02A CLARIFIER & BANDSWITCH MODIFICATION

Modification 02A chassis clarifier circuit, to prevent loss of power caused by large amounts of clarifier swing over 5KHz...

- 1. Disconnect the collector of Q4
- 2. Remove C20.
- 3. Remove CT1 and SAVE!
- 4. Remove C18 and SAVE!
- 5. Rll, Rl2, Cl9, and the base of Q3; all form a junction point.

 Also Ll and Rl3 opposite Xl form another junction point.

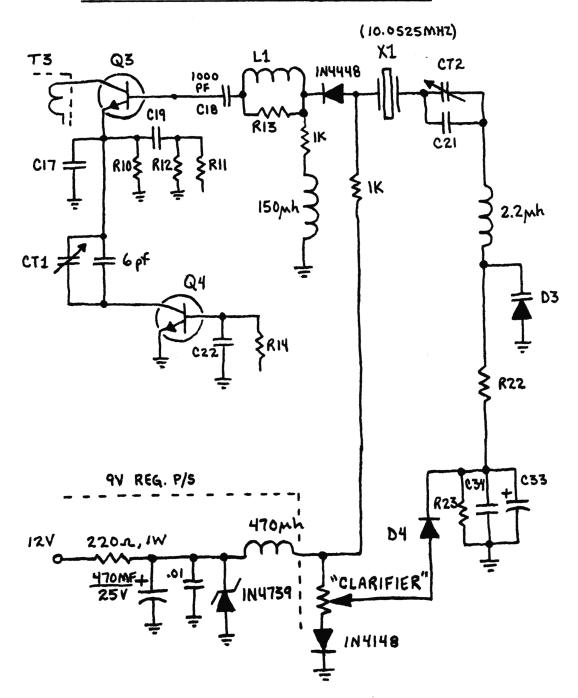
 Open the circuit between these two junction and insert Cl8 across the open.
- 6. Connect the collector of Q4 to the junction of C19, R10, C17 and the emitter of Q3, through a 6 pf capacitor.
- 7. Connect the removed CTI from the collector of Q4 to the junction of C19, R10, C17 and the emitter of Q3.
- 8. Connect a lK resistor to the junction of X1, L1, and R13.
- 9. Connect a 150 UH RF Choke between the open end of the resistor and ground.
- 10. Open the circuit between X1 and the junction of L1, R13, and the 1K resistor you added in Step 8.
- 11. Place a 1N4448 diode across the open, anode towards X1.

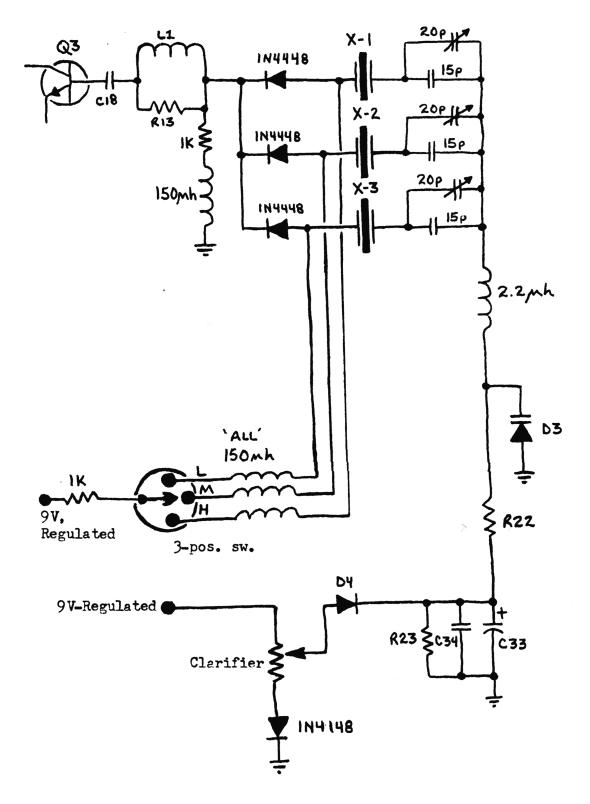
 If band switching is desired, see schematic of how crystals should be added at this point.
- 12. Connect the open end of X1 to the junction of CT2 and C21.
- 13. Connect the junction of R22 and D3 to the other end of CT2 and C21 junction, through a 2.2 UH choke.
- 14. Build a 9 volt regulated supply as illustrated on the schematics.
- 15. Apply the 9 volts from this supply to the anode of the diode you installed in Step 11, through a lK resistor.

02A Clarifier & Bandswitch Modification...Cont.

- 15. --Cont. *If band switching is used, -see schematic of switching arrangement for crystals.*
- 16. Apply the regulated 9 volts to the unused side of the clarifier potentiometer.
- 17. Connect the other end to ground through a 1N4148 diode, cathode to ground. Leave the center wire connected as is!
- 18. Disconnect R24 and D5...

02A Clarifier Mod./Power supply schematic:





X1 - 10.2725MHz

X2 - 10.0525MHz X3 - 9.8325MHz

Bandswitch Skem,