# UP-DATES ON "LTD" KITS BY CARD-KIT

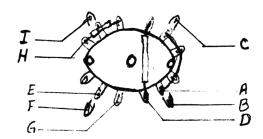
There have been improvements on the LTD Kit that allows for better and quicker installations.

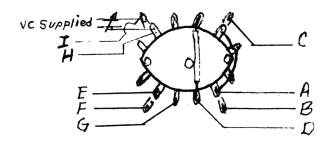
There are now two yellow dots on the epoxy packs. One will be curled and one will be straight. The curled one is capacitive coupled, as was the original, to be used with external amplification. The straight one is to be used when the output is used direct to mixer.

We found that with slight design changes we could feed the regulated 9.1 volt source to the Epoxy Pack and generate a signal of sufficent amplitude. This does eliminate the need for further amplification.

Wiring a 4 Pole 3 Position switch for 1/2 channels.

Wiring a 4 Pole 3 Position switch for full channels.





# COBRA 21, 25 GTL & LTD AND OTHER SISTER UNITS

# MOUNTING SWITCH

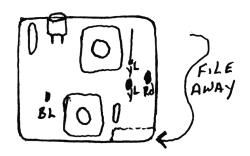
- 1. Punch or drill a 3/8" hole in bottom cover, in line with and 3/4" to the rear of the upper most mike hole on the right side of the unit.
- 2. Put the cover back in position and mark the center of this hole on the chassis.
- With cover off mark two more places
   13/32" on both sides of this point.
- 4. Punch or drill a 3/8" hole in the center and 1/8" holes on each side. Mount switch.

# ide。 Mount switch. MOUNTING EPOXY PACK

1. With the lower right bevel of the Epoxy Pack filed away, (Do not file closer than 1/8" of adjacent capacitor) and using hot glue, plastic adhesive, or adhesive sealant mount the Epoxy Pack between the bracket mounting hole and L-18.

#### UPDATE FROM LTD KITS CONTINUED

DO NOT BLOCK THE MOUNTING HOLE OR THE ADJUSTMENT HOLE OF L-18.



### PRELIMINARY STEPS

- 1. Remove JP-14.
- 2. Cut the PC run on the output of L-16 between where JP-14 was removed and the large hole (TP-3).
- 3. Remove R-58 turn it around and solder body where the leg was, leaving the leg raised.
- 4. Run a ground to one of the tank covers on the Epoxy Pack.

NOTE: If full channels are to be used, do these steps also:

- 1. Cut the PC run between the 10.24 Mhz. Xtal and C-111 (If VC-1 is not used change C-111 to approximately 33 pf. If VC-1 is used remove C-111).
- 2. Run a jumper from the cathode of D-14 to the red dot on the Epoxy Pack.

# CONNECTING 4 POLE 3 POSITION SWITCH FOR HALF CHANNELS

- A. To output of L-16 (Right end of JP-14) via blue dot on the Epoxy Pack.
- B. To TP-3.
- C. To input of TA-7310P chip (Left end of JP-14).
- D. To straight yellow post of Epoxy Pack.
- E. To PTT signal where R-58 was lifted from.
- F. To lifted end of R-58.
- G. To pin 1 of PLL chip.
- H. To cathode of D-14.
- I. To the red dot on the Epoxy Pack.

# CONNECTING 4 POLE 3 POSITION SWITCH FOR FULL CHANNELS

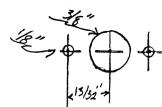
Same as above except H & I.

- H. To PC side of board leg of VC-1 that is tied to 10.24 Mhz. Xtal.
- I. To the PC side of board to leg of 10.24 Mhz. Xtal that is tied to VC-1.

# COBRA 21, 25 & 29 PLUS AND OTHER SISTER UNITS

### MOUNTING SWITCH

- 1. Punch or drill a 3/8" hole in bottom cover, in line with and 1" to the rear of the front cover screw hole on the right side of unit. NOTE: On the 29 Plus units C-38 will have to be relocated. Extend the legs and glue it on top of the PLL chip.
- 2. Put the cover back in postion and mark the center of this hole on the chassis.
- With the cover off, mark two more places 13/32" on both sides of this point.
- 4. Punch or drill a 3/8" hole in the center and 1/8" holes on each side. Mount switch.



#### MOUNTING EXPOXY PACK

1. Mount the epoxy pack just to the rear of the bracket mounting holes. Use hot glue, plastic adhesive or adhesive sealant.

#### PRELIMINARY STEPS

- To have excess to the PC side of board, drill a 1/8" hole (for a 21 or 25 Plus drill on the right side of L-4 close and dead center and for the 29 Plus drill to the rear and slightly left of the 10.7 crystal filter).
- 2. Cut the PC run at the output of L-9.
- 3. Cut this same run again just past the first connection on this run.
- 4. Lift the cathode end of D-15.
- 5. Ground one of the cases of the tanks on the Epoxy Pack.

NOTE: If full channels are to be used, do these additional steps.

- 1. Change C-49 (47pf) to a 33pf capacitor leaving the leg normally connected to the 10.24 Mhz. Xtal raised.
- 2. Run a jumper from the leg of R-69 (82 ohm) to the red dot terminal on the Epoxy Pack.

# UPDATE FROM LTD KITS CONTINUED

# CONNECTING 4 POLE 3 POSITION SWITCH FOR HALF CHANNELS

- A. To the output leg of L-9, via blue dot on Epoxy Pack.
- B. To TP-2 (bare leg of R-16).
- C. To the point between the two cuts made just off L-9.
- D. To the straight yellow leg on the Epoxy Pack.
- E. To the PTT signal where D-15 was raised from.
- F. To the raised leg of D-15.
- G. To ground.
- H. To the leg of R-69 (82 ohm resistor near D-16).
- I. To the red dot on the Epoxy Pack.

# CONNECTING 4 POLE 3 POSITION SWITCH FOR FULL CHANNELS

Same as above except for H & I.

- H. To the raised leg of C-49.
- I. To the point the leg of C-49 was raised from.