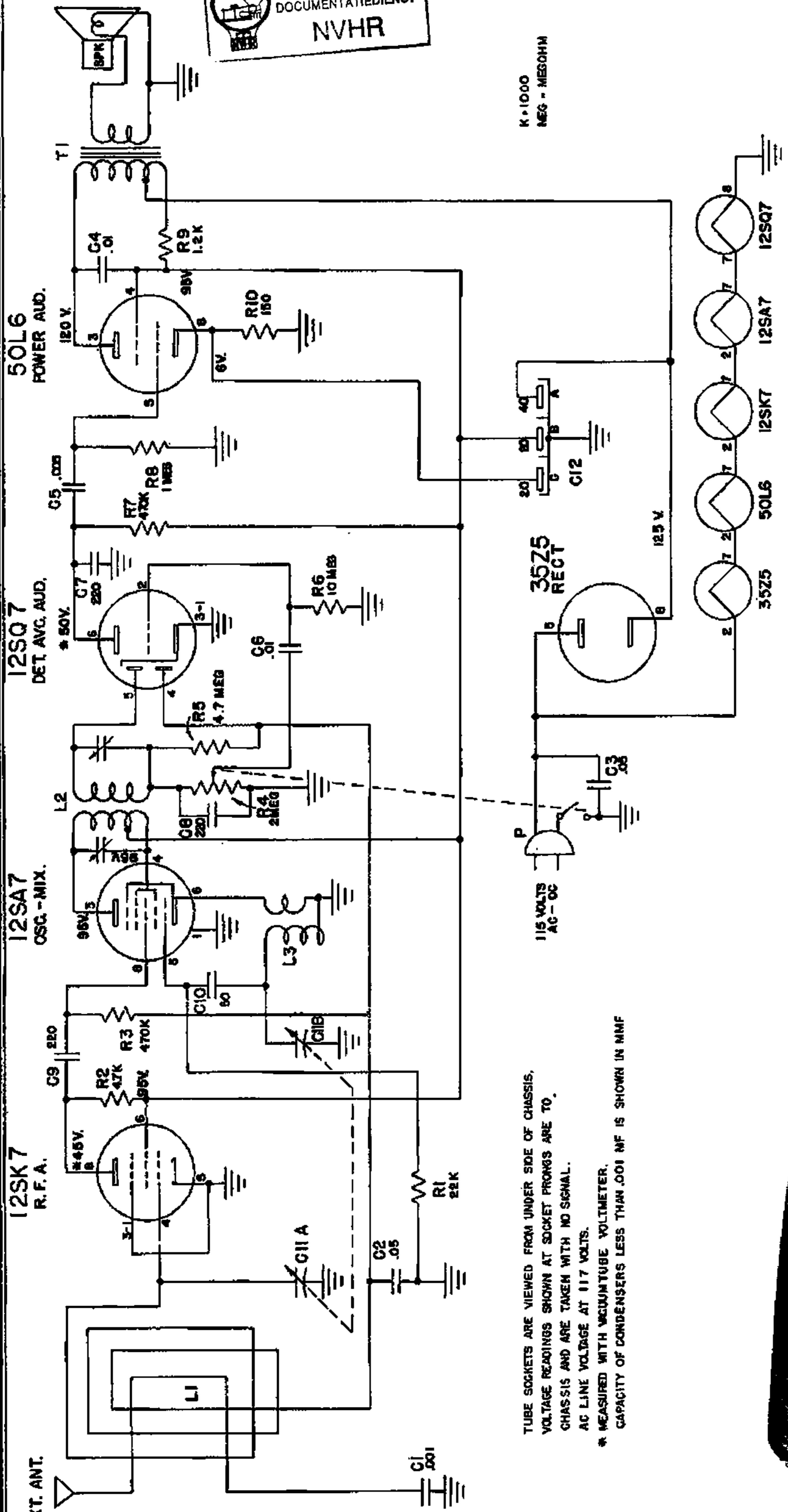
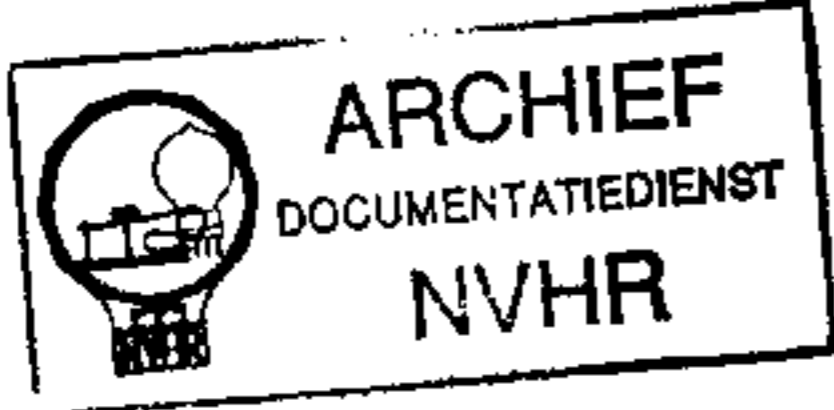


Ned. Ver. v. Historie v/d Radio

MODELS 253T, 254T, 255T, 256T; Ch. RE-252



K = 1000
NEG - MEGOHM

TUBE SOCKETS ARE VIEWED FROM UNDER SIDE OF CHASSIS, VOLTAGE READINGS SHOWN AT SOCKET PRONGS ARE TO CHASSIS AND ARE TAKEN WITH NO SIGNAL.
* MEASURED WITH VACUUM TUBE VOLTMETER.
CAPACITY OF CONDENSERS LESS THAN .001 MF IS SHOWN IN MMF

SPECIFICATIONS

FREQUENCY RANGE

Broadcast ----- 540-1600 kc
IF ----- 455 kc

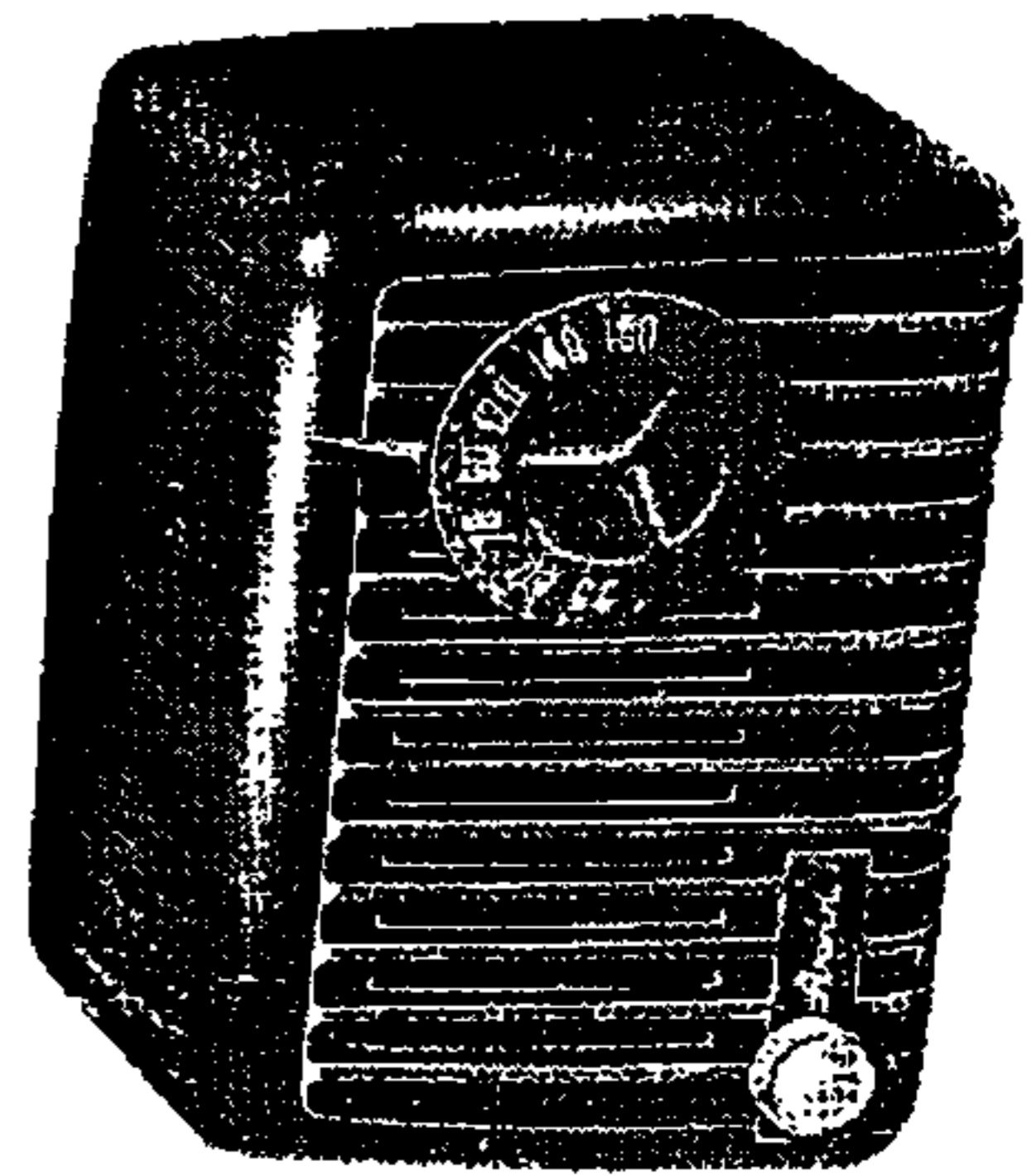
POWER OUTPUT

Undistorted ----- 1.2 Watts
Maximum ----- 3 Watts
Plate load ----- 2000 Ohms

LOUD SPEAKER

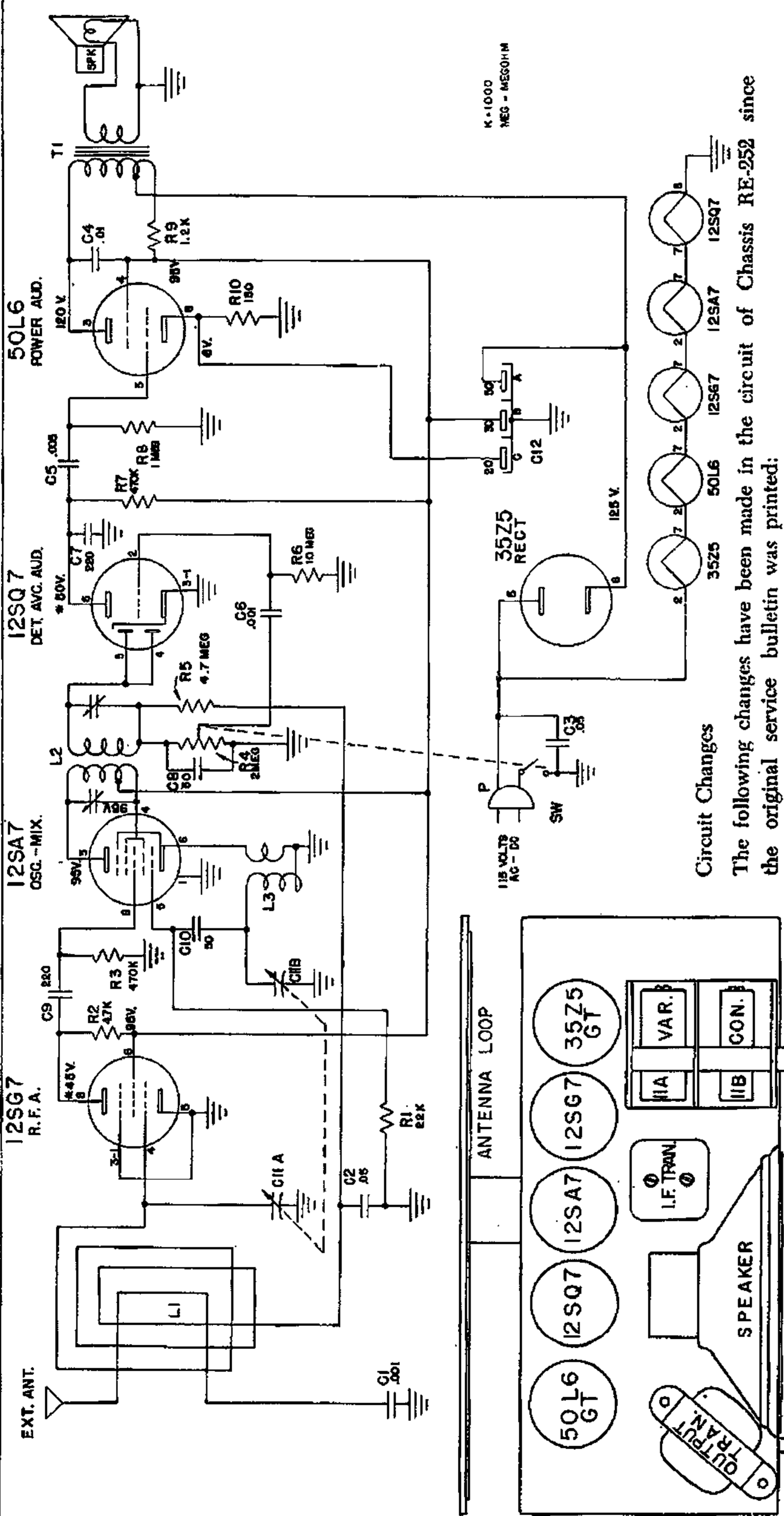
Type: Permanent magnet
Size: 4 Inch
Voice coil impedance ----- 3.2 Ohms

POWER SUPPLY
105-125 Volts, AC-DC, 35 Watts



All Models are identical except for Colors, See Chart under Parts list.

MODELS 253T, 254T,
255T, 256T; Ch. RE-252



K-1000
MEG - MEGOHM

Circuit Changes

The following changes have been made in the circuit of Chassis RE-252 since the original service bulletin was printed:

1. Resistor R3 is connected from the grid of the 12SA7 tube to chassis. On the schematic diagram of the original bulletin, this was shown connected from the grid to A. V. C.
2. The Electrolytic Capacitor C12, Part No. A22015, has been changed from 40-20 mfd., 150 V., 20 mfd., 25 V., to 50-30 mfd., 150 V., 20 mfd., 25 V. Some sets were built with a 20 mfd., 150 V. condenser connected across the B section of the original condenser. When excessive hum or hum modulation is encountered on sets which have the original 40-20 mfd., 150 V., 20 mfd., 25 V. condenser, adding the extra 20 mfd., 150. condenser across the B section will usually correct it.
3. The RF Plate Resistor R2 is changed from 1/4 Watt, C20060-472 to 1 Watt, C20103-472.
4. The two diodes in the 12SQ7 tube, socket lugs 4 and 5, are tied together; lug No. 4 was originally connected to A. V. C.
5. The RF tube was changed from 12SK7 to 12SG7 to increase the gain.

TUBE SOCKETS ARE VIEWED FROM UNDER SIDE OF CHASSIS.
VOLTAGE READINGS SHOWN AT SOCKET PRONGS ARE TO CHASSIS AND ARE TAKEN WITH NO SIGNAL.
AC LINE VOLTAGE AT 117 VOLTS.
* MEASURED WITH VACUUM TUBE VOLTMETER.
CAPACITY OF CONDENSERS LESS THAN .001 MF IS SHOWN IN MMF

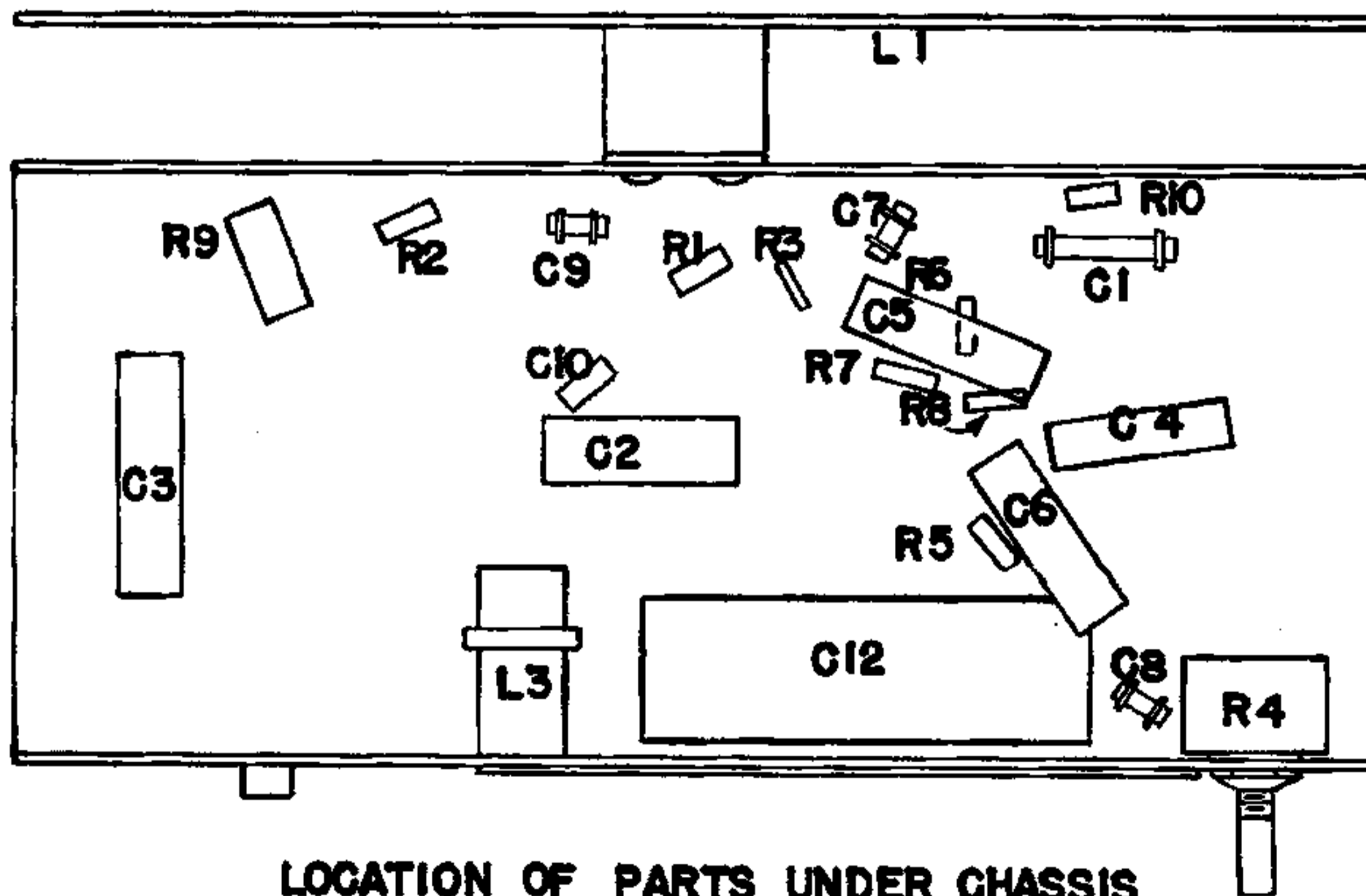
MODELS 253T, 254T,
255T, 256T; Ch. RE-252

PARTS LIST

Sch. Loc.	Part No.	Description	Sch. Loc.	Part No.	Description
R1	C20060-223	Resistor, 22,000 ohms, 1/4 W	C11A, B	C21948	Condenser, variable
R2	C20060-472	Resistor, 4700 ohms, 1/4 W	C12A, B, C	A22015	Condenser, electrolytic, 20-40 uf., 150 V., 20 uf, 25 V.
R3, R7	C20060-474	Resistor, 470,000 ohms, 1/4 W	L1	AC21998-1	Antenna loop and rear cover assembly
R4	C21947	Volume control & switch, 2 megohms	L2	AC21999-1	I. F. coil assembly
R5	C20060-475	Resistor, 4.7 megohms, 1/4 W	L3	AC22024	Oscillator coil assembly
R6	C20060-108	Resistor, 10 megohms, 1/4 W	T1	AC22014-1	Output transformer assembly
R8	C20060-105	Resistor, 1 megohm, 1/4 W	Spk.	C21948	Speaker, 4"
R9	C20070-122	Resistor, 1200 ohms, 1 W		A20077-3	Grommet, rubber, variable condenser mtg.
R10	C20060-151	Resistor, 150 ohms, 1/4 W		A20258-1	Socket, tube, molded, plain
C1	C20226-102	Condenser, .001 uf., 350 V., Ceramic		*A21993-1 ()	Knob, volume
C2	C20067-503	Condenser, .05 uf., 200 V., P. T.		A22016	Carton, complete with fillers
C3	C20068-503	Condenser, .05 uf., 400 V., P. T.		*AA22114-1 & 4	Cabinet assembly, walnut and black
C4	C20068-103	Condenser, .01 uf., 400 V., P. T.		*AA22114-2 & 3	Cabinet assembly, ivory and green
C5	C20069-502	Condenser, .005 uf., 600 V., P. T.		*AA22115-1 ()	Knob, tuning
C6	C20067-103	Condenser, .01 uf., 200 V., P. T.		A19138-1	Spacer eyelet, variable condenser mounting
C7, C8,				B20254-1	Line Cord & Plug assembly
C9	C20226-221	Condenser, .00022 uf., 350 V., Ceramic			
C10	A21648	Condenser, .00005 uf., 350 V., molded			

*Be sure to use the proper dash number as outlined in the chart below when ordering colored parts:

MODEL	CABINET	VOLUME KNOB	TUNING KNOB
254-T Walnut	AA22114-1 Walnut	A21993-1 Rust	A22115-1 Rust
255-T Ivory	AA22114-2 Ivory	A21993-2 Old Rose	A22115-2 Old Rose
256-T Green	AA22114-3 Green	A21993-3 Cream	A22115-3 Cream
253-T Black	AA22114-4 Black	A21993-4 Fern Green	A22115-4 Fern Green



LOCATION OF PARTS UNDER CHASSIS

MODELS 253T, 254T,
255T, 256T; Ch. RE-252

ALIGNMENT PROCEDURE

- A. Connect to 117 V., AC line and turn set on with volume control at full volume.
- B. Connect signal generator high side through .05 uf or larger condenser to 12SA7 grid. Connect low side of signal generator to Chassis. Connect output meter across speaker voice coil.
- C. Open variable condenser.
- D. With signal generator set at 455 Kc, increase output of generator until output is heard in speaker. Adjust IF trimmers until maximum output meter reading is obtained, reducing signal generator output as adjustment progresses so that final adjustment is made with lowest input consistent with good signal to noise ratio.
- E. With signal generator connected to a radiating loop and set to 1620 Kc, adjust oscillator trimmer (C11B) on variable condenser until output is maximum. Variable Condenser is to be fully opened during this adjustment.
- F. Set signal generator to 1400 Kc and rotate variable condenser until output is maximum. Adjust R. F. trimmer (C11A) on variable condenser until output increases to a new maximum. Rotate variable condenser slightly to obtain another maximum output. Re-adjust trimmers until output is again a maximum. Repeat this cycle until no further increase in output can be obtained. Final adjustment to be made with a signal generator output at lowest level consistent with good signal to noise ratio.
- G. Set signal generator to 1000 Kc and tune radio to maximum output. Adjust variable condenser plates for maximum output.
- H. Set signal generator to 600 Kc and proceed as in G above.
- I. Set signal generator to 540 Kc and make sure that radio will tune to maximum output slightly before variable condenser is fully closed.
- J. Recheck alignment and calibration at 1400, 1000, and 600 Kc, making any necessary readjustments.
- K. Tune the variable condenser through its entire range to make sure it is not shorted at any point.

TUBE LAYOUT

