Power Supply Checkout. The power supply voltages must be checked out before the ICs are installed. A DC voltmeter is required.

1. Plug the power adapter plug into the power jack on rear panel. With the power switch "off" plug the adapter into a 120 VAC source.

- 2. Turn on the power switch and measure the +5 VDC source with respect to ground. (A +5 VDC source can be found on the LED + wire.) It should measure in the range of +4.75 to 5.25 volts. If there is no voltage or it is incorrect, remove the adapter and try to find the source of the problem. DO NOT PROCEED until the +5 VDC source is operating properly as serious damage could occur to the ICs.
- 3. The other voltages on the board will be higher than normal because there is no load. Typical values are: +8 VDC \approx 15 to 18 VDC; +12 VDC \approx 16 to 20 VDC. These voltages will drop when the ICs are installed.

IC Installation. Carefully check the orientation of the ICs when installing.

1. Install the 4 ICs on the display board.

2. Install IC2 and IC3 on the main board.

3. Carefully install the custom 40 pin microcomputer IC. Make sure it is oriented properly with no bent under pins. This IC is NOT covered by warranty as it can be damaged by incorrect voltages or mishandling. It is 100% tested and burned-in at the factory.

Final Checkout. Carefully check over everything done thus far for possible loose connections or poor solder joints. If everything looks okay, proceed.

1. Plug in the power adapter and turn on the power switch. After 1 or 2 seconds the display should come on and indicate the mode selected.

2. Rotate the mode switch. Each of the modes should be displayed. The display will flicker when in the RTTY modes. This is normal and is due to the microcomputer scanning the input.

3. Connect a telegraph key to the KEY jack. When keyed, a tone should be heard in the speaker. Adjust R53 for maximum sound and maximum brightness on the TUNE LED. At this point you should be able to test your "fist" by sending Morse code to CODE*STAR via the key.

4. Adjust the VOLUME trimmer for your preference.

5. To complete your CODE*STAR, attach the top cover with the screws provided.