g GE Energy	**Functional Testing Specification**
Parts & Repair Services ***Louisville, KY***	**LOU-GED-DS200FSAAG2**

Test Procedure for a Field Supply Amplifier Card

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

REV.	DESCRIPTION	SIGNATURE	REV. DATE
A	Initial release	Monte Starling	10-1-2002
B	Separated test into G1A & G2A	Jill Hardin	6-17-2009
C	Removed DC Power Supply from equipment list. Not needed on G2.	Jill Hardin	12-7-2012

PREPARED BY	REVIEWED BY	REVIEWED BY	QUALITY APPROVAL
Monte Starling	Jill Hardin		Robert Dunlap
DATE	**DATE**	**DATE**	**DATE**
10-1-2002	6/17/2009		10/16/02

Functional test procedure for a Field Supply Amplifier Card

1. SCOPE

1.1 Functional testing procedure for a DS200FSAAG2A Field Supply Amplifier 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 DS200FSAAG2A Drawings

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		Oscilloscope
1		SCR Firing Box

6. TESTING PROCESS

6.1 Setup

6.1.1 Verify that no shorts exist between adjacent traces.

6.1.2 Verify that only the parts called for on the Material List are present.

6.1.3 Verify that all leads are properly soldered and connections are properly filleted and clipped.

6.1.4 Verify that diodes and zeners are assembled per silk-screen.

6.1.5 Verify that FU2 and FU3 are marked KTK-30.

6.1.6 Verify that C5, C6, C7 and C8 are marked .22-1200vdc/660vac, and are not leaking oil.

6.1.7 Verify that the fuse holders mounting screws are tight and not touching the fuse.

6.1.8 Verify that P1PL, P2PL, N1PL and N2Pl are mounted with the flange toward the card front.

6.1.9 Verify that FPL is mounted with the keyway toward T4 (key is not to be present in plug).

6.1.10 Verify that CR45 is marked "1000L160".

6.1.11 Continue with step 7.

6.2 POWER TEST

6.2.1 Verify continuity exists from connector SHP to connector SP.

6.2.2 Verify continuity exists from connector SHN to connector SN.

6.2.3 Verify (1.27) to (1.38) mega ohms from connector FAC3 to connector AC3R.

6.2.4 Verify (1.27) to (1.38) mega ohms from connector FPR to connector FN.

6.2.5 Verify that R19, 20, 23 and 24 are 100 ohms (brown-black-brown-gold) resistors.

6.2.6 Connect Pulse Generator between connector P1G1 (+) and connector P1C1 (-).

6.2.7 Connect scope across Pulse Generators output and set it for a positive 5v 5 usec on, 20 usec off pulse.

6.2.8 Connect scope between connector P1G (+) and connector P1C (-).

6.2.9 Scope should display a 1-2V 5 usec on, 20 usec off pulse.

6.2.10 Connect Pulse Generator between connector N1G1 (+) and connector N1C1 (-).

6.2.11 Connect scope between connector N1G (+) and connector N1C(-).

6.2.12 Scope should display a 1-2V 5 usec on, 20 usec off pulse.

6.2.13 Verify that R4 and R6 are 47.5-ohm resistors (yellow-violet-green-gold).

6.2.14 End of G2A test. If card passes all the above tests apply proper stamps.

6.3 ******End of Test******

7. NOTES

7.1 None at this time