

## **Unit Evaluation**

AX-144. They were using the instructions as printed for the Cobra 146GTL. They were having problems finding the points to cut and cross-jumper. The printed circuits for these units are not identical. The best way to find these points on any circuit is to locate the input PC run to L-22 and L-23 (470uh coils). Cut and cross-jumper these runs so that the change only effects these components. The only other exception is that you can include the two switching diodes D-37 and D-38.

### **Modifying The UNIC-RV-CB45 For High Channels**

#### **Using The "A" Kit**

For mounting the two switches of the "A" kit we suggest you use the side next to the channel selector.

1. On the bottom cover, locate and mark a point 1/4" up (toward the lip) from the rear mike holder hole. Mark another point 1/2" to the rear and inline with this point.
2. Punch or drill 1/4" holes at these two points.
3. Replace the cover and mark the center of these two holes on the chassis. Punch or drill these two points.
4. Make up the two switches as indicated on the packing card.
5. Mount these two switches with the spdt most forward.

matching points according to "A" kit insert

*NOTE; To open the circuit between "B" and "B" prime (b') isolate pin 20 of the PLL chip by cutting that PC pad.*

*To open the circuit between "C" and "C" prime (c') leave the leg of C-41 raised that is not attached to pin 4 of the vco/mixer, as you are changing it.*

### **Modifying The UNIC-RV-CB45 For Low Channels Using The "B" Kit**

For mounting the switch and epoxy pack (ep) of the "B" kit we suggest you use the side next to the channel selector and that they be mounted vertically.

1. On the bottom cover, starting with the rear most mike holder mounting hole, measure 1/4" toward the lip and then 1/2" to the rear. Mark this point.
2. Mark another point on the top cover vertically in line with this point and also in line with the cover mounting screw holes front to rear.

3. Remove the covers and punch or drill these marked points to 1/4". Also punch or drill matching holes in the chassis.
4. Make up the SPDT switch as indicated on the packing card.
5. Mount the switch and ep with the switch next to the PC board. Matching points according to "B" kit insert follow instructions or installation printed on the "B" kit card

*Note: Step two part 3. . . PLL vdd is pin 18.*

### **Modifying The UNIC-RV-CB45 For High And Low Channels**

Using the "A" and "B" kits.

For mounting the DPDT switch for the "A" kit and the ep of the "B" kit we suggest that you use the same locationing and punch or drilling outlined for the "B" kit. For mounting the 5k offset SPST switch we suggest that you use the opposite side of the chassis. To find this point you will notice that there is a 1/4" and 1/8" hole in the chassis vertically located. Punch out the 1/8" hole to 1/4". Punch the top cover to coincide with this point, then "v" it out to the lip. This allows the cover to slide down over the switch.

1. Mount the two switches on the "A" kit and wire them according to instructions except the wire marked b.
2. Connect the brown wire of the "B" kit to "B" on the DPDT switch of the "A" kit and mount the "B" kit ep.
3. Follow the instructions for wiring the "B" kit (orange lead goes to pin20 of the PLL).

### **Circuit Of The Month**

It was my intent to continue this discussion from the point in the receiver that I concluded last month, in fact I already had my notes ready when other things of more importance were brought to my attention. I feel that you will be better served if we discuss them now rather than 6 or 8 months from now. They are alignment procedures for the Cobra 21,25, and 29 Plus units, and the AMC (automatic modulation control) circuit for the same units. As long as you have an "s" meter, there are two ways of measuring or indicating the receive signal, enabling you to make fine, incremental adjustment in the tuning of the receiver's tanks.