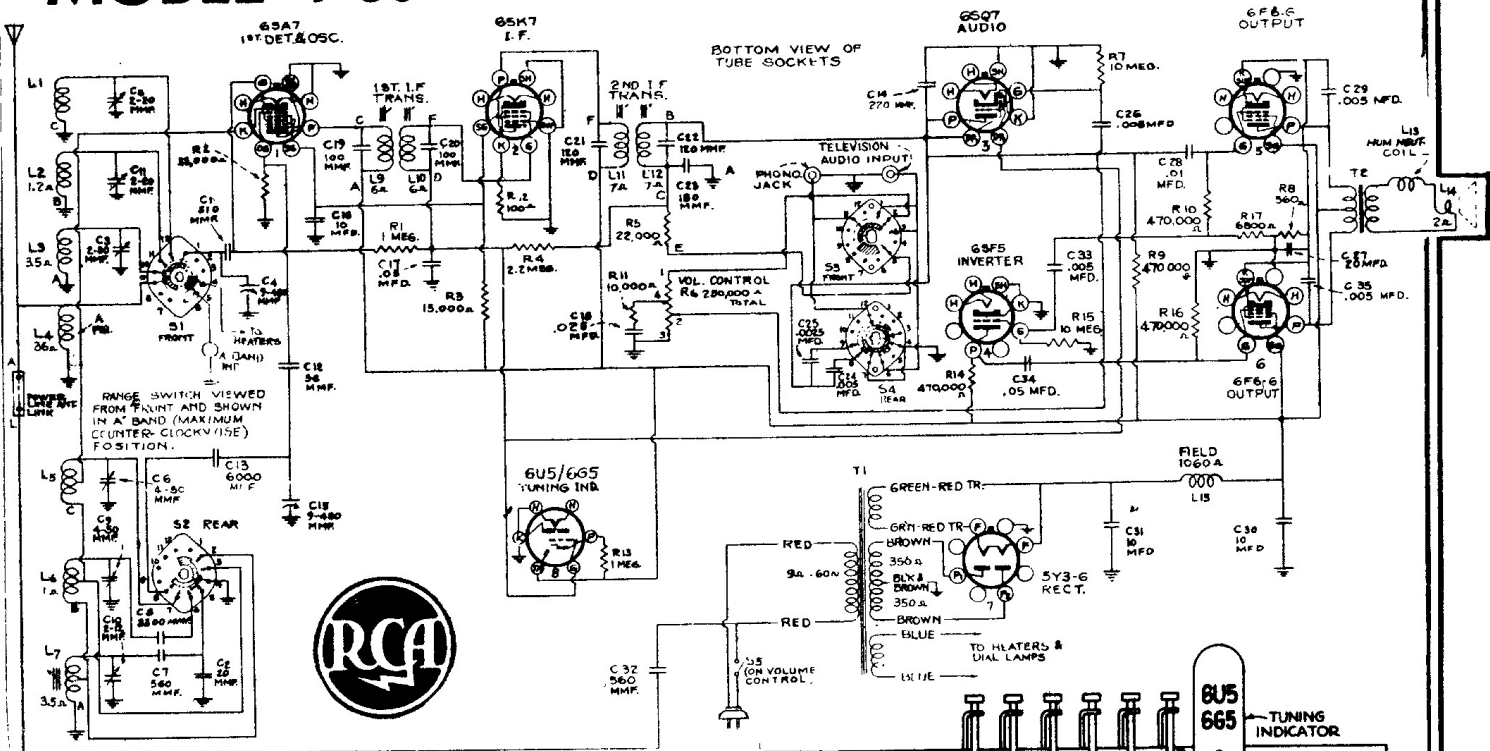


# MANUAL OF 1939 MOST POPULAR SERVICE DIAGRAMS

## MODEL T-80 Eight-Tube, Three-Band, AC, Superheterodyne

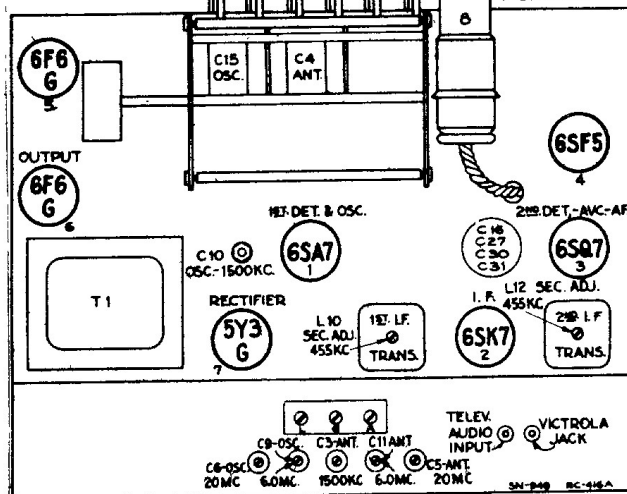


Steps	Connect the high side of the test-osc. to—	Tune test osc. to—	Turn radio dial to—	Adjust the following for maximum peak output
1	6SK7 grid in series with .01 mfd.	455 kc	"A" Band Quiet Point between 550-750 kc	L11 and L13 (2nd I-F Trans.)
2	6SA7 grid in series with .01 mfd.			L9 and L10 (1st I-F Trans.)
3	Ant. terminal in series with 300 ohms	20 mc	20 mc (40°) "C" Band	C6 (osc.)* C5 (ant.)
4		6 mc	6 mc (52.5°) "B" Band	C9 (osc.)* C11 (ant.)
5	Ant. terminal in series with 200 mmfd.	1,500 kc	1,500 kc (41.75°) "A" Band	C10 (osc.) C3 (ant.)
6		800 kc	800 kc (200.25°) "A" Band	L7 (osc.) Rock Gang
7	Repeat step 5.			

\* Use minimum capacity peak if two can be obtained. Check to determine that C6 has been adjusted to correct peak by tuning receiver to approximately 19.09 mc where a weaker signal should be received.

\*\* Use minimum capacity peak if two can be obtained. Check to determine that C9 has been adjusted to correct peak by tuning receiver to approximately 5.09 mc where a weaker signal should be received.

Note: Oscillator tracks above signal on all bands.



Cathode-Ray Alignment is the preferable method. Connections for the oscillograph are shown in the chassis drawing.

Output Meter Alignment.—If this method is used, connect the meter across the voice coil, and turn the receiver volume control to maximum.

Test-Oscillator.—For all alignment operations, connect the low side of the test-oscillator to the receiver chassis, and keep the output as low as possible to avoid a-v-c action.

Calibration Scale on Indicator-Drive-Cord-Drum.—The tuning dial is fastened in the cabinet and cannot be used for reference during alignment; therefore, a calibration scale is attached to the tuning drum. The setting of the gang condenser is read on this scale, which is calibrated in degrees. The correct setting of the gang in degrees, for each alignment frequency, is given in the alignment table.

As the first step in r-f alignment, check the position of the drum. The 240° mark on the drum scale must be vertical and directly above the center of the shaft of the tuning drum when the plates are fully meshed. The drum is held to the shaft by means of two set-screws, which must be tightened securely when the drum is in the correct position.

On the inner side of the tuning drum are two projections which serve as stops to prevent extreme rotation of the gang condenser. The tuning drum should be set so that the stop limiting clockwise movement of the drum takes effect just as the gang condenser plates are becoming fully meshed, thus preventing stress on the gang due to extreme rotation.

