SUBJECT: SERVICE NOTES ON TS-520

DATE 10-21-77

TRANSMITTER

- 1. No switching of final relay: Bad Q8 on (X54-0001-00) 2SA562(y).
- 2. No drive: C-3 100pf in final box is cold soldered.
- 3. Low output: Check the plate load cap for touching plates.
- 4. 3.5 Mhz low output: Replace burned 47pf 3KV at load wafer.
- 5. No Tx: Final choke burned out in final VOX L-8.
- 6. No Rx or Tx: Bad common amp. Q1 3SK35(GR) in IF unit (X48-1060-00).
- 7. No ACC: No plate current Q2 3SK41 IF unit X48-1060-00).
- 8. No Tx relay: Q8 2SA562(y) on VOX unit (X54-0001-00). Also R18 lK resistor relay control.
- 9. No Tx or Rx: Check 9 volt terminal on fix AVR (X43-1100-00) is loose.
- 10. No CW Tx: Bad 9 volt regulator. Check D3 WZ061 on (X43-1100-00).
- 11. No Tx: Solder touch between TIF and key terminal on (X44-1080-00).
- 12. No drive to Tx: Check RLl on GEN unit, small reed relay (X52-0010-01).
- 13. No ALC meter action on 10 meters: This is normal for TS-520.
- 14. CW chirp: Q4 2SA606(L) on Fix channel ARV (X43-1100-00).
- 15. ALC meter to maximum when Tx: RFI terminal at (X44-1080-00) is not soldered.
- 16. No Tx output: 82pf 3KV in final is burned.
- 17. No Tx output: Q3 on RF unit 3SK41 (X44-1080-00).
- 18. No bias: 10 ohm cathode resistors burned in final VOX.
- 19. No drive or Tx output: R70-71 RF unit, R5 rectifier unit.

SUBJECT: SERVICE NOTES ON TS-520

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TRANSMITTER (Cont'd.)

- 20. No VOX: Q8 in VOX unit (X54-0001-00).
- 21. No Tx: 12BY7 is bad. Shorts and burns out. R71 and R70.
- 22. No carrier output: Ql on carrier (X50-0009-01).
- 23. No drive no screen voltage: R5 470 or open on rectifier (X43-1090-00).
- 24. No drive no ACC: Q2 3SK35(y) IF unit (X48-1060-00). Q3 3SK41(L) RF unit (X43-1090-00).
- 25. No RF output: Cl3 .04uf at pin 1 of S2001A is bad.
- 26. Low mic gain: Q1 2SC 1000 on GEN unit (X52-0010-01).
- 27. No Tx: Missconnection of brown wire after installation of CW filter.