

COMPLETE INFORMATION

ON O2A CHIP

1. SSB O2A = AS FOUND IN MANY SSB RADIOS

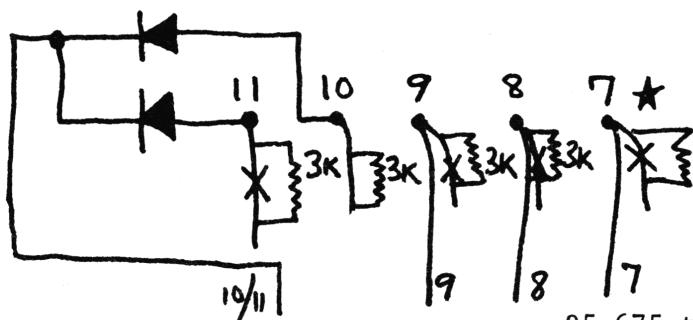
Modulation - Remove C-175

AM Watts - turn VR-4 counter clockwise

SSB watts - adjust RV2

Slider - cut D4, D5. Move center wire from clarifier pot from anode side of D4 to cathode of D4. Run a wire from empty side of clarifier pot to 9v source (R9 is in the front of unit, and has a regulated 9v).

Frequency modification - Range 25.675 to 28.235



X DENOTES CUT FOIL

★ MUST CUT FOIL ON BOTH SIDES OF THIS PIN

0 = GROUND

1 = 5VOLTS

25.675 to 26.165 -	1 to pin 7 0 to Pin 8
26.325 to 26.765 -	1 to Pin 7 0 to Pin 8 0 to Pin 9
26.805 to 26.955 -	1 to Pin 7 0 to Pin 8 0 to Pin 10/11 0 to Pin 9

X = Cut Foil

* = Must Cut Foil on Both Sides of This Pin

0 = Ground

1 = 5v

2. 27.445 to 27.595 -	0 Pin 7 1 Pin 8 0 Pin 10/11
27.605 to 28.045 -	0 Pin 7 1 Pin 8 0 Pin 9
28.065 to 28.235 -	0 Pin 7 1 Pin 8 0 Pin 9 0 Pin 10/11

NOTE: With Pin 7 high and Pin 8 low, unit is in down frequency range (below one) when 7 is low and 8 is high, unit is in up frequency range (above 40).

Cut foil between pins *7,8,9,10 and 11. Add 3k resistors across breaks in foil. Place one diode (in34/in60) anode side to pin 10 and one to pin 11. Join the cathode sides together.

The cybernet units that utilize the O2A chip will not spread over the entire frequency range without broad banding. These units will spread an average of

1500kc. I have tried many experiments in broadbanding, and have only found one way, which is very costly and requires extensive modifications and additions to the unit. I will enclose this modification on a separate paper.
*Pin 7 is connected to ground on both sides of the pin. The foil must be cut on both sides.

3. Broadbanding cybernet 02A units.

This modification should not be attempted unless you are willing to spend a lot of time and money (\$25.00).

1. Remove VCO Block from unit.
2. Mount original VCO Block and second VCO * Block on a small piece of perf-board.
3. Mount a 12 volt relay in a convenient location and wire so the relay will switch the VCO blocks back and forth.
4. At 27.595 tune one VCO for highest wattage. Check the unit at 28.235 and at 26.965 to assure, it is transmitting on frequency.
5. At 26.325 tune the 2nd VCO block for watts. Check unit again at 26.955 and 25.675.
6. Realign transmit section of unit at 26.955.

* AVAILABILITY OF VCO* BLOCK MAY BE DIFFICULT TO FIND.

