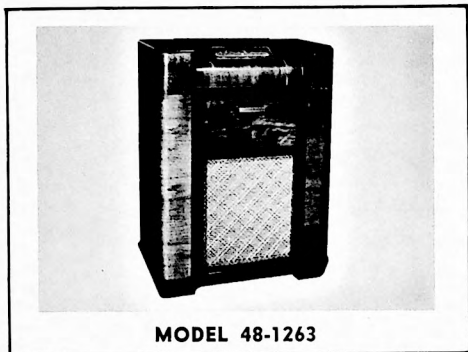


PHILCO RADIO-PHONOGRAPH MODEL 48-1263



SPECIFICATIONS

CABINET	Wood, walnut finish
CIRCUIT	Eight-tube superheterodyne
FREQUENCY RANGES	Broadcast: 540 to 1720 kc. Short Wave: 9.3 to 15.5 mc.
AUDIO OUTPUT	6 watts
OPERATING VOLTAGE	117 volts, 60-cycle, a.c.
POWER CONSUMPTION	Radio, 110 watts Phonograph, 20 watts
AERIAL	Built-in low-impedance loop
INTERMEDIATE FREQUENCY	455 kc.
PHILCO TUBES (8)	7AF7, 7A7 (2), 7C6, 6J5GT, 6K6GT (2), 5Y3GT
PHONOGRAPH	Philco Automatic Record Changer Model D-10. (For service information, refer to PR-1156.)

TP-3451

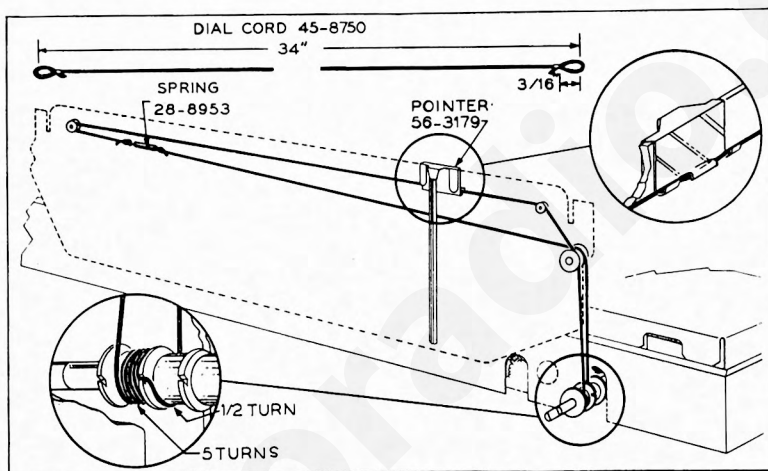


Figure 1. Drive-Cord Installation Details

TP-1653-1

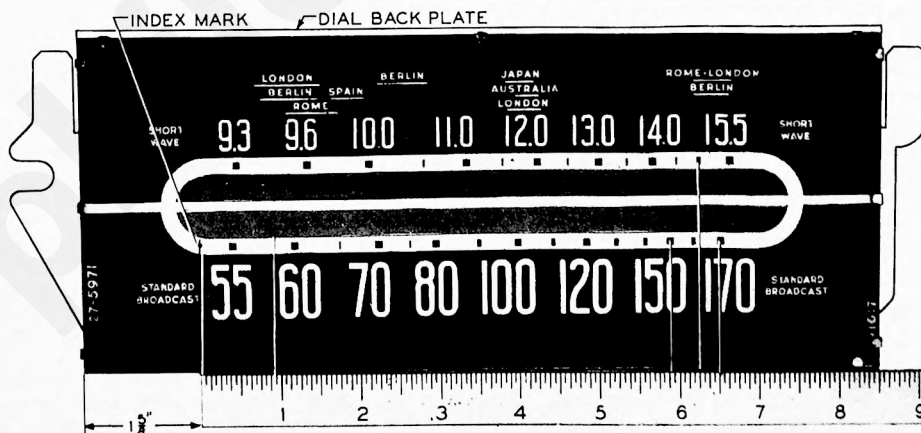


Figure 2. Calibration Measurements for Dial Backplate

TP-3780

ALIGNMENT PROCEDURE

CAUTION: Do not turn on the radio with the loud-speaker disconnected.

NOTE: Make alignment with loop aerial connected to the radio.

OUTPUT LEVEL: During alignment, adjust signal-generator output to maintain output-meter indication below 1.5 volts. Set volume control fully clockwise and tone control fully counterclockwise.

SIGNAL GENERATOR (modulated): Connect as indicated in chart.

STEP	SIGNAL GENERATOR		RADIO			
	CONNECTIONS TO RADIO	DIAL SETTING	DIAL SETTING	WS POSITION	SPECIAL INSTRUCTIONS	ADJUST
1	Through .1-mf. condenser to Terminal 1 of TB400.	455 kc.	540 kc.	BC	Adjust for maximum, ONCE only, in order.	C302A C301A C300B TC300
2	Radiating loop (see Note below).	580 kc.	580 kc.	BC	Adjust for maximum.	C402A
3	Same as step 2.	1700 kc.	1700 kc.	BC	Adjust for maximum.	C402B
4	Same as step 2.	1500 kc.	1500 kc.	BC	Adjust for maximum.	C401A
5	Same as step 2.	580 kc.	580 kc. (approx.)	BC	Rock tuning control while adjusting for maximum.	C402A
6	Repeat steps 3, 4, 5, and 3, in order, until no improvement results.					
7	Same as step 2.	15 mc.	15 mc.	SW	Adjust for maximum on FIRST peak from loose position. Image should be heard at 14.1 mc.	C402C
8	Same as step 2.	15 mc.	15 mc.	SW	Adjust for maximum.	C401B

RADIATING-LOOP NOTE: Make up a 6-8-turn, 6-inch-diameter loop, using insulated wire; connect to signal-generator leads and place near radio loop aerial.

DIAL: Calibration and pointer-index measurements are shown in figure 2. With tuning gang fully meshed, set pointer to index mark.

OUTPUT METER: Connect to terminals indicated in figure 4.

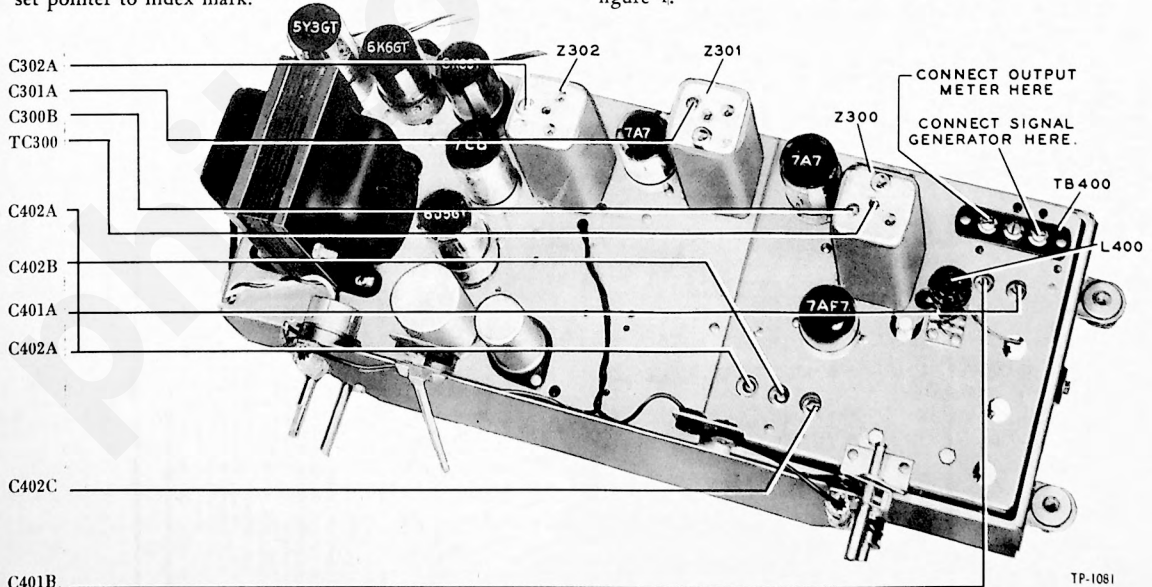


Figure-4. Top View, Showing Trimmer Locations
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REPLACEMENT PARTS LIST

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, line filter, .01 mf	.61-0120*
C101	Condenser, line filter, .01 mf	.61-0120*
C102	Condenser, electrolytic, filter, 20 mf	.30-2555
C103	Condenser, two-section, electrolytic	.30-2556
C103A	Condenser, filter, 10 mf	Part of C103
C103B	Condenser, filter, 25 mf	Part of C103
I100	Panel lamp	.34-2040
I101	Panel lamp	.34-2040
J100	Record-changer power socket	.27-6200
L100	Speaker, field	Part of LS200
R100	Resistor, screen dropping, 15,000 ohms	.66-3155340
R101	Resistor, grid bias, 165 ohms	.33-3435-1
S100	Power switch	Part of R203
T100	Power transformer	.32-8248
W100	Line cord and plug	L3339
WS5	Wafer switch	Part of WS

SECTION 2

C200	Condenser, d-c blocking, .006 mf	.45-3500-7*
C201	Condenser, r-f by-pass, 100 mmf	.60-1010540*
C202	Condenser, d-c blocking, .006 mf	.45-3500-7*
C203	Condenser, tone compensation, .01 mf	.61-0120*
C204	Condenser, r-f by-pass, 100 mmf	.60-1010540*
C205	Condenser, tone compensation, .01 mf	.61-0120*
C206	Condenser, d-c blocking, .006 mf	.45-3500-7*
C207	Condenser, d-c blocking, .006 mf	.45-3500-7*
C208	Condenser, d-c blocking, .006 mf	.45-3500-7*
C209	Condenser, audio by-pass, .1 mf	.61-0113*
C210	Condenser, tone compensation, .003 mf	.61-0109*
J200	Test socket	.27-6180
LS200	Loud-speaker	.36-1595
R200	Volume control, 2 megohms	.33-5535-1
R201	Resistor, crystal load, 470,000 ohms	.66-4473340*
R202	Resistor, tone compensation, 33,000 ohms	.66-3333340*
R203	Tone control, 6 megohms	.33-5538-1
R204	Resistor, feedback voltage divider, 4.7 ohms	
R205	Resistor, feedback voltage divider, 68 ohms	.66-0683340*
R206	Resistor, grid return, 10 megohms	.66-6103340*
R207	Resistor, plate load, 220,000 ohms	.66-4223340*
R208	Resistor, grid return, 1 megohm	.66-5103340*
R209	Resistor, cathode bias, 4700 ohms	.66-2473340*
R210	Resistor, cathode load, 47,000 ohms	.66-3473340*
R211	Resistor, plate load, 56,000 ohms	.66-3563340*
R212	Resistor, grid return, 330,000 ohms	.66-4333340*
R213	Resistor, grid return, 330,000 ohms	.66-4333340*
R214	Resistor, bias filter, 150,000 ohms	.66-4153340*
WS1 (F)	Wafer switch	Part of WS
T200	Output transformer	.32-8274

SECTION 3

C300A	Condenser, fixed, 3000 mmf	Part of Z300
C300B	Condenser, trimmer	Part of Z300
C301A	Condenser, trimmer	Part of Z301
C302A	Condenser, trimmer	Part of Z302
C302B	Condenser, r-f by-pass, 100 mmf	Part of Z302
C302C	Condenser, r-f by-pass, 100 mmf	Part of Z302
C303	Condenser, r-f by-pass, .01 mf	.61-0120*
C304	Condenser, r-f by-pass, .01 mf	.61-0120*
C305	Condenser, r-f by-pass, .01 mf	.61-0120*
C306	Condenser, r-f by-pass, .01 mf	.61-0120*
C307	Condenser, a-v-c filter, .05 mf	.61-0122*
C308	Condenser, r-f by-pass, .01 mf	.61-0120*
C309	Condenser, r-f by-pass, .01 mf	.61-0120*
C310	Condenser, r-f by-pass, 100 mmf	.60-1010540*
R300	Resistor, plate dropping, 10,000 ohms	
R301	Resistor, a-v-c decoupling, 2.2 megohms	.66-5223340*
R302	Resistor, cathode bias, 150 ohms	.66-1153340*
R303	Resistor, screen voltage divider, 100,000 ohms	.66-3103340*
R304	Resistor, screen voltage divider, 150,000 ohms	.66-4153340*
R305	Resistor, cathode bias, 180 ohms	.66-1183340*

SECTION 3 (Continued)

Reference Symbol	Description	Service Part No.
R306	Resistor, screen dropping, 47,000 ohms	.66-3473340*
R307	Resistor, plate dropping, 33,000 ohms	
R308	Resistor, r-f filter, 47,000 ohms	.66-3473340*
R309	Resistor, diode load, 330,000 ohms	.66-4333340*
R310	Resistor, a-v-c filter, 1.0 megohm	.66-5103340*
WS1 (R)	Wafer switch	Part of WS
Z300	Transformer, 1st i.f., 455 kc., includes C300A and C300B	.32-3956-3
Z301	Transformer, 2nd i.f., 455 kc., includes C301A	.32-3957-2
Z302	Transformer, 3rd i.f., 455 kc., includes C302A, C302B, and C302C	.32-3955-3

SECTION 4

C400	Condenser, tuning gang	.31-2719
C401	Condenser, antenna trimmer, two-section	.31-6476-4
C401A	Condenser, trimmer	Part of C401
C401B	Condenser, trimmer	Part of C401
C402	Condenser, osc. trimmer and padder, three-section	.31-6464
C402A	Condenser, padder	Part of C402
C402B	Condenser, trimmer	Part of C402
C402C	Condenser, trimmer	Part of C402
C403	Condenser, fixed, 255 mmf	.30-1220-24*
C404	Condenser, d-c blocking, 220 mmf	.60-1020530*
C405	Condenser, fixed, 225 mmf	.30-1220-24*
C406	Condenser, feedback, 10 mmf	.60-0010540*
C407	Condenser, d-c blocking, 220 mmf	.60-1020530*
C408	Condenser, oscillator feedback, 100 mmf	.30-1225-2*
C409	Condenser, oscillator coupling, .006 mf	.45-3500-7*
C410	Condenser, r-f by-pass, .01 mf	.61-0120*
L400	Coil, BC aerial	.32-4033-1
L401	Coil, SW aerial	.32-4050-6
L402	Coil, BC osc.	.32-4019-2
L403	Coil, SW osc.	.32-4113
LA400	Loop aerial	.76-1989-2
R400	Resistor, grid return, 1 megohm	.66-5103340*
R401	Resistor, grid leak, 47,000 ohms	.66-3473340*
R402	Resistor, cathode bias, 2200 ohms	.66-2223340*
R403	Resistor, plate dropping, 33,000 ohms	.66-3333340*
TB400	Terminal panel, aerial	.27-6213
TB401	Socket, 5-prong, external aerial	.27-6214-1
WS	Switch, wafer, five-section	.42-1813

MISCELLANEOUS

Description	Service Part No.
Cabinet (less scale)	
Baffle and cloth	.40-6933
Bezel	.56-4878
Bin mechanism (R.H.)	.76-3223-3
Bin mechanism (L.H.)	.76-3223-2
Domes	.45-6042
Door pull	.56-4867
Frame assembly	.76-2199
Hinge	.45-6200
Scale strap	.56-4916
Scale and backplate	.76-3187
Speaker grille	.56-4920
Wood baffle	.219085
Dial backplate assembly	.76-2005-3
Drive cord (25-ft. spool)	.45-8750*
Pointer	.56-3179
Spring, pointer	.28-8953
Knob	.54-4376
Link assembly (wafer switch)	.76-2186-3
Phono cable	.41-3735-2
Pilot light assembly	.76-2109
Shaft (wafer switch)	.56-3298FA11
Shield, cable (7")	
Shield, cable (6")	
Speaker cable	.41-3701
Socket, Loktal	.27-6138*
Socket, octal	.27-6174

REVISIONS AND ADDITIONS TO 48-1263 SERVICE MANUAL

Reference Symbol	Description	Service Part No.
Parts List Additions		
	Tilt front	45-6395
Parts List Corrections		
R204	Resistor, feedback voltage divider, 4.7 ohms	66-9473340*
R300	Resistor, plate dropping, 10,000 ohms	66-3103340*
R307	Resistor, plate dropping, 33,000 ohms	66-3333340*
	Cabinet (less scale)	10682B
	Shield, cable (7")	41-3754-5
	Shield, cable (6")	41-3754-11

PRODUCTION CHANGES

Run 1

Some Run 1 sets were changed to incorporate the Philco low-noise crystal pickup and the accompanying resistor value, as given in item 2 under Run 2, below. These sets are identified by the marking "Run #1".

Run 2

1. Resistor R101 was changed to a flexible wire-wound resistor, Part No. 33-1334-3. The wiring of this resistor was changed to go from the can lug of C102 to the third (ground) lug of the 9-lug wiring panel.

2. The crystal was changed to a Philco low-noise crystal pickup, Part No. 35-2671-1. The crystal load resistor, R201, was changed to 820,000 ohms, Part No. 66-4828340*.

CRITICAL LEAD DRESS

All i-f-transformer leads should be dressed along the chassis. The grid lead (green) of Z300 should be dressed away from the wafer switch, detector, and aerial coil.