g GE Energy	**Functional Testing Specification**
Parts & Repair Services ***Louisville, KY***	**LOU–GED-193X526xx**

Test Procedure for a 193X526xx Power Supply Card

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

REV.	DESCRIPTION	SIGNATURE	REV. DATE
A	Initial release	J. Barton	6/25/02
B	Made corrections to Section 6.1	R. Duvall	07/18/02
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PREPARED BY	REVIEWED BY	REVIEWED BY	QUALITY APPROVAL
J. Barton	R. Duvall		Robert Duvall
DATE	**DATE**	**DATE**	**DATE**
06/25/02	07/18/02		06/25/02

Functional test procedure for a 193X526 Power Supply Card

1. SCOPE

1.1 This is a functional testing procedure for a Valutrol Power Supply 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 GEK – 45111

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	H033665	193X526 Test Fixture
1		Fluke 85 DMM or Equiv.

6. TESTING PROCESS

6.1 Factory Upgrade – Component# FU102 (applies to G02 only)

6.1.1 Verify part# FU102 in X1 / FX1 circuit is a: 2.0A 3AG Slow Blow fuse

6.1.2 Designated as 2.0 Amp on board's silkscreen.

6.1.3 If both statements are true, proceed to Step 6.2 otherwise continue.

6.1.4 Remove X1 / FX1 (FU102) fuse, (3AG / 1.0A Slow Blow).

6.1.5 Install small decal with designation "2.0" over 1.0 designation where fuse was removed in X1 / FX1 circuit.

6.1.6 Install small decal with designation "REV B" on the component side of the card.

6.1.7 Install new 3AG 2.0A Slow Blow fuse in X1 / FX1 circuit.

6.1.8 Verify ALL fuses in good physical condition and static check to verify.

6.2 Testing Procedure

6.2.1 Voltage Test

6.2.2 Install UUT in test fixture and tighten all hardware where required for contact tabs.

6.2.3 Verify G01/G02 switch on test fixture matches UUT model #

6.2.4 Connect power cord on back of test fixture.

6.2.5 Apply power to UUT by moving switch on test fixture to ON position.

6.2.6 Using DMM with common connected to COM on UUT

6.2.7 Verify all voltages are within tolerances listed below.

6.2.8 Warning: AC1 / AC2 are the AC Voltage Supplying Power Supply

6.2.9 -20v = -19.9VDC to –20.1VDC

6.2.10 -30v = -27VDC to –33VDC

6.2.11 +30v = +27VDC to +33VDC

6.2.12 +20v = +19.9VDC to +20.1VDC

6.2.13 If all voltages within tolerance, switch power on test fixture to OFF position AND disconnect AC cord on back of test fixture.

6.2.14 Remove UUT from test fixture.

6.3 ***TEST COMPLETE ***

7. NOTES