GENERAL ELECTRIC

277A3794

CONT ON SHEET 2 SH NO. 1

REV NO.	TITLE
277A3794 CONT ON SHEET 2 SH NO. 1	Test Specifications FIRST MADE FOR 44C331863-G01 & G02

REVISIONS

STANDING INSTRUCTIONS

FOR RELAY

RELAY PRINTED CIRCUIT BOARD

FOR

POWER SYSTEM STABILIZER

Distribution Copies:

1 QC Eng.
1 QC Test
1 Eng.

3EL1
~~1QA3~~
1RA2
~~4EK1~~
DL13

PRINTS TO

MADE BY	APPROVALS	DIV OR DEPT.	
RK Gerlitz 781109	J R Pierson 11/5/78	Drive Systems	277A3794
ISSUED 11-20-78		Salem, Va. USA LOCATION	CONT ON SHEET 2 SH NO. 1

CODE IDENT NO.

FF-803 WF (11-77)
PRINTED IN U.S.A.

I. Test Equipment Required

A. Printed Circuit Board test setup 44C931365

B. Adaptor Cable - Amp. Mod. II 30 pin.

C. Adaptor Cable - Power Supplies

D. Oscilloscope - Tektronix model 7403N or equivalent

E. Patchboard PB-3.

F. Drawings

44C306569	Elementary	for G01 (3)
44C309094	"	for G02
44C331863	Assembly	
44C931365	Test Fixture	

II. Connections

A. Connect the Amp Mod II adaptor cable to "PL-1" on the Universal Tester (U.T.)

B. Connect the Power Supply adapter cable to "PL-3" on the U.T. and to Power Supplies per lead markings.

C. Insert patchboard PB-3 into carrier of U. T. and close.

D. Connect a digital voltmeter to "BJ-1" and another to "BJ-2." (Red + and Black -).

III. Resistance Check

Adjust 1P completely CCW. Remove F1F and F2F fuse. Connect Jumper 1S to Ter. 1-2 and Jumper 2S to Ter. 1-2, 3S to Ter. 2-3 and 4S to Ter. 2-3.
(1) Adjust 2P completely CCW.
Measure the following resistance:

Pin	To	Pin	1P	Resistance (Ohms)	(3) G02 only
11		13	CCW	1060 to 1200	2060 to 2200
11		13	CW	~~264~~ to ~~282~~	

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11	15	2P CW	~~327/16/369~~ 385 to 427 (2)
13	15	2P CW	~~1447/16/1443~~ (1) 90 to 92 *
9	28		Inf. (X 100 scale)
7	17		Inf. (X 100 scale)
19 (+)	22 (-)		55-100 (X100 scale)
19 (-)	22 (+)		180-220

(4) * If out of limits remove F3S and F4S and check each component individually
Reinsert fuses.
F5R = 95 to 105 Ω
F2P = 900 Ω to 1100 Ω
Reinstall F3S and F4S

IV. SETUP

A. Turn all switches to OFF or NORMAL on both the UT and UPS.

B. Install Dialco 28 volt ~~40 Amp I Amps~~ (3) 40 MA Lamps in ~~LVB~~, (3) "L18", "L20", "L26" and "L27."

C. Turn all D. C. power supplies to zero, then all varacs to zero on the UPS.

D. Apply power to test stand.

E. Install board to be tested into adaptor.

V. Electrical Test

A. Close "SW-1", "SW-18", "SW-20", "SW-26", "SW-34", depress "LPB-1" and increase PS-1 to 24 ±0.5 VDC at "BJ-1". Output Off light (~~qty. 2~~) (4) shall be energized on PCB.
(2) Note: Should it become necessary to remove all power from PC board, open "SW-1".

B. Close "SW-21". "Light 20" shall energize. Close "SW-27". "Light 27" should energize.

C. Depress Output On PB. No change in lights. Release Output On PB.

D. Close "SW-17" then depress Output On PB. Again no change in ~~lights.~~ (4) lights
Release Output On PB.

E. Close "SW-24". Then depress Output On PB. Output Off and light 27 shall deenergize and Output On and light 26 shall energize. Release Output On PB and Output On and light 26 deenergize and Output Off and light 27 energize.

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F. Close SW-22. Light 20 shall deenergize and light 18 shall energize.

G. Depress and release Output on PB. Output Off and light 27 shall deenergize and Output On and light 26 shall be energized.

H. Perform the following SW function and insure PCB will transfer from Output On to Output Off to Output On.

SW Open	SW Closed	Depress & Release	Output
17			"OFF"
	17		"OFF"
		Output ON	"ON"
24			"OFF"
	24		"OFF"
		Output ON	"ON"

I. Adjust 1P completely CCW. Measure the following resistance.

Pin to Pin		Resistance (Ohms)
11	15	950 to 1150
11	13	1015 to 1150
15	13	90 to 110

Remove Ohmeter

J. ~~Connect an oscilloscope across 2D (or 2C) then across 3D (or 1C) and check voltage delay time when Output Off PB is depressed. (Note the ground side of the oscilloscope can be connected to pin 28). TC = 25m sec.~~ (1) Verify F1C and F2C are .33 mfd. F1OR and F11R are 150 ohm.

K. Place "RS-1" to position on 1, close "SW-11" and slowly increase PS-4 to 10 volts at "BJ-2". Note that ~~+10-10~~ -10-0+10 (2) voltmeter tracks BJ-2 voltage in a positive direction within 3%. Return PS-4 to Zero.

L. Place "SW-11" down and repeat step K this time the voltage shall track in a negative direction. Return PS-4 to Zero.

M. Open SW-1 then return remaining switches to OFF or Normal. Return power supplies to zero.

(1) N. Measure forward resistance of F2D and F3D. Each shall be 7 to 8 0 ohms.

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