

TROUBLE - SPOT:
by J.V.

COBRA 'AM' units with uPD2816D-PLL... 1000, 89, 87, and 29GTL/LTD.

After tune-up or removing modulation limiter, these units develop a buzzing sound when transmitting. In some cases it sounds like an airplane diving.

Check the audio chip TA7222AP, there is a capacitor soldered from the mounting tab to chassis ground. Remove this capacitor, no replacement. All units I have worked on have this one common problem. "Would show about 50% modulation on dead key before removal".

G.E.3-5826A, 40 Ch. SSB Mobile (LC7131-PLL)

NOTE: This is an odd-ball unit, the only unit I know of that uses this chassis....

Below is 'rough alignment procedure' for the experienced tech...

PLL: A. TP1 (R6, R7 junction), Ch 40 AM, TX; adjust T1 for 3.4VDC.

B. TP1, Ch 1 AM, TX; adjust T1 for 2.0VDC..... ± 0.3 VDC.

C. Fo Cntr - TP3 (Q11 collector), Ch 20 LSB, TX; adjust CT4 for 10.695MHz.

D. Fo Cntr - TP3, Ch 20 USB, TX; adjust CT3 for 10.692MHz.

E. Fo Cntr - TP2 (Q2 base), Ch 20 USB, TX; adjust CT1 for 16.513MHz, ± 50 Hz.

F. Fo Cntr - TP2, Ch 20 LSB, TX; adjust CT2 for 16.510MHz, ± 50 Hz.

RECEIVE: A. Peak in AM mode: T6, T7, T8, T9, T10, and T11.

B. RV8 - SSB AGC, RV9 - Sq Rng, RV3 - RX Mtr.

C. Noise Blanker may be improved by following:
increase value of C103, or decrease value of R80.