g GE Energy	**Functional Testing Specification**
Parts & Repair Services ***Louisville, KY***	**LOU-GED-3S7932YA130**

Test Procedure for a 3S7932YA130A13

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

REV.	DESCRIPTION	SIGNATURE	REV. DATE
A	Initial release	James Archibald	02/12/2018
B			
C			

PREPARED BY	REVIEWED BY	REVIEWED BY	QUALITY APPROVAL
James Archibald			L. Groves
DATE	**DATE**	**DATE**	**DATE**
02/12/2018			2/13/2018

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
2		Fluke 87 DMM (or Equivalent)
1		90 Vdc power supply
1	Fluke 78 of equiv	Frequency counter

6. Modifications/Upgrades

6.1 Fill out if applicable.

7. Testing Process

8.

8.1 Setup

Hook power supply to 1TB-J positive and 1TB-D negative

Note:

8.2 Testing Procedure

Apply 65 VDC.
Put DVM on D com and G pos should read appx 35 VDC
Probe cathode of 2Z should read appx 11.0 VDC
Lower voltage on J to 37 VDC. TP7 should read appx 20 VDC.
With freq counter on 5 TP com on D adjust 3P for 204.8 hz (for 10 sec).
Hook freq counter on 6TP and adjust 4P for 204.8 hz.
Adjust supply to24vdc
Short J to G (must be shorted or 1led will not come on when 1p is adjusted).
Adjust 1 P until 1 LED lights (sets for 10 SEC delay) . 3TP should be appx 0 vdc. after the 1LED lights, lower the supply (before 10 SEC) to 22VDC and 1 LED should turn off.
After the 10sec delay supply voltage must be lowered to 18 volts before 1LED turns off.

Remove the short from J-G set supply to 83 vdc.
Short F-G and adjust 2p until 2 led comes on.
Lower supply to 75 vdc and 2 led should turn off and 4 TP should read appx 11.0 vdc and H appx 35.0 vdc
Raise the supply to 88 vdc, 4 TP and TB-H should read appx 35.0 vdc. After 10 sec H should read appx 0.0 vdc 4TP should remain at appx 0.0 vdc .
Static check 1D-6D

8.3 Post Testing Burn-in **Required** ___ **Yes** __

8.4 _ **No**

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

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

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

8.5 ***TEST COMPLETE ***

9. Notes

9.1 None at this time?

10. Attachments

10.1 None at this time?