

VOL. II
NO'S 1-6
ORIGINALS

S/1 NEWS

Note the "VOLUME II" in the upper right-hand corner. We have made it to our second year! It appears that S/1 NEWS is providing a service - I have received many letters of thanks which I appreciate very much. I will attempt to publish issues on time.

Single issues are no longer available. This takes too much time and is expensive. I will make available issues 7 through 12 as a package to those who are interested. Cost is \$3.00 post paid. (I'm sorry but this price is a bit higher than advertised earlier)

I received a little feedback from W8CXS who found a couple of errors in previous issues. From W8CXS:

1. VOLUME I, NUMBER 12: Page 4, item 4. In the hint by K2SIL - the diode is shown reversed. The ANODE goes to A/TO switch, S2B, pin 12, and the CATHODE to the SPOT switch, S2E, pin 17. (W8CXS used a 1N456 which has a little higher current rating - he said the fix works FB)

2. VOLUME I, NUMBER 11: More information on his keyer modification: The ceramic disc capacitor should be closer to .003 in most cases. A value that actually measures between .003 and .004 on a tester is better for the average CX7. Some experimentation may be required to get the right size.

Talk about good and bad experiences with the same rig...

Lee, W3RHO writes "My CX7 .. was purchased from Florida .. and shortly thereafter modified to a CX7A .. the process of repairs and modifications took .. 9 months. .. ownership of this unit has been a true adventure in science .. It is indeed fortunate that I have other units that enable me to stay on the air while the Signal/One is down for repairs most of the time."

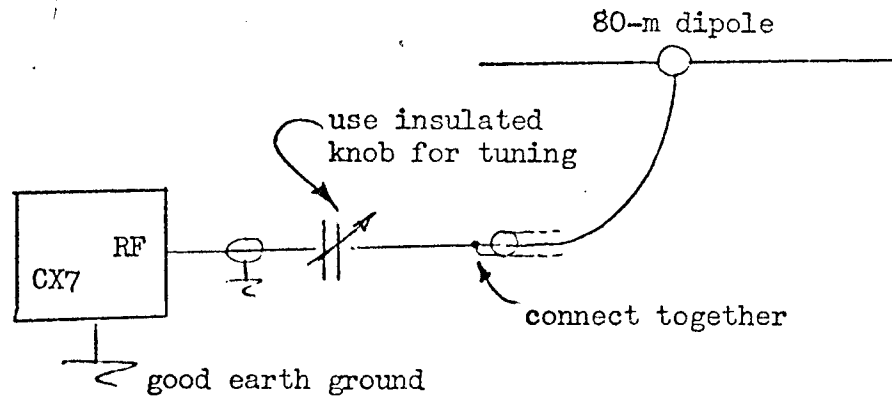
But Harry, W7IV, writes "My S/1 is a very early one .. I have had no actual failures for at least four years. Some of the troubles you describe I have never had. My keying characteristic is perfect .. My power supplies are of the original design but no failure since 1970 .. there is nothing else I would rather have in my shack; it is a joy to operate."

...so there.

Jan, W3SWN, writes with a neat idea for getting on 160 using a 80-meter dipole. Here is how he does it;

1. Tie feeders to dipole together
2. Connect feeders to a 3-gang BC variable - all sections in parallel
3. Connect CX7 coax center output to other side of variable
4. Ensure a GOOD ground to CX7
5. Set the BC capacitor to $\frac{1}{2}$ -capacity
6. Tune CX7 is MANUAL to get indication on FWD PWR
7. Retune the BC variable for min REV PWR
8. Recheck tuning in FWD

Jan reports that he can cover 1800-1850 with one setting of the BC capacitor with zero reverse power and can cover 1970-2000 by simply moving the capacitor 10-15° for zero reverse power. (Do your tuning at as low a power as possible and do it quickly!...ed).



AN INDEX FOR VOLUME I ISSUES IS ATTACHED
AS THE LAST TWO PAGES OF THIS ISSUE

DK3NG advises that the CX7B power supply from Payne Radio does NOT include a schematic! He attempted to hook up the new board without pin identification using Signal/One's conversion directions and promptly "tuned for maximum smoke". He advises that there are additional pins on the new board and they will throw you off!

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JAN - 76

DJ4BZ writes that he connected to J19 (spare on rear panel) with a 10pf capacitor to the A5 board (driver), point 269 for use with a 28-30 Mhz 2 meter transverter. He also uses a small DPDT switch mounted in the small hole next to the sidetone pot to switch filament and relay K1 to save the 8072 during 2-meter work.

Rudi also utilizes a phase locked local oscillator (QST, Jan 1972) connected to the A2 board, point 71. This makes the CX7 a beautiful general coverage receiver. The PLL provides an output from 42 to 72 Mhz in one Mhz steps with the sidebands 55db down by merely rotating a 2-section variable capacitor for bandhopping. Sounds neat.

Rudi also reminds us that there is +300 volts on that counter board as well as a mess of +5 volt IC's! Be careful where you put your screwdriver when troubleshooting!!!

Does anyone use a 8072W in the final?

Has anyone had this problem: After installing the CX7B power supply board from N.J., the unit remains in transmit after initial turn on and can only be put into the receive mode after a quick switch to OFF and than back on. After that, all is okay.

Sorry but for those of you who have asked, I am not going to make available the modification package for the new audio IC. There was not enough interest to make any quantity buys.

WBØLGY reminds us that (as suggested by Larry Pace a long time ago) it is a good idea to leave the CX7 turned on. This will probably result in less failures over the long run. (If you do this, make sure you have adequate antenna lightning protection (ground the coax) and adequate AC line protection for both lightning and current. GE makes a home lightning protector that is connected at the distribution box across each side of the line and ground - it is identified as GE #9L15DCB002 and lists for \$14.95 but is usually available through electrical supply houses for around \$10.00 .. editor)

The following are due for subscription renewals (\$4.50):

WA6JPL, WB6AJR, W2PF, W8JQ, K8KEC, W2RID/4,
W4BCV, K3NPV, K4LSD, W6OAU, W2DIE, KH6RS,
K6SVT, WBØESO, W1GUW, K4NX, K6GA.

... and those guys from last month who forgot!!

FOR SALE

CX7, Serial 264 with CX7B power supply board and MPSU05's for Q16 &17 in Audio Board. Owner is KV4CK. Contact W1NXY if interested.

POWER TRANSFORMERS. Don Payne (Payne Radio) has 4 new units at \$110 each and guaranteed.

- NO. 1. CX7 parts - Payne Radio
Power Supply boards
Checking MOSFETS in circuit
Modification for using preselector
Modification to improve AGC action
Adjusting R46 (8.8Mhz) without frequency counter
- NO. 2. Front-panel pushbutton engraving
LED readout boards - availability
40673 substitute
Installing Johnson power supply "B" board
Correction to checking MOSFETS (NO. 1)
Modification for increased audio output
- NO. 3. Serial number information
LED counter boards from KØHHP
Adjusting R46 (8.8Mhz) with a BC221
CX-11 information from Franklin Lakes
Repairing PTO backlash
- NO. 4. Receiver incremental tuning without modifications
Eliminating frequency shift when switching from VFO A to B
KØHHP power supply modifications (step-by-step)
AGC modification
Transmit mode lockup repair hint
Push-buttons from Don Payne
B5750 nixie source
Power supply notes
- NO. 5. Net information
Replacement power transformers from Johnson
Another nixie tube source
KØHHP power supply schematic
Repair service information - Larry Pace
Adjusting R46 (8.8Mhz) with no equipment
Caution note on Johnson power supply board
Modification to add sidetone PITCH (CW) control
- NO. 6. Substitute transistor information
Using ALC with A77 linears
8072 socket modification
Receiver intermittent repair hint

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 Modification to protect 8072
 RTTY modifications by W4FQM/1
 Another hint on repairing PTO backlash
 Motorola IC error correction
 Modification to prevent reed relay sticking
 Modification to prevent AGC pumping action
 Installation of MFJ audio filter

- NO. 8. Corrections for transistor substitute listings
 Modification to utilize LM380 audio IC
 Technical Manual corrections
 Zener diode change for CX7A power supply board
 Modification to use AGC with A77 linears
 A77 modifications - general

- NO. 9. Installing MFJ audio (CW) filter
 CX7A modifications by W8CXS
 Curing instability in the 4.3.1Mhz oscillator

- NO. 10. Correction to modification concerning .01uf to replace driver
 CX-11 information via Reston
 RTTY modifications
 Information concerning spurious emissions by W2GRU
 Instructions for installation of CX7B power supply board

- NO. 11. Repairs by K6BE
 AUTEK research audio filter information
 PA237 replacement
 Reed relay information
 Capacitor replacement to prevent RF driver board damage
 Keyer modification by W8CXS
 Schematic of CX7B power supply board

- NO. 12. More info on capacitor replacement to prevent RD driver board damage
 Modification to eliminate images when in A/TO mode
 More backlash information
