

TO LEVEL LED AND POWER/INT CIRCUITS

TO TDI (DIST. LED) CIRCUIT

TO INPUT BRL-IN (POWER/INT) CIRCUIT



## TROUBLESHOOTING CHART FOR A8.0

11-28-78

## A. Current Draw

1. "Hard" short: Lift ground on both heatsinks to check for shorts  
Check D8,9--reversed?  
Lift Xistor fuses one by one: bad/shorted transistor?  
Solder Short? Red/Green DC wires reversed?
2. Short w/ DC offset (may be slight) D8,9? Output Xistor short?(note which rail)
3. "Soft" short: wrong polarity of driver, output Xistor?  
if amp runs: check crossover diodes 4,5,6, replace high-voltage parts  
if only slight: and D4,5,6 OK: sub. 8.2ohm, R16

## B. DC fault(offset):With current draw: see (A)

No current draw: output/drivers OK--check Q1,2,3 and circuit  
solder short, Q3? Wrong device, Q1,Q2? Bad D1,2? Parts missing?

## C. Audio (AC) faults: amp runs, but severe clipping, esp. into load:

1. clipping, one side: current limit missing R14,19? Bad D3?  
Missing/unsoldered Q4,5? Fuses not in?  
Emitter-base short (solder), Q4,5? (hard to tell--sub, last resort)
2. Wrong current limit: Positive: to decrease, parallel R18(360ohm) w/ 2.7K typ.  
Negative: to decrease, parallel R15 (360ohm) w/ 2.7K typ.  
If either current limit is low, look for missing .42ohm/5W resistors,  
or bad Q7-14. Measure AC voltage (2V) across each .42ohm resistor  
under load: should match to 10%. If low, suspect Q. If high, bad .42ohm?
3. Fuse blows when first applying load (or sooner) Also--check fuses  
Incorrect fuse value?  
Intermittent solder short--check heat sink closely for alignment.  
Note: if any Q11-14 are dead, F4 will usually blow, into 4ohms load

## D. Glitch (high frequency oscillation)

Mild: usually wrong C1,2, or 3

Severe: usually missing C1,2,3 or C4, R24, J4 (between C9 and F13)

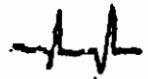
## E. Excess Distortion: Note appearance of Distortion analyzer trace:

Severe (over 1% but runs) Reverse C6, incorrect R7,8, R4, C1,2,3

Mild (.25% or so):

Hum: Led 1, C6, Q1


  
smooth, but excessive: Try new Q2, Q3. Check C1,2,3


  
Spikes. Missing R16 (excess Xover dist)

Purple wire hooked to D10,11 (instead of going thru R26)

## F. Feature doesn't work:

1. Level LED's: None at all: Purple Wire? R26 in? D10,11 in? If R26 burns, look  
for short after D10,11: reversed? C9 shorted? R33 (550/10W) in?  
Bad or Dim LED--usually replace. If still bad, check R27,28 in?  
Display stays on: LED 2? D12?
2. Distortion LED: Yellow Pilot LED off? Check for voltage, replace.  
If Yellow LED on: Check for voltage at Dist LED (with amp clipping).  
If no voltage: Check Q15 collector voltage? parts? VM-08 bridge?
3. PowerLimit: No Limit, No LED: Photocell in right? Check voltage at photocell  
LED, R29, Panel LED? If none, Q16 not coming on, check Powerlimit  
control, R30, shorted C10? reversed D11?  
No Limit, but Panel LED lights: TURN DOWN before blowing the circuit:  
Usually solder short at LED end of photocell.

## G. No output, but amp idles OK, no DC fault:

Assume amp works, input not getting thru: Blue wire? R1,2? shorted  
photocell solder or lead? Gain control? C5? D1?