GENERAL ELECTRIC

REV NO. A	TITLE	68A999750
68A999750	TEST SPECIFICATIONS	CONT ON SHEET 2 SH NO. 1
CONT ON SHEET 2 SH NO. 1	5.3V AND 12V, 6A OR 7A-REGULATOR	
	FIRST MADE FOR IC3601A250 A,B OR C	

ELEMENTARY IC3601A250 SH. 3.0

SPECIAL TEST EQUIPMENT

1. DIFFERENTIAL VOLTMETER
2. +28V D.C. SOURCE 20 AMP
3. RESISTOR BRIDGE OR 0-20V VARIABLE D.C. SUPPLY WITH 7.5 AMP CAPACITY
4. OSCILLOSCOPE

PERFORM 5.3 VOLT OR 12 VOLT TESTS DEPENDING ON TYPE IN HAND

5.3 TESTS - ALL SWITCHES OPEN EXCEPT SW5 WHICH SHOULD BE CLOSED. MAX. RESISTANCE ON VARIABLE LOAD.

1. CONNECT PER FIG. 1. CLOSE SW1. SET VOLTMETER READING TO 5.3V ± 20MV. BY MEANS OF R40 (ACCESSABLE FROM CARD FRONT)

2. LOAD REGULATION: CLOSE SW2. VARY LOAD FROM MINIMUM TO 6 AMPERES AND VERIFY THAT THE 5.3 VOLTS CHANGES LESS THAN ±150MV. WITH OSCILLOSCOPE CONNECTED ACROSS V OUT (AC COUPLED, 50MV/DIV, 10MS/DIV.) VARY FROM MINIMUM TO 6 AMPERES. VERIFY THAT THERE ARE NO SUSTAINED OSCILLATIONS. SUSTAINED RIPPLE SHOULD BE LESS THAN 100MV P-P.

3. CURRENT LIMIT - SLOWLY INCREASE LOAD CURRENT UNTIL OUTPUT VOLTAGE AND CURRENT DECREASE TO LESS THAN 2 VOLTS AND 2 AMPS. THE CURRENT LEVEL THAT THIS ACTION OCCURS AT SHOULD BE 7 AMPS ± .5 AMP. INCREASE LOAD RESISTANCE UNTIL VOLTAGE AND CURRENT RECOVER. APPLY SHORT CIRCUIT TO OUTPUT BETWEEN P5 AND DCOM. CURRENT SHOULD BE LESS THAN 2 AMPS AND 2 VOLT. OPEN SW1 FOR AT LEAST 10 SEC. CLOSE SW1. OUTPUT CURRENT SHOULD RISE TO AT LEAST RATED FOR AT LEAST 1 SEC.

4. PARALLEL - SET LOAD CURRENT TO 3 AMPERES. READ OUTPUT VOLTAGE WITH DIFFERENTIAL. CLOSE SW3. OUTPUT VOLTAGE SHOULD INCREASE APPROX. 20MV . OPEN SW3.

5. CROWBAR - OPEN SW2; MONITOR OUTPUT VOLTAGE. CLOSE SW4 AND OUTPUT VOLTAGE SHOULD DROP TO 0V. OPEN SW4; OPEN SW1 THEN RECLOSE. OUTPUT VOLTAGE WILL BE 5.3V AGAIN.

"FORM B"

12V TESTS - ALL SWITCHES OPEN; MAX. RESISTANCE ON VARIABLE LOAD.

1. CONNECT PER FIG. 1. CLOSE SW1. SET VOLTMETER READING TO 12 VOLTS ± 10MV BY MEANS OF R40 (ACCESSABLE FROM CARD FRONT).

2. LOAD REGULATION: CLOSE SW2. VARY LOAD FROM MINIMUM TO 6 AMPERES AND VERIFY THAT THE 12 VOLTS CHANGES LESS THAN ± 90MV. WITH OSCILLOSCOPE CONNECTED ACROSS V OUT (AC COUPLED, 50MV/DIV, 10MS/DIV) VARY FROM MINIMUM TO 6 AMPERES. VERIFY THAT THERE ARE NO SUSTAINED OSCILLATIONS. SUSTAINED RIPPLE SHOULD BE LESS THAN 10MV P-P.

REVISIONS

3 BU93BADG 1/17/78 PJR

1 BU930HB 11/13/74

2 E. Ayllon 9-16-75 Changed 70V & 70mV on page 2-12V

DL88

2520

PRINTS TO

MADE BY D. J. MCCOY	APPROVALS D.J. McCoy	INDUSTRY CONTROL DIV OR DEPT	68A999750
ISSUED May 12, 1971		SALEM, VIRGINIA LOCATION	CONT ON SHEET 2 SH NO. 1

TITLE
TEST SPECIFICATIONS
5.3V AND 12V, 6A OR 7A REGULATOR
FIRST MADE FOR IC3601A250 A,B OR C

REVISIONS

3. CURRENT LIMIT - SLOWLY INCREASE LOAD CURRENT UNTIL OUTPUT VOLTAGE AND CURRENT DECREASE TO LESS THAN 5V AND 2 AMPS. THE CURRENT LEVEL THAT THIS ACTION OCCURS AT SHOULD BE 7 AMPS ± .5 AMP. INCREASE LOAD RESISTANCE UNTIL VOLTAGE AND CURRENT RECOVER. APPLY SHORT CIRCUIT TO OUTPUT BETWEEN P12 AND DCOM. CURRENT SHOULD BE LESS THAN 2 AMPERES AND VOLTAGE .2V. OPEN SW1 FOR AT LEAST 10 SEC. CLOSE SW1. OUTPUT CURRENT SHOULD RISE TO AT LEAST RATED FOR AT LEAST 1 SEC. REMOVE SHORT CIRCUIT.

4. PARALLEL - SET LOAD CURRENT TO 3 AMPERES. READ OUTPUT VOLTAGE WITH DIFFERENTIAL. CLOSE SW3. OUTPUT VOLTAGE SHOULD INCREASE APPROX. +200MV. OPEN SW3.

5. CROWBAR - OPEN SW2; MONITOR OUTPUT VOLTAGE. CLOSE SW4 AND OUTPUT VOLTAGE SHOULD DROP TO 0V. OPEN SW4, OPEN SW1, THEN RECLOSE. OUTPUT VOLTAGE WILL BE 12V AGAIN.

FORM C
12V TESTS - ALL SWITCHES OPEN, MAX. RESISTANCE ON VARIABLE LOAD.

1. CONNECT PER FIG. 1. CLOSE SW1. SET VOLTMETER READING TO 12 VOLTS ± 10MV BY MEANS OF R40 (ACCESSABLE FROM CARD FRONT).

2. LOAD REGULATION. CLOSE SW2. VARY LOAD FROM MINIMUM TO 7 AMPERES AND VERIFY THAT THE 12 VOLTS CHANGE LESS THAN ± 90MV. WITH OSCILLOSCOPE CONNECTED ACROSS V OUT (AC COUPLED, 50MV/DIV, 10MS/DIV) VARY FROM MINIMUM TO AMPERES. VERIFY THAT THERE ARE NO SUSTAINED OSCELLATIONS. SUSTAINED RIPPLE SHOULD BE LESS THAN 10MV P-P.

3. CURRENT LIMIT - SLOWLEY INCREASE LOAD CURRENT UNTIL OUTPUT VOLTAGE AND CURRENT DECREASE TO LESS THAN 5V AND 2 AMPS. THE CURRENT LEVEL THAT THIS ACTION OCCURS AT SHOULE BE 7.5 ± .5 AMP. INCREASELOAD RESISTANCE UNTIL VOLTAGE AND CURRENT RECOVER. APPLY SHORT CIRCUIT TO OUTPUT BETWEEN P12 AND DCOM. CURRENT SHOULD BE LESS THAN 2 AMPERES AND VOLTAGE .2V OPEN SW1 FOR AT LEAST 10 SEC. CLOSE SW1. OUTPUT CURRENT SHOULD RISE TO AT LEAST RATED FOR AT LEAST 1 SEC. REMOVE SHORT CIRCUOT.

4. PARALLEL - SET LOAD CURRENT TO 3 AMPERES. READ OUTPUT VOLTAGE WITH DIFFERENTIAL. CLOSE SW3. OUTPUT VOLTAGE SHOULD INCREASE APPROX. +200MV. OPEN SW3.

5. CROWBAR - OPEN SW2, MONITOR OUTPUT VOLTAGE. CLOSE SW4 AND OUTPUT VOLTAGE SHOULD DROP TO OV. OPEN SW4, OPEN SW1, THEN RECLOSE. OUTPUT VOLTAGE WILL BE 12V AGAIN.

Revisions: 1 BU938110 10/10/74 · 2 BU938ADG 1/17/78 P.REECE · DL88 · 2520

PRINTS TO

GENERAL ELECTRIC

68A999750

CONT ON SHEET FL. SH NO. 3

REV NO.

68A999750

CONT ON SHEET FL. SH NO. 3

TITLE TEST INSTRUCTIONS

5.3V AND 12V, 6A, OR7A REGULATOR

FIRST MADE FOR IC3601A250A,B OR C

REVISIONS

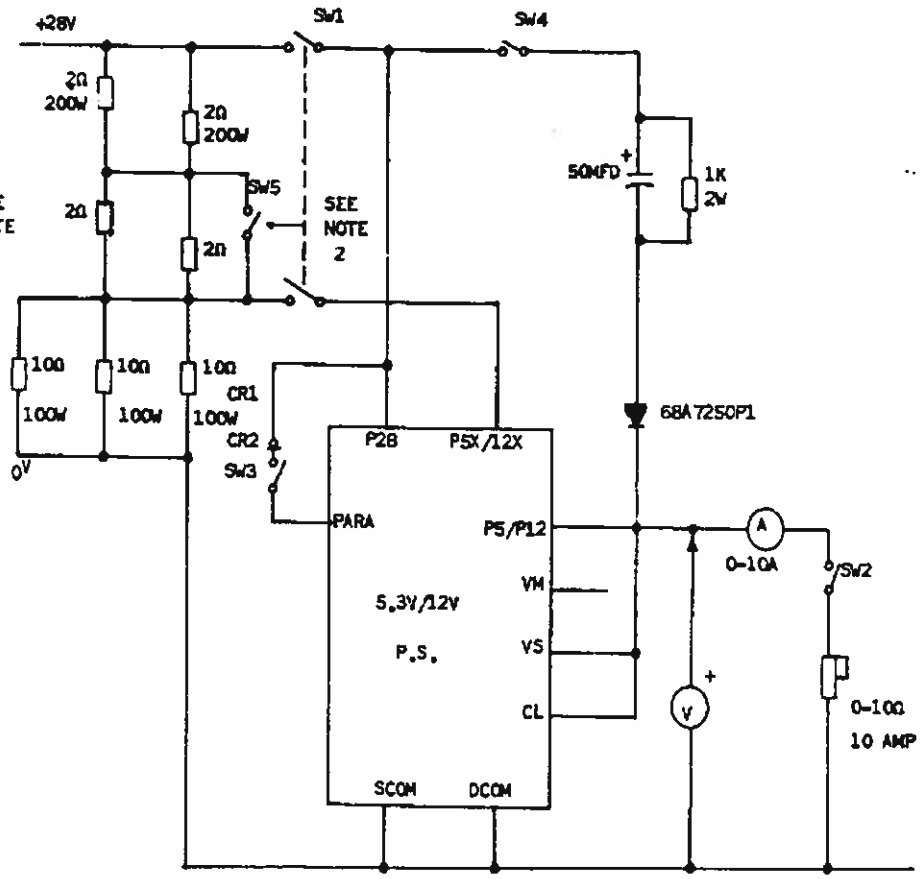

FIGURE 1

CR1 - 68A8200

CR2 - 68A7253P1

NOTES:

1. RESISTOR BRIDGE CAN BE REPLACED WITH 16V/7.5 AMP POWER SUPPLY
2. INSURE SW5 IS OPEN WHEN 5.3V SUPPLY IS CONNECTED; IF NOT OPEN P.S. OVERHEATING RESULTS.

1 1/23/76

2820

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MADE BY D. J. MCCOY

ISSUED May 12, 1971

APPROVALS D.J. McCoy

INDUSTRY CONTROL DIV OR DEPT

SALEM, VIRGINIA LOCATION

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CONT ON SHEET FL SH NO. 3

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