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GE Energy

Functional Testing Specification

Inspection & Repair Services
Louisville, KY

ROPS1x
Display Power Supply

Testing Procedure for the ROPS1 Printed Circuit Board

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DATE 8/27/2007	DATE	DATE	DATE 8/27/2007

<p>LOU-GEF-ROPS1x REV. A</p>	<p style="text-align: center;">  GE Energy <i>Inspection & Repair Services</i> <i>Louisville, KY</i> </p>	<p>Page 2 of 4</p>
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Functional test procedure for ROPS1 Printed Circuit Board

1. SCOPE

- 1.1 This specification provides the Engineering Requirements for testing the ROPS1 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.

<p>2.1.1 GEK-36093 GEK-71632 GEK-45668</p>	<p>Diagnostic Software for 1050T Controls Diagnostic Software for 1050MC Controls Computer Access Panel</p>
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4. ENGINEERING REQUIREMENTS

- 4.1 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. The backplane consists of printed conductors arranged in a busing structure so that each slot is universal and can accept any board type. The 1050 control uses the AXIS2 board for controlling two separate axis's.

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 1050T/MC	CPU3 Model
1	GE Computer Access Panel	External Interface
1	Diagnostic Tape Specific to Control	Diagnostic Tape

6. TEST REQUIREMENTS

- 6.1 Diagnostic Test
- 6.1.1 Compare Board Under Test (BUT) with Known Good Board (KGB).
 - 6.1.2 Load the third section of the Diagnostic Tape.
 - 6.1.2.1 Once the tape is fully loaded it will rewind back to the beginning (Before Test No. 1). The Display should show: Push Control OFF, then ON, follow this instruction at this time. If the Cap Panel is hooked up you will also have to hit the RUN switch to start the control's program
 - 6.1.3 Setup the control for testing.
 - 6.1.3.1 Press NEXT, then 2, then Cycle Start. Alphanumeric characters should scroll on the display and the Option STOP lamp should flash.
 - 6.1.3.2 Run for 30 minutes, if no problems occur unit passes test.
 - 6.1.3.3 END OF TEST

7. NOTES