g GE Industrial Systems *Renewal Services* *Louisville,KY*	**Functional Testing Specification** **LOU–GED-193X701AR**

Test Procedure for a Card

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

REV.	DESCRIPTION	SIGNATURE	REV. DATE
A	Initial release	Steve Pharris	07/16/02
B			
C			

PREPARED BY	REVIEWED BY	REVIEWED BY	QUALITY APPROVAL
Steve Pharris			Robert Dwall
DATE	**DATE**	**DATE**	**DATE**
07/16/02			08/09/02

Functional test procedure for a Discriminator Card

1. SCOPE

1.1 This is a functional testing procedure for a 193X701AR Discriminator 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 193X701AR Documentation Folder**
- **3.1.2 QSI # 2150, Factory Test instruction**
- **3.1.3 36C759242AA, Schematic**

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)
1	H033960	193X701AR Test Fixture

6. TESTING PROCESS

6.1 Setup

6.1.1

Note:

6.2 Testing Procedure

6.2.1 See Following Sheets

GENERAL ELECTRIC

SPEED VARIATOR DEPARTMENT

#2150

TITLE

DISCRIMINATOR - 193X701ARG01

REVISION

#2

1.0 Applicable Documents
Diagram 36C759242AA and Parts List

2.0 Equipment
Test Stand and Program Board (193X701ARC01)

3.0 Procedure
Place the [redacted] LINE SYNC SENSE DC
[redacted] meter on VDC, all switches on test fixture should be in up position

4.0 Test Procedure

4.1 Insert card in test fixture and energize test stand. [redacted].

4.2 Rotate zero adjust pot from max. CCW to max. CW. The voltmeter reading should change by at least 1 volt.

4.3 Place S2 down. The voltmeter should change [redacted] reading [redacted]. By placing S2 up and down and adjusting zero adjust pot, it should be possible to have the voltages nearly equal, [redacted] for each position of S2. FU6 has to be good

4.4 Place S1 down. Output should increase to approximately [redacted] volts. 30 VDC

4.5 Place S3 and S4 down. The voltmeter should show approximately 6.0 volts.

4.6 If the card passes all the steps, place the component acceptance stamps on it.

5.0 Scope of test

5.1 Step 4.1 sets the supply voltage.

5.2 Step 4.2 checks the range of the zero adjust.

5.3 Step 4.3 reverses the phase of the 6.3 vac input and adjusts for zero output.

5.4 Step 4.4 changes the input from 6.3 vac to 110 VAC input. This checks for proper phasing.

5.5 Step 4.5 changes from 4-5-6 secondary of TX386 and TX388 to 7-8-9 (see diagram) check phasing.

*Change or Addition

DISTRIBUTION	C
Mgr. Eng.	
Mgr. Mfg.	
Mgr. Prod. Eng.	
Mgr. Mat.	
Mgr. Sys. Eng.	
Eng. Supv.	
Foreman-Test	
Foreman-Insp.	
Mgr.-Dev. Eng.	

SV-100 (2-68)

step 4.2 fails check if the two black wire [illegible] in right

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unplug unit

6.3 ***TEST COMPLETE ***

7. NOTES

8. Oscilloscope Verification Examples:

Fig. 1

Fig. 2