

TRUBLE-SHOOTING TIP - 858 SSB CHASSIS

Had a phone call on this one; 'stuck on 23.3MHz'?? Told to double-check the PLL alignment, Oscillators, and Clarifier mod.-if any. Sat down with a schematic to see what else could possibly cause the problem, and wrote to man what might do it.

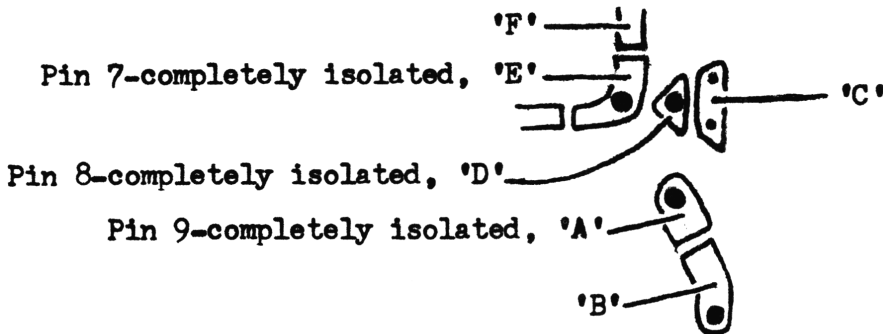
Rc'vd letter back in a week; no-go; still bad... Pulled out my own unit to try and see if I could duplicate condition, as positive that the alignment was problem. I screwdriver-jockeyed the entire transmit and PLL circuit alignment on purpose, - BINGO. I had the same 23.3MHz!

Found the problem after doing a complete realignment, SLOWLY! L-37! It can be adjusted for peak power but on a harmonic oscillation. The coil section nearest FET-6 is the one, adjust for peak power: Take core to top of can, then adjust down for the first peak reading. If you have broadbanded the unit; and 'extra channels' in also; be very careful.. Good Luck, as will have to balance out the power!

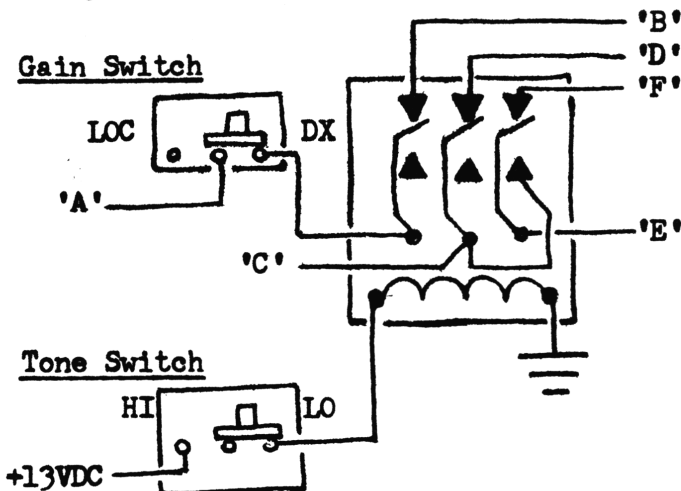
148GTL-B, High/Low Modification

For this modification the following switches were 'hard-wired' and used for logic switching: RF Gain (Loc/Dx), and Tone (High/Lo).

PLL chip must have the etch cut in the four indicated places to isolate the pins. See below-only the modified pins are shown...



Wire up relay as shown below to switches and PLL etchs (Pts. A - F).



FREQUENCY RANGE CHART

1. Tone-Hi, Gain-DX
26.965-27.605MHz
Selector: 1-60
2. Tone-Hi, Gain-LOC
27.605-28.245MHz
Selector: 1-60
3. Tone-Lo, Gain-DX
26.325-26.955MHz
Selector: 1-60

NOTE: VCO alignment is critical to reach extreme ends of band.

(Both sw's shown in Lo Fo position)