g GE Energy	**Functional Testing Specification**
Renewal Services ***Louisville, KY.***	**LOU-GEF-IC609SJR100**

Test Procedure for: IC609SJR100

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

REV.	DESCRIPTION	SIGNATURE	REV. DATE
A	Initial release	*Charlie Wade*	*7/22/2005*
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PREPARED BY	REVIEWED BY	REVIEWED BY	QUALITY APPROVAL
Charlie Wade			Charlie Wade
DATE **7/22/2005**	**DATE**	**DATE**	**DATE** 7/22/2005

Functional test procedure for: IC609SJR100

1. SCOPE

1.1 This is a functional testing procedure for a: Test Procedure.doc

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.
2.1.1

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		Series One Junior
1		Portable Programmer
1		Series One Junior Test Box (115VAC)
1		Series One I/O Expansion Rack

6. TESTING PROCESS

6.1 Setup

6.1.1 Replaced RAM and battery.

6.1.2 Power up the Series One Junior first to see if it will come on line, 115VAC. If OK continue.

6.1.3 Hook up Series One Junior 115VAC Test box to the UUT. Be sure communications cable between the Junior and the expansion rack is connected.

6.1.4 Flip top row of test switches to the middle position and the bottom row of switch down on the test box.

6.1.5 Turn power on and turn key switch on programmer panel to Program or flip switch to the Program Position.

6.1.6 Install the following program into CPU using the portable programmer. Clear memory first then start with the 1st Bit.

6.1.7 To Clear memory enter

Clear SHF 348 Delete NXT THIS CLEARS THE MEMORY

6.1.8 Exercise Program

1st Bit on Junior	NXT	STR	SHF	0	ENT	TMR	SHF	600	ENT	SHF	1	ENT
	STR	TMR	SHF	600	ENT	OUT	SHF	17	ENT			
2nd Bit	STR	SHF	15	ENT	STR	SHF	16	ENT	CNT	SHF	610	ENT
	SHF	***15***	ENT	STR	CNT	SHF	610	ENT	OR	SHF	1	ENT
	OUT	SHF	20	ENT								
3rd Bit	NXT	STR	SHF	2	ENT	TMR	SHF	602	ENT	SHF	1	ENT
	STR	TMR	SHF	602	ENT	OUT	SHF	21	ENT			
4th Bit	NXT	STR	SHF	3	ENT	TMR	SHF	603	ENT	SHF	1	ENT
	STR	TMR	SHF	603	ENT	OUT	SHF	22	ENT			
5th Bit	NXT	STR	SHF	4	ENT	TMR	SHF	604	ENT	SHF	1	ENT
	STR	TMR	SHF	604	ENT	OUT	SHF	23	ENT			
6th Bit	NXT	STR	SHF	5	ENT	TMR	SHF	605	ENT	SHF	1	ENT
	STR	TMR	SHF	605	ENT	OUT	SHF	24	ENT			
7th Bit	NXT	STR	SHF	6	ENT	TMR	SHF	606	ENT	SHF	1	ENT
	STR	TMR	SHF	606	ENT	OUT	SHF	25	ENT			
8th Bit	NXT	STR	SHF	7	ENT	TMR	SHF	607	ENT	SHF	1	ENT
	STR	TMR	SHF	607	ENT	OUT	SHF	26	ENT			
9th Bit	NXT	STR	SHF	10	ENT	TMR	SHF	611	ENT	SHF	1	ENT
	STR	TMR	SHF	611	ENT	OUT	SHF	27	ENT			
I/O Expansion Rack												
1st Bit	NXT	STR	SHF	11	ENT	TMR	SHF	612	ENT	SHF	2	ENT
	STR	TMR	SHF	612	ENT	OUT	SHF	30	ENT			
2nd Bit	NXT	STR	SHF	12	ENT	TMR	SHF	613	ENT	SHF	2	ENT
	STR	TMR	SHF	613	ENT	OUT	SHF	31	ENT			
3rd Bit	NXT	STR	SHF	13	ENT	TMR	SHF	614	ENT	SHF	2	ENT
	STR	TMR	SHF	614	ENT	OUT	SHF	32	ENT			
4th Bit	NXT	STR	SHF	14	ENT	TMR	SHF	615	ENT	SHF	2	ENT
	STR	TMR	SHF	615	ENT	OUT	SHF	33	ENT			

6.2 Testing Procedure

6.2.1 Once done you should see an End of Program statement.

6.2.2 Turn or flip switch to RUN.

6.2.3 Flip switch 0 down and approximately 1-second later light 0 should come on.

6.2.4 Flip switch 1 down and immediately light 1 should come on.

6.2.5 Flip switch 2 down and approximately 1-second later light 2 should come on.

6.2.6 The panel should stay the same through switch 7.

6.2.7 Flip switch 10 up and approximately 1-second later light 10 should come on.

6.2.8 Flip switch 11 up and approximately 2 seconds later light 0 on the output card in the expansion rack should come on.

6.2.9 Flip switch 12 up and approximately 2 seconds later light 1 on the output card in the expansion rack should come on.

6.2.10 Flip switch 13 up and approximately 2 seconds later light 2 on the output card in the expansion rack should come on.

6.2.11 Flip switch 14 up and approximately 2 seconds later light 3 on the output card in the expansion rack should come on.

6.2.12 Flip all switches to their original position, off.

6.2.13 Push black button 15 times, Lamp 1 should come. Reset lamp by pressing red button, repeat once.

6.2.14 End of Test

6.3 ***TEST COMPLETE ***

7. NOTES:

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