g	GE Energy	**Functional Testing Specification**
	Inspection & Repair Services *Louisville, KY*	**LOU-GED-246B2369G01**

Test Procedure for a power supply

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Functional test procedure for **246B2369G01** an External Power supply

1. SCOPE

1.1 This specification provides the Engineering Requirements for testing the 246B2369G01 External Power supply.

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 246B2369   Elementary P.S.
  3.1.2 DS200DPCBG#AA   Elementary PCB
  3.1.3 DS200DPCBG#AA   Schematics

4. ENGINEERING REQUIREMENTS

4.1 Description
  4.1.1   External Power Supply: Input 230/115VAC, output is a center tap with two 19VAC outputs.
4.2 Equipment Cleaning
  4.2.1 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.
4.3 Equipment Inspection
  4.3.1 Equipment should be visually inspected for any defects prior to applying power. This inspection should include the following as a minimum:
    4.3.1.1 Wires broken or cracked
    4.3.1.2 Terminal strips / connectors broken or cracked
    4.3.1.3 Loose wires
    4.3.1.4 Components visually damaged
    4.3.1.5 Capacitors leaking
    4.3.1.6 Solder joints damaged or cold
    4.3.1.7 Circuit board burned or de-laminated
    4.3.1.8 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
2		Fluke 77 Multimeter or equivalent
1	Variable Autotransformer	115VAC
2	Load Resistors	10 Ohms 20 Watts or more

6. TESTING PROCESS

6.1.1 **Special Note: Caution 115VAC is connected to Power Supply. Keep fingers away from unit when power is on.**

6.1.2 Bench check DS200DPCBG#AA and set jumpers for 115VAC TX4 to TX7 and TX5 to TX2.

6.1.3 Connect AC input from Autotransformer L1 to FXTB #3, Neutral to FXTB #1, and GND to GND on Base.

6.1.4 Connect resistors: one lead of R1 to CPTB #1, one lead of R2 to CPTB #3, and the other leads of R1 and R2 to CPTB #2.

6.1.5 Connect meters across R1 and R2.

6.1.6 With SW1 on DS200PCBG##AA in off position turn on Autotransformer and adjust output for 115VAC.

6.1.7 Switch on SW1 and monitor meters. They should read @19VAC +/-. 5VAC and should be balanced outputs.

6.1.8 Switch off SW1 and turn off Autotransformer.

6.1.9 Remove jumpers TX4 to TX7 and TX5 to TX2.

6.1.10 Then place a jumper at TX4 to TX5 (this will test transformer setting for 230VAC Input.

6.1.11 Turn on Autotransformer (it still should be set for 115VAC).

6.1.12 Switch on SW1 and monitor meters. They should read @ 9.5VAC +/-. 5VAC and should be balanced outputs.

6.1.13 Switch off SW1 and turn off Autotransformer.

6.1.14 Replace Jumpers for 115VAC TX4 to TX7 and TX5 to TX2.

6.2   ***TEST COMPLETE ***

7. REFERENCES

7.1 None at this time