g GE Industrial Systems	**Functional Testing Specification**
Renewal Services ***Louisville,KY***	**LOU–GED-193X390xx**

Test Procedure for a 193X390AAG01

DOCUMENT REVISION STATUS: Determined by the last entry in the "REV" and "DATE" column

REV.	DESCRIPTION	SIGNATURE	REV. DATE
A	Initial release	Steve Pharris	08/08/02
B			
C			

PREPARED BY	REVIEWED BY	REVIEWED BY	QUALITY APPROVAL
Steve Pharris			Robert Duvall
DATE	**DATE**	**DATE**	**DATE**
8/8/02			10/25/02

Functional test procedure for 193X390AAG01

1. SCOPE

1.1 This is a functional testing procedure for a 193X390AAG01.

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

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		Power Supply
1		SCR Firing Box
1		O-Scope
1		BNC to Banana Jack Connector
1		100 Ohm Resistor

6. TESTING PROCESS

6.1 Setup

6.1.1 Set power supply for +20VDC.

6.1.2 Connect positive lead from +20VDC to pin labeled 20V on card.

6.1.3 Connect negative lead from +20VDC to pin labeled COM on card.

6.1.4 From the SCR firing box connect non isolated negative to pin labeled COM on card.

6.1.5 Place resistor in parallel with O-Scope input. (See notes.)

6.2 Testing Procedure

6.2.1 Connect positive lead from SCR firing box to pin labeled 1P.

6.2.2 Connect positive lead from scope to pin labeled 1PG.

6.2.3 Connect negative lead from scope to pin labeled 1PC.

6.2.4 Apply voltage from power supply, turn on SCR firing box in normal mode. Turn potentiometer on firing box fully CW.

6.2.5 Verify waveform in Fig. 1

6.2.6 Repeat steps 6.2.1 through 6.2.5 using table below for connections. (See notes)

6.2.7 If no deviations are found card passed.

6.3 ***TEST COMPLETE ***

7. NOTES

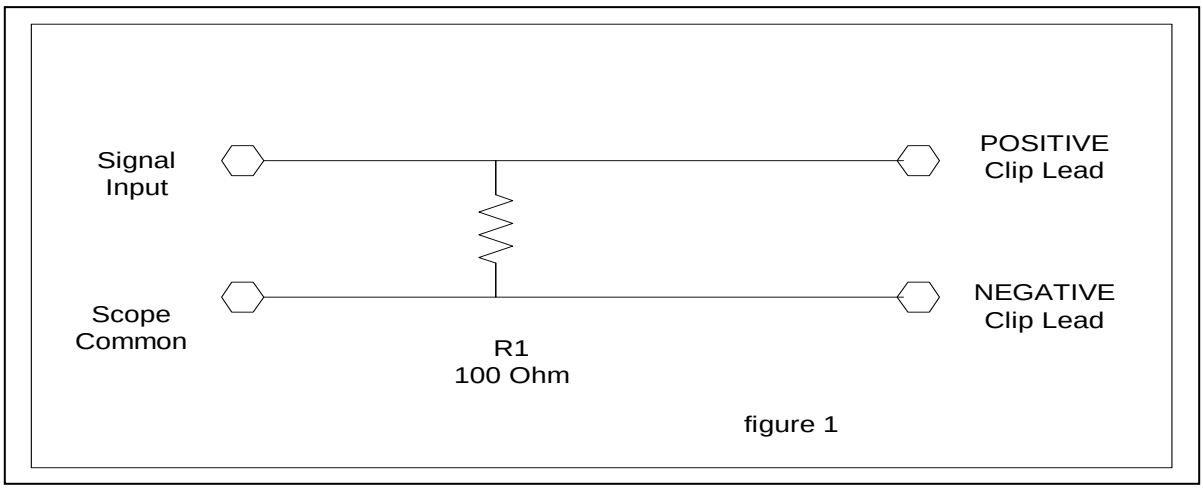

figure 1

SCR firing box Positive lead	**O-scope Positive lead**	**O-scope Negative lead**
1N	1NG	1NC
2P	2PG	2PC
2N	2NG	2NC

8. Oscilloscope Verification Examples:

Fig. 1