power Supply
1		Scope
1		220 ohm
1		4.7K ohm

## 6. Testing Process

### 6.1 Setup

6.1.1 Setup per drawing in section 7.

### 6.2 Testing Procedure

6.2.1 Set R11 and R7 to mid-range.

6.2.2 Adjust PS1 for 8V peak-peak at pin-9. Should occur at 8.8VDC +/- 0.5V.

6.2.3 Check frequency of square wave at pin-9. Should be between 3030 and 3150Hz.

6.2.4 Turn card on and off ½ dozen times to make sure unit runs consistently.

### 6.3 Post Testing Burn-in

Required   X   Yes    No



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

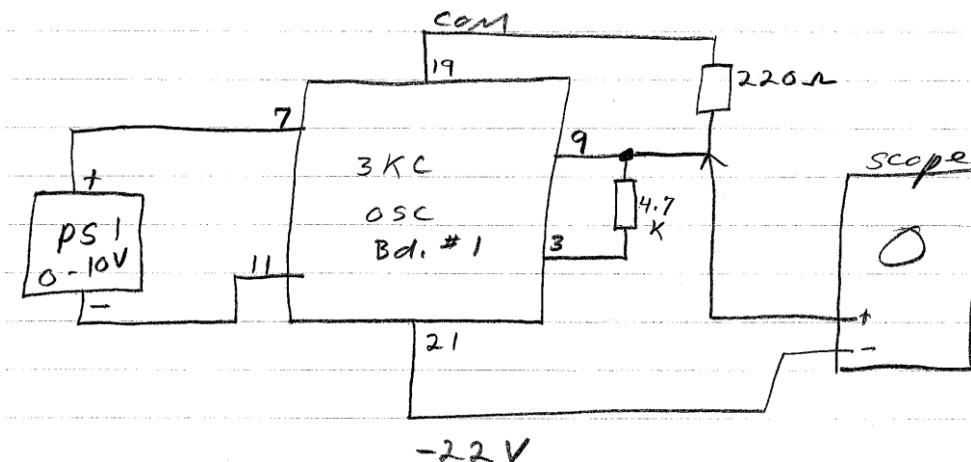
6.3.1 Apply BUS or Operational power to the card for a period of 100 hours.

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

### 6.4 \*\*\*TEST COMPLETE\*\*\*

## 7. Note

7.1 Setup drawing.



## 8. Attachments

8.1 None at this time.