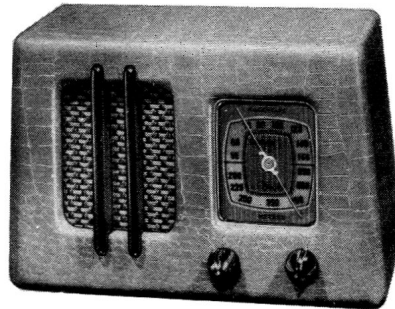


Model 540

Universal AC-DC Superheterodyne

Radio Receiver



Specifications

Frequency Range:

Broadcast only 540 to 1720 K.C.

I.F.:

470 K.C.

Tubes:

Type	Position
12A8GT	Converter
12K7GT	I.F.
12SQ7	2 Det. AVC & Audio
35L6GT	Output
35Z5GT	Power Rectifier

Power Supply:

110-125 volts, 25-60 cycle
110-125 volts, D.C.
Consumption: 27 watts

A.V.C.:

On 12K7GT I.F. and 12A8GT Converter

Controls:

Two A (left)
Volume, and A.C. Switch
B (right) Tuning

Power Output:

1.5 watts

Loudspeaker:

4" E.D.

Dial:

Rectangular metal; four colours, double-end pointer; scale directly illuminated

Cabinets:

Style "I", "G" and "R" wood with fabricoid covering; "W" wood with walnut finish

Audio System:

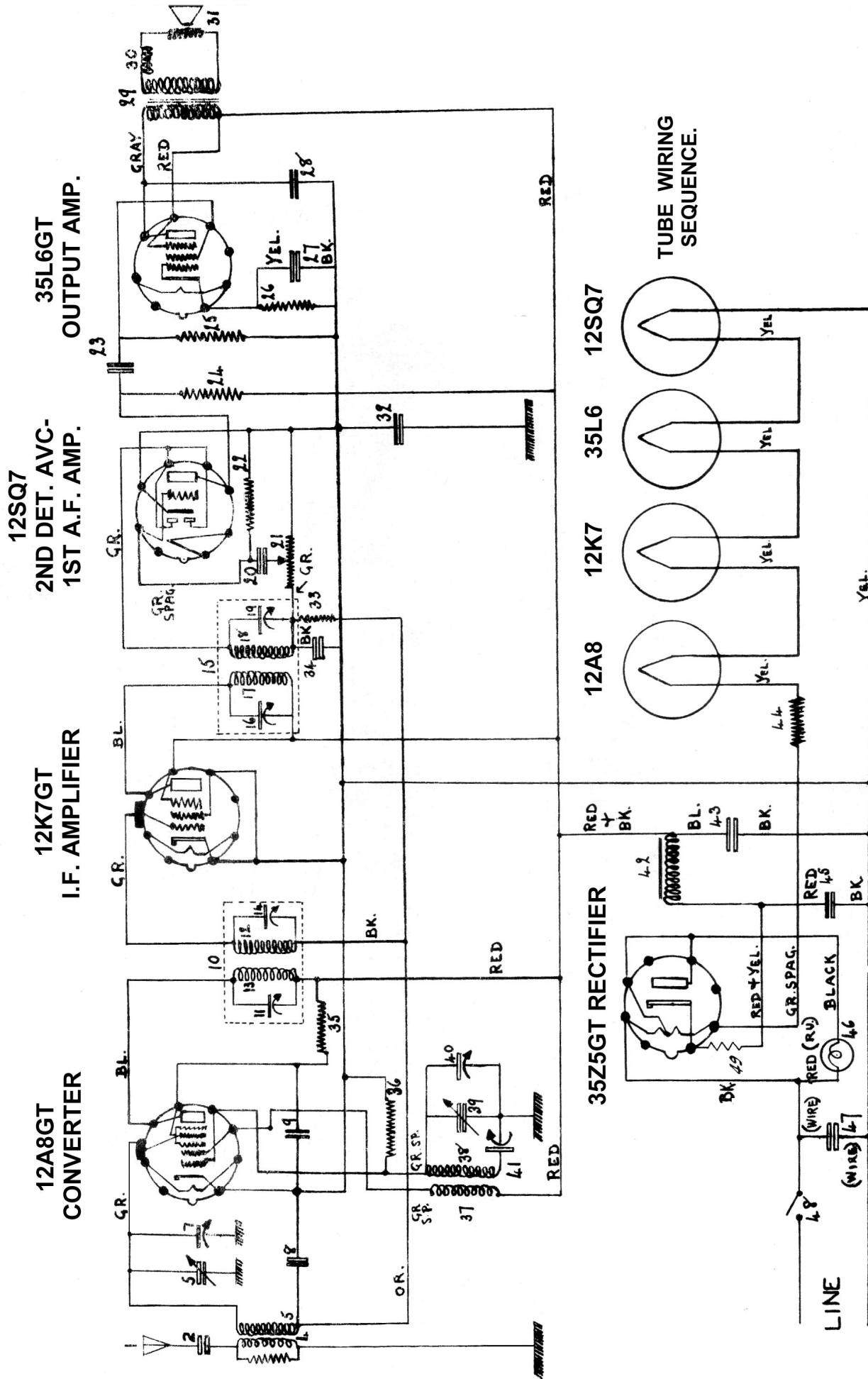
35L6GT single pentode, resistance capacitance coupled

Dimensions:

Chassis 8-1/4" x 3-5/8" x 11-15/32"
Cabinets: 9-1/2" x 4-1/2" x 6-3/16" (overall)

Antenna:

25' Insulated wire permanently connected



SCHEMATIC DIAGRAM MODEL 540 A.C. - D.C.

MODEL 540 RADIO RECEIVER

REPLACEMENT PARTS LIST

Item	Description	Part No.	Item	Description	Part No.
1	Antenna wire (25' #23 flex.)	K-5047	34	Capacitor: mica 400 mmf.	K-1611-24
2	Capacitor .002 mf. 400 volt	K-2228-2	35	Resistor: 25,000 ohms, 1/2 W.	K-2226-7
3	Resistor, 20,000 ohms 1/2 W.	K-2226-8	36	Resistor: 50,000 ohms, 1/2 W.	K-2226-6
4	Antenna transformer primary	K-4948	37	Oscillator plate coil	K-4949
5	Antenna transformer sec.	Part of K-4950	38	Oscillator grid coil	
6	Antenna sect. tuning gang		39	Oscillator Sect. Tuning Gang	Part of K-4950
7	Antenna sect. trimmer		40	Oscillator Trimmer	
8	Capacitor, .05 mf. 200 volts	K-2227-8	41	Oscillator pad. cap.	K-3860-8
9	Capacitor, .05 mf. 200 volts	K-2227-8		300-625 mmf.	
10	1st I-F Transformer assembly, complete	K-4951	42	Loudspeaker field-500 ohms	Part of K-5002
11-14	1st I-F trimmers	K-5688	43	Filter cap. 40 mf. 150 volts	Part of K-4994
12-13	1st I-F coil only	K-4972	44	Resistor W/W 50 ohm (2 watt)	K-4990-1
15	2nd I-F transformer assembly, complete	K-4952	45	Filter cap. 40 mf. 150 volts	Part of K-4994
16-19	2nd I-F trimmers	K-5688	46	Dial lamp 6.3 V. 250 ma.	K-2589-3
17-18	2nd I-F coil only	K-4973	47	Capacitor: .03 mf.	K-2228-18
20	Capacitor .01 mf. 200 volts	K-2227-6	48	On-Off Switch	Part of K-4991
21	Volume control (with switch) (.5 meg)	K-4991	49	Resistor 33 ohms, 1/2 watt	K-5975-32B
22	Resistor: 10 meg. 1/2 W.	K-2226-74	<u>Miscellaneous:</u>		
23	Capacitor: .01 mf. 200 Volts	K-2227-6		Cabinet back cover	K-4970-2
24	Resistor: .25 meg. 1/2 W.	K-2226-4		Sockets (Octal base - small size)	K-4944
25	Resistor: .5 meg. 1/2 W.	K-2226-3		Dial Pulley	K-4976
26	Resistor: 220 ohm. 1/2 W.	K-2226-80		Dial Indicator	K-4977
27	Capacitor: 20 mf. 25 volts	Part of K-4994		Dial Cord (10")(Order by feet)	K-4636
28	Capacitor: .05 mf. 200 volts	K-2227-8		Dial Spring	K-4487
29	Output transformer	K-5008		Lamp Socket	K-5003
30	Hum coil (not replaceable; part of K-5002)	-		Drive Shaft	K-4489-4
31	Loudspeaker assembly	K-5002		Dial Scale	K-4947
32	Capacitor: .25 mf. 400 volts	K-2228-10		Grid Clip	K-3030-2
33	Resistor: 2 meg. 1/2 W.	K-2226-1		Antenna Spool	K-5046
				Knobs	K-4989
				Single Stand-off	K-2594
				Dial Cover (Cellulose)	K-4998-2

D.C. RESISTANCE OF COILS (OHMS)

Item	Description	Resistance
4	Ant. Coil Primary	40.0
5	Ant. Coil Secondary	5.0
37	Oscillator Plate Coil	6.0
38	Oscillator Grid Coil	2.5
29 (A)	Output Transformer Primary	170.0
29 (B)	Output Transformer Secondary	Less than 0.5
42	Field	500.0
13	1st I-F Primary	34.0
12	1st I-F Secondary	34.0
17	2nd I-F Primary	34.0
18	2nd I-F Secondary	34.0

MODEL 540 RADIO RECEIVER

REALIGNING DETAILS

- I.F.: With .1 mf. capacitor in signal generator lead, set to 470 K.C.; connect to 12A8GT converter grid, adjust trimmers, items 11, 14, 16 and 19.
- R.F.: Set dial at gang "full open" position. With 100 mmf. capacitor in signal generator lead, set to 1712 K.S.; align oscillator trimmer item 40 (rear trimmer on gang); set generator and receiver to 1600 K.C.; align antenna trimmer item 7 (front trimmer on gang), rocking tuning gang while doing so. Set signal generator and receiver to 600 K.C.; align oscillator pad item 41 (on oscillator coil underneath chassis), rocking tuning gang while doing so. Recheck high frequency end of dial.

IMPORTANT NOTES:-

The lower trimmer on the antenna tuning portion of the gang (a duplicate of item 7) has been left in place but screwed up tightly to maximum capacity before the set left the factory. It is most essential that this trimmer remain in this position.

In all alignment work on this receiver, return lead of signal generator, normally the "ground lead", must be connected to 12A8, 12K7, or 12SQ7 cathodes. It must not be connected to chassis or to 35L6GT cathode.

SOCKET VOLTAGES (117 VOLT LINE A.C.)

	<u>Plate</u>	<u>Screen</u>	<u>Anode Plate</u>	<u>Grid</u>
12A8GT	100	49	100	-
12K7GT	100	100	-	-
12SQ7	45	-	-	-
35L6GT	93	100	-	6.6
35Z5GT		100 Volts		