

REV NO. A

TITLE
TEST SPECIFICATIONS
DC/DC POWER SUPPLY
INVERTER PRIMARY CONTROL
FIRST MADE FOR IC3600EPSU1

6 8 A 9 4 4 1 4 2

CONT ON SHEET 2 SH NO. 1

ELEMENTARY IC3600EPSU1 SH. 3.0 - 3.3

TEST EQUIPMENT: OHMMETER, 50V SUPPLY AT 100MA, WAVETEK, OSCILLOSCOPE,
PRECISION VOLTMETER, MISC. SWITCHES, RESIS, ETC...
PER FIG. 1

NOTE: CURRENT UNLIMITED P51 MAY OVERHEAT
TRANSISTORS Q1,Q2

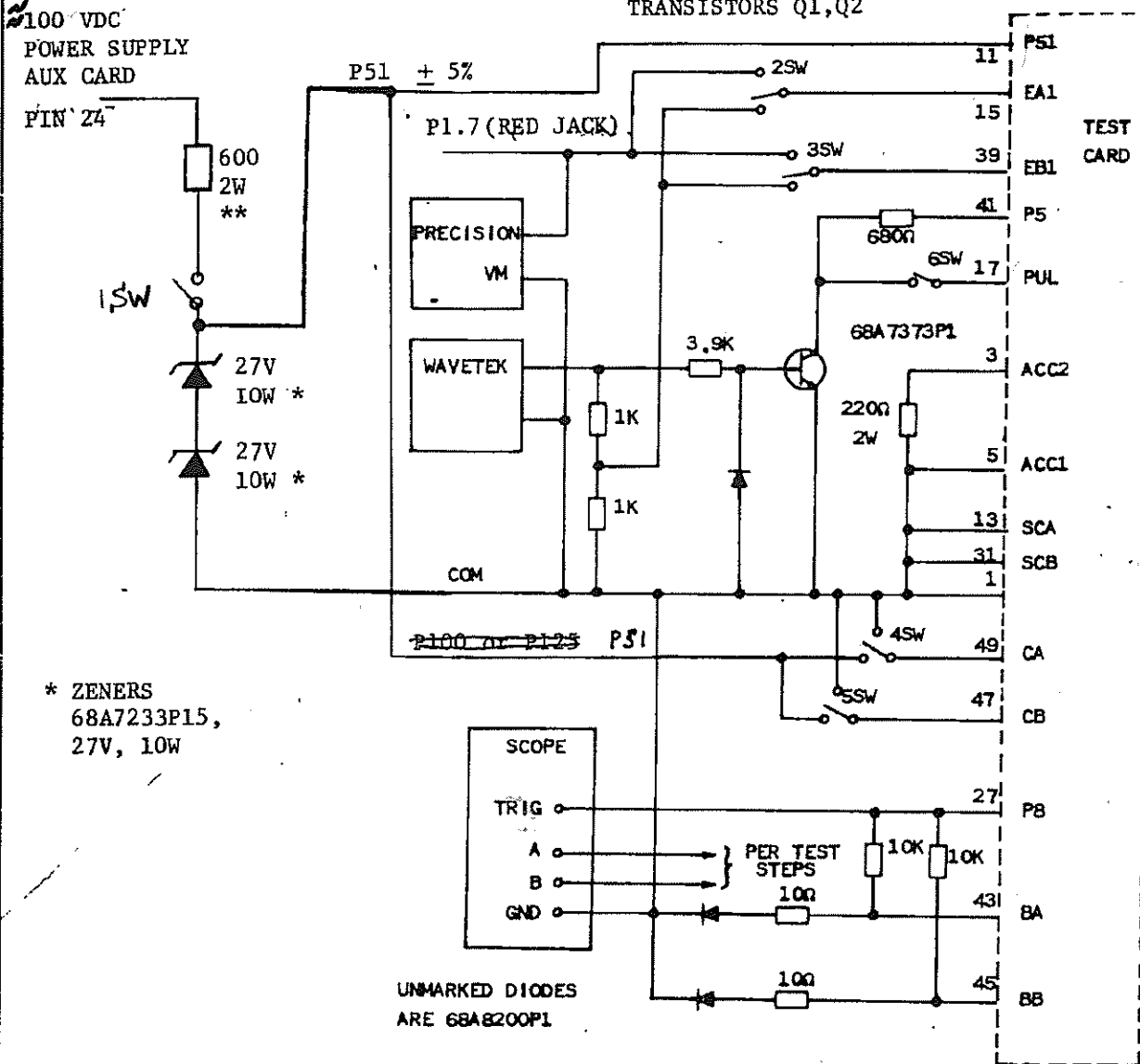


FIGURE 1

NOTE: TEST FIXTURE H188615 IS
WIRED PER THIS DRAWING

6-15-06 DAL

REVISION.

1 BU9468AR W 11/10/70
2 BU9452H CGL 791102
3 21APR86 JMT

2520

PCA

1338

ONL

PRINTS TO

MADE BY

KENNEY C. COX

ISSUED

5-10-71

APPROVALS

D. J. McCoy

DRIVE SYSTEMS

SALEM, VIRGINIA

DIV OR

DEPT.

6 8 A 9 4 4 1 4 2

LOCATION

CONT ON SHEET 2

SH NO. 1

REV NO.	TITLE		CONT ON SHEET	SH NO.
6 8 A 9 4 4 1 4 2	Test Specifications DC/DC POWER SUPPLY INVERTER, PRIMARY CONTROL		3	2
CONT ON SHEET	SH NO.	FIRST MADE FOR		
3	2	IC3600EPSU1		

TEST STEPS

- Ohmmeter test before plugging in card.
All of the following must read within 5% of each other (absolute value, approx. 6.6K, not important).

Terms	15	to	19
	19	to	21
	21	to	25
	39	to	33
	33	to	35
	35	to	37

- Power Supply Check

- Wavetek switched off; 1SW closed; 2SW, 3SW to wavetek; 4SW, 5SW to P51; 6SW open.

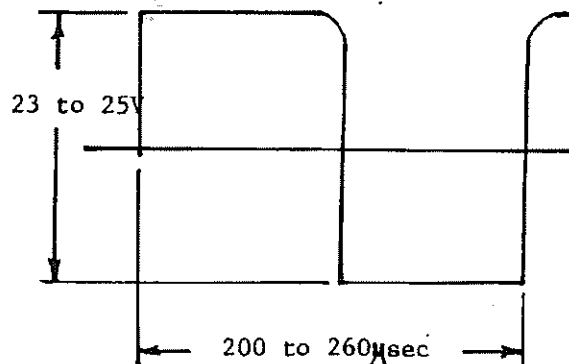
Apply 51V - power only after card plugged in. Use 100VDC power supply. Adjust for P51 VDC at pin 11. (See Fig. 1).

- With voltmeter read following busses:

P8, terms	27 to 1,	8 to 8.5V
N8, terms	29 to 1,	8.0V to 8.7V
P5, term	41 to 1,	5.1V to 5.7V

- Scope on ACC2, term 3, 5V/DIV, 50 microsec/DIV, internal trigger. Picture per Figure 2.

Figure 2



REVISIONS

5) 22 SEP86 JMT
2. BUGG BAR WMH 781020
3. BULLG BAR 3/1/79 MAC
4. 21 APR86 JMT

DL22

2520

PRINTS TO

MADE BY	APPROVALS	DRIVE SYSTEMS	DIV OR DEPT.	6 8 A 9 4 4 1 4 2
RA Salibrici 781020	11-1-78	Salem, VA. U.S.A.	LOCATION	CONT ON SHEET 3 SH NO. 2
ISSUED	10-20-78	RA Salibrici		

GENERAL ELECTRIC

6 8 A 9 4 4 1 4 2

CONT ON SHEET 4 SH NO. 3

REV NO.	TITLE
6 8 A 9 4 4 1 4 2	Test Specifications
CONT ON SHEET 4 SH NO. 3	DC/DC POWER SUPPLY INVERTER PRIMARY CONTROL FIRST MADE FOR IC3600EPSU1

TEST STEPS (Continued)

3. Current Limit Setting (Wavetek still switched off)

- Close 6SW. Close 4SW and 5SW to COM. **2.00 V ON 1P VERSION**
- Set 1.7 bus (Red jack on aux card) at 1.70 volts \pm .005V with precision voltmeter.
- Scope on OCL, term 23, 2V/CM, free running still 50 μ sec/DIV. **ADJ R70 TO SEE WAVEFORM**
Scope picture may be erratic but is about +5V.
- Open 6SW. Change 2SW to Pl.7. Turn R70 on card until scope picture is about half time at 0V and half time at +5V or in between and chattering (turn intensity on scope up so that all chatter may be seen). Note, CW on R70 makes scope +5V, CCW makes scope 0V. This sets point of current limit Channel A.
- Reverse 2SW and 3SW (3SW now on Pl.7). Adjust Pl.7 to get same or approx. as pictured in 3D. Measure Pl.7 Volts, must be 1.65 to 1.77 Volts. This checks current limit Channel B. **1.96 TO 2.06 VOLTS ON 1P VERSION**
- Seal Pot R70 with RTV.
- Close 6SW. Increase Pl.7 until picture of 3D reappears. Pl.7 to be 2.9 to 3.4 Volts.

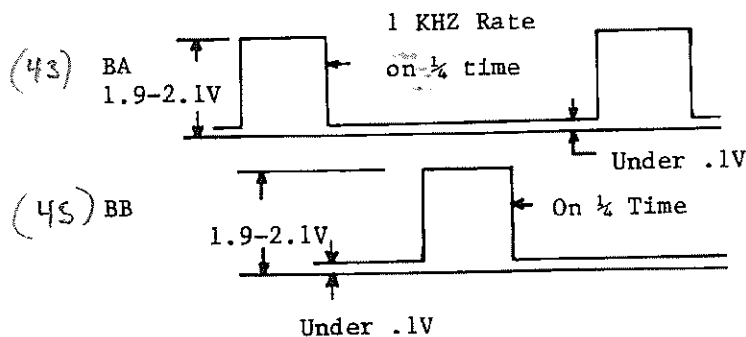


FIGURE 3

REVISIONS

4) BU11603QA LAC BU00930
5) 21APR86 JMT
6) 22SEP86 JMT

1-BU968AR UNN 791020
2-BU968AR RSN 790706
3-BU945ZH CGL 791102

DL22

2520

PRINTS TO

MADE BY R.E.Hannah 790703	APPROVALS GLS/RAS 7/5/79	Drive Systems Salem, Va.	DIV OR DEPT. LOCATION	6 8 A 9 4 4 1 4 2
ISSUED 7-6-79			CONT ON SHEET 4	SH NO. 3

CODE IDENT NO.

REV NO. 6 8 A 9 4 4 1 4 2 CONT ON SHEET FL SH NO. 4	TITLE Test Specifications DC/DC POWER SUPPLY INVERTER PRIMARY CONTROL FIRST MADE FOR IC3600EPSU1
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REVISIONS

4. Base Drivers and Logic

- A. 1SW and 6SW closed; 2SW and 3SW on wavetek; 4SW and 5SW on COM.
- B. Scope CHAN A on wavetek, 2V/DIV, 100 μ sec/DIV. Set wavetek for 9V peak to peak, 2KC square wave.
- C. Move CHAN A to BA (Term 43), 1V/DIV. CHAN B to BB (Term 45), 1V/DIV. Synch on channel A. Check per Figure 3.
- D. Change scope to 50 millisec/DIV and external trigger on P8 (Term 27). Open and close 1SW, scope to trigger on closing 1SW.
- E. Check power applied reset per Figure 4 as 1SW is closed.

Like Figure 3 Condensed

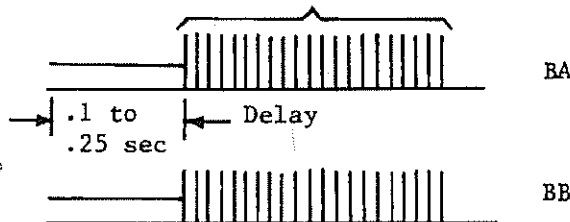


Figure 4

5. Protective Circuits

- A. 1SW and 6SW closed; 2SW and 3SW on wavetek; 4SW and 5SW to COM; scope probes on BA (Chan A) and BB (Chan B).
- B. Scope Chan A only, 5MS/DIV, internal Pos. trigger. 4SW to P51. Light emitting diode CR25 must turn On. Check per Figure 5.
- C. Scope Chan B only. 4SW to COM. Light goes Out. 5SW to P51. CR25 On. Scope like Figure 5.
- D. Scope 5 microsec/DIV. Pulse of Figure 5 becomes like Figure 6, for Chan A in Step 5B and Chan B in 5C.

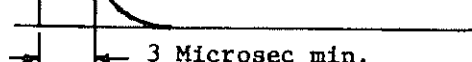
Figure 5

BA - Chan A	BB - Chan B

8 to 25 MS

1 MS jitter is normal

Figure 6



1. Bu11604AR 3/179 MAC

DL22

2520

PRINTS TO

MADE BY RA Salibrici 781020 ISSUED 10-20-78	APPROVALS 11-4-78 R.A. Salibrici	DRIVE SYSTEMS Salem, VA. U.S.A.	DIV OR DEPT. 6 8 A 9 4 4 1 4 2 LOCATION CONT ON SHEET FL SH NO. 4
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