

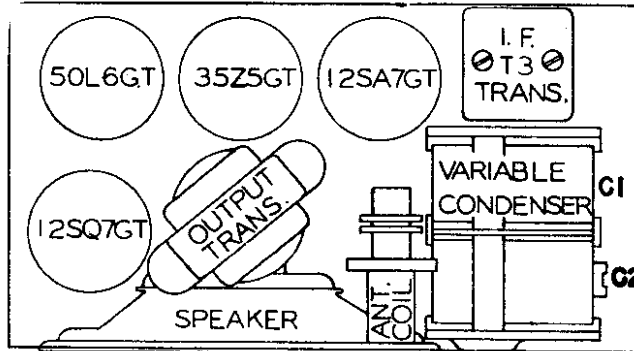
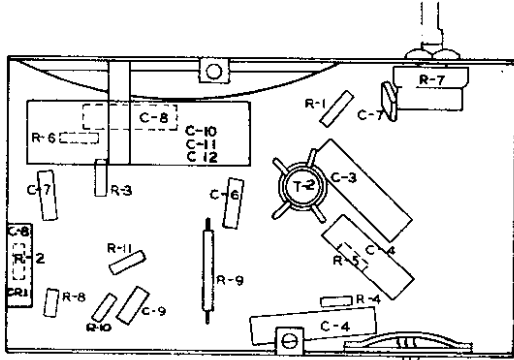
MODEL 8003
CHASSIS 132.818-1

SEARS, ROEBUCK & CO.

SPECIFICATIONS

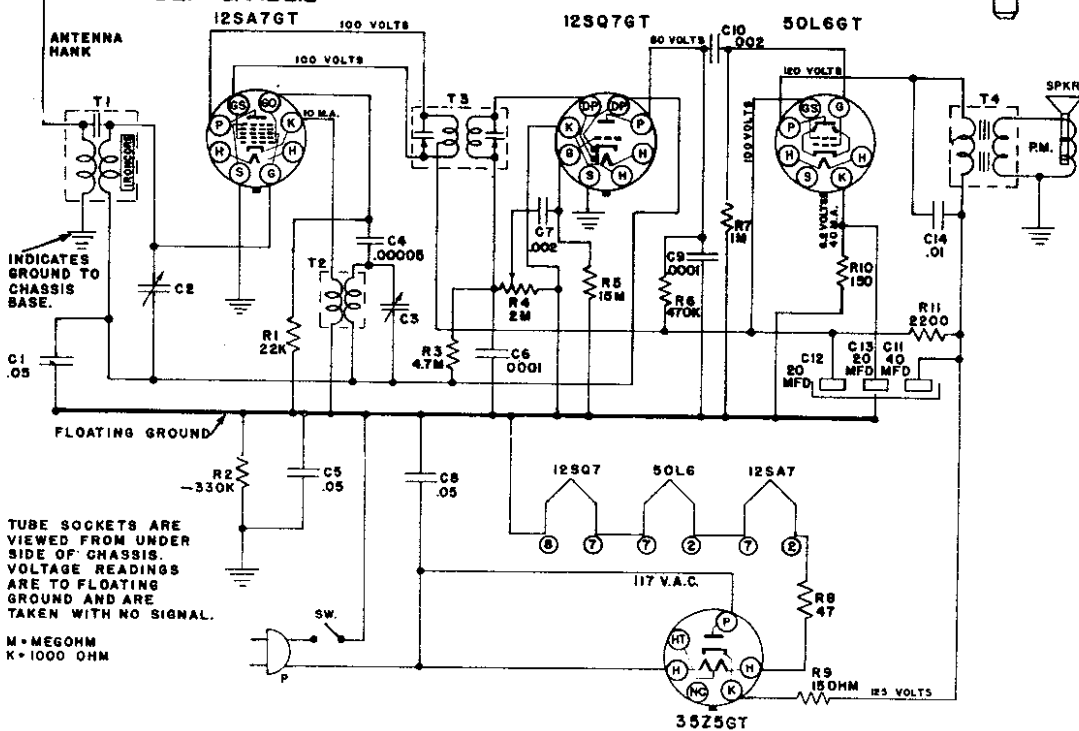
Power Supply -- 105-125 Volts AC-DC, 30 Watts
Power Output
Undistorted .8 Watts, Maximum - 2.5 Watts

Tuning Range Broadcast Band 540-1600 Kc
Speaker
Voice Coil Impedance 3.2 Ohms



LOCATION OF PARTS UNDER CHASSIS

TUBE LAYOUT



SCH. LOC.	PART NO.	DESCRIPTION	M.U. CODE	SCH. LOC.	PART NO.	DESCRIPTION
T1	N19936-2	Cabinet, gray-green		R1		Resistor, 22,000 Ohms, 1/4 w
	N18255	Coil, antenna		R2		Resistor, 330,000 ohms, 1/4 w
T2	N18256	Coil, oscillator		R3		Resistor, 4.7 megohms, 1/4 w
C1		Condenser, .05 mfd., 200 v		R4	N18587	Resistor, 2 meg., vol control & sw
C2, C3	N17115	Condenser, variable, 2-gang	AAO	R5		Resistor, 15 meg., 1/4 w
C4		Condenser, .00005 mfd., 500 v, mica		R6		Resistor, 470,000 ohms, 1/4 w
C5, C8		Condenser, .05 mfd., 400 v		R7		Resistor, 1 meg., 1/4 w
C6, C9		Condenser, .0001 mfd., 500 v		R8	N19177	Resistor, 470 ohms, 1 w
C7, C10		Condenser, .002 mfd., 600 v		R9		Resistor, 15 ohms, 1/4 w
C11	N19176	Condenser, 40 mfd., 150 v		R10		Resistor, 150 ohms, 1/4 w
C12		Condenser, 20 mfd., 150 v		R11		Resistor, 2200 ohms, 1 watt
C13		Condenser, 20 mfd., 25 v		Spk.	N19937-1	Speaker & Output transformer assy.
C14		Condenser, .01 mfd., 400 v			N21626-1	Speaker, 4" P. M.
	N20237	Cord, Power		T4	N18258	Transformer, output
	N21923	Emblem, Dial Scale		T3	N19649	Transformer, I.F.
	N19120-1	Knob, tuning			N20040	Washer, white felt
	N18679	Knob, volume			N18136	Wire, antenna
	N21925	Leaflet, instruction				

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MODEL 8003
CHASSIS 132.818-1
MODEL 8090
CHASSIS 101.821

MODEL 8003 CHASSIS 132.818-1
ALIGNMENT PROCEDURE

PRELIMINARY:

Output meter connection Across speaker voice coil
Output meter reading to indicate 200 milliwatts8 volt
Connection of generator ground lead Floating ground
Generator modulation 30%, 400 cycles
Position of volume control Fully clockwise
Position of dial pointer with variable fully closed 54 on dial

POSITION OF VARIABLE	GENERATOR FREQUENCY	DUMMY ANTENNA	GENERATOR CONNECTION (high)	TRIMMERS ADJUSTED (in order shown)	TRIMMER FUNCTION
Open	455 kc	.05 mfd.	12SA7GT grid	Top of T3	I. F.
1400 kc	1400 kc	.00005 mfd.	**Antenna	*C2	Oscillator
600 kc	600 kc	.00005 mfd.	**Antenna	Check point	- - - -

IMPORTANT ALIGNMENT NOTES

*Since the antenna stator section of the variable has no trimmer, the rotor is rocked back and forth while adjusting oscillator trimmer, to obtain maximum output.

Check the sensitivity at 600 kc; if weak, adjust antenna section plates for maximum output at 600 kc; tracking is accomplished by adjusting plates of rotor.

**Unsolder 20' antenna lead from lug on antenna coil, and connect signal generator lead to lug through .00005 mfd. Dummy Antenna.

Approximate stage by stage sensitivities are: Mixer - 455 kc - 2600 uv; Mixer 1000 kc - 2600 uv; Antenna - 1000 kc - 180 uv.

ALIGNMENT PROCEDURE

MODEL 8090 CHASSIS 101.821

PRELIMINARY:

Output meter reading to indicate 0.05 Watt across voice coil.....0.4 Volt
Generator ground lead connection.....I.F. alignment-negative "B" lead
.....Ant. alignment-Receiver chassis
Generator modulation.....30%, 400 cycles
Position of volume control.....Fully on
Position of pointer with tuner fully closed..Last line to left of 540 calibration mark
on escutcheon or the second light brown
mark from the left-hand end on the upper
edge of the dial background.

POSITION OF TUNER	GENERATOR FREQUENCY	DUMMY ANTENNA	GENERATOR CONNECTION	ADJUSTMENTS (IN ORDER SHOWN)	TRIMMER FUNCTION
Closed	455 Kc.	0.1 mfd.	Transl.-Grid	T2 & T1	I. F.
Fully open	1650 Kc.	.0002 mfd.	Antenna	C7	Oscillator
See note below	1410 Kc.	.0002 mfd.	Antenna	C3	Antenna

IMPORTANT ALIGNMENT NOTES:

NOTE: The 1410 Kc. calibration point is the first light brown mark from the right-hand edge of the dial background.

The alignment must be done in the order given.

The entire Alignment Procedure should be repeated step by step in the original order for greatest accuracy.

Always keep the output from the generator at its lowest possible value to prevent the AVC of the receiver from interfering with accurate alignment.