



GE Energy

Functional Testing Specification

Inspection & Repair Services
Louisville, KY

LOU-GEF-SCB0x

Test Procedure for SCB01-SCB06 Interface Cards

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<p>LOU-GEF-SCB0x REV. A</p>	<p>g</p> <p>GE Energy <i>Inspection & Repair Services</i> <i>Louisville, KY</i></p>	<p>Page 2 of 3</p>
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Functional test procedure for SCB Interface cards

1. SCOPE

1.1 This specification provides the Engineering Requirements for testing SCB01-SCB06

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 purpose of the machine control station is to provide an operator interface for use in controlling the machine tool. The circuitry for the machine control station is contained on MCB02, MCX02, and SCB01-SCB06 boards for MCS Control Station. Push buttons and lamps are controlled by the MCB02 and MCX02 through the SCB cards.

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 Test Control	2000 Test Control
1	Factory Service Diagnostics	Resides on Bubble Board MB1:

6. TESTING PROCESS

6.1 _Diagnostic Test

6.2 Install board to be tested in MC2000 Test Control

Turn on MC2000 Power Switch.

6.2.1 Turn control on by depressing green "Control On" push button on the NCS Station. If the LED on the MCB02 does not come on, stop the testing and begin your troubleshooting.

6.2.2 "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".

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

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

6.2.5 Go to manual testing of the MBC02 or MCX02 by selecting "Machine Control Station Test" Test and pressing enter or return. You need to go through the following tests.

6.2.5.1 "1. MCS Lamp Test.

6.2.5.2 "2. MCS Input Test

6.2.5.3 "5. Output Test

6.2.6 After the SCB0 board is tested Shut down the MC2000 Control and remove board.

6.3 ***TEST COMPLETE ***