# g GE Canada
# Electronic Products Repair

## Test Instructions for

## 0517L0438_GALL
*Device Number*

## ±15 VDC 3A Power Supply
*Description of Device*

**Originated By:** Rogerio Cordeiro **Date:** August 5, 2005
Typed Name mm/dd/yy

**Approved By:** Dennis Cully **Approval Date:** August 5, 2005
Signature mm/dd/yy

**TEST INSTRUCTIONS**

# PREVIOUS REVISION SHEET

0517L0438 GALL
*Device Number*
±15 VDC 3A Power Supply
*Description of Device*

| **Originated By** | **Date mm/dd/yy** | **Description of change** |
|---|---|---|
| Don Cleveland | Mar. 19, 1991 | Create test instruction for ± 15 VDC Power Supply 0517L0438 GALL |
| Dennis Cully | July 7, 1995 | Create cover and revision sheets |
| Rogerio Cordeiro | August 5, 2005 | Moved to new format |
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# TEST INSTRUCTIONS

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Location: Book or file File

±15 VDC 3A Power Supply
0517L0438 GALL
Date: August 5, 2005



1. PURPOSE:

   a. Static and dynamic test procedures for ±15 VDC 3A Power Supply 0517L0438 GALL

2. ELEMENTARY:

   a. 216B9736AD

3. EQUIPMENT:

   a. 115VAC
   b. DMM X3
   c. Variac
   d. Oscilloscope
   e. 10Ω 100W resistor
   f. 100Ω 10W resistor
   g. 100kΩ pot

4. SET UP:

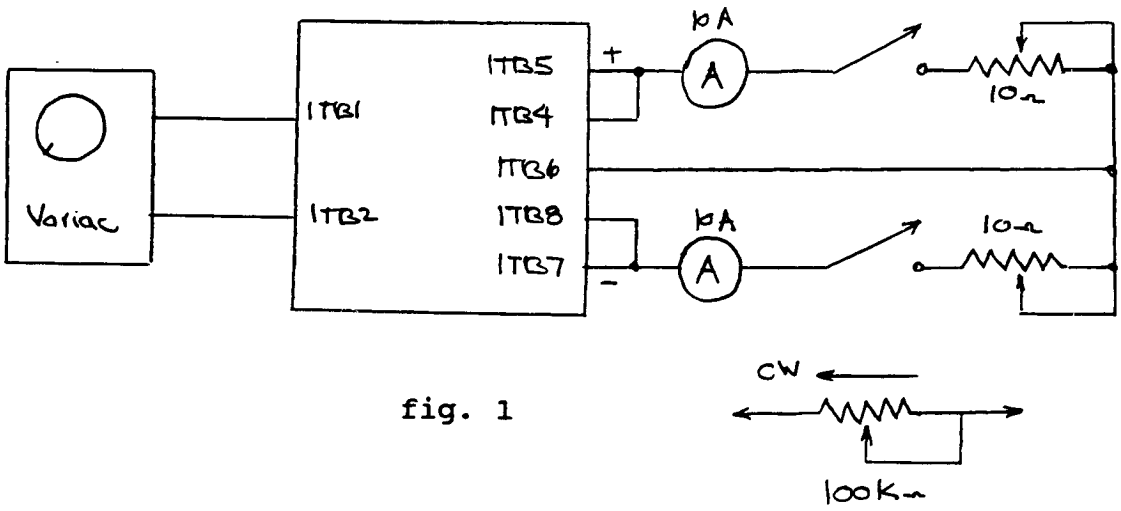


fig. 1

5. PROCEDURE:

a. Regulator
   i. With both load circuits open, power up and adjust the variac for 115VRMS between 1TB1 and 1TB2.
   ii. Note LEDs 1 to 4 are on.
   iii. Adjust R2 until the voltage at 1TB7 is –15.00V.
   iv. Adjust R1 for 15.00V at 1TB5.
   v. Close the load circuits, and adjust the loads for 3A.
   vi. Check 1TB5, and 1TB7 have not change more than 10mV.
   vii. Check the AC ripple on 1TB5, and 1TB7 is 20mVpp maximum.

b. Negative current limit.
   i. Increase the negative load current until the voltage at 1TB7 begins to drop, and note the current is 3.1 to 4A.
   ii. Reduce the load resistance to 0Ω, and check the current is 1A maximum.
   iii. Reset the load current to 3A.

c. Positive current limit.
   i. Increase the positive load current until the voltage at 1TB5 begins to drop, and note the current is 3.1 to 4A.
   ii. Reduce the load resistance to 0Ω, and check the current is 1A maximum.

d. Negative crowbar.
   i. Power down, replace FU1, FU2 with 100Ω resistors, and open both load circuits.
   ii. Jumper the top of R35 to COM (CP2 or CP12), and connect the positive lead of the DMM to 1TB7.
   iii. Connect the 100kΩ pot (set to max.) between the top of R29, and COM.
   iv. Power up and note LEDs 1 to 5 are on (LED 6 glows slightly).
   v. Adjust the 100kΩ pot CW until the crowbar fires (positive and negative), and note the voltage was –16.5V60.8V.
   vi. Note LED1 1,2,5, and 6 are on, 3 and 4 are off.
   vii. Power down, set the 100kΩ pot CCW (MAX), and remove the jumper from R35.

e. Positive Crowbar.
   i. Jumper the top of R36 to COM, connect the positive lead of the DMM to 1TB5, and power up.
   ii. Adjust the 100kΩ pot CW until the crowbar fires (positive and negative), and note the voltage was 16.5V60.8V.

6. UPGRADES:

   a. Rev0 to Rev1
      i. Add C1A 0177A1279 P015 in parallel with C1.
      ii. Add C2A 0177A1279 P015 in parallel with C2.
   b. Rev1 to Rev2
      i. Add R1 0177A1003 P065 in parallel with C1.
      ii. Add R2 0177A1003 P065 in parallel with C2.

7. END: