

OVER THE CAMDEN, N. J. MAY 14, 1937. SOLDERING IRON

PREPARED FOR THE INFORMATION AND USE OF RCA VICTOR DISTRIBUTORS' SERVICE MANAGERS

84BT6 TUBE COMPLEMENT

Some receivers of this type employ a '42 output tube. Present specifications call for an RCA-41 in the output stage and it is recommended that this tube be used for replacement on all receivers. The '41 fits the '42 socket, no circuit changes are necessary, and performance does not change. Battery drain changes to 2.65 amperes.

MOTORBOATING - MODELS 13K and 15K

Low frequency oscillation or motorboating with resultant audio distortion may occasionally be due to an open joint in the 10 x 10 mfd. Stock #13025 capacitor used as by-pass for the audio and driver stage cathodes. The condition may be either continuous or intermittent.

MODEL 5T7-0

This instrument has a chassis and speaker identical with those of Model 5T7. The cabinet finish is plain maple instead of blonde maple as on the 5T7. All electrical and mechanical service data of 5T7 are directly applicable to 5T7-0.

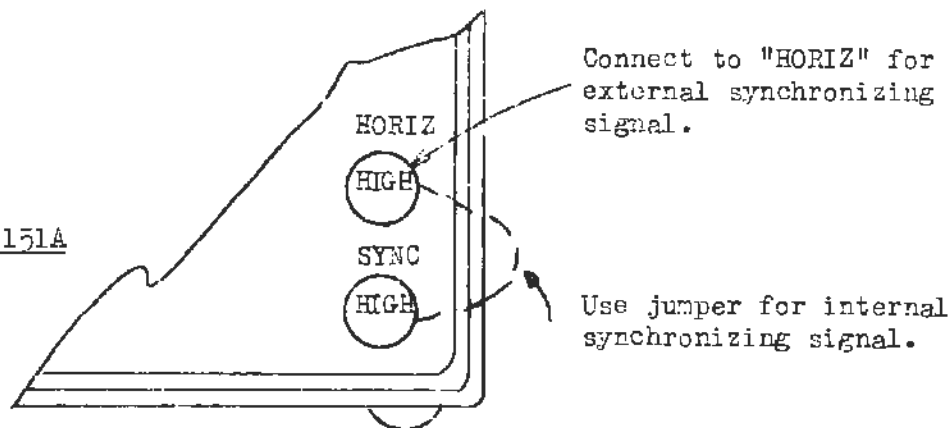
PARTS IDENTIFICATION

The numerals stamped on various parts of RCA receiver assemblies are for manufacturing use only and should not be interpreted as stock or catalogue numbers. Always order replacement parts by the Stock Numbers supplied in service lists, and in the event this number is unavailable, order by careful description of the part desired, including the factory markings.

SYNCHRONIZING CONTROL - MODEL 151 C-R OSCILLOGRAPH

Unless proper connections are made at the "HORIZ-SYNC" terminals, it will be impossible to lock-in the synchronizing signal or to control it correctly. The terminal marked "HORIZ" is the input to the horizontal amplifier and the "SYNC" terminal is used for connection

STOCK #151 & 151A
OSCILLOGRAPH



purposes only in order to employ internal synchronization. When external synchronization is to be used, attach the source of the signal to "HORIZ" and "O" terminals of the oscillograph, and turn the Amp.-H switch to "Timing". For internal synchronization, a jumper lead such as shown above, should be connected between "HORIZ" and "SYNC", and the Amp.-H switch placed in the "Timing" position.

REPAIRING PICKUP UNIT

If inspection or tests indicate that a pickup of the type employed on Models 9U, 9U2, D22, etc., is unstable due to loose solder at the point where the centering spring is attached to the armature, careful repair should be effected as follows:-

- (1) Remove armature from pickup assembly and thoroughly clean parts to be soldered.
- (2) Obtain a soldering iron of approximate 100 watt capacity; adjust or modify it so that the point is short and stubby in order to concentrate the heat.
- (3) Apply an acid flux to the junction of spring and armature, and solder as hurriedly as possible to prevent the heat from spreading. Solder consisting of 50% tin and 50% lead should be used. See that it flows between the spring and the walls of the hole in the armature.

WARNING:- This repair requires that a quick, clean, solid joint be made in the minimum of time. Excess heating will affect the resilience of the spring, therefore avoid application of the iron for too long an interval.

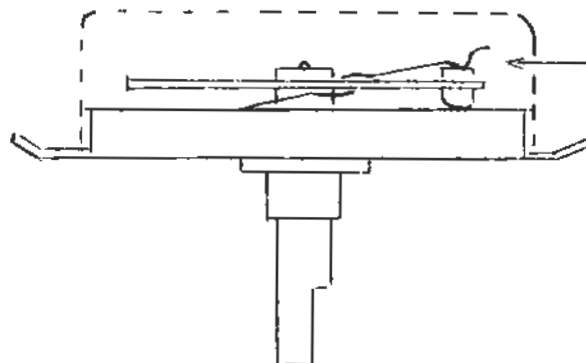
MAGIC EYE DEFLECTION - C11-1, D11-2, & T11-8

Deflection of the Magic Eye on short wave stations is generally limited by the comparatively low signal strength obtained. The original circuits of these models are arranged so that excessive overlapping does not occur on strong standard wave stations, and at the same time, some indication is possible on the average weaker short wave stations. Better deflection can however, be obtained by using an RCA-6G5 tube in place of the 6E5, and making minor circuit alterations as follows:-

- (1) Remove 2.2 megohm resistor R-11 from circuit.
- (2) Change value of capacitor C-24 to .025 mfd.
- (3) Re-connect resistor R-10 to the junction of R-9 and R-7 (lug labeled C-21 on chassis wiring diagram) instead of to R-8 and R-7. This connection can be conveniently made at the base of the 2nd I-F transformer.

VOLUME CONTROL REPAIR

Many controls of the Stock #11237, #11205 and #5223 types have a construction as shown by the sketch below. Any noise developing on these units can be satisfactorily eliminated by cleaning the contact



Contact point between spring and shoe must be cleaned.

point between the phosphor bronze spring of the wiper arm and the monel metal sliding shoe. The cleaning should be done by drawing a strip of crocus cloth or very fine sandpaper through the contact so as to clean both parts. A small amount of very light oil or Vaseline applied to the contact surfaces after cleaning will prevent future corrosion.

SERVICE NOTE CORRECTIONS

Model 9K1-9K3 --- Dial Lamp Shield for 9K1 should be Stock #12735 instead of #12733.

Model 150 Electronic Sweep Oscillator --- Page 9; Output voltage rating is 0.25 volts instead of 25. Page 12; last sentence of first column; O-28 should be C-28.

SERVICE DIVISION

RCA MANUFACTURING COMPANY, INC.