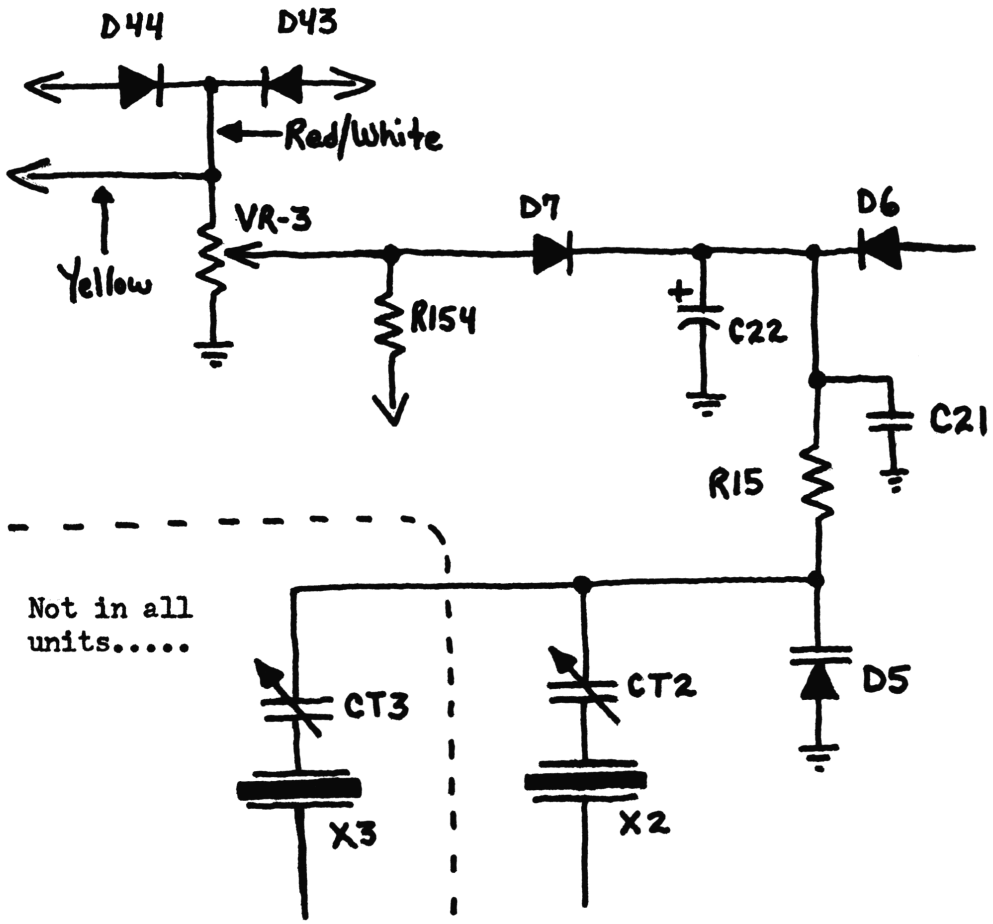
COBRA 148GTL-B, 60 Ch. AM/SSB - 02AG PLL: (EXPORT)

It seems that it is a 'jungle' at 'COBRALAND', and 2 versions of this unit may exist! Here we go again; just like the 148GTL-DX; but this may straighten some of it out.

The main discrepancy seems to be in the clarifier circuitry: The skematic I have available shows only one crystal (X-2, 10.0525MHz), in the circuit. Information received-says that there is sometimes two crystals and switching is done by the Tone switch or labeled Band HI-LO. Two different clarifier modifications exist also. With a discrepancy between them also: D6 and D7 (per schematic D6 is the one in direct feed from Clarifier pot.) Suggest lifting either one; if you lose transmit; that one stays in - remove the other.

The following 2 diagrams are for clarifier modification: #1 (Sent in:)

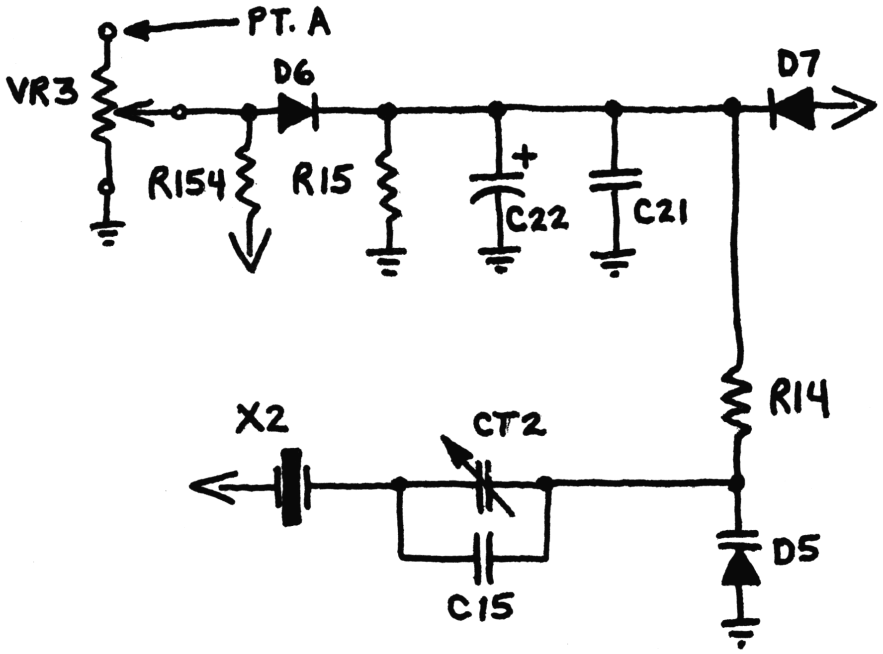


Cobra 148GTL-B (Export)...Cont.

#1. Cont...

A. Remove Red/White and Yellow wires from clarifier pot, solder together and sleeve.
B. Run a wire from where wires removed to the emitter of Q-28.
C. Remove R154, no replacement.
D. Remove D6, no replacement.
E. REMOVE D7, REPLACE WITH SOLID BUSS WIRE.

#2. (Per Schematic/Theory)...Want some feedback on this for Vol. 18 if any discrepancies/additions...NOT TESTED OR PROVEN, as have no unit to work with!



A. Remove all wiring at PT. A (If more than one wire, solder all together and sleeve.)
B. Run a new wire from Emitter of Q28 to PT. A....
D6 → C. Remove D7, no replacement.
D. Remove R154, no replacement.
E. Unit should now 'slide' on transmit.... If it does, let's go
D7 → the whole route: Remove D6 and replace with solid buss wire. Remove D5 and replace with 'Super Diode'. Remove VR3 and replace with 10-turn pot. Remove C15, no replacement.
F. If you do everything in step E., use following adjustments for aligning the transmit FØ to get a center on the pot, or any way you want... CT5 - LSB; CT6 - USB/AM; and CT2.
G. Check the transistors for Mica type insulators, if not-replace.
H. Change Driver and Final if you want to: 2SC1306 and 2SC1307. RV-4 is Final Bias (2SC1307 - set for 60ma).
I. Check PLL logic levels on the following pins, schematic shows no connection: Pin 4 - Freq. Select Steps; 1-10KHz, 0-5KHz.
Pin 6 - Lock Detector
Pin 7 - P8 (256's bit) program pin.

Cobra 148GTL-B (Export)...Cont.

#2. Cont.

J. If Pin 4 has no connection, change logic state. (ground thru a 5.1K resistor; check for frequency changes on TX/RX.)
Note: This does not work all the time...If it does-plenty of extra switches on the front panel.

K. THIS IS PROVEN: Break feed line to Pin 9 of chip, with selector should now go: 27.615-28.245MHz.

PROVEN → L. Change R44 (270K), to 39K, if you are going to FØ expand the unit. Located near IC-4.

M. Don't forget Pin 7, and Pin 8 - which is tied high. Pin 8; break the line-bridge with 5.1K and switch at the pin to D.C. ground.

Remember: Feedback wanted on these mod's....as worked from schematic!

- NEW EXPORT MODELS -

COLT MDL.-510; AM/FM 120-Ch.

IDENTICAL to the Commtron XII, refer to it for all information.

COBRA GTL-150; AM/FM/SSB

IDENTICAL to the Tristar 747, refer to it for all information.
NOTE: SCB still needs more information on either unit, Owner's Manual/Factory Service - have schematic..

PALOMAR MDL. 2400

1,200 TOTAL - Advertised channels! AM/SSB/FM/CW unit, with an "un-advertised DEALER PRICE of $450"!..... SPECS are as follows: Cybernet Chassis, crystal switching for Freq. Rng. Shift; and the familiar "El-Cheapo" Driver/Final.
Freq. Selection in conjunction with LED Ch. Sel. and Band SW:
Pos. 1: 26.065-26.505MHz
2: 26.515-26.955MHz
3: 26.965-27.405MHz
4: 27.415-27.855MHz
5: 27.865-28.305MHz
6: 28.315-28.755MHz
RF Gain: Operated by switching (local-mid-DX)...?
Clarifier: Variable Transmit ± 5KHz; Coarse varies TX and RX, Fine varies RX only.
Power Output Switch: Lo-1W, Middle-4W, High-7/8W in AM mode. FM mode is 10W...
Meter: Standard - S/RF
Other switches - On/Off-Volume, Squelch, Mode, Tone, Tx/Rx-PA, ANL, and NB.
PERSONAL OPINION: For $450 dealer price should have at least the following:...SWR/Modulation/S/RF meter, Frequency Readout, and at least quality Driver and Final....

Schematic is printed in this volume....