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GE Industrial Systems

Functional Testing Specification

*Renewal Services
Louisville, KY*

LOU-GED-44C372602

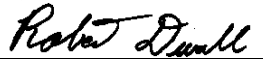
Test Procedure for a Ground Detector card

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REV.	DESCRIPTION	SIGNATURE	REV. DATE
A	Initial release	P. Kelley	7/17/02
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PREPARED BY P. Kelley	REVIEWED BY D. Laemmle	REVIEWED BY	QUALITY APPROVAL 
DATE 7/17/02	DATE 7/19/02	DATE	DATE 10/25/02

Functional test procedure for a Card

1. SCOPE

1.1 This is a functional testing procedure for a Card.

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 277A3907

3.1.2 GEK-36553

4. ENGINEERING REQUIREMENTS

4.1 Equipment Cleaning

4.1.1 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.

4.2 Equipment Inspection

4.2.1 Equipment should be visually inspected for any defects prior to applying power. This inspection should include the following as a minimum:

4.2.1.1 Wires broken or cracked

4.2.1.2 Terminal strips / connectors broken or cracked

4.2.1.3 Loose wires

4.2.1.4 Components visually damaged

4.2.1.5 Capacitors leaking

4.2.1.6 Solder joints damaged or cold

4.2.1.7 Circuit board burned or de-laminated

4.2.1.8 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		Fluke 85 DMM (or Equivalent)

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6. TESTING PROCESS

6.1 Setup

6.1.1



Note:

6.2 Testing Procedure

6.2.1 See Attached Sheets

6.3 ***TEST COMPLETE***

7. NOTES

Oct-25-02 12:30

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5024930640

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Test for 44C372602-G01

- Connect the board as shown in the test drawing.
- Apply power.
- Meter readings below are with the neg lead from the volt meter to pin 7 (used as common).
- Position NEG ALO and POS ALO switches down (on front panel).
- Press RESET button (on front panel).
- Verify that LEDs marked NEG and POS on the front panel of the UUT are both on.
- Verify that the LED marked MCA on the front panel is blinking at a 1HZ rate.
- Verify that the LED between pin 23 and com is blinking at approx a 2 HZ rate.
- Verify < .5 volt on pin 21.
- Verify < 2 volts on pin 24 (you may see a 2 HZ signal but it should stay < 2 volts).
- Verify < .5 volt on pin 29.
- Verify < 2 volts on pin 19 (you may see a 2 HZ signal but it should stay < 2 volts).
- Connect the side of the 4.7 K resistor not connected to pin 3 to pin 9 for one second and release.
- Verify that the NEG LED on the front panel is blinking at approx a 2HZ rate.
- Verify that pin 21 reads 24 volts.
- Verify that pin 24 is going from < 2 volts to 24 volts at a 2HZ rate.
- Position the NEG ALO switch on the front panel to the up position.
- Verify < .5 volts on pin 21.
- Verify < 2 volts on pin 24 (you may see a 2 HZ signal but it should stay < 2 volts).
- Verify 24 volts on pin 29.
- Verify that pin 19 is going from < 2 volts to 24 volts at a 2HZ rate.
- Position the NEG ALO switch on the front panel to the down position.
- Press the reset button on the front panel.
- Verify that the NEG LED on the front panel is on (not blinking).
- Connect the side of the 4.7 K resistor not connected to pin 3 to pin 7 for one second and release.
- Verify that the POS LED on the front panel is blinking at approx a 2 HZ rate.
- Verify that pin 21 reads 24 volts.
- Verify that pin 24 is going from < 2 volts to 24 volts at a 2HZ rate....
- Position the POS ALO switch on the front panel to the up position.
- Verify < .5 volts on pin 21.
- Verify < 2 volts on pin 24 (you may see a 2 HZ signal but it should stay < 2 volts).
- Verify 24 volts on pin 29.
- Verify that pin 19 is going from < 2 volts to 24 volts at a 2HZ rate.
- Position the POS ALO switch on the front panel to the down position.
- Press the reset button on the front panel.
- Verify that the POS LED on the front panel is on (not blinking).
- Done.

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44C372602-601 Test

