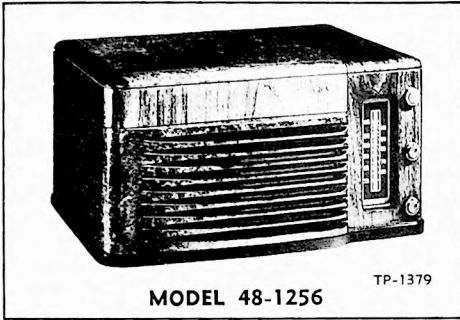
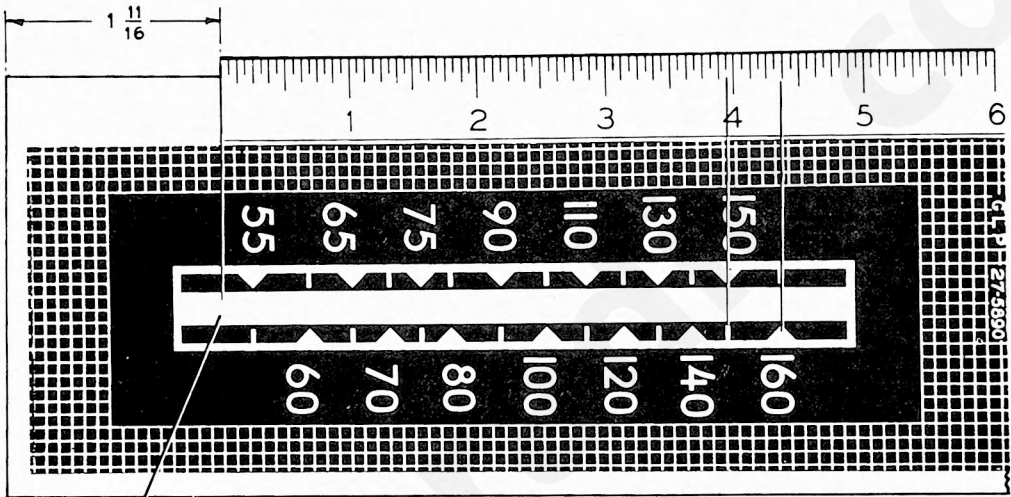


PHILCO RADIO-PHONOGRAPH, MODEL 48-1256

SPECIFICATIONS



CABINET	Wood, walnut or mahogany finish
CIRCUIT	Six-tube superheterodyne
FREQUENCY RANGE	540—1620 kc.
OPERATING VOLTAGE	105—120 volts, 60 cycles, a.c.
POWER CONSUMPTION	60 watts
AERIAL	Built-in loop; terminal provided for external aerial
INTERMEDIATE FREQUENCY	455 kc.
PHILCO TUBES (6)	7C7, 7A8, 14A7, 7C6, 35L6GT, 50X6
RECORD CHANGER	Philco Automatic Record Changer, Model D-10 (For service information, see manual PR-1156.)



INDEX MARK ↗ DIAL BACKPLATE
Figure 1. Calibration Measurements for Dial Backplate

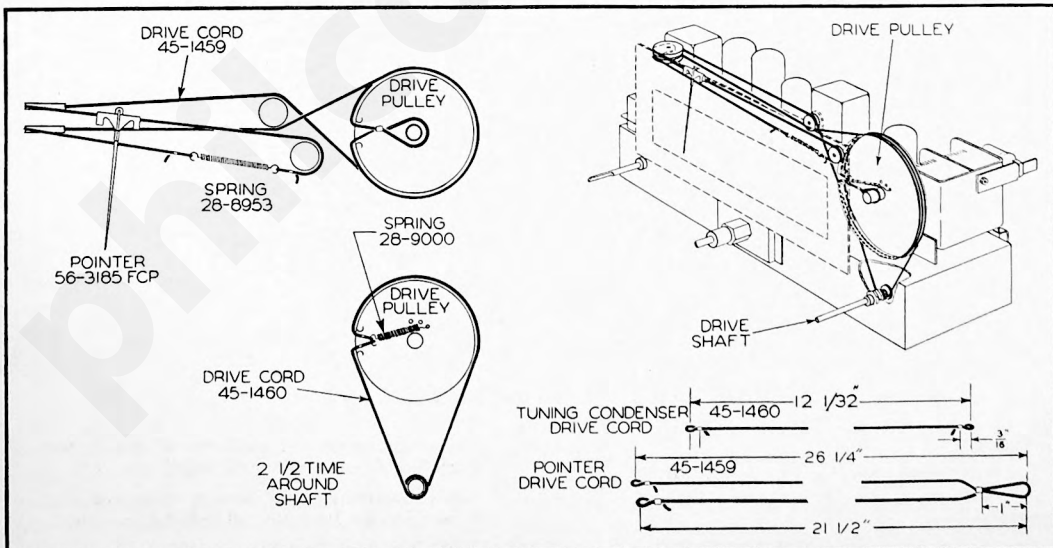


Figure 2. Drive-Cord Installation Details
 150

TP-707

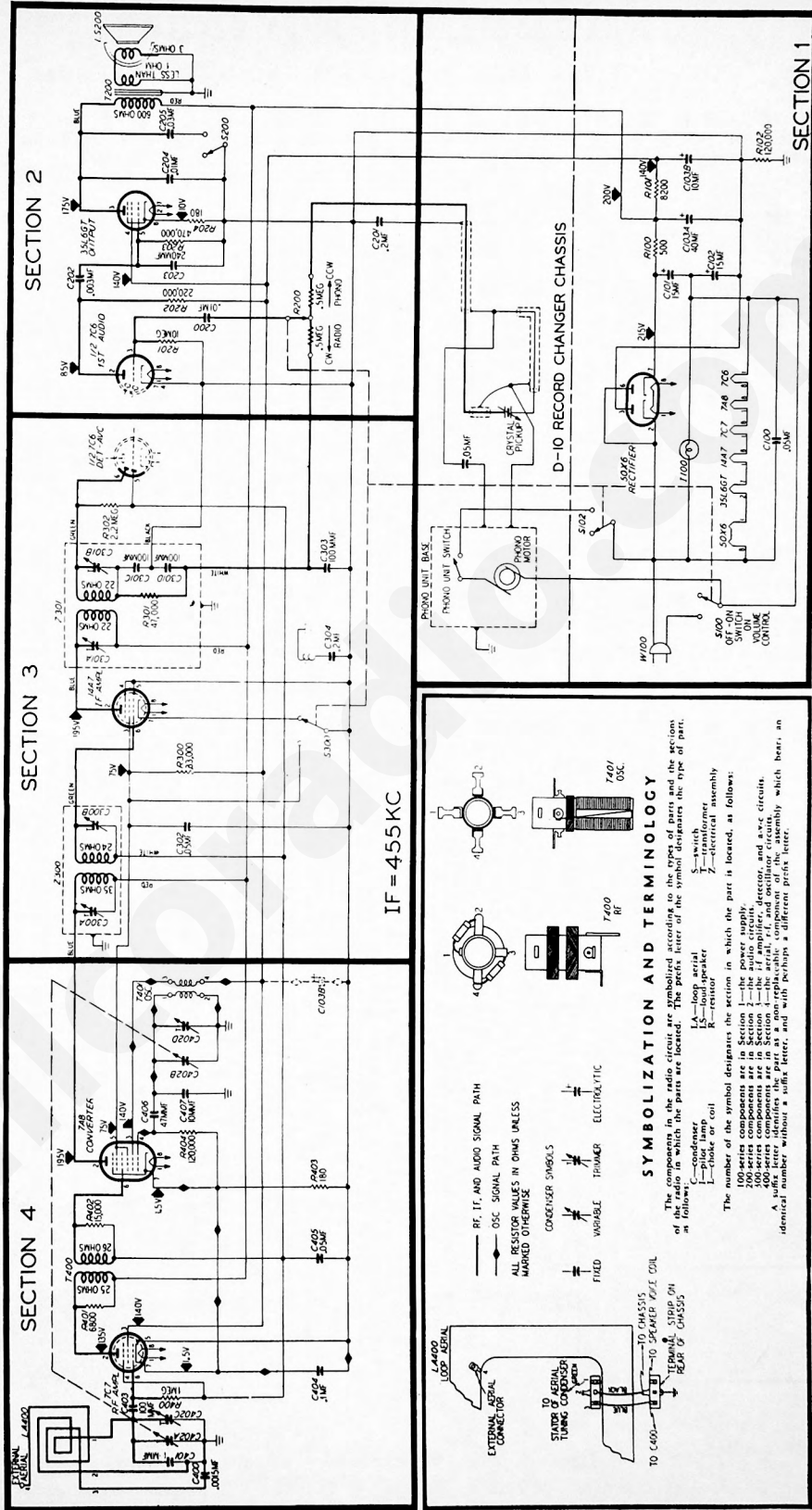


Figure 3. Philco Radio-Phonograph, Model 48-1256, Sectionalized Schematic.

ALIGNMENT PROCEDURE

TURN THE VOLUME CONTROL FOR RADIO TO MAXIMUM.

SIGNAL GENERATOR—Connect the ground lead to B-; connect the output lead as indicated in the chart. Use modulated output.

OUTPUT LEVEL—During alignment, adjust the signal-generator output to maintain an output-meter indication below 1.25 volts.

STEP	SIGNAL GENERATOR		RADIO		ADJUST
	CONNECTIONS TO RADIO	DIAL SETTING	DIAL SETTING	SPECIAL INSTRUCTIONS	
1				Turn C300B (copper screw) down tight.	
2	Through .1-mf. condenser to pin #6 of 7A8.	455 kc.	540 kc.	Adjust, in order given, for maximum output.	C301A C301B C300A C300B
3	Through 200-mmf. condenser to external aerial connector.	1600 kc.	1600 kc.	Adjust for maximum output.	C402D
4	Same as step 3.	1500 kc.	1500 kc.	Adjust for maximum output.	C402C

DIAL—Calibration and pointer-index measurements are shown in figure 1. With the tuning condensers fully meshed, set the pointer to the index mark.

OUTPUT METER—Connect to the right-hand (output) lug and center (chassis) lug of the terminal panel, shown in figure 4.

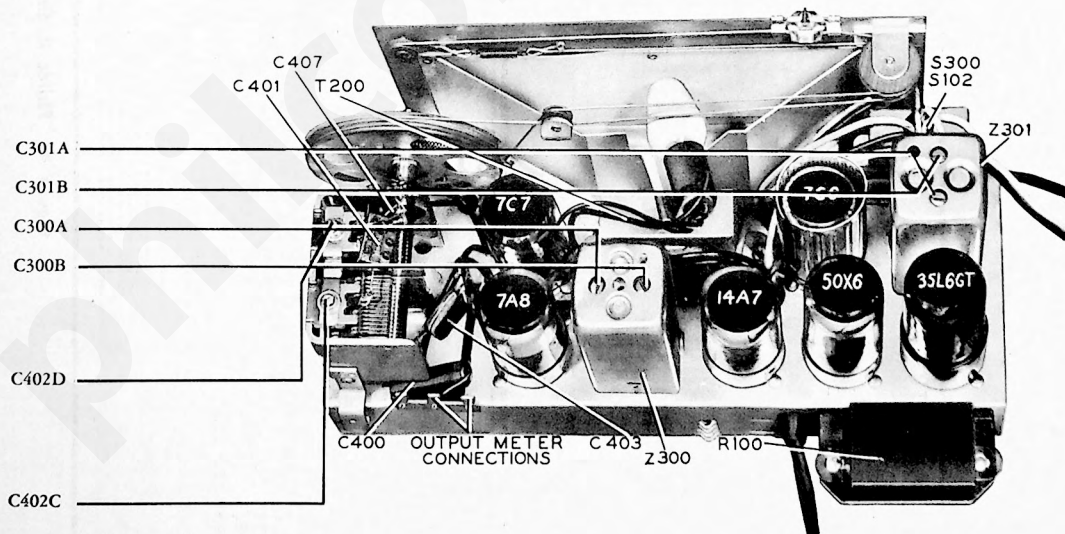


Figure 4. Top View, Showing Trimmer Locations

REPLACEMENT PARTS LIST

NOTE

Part numbers marked with an asterisk (*) are general replacement items. These numbers may not be identical with those on factory assemblies; 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

Reference Symbol	Description	Service Part No.
C100	Condenser, power-line by-pass, .05 mf.	61-0122
C101	Condenser, electrolytic, filter, 15 mf.	30-2575-11
C102	Condenser, electrolytic, filter, 15 mf.	30-2575-11
C103	Condenser, electrolytic, 2-section	30-2575-12
C103A	Condenser, filter, 40 mf.	Part of C103
C103B	Condenser, filter, 10 mf.	Part of C103
I100	Lamp, panel, 110 volts, 6 watts	34-2477
R100	Resistor, filter, 500 ohms	33-3435-3
R101	Resistor, filter, 8200 ohms	66-2824340*
R102	Resistor, a-c leakage, 120,000 ohms	66-4123340*
S100	Switch, a-c power	Part of R200
S102	Switch, phono-motor power	Part of 42-1736

SECTION 2

Reference Symbol	Description	Service Part No.
C200	Condenser, d-c blocking, .01 mf.	61-0120*
C201	Condenser, a-c isolation, .2 mf.	45-3500-3*
C202	Condenser, d-c blocking, .003 mf.	61-0109*
C203	Condenser, r-f by-pass, 240 mmf.	60-10245307*
C204	Condenser, tone compensating, .01 mf.	61-0120*
C205	Condenser, tone control, .03 mf.	45-3500-1*
LS200	Speaker	36-1613
R200	Control, volume, .5 megohm each side of center tap	33-5503
R201	Resistor, grid return, 10 megohms	66-6103340*
R202	Resistor, plate load, 220,000 ohms	66-4223340*
R203	Resistor, grid return, 470,000 ohms	66-4473340*
R204	Resistor, cathode bias, negative feedback, 180 ohms	66-1183340*
S200	Switch, tone control	42-1770
T200	Transformer, audio output	32-8242

SECTION 3

Reference Symbol	Description	Service Part No.
C300A	Condenser, trimmer	Part of Z300
C300B	Condenser, trimmer	Part of Z300
C301A	Condenser, trimmer	Part of Z301
C301B	Condenser, trimmer	Part of Z301
C301C	Condenser, r-f by-pass	Part of Z301
C301D	Condenser, r-f by-pass	Part of Z301
C302	Condenser, r-f by-pass, .05 mf.	61-0122*
C303	Condenser, r-f by-pass, 100 mmf.	60-10105407*
C304	Condenser-and-choke assembly, resonant at 455 kc.	76-1198
R300	Resistor, screen dropping, 33,000 ohms	
R301	Resistor, r-f filter	Part of Z301
R302	Resistor, a-v-c decoupling, 2.2 megohms	66-6103340*
S300	Switch (combined with S102), radio disabling	Part of 42-1736
Z300	Transformer, 1st i-f, 455 kc., including C300A and C300B	32-3962
Z301	Transformer, 2nd i-f, 455 kc., including C301A, C301B, C301C, C301D, and R301	

SECTION 4

Reference Symbol	Description	Service Part No.
C400	Condenser, aerial isolating, .0015 mf.	45-3500-6*
C401	Condenser, fixed circuit capacitance, 10 mmf.	
C402	Condenser, tuning gang	31-2527-2
C402A	Condenser, aerial tuning	Part of C402
C402B	Condenser, oscillator tuning	Part of C402
C402C	Condenser, aerial trimmer	Part of C402
C402D	Condenser, oscillator trimmer	Part of C402
C403	Condenser, d-c blocking, 100 mmf.	60-10105407*
C404	Condenser, cathode r-f by-pass, .1 mf.	61-0113*
C405	Condenser, a-v-c filter, .05 mf.	61-0122*
C406	Condenser, d-c blocking, 47 mmf.	
C407	Condenser (ceramic), fixed circuit capacitance, 10 mmf.	62-010009001*
LA400	Loop-aerial assembly	76-3020
R400	Resistor, grid return, 1 megohm	66-5103340*
R401	Resistor, 6800 ohms	Part of T400
R402	Resistor, 15,000 ohms	Part of T400
R403	Resistor, cathode bias, 180 ohms	66-1183340*
R404	Resistor, oscillator grid leak, 120,000 ohms	66-4123340*
T400	Transformer, r-f band-pass, including R401 and R402	32-3595
T401	Transformer, oscillator	32-4190

MISCELLANEOUS

Description	Service Part No.
Backplate assembly, dial	76-3178
Cabinet (less scale), mahogany	10641E
Cabinet (less scale), walnut	10641G
Baffle-and-cloth assembly	40-6798
Band, rubber, scale mounting	54-4168
Grommet, for corner plate	54-4313
Hinge, butt	45-6306
Hinge, lid support	45-6305
Knob	54-4488
Plate, corner, record-changer mounting	56-3103
Scale, dial	27-5890
Screw, chassis-board mounting	1W15471FA9
Screw, chassis mounting	1W13210FA3
Strap, dial mounting	56-2234
Washer, cupped, for 1W15471FA9 screw	1W42303FA9
Cam, pickup	41-3708
Cam assembly, phono-radio switch	76-1638
Clamp, electrolytic-condenser mounting	56-1466
Clip, coil mounting (oscillator, r.f.)	28-5002FA1
Cord, tuning-condenser drive (25-ft. spool)	45-8750*
Cord, pointer drive (25-ft. spool)	45-8755*
Diffusing panel	54-4257
Grommet, tuning-condenser mounting	27-4610
Lever assembly, phono-radio switch	76-1642
Plate, backing, tuning condenser	56-2105
Pointer, dial	56-3185
Pulley, dial	11W29740
Shaft, tuning-condenser drive	76-1717
Socket, Loktal	27-6138*
Socket, octal	27-6174
Spring, tuning-condenser drive	56-2617
Spring, retaining, switch-lever assembly	28-8658
Spring, pointer drive	28-8953
Stud, switch lever	56-2945

REVISIONS AND ADDITIONS TO 48-1256 SERVICE MANUAL

Reference Symbol	Description	Service Part No.
Parts List Additions		
	Socket, pilot lamp	27-6233
	Pilot-lamp clip	56-3545-6
Parts List Corrections		
R302	Resistor, a-v-c decoupling, 2.2 megohms	66-5223340*
Z301	Transformer, 2nd i-f, 455 kc., including C301A, C301B, C301C, C301D, and R301	AD-1024
C401	Condenser, fixed circuit capacitance, 10 mmf.	30-1224-26
C406	Condenser, d-c blocking, 47 mmf.	60-00515307*

PRODUCTION CHANGES

Run 2

Z300	Transformer, 1st i-f, was changed	32-4160
Z301	Transformer, 2nd i-f, was changed	AD-1024

SERVICE HINTS

1. In a few of the early sets, frequency drift, accompanied by loss of sensitivity, occurred because the 10-mmf. condenser, C407, did not have the proper temperature coefficient. In these sets, C407 should be replaced by Part No. 30-1224-26.

2. Excessive drift may occur in sets where the trimmer condensers on the tuning gang have the round plates. The difficulty may be corrected by soldering the plate of the trimmer, at the point where it is crimped into the frame of the gang, or by replacing the trimmer with one of the ceramic type, Part No. 63-0069.

3. In some of the early sets, there may be some drift, accompanied by loss of sensitivity and increase in interference, caused by changes in the 1st i-f transformer, Z300. Replace the transformer with Part No. 32-4160.