

COBRA 148GTL-DX EXPORT MODEL

If you were lucky enough to pick-up one of these overseas, there are still a few things that can be added. The DX is a unique radio - frequency coverage 26.515-27855 on three ranges, a Roger BEEP that signals on end of transmission, FM and CW modes. Also, unit sports a dual RIT clarifier, and all the other normal deluxe features, like RF gain, MIC gain, etc..

One of the first things you will want to do is to make the ROGER BEEP switchable. A separate on/off switch could be installed but we choose to use the Ch.9 switch instead. Here is how:

1. Remove the top and botton covers.
2. Locate the Ch. 9 switch and eyeball the PINK, WHITE, and YELLOW wires.
3. Unsolder the PINK and WHITE wire from the Ch. 9 switch.
4. Unsolder the other end of the PINK wire which goes to the channel selector sub board. Remember which pad it was connected to.
5. Resolder the WHITE wire to where the PINK wire was in (4).
6. Unsolder both ends of the YELLOW wire and remove completely.

NOTE: An alternate version using the Tone hi-lo Switch can be used. To do so, omit steps 2-6 above and follow steps 7 & 8.

7. Locate the Tone Hi-Lo Switch and eyeball the GRAY & ORANGE wire.
8. If you want premanent Hi tone, just unsolder the wires from the switch and PCB and remove completely.

If you want permanent Low tone, solder the GRAY & ORANGE wires together and insulate with heat shrinkable tubing.

We will now proceed to hook up the ROGER BEEP switch using the Ch. 9 or Tone Switch as you decided.

9. Locate the ORANGE wire behind the meter (on component side of board) labeled PEEP. Unsolder this end & clean out hole.
10. Resolder this ORANGE wire to the center terminal on the Ch. 9 or tone switch, depending on which one you decided to use.
11. Solder a new wire into the hole marked PEEP (where the ORANGE wire was removed - step 9.)
12. Solder the other end of the wire in (11) to the top terminal on the switch.

This completes the Roger BEEP switch modification.

COBRA 148GTL-DX Continued:

HOW TO DISABLE THE NB/ANL SWITCH:

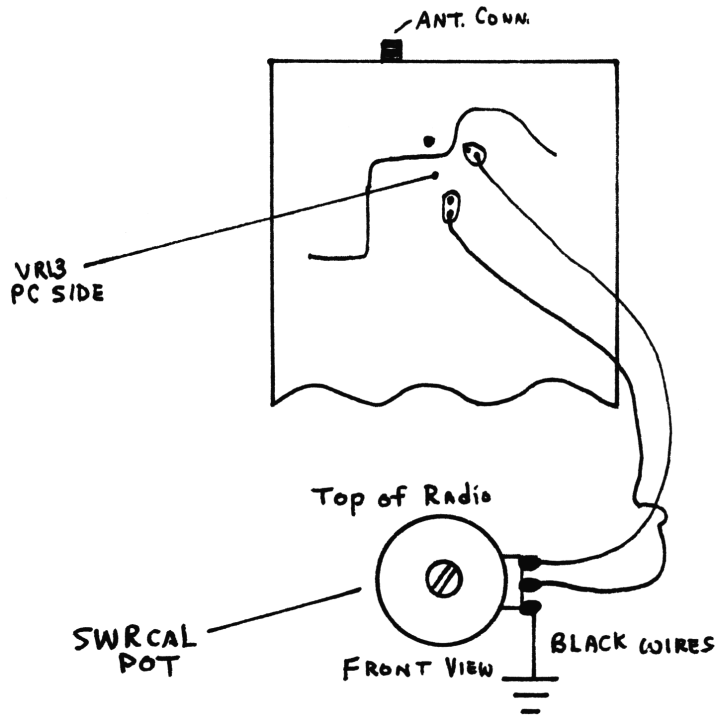
If you want to add extra channels, you may want to use this switch. So here is how to keep the NB/ANL working all the time.

1. Remove BLUE and PINK wires from the switch and solder together, insulate with heatshrink.
2. Remove the VIOLET and YELLOW wires completely.

HOW TO ADD A VARIABLE POWER POT:

This modification will allow front panel RF power control between 0-11 watts AM using the SWR CAL pot.

1. Remove the GRAY and VIOLET wires completely.
2. Locate the AM power pot (VR13) near the rear of the chassis next to the large electrolytic capacitor C228 (component side.)
3. Turn radio over and locate the three points of VR13 on the foil side.
4. Hook up 2 wires as shown:



ADJUSTMENT:

Hook up the unit and adjust both pots to obtain maximum power. Back off on VR13 until power just starts to fall and leave at that peak, (approx 10W). This makes the front pot less sensitive. We have found that an outboard amp will sound best with
Continued on next page.

COBRA 148GTL-DX Continued:

ADJUSTMENT continued:

3W driving around 7. Use the built in RF meter as a reference any time you need to go up or down with power.

ADDING FREQUENCIES:

Apply 8V to pin 10 (IC5) for channels 27.795-28.235 on low.

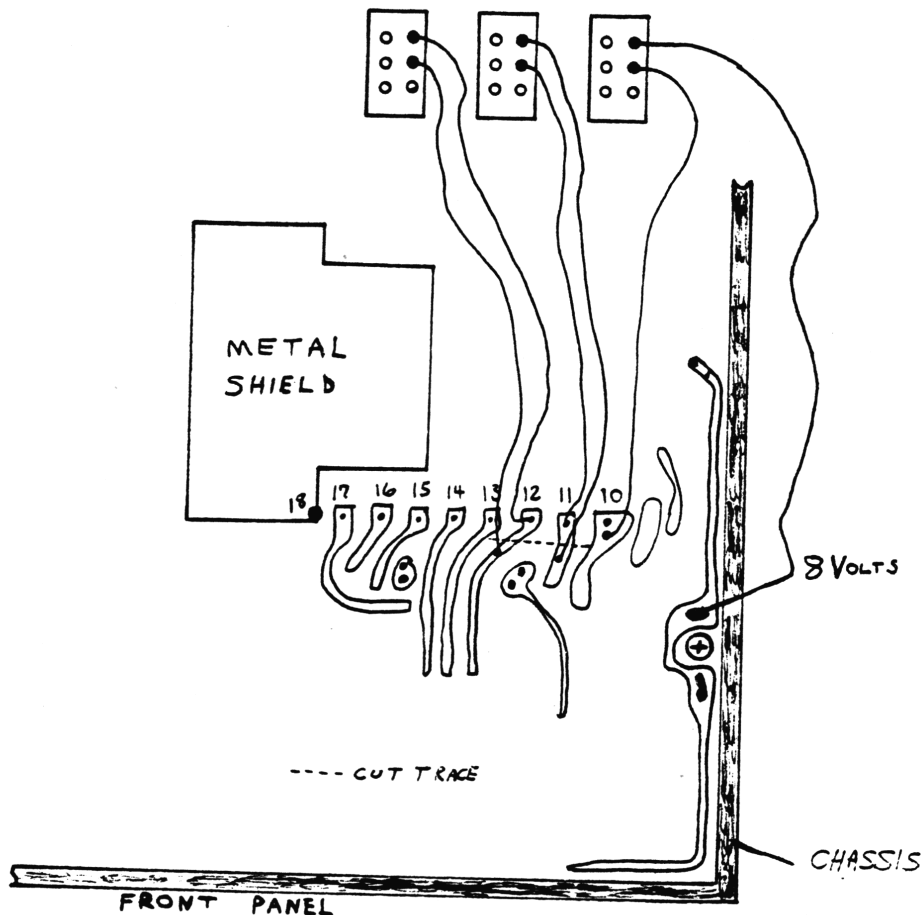
Open pin 11 (IC5) for 25.875-26.315.

→ Open pin 12 (IC5) for 26.335 (ch 12) to 26.635.

Tweak L18 VCO for full frequency coverage.

See diagram below:

- A. Cut trace 12. Solder switch across cut.
- B. Cut trace 11. Solder switch across cut.
- C. Run a wire from center terminal to pin 10.
Run a wire from top terminal to 8 volt source.



COBRA 148GTL-DX Continued:

ADJUSTMENTS:

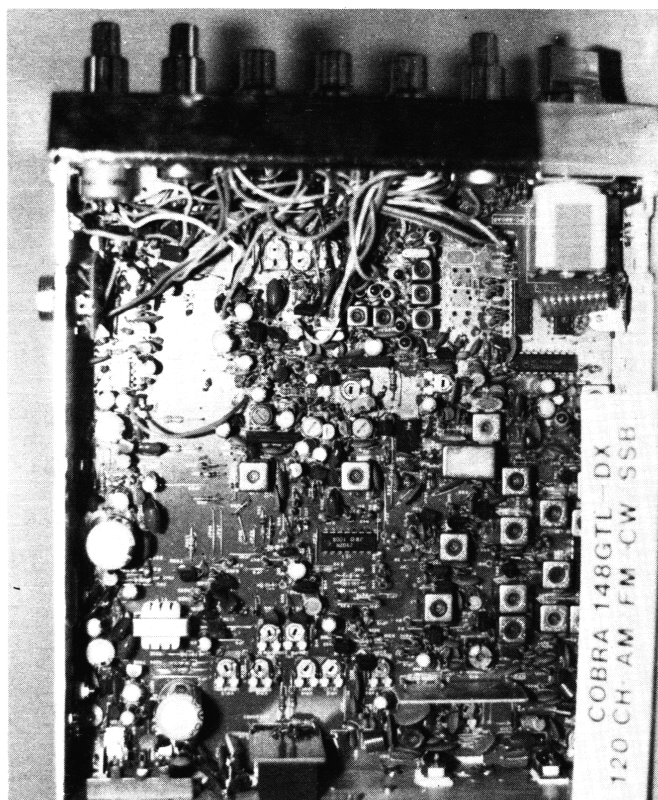
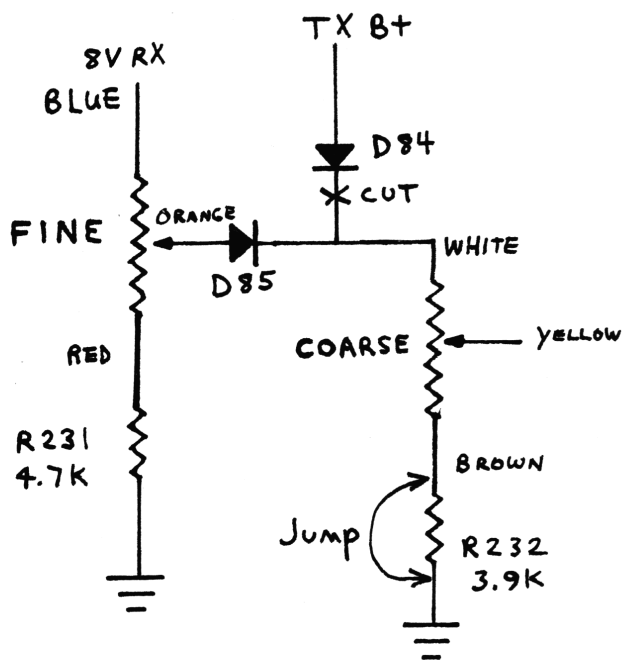
- VR1 AM/FM "S" Meter
- VR2 SSB "S" Meter
- VR5 FM Freq. Dev.
- VR7 Carrier Bal.
- VR8 RF Power Meter
- VR12 SSB ALC
- VR13 AM Power
- VR14 AM Mod.



Peak L44 for maximum RF power output.

CLARIFIER INFO:

1. Remove D84, *(D75 on 390° chassis) This one works good ↓*
 2. Remove BLUE wire from ~~FINE control and PC board.~~ *PC BOARD AND MOVE IT TO OPEN HOLE MARKED (8V COM) NEXT TO WHT WIRE*
 3. Run a new wire from where the BLUE wire was on the fine control to the cathode of D88 (located directly in front of green A473 power transistor on right side of chassis).
 4. For more down slide, pull out R232 and install a wire jumper in its place. This gives about 12KC down.
- * If you like the FINE RIT feature as I do, skip steps 1-3.
The schematic below shows how the above modification works.



Continued on next page.

COBRA 148GTL-DX Continued:

HOW TO GET "SKIP" CHANNELS:

→ This one is Bullshit

- A. 26.545 (L)
26.995 (M)
27.445 (H)

These are obtained as follows:

Apply 8V to pin 17 for 26.545, 27.445 on ch. 3.

Apply 8 V to pin 16 for 26.995 on ch. 2.

- B. 26.595 (L)
27.045 (M)
27.495 (H)

Apply 8V to pin 16 for 26.595 on ch. 6.

Apply 8 V to pin 17 for 27.045 on ch. 7.

Apply 8V to pin 15 for 27.495 on ch. 4.

- C. 26.645
27.095
27.545

Apply 8V to pin 17 for 26.645 on ch. 11.

Apply 8V to pin 15 for 27.095 on ch. 8.

Apply 8V to pin 17 for 27.545 on ch. 11.

- D. 26.695
27.145
27.595

Apply 8V to pin 15 for 26.695 on ch.12.

Apply 8V to pin 17 for 27.145 on ch. 15.

Apply 8V to pin 16 for 27.595 on ch. 14.

- E. 26.745
27.195
27.645

Apply 8V to pin 17 for 26.745 on ch. 19.

Apply 8V to pin 15 for 27.195 on ch. 16.

Apply 8V to pin 17 for 27.645 on ch. 19.