

INSTRUCTIONS

ASSEMBLY DRAWING

PC BOARD DRAWING

165A663AY

SCHEMATIC DRAWING

125D443AY

TEST KIT

165A33AY

1.0 INSPECTION

- | | | |
|-------------------|----------------|-------------|
| .1 Identification | .3 Solder/Wire | .5 Key Slot |
| .2 Comp. Check | .4 Temp. Cycle | .6 |
| | | .7 |

REMARKS:

2.0 BOARD SET-UP

2.1 ADD COMPONENTS AS SHOWN IN FIGURE 1.

4-33 μ F, 470 Ω , 2-20K, 63.4K, 1K 5.19

3.0 TEST SET-UP

- 3.1 TURN POWER SWITCH OFF.
- 3.2 CONNECT +15 VDC, -15 VDC, +12 VDC, -12 VDC AND PS COMMON TO TEST KIT.
- 3.3 CONNECT UP PS1 (0 TO +10 VDC) TO PS1 TEST JACK, SET TO 0.0 VDC.
- 3.4 CONNECT UP +5 VDC SQUARE WAVE GENERATOR (SG1) TO SG1 TEST JACK, SET TO 0 HZ.
- 3.5 TURN S1 OFF, (LEFT POSITION).

4.0 BOARD TEST

- 4.1 PLUG BOARD INTO AY POSITION.
- 4.2 TURN POWER SWITCH ON.

5.0 SETP #:

- 5.1 TURN S1 OFF. READ +15 VDC CURRENT, 20 MA MAX.
- 5.2 READ -15 VDC CURRENT, 20 MA MAX.
- 5.3 READ +12 VDC CURRENT, 10 MA MAX.
- 5.4 READ -12 VDC CURRENT, 10 MA MAX.
- 5.5 TURN S1 ON. READ -15 VDC CURRENT, 60 MA MAX.
- 5.6 TURN S1 OFF. CONNECT DVM TO <7> TP903, SET SG1 TO 0 HZ.
- 5.7 TP903 SHOULD BE 0.00 \pm 0.10 VDC.
- 5.8 SET SG1 TO 2000 \pm 2 HZ.
- 5.9 TP903 SHOULD BE +1.98 \pm 0.030 VDC.
- 5.10 SET SG1 TO 6000 \pm 6 HZ.
- 5.11 TP903 SHOULD BE +5.94 \pm 0.070 VDC.
- 5.12 SET SG1 TO 10000 \pm 10 HZ.
- 5.13 TP903 SHOULD BE +9.90 \pm 0.11 VDC.
- 5.14 ADD A 1 K RESISTOR BETWEEN + END OF C902 (2) AND + END OF C905 (3).
SET <3> P901 FULL CCW. SET <2> P902 FULL CW. SET SG1 TO 0 HZ.
- 5.15 CONNECT DVM TO <3> TP905. SET PS1 FOR 0.0 \pm 0.010 AT TP905.
- 5.16 CONNECT DVM TO <2> TP906. CHECK RANGE OF <1> P903, -3.3 TO +3.3 VDC.
- 5.17 SET <1> P903 FOR 0.0 \pm 0.020 VDC AT TP906.

- 5.18
5.19 SET PSI TO 0 VDC.
5.20 CONNECT DVM TO $\langle 6 \rangle$ TP908, SHOULD BE $+0.060$ TO $.200$ VDC.
5.21
5.22 CONNECT DVM TO $\langle 7 \rangle$ TP903, SHOULD BE 0.0 TO ± 0.010 VDC.
5.23 CONNECT DVM TO $\langle 6 \rangle$ TP908, SET PSI TO 0.0 ± 0.010 VDC AT TP908.
5.24 SET SG1 FOR $+3.00 \pm 0.010$ VDC AT TP908.
5.25 CONNECT DVM TO $\langle 7 \rangle$ TP903, SHOULD BE $+0.93 \pm 0.050$ VDC.
5.26 TURN S1 ON. SET SG1 TO 0 HZ (WAVETEK POWER OFF).
5.27 TP903 SHOULD BE 0.0 ± 0.010 VDC.
5.28 CONNECT DVM TO $\langle 6 \rangle$ TP908, SET PSI FOR 0.0 ± 0.010 VDC AT TP908.
5.29 SET SG1 FOR $+3.00 \pm 0.010$ VDC AT TP908.
5.30 CONNECT DVM TO $\langle 7 \rangle$ TP903, SHOULD BE $+1.86 \pm 0.090$ VDC.
5.31 TURN S1 OFF. SET SG1 FOR $+5.00 \pm 0.010$ VDC AT TP 903.
5.32 SET PSI TO $+5.00 \pm 0.01$ VDC.
5.33 CONNECT DVM TO $\langle 6 \rangle$ TP908, SHOULD BE -0.75 TO $+1.01$ VDC.
5.34 SET S1 ON. TP908 SHOULD BE -0.75 TO $+1.01$ VDC.
5.35 SET SG1 TO 0 HZ (WAVETEK POWER OFF).
5.36 SET PSI FOR 0.0 ± 0.010 AT TP908.
5.37 CONNECT DVM TO $\langle 2 \rangle$ TP906, TRIM $\langle 1 \rangle$ P903 FOR 0.0 ± 0.020 VDC AT TP906.
5.38 CONNECT DVM TO $\langle 6 \rangle$ TP908. SET PSI FOR -1.0 ± 0.010 VDC AT TP908.
5.39 CONNECT DVM TO $\langle 3 \rangle$ TP905. CHECK RANGE OF $\langle 3 \rangle$ P901, -0.25 TO -0.93 VDC.
5.40 CONNECT DVM TO $\langle 2 \rangle$ TP906, SET $\langle 3 \rangle$ P901 FOR $+6.91 \pm 0.010$ VDC AT TP906.
5.41 REMOVE 1 K RESISTOR AT + END OF 902 TO + END OF C905.
5.42 SET SG1 TO $+3.00 \pm 0.010$ VDC.
5.43 CONNECT DVM TO $\langle 6 \rangle$ TP908, CHECK RANGE OF $\langle 2 \rangle$ P902, -0.18 TO -2.00 VDC.
5.44 SET $\langle 2 \rangle$ P902 FOR -1.16 ± 0.010 VDC AT TP908.
5.45 CONNECT DVM TO $\langle 5 \rangle$ TP904, -12 VDC MAX.
5.46 CONNECT DVM TO $\langle 7 \rangle$ TP903, SET SG1 FOR $+6.00 \pm 0.020$ VDC AT TP903.
5.47 CONNECT DVM TO $\langle 6 \rangle$ TP908, SHOULD BE $+1.16 \pm 0.050$ VDC.
5.48 CONNECT DVM TO $\langle 5 \rangle$ TP904, $+12$ VDC MAX.
5.49 CONNECT SCOPE TO $\langle 7 \rangle$ TP903, NOISE MUST BE 50 MV MAX.
5.50 CONNECT SCOPE TO $\langle 5 \rangle$ TP904, NOISE MUST BE 50 MV MAX.
5.51 CONNECT SCOPE $\langle 2 \rangle$ TP906, NOISE MUST BE 50 MV MAX.
POWER TO OFF.
S1 TO OFF (LEFT).
SG1 TO 0 HZ (OFF).
PSI TO 0.0 VDC.

REV. A BC
PARTS LIST FOR

TITLE CIRCUIT BOARD ASM

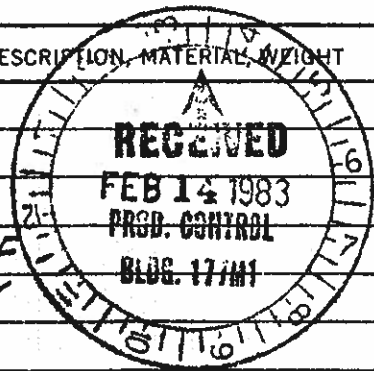
CONT ON SHEET 2 SH NO. 1

CONT ON SHEET

SH NO.

FIRST MADE FOR DA226000

GROUP	NO.	AND QUANTITY	PART NO.	NAME	DRAWING NO., DESCRIPTION, MATERIAL, WEIGHT
	2	1	1	ASSY GR.1	
	X		2	ASSY GR.2	
	X		3	WAVE SOLDER	P18A-AM1
	X		4	TEST INST	165A663BF
	X		5	TEST INST	165A663AY
	X	X	6	ELEMENTARY DIAG	125D443AY
	X		7	COATING INST	P6C-AF7
	AR		8	INK	165A658EBP.1
	X		9	KEYING INST	165A662ABP.4
	X	X	10	COMPONENT ASM	165A662AA
			11	CIRCUIT BD	125D461AYP.1
			12	TERMINAL	165A658CAP.2 TP901-908 TEST POINT
	2		13	EJECTOR	165A658ARR.1
			14	CONNECTOR	165A658AXP.3 JP901
	2		15	TRIM POT	165A658BBP.7 P901, 902
			16	TRIM POT	165A658BBP.6 P903
	2		17	RESISTOR	165A658AYP.443 R901, 902
	3		18	RESISTOR	165A658AYP.368 R906, 912, 913
	5		19	RESISTOR	165A658AYP.430 R903, 904, 909, 916, 917
	2		20	RESISTOR	165A658AYP.401 R910, 911
	1		21	RESISTOR	165A658AYP.201 R914
	1		22	RESISTOR	165A658AYP.450 R915
	1		23	RESISTOR	165A658AYP.418 R920
	1		24	RESISTOR	165A658AYP.239 R921
	1		25	RESISTOR	165A658AYP.501 R922
	2		26	CAPACITOR	165A658BAP.92 C903, 904
	1		27	CAPACITOR	165A658BAP.51 C906



DESCRIPTION OF GROUPS		REVISIONS		PRINTS TO	
GR1 (WAVE SOLDER ASM)		A Rankin 1-3-77 CN78-8508		12G	
GR2 (FINAL ASM)		DELETE QTY(X) FROM P5, GR2		14E	
REV STATUS		B Gordon 11-13-78 CN78-8223		11V	
REV C D G		R909 IN GR.1		RW973	
SHT 1 2 3 4 5		C J. Raley 12/30/82			
MADE BY E. Rankin 12-31-75		APPROVALS MDT		PARTS LIST FOR 125D460AY	
ISSUED R. LEBLANC 1-9-76		DAB 1-8-76		DIV. OR DEPT. LOCATION	
		FITCHBURG		CONT ON SHEET 2 SH NO. 1	

REV. **A B C D**
PARTS LIST FORTITLE **CIRCUIT BOARD ASM**125D460AY
CONT ON SHEET **3** SH NO. **2**

CONT ON SHEET

SH NO.

FIRST MADE FOR **DA226000**

GROUP NO. AND QUANTITY

PART NO.

NAME

DRAWING NO., DESCRIPTION, MATERIAL, WEIGHT

2

1

28

RECTIFIER

165A658XC P.1

CR901

2

29

DIODE

165A658DE P.1

CR902,903

1

30

DIODE

165A658DC P.1

CR904

3

31

AMPLIFIER, OPR

165A658DA P.1

IC902-IC904

1

32

RELAY

165A658BC P.2

IC901

1

33

SPACER

165A665AB P.1

IC901

4

34

SPACER

165A665AD P.1

IC901

9

35

SPRING SOCKET

165A658FC P.2

IC901

16

36

STANDOFF

165A658CA P.2

IC901

AR

37

SOLDER

165A665DC P.1

IC901

X

38

RESISTOR

ML IT JG2 P.58

R905

X

39

RESISTOR

ML IT JG2 P.58

R905

X

40

RESISTOR

ML IT JG2 P.58

R905

1

41

RESISTOR

165A658AY P.353

R907

1

42

RESISTOR

165A658AY P.550

R908

X

43

RESISTOR

ML IT JG2 P.61

R906

X

44

RESISTOR

ML IT JG2 P.61

R906

X

45

RESISTOR

ML IT JG2 P.61

R906

1

46

RESISTOR

165A658AY P.301

R919

X

47

RESISTOR

ML IT JG2 P.65

R923

X

48

RESISTOR

ML IT JG2 P.66

R924

1

49

CAPACITOR

165A658BA P.78

C901

X

50

CAPACITOR

ML IT JG2 P.68

C902

X

51

CAPACITOR

ML IT JG2 P.69

C905

X

52

CAPACITOR

ML IT JG2 P.70

C907

X

53

CAPACITOR

ML IT JG2 P.71

C908

2

54

CAPACITOR

165A658BA P.88

C909,910

DESCRIPTION OF GROUPS

REVISIONS

PRINTS TO

A G DION 3-18-76 CN76

PT 33 QTY WAS 4 18045

NAME WAS WASHER 5R

B S. PRYBUREK 2-15-77 CN77

P 37 WAS 820013E2

C G DION 11-13-78 CN78

PT 36 WAS QTY(41) 8223

INGR. 1; DELETE P.38, 39,

93, 44, 45, 41, 42, 46, 49

REV C (CONT) 1254 QTY (X)

IN GR. 2; ADD QTY (1) TO

P.41, 42, 46, 49, IN GR. 1

ADD QTY (2) TO P.54 IN GR. 1

P.41, 42, 46, 49 & 54 WAS

ML IT JG2 P.59, 60, 64, 67

& 72 RESPECTIVELY

D J. Raley 12/30/82

TAB PRINTS RW973 WAS RW219A

12G

14E

11V

RW973

MADE BY **C Rankin** 12-31-75ISSUED **R. LEBLANC** 1-9-76APPROVALS **DD 1-8-76**

MDT

DIV. OR DEPT

PARTS LIST FOR **125D460AY**

LOCATION

CONT ON SHEET **3** SH NO. **2**

GENERAL ELECTRIC

PARTS LIST FOR
125D460AY

CONT ON SHEET ~ SH NO. 3

REV. NO. **ABCD EFG**
PARTS LIST FOR

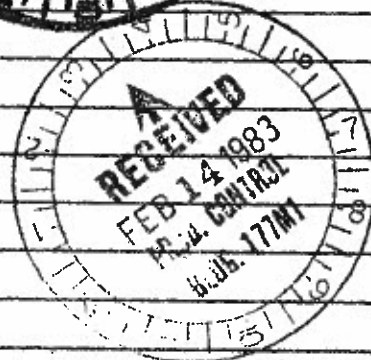
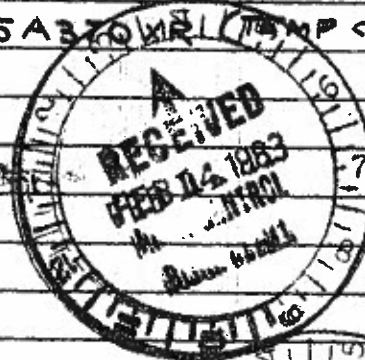
TITLE **CIRCUIT BOARD ASM**

CONT ON SHEET

SH NO.

FIRST MADE FOR **DA-226000**

GROUP NO.	QTY	PART NO.	NAME	DRAWING NO., DESCRIPTION, MATERIAL, WEIGHT
2	1	55	CAPACITOR	ML IT 162 P73 C911
2	2	56	CAPACITOR	165A658 BA P69 C911,912
2	2	57	CAPACITOR	ML PT 162 P75 C911
1	1	58	CONVERTER	165A658BE P.1 1C901
2	2	59	TEMPER	ML IT 162 P76 JP401 902
X	X	60	SOLDER INST	P18KAF2
X	X	61	PROCESS INST	P24CAFIG (REF. INST PT.# I)
AR	AR	62	COMPOUND	165A206 BY PI
AR	AR	63	COATING	165A658ECP1
AR	AR	64	COATING	165A658ECP2
X	X	65	PROCESS INST	P3K-AF2 (TEMP CYCLE COMP)
X	X	66	TEST INST	165A370 ML (TEMP CYCLE P.C. BD)



REVISIONS

PRINTS TO

F. O'Clair CN 81-8267 4-8-81 ADDED PT 65 TO GR 1 & 2 ADDED PT 66 TO GR 1 IN	D. DIWILDER MAY-15 CN 78-8177 1922 54 ADDED PT 63 & 64	A. G. DION 5-1-76 CN 76-8172 ADD P18KAF2 TO PT 60 WAS (LATER) 54	12G
G. J. Riley 12/30/82 TAB "PRINTS" RW973 WAS RW219A	E. G. DION 11-13-78 CN 78 DELETE P55, 56, 57 & 8223 59 QTY (X) FROM GR 2; ADD QTY (2) TO P56 IN GR 1; P55 56, 57 & 59 WERE (ML IT) 162 P73, 74, 75 & 76 RESPECTIVELY	B. E. Rankin CN 76- 1-3-77 8508 ADD P. 61 TO GR. 2	14E
		C. W. SAFFORD CN 77- 3-7-77 8102 54 ADD PT. 62 QTY. AR, GR. 2	11V
			RW973

MADE BY **E. Rankin** 12-31-75
ISSUED **R. LEBLANC** 1-9-76

APPROVALS **DFB 1-8-76**

MDT
FITCHBURG

DIV. OR DEPT
LOCATION

PARTS LIST FOR
125D460AY
CONT ON SHEET ~ SH NO. 3