

AA

FITCHBURG TEST INSTRUCTIONS

SHEET 1 OF

BD. #125D46QAA

SCHEMATIC NO.

DATA SHEET NO.

BD. NO.

SER. NO.

125D443 AA

165A663BB

TURBINE

TEST: INSTRUCTIONS #165A663 AA

EQUIPMENT

DATE

1.0 INSPECTION

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

REMARKS:

2.0 BOARD SET-UP

- .1 Add R101 (249 Ω) - #33

3.0 TEST SET UP

- .1 Turn Power Switch OFF.
 .2 Connect +15 VDC, -15 VDC, +12 VDC, -12 VDC, to Test Kit.
 .3 Use DC voltage standard: Connect up PS1 (0 to +10 VDC), Set to 0.0 VDC.
 .4 Use DC voltage standard: Connect up PS2 (0 to +10 VDC), Set to 0.0 VDC.
 .5 Set S1, S3 and S6 to OFF, (LEFT position)
 .6 Turn $\textcircled{9}$ P109 FULL CW, $\textcircled{1}$ P104 CCW, $\textcircled{1}$ P103 CCW.

4.0 BOARD TEST: RECORD ALL READINGS

- .1 Plug Board into AA Position.
 .2 Turn power switch ON.
 .3 Read +15 VDC current, 100 MA max.
 .4 Read -15 VDC current, 100 MA max.
 .5 Read +12 VDC current, 10 MA max.
 .6 Read -12 VDC current, 10 MA max.
 .7 Set PS1 to +4.000 \pm .010 VDC.
 .8 Set PS2 to +1.000 \pm .010 VDC. use #2.5 Ω Resistor to com for +1V
 .9 Read $\textcircled{4}$ TP101, +2.00 \pm .010 VDC.
 .10 Set PS1 to +1.00 \pm .010 VDC.
 .11 Set PS2 to +5.00 \pm .010 VDC.
 .12 Read $\textcircled{4}$ TP101, -4.00 \pm .010 VDC.
 .13 Set PS2 to 0.00 VDC. (set polarity to 0.)
 .14 Set PS1 for 0.00 \pm .010 VDC at $\textcircled{4}$ TP101.
 .15 Connect DVM to $\textcircled{1}$ TP109. Check range of $\textcircled{2}$ P109, -4.4 to +.4 VDC.
 .16 Connect DVM to $\textcircled{3}$ TP102. Set $\textcircled{2}$ P102 until TP102 just reaches 0.00 \pm .010 VDC.
 .17 Set PS1 to +5.000 VDC.
 .18 Connect DVM to $\textcircled{3}$ TP102. Check range of $\textcircled{1}$ P101, -7.2 to -.1 VDC.
 .19 Set PS1 to +3.940 VDC.
 .20 Set $\textcircled{1}$ P101 for -5.000 \pm 0.10 VDC at TP102

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4.0 BOARD TEST (continued...)

- .71 Set PS1 to +4.920 VDC.
- .72 Set 2 P102 for -5.00 \pm 0.010 VDC at TP102.
- .73 Set PS1 to +0.960 VDC.
- .74 TF102 should be 0.00 \pm .020 VDC.
- .75 Connect DVM to 6 TP102. Set PS1 for 0.00 \pm .010 VDC at TP103.
- .76 Connect DVM to 9 TP104. Set 3 P103 for 0.00 \pm .010 VDC.
- .77 Connect DVM to 6 TP103. Set PS1 (+5V) for -5.00 \pm .010 VDC at TP103.
- .78 Connect DVM to 9 TP104. Check range 4 P104, +1.10 to +10.50 VDC. Set 4 P104 FULL CCW.
- .79 Connect DVM to 6 TP103, set PS1 for 0.00 \pm .010 VDC at TP103.
- 30 .80 Connect DVM to 9 TP104. Check range of 3 P103, -1.8 to +6.1 VDC.
- .81 Set 3 P103 for 0.00 \pm 0.010 VDC at 9 TP104.
- .82 Connect DVM to 6 TP103, set PS1 for -5.00 \pm .010 VDC at TP103.
- .83 Connect DVM to 9 TP104. Set 4 P104 for +4.66 \pm .010 VDC.
- .84 Set 3 P103 for +5.79 \pm 0.010 VDC at 9 TP104.
- .85 Connect DVM to 6 TP103. Set PS1 for 0.00 \pm .010 at TP103.
- .86 Connect DVM to 9 TP104. Should be +1.110 to +1.150 VDC.
(Tight Limit Adjust 3 P103 if necessary).
- .87 Set P1 CW. Connect DVM to 11 TP108. Check range of 5 P106, +3.8 to +7.0 VDC.
- 38 .88 Set 5 P106 to +5.79 \pm .010, -0.00 VDC at TP108.
- .89 Connect DVM to 10 TP107. Should be +5.79 \pm .010 VDC.
- 40 .90 PRESS S4. Set S1 and S6 to ON. Connect DVM to 7 TP105. Check range of 6 P107, +3.2 to +6.4 VDC.
- 41 .91 Set 6 P107 to +5.49 \pm .010 at TP105.
- 42 .92 Set S6 OFF. Check range of 7 P108 at TP105, +5.50 to +7.49 VDC.
- 43 .93 Set 7 P108 to +6.10 \pm .010 VDC at TP105.
- 44 .94 PRESS S5. Connect DVM to 9 TP104. Set 4 P104 to +1.13 \pm .010 VDC.
- 45 .95 Connect DVM to 7 TP105. Should be +1.09 to +1.14 VDC.
- 46 .96 Check for less than 1 Ω between P27 and P28.
- 47 .97 Check for infinite OHMS between P23 and P29. SET S1 OFF.
- 48 .98 Connect DVM to 10 TP107, Set P1 for +2.00 \pm .010 VDC.
- 49 .99 PRESS S4. Connect DVM to 7 TP105, should be +1.9 to +.01 VDC
- 50 .100 Check for infinite OHMS between P27 and P28.
- 51 .101 Check for less than 1 Ω between P23 and P29.
- 52 .102 Connect DVM to 9 TP104. Set PS1 for +5.790 \pm .001 VDC at TP104.
- 53 .103 Connect DVM to 10 TP107. Set P1 for +5.790 \pm .001 VDC.

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4.0 BOARD TEST (continued...)

- .54 Connect DVM to P38 (+) and P37 (-). Set \diamond P105 for $0.00 \pm .010$ VDC
- .55 Set PS1 to 0 VDC
- .56 Connect DVM to \diamond TP104. Set \diamond P106 to $-1.12 \pm .001$ VDC.
- .57 Connect DVM to \diamond TP107. Set P1 for $+1.120 \pm .001$ VDC.
- .58 Connect DVM to P38 (+) and P37 (-). Should be $0.00 \pm .020$ VDC.
- .59 Connect DVM to \diamond TP104. Set P1 for $+1.72 \pm .10$ VDC at TP104.
- .60 Connect DVM to \diamond TP107. Set P1 full CW, then CW for $+3.00 \pm .10$ VDC. Press S5.
- .61 Connect DVM to \diamond TP111. Should be $+5.49 \pm .10$ VDC. Set S2 ON.
- .62 Connect DVM to \diamond TP105. Should be $+2.9 \pm .2$ VDC
- .63 Connect DVM to \diamond TP111. Should be $+0.0 \pm .010$ VDC. Set S2 OFF.
- .64 Set \diamond P109 FULL CCW. Connect DVM to \diamond TP105. Set P1 for $.00 \pm .003$ VDC. NOTE: Adj. pwr supplies to $+15.000 \pm .001$ 15.000 for next step to work.
- .65 S2 resets Pin 17.
- .66 Connect DVM to P17. Turn \diamond P109 CW until P17 changes to $+15$ VDC.
- .67 PRESS S3. Connect DVM to \diamond TP111, should be $+5.49 \pm .1$ VDC
- .68 Connect scope to \diamond TP109, should have less than 50 MV NOISE.
- .69 \diamond TP104, less than 50 MV NOISE.
- .70 \diamond TP105, less than 50 MV NOISE.
- .71 \diamond TP107, less than 50 MV NOISE.
- .72 \diamond TP106, less than 50 MV NOISE.
- .73 TURN POWER OFF.