



GE Energy

Functional Testing Specification

*Inspection & Repair Services
Louisville, KY*

LOU-GEF-MONITOR

Test Procedure for MC2000 Monitor

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Functional test procedure for GE CRT Monitor

1. SCOPE

- 1.1 This specification provides the Engineering Requirements for testing GE CRT Monitor, 12 and 9 inch, 44A719977-107 & 115.

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-25382 | Maintenance & Troubleshooting |
| 3.1.2 | GEK-25381 | Startup & Adjustments |
| 3.1.3 | GEK-25391 | System Diagrams |
| 3.1.4 | GIT-200 | TAB12 Diagnostic Software |

4. ENGINEERING REQUIREMENTS

4.1 Description

- 4.1.1 The Monitor part of the MC200 NC Control Station it's purpose is to receive the Composite Video sent by the NCB02/3 Board and display the Data information on to the CRT Screen.

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

4.3.1.9 CRT Screen is not burned in

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 Bench Control | 2000 P.S/ CRT Bench Test Control |
| 1 | Factory Service Diagnostics | Resides on Bubble Board MB1: |

6. TESTING PROCESS

6.1 Diagnostic Test

6.1.1 Connect Monitor to be tested in MC2000 P.S CRT Bench Test Control

Turn on MC2000 Power Switch.

6.1.1.1 Turn control on by depressing green "Control On" push button.

6.1.1.2 "Power Up Diagnostics" should be displayed on screen (*****SEE NOTE in section 7 if no PIX**) followed by "System Loading", which will be followed by "Mark Century 2000 Service Diagnostics Initialization" & "Make any Keyboard entry for manual/menu mode". The Video frame on screen should be straight and centered (adjust if needed).

6.1.1.3 Press any key and Factory Diagnostic Screen will be displayed.

6.1.1.4 To select a heading on the menu page, use the cursor control up or down arrow key.

6.1.1.5 Go to manual testing of the NCB01-3 by selecting "NC Control Station Test" Test and pressing enter or return. You need to go through the following tests.

NC Extended Diagnostic Test

Port B Loopback Test

NCS CRT Test

6.1.1.6 Select "NCS CRT Test" Video should be clear

6.1.1.7 Depress Return button to go back to the menu page.

6.1.1.8 Select "NC Extended Diagnostic Test"

6.1.1.9 Video display should be clear and legible run this test for 2-4 hours

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6.1.2 Shut down MC2000 Bench Control.

6.2 *TEST COMPLETE *****

7. Special Notes

7.1 Note: if there is No PIX Display,

7.1.1 1st see if CRT's filament has power.

7.1.2 2nd check Brightness pot

7.1.3 3rd try to calibrate monitor

7.2 If PIX cannot be displayed CRT or PCB is bad shut down and repair.