RESISTANCE CHECKS ON THE RF PRINTED CIRCUIT BOARD

If you have an ohmmeter, check the resistance between ground and the following test points on the RF printed circuit board. (These measurements are to be made without the tubes in place.) A convenient point for ground connection is the copper-covered corner of the board stamped "820020".

Experience in kit building shows that wrong resistance readings are usually caused by "cold" solder connections, connections left unsoldered, using too much solder on the printed circuit board, mounting a component at the wrong holes or wrong mounting of the coils. Carefully recheck the whole wiring of the RF printed circuit board, especially the mounting and soldering of the bandswitch to the board and the mounting of the coils. If in doubt about a soldered connection, heat the connection again and apply a little more solder.

☑ Between ground and hole 6, the meter should indicate an open circuit. This checks for short circuits in the filament circuits of V-1 and V-9.

☑ Between ground and hole 11, the meter should indicate 800KΩ. This checks for short circuits and continuity in the B+ circuit.

☑ Between ground and hole 10, the meter should indicate an open circuit. This checks for short circuits in the AVC line.

☑ Between ground and hole 2, the meter should read under 40Ω, with the BANDSWITCH in the A, B, C, or D position. This tests the antenna circuit.

☐ Between ground and the green wire from hole Z on the component side, the meter should indicate open circuit, except in BANDSWITCH position D, where the ohmmeter should read less than 1Ω. This checks the oscillator tuning circuit.

PARTS MOUNTING AND WIRING ON TOP OF THE CHASSIS

SEE FIGURE 20 on a large separate sheet.

☑ Position the chassis as shown.

☑ On top of the chassis, mount the bracket for the dial crystal close to the IF printed circuit board. Use two 6-32 x 5/16" screws, lockwashers and nuts.

☑ Mount TS-6, a 2-terminal strip, on one of the L-shaped dial support brackets. Use a 6-32 x 5/16" screw, lockwasher, and nut. Position TS-6 as shown.

☑ Mount the L-shaped dial support bracket (with TS-6) on top of the chassis. Use two 6-32 x 5/16" screws, lockwashers, and nuts.

Close the plates of C-2, the BANDSPREAD capacitor, to protect them.

☑ Slide the shaft of C-2 through the lower hole in the dial support bracket with TS-6.

☑ Mount C-2 on top of the chassis with three 6-32 x 5/16" screws and lockwashers.

☑ Mount the vernier drive in the large lower hole of the other L-shaped dial support bracket. Use two 6-32 x 5/16" screws, one lockwasher, one solder lug, and two nuts.

☑ Mount this dial support bracket loosely on top of the chassis. Use two 6-32 x 5/16" screws, lockwashers, and nuts.

CAUTION: Keep the plates of C-1 closed during the following steps.

☑ Slip one collar of a shaft coupler on the shaft of C-1. Tighten the set-screw slightly.

NOTE: When you place the RF subchassis into position, be sure the 9-conductor cable is out of the way so S-4 is not damaged.

☑ Place the main chassis over the subchassis assembly, as shown. Lift the subchassis into position, and slip the vernier drive into the other collar of the shaft coupler. Fasten the subchassis to the main chassis with twelve 6-32 x 5/16" screws and lockwashers. Two of these screws also fasten the left dial crystal bracket to the main chassis.