



GE Energy

## Functional Testing Specification

Parts & Repair Services  
Louisville, KY

LOU-GED-246B2242AEG\*

### Test procedure for Genius Block I/O Network Control Card

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

REV.	DESCRIPTION	SIGNATURE	REV. DATE
A	Initial release	Eric Rouse	11/2/2001
B	Transferred procedure from a general group to a specific single document. Also added asset numbers to section 5.	Jeffrey Barton	7/8/2010

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DATE 11/2/2001	DATE 7/20/2010	DATE	DATE 7/31/2010

Test procedure for Genius Block I/O Network Control Card

**1. SCOPE**

1.1 This is a functional testing procedure for a 246B2242AEG\* on the IOS Test System

**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 Check board's electronic folder for more information

**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 site specific SRA's 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	H188629	IOS Test System
1		Computer with IOS Test Software with Serial comm. to DS200DMCB board

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## 6. Testing Process

### 6.1 Setup

**6.1.1** Visually inspect to see if both cards are mated correctly

**6.1.2** Setup SW1 as Diagram inside IOS Test Station designates.

1=closed

2=open

3=open

4=open

5=closed

6=open

7=open

8=closed

**6.2** Install Unit in Test Fixture by connecting 5PL, 4PL and 3PL.

**6.3** Power up IOS Test station and verify Geni 1 and Geni 2 illuminate and IOS displays show basic IOS and 10.0 sec countdown diag. screens

### 6.4 Testing Procedure

**6.4.1** Execute IOSMENU icon on test computer by Dbl. Clicking on Icon labeled losmenu

**6.4.2** Tab down to Genius / Run-time Mon. DMCB and hit return

**6.4.3** IOS I/O Test Monitor screen will come up

**6.4.4** Enter "3" for Test Genius Blocks

**6.4.5** A listing of connected Genius Blocks should come up (0-31)

**6.4.6** Enter "1" (Signifies IOS Station Drop # that sees our connected Genius Block at Address 1) hit return

**6.4.7** To modify the I/O ports on Drop 1, use the return key to change its status.

**6.4.8** Used left arrow key to move to next bit #2 and hit enter, the bit will change to a "1" on the screen and notice the yellow light on IOS fixture labeled "OUTPUT #1" will illuminate.

**6.4.9** Left arrow to next bit and hit return, the bit will change to a "1".

**6.4.10** Continue thru all bits with bit #8 changing and illuminating Output #4 on IOS fixture.

**6.4.11** Hitting Esc. Will return to Genius Blocks Listings screen

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**6.4.12** Hitting Esc. Again will take you back to main menu of step 6.4.2 and the IOS display will return to step 6.3 screen.

**6.4.13** Esc. Will take you back to the main IOS Test menu

**6.4.14** Turn off power to IOS and remove Genius Network Controller

**6.5 \*\*\*TEST COMPLETE\*\*\***

**7. Notes**

**7.1** None at this time.

**8. Attachments**

**8.1** None at this time.