



GE Energy

Functional Testing Specification

*Parts & Repair Operations
Louisville, KY*

LOU-GEF-GCS-PS

Test Procedure for MC2000 Graphic Control Station Power Supply

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1. SCOPE

- 1.1 This is a functional testing procedure for a MC2000 Graphic Control Station Power Supply. This encompasses model # 259A9944P1.

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		AC power cable with terminal connections and fuse.
1		Series Six Power Supply passive test load pack.
1		Active test load

6. Testing

6.1 SETUP

6.1.1 Connect AC cable to the terminal strip in accordance with chart 1.

TB1-1	TB1-2	TB1-3
Hot	Neutral	Ground

Chart 1

6.1.2 Connect Series six passive test load pack across terminals TB1-4 through TB1-7 with the common side connected to TB1-7.

6.1.3 Ensure that the amperage setting of the active test load is set to 0 Amps.

6.1.4 Connect the active test load with negative to TB1-8 and positive to TB1-9.

6.2 TEST PROCESS

6.2.1 Plug in the AC cable.

6.2.2 Slowly increase that amperage setting of the active load to 15 Amps.

6.2.3 TB1-7 and TB1-8 are both the same ground.

6.2.4 Measure the voltages from ground in accordance with chart 2.

TB1-4	TB1-5	TB1-6	TB1-9
12VDC	-12VDC	12VDC	5VDC

Chart 2

7. NOTES

7.1 **When testing the next unit, please put max ripple percentages (Section 6.2.4) you would normally see on the DC output voltages after unit is repaired. C. Wade**

8. ATTACHMENTS

8.1 None at this time