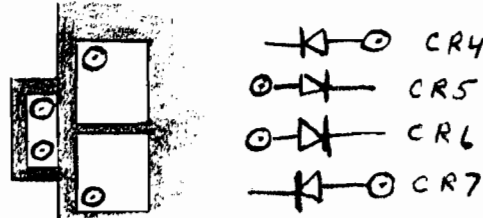


IMSAI 8080 MICROCOMPUTERASSEMBLY MANUAL ERRORS

POWER SUPPLY:

- 1) ASSEMBLY DIAGRAM (rev. 1, 5/76) - The four diodes CR4 - CR7 are shown mounted wrong. They should be mounted as follows:



- 2) ASSEMBLY INSTRUCTIONS (PAGE 3-19) - Step #6 should read: "Insert and solder each of the six .01 uf capacitors C7 through C12 in the locations shown on the assembly diagram." (perhaps this is not an error but I found only .01's in my kit although .04's are specified both in the instructions and on the schematic diagram.)
- 3) ASSEMBLY INSTRUCTIONS (PAGE 3-19) - Step #12 should read: "Next connect the two yellow #18 wires to terminal numbers 5 and 11. Run the wires across the transformer to the anode pads of CR4 and CR6. (CR6 is part of the -16 volt output while the CR1 mentioned in the manual is for the +8 volt output and is on a different part of the board.)"
- 4) ASSEMBLY INSTRUCTIONS (PAGE 3-20) - Step #17 should read: "Solder the black wire from terminal 7 to CR0 and CR1." (not to wire from terminal 9 and to CR2 and CR3 as mentioned in the manual. The wire from terminal 9 is connected to CR2 and CR3 in the next step #18).

*** A helpful hint would be to just strip the #14 or larger wire 1½" from the end and insert it through CR0 to CR1 soldering both connections. Attach the other end of this wire to terminal 7 of the transformer. Similarly, insert a wire through CR3 to CR2 and solder both connections. Attach the other end of this wire to terminal 9 of the transformer. Be sure to cut off any excess length of wire from CR1 and CR2.

CPA BOARD (rev. 4)

- 1) A modification of the CP-A board is necessary if you plan to use other manufacturers memory boards. It probably is wise to make this modification anyways since it appears on the IMSAI schematic and will not affect any other function. This was recommended by the IMSAI company but was not included in most kits:
- On the front side of the CP-A board cut the trace at pin #3 of U-25.
 - Turn the board over and using gauge #26 or #28 connect a wire from pin #3 to pin #4 of U-25. Also, connect pins #6, #9 and #10 of U-25. Now, connect a single stranded wire (#26 or 28 gauge)

from pin #8 of U-25 to pin #4 of U-24. Finally connect pin #5 of U-25 to pin #2 of U-15.

- 2) After assembling my kit it would not work properly (when I tried to go to a certain address in memory it would fail to do so) for a few moments. The problem appeared to be heat because after the set "warmed up" it would function normally. After a few days of searching in vain the people at the BYTE SHOP called IMSAI and they suggested changing capacitor C8 from a .001 uf to a .01 uf. This cleared up my problem instantly so my suggestion is to make the substitute at the beginning to be sure this does not happen to you after you have everything together. IMSAI is apparently considering making the change on future kits.
- 3) ASSEMBLY INSTRUCTIONS (PAGE 4-18) - In step number 4, the last four LED's mentioned should be "LIE, LHD, LRN, LWT.
- 4) ASSEMBLY INSTRUCTIONS (PAGE 4-18) - Step #8 should read: "Insert and solder each of the nine 1K ohm $\frac{1}{4}$ watt resistors (brown/black/red) R2, R6, R7, R10, R11, R13..." (R5 as mentioned in my manual was installed in step number 6 and is a 47K resistor not a 1K. The schematic is correct.)
- 5) ASSEMBLY INSTRUCTIONS (PAGE 4-19) - The manual has left out the installation of CR1 (a 1N914 diode) between S4 and S3 on the lower right of the CP-A board. Perhaps you might include a step 26a that says: "Install a 1N914 diode at CR1 on the CP-A board."
- 6) ASSEMBLY INSTRUCTIONS (PAGE 4-19) - Step #29 does not mention which side of the cable the red line should be on when installing it at position U2. It really doesn't matter as long as you remember to connect it, with the same orientation, to the MPU board in a future step.

MPU-A BOARD (edition 1):

- 1) ASSEMBLY INSTRUCTIONS (PAGE 5-11) - Step #14 should say to connect the 16 pin IC socket at location A9 not at A10. Also, at the end of the instructions (page 5-13) there is a note mentioning the same error. It should say A9 not A10.

OTHER NOTES ABOUT GENERAL CONSTRUCTION:

- 1) I found that connecting the wires to the motherboard before installation was much more convenient. Just be sure that the wires are cut long enough to reach the power supply board.
- 2) By making the two wires from the power supply to the CP-A board (to the power switch) a little longer, you can install them on the CP-A board before connecting the CP-A board to the chassis and this will eliminate any possibility of burning the acrylic front panel.
- 3) The order in which the manual says to install the components on the chassis is a little backward. I feel that the power supply board should be installed before the 120 VAC line and plug. The power supply board is a little awkward to handle and I had some problem getting it around the strain relief plug. Also, do not install the fan until last or you will find yourself taking it

off many times - to get the powersupply board on and you cannot connect the AC power cable with the fan in place.

- 4) Always use heat-sink grease on all heat-sinks. This helps to dissipate excess heat tremendously.
- 5) Be sure the wires connected to the transformer are securely connected. remember - thats a big solder lug and has to be heated a lot. One special lug is the one with the wire connecting directly to ground(lug 8). It is extremely important that this is secured well.
- 6) One other error in my manual was with the test programs. On page 36, it states that switches 7,6,4,3,1,0 should be in the down position. The opposite is true - they should all be in the up position.
- 7) **NOTE:** Numbers U15.5, U18, U10, U21, U8, and U12 (I. C.^S), need to be soldered into position; So that capacitors are not over-crowding panel. Do Not solder in sockets for these I. C.^S