
 <b>GE Industrial Control Systems</b>	<b>Test and Operating Procedure</b>	
	<b>DATE: 03/24/98</b>	<b>PAGE 1 OF 5</b>
<b>QUALITY REP:</b> 		
<b>TITLE:</b> <b>GEM Module Test Procedure</b>		<b>PROCEDURE:</b> <b>LOU – GED-DS3820WGCB-B</b>

## **1. INTRODUCTORY DESCRIPTION**

- A. This procedure establishes the methods for testing a
- 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.


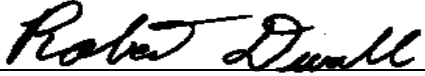
## **3. EQUIPMENT CLEANING**

- A. All equipment clean will be performed as instructed in the GEES SOP Sec. 14.0



## **4. EQUIPMENT INSPECTION**

- A. The following criteria should be used as a guideline or basis for the inspection process of the 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.
  - 7. Circuit board discolored or burned.
  - 8. Printed wire runs burned or damaged.

## **5. REVISION HISTORY**

 <b>GE Industrial Control Systems</b>	<b>Test and Operating Procedure</b>	
	DATE: 03/24/98	PAGE 2 OF 5
QUALITY REP: 		
TITLE: <b>GEM Module Test Procedure</b>		PROCEDURE: <b>LOU – GED-DS3820WGCB-B</b>

Revision	Date	Initials	Reason for Revision
A	03/24/98	EWR	Initial Release
B	06/10/02	RKD	Added Section 5 & 6, Updated procedure number
C	3/13/08	CW	Added comment to end of section 9, about to tie wrapping PS card down to keep it secure during shipping
D			
E			
F			
G			
H			
I			
J			
K			

 <b>GE Industrial Control Systems</b>	<b>Test and Operating Procedure</b>	
	DATE: 03/24/98	PAGE 3 OF 5
QUALITY REP: 		
TITLE: <b>GEM Module Test Procedure</b>		PROCEDURE: <b>LOU – GED-DS3820WGCB-B</b>

## 6. REFERENCE DOCUMENTATION

- Reference: GEK
- Factory Procedure #

## 7. THEORY OF OPERATION


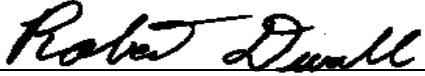
- Reference: GEK-83856

## 8. TEST EQUIPMENT TO BE USED



- DS3820 WGCB test console (H033719)
- Fluke 9010 troubleshooter
- Z80 interface pod for Fluke troubleshooter
- General purpose test fixture for Fluke troubleshooter (H033509)
- WGCB personality module for gen purpose test fixture
- Fluke 85 multimeter or equivalent
- Serial communications terminal (set for 9600,E,8,1)
- DS3820 WGCB test software sections 1 and 2 (on network)

## 9. FINAL TEST AND OPERATION PROCESS

- Attach Z80 interface pod to the fluke 9010 trouble shooter.
- Attach serial port of fluke 9010 to communications port of serial terminal.
- Attach Z80 interface pod to 40 pin zif socket in gen purpose test fixture.

 <b>GE Industrial Control Systems</b>	<b>Test and Operating Procedure</b>	
	DATE: 03/24/98	PAGE 4 OF 5
QUALITY REP: 		
TITLE: <b>GEM Module Test Procedure</b>		PROCEDURE: <b>LOU – GED-DS3820WGCB-B</b>

- **Attach WGCB personality module to gen purpose test fixture.**
- **Attach cable from personality module to J1 connector on test console.**
- **Place unit under test on top of the test console utilizing pegs to hold it in place.**
- **Connect all wires from T1 terminal strip of the console to the CTB terminal strip of the unit under test.**
- **Connect all labled cables from the test console to the associated connectors of the unit under test.**
- **Make sure CB1 circuit breaker is off and the E-Stop button is pushed in the on the console**
- **Connect the power cable from the console to 480 VAC 3 phase power.**
- **Transfer section 1 of the WGCB test software into the fluke 9010**
- **Execute program 0 on the fluke and complete the testing process by carefully following the directions given by the software.**
- **Before shipping be sure to tie wrap power supply card within module to keep it from moving around during shipping.**

 <b>GE Industrial Control Systems</b>	<b>Test and Operating Procedure</b>	
	<b>DATE: 03/24/98</b>	<b>PAGE 5 OF 5</b>
<b>QUALITY REP:</b> 		
<b>TITLE:</b> <b>GEM Module Test Procedure</b>		<b>PROCEDURE:</b> <b>LOU – GED-DS3820WGCB-B</b>

**10. SPECIAL INFORMATION**

**TEST WRITTEN BY: Eric Rouse**

**DATE: 3-24-98**

**TEST VERIFIED BY: David Bush**

**DATE: 3-24-98**