

S/1 NEWS

My backlog of letters from which I draw information for use in our newsletter is rapidly diminishing! If any of you have interesting data concerning operation, repair, troubleshooting, parts availability, etc., etc., for "brown boxes", please take a couple of minutes to write. What you think trivial might be of considerable help to many of us! Thanks!

I have not received renewals from the following: WB6UIB, WB4RSK, ~~W6UIB~~, W3HII, W5RR, WB6AJR, ~~K8HHP~~, K4LSD, WA6NGM, WA6YLT. These persons will not be sent further issues. The following subscriptions are due this month: W7JST, W6MAV, WA3EQQ, W8HR, W4ZCB, W2AU, W1UD, KØHHP, K8CXT, DK3NG, W2CR, K4BYM, W8VHY, WB6NVX, W6YCK, WA6VGJ, K6DYQ, W6HX

Dick Cunningham, KØHHP, informs me that he is still making available his LED counter boards at \$159. This price includes all components for the 5-volt IC regulator modification. The board is completely tested before shipping. Dick emphasizes that the modifications are straightforward but should only be attempted by persons with some technical knowledge - there are plenty of mistakes that can be made which will do considerable damage to the rig.

Dick will also sell the PC board only (there are actually two boards - the mother board and the small board for mounting the readouts). Cost is \$15 and includes complete schematic but no step-by-step information. (You're on your own with this one). The boards are, of course, predrilled.

Dick is also working on a modification that will shut the rig down on high SWR. This will be a handy addition for those of us who cannot remember to connect the correct antenna for the correct band! More on this in a later issue of S/1 NEWS. Dick's address is 1477 N. 96th Ave., Omaha, Neb., 68114

Single issues of Volume I of S/1 NEWS are no longer available. However, the entire VOLUME I (Numbers 1 through 12) set is available at a cost of \$5.00 postpaid.

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CX-11 INFO: I spoke with the President of the Signal One Company, Don Roehrs, and got an update on the status of the CX-11. Don informs me that they are presently working on the backlog of orders received over the past two years (this is about 300 units). Orders for new units are being taken at a cost of \$4,000 with an estimated delivery of at least 6 months. Don will be sending me additional technical literature which I will include in a future issue of S/1 NEWS.

Received an interesting letter from Mike, W6QJV, concerning the 8072 used as the final in the CX7's. In conversations with the factory Mike learned that the heater structure of the 8072 was such that when energized a certain degree of torsion or twist occurred. The normal position was never regained when turned off. Each time the tube is energized, the twist would occur even more and eventually the damage is so severe that an internal short results! Mike suggests using a 4CX350 as a replacement which is similar to the 8072 but with socket and fin differences. Mike installed the 4CX350 in the following manner: Remove the rear heat sink and install the 4CX350 horizontally with the socket through the rear chassis. Mount a small blower to suck air through plate fins and socket. According to Mike, this tube will last forever and deliver more RF on all bands!!

Mike also indicates that a black, grounded 4 x 4" sheet of aluminum between the transformer and the final cage is a MUST. The transformer will run much cooler. He also reminds us (See the TROUBLE GUIDE) to keep tune ups short and to keep the rig "on" all the time.

Thanks to Paul, W8CXS, and Joe, W1NXY, we have a up to date schematic of the CX7B power supply board. (Attached to this issue in two pages) If anyone notes any errors in the schematic please let me know .. ed. Several features should be noted according to Paul: The varistors across the power transformer are GE V130LA10A but stores may have the earlier type VP130A10 which are equally good. The "B" board uses two varistors due to the split primary for 240 but the GE info sheet says parallel operation (as the CX7 on 120) has no advantage because the lowest breakdown voltage one will absorb the total transient spike. Terminals 164 and 165 on any model board are adjacent and the varistor, which looks like a red colored .01 disc fits nicely. It is supposed to absorb the transient when turning on or off which is caused by sudden magnetic flux changes.

The three diode network, CR21, CR22, CR23, R2 work very well with the audio board transistor change as noted in S/1 NEWS, Number 10, Volume I. However, the forward voltage drop of 1N4001 diodes seems to be quite variable and out of 12 for \$1 package, only one set of three worked almost perfectly in maintaining the T/R and R/T voltages at 0 and -15 volts. By the way, these three diodes fit nicely into the spot vacated by the -15 volt adjust pot when making the change to IC regulators.

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With the 3 IC regulators the rear of the chassis gets plenty hot. Paul installed three 4 $\frac{1}{4}$ -inch long aluminum pieces as heat sinks. These were cut from a sliding door rail and have 3 fins that are $\frac{1}{2}$ " high. They were stained with aluminum black and self tapped in place after coating with heat sink compound.

Paul has promised a step-by-step power supply board conversion in the near future!

Re: W8JUY. Be careful that you are tuning up into the correct antenna! Trying to load his 20-meter beam with the rig switched to 80-meter (broadband) cost him a blown broadband network capacitor. Take your time! (See the TROUBLE GUIDE)

WA1EOT advises that 8072'2 are available from A.W. Mayer, Newton, Mass. for those in the area. Price is \$35.00 and they are normally stocked.

I have "recruited" some local help to assist me with S/1 NEWS. Hopefully, I can send out longer and more informative newsletters in the future. Please take time to write me with any information you may have concerning operating experience, antennas, repair and trouble shooting information, modifications of ANY kind, parts information, unsolved problems, or requests for special parts for the CX7. If you desire an individual reply for some question, please send me a SASE (those 13¢ really add up!)

vy 73 Bob WØYVA/4

INFORMATION WANTED AND FOR SALE

Anyone have a cure for the RF spike emitted when first keying into the "TRANSMIT" position.

FOR SALE. CX7A, Serial 100234424 (California). Unmodified and in good operating and mechanical/physical condition. \$995 including UPS in the 48 states. Contact Dave Jaksa, WAØVDX, 775 Alpine Road, Marion, Iowa, 52302. Call evenings at 319 377 7507.

WANTED. 5-inch television monitors (solid-state only, please). Bob, WØYVA/4, POB 6216, Arl., Va., 22206

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- 3. ALL COMPONENTS SHOWN EXTERNAL TO BOARD ARE FOR REF. ONLY
- 2. ALL UNMARKED RESISTORS ARE 1/4 WATT
- 1. UNLESS OTHERWISE SPECIFIED, ALL DECIMAL VALUE CAPACITORS ARE IN MFD.

NOTES:

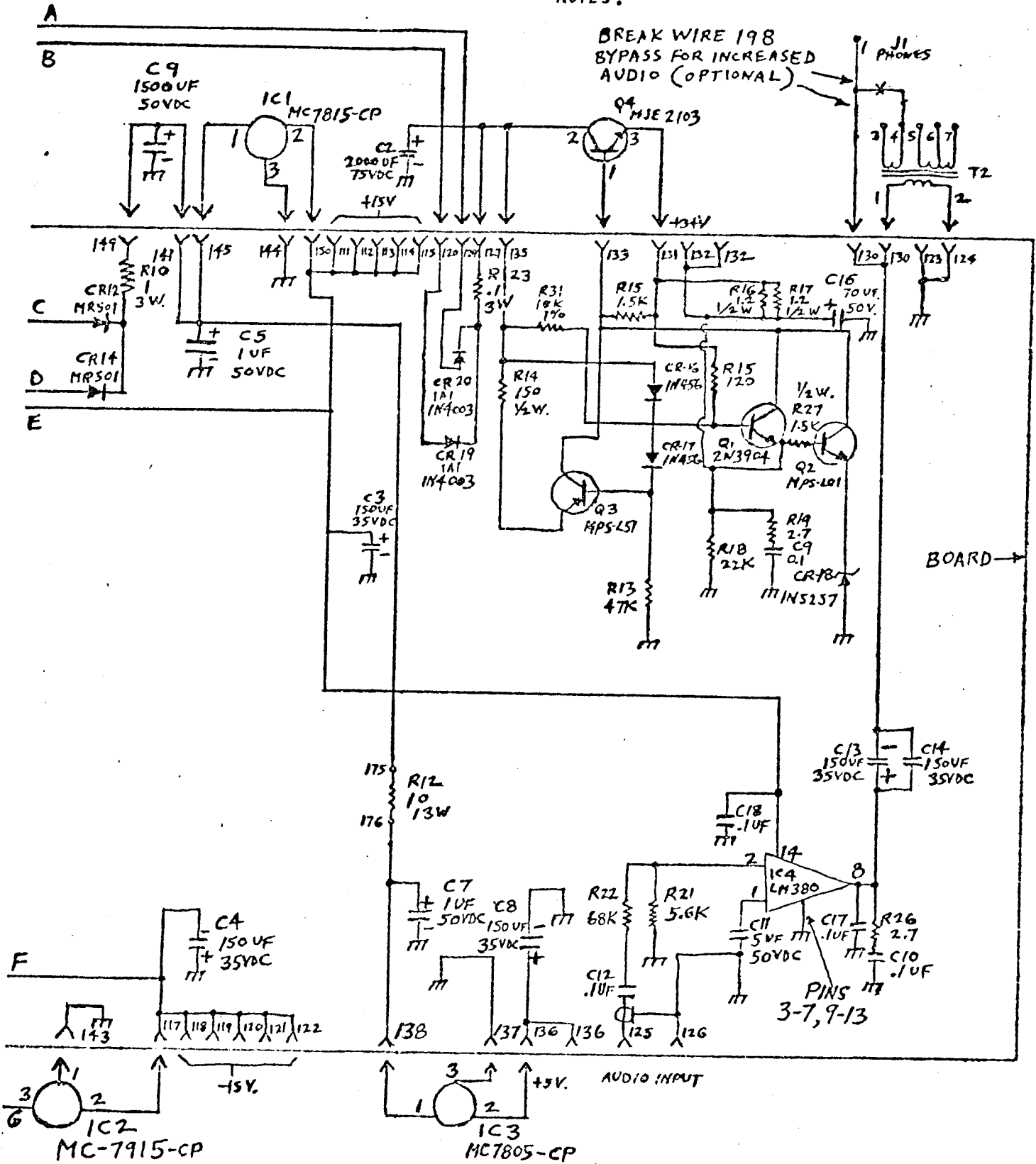


FIGURE 6-4 Power Supply Board A3 Schematic Diagram

[CX7-B]

6-25/6-26

