g GE Energy	**Functional Testing Specification**
Parts & Repair Services ***Louisville, KY***	**LOU-GEF-VDI1A** **1050HLX Board**

Test Procedure for VDI1A Printed Circuit Board for a 1050HLX Control

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1. SCOPE

1.1 This is a functional testing procedure for a 1050HLX VDI1A Printed Circuit Board.

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 GEK-25345 1050HLX Blue Book (Manual GEK-84814)
3.1.2 GEK-84815 Test instructions
3.1.3 GEK-25346 Board Diagrams for 1050HLX boards.
3.1.4 44C704931 VDI1A Elementary
3.1.5 Check board's electronic folder for more information

4. ENGINEERING REQUIREMENTS

4.1 Description

4.1.1 The 1050 Control is a solid-state, integrated circuit controller/processor system using LSI circuits for data processing and control. The static logic circuits are arranged on modular, plug in, printed circuit boards, clearly identified by type. The circuit boards are mounted with functional grouping. In addition, a board identification number marks each rack slot.

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 site specific SRA's 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, cracked, or loosely connected
4.3.1.2 Terminal strips / connectors - broken or cracked
4.3.1.3 Components - visually damaged
4.3.1.4 Capacitors - bloated or leaking
4.3.1.5 Solder joints - damaged or cold
4.3.1.6 Circuit board - burned or de-laminated
4.3.1.7 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	H188669	1050 HLX Control
1	H188724	1050 HLX Test Control

6. Modifications/Upgrades

6.1 Check Orange Book for any modifications or upgrades.

7. Testing Process

7.1 Setup

7.1.1 This describes the procedure for testing to test VDI1A, CRT Video's: 40 x16 Character and 80 x 20 Character display.

7.1.2 The VDI1A Board is the 1050HLX main CRT Controller and Video Character generator.

7.2 Testing Procedure

7.2.1 First make should PROM3 Diagnostic Board is in Rack Slot 14.

7.2.2 Remove the test VDI1A board from slot 15 and insert the board to be tested.

7.2.3 Special Mode Switch should be on (UP).

7.2.4 Press "ON".

7.2.5 Monitor should display Diagnostic Page, remove all tests (tested can be removed by moving curser up or down to highlight test to be removed press **"Shift"** and **"Delete").**

7.2.6 To test Press **"SPCL1"** display in bottom left corner INSERT NO? Enter in **"11"** depress **"enter"** Enter "**N"** then depress **"CYCLE START".** 1st display 40 X 16 will appear on the screen each now in normal, reverse and blinking video display.

7.2.7 Now depress **"CYCLE START"** for 2nd display of 80 x 20 characters will appear on the screen each now in normal, reverse, and blinking video display. Run VDI1A CRT Test for @ 1 hour for each total of 2 hours. *** Refer to Diagnostic GEK-84815 page 37.

7.2.8 Depress **"Shift"** and **"Clear"** to stop test and Delete Sub-Test 01 (Sift and Delete).

7.2.9 Shut down remove VDI1A replaced Test VDI1A.

7.3 TEST COMPLETE *

8. Notes

8.1 None at this time.

9. Attachments

9.1 None at this time.