



GE Energy

Functional Testing Specification

*Parts & Repair Services
Louisville, KY*

LOU-GED-DS3800DGPA

Test Procedure for a DS3800DGPA

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DATE 08/12/2010	DATE	DATE	DATE 8/16/2010

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1. SCOPE

1.1 This is a functional testing procedure for a DS3800DGPA.

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)

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6. TESTING PROCESS

6.1 Setup

- 6.1.1 Remove all components from saddle clamps. (Make a note of what came from where so you can put them back after test.)
- 6.1.2 Set all pots full CW
- 6.1.3 Pots should be facing you during test

6.2 Testing Procedure

- 6.2.1 Verify 20K ohms between points 20-29
- 6.2.2 Verify 20K ohms between points 20-21
- 6.2.3 Adjust R1 full CCW and verify smooth movement to 0 ohms
- 6.2.4 Readjust R1 fully CW
- 6.2.5 Verify 10K ohms between points 26-27
- 6.2.6 Verify 10K ohms between points 26-28
- 6.2.7 Adjust R2 full CCW and verify smooth movement to 0 ohms
- 6.2.8 Readjust R2 fully CW
- 6.2.9 Verify 10K ohms between points 24-19
- 6.2.10 Verify 10K ohms between points 25-19
- 6.2.11 Adjust R3 full CCW and verify smooth movement to 0 ohms
- 6.2.12 Readjust R3 fully CW
- 6.2.13 Verify 10K ohms between points 17-R12 (saddle clamp right side)
- 6.2.14 Verify 0 ohms between points 17-16
- 6.2.15 Adjust R4 full CCW and verify smooth movement to 10K ohms
- 6.2.16 Readjust R4 fully CW
- 6.2.17 Verify 0 ohms between points 19-R12 (saddle clamp left side)
- 6.2.18 Add jumpers at C1, R15, and R13
- 6.2.19 Verify 0 ohms between points 15-23
- 6.2.20 Adjust R5 full CCW and verify smooth movement to 10K ohms
- 6.2.21 Move lead at point 23 to 13
- 6.2.22 Adjust R5 full CW and verify smooth movement to 0 ohms
- 6.2.23 Verify 10K ohms between points 15-19
- 6.2.24 Remove jumpers
- 6.2.25 Add jumpers at R14 and R16
- 6.2.26 Verify 10K ohms between points 14-19

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- 6.2.27** Verify 0 ohms between points 14-12
- 6.2.28** Adjust R6 full CCW and verify smooth movement to 10K ohms
- 6.2.29** Readjust R6 fully CW
- 6.2.30** Remove jumpers
- 6.2.31** Add jumpers at C2, C3, R17, R18, R19, R20, and R21
- 6.2.32** Verify 0 ohms at the following points
 - 22-10
 - 10-11
 - 9-8
 - 7-6
 - 5-4
 - 3-2
 - 1-18

6.3 *TEST COMPLETE*****

7. NOTES

7.1 None at this time.

8. ATTACHMENTS

8.1 None at this time.