HW-101

(A couple of these are my own, but most came from Engineering, Tech. Consultants, Heath technicians, and field technicians. The HW-101 was a great transceiver, but it was truly an art to repair one that was broken.)

- **Receive audio amplifier oscillates with RF gain set to 2 o'clock:** Check for open R323 at V14A.
- **No RF out:** Check for interchanged R938 and R916 (near V9 and V8).
- **R14 and R112 cooked:** White-blue and White-blue-blue wires on RL-2 may be interchanged.
- **R223 and R109 cooked:** Check for short across C111.
- **RL2 keys after warm-up:** Check for leaky D202 at V12B (56-25).
- **Low power output:** This is affected by the placement of the grounds on the shields in the HFO stages. The rear shield is the most critical. Remove the "fingers" on the rear shield cover. The power can be tuned for maximum output by properly positioning the grounding solder.
- **Microphonics on receive calibrate:** This is normal if they occur when the unit is jarred.
- **7 MHz and 14 MHz (40 & 20 meters) bands dips instead of peaks (rcv & xmit):** This is the combined effects of L702 through L705 and/or L802 through L805. Selecting coils for the offending board may help. In one case, the culprits were the 21 MHz (15 meter) coils.
- **Low power output, all bands, worse on 10 meters:** Try replacing the finals (V8, V9) with **GE**-brand tubes. **RCA**-brand tubes appear to be the cause. Also, sub V7.
- **Low power output at 40 meters:** Check C703, C704, C802, and C803. May be out of tolerance.
- **Oscillates on 15 and 10 meters:** Be sure that the neutralization wire from the preselector isn't shorted to ground. Check for good grounds on the shields of the drivers.
- **Relay chatter in VOX mode:** Replace the two wht/rd/rd wires to R213/R214 with shielded cable. Ground the shields near R213/R214.
- **High plate current, no RF power out on some bands--receive okay:** Check for broken taps on L904.