



GE Energy

## Functional Testing Specification

Parts & Repair Services  
Louisville, KY

LOU-GEF-VID01

### Test Procedure for VID01 Printed Circuit Boards

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## Functional test procedure for VID01 Printed Circuit Boards

### 1. SCOPE

1.1 This is a functional test procedure for testing the VID01 printed circuit boards. The process applies only to these boards model number 44A719349-G01

### 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	44C719648	Elementary
3.1.2	44C719661	Elementary
3.1.3	GEK-25382	Maintenance & Troubleshooting
3.1.4	GEK-25381	Startup & Adjustments
3.1.5	GEK-25391	System Diagrams
3.1.6	GIT-200	<b>TAB12</b> Diagnostic Software
3.1.7	GEK-84876	Color Graphic System

### 4. ENGINEERING REQUIREMENTS

#### 4.1 Description

4.1.1 VID01 board used in the Graphics Numerical Control Station (GNCS). The Video Board (VID) interfaces with the System Board (SYS) to the CRT.

#### 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
1	GE MC2000 GCS Control	MC2000 Graphic/ Color Control
1		Factory Service Diagnostics Resides on Bubble Board MB1:

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## **6. TESTING PROCESS**

### **6.1 Diagnostic Test**

- 6.1.1** Install board to be tested in MC2000 GCS Control. Turn on MC2000 Power Switch.
- 6.1.2** Turn control on by depressing green “Control On” push button on the NCS Station. If the LED on the VID Board does not come on, stop the testing and begin your troubleshooting.
- 6.1.3** “Power Up Diagnostics” should be displayed on screen, followed by “System Loading”, which will be followed by “Mark Century 2000 Service Diagnostics Initialization” & “Make any Keyboard entry for manual/menu mode”.
- 6.1.4** Press any key and Factory Diagnostic Screen will be displayed.
- 6.1.5** To select a heading on the menu page, use the cursor control up or down arrow key.
- 6.1.6** Go to manual testing of the VID, selecting “Additional Test\Option Menu” then “Graphic Control Station Test” and pressing enter or return.
- 6.1.7** Select “GCS CRT Test”
  - 6.1.7.1** First Test with test all color combination on CRT. Test will continue until DEPRESS ANY KEY TO CONTINUE. Depress return to go to next test.
  - 6.1.7.2** Second test will test GRAPHIPS CAPABILITES. Go through the test (Visual Test) until the GCS CRT Test is complete.
- 6.1.8** Depress return then select “GCS Extended Diagnostic Test” Run test for about 2 hours.
- 6.1.9** Stop Test by depressing return twice then cancel twice.
- 6.1.10** Shut down remove VID01 board.

### **6.2 \*\*\*Test Complete \*\*\***

## **7. Attachments & Notes**

- 7.1** None at this time.