



GE Energy

Functional Testing Specification

Parts & Repair Operations
Louisville, KY

LOU-GEF-IC600xx801

Test Procedure for an IC600 Remote I/O Receiver card.

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

REV.	DESCRIPTION	SIGNATURE	REV. DATE
A	Initial release	Cristyn Edlin	3/7/2011
B			
C			

© COPYRIGHT GENERAL ELECTRIC COMPANY

Hard copies are uncontrolled and are for reference only.

PROPRIETARY INFORMATION – THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION OF GENERAL ELECTRIC COMPANY AND MAY NOT BE USED OR DISCLOSED TO OTHERS, EXCEPT WITH THE WRITTEN PERMISSION OF GENERAL ELECTRIC COMPANY.

PREPARED BY Cristyn Edlin	REVIEWED BY	REVIEWED BY	QUALITY APPROVAL <i>Charlie Wade</i>
DATE 3/7/2011	DATE	DATE	DATE 3/15/2011

LOU-GEF-IC600xx801 REV. A	g GE Energy <i>Parts & Repair Services</i> <i>Louisville, KY</i>	Page 2 of 4
------------------------------	--	-------------

1. SCOPE

1.1 This is a functional testing procedure for a 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 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, cracked, or loosely connected

4.2.1.2 Terminal strips / connectors: broken or cracked

4.2.1.3 Components: visually damaged

4.2.1.4 Capacitors: bloated or leaking

4.2.1.5 Solder joints: damaged or cold

4.2.1.6 Circuit board: burned or de-laminated

4.2.1.7 Printed wire runs / Traces: 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	H188889	CPU-3 Local 1 and Local 3
1		Twisted pair cable

<p>LOU-GEF-IC600xx801 REV. A</p>	<p>g</p> <p>GE Energy Parts & Repair Services Louisville, KY</p>	<p>Page 3 of 4</p>
---	--	---------------------------

6. SETUP

- 6.1** See the notes section for more thorough jumper information.
- 6.2** On the customer card, set Jumpers as follows. **1-2, 4-6, 7-8, 10-11, 13-14, 16-17, 19-20, 23-24, 25-26, 28-29, 31-32, 34-35, 37-38, 40-41, 43-44, 46-47, 50-51, 54-55, 62-63, 67-66, 74-75, 78-79, 81-82, 83-84, 85-84, 87-89, 90-91, 96-97, 99-100, 103-104, 68-CDB, 57-CDA, 60-CTSA and 73-CSTB.**

7. TEST PROCESS

- 7.1** Turn off power to CPU-3 Local 3.
- 7.2** Remove the shop card from slot 1.
- 7.3** Install the customer card into slot 1.
- 7.4** Connect the termination plug to J4.
- 7.5** Connect the Data cable to J3.
- 7.6** Turn on power to CPU-3 Local 3.
- 7.7** Ensure that the indicator lights of the I/O cards throughout the CPU-3 system light up in a scrolling fashion.
- 7.8** Allow system to run for a minimum of 15 minutes.
- 7.9** Turn off power to CPU-3 Local 3 and Local 1.
- 7.10** Remove the customer card from slot 1 of CPU-3 Local 3.
- 7.11** Remove the Remote I/O Driver card from slot 3 of CPU-3 Local 1.
- 7.12** Change the following jumper settings.
- 7.10.1** For the Remote I/O Receiver card: **65-66, 63-64, 49-50 and 102-103.**
- 7.10.2** For the Remote I/O Driver card: **36-37, 38-39, 42-43 and 44-45.**
- 7.13** Reinstall the customer card into slot 1 of CPU-3 Local 3.
- 7.14** Reinstall the Remote I/O Driver card into slot 3 of CPU-3 Local 1.
- 7.15** Replaced the RS-232 cable with the twisted pair cable.
- 7.16** Turn on power to CPU-3 Local 3 and Local 1.
- 7.17** Ensure that the indicator lights of the I/O cards throughout the CPU-3 system light up in a scrolling fashion.
- 7.18** Allow system to run for a minimum of 15 minutes.
- 7.19** Turn off power to CPU-3 Local 3 and Local 1.
- 7.20** Remove the customer card from slot 1 of CPU-3 Local 3.
- 7.21** Remove the Remote I/O Driver card from slot 3 of CPU-3 Local 1.

<p>LOU-GEF-IC600xx801 REV. A</p>	<p>g</p> <p>GE Energy Parts & Repair Services Louisville, KY</p>	<p>Page 4 of 4</p>
---	--	---------------------------

7.22 Change the following jumper settings.

7.10.1 For the Remote I/O Receiver card: **66-67, 62-63, 50-51 and 103-104.**

7.10.2 For the Remote I/O Driver card: **35-37, 39-40, 41-43 and 45-46.**

7.23 Install the shop card into slot 1 of CPU-3 Local 3 and the Remote I/O Driver card into slot 3 of CPU-3 Local 1.

7.24 Turn on power to CPU-3 Local 3 and Local 1.

7.25 Test complete.

8. NOTES

8.1 Jumper settings for RS-232 operation:

8.1.1 For the Remote I/O Receiver card: **66-67, 62-63, 50-51 and 103-104.**

8.1.2 For the Remote I/O Driver card: **35-37, 39-40, 41-43 and 45-46.**

8.2 Jumper settings for twisted pair operation:

8.2.1 For the Remote I/O Receiver card: **65-66, 63-64, 49-50 and 102-103.**

8.2.2 For the Remote I/O Driver card: **36-37, 38-39, 42-43 and 44-45.**

8.3 Jumper settings common to each:

8.3.1 For the Remote I/O Receiver card: **1-2, 4-5, 7-8, 10-11, 13-14, 16-17, 19-20, 23-24, 25-26, 28-29, 31-32, 34-35, 37-38, 40-41, 43-44, 46-47, 68-CDB, 57-CDA, 60-CTSA, 72-CSTB, 54-55, 74-75, 81-82, 83-84, 87-89, 90-91, 96-97, 99-100,**

8.3.2 For the Remote I/O Driver card: **1-2, 6-7, 9-10, 12-13, 15-16, 18-19, 21-22, 24-25, 26-27, 47-49, 50-30, 51-33.**

9. ATTACHMENTS

9.1 None at this time.