

ROBIN SB-505
MOBILE SIDEBAND

26.965 MHZ to 27.925 MHZ

Additional 40 channels using II.2858 MHZ crystal

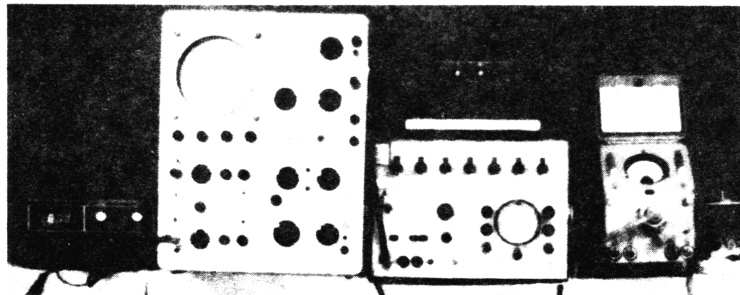
- 1-Use dimmer switch as crystal change switch.
- 2-Remove the orange wire and the black wire from the dimmer switch and solder them together and tape.
- 3-Remove the 100ohm $\frac{1}{2}$ watt resistor R421.
- 4-Remove the 680 ohm resistor R420.
- 5-Remove the gray wire in front of R420. This wire may be cut out as it will not be used. These parts are all located on the dimmer switch.
- 6-Remove the II.II25 MHZ crystal in back of the channel switch.
- 7-Solder a short heavy bare wire in the crystal lead hole next to CT3. This lead must come through the board far enough to solder one lead of the II.II25 MHZ crystal and one lead of the II.2858 MHZ crystal to this wire. Keep this lead as short as possible to prevent unstable operation.
- 8-Solder one end of a $2\frac{1}{2}$ inch piece of hook up wire in the other crystal lead hole. The other end is soldered to the center lug of the dimmer switch.
- 9-Solder one end of a $2\frac{1}{2}$ inch piece of hook up wire to the unused crystal pin on the II.II25 crystal. The other end is soldered to the rear lug of the dimmer switch.
- 10-Solder one end of a $2\frac{1}{2}$ inch piece of hook up wire to the unused crystal pin on the II.2858 MHZ crystal. The other end is soldered to the front lug on the dimmer switch.

CLARIFIER RANGE

- 1-Open microphone and short out the 3.3 K resistor. This will increase the range of your clarifier.

CLARIFIER ON TRANSMIT

- 1-Remove DI36. (Located by the channel switch).
- 2-Open the microphone and remove the black wire going from the push to talk switch to the upper side of the clarifier control.
- 3-Solder a 2.2K resistor from the supply line for pin 9 on MB8719 IC to pin 6 of the microphone socket.
- 4-The 3.3K resistor in the microphone must be shorted for this to work.



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THE FOLLOWING ALIGNMENT MAY BE NEEDED:

- 1-Channel 40 standard A-M receive mode clarifier in center of range. Correct probe of RF VTVM or oscilloscope to test point TP-10 and adjust L-18 for maximum out put.
- 2-Same mode as step one except DC VTVM probe to TP-9. Adjust L-13 to obtain 3.5 to 3.7 volts on VTVM.
- 3-Channel 40 USB receive mode R-F VTVM probe to TP-I. Adjust L-I4 for maximum out put.
- 4-Channel 40 USB receive mode frequency counter to TP-I. Adjust CT3 to 35.2075 MHZ.
- 5-Channel 40 A-M receive mode frequency counter to TP-I. Adjust L20 to 35.2050.
- 6-Channel 40 LSB receive mode frequency counter to TP-I. Adjust LI9 to 35.2025 MHZ.
- 7-Channel 40 LSB transmit mode frequency counter to TP-I. Adjust VR3 to 35.2025 MHZ.
- 8-Channel 40 USB receive mode frequency counter to TP-3. Adjust CTI to 7.8025.
- 9-Channel 40 LSB receive mode frequency counter to TP-3. Adjust CT2 to 7.7975.
- 10-Channel 40 A-M transmit mode frequency counter to TP-3. Adjust LI7 to 7.8000MHZ.

If the 11.2858 MHZ crystal is high in frequency it may be lowered by soldering a 2 to 5PF capacitor in parallel with the crystal. Keep lead wires short.

Use 50ohm dummy load during transmitter adjustments. To balance transmitter out put adjust L36 on highest, then lowest channel for same wattage out. To balance receiver adjust L10 for maximum S meter reading and L9 and L8 alternately on highest and lowest channels.

