

g GE Industrial Systems	Test and Operating Procedure	
QUALITY REP:	DATE : 4/12/01	PAGE 1 OF 5
TITLE: Test Instructions for 193X392AAG01.		PROCEDURE: LOU – GE-193X392AAG01-A

1. INTRODUCTORY DESCRIPTION

- A. This procedure establishes the methods for testing a 193X392AAG01.
- B. Environmental ranges: 70 +/- 10 Deg. F. with 20-75% R.H.
- C. Unit warm-up/stabilization period requirement: None
- D. Personnel using this procedure are expected to have a high degree of confidence and expertise in related testing and calibration procedures.
- E. Procedures not explained here are considered to be understood as common practice.

2. TEST EQUIPMENT VERIFICATION

- A. Verify the accuracy of the standard(s) used in the repair/calibration process by evidence of recent calibration labeling affixed to the test equipment.
- B. All measurement standards used in this procedure shall be traceable to the NATIONAL INSTITUTE of STANDARDS and TECHNOLOGY (N.I.S.T.) and shall have the accuracy, stability, range and resolution required for the intended use.
- C. Unless otherwise specified, the collective uncertainty of the Measurement Standard(s) shall not exceed twenty five percent of the acceptable tolerance for each characteristic being calibrated.
- D. All deviations shall be documented.

3. EQUIPMENT CLEANING

- A. All equipment clean will be performed as instructed in the GE T&IC SOP Sec. 14.0

4. EQUIPMENT INSPECTION

- A. The following criteria should be used as a guideline or basis for the inspection process of this unit:
 - 1. Wires broken or cracked.
 - 2. Terminal strips / connectors broken or cracked.
 - 3. Loose wires.
 - 4. Components visually damaged.
 - 5. Capacitors leaking.
 - 6. Solder joint, cold or otherwise inadequate.
 - 7. Circuit board discolored or burned.
 - 8. Printed wire runs burned or damaged.

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5. REVISION HISTORY

Revision	Date	Reason for Revision
A	4/12/01	Initial Procedure – After Verification
B		
C		
D		
E		
F		
G		
H		
I		
J		
K		

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6. REFERENCE DOCUMENTATION

- Reference: GEK
- Factory Procedure #QSI 2610 Rev 0

7. THEORY OF OPERATION

- Reference: GEK

8. TEST EQUIPMENT TO BE USED

- Function Generator
- O-Scope
- DMM (Fluke 85 or equivalent)
- 2 – 10 Ω Res., 1 – 22 Ω Res., 1 – 1 K Res., 1 – 1N4148 diode.

9. FINAL TEST AND OPERATION PROCESS

- 1) Set “bias” pot full CW (P1)
 - Set “trip” pot full CCW (P2)
- 2) Apply + 20VDC to +20v pin on CN1
- A) TOL LED will be off
- B) RX relay will set – check for less than 1.5 Ω from RX1 and RX2 of TB1
- C) “**BV**” post, with P1 full CW, will be 11.8VDC to 12.4 VDC to GND
- D) “**BV**” post, with P1 fully CCW, will be 7.5 to 8.1 VDC
- 3) TV Post
 - A) With trip pot (P2) fully CCW “**TV**” is 7.7 VDC to 8.3 VDC
 - B) With trip pot (P2) fully CW “**TV**” is 14.2 VDC to 14.8 VDC

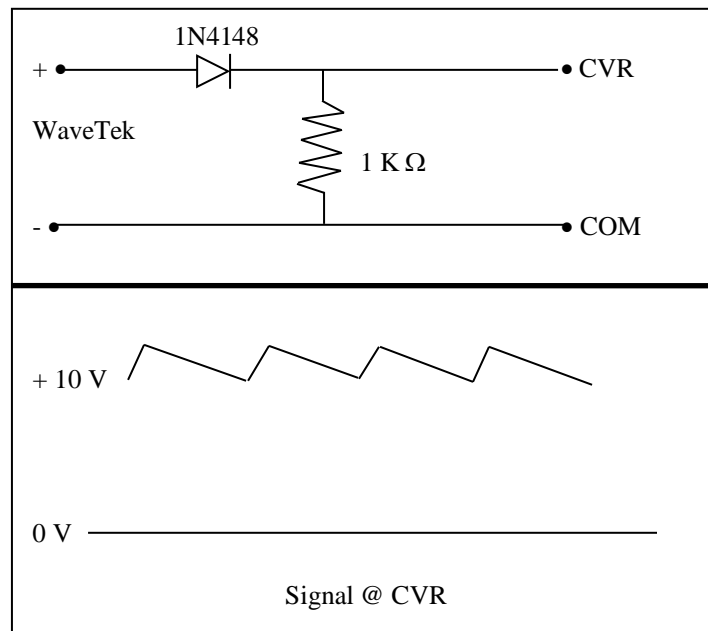
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- 4) Apply +20 VDC via 22k res. To “**RP**” of CN4
 - A) After 5 to 10 sec. “**TOL**” LED on and relay drops out (RX1 to RX2 open)
 - B) DBT of CNI will be less than 5 VDC

- 5) Remove +20 VDC via 22k res. from “**RP**”
 - A) TOL should remain on (latched)

- 6) Wait 15 sec. after removing above input
 - A) Apply COM to “**RST**” of CNI (just apply and remove)
 - B) “**TOL**” LED should go out and remain off

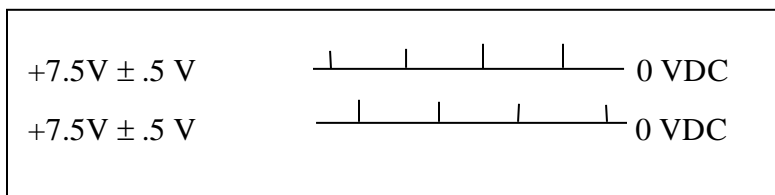
- 7) Attach Wave Tek as follows:
 - A) Set Wave Tek for, Sinewave 60 Hz 21V P-P



- B) Connect 10Ω res. across DG to DC and across CG to CC

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C) Signal on CG to CC and should be 180 out of phase.



8) Adjust bias pot (P1) for 7.82 to 8.10 VDC at “BV”

9) Adjust trip pot (P2) for 8.27 to 8.37 VDC at “TV”

10. SPECIAL INFORMATION

TEST WRITTEN BY: Brian Prunty

DATE: 2/8/00

TEST VERIFIED BY: _____

DATE: _____