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GE Energy

Functional Testing Specification*Parts & Repair Services
Louisville, KY***LOU-GED-IS200TCAT****Test Procedure for an IS200TCATH1Axx Mark VIe Terminal Board.****DOCUMENT REVISION STATUS:** Determined by the last entry in the "REV" and "DATE" column

REV.	DESCRIPTION	SIGNATURE	REV. DATE
A	Initial release	J. Francis	11/20/2012

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DATE 11/20/2012	DATE	DATE	DATE 12/5/2012

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1. SCOPE

1.1 This is a functional testing procedure for an **IS200TCATH1Axx** MARK VIe Terminal board.

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
3		Fluke 87 DMM (or Equivalent)
1		Tenma Dual Output Power Supply (or Equivalent)

6. TESTING PROCESS


6.1 Testing Procedure

6.1.1 Continuity checks


6.1.1.1 Set jumpers JP1 through JP24 to position 2-3 (GND).

6.1.1.2 Using Multimeter set for Resistance function, check for continuity between the following points listed below:


Measure from:	Measure to:	Expected results:
TB1-38	TB1-2	Continuity
TB1-38	TB1-4	Continuity
TB1-38	TB1-6	Continuity
TB1-38	TB1-8	Continuity
TB1-38	TB1-10	Continuity
TB1-38	TB1-12	Continuity
TB1-38	TB1-14	Continuity
TB1-38	TB1-16	Continuity
TB1-38	TB1-18	Continuity
TB1-38	TB1-20	Continuity
TB1-38	TB1-24	Continuity
TB1-38	TB1-40	Continuity
TB1-38	TB1-42	Continuity
TB1-38	TB1-44	Continuity
TB1-38	TB1-46	Continuity
TB1-38	TB1-48	Continuity
TB1-38	TB1-50	Continuity
TB1-38	TB1-52	Continuity
TB1-38	TB1-54	Continuity
TB1-38	TB1-56	Continuity
TB1-38	TB1-58	Continuity
TB1-38	TB1-60	Continuity
TB1-38	TB1-62	Continuity
TB1-38	PR1-67	Continuity
TB1-38	PR1-68	Continuity
TB1-38	PS1-67	Continuity
TB1-38	PS1-68	Continuity

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Measure from:	Measure to:	Expected results:
TB1-38	PT1-67	Continuity
TB1-38	PT1-68	Continuity
TB1-38	PR2-68	Continuity
TB1-38	PS2-68	Continuity
TB1-38	PT2-68	Continuity
TB1-38	P3-2	Continuity
TB1-38	P4-2	Continuity
TB1-38	TP1 (PCOM)	Continuity
TB1-1	TB1-2	250 Ohms +/- 2 Ohms
TB1-3	TB1-4	250 Ohms +/- 2 Ohms
TB1-5	TB1-6	250 Ohms +/- 2 Ohms
TB1-7	TB1-8	250 Ohms +/- 2 Ohms
TB1-9	TB1-10	250 Ohms +/- 2 Ohms
TB1-11	TB1-12	250 Ohms +/- 2 Ohms
TB1-13	TB1-14	250 Ohms +/- 2 Ohms
TB1-15	TB1-16	250 Ohms +/- 2 Ohms
TB1-17	TB1-18	250 Ohms +/- 2 Ohms
TB1-19	TB1-20	250 Ohms +/- 2 Ohms
TB1-21	TB1-22	250 Ohms +/- 2 Ohms
TB1-23	TB1-24	250 Ohms +/- 2 Ohms
E1 (CHASS)	E2 (CHASS)	Continuity
E1 (CHASS)	E3 (CHASS)	Continuity
E1 (CHASS)	TB1-1	> 100 KOhms
E1 (CHASS)	TB1-2	> 100 KOhms
E1 (CHASS)	TB1-3	> 100 KOhms
E1 (CHASS)	TB1-4	> 100 KOhms
E1 (CHASS)	TB1-5	> 100 KOhms
E1 (CHASS)	TB1-6	> 100 KOhms
E1 (CHASS)	TB1-7	> 100 KOhms
E1 (CHASS)	TB1-8	> 100 KOhms
E1 (CHASS)	TB1-9	> 100 KOhms
E1 (CHASS)	TB1-10	> 100 KOhms
E1 (CHASS)	TB1-11	> 100 KOhms
E1 (CHASS)	TB1-12	> 100 KOhms
E1 (CHASS)	TB1-13	> 100 KOhms

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Measure from:	Measure to:	Expected results:
E1 (CHASS)	TB1-14	> 100 KOhms
E1 (CHASS)	TB1-15	> 100 KOhms
E1 (CHASS)	TB1-16	> 100 KOhms
E1 (CHASS)	TB1-17	> 100 KOhms
E1 (CHASS)	TB1-18	> 100 KOhms
E1 (CHASS)	TB1-19	> 100 KOhms
E1 (CHASS)	TB1-20	> 100 KOhms
E1 (CHASS)	TB1-21	> 100 KOhms
E1 (CHASS)	TB1-22	> 100 KOhms
E1 (CHASS)	TB1-23	> 100 KOhms
E1 (CHASS)	TB1-24	> 100 KOhms
E1 (CHASS)	TB1-63	> 100 KOhms
E1 (CHASS)	TB1-64	> 100 KOhms
E1 (CHASS)	TB1-65	> 100 KOhms
E1 (CHASS)	TB1-66	> 100 KOhms
E1 (CHASS)	TB1-67	> 100 KOhms
E1 (CHASS)	TB1-68	> 100 KOhms
E1 (CHASS)	TB1-69	> 100 KOhms
E1 (CHASS)	TB1-70	> 100 KOhms
E1 (CHASS)	TB1-71	> 100 KOhms
E1 (CHASS)	TB1-72	> 100 KOhms
E1 (CHASS)	TB1-73	> 100 KOhms
E1 (CHASS)	TB1-74	> 100 KOhms
E1 (CHASS)	TB1-75	> 100 KOhms
E1 (CHASS)	TB1-76	> 100 KOhms
E1 (CHASS)	TB1-77	> 100 KOhms
E1 (CHASS)	TB1-78	> 100 KOhms
E1 (CHASS)	TB1-79	> 100 KOhms
E1 (CHASS)	TB1-80	> 100 KOhms
E1 (CHASS)	TB1-81	> 100 KOhms
E1 (CHASS)	TB1-82	> 100 KOhms
E1 (CHASS)	TB1-83	> 100 KOhms
E1 (CHASS)	TB1-84	> 100 KOhms
E1 (CHASS)	TB1-85	> 100 KOhms
E1 (CHASS)	TB1-86	> 100 KOhms

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Measure from:	Measure to:	Expected results:
E1 (CHASS)	TB1-87	> 100 KOhms
E1 (CHASS)	TB1-88	> 100 KOhms
E1 (CHASS)	TB1-90	> 100 KOhms
E1 (CHASS)	TB1-91	> 100 KOhms
E1 (CHASS)	TB1-92	> 100 KOhms
E1 (CHASS)	TB1-93	> 100 KOhms
E1 (CHASS)	TB1-94	> 100 KOhms
E1 (CHASS)	TB1-95	> 100 KOhms
E1 (CHASS)	TB1-96	> 100 KOhms
E1 (CHASS)	TB1-97	> 100 KOhms
E1 (CHASS)	TB1-98	> 100 KOhms
E1 (CHASS)	TB1-99	> 100 KOhms
E1 (CHASS)	TB1-100	> 100 KOhms
E1 (CHASS)	TB1-101	> 100 KOhms
E1 (CHASS)	TB1-102	> 100 KOhms
E1 (CHASS)	TB1-103	> 100 KOhms
E1 (CHASS)	TB1-104	> 100 KOhms
E1 (CHASS)	TB1-105	> 100 KOhms
E1 (CHASS)	TB1-106	> 100 KOhms
E1 (CHASS)	TB1-107	> 100 KOhms
E1 (CHASS)	TB1-108	> 100 KOhms
E1 (CHASS)	TB1-109	> 100 KOhms
E1 (CHASS)	TB1-110	> 100 KOhms
E1 (CHASS)	TB1-111	> 100 KOhms
E1 (CHASS)	TB1-112	> 100 KOhms
E1 (CHASS)	TB1-113	> 100 KOhms
E1 (CHASS)	TB1-114	> 100 KOhms
E1 (CHASS)	TB1-115	> 100 KOhms
E1 (CHASS)	TB1-116	> 100 KOhms
E1 (CHASS)	TB1-117	> 100 KOhms
E1 (CHASS)	TB1-118	> 100 KOhms
E1 (CHASS)	TB1-119	> 100 KOhms
E1 (CHASS)	TB1-120	> 100 KOhms
TB1-1	PR1-3	10 Ohms -/+ 2 Ohms
TB1-1	PS1-3	10 Ohms -/+ 2 Ohms

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Measure from:	Measure to:	Expected results:
TB1-1	PT1-3	10 Ohms -/+ 2 Ohms
TB1-2	PR1-37	10 Ohms -/+ 2 Ohms
TB1-2	PS1-37	10 Ohms -/+ 2 Ohms
TB1-2	PT1-37	10 Ohms -/+ 2 Ohms
TB1-3	PR1-4	10 Ohms -/+ 2 Ohms
TB1-3	PS1-4	10 Ohms -/+ 2 Ohms
TB1-3	PT1-4	10 Ohms -/+ 2 Ohms
TB1-4	PR1-38	10 Ohms -/+ 2 Ohms
TB1-4	PS1-38	10 Ohms -/+ 2 Ohms
TB1-4	PT1-38	10 Ohms -/+ 2 Ohms
TB1-5	PR1-5	10 Ohms -/+ 2 Ohms
TB1-5	PS1-5	10 Ohms -/+ 2 Ohms
TB1-5	PT1-5	10 Ohms -/+ 2 Ohms
TB1-6	PR1-39	10 Ohms -/+ 2 Ohms
TB1-6	PS1-39	10 Ohms -/+ 2 Ohms
TB1-6	PT1-39	10 Ohms -/+ 2 Ohms
TB1-7	PR1-6	10 Ohms -/+ 2 Ohms
TB1-7	PS1-6	10 Ohms -/+ 2 Ohms
TB1-7	PT1-6	10 Ohms -/+ 2 Ohms
TB1-8	PR1-40	10 Ohms -/+ 2 Ohms
TB1-8	PS1-40	10 Ohms -/+ 2 Ohms
TB1-8	PT1-40	10 Ohms -/+ 2 Ohms
TB1-9	PR1-7	10 Ohms -/+ 2 Ohms
TB1-9	PS1-7	10 Ohms -/+ 2 Ohms
TB1-9	PT1-7	10 Ohms -/+ 2 Ohms
TB1-10	PR1-41	10 Ohms -/+ 2 Ohms
TB1-10	PS1-41	10 Ohms -/+ 2 Ohms
TB1-10	PT1-41	10 Ohms -/+ 2 Ohms
TB1-11	PR1-8	10 Ohms -/+ 2 Ohms
TB1-11	PS1-8	10 Ohms -/+ 2 Ohms
TB1-11	PT1-8	10 Ohms -/+ 2 Ohms
TB1-12	PR1-42	10 Ohms -/+ 2 Ohms
TB1-12	PS1-42	10 Ohms -/+ 2 Ohms
TB1-12	PT1-42	10 Ohms -/+ 2 Ohms
TB1-13	PR1-9	10 Ohms -/+ 2 Ohms

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Measure from:	Measure to:	Expected results:
TB1-13	PS1-9	10 Ohms -/+ 2 Ohms
TB1-13	PT1-9	10 Ohms -/+ 2 Ohms
TB1-14	PR1-43	10 Ohms -/+ 2 Ohms
TB1-14	PS1-43	10 Ohms -/+ 2 Ohms
TB1-14	PT1-43	10 Ohms -/+ 2 Ohms
TB1-15	PR1-10	10 Ohms -/+ 2 Ohms
TB1-15	PS1-10	10 Ohms -/+ 2 Ohms
TB1-15	PT1-10	10 Ohms -/+ 2 Ohms
TB1-16	PR1-44	10 Ohms -/+ 2 Ohms
TB1-16	PS1-44	10 Ohms -/+ 2 Ohms
TB1-16	PT1-44	10 Ohms -/+ 2 Ohms
TB1-17	PR1-11	10 Ohms -/+ 2 Ohms
TB1-17	PS1-11	10 Ohms -/+ 2 Ohms
TB1-17	PT1-11	10 Ohms -/+ 2 Ohms
TB1-18	PR1-45	10 Ohms -/+ 2 Ohms
TB1-18	PS1-45	10 Ohms -/+ 2 Ohms
TB1-18	PT1-45	10 Ohms -/+ 2 Ohms
TB1-19	PR1-12	10 Ohms -/+ 2 Ohms
TB1-19	PS1-12	10 Ohms -/+ 2 Ohms
TB1-19	PT1-12	10 Ohms -/+ 2 Ohms
TB1-20	PR1-46	10 Ohms -/+ 2 Ohms
TB1-20	PS1-46	10 Ohms -/+ 2 Ohms
TB1-20	PT1-46	10 Ohms -/+ 2 Ohms
TB1-21	PR1-13	10 Ohms -/+ 2 Ohms
TB1-21	PS1-13	10 Ohms -/+ 2 Ohms
TB1-21	PT1-13	10 Ohms -/+ 2 Ohms
TB1-22	PR1-47	10 Ohms -/+ 2 Ohms
TB1-22	PS1-47	10 Ohms -/+ 2 Ohms
TB1-22	PT1-47	10 Ohms -/+ 2 Ohms
TB1-23	PR1-14	10 Ohms -/+ 2 Ohms
TB1-23	PS1-14	10 Ohms -/+ 2 Ohms
TB1-23	PT1-14	10 Ohms -/+ 2 Ohms
TB1-24	PR1-48	10 Ohms -/+ 2 Ohms
TB1-24	PS1-48	10 Ohms -/+ 2 Ohms
TB1-24	PT1-48	10 Ohms -/+ 2 Ohms

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Measure from:	Measure to:	Expected results:
TB1-39	PR1-15	10 Ohms -/+ 2 Ohms
TB1-39	PS1-15	10 Ohms -/+ 2 Ohms
TB1-39	PT1-15	10 Ohms -/+ 2 Ohms
TB1-40	PR1-49	10 Ohms -/+ 2 Ohms
TB1-40	PS1-49	10 Ohms -/+ 2 Ohms
TB1-40	PT1-49	10 Ohms -/+ 2 Ohms
TB1-41	PR1-16	10 Ohms -/+ 2 Ohms
TB1-41	PS1-16	10 Ohms -/+ 2 Ohms
TB1-41	PT1-16	10 Ohms -/+ 2 Ohms
TB1-42	PR1-50	10 Ohms -/+ 2 Ohms
TB1-42	PS1-50	10 Ohms -/+ 2 Ohms
TB1-42	PT1-50	10 Ohms -/+ 2 Ohms
TB1-43	PR1-17	10 Ohms -/+ 2 Ohms
TB1-43	PS1-17	10 Ohms -/+ 2 Ohms
TB1-43	PT1-17	10 Ohms -/+ 2 Ohms
TB1-44	PR1-51	10 Ohms -/+ 2 Ohms
TB1-44	PS1-51	10 Ohms -/+ 2 Ohms
TB1-44	PT1-51	10 Ohms -/+ 2 Ohms
TB1-45	PR1-18	10 Ohms -/+ 2 Ohms
TB1-45	PS1-18	10 Ohms -/+ 2 Ohms
TB1-45	PT1-18	10 Ohms -/+ 2 Ohms
TB1-46	PR1-52	10 Ohms -/+ 2 Ohms
TB1-46	PS1-52	10 Ohms -/+ 2 Ohms
TB1-46	PT1-52	10 Ohms -/+ 2 Ohms
TB1-47	PR1-19	10 Ohms -/+ 2 Ohms
TB1-47	PS1-19	10 Ohms -/+ 2 Ohms
TB1-47	PT1-19	10 Ohms -/+ 2 Ohms
TB1-48	PR1-53	10 Ohms -/+ 2 Ohms
TB1-48	PS1-53	10 Ohms -/+ 2 Ohms
TB1-48	PT1-53	10 Ohms -/+ 2 Ohms
TB1-49	PR1-20	10 Ohms -/+ 2 Ohms
TB1-49	PS1-20	10 Ohms -/+ 2 Ohms
TB1-49	PT1-20	10 Ohms -/+ 2 Ohms
TB1-50	PR1-54	10 Ohms -/+ 2 Ohms
TB1-50	PS1-54	10 Ohms -/+ 2 Ohms

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Measure from:	Measure to:	Expected results:
TB1-50	PT1-54	10 Ohms -/+ 2 Ohms
TB1-51	PR1-21	10 Ohms -/+ 2 Ohms
TB1-51	PS1-21	10 Ohms -/+ 2 Ohms
TB1-51	PT1-21	10 Ohms -/+ 2 Ohms
TB1-52	PR1-55	10 Ohms -/+ 2 Ohms
TB1-52	PS1-55	10 Ohms -/+ 2 Ohms
TB1-52	PT1-55	10 Ohms -/+ 2 Ohms
TB1-53	PR1-22	10 Ohms -/+ 2 Ohms
TB1-53	PS1-22	10 Ohms -/+ 2 Ohms
TB1-53	PT1-22	10 Ohms -/+ 2 Ohms
TB1-54	PR1-56	10 Ohms -/+ 2 Ohms
TB1-54	PS1-56	10 Ohms -/+ 2 Ohms
TB1-54	PT1-56	10 Ohms -/+ 2 Ohms
TB1-55	PR1-23	10 Ohms -/+ 2 Ohms
TB1-55	PS1-23	10 Ohms -/+ 2 Ohms
TB1-55	PT1-23	10 Ohms -/+ 2 Ohms
TB1-56	PR1-57	10 Ohms -/+ 2 Ohms
TB1-56	PS1-57	10 Ohms -/+ 2 Ohms
TB1-56	PT1-57	10 Ohms -/+ 2 Ohms
TB1-57	PR1-24	10 Ohms -/+ 2 Ohms
TB1-57	PS1-24	10 Ohms -/+ 2 Ohms
TB1-57	PT1-24	10 Ohms -/+ 2 Ohms
TB1-58	PR1-58	10 Ohms -/+ 2 Ohms
TB1-58	PS1-58	10 Ohms -/+ 2 Ohms
TB1-58	PT1-58	10 Ohms -/+ 2 Ohms
TB1-59	PR1-25	10 Ohms -/+ 2 Ohms
TB1-59	PS1-25	10 Ohms -/+ 2 Ohms
TB1-59	PT1-25	10 Ohms -/+ 2 Ohms
TB1-60	PR1-59	10 Ohms -/+ 2 Ohms
TB1-60	PS1-59	10 Ohms -/+ 2 Ohms
TB1-60	PT1-59	10 Ohms -/+ 2 Ohms
TB1-61	PR1-26	10 Ohms -/+ 2 Ohms
TB1-61	PS1-26	10 Ohms -/+ 2 Ohms
TB1-61	PT1-26	10 Ohms -/+ 2 Ohms
TB1-62	PR1-60	10 Ohms -/+ 2 Ohms

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Measure from:	Measure to:	Expected results:
TB1-62	PS1-60	10 Ohms +/- 2 Ohms
TB1-62	PT1-60	10 Ohms +/- 2 Ohms
TB1-63	PR1-27	Continuity
TB1-63	PS1-27	Continuity
TB1-63	PT1-27	Continuity
TB1-64	PR1-61	Continuity
TB1-64	PS1-61	Continuity
TB1-64	PT1-61	Continuity
TB1-65	PR1-28	Continuity
TB1-65	PS1-28	Continuity
TB1-65	PT1-28	Continuity
TB1-66	PR1-62	Continuity
TB1-66	PS1-62	Continuity
TB1-66	PT1-62	Continuity
TB1-67	PR1-29	Continuity
TB1-67	PS1-29	Continuity
TB1-67	PT1-29	Continuity
TB1-68	PR1-63	Continuity
TB1-68	PS1-63	Continuity
TB1-68	PT1-63	Continuity
TB1-69	PR1-30	Continuity
TB1-69	PS1-30	Continuity
TB1-69	PT1-30	Continuity
TB1-70	PR1-64	Continuity
TB1-70	PS1-64	Continuity
TB1-70	PT1-64	Continuity
TB1-71	PR1-31	Continuity
TB1-71	PS1-31	Continuity
TB1-71	PT1-31	Continuity
TB1-72	PR1-65	Continuity
TB1-72	PS1-65	Continuity
TB1-72	PT1-65	Continuity
TB1-73	PR1-32	Continuity
TB1-73	PS1-32	Continuity
TB1-73	PT1-32	Continuity

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Measure from:	Measure to:	Expected results:
TB1-74	PR1-66	Continuity
TB1-74	PS1-66	Continuity
TB1-74	PT1-66	Continuity
TB1-75	PR2-3	Continuity
TB1-75	PS2-3	Continuity
TB1-75	PT2-3	Continuity
TB1-76	PR2-37	Continuity
TB1-76	PS2-37	Continuity
TB1-76	PT2-37	Continuity
TB1-77	PR2-4	Continuity
TB1-77	PS2-4	Continuity
TB1-77	PT2-4	Continuity
TB1-78	PR2-38	Continuity
TB1-78	PS2-38	Continuity
TB1-78	PT2-38	Continuity
TB1-79	PR2-5	Continuity
TB1-79	PS2-5	Continuity
TB1-79	PT2-5	Continuity
TB1-80	PR2-39	Continuity
TB1-80	PS2-39	Continuity
TB1-80	PT2-39	Continuity
TB1-81	PR2-6	Continuity
TB1-81	PS2-6	Continuity
TB1-81	PT2-6	Continuity
TB1-82	PR2-40	Continuity
TB1-82	PS2-40	Continuity
TB1-82	PT2-40	Continuity
TB1-83	PR2-7	Continuity
TB1-83	PS2-7	Continuity
TB1-83	PT2-7	Continuity
TB1-84	PR2-41	Continuity
TB1-84	PS2-41	Continuity
TB1-84	PT2-41	Continuity
TB1-85	PR2-8	Continuity
TB1-85	PS2-8	Continuity

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Measure from:	Measure to:	Expected results:
TB1-85	PT2-8	Continuity
TB1-86	PR2-42	Continuity
TB1-86	PS2-42	Continuity
TB1-86	PT2-42	Continuity
TB1-63	TB1-64	> 1 Mohm
TB1-65	TB1-66	> 1 Mohm
TB1-67	TB1-68	> 1 Mohm
TB1-69	TB1-70	> 1 Mohm
TB1-71	TB1-72	> 1 Mohm
TB1-73	TB1-74	> 1 Mohm
TB1-75	TB1-76	> 1 Mohm
TB1-77	TB1-78	> 1 Mohm
TB1-79	TB1-80	> 1 Mohm
TB1-81	TB1-82	> 1 Mohm
TB1-83	TB1-84	> 1 Mohm
TB1-85	TB1-86	> 1 Mohm
TB1-87	PR2-12	200 Ohms +/- 2 Ohms
TB1-87	PS2-12	200 Ohms +/- 2 Ohms
TB1-87	PT2-12	200 Ohms +/- 2 Ohms
TB1-88	PR2-46	200 Ohms +/- 2 Ohms
TB1-88	PS2-46	200 Ohms +/- 2 Ohms
TB1-88	PT2-46	200 Ohms +/- 2 Ohms
TB1-89	PR2-13	200 Ohms +/- 2 Ohms
TB1-89	PS2-13	200 Ohms +/- 2 Ohms
TB1-89	PS2-13	200 Ohms +/- 2 Ohms
TB1-90	PS2-47	200 Ohms +/- 2 Ohms
TB1-90	PS2-47	200 Ohms +/- 2 Ohms
TB1-90	PS2-47	200 Ohms +/- 2 Ohms
TB1-87	TB1-88	> 1 Mohm
TB1-89	TB1-90	> 1 Mohm
E1 (CHASS)	TB1-87	> 1 Mohm
E1 (CHASS)	TB1-88	> 1 Mohm
E1 (CHASS)	TB1-89	> 1 Mohm
E1 (CHASS)	TB1-90	> 1 Mohm
TB1-91	PR2-14	Continuity

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Measure from:	Measure to:	Expected results:
TB1-91	PS2-14	Continuity
TB1-91	PT2-14	Continuity
TB1-92	PR2-48	Continuity
TB1-92	PS2-48	Continuity
TB1-92	PT2-48	Continuity
TB1-93	PR2-15	Continuity
TB1-93	PS2-15	Continuity
TB1-93	PT2-15	Continuity
TB1-94	PR2-49	Continuity
TB1-94	PS2-49	Continuity
TB1-94	PT2-49	Continuity
TB1-95	PR2-16	Continuity
TB1-95	PS2-16	Continuity
TB1-95	PT2-16	Continuity
TB1-96	PR2-50	Continuity
TB1-96	PS2-50	Continuity
TB1-96	PT2-50	Continuity
TB1-97	PR2-17	Continuity
TB1-97	PS2-17	Continuity
TB1-97	PT2-17	Continuity
TB1-98	PR2-51	Continuity
TB1-98	PS2-51	Continuity
TB1-98	PT2-51	Continuity
TB1-99	PR2-18	Continuity
TB1-99	PS2-18	Continuity
TB1-99	PT2-18	Continuity
TB1-100	PR2-52	Continuity
TB1-100	PS2-52	Continuity
TB1-100	PT2-52	Continuity
TB1-101	PR2-19	Continuity
TB1-101	PS2-19	Continuity
TB1-101	PT2-19	Continuity
TB1-102	PR2-53	Continuity
TB1-102	PS2-53	Continuity
TB1-102	PT2-53	Continuity

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Measure from:	Measure to:	Expected results:
TB1-103	PR2-20	Continuity
TB1-103	PS2-20	Continuity
TB1-103	PT2-20	Continuity
TB1-104	PR2-54	Continuity
TB1-104	PS2-54	Continuity
TB1-104	PT2-54	Continuity
TB1-105	PR2-21	Continuity
TB1-105	PS2-21	Continuity
TB1-105	PT2-21	Continuity
TB1-106	PR2-55	Continuity
TB1-106	PS2-55	Continuity
TB1-106	PT2-55	Continuity
TB1-107	PR2-22	Continuity
TB1-107	PS2-22	Continuity
TB1-107	PT2-22	Continuity
TB1-108	PR2-56	Continuity
TB1-108	PS2-56	Continuity
TB1-108	PT2-56	Continuity
TB1-109	PR2-23	Continuity
TB1-109	PS2-23	Continuity
TB1-109	PT2-23	Continuity
TB1-110	PR2-57	Continuity
TB1-110	PS2-57	Continuity
TB1-110	PT2-57	Continuity
TB1-111	PR2-24	Continuity
TB1-111	PS2-24	Continuity
TB1-111	PT2-24	Continuity
TB1-112	PR2-58	Continuity
TB1-112	PS2-58	Continuity
TB1-112	PT2-58	Continuity
TB1-113	PR2-25	Continuity
TB1-113	PS2-25	Continuity
TB1-113	PT2-25	Continuity
TB1-114	PR2-59	Continuity
TB1-114	PS2-59	Continuity

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Measure from:	Measure to:	Expected results:
TB1-114	PT2-59	Continuity
E1 (CHASS)	TB1-91	> 1 Mohm
E1 (CHASS)	TB1-92	> 1 Mohm
E1 (CHASS)	TB1-93	> 1 Mohm
E1 (CHASS)	TB1-94	> 1 Mohm
E1 (CHASS)	TB1-95	> 1 Mohm
E1 (CHASS)	TB1-96	> 1 Mohm
E1 (CHASS)	TB1-97	> 1 Mohm
E1 (CHASS)	TB1-98	> 1 Mohm
E1 (CHASS)	TB1-99	> 1 Mohm
E1 (CHASS)	TB1-100	> 1 Mohm
E1 (CHASS)	TB1-101	> 1 Mohm
E1 (CHASS)	TB1-102	> 1 Mohm
E1 (CHASS)	TB1-103	> 1 Mohm
E1 (CHASS)	TB1-104	> 1 Mohm
E1 (CHASS)	TB1-105	> 1 Mohm
E1 (CHASS)	TB1-106	> 1 Mohm
E1 (CHASS)	TB1-107	> 1 Mohm
E1 (CHASS)	TB1-108	> 1 Mohm
E1 (CHASS)	TB1-109	> 1 Mohm
E1 (CHASS)	TB1-110	> 1 Mohm
E1 (CHASS)	TB1-111	> 1 Mohm
E1 (CHASS)	TB1-112	> 1 Mohm
E1 (CHASS)	TB1-113	> 1 Mohm
E1 (CHASS)	TB1-114	> 1 Mohm
E1 (CHASS)	TB1-115	> 1 Mohm
E1 (CHASS)	TB1-116	> 1 Mohm
E1 (CHASS)	TB1-117	> 1 Mohm
E1 (CHASS)	TB1-118	> 1 Mohm
E1 (CHASS)	TB1-119	> 1 Mohm
E1 (CHASS)	TB1-120	> 1 Mohm
TB1-91	TB1-92	> 1 Mohm
TB1-93	TB1-94	> 1 Mohm
TB1-95	TB1-96	> 1 Mohm
TB1-97	TB1-98	> 1 Mohm

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Measure from:	Measure to:	Expected results:
TB1-99	TB1-100	> 1 Mohm
TB1-101	TB1-102	> 1 Mohm
TB1-103	TB1-104	> 1 Mohm
TB1-105	TB1-106	> 1 Mohm
TB1-107	TB1-108	> 1 Mohm
TB1-109	TB1-110	> 1 Mohm
TB1-111	TB1-112	> 1 Mohm
TB1-113	TB1-114	> 1 Mohm
TB1-115	TB1-116	> 1 Mohm
TB1-117	TB1-118	> 1 Mohm
TB1-119	TB1-120	> 1 Mohm
TB1-115	PR2-26	50 Ohms -/+ 2 Ohms
TB1-115	PS2-26	50 Ohms -/+ 2 Ohms
TB1-115	PT2-26	50 Ohms -/+ 2 Ohms
TB1-115	PR2-27	50 Ohms -/+ 2 Ohms
TB1-115	PS2-27	50 Ohms -/+ 2 Ohms
TB1-115	PT2-27	50 Ohms -/+ 2 Ohms
TB1-115	PR2-61	Continuity
TB1-115	PS2-61	Continuity
TB1-115	PT2-61	Continuity
TB1-116	PR2-60	10 Ohms -/+ 2 Ohms
TB1-116	PS2-60	10 Ohms -/+ 2 Ohms
TB1-116	PT2-60	10 Ohms -/+ 2 Ohms
TB1-117	PR2-28	50 Ohms -/+ 2 Ohms
TB1-117	PS2-28	50 Ohms -/+ 2 Ohms
TB1-117	PT2-28	50 Ohms -/+ 2 Ohms
TB1-117	PR2-29	50 Ohms -/+ 2 Ohms
TB1-117	PS2-29	50 Ohms -/+ 2 Ohms
TB1-117	PT2-29	50 Ohms -/+ 2 Ohms
TB1-117	PR2-63	Continuity
TB1-117	PS2-63	Continuity
TB1-117	PT2-63	Continuity
TB1-118	PR2-62	10 Ohms -/+ 2 Ohms
TB1-118	PS2-62	10 Ohms -/+ 2 Ohms
TB1-118	PT2-62	10 Ohms -/+ 2 Ohms

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Measure from:	Measure to:	Expected results:
TB1-119	PR2-30	50 Ohms -/+ 2 Ohms
TB1-119	PS2-30	50 Ohms -/+ 2 Ohms
TB1-119	PT2-30	50 Ohms -/+ 2 Ohms
TB1-119	PR2-31	50 Ohms -/+ 2 Ohms
TB1-119	PS2-31	50 Ohms -/+ 2 Ohms
TB1-119	PT2-31	50 Ohms -/+ 2 Ohms
TB1-119	PR2-65	Continuity
TB1-119	PS2-65	Continuity
TB1-119	PT2-65	Continuity
TB1-120	PR2-64	10 Ohms -/+ 2 Ohms
TB1-120	PS2-64	10 Ohms -/+ 2 Ohms
TB1-120	PT2-64	10 Ohms -/+ 2 Ohms

6.1.2 Power Checks

6.1.2.1 28 VDC Power Checks

6.1.2.1.1 +28 VDC Voltage Checks

6.1.2.1.2 Connect +28 VDC to P4-1 and connect 28 VDC return to P4-2.

6.1.2.1.3 Using Multimeter set for DC Volt function, check for correct voltages between the following points listed below:

Measure from (+):	Measure to (-):	Expected results:
P3-1	P3-2	+28 VDC -/+ 0.5 VDC
TP2	TB1-38 (PCOM)	+28 VDC -/+ 0.5 VDC
TB1-25	TB1-38 (PCOM)	+24 VDC -/+ 0.5 VDC
TB1-27	TB1-38 (PCOM)	+24 VDC -/+ 0.5 VDC
TB1-28	TB1-38 (PCOM)	+24 VDC -/+ 0.5 VDC
TB1-29	TB1-38 (PCOM)	+24 VDC -/+ 0.5 VDC
TB1-30	TB1-38 (PCOM)	+24 VDC -/+ 0.5 VDC
TB1-31	TB1-38 (PCOM)	+24 VDC -/+ 0.5 VDC
TB1-32	TB1-38 (PCOM)	+24 VDC -/+ 0.5 VDC
TB1-33	TB1-38 (PCOM)	+24 VDC -/+ 0.5 VDC
TB1-34	TB1-38 (PCOM)	+24 VDC -/+ 0.5 VDC
TB1-35	TB1-38 (PCOM)	+24 VDC -/+ 0.5 VDC
TB1-36	TB1-38 (PCOM)	+24 VDC -/+ 0.5 VDC
TB1-37	TB1-38 (PCOM)	+24 VDC -/+ 0.5 VDC

6.1.2.1.4 Disconnect +28 VDC from P4-1 and 28 VDC from P4-2.

6.1.2.2 R +28 VDC Voltage Checks

6.1.2.2.1 Connect + 28 VDC to PR1-34 and 28 VDC return to TB1-38 (PCOM).

6.1.2.2.2 Using Multimeter set for DC Volt function, check for correct voltages between the following points listed below:

Measure from (+ lead):	Measure to (- lead):	Expected results:
PR1-2	TB1-38 (PCOM)	+28 VDC -/+ 0.5 VDC
PR2-34	TB1-38 (PCOM)	+28 VDC -/+ 0.5 VDC
TB1-25	TB1-38 (PCOM)	+24 VDC -/+ 0.5 VDC

6.1.2.2.3 Disconnect + 28 VDC from PR1-34. Leave the 28 VDC return connected to TB1-38 (PCOM) for "S" and "T" +28 VDC Voltage Check tests.

6.1.2.3 S +28 VDC Voltage Checks

6.1.2.3.1 Connect + 28 VDC to PS1-34 and 28 VDC return to TB1-38 (PCOM).

6.1.2.3.2 Using Multimeter set for DC Volt function, check for correct voltages between the following points listed below:

Measure from (+ lead):	Measure to (- lead):	Expected results:
PS1-2	TB1-38 (PCOM)	+28 VDC -/+ 0.5 VDC
PS2-34	TB1-38 (PCOM)	+28 VDC -/+ 0.5 VDC
TB1-25	TB1-38 (PCOM)	+24 VDC -/+ 0.5 VDC

6.1.2.3.3 Disconnect + 28 VDC from PS1-34.

6.1.2.4 T +28 VDC Voltage Checks

6.1.2.4.1 Connect + 28 VDC to PT1-34 and 28 VDC return to TB1-38 (PCOM).

6.1.2.4.2 Using Multimeter set for DC Volt function, check for correct voltages between the following points listed below:

Measure from (+ lead):	Measure to (- lead):	Expected results:
PT1-2	TB1-38 (PCOM)	+28 VDC -/+ 0.5 VDC
PT2-34	TB1-38 (PCOM)	+28 VDC -/+ 0.5 VDC
TB1-25	TB1-38 (PCOM)	+24 VDC -/+ 0.5 VDC

6.1.2.4.3 Disconnect + 28 VDC from PR1-34 and 28 VDC return from TB1-38 (PCOM).

6.1.2.5 15 VDC Power Checks

6.1.2.5.1 R + 15 VDC Power Checks

6.1.2.5.1.1 Connect + 15 VDC to PR2-32 and 15 VDC return to TB1-38 (PCOM).

6.1.2.5.1.2 Using Multimeter set for DC Volt function, check for correct voltages between the following points listed below:

Measure from (+ lead):	Measure to (- lead):	Expected results:
TB1-63	TB1-38 (PCOM)	+ 14.6 VDC -/+ 0.5 VDC
TB1-65	TB1-38 (PCOM)	+ 14.6 VDC -/+ 0.5 VDC
TB1-67	TB1-38 (PCOM)	+ 14.6 VDC -/+ 0.5 VDC
TB1-69	TB1-38 (PCOM)	+ 14.6 VDC -/+ 0.5 VDC
TB1-71	TB1-38 (PCOM)	+ 14.6 VDC -/+ 0.5 VDC
TB1-73	TB1-38 (PCOM)	+ 14.6 VDC -/+ 0.5 VDC
TB1-75	TB1-38 (PCOM)	+ 14.6 VDC -/+ 0.5 VDC
TB1-77	TB1-38 (PCOM)	+ 14.6 VDC -/+ 0.5 VDC
TB1-79	TB1-38 (PCOM)	+ 14.6 VDC -/+ 0.5 VDC
TB1-81	TB1-38 (PCOM)	+ 14.6 VDC -/+ 0.5 VDC
TB1-83	TB1-38 (PCOM)	+ 14.6 VDC -/+ 0.5 VDC
TB1-85	TB1-38 (PCOM)	+ 14.6 VDC -/+ 0.5 VDC
TP3	TB1-38 (PCOM)	+ 14.6 VDC -/+ 0.5 VDC

6.1.2.5.1.3 Disconnect + 15 VDC from PR2-32. Leave the 15 VDC return connected to TB1-38 (PCOM) for "S" and "T" +15 VDC Voltage Check tests.

6.1.2.5.2 S + 15 VDC Power Checks

6.1.2.5.2.1 Connect + 15 VDC to PS2-32.

6.1.2.5.2.2 Using Multimeter set for DC Volt function, check for correct voltage between TB1-85 and TB1-38 (PCOM). Meter should read +14.6 VDC -/+ 0.5 VDC.

6.1.2.5.2.3 Disconnect + 15 VDC from PS2-32.

6.1.2.5.3 T + 15 VDC Power Checks

6.1.2.5.3.1 Connect + 15 VDC to PT2-32.

6.1.2.5.3.2 Using Multimeter set for DC Volt function, check for correct voltage between TB1-85 and TB1-38 (PCOM). Meter should read +14.6 VDC -/+ 0.5 VDC.

6.1.2.5.3.3 Disconnect + 15 VDC from PT2-32.

6.1.2.5.4 R - 15 VDC Power Checks

6.1.2.5.4.1 Connect - 15 VDC to PR2-33 and 15 VDC return to TB1-38 (PCOM).

6.1.2.5.4.2 Using Multimeter set for DC Volt function, check for correct voltages between the following points listed below:

Measure from (+ lead):	Measure to (- lead):	Expected results:
TB1-64	TB1-38 (PCOM)	- 14.6 VDC +/- 0.5 VDC
TB1-66	TB1-38 (PCOM)	- 14.6 VDC +/- 0.5 VDC
TB1-68	TB1-38 (PCOM)	- 14.6 VDC +/- 0.5 VDC
TB1-70	TB1-38 (PCOM)	- 14.6 VDC +/- 0.5 VDC
TB1-72	TB1-38 (PCOM)	- 14.6 VDC +/- 0.5 VDC
TB1-74	TB1-38 (PCOM)	- 14.6 VDC +/- 0.5 VDC
TB1-76	TB1-38 (PCOM)	- 14.6 VDC +/- 0.5 VDC
TB1-78	TB1-38 (PCOM)	- 14.6 VDC +/- 0.5 VDC
TB1-80	TB1-38 (PCOM)	- 14.6 VDC +/- 0.5 VDC
TB1-82	TB1-38 (PCOM)	- 14.6 VDC +/- 0.5 VDC
TB1-84	TB1-38 (PCOM)	- 14.6 VDC +/- 0.5 VDC
TB1-86	TB1-38 (PCOM)	- 14.6 VDC +/- 0.5 VDC
TP4	TB1-38 (PCOM)	- 14.6 VDC +/- 0.5 VDC

6.1.2.5.4.3 Disconnect - 15 VDC from PR2-32. Leave the 15 VDC return connected to TB1-38 (PCOM) for "S" and "T" -15 VDC Voltage Check tests.

6.1.2.5.5 S + 15 VDC Power Checks

6.1.2.5.5.1 Connect - 15 VDC to PS2-33.

6.1.2.5.5.2 Using Multimeter set for DC Volt function, check for correct voltage between TB1-86 and TB1-38 (PCOM). Meter should read -14.6 VDC +/- 0.5 VDC.

6.1.2.5.5.3 Disconnect - 15 VDC from PS2-33.

6.1.2.5.6 T + 15 VDC Power Checks

6.1.2.5.6.1 Connect - 15 VDC to PT2-33.

6.1.2.5.6.2 Using Multimeter set for DC Volt function, check for correct voltage between TB1-86 and TB1-38 (PCOM). Meter should read -14.6 VDC +/- 0.5 VDC.

6.1.2.5.6.3 Disconnect - 15 VDC from PT2-33 and 15 VDC return from TB1-38 (PCOM).

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6.1.3 CHIP ID: The ID chip needs to be read to confirm that it has been programmed properly. Take the card over to the CHIP ID pc located in the MARK VI area of the shop and select the correct revision of IS200TCAT from the menu and follow the instructions given to you by the pc. When selecting which IS200TCAT to use, you may see a 5G or 7G next to the number. This refers to the serial number and whether it has 5 or 7 digits in it. Select the proper one, as you will be expected to type this number into the system at a given point. When entering this data, be sure to use all CAPITAL LETTERS as lower case might cause it not to agree with what's programmed in the chip. If the particular revision you need to select doesn't have a 5G or 7G next to it, get it added before proceeding.

6.1.3.1 Special Note for this ID test: *When the test gets to PR2 watch the lead connections. The id chips are hooked up in reverse for the PR2, PS2, and PT2 connectors. Red wire will go to pin 35 of each of these connectors, instead of pin 1, and the black wire will go to pin 1, instead of pin 35.*

6.2 *TEST COMPLETE *****

7. NOTES

7.1 None at this time.

8. ATTACHMENTS

8.1 None at this time.