

PHILCO RADIO MODELS 51-531 AND 51-531-I

SPECIFICATIONS

CABINET

Model 51-531 Molded plastic,
mottled mahogany

Model 51-531-I Molded plastic, ivory

CIRCUIT 5-tube superheterodyne

FREQUENCY RANGE 540—1620 kc.

AUDIO OUTPUT 1.2 watts

OPERATING VOLTAGE 105—125 volts,
a.c. or d.c.

POWER CONSUMPTION 30 watts

AERIAL High-impedance loop; con-
nector for external aerial

INTERMEDIATE FREQUENCY 455 kc.

PHILCO TUBES (5) 7A8, 12BA6, 14B6,
50L6GT, 35Z5GT



TP-7807

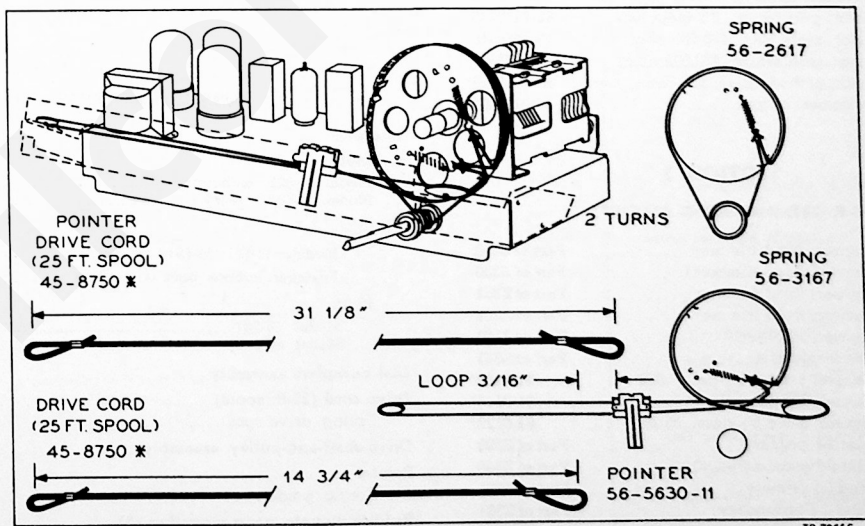


Figure 1. Drive-Cord-Installation Details

REPLACEMENT PARTS LIST

NOTE: Part numbers identified by an asterisk (*) are general replacement items. These numbers may not be identical with those on factory parts; also, the electrical values of some replacement items may differ from the values indicated in the schematic diagram and parts list. The values substituted in any case are so chosen that the operation of the radio will be either unchanged or improved. When ordering replacements, use only the "Service Part No."

SECTION 1

POWER SUPPLY

Reference Symbol	Description	Service Part No.
C100	Condenser, line filter, .04 μ f.	45-3500-2*
C101	Condenser, electrolytic, 3-section filter.	30-2573
C101A	Condenser, filter, 30 μ f., 150 v.	Part of C101
C101B	Condenser, filter, 25 μ f., 150 v.	Part of C101
C101C	Condenser, filter, 20 μ f., 150 v.	Part of C101
R100	Resistor, leakage, 150,000 ohms.	66-4158340*
R101	Resistor, filter, 220 ohms, 1 watt.	66-1224340*
R102	Resistor, filter, 1200 ohms.	66-2128340*
S100	Switch, off-on	Part of R200
W100	Line cord and plug	L-2183*

SECTION 2

AUDIO CIRCUITS

C200	Condenser, d-c blocking, .01 μ f.	61-0120*
C201	Condenser, d-c blocking, .01 μ f.	61-0120*
C202	Condenser, by-pass, 220 μ f.	62-122001001*
C203	Condenser, tone compensation, .02 μ f.	61-0108*
LS200	Speaker, p-m, 4"	36-1627-5
R200	Volume control (with off-on switch), 500,000 ohms	33-5566-4
R201	Resistor, grid return, 3.3 megohms.	66-5338340*
R202	Resistor, plate load, 470,000 ohms.	66-4478340*
R203	Resistor, grid return, 470,000 ohms.	66-4478340*
R204	Resistor, cathode bias, 130 ohms, 1 watt.	66-1134340*
T200	Transformer, output	32-8384

SECTION 3

I-F, DET, AND A-V-C CIRCUITS

C300A	Condenser, fixed trimmer	Part of Z300
C300B	Condenser, fixed trimmer	Part of Z300
C301A	Condenser, fixed trimmer	Part of Z301
C301B	Condenser, fixed trimmer	Part of Z301
C301C	Condenser, i-f filter	Part of Z301
C301D	Condenser, i-f filter	Part of Z301
C302	Condenser, screen by-pass, .003 μ f.	61-0109*
C303	Condenser, by-pass, .1 μ f.	61-0113*
C304	Condenser, a-v-c by-pass, .05 μ f.	61-0122*
L300A	Coil, 1st i-f primary	Part of Z300
L300B	Coil, 1st i-f secondary	Part of Z300
L301A	Coil, 2nd i-f primary	Part of Z301
L301B	Coil, 2nd i-f secondary	Part of Z301
R300	Resistor, screen dropping, 39,000 ohms.	66-3398340*
R301	Resistor, grid return, 330,000 ohms.	66-4338340*
R302	Resistor, i-f filter, 47,000 ohms.	66-3478340*
R303	Resistor, diode load, 2.2 megohms.	66-5228340*

SECTION 3 (Cont.)

Reference Symbol	Description	Service Part No.
TC300A	Tuning core, 1st i-f primary	Part of Z300
TC300B	Tuning core, 1st i-f secondary	Part of Z300
TC301A	Tuning core, 2nd i-f primary	Part of Z301
TC301B	Tuning core, 2nd i-f secondary	Part of Z301
Z300	Transformer, 1st i-f	32-4160-8A
Z301	Transformer, 2nd i-f	32-4240-A

SECTION 4

R-F AND CONVERTER

C400	Condenser, tuning gang, 2-section	31-2727-2
C400A	Condenser, trimmer, aerial	Part of C400
C400B	Condenser, trimmer, oscillator	Part of C400
C401	Condenser, d-c blocking, 47 μ f.	60-00515307*
C402	Condenser, fixed trimmer, 10 μ f.	30-1224-26*
LA400	Loop aerial Models 51-531, 51-531-I	32-4052-31
R400	Resistor, grid return, 100,000 ohms.	66-4108340*
T400	Transformer, oscillator	32-4263

MISCELLANEOUS

Description	Service Part No.
Cabinet	
Model 50-522, mahogany	10747
Model 50-522-I, ivory	10747-1
Back	
Models 51-531, 51-531-I	54-7767
Fastener, cabinet back (4)	W2235-2FA9
Knob	
Model 51-531	54-4674
Model 51-531-I	54-4674-1
Dial-backplate assembly	76-4570
Drive cord (25-ft. spool)	45-8750*
Spring, drive cord	56-2617
Drive-shaft-and-pulley assembly	76-3671-2
Pointer	56-5630-11
Spring, pointer	56-3167
Rubber mounts, gang mounting (3)	27-4771-1
Socket, Loktal (2)	27-6138*
Socket, miniature (1)	27-6203
Socket, octal (2)	27-6174*

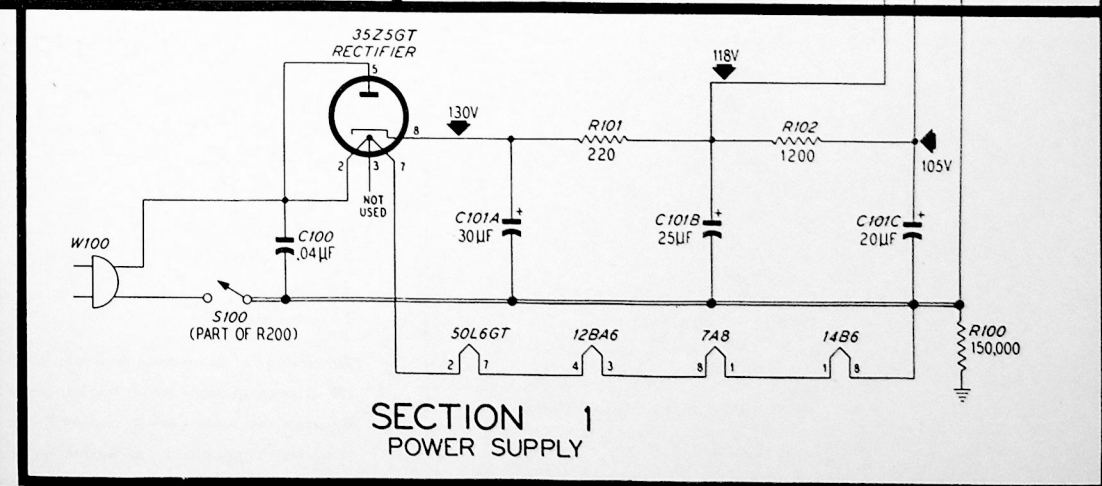
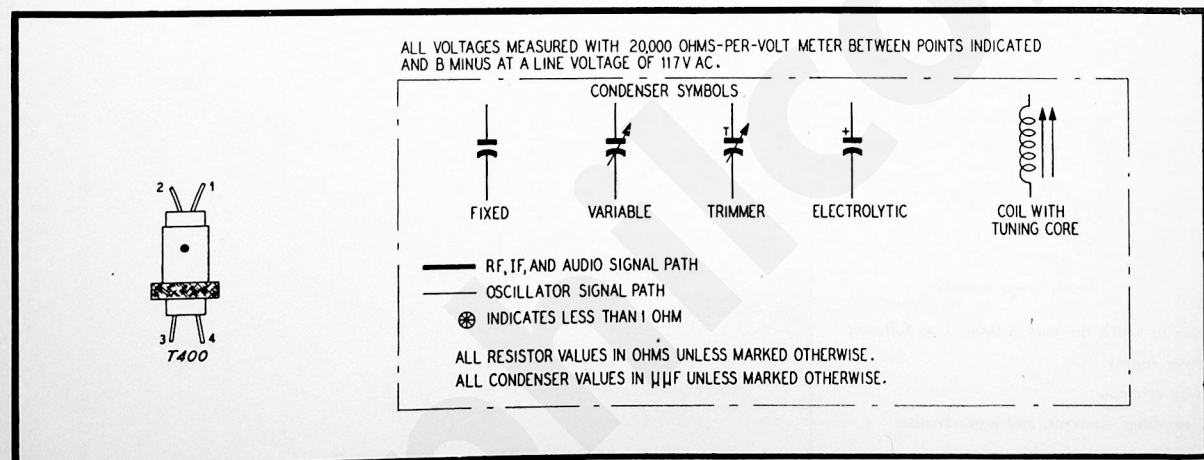
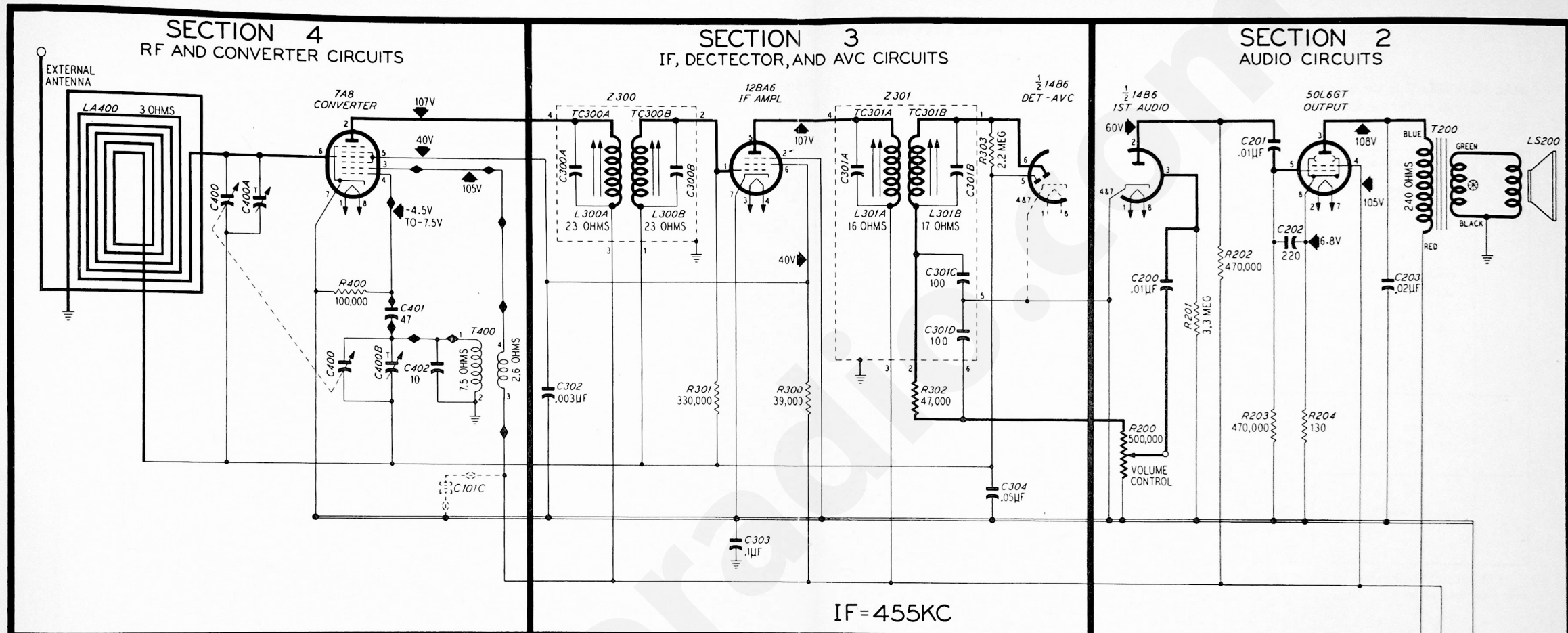


Figure 2. Philco Radio Models 51-531 and 51-531-I, Schematic Diagram