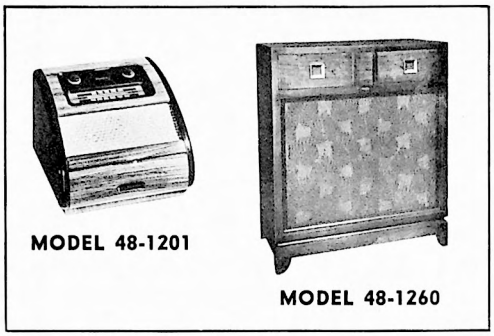
PHILCO RADIO-PHONOGRAPH MODELS 48-1201 AND 48-1260



MODEL 48-1201

MODEL 48-1260

SPECIFICATIONS

CABINET
Model 48-1201; wood, mahogany finish, harvest (L)
Model 48-1260; wood, Philcote finish
CIRCUIT ..... Five-tube superheterodyne
FREQUENCY RANGE ..... 540 to 1600 kc.
AUDIO OUTPUT ..... 1.8 watts
OPERATING VOLTAGE
105—120 volts, 60 cycles, a.c.
POWER CONSUMPTION
Radio, 45 watts; Phonograph, 60 watts
AERIAL ..... Built-in loop; terminal also provided for external aerial
INTERMEDIATE FREQUENCY ..... 455 kc.
PHILCO TUBES (5) 7A8, 7B7, 7C6, 50A5, 50X6
PHONOGRAPH
Philco automatic record player, Model M-7
(For service information, refer to PR-1154.)

TP-1630B & TP-3455

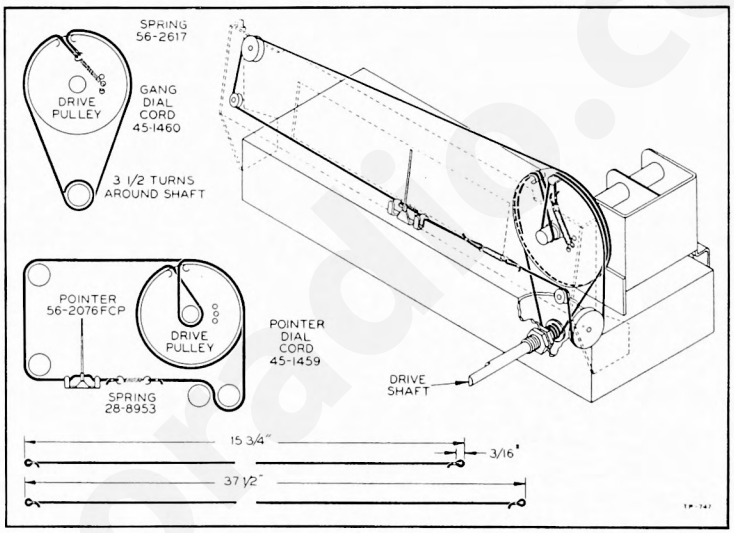


Figure 1. Drive-Cord Installation Details

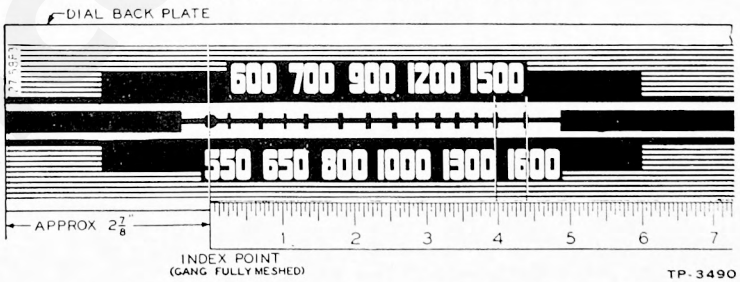


Figure 2. Calibration Measurements for Dial Backplate

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, .05 mf.	61-0122*
C101	Condenser, electrolytic, filter, 15 mf.	

Section 1 *(Continued)*

Reference Symbol	*Description*	*Service Part No.*
C102	Condenser, electrolytic, filter, 15 mf.	
C103	Condenser, dual electrolytic	30-2575-12*

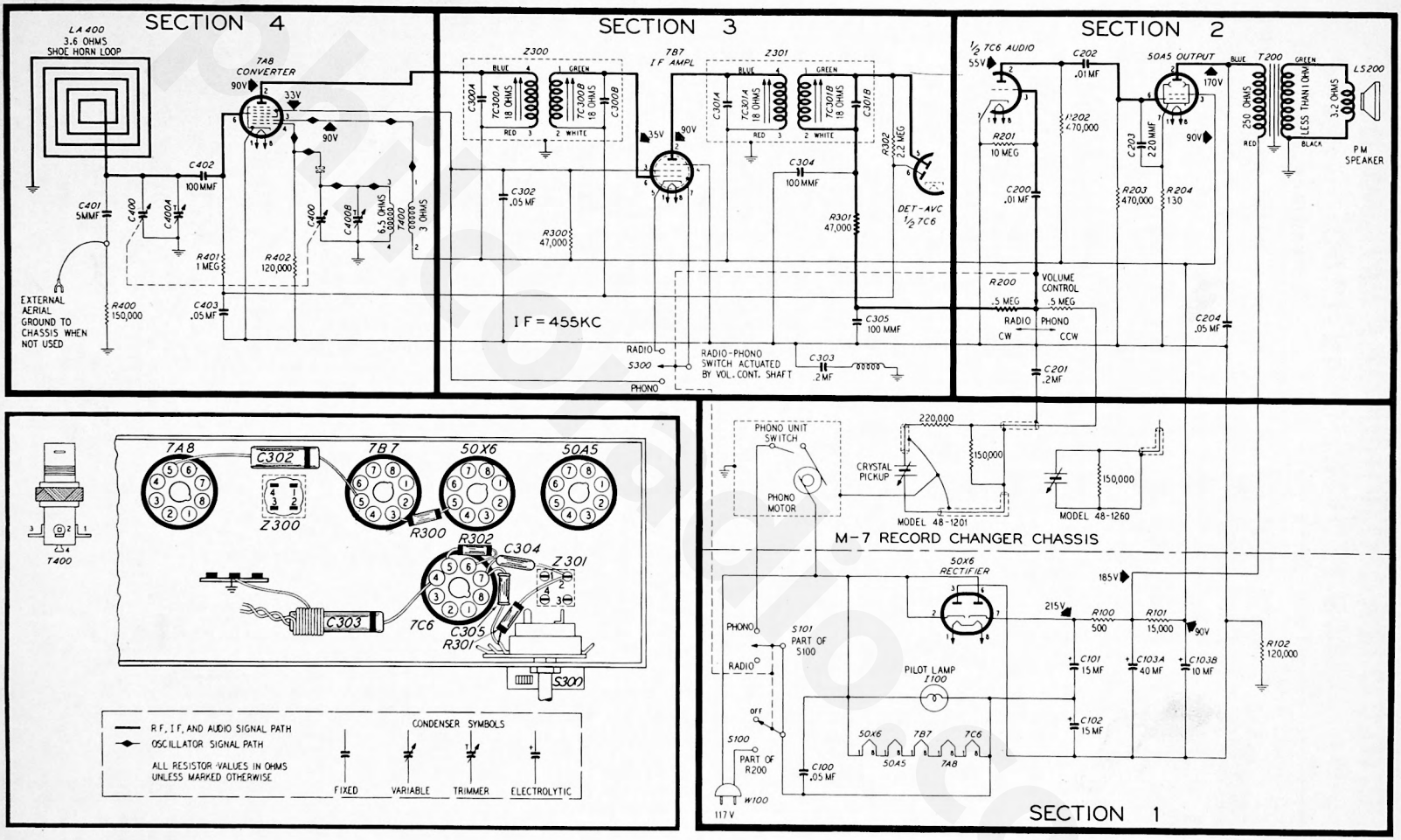


Figure 3. Philco Radio-Phonograph Models 48-1201 and 48-1260, Sectionalized Schematic Diagram.

ALIGNMENT PROCEDURE

TURN VOLUME CONTROL TO MAXIMUM IN THE RADIO POSITION

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

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

STEP	SIGNAL GENERATOR		RADIO		ADJUST
	CONNECTIONS TO RADIO	DIAL SETTING	DIAL SETTING	SPECIAL INSTRUCTIONS	
1	Through .1-mf. condenser to ext. aerial lead.	455 kc.	Gang fully meshed.	Adjust trimmers for maximum output in order given.	TC301B TC301A TC300B TC300A
2	Through 100 - mmf. condenser to ext. aerial lead.	1600 kc.	1600 kc.	Adjust trimmer for maximum output.	C400B
3	Same as step 1.	1500 kc.	1500 kc.	Adjust trimmer for maximum output.	C400A
4	Repeat steps 2 and 3.				

NOTE: Make alignment with loop connected to radio.

OUTPUT METER—Connect to terminals indicated in figure 4.

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

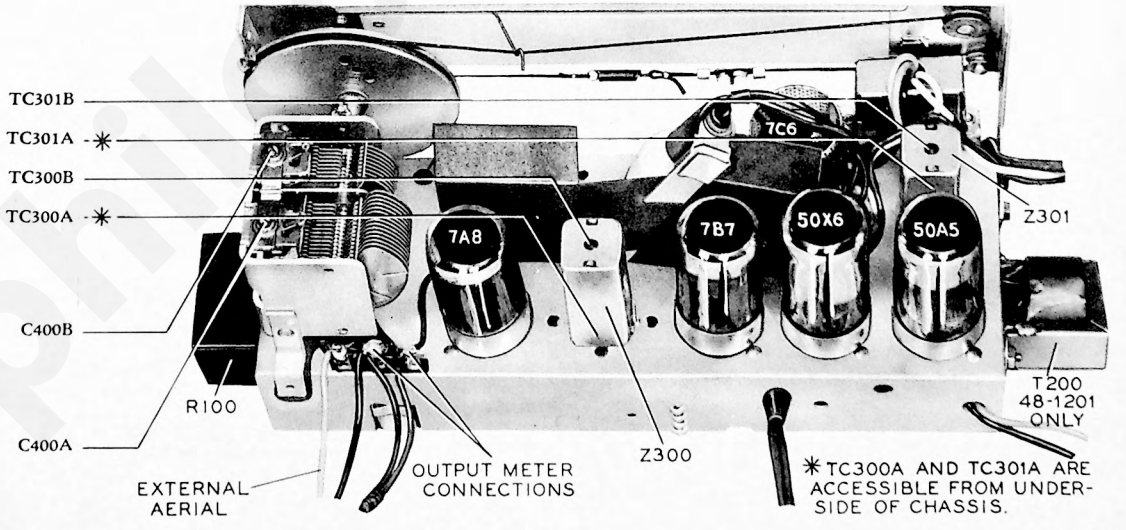


Figure 4. Top View, Showing Trimmer Locations

REPLACEMENT PARTS LIST (Continued)

Section 1 (Continued)

Reference Symbol	Description	Service Part No.
C103A	Condenser, electrolytic, filter 40 mf.	Part of C103
C103B	Condenser, electrolytic, filter, 10 mf.	Part of C103
I100	Panel lamp	34-2477
R100	Resistor, filter, 500 ohms	33-3435-3
R101	Resistor, filter, 15,000 ohms	66-3154340
R102	Resistor, leakage, 150,000 ohms	66-4123340*
S100	Switch, off-on, power	Part of R200
S101	Switch, radio-phono	42-1736
W100	A-c power cord	L-3199

Section 2

C200	Condenser, blocking, .01 mf.	61-0120*
C201	Condenser, audio by-pass, .2 mf.	45-3500-3*
C202	Condenser, blocking, .01 mf.	61-0120*
C203	Condenser, by-pass, mmf.	
C204	Condenser, tone compensation, .05 mf.	61-0122*
R200	Volume control, center-tapped, 1 megohm	33-5519
R201	Resistor, grid leak, 10 megohms	66-6103340*
R202	Resistor, plate load, 470,000 ohms	66-4473340*
R203	Resistor, grid leak, 470,000 ohms	66-4473340*
R204	Resistor, cathode bias, 130 ohms	
LS200	Loud-speaker	
	Model 48-1201	
	Model 48-1260	36-1626
T200	Output transformer	
	Model 48-1201	32-8310
	Model 48-1260	32-8310-1

Section 3

C300A	Condenser, fixed, primary	Part of Z300
C300B	Condenser, fixed, secondary	Part of Z300
C301A	Condenser, fixed, primary	Part of Z301
C301B	Condenser, fixed, secondary	Part of Z301
C302	Condenser, screen by-pass, .05 mf.	61-0122*
C303	Condenser-and-choke assembly, by-pass, .2 mf.	76-1161
C304	Condenser, i-f by-pass, 100 mmf.	60-10105407*
C305	Condenser, i-f by-pass, 100 mmf.	60-10105407*
R300	Resistor, screen dropping, 47,000 ohms	66-3473340*
R301	Resistor, filter, 47,000 ohms	66-3473340*
R302	Resistor, a-v-c filter, 2.2 megohms	66-5223340*
S300	Switch, phono-radio	Part of S101
Z300	Transformer, 1st i.f., 455 kc., includes C300A and C300B	32-4160
Z301	Transformer, 2nd i.f., 455 kc., includes C301A and C301B	32-4161

Section 4

C400	Condenser, tuning gang	31-2527-2
C400A	Condenser, aerial trimmer	Part of C400
C400B	Condenser, oscillator trimmer	Part of C400
C401	Condenser, coupling, 5 mmf.	60-90505007*
C402	Condenser, coupling, 100 mmf.	60-10105407*
C403	Condenser, a-v-c filter, .05 mf.	61-0122*
LA400	Loop aerial	
	Model 48-1201	76-2127-3
	Model 48-1260	76-2127-4
R400	Resistor, ext. aerial loading, 150,000 ohms	66-4153340*
R401	Resistor, grid leak, 1 megohm	66-6103340*
R402	Resistor, grid leak, 120,000 ohms	66-4123340*
T400	Oscillator transformer	32-4095-2

Miscellaneous — Model 48-1201

Description	Service Part No.
Aerial-lead assembly	76-1472
Cabinet (less scale)	10664B
Baffle and cloth	40-6827
Bar-and-clip assembly	76-2111
Bottom cover	54-7243
Button (2 required)	56-3920
Button, springs (2 required)	56-3919
Door	
Frame and base	76-2499
Hinge (2 required)	56-3910

Miscellaneous — Model 48-1201 (Continued)

Description	Service Part No.
Knob (2 required)	54-4255
Rubber foot (4 required)	54-4377
Rubber mount	27-4610
Snap fastener (4 required)	28-4279FA1
Scale	
Scale strap	56-2261
Wooden baffle	
Dial backplate	76-1940
Cam assembly	76-1638
Drive cord, gang drive (25-foot spool)	45-8740
Drive cord, pointer (25-foot spool)	45-8755
Pointer	56-2076-2
Shaft assembly	31-2680
Spring, gang drive	56-2617
Spring, pointer	28-8953
Hardware	
Bolt, speaker mounting (4 required)	W-2123
Clamp, electrolytic mounting	56-1466
Clip, coil mounting	28-5002FA1
Retainer (2 required)	56-3918
Screw, backplate mtg.	1W19670FA3
Screw (4 required)	1W22285FA9
Spring retainer	28-8658
Pickup cable	41-3708
Socket, Loktal (5 required)	27-6138
Socket, pilot lamp	27-6233
Speaker cable	41-3759
Switch-lever assembly	76-1642

Miscellaneous — Models 48-1260M (Mahogany) and 48-1260L (Light)

Cabinet (L)	10677A
(M)	
Bar and clip assembly	76-2111
Baffle and cloth (L)	40-6927
(M)	40-6927-1
Bezel	
Bullet catch (L)	45-6002-1
(M)	45-6002
Door	56-4921FJ31
Door spring	56-5027FA38
Door pull (2 required) (L)	56-4796
(M)	56-4796-1
Dome (4 required)	45-6190
Knife hinge (2 required)	
Knob (2 required) (L)	54-4214-1
(M)	54-4214
Rail (2 required)	56-4797FA1
Scale	27-5883
Scale strap (2 required)	56-2261
Washer, scale strap (2 required)	1W51931
Snap fastener (4 required)	
Strike plate (L)	45-6003-1
(M)	45-6003
Wood baffle	
Dial backplate assembly	76-3176
Cam assembly	76-1638
Drive cord, pointer and gang drive (25-foot spool)	45-8750
Frame and bracket	76-2468-1FJ31
Pointer	56-2076-2
Shaft assembly	
Spring, pointer	28-8953
Spring, gang drive	56-2617
Screw, backplate mtg. (4 required)	1W19670FA3
Hardware	
Bolt, speaker mtg. (4 required)	W-1695
Clamp, electrolytic mtg.	
Clip, coil mtg.	28-5002FA1
Nut (4 required)	1W19988FA3
Rubber mount, gang mtg.	27-4610
Spring retainer	28-8658
Pickup cable	41-3735-10
Socket, Loktal (5 required)	27-6138
Socket, pilot lamp	27-6233
Switch-lever assembly	76-1642

REVISIONS AND ADDITIONS TO 48-1201 AND 48-1260 SERVICE MANUAL

Reference Symbol	Description	Service Part No.
	Parts List Additions	
	Door spring	56-5027FA38
	Parts List Corrections, Sections 1 and 2	
C101	Condenser, electrolytic, filter, 15 mf.	45-3018-8*
C102	Condenser, electrolytic, filter, 15 mf.	45-3018-8*
C203	Condenser, by-pass, 220 mmf.	62-122001001*
R204	Resistor, cathode bias, 130 ohms	66-1123340*
LS200	Loud-speaker	
	Model 48-1201	36-1617-2
	Parts List Corrections, Miscellaneous—Model 48-1201	
	Door	219058
	Scale	27-5883
	Wooden baffle	219055
	Parts List Corrections, Miscellaneous—Models 48-1260M (Mahogany) and 48-1260L (Light)	
	Cabinet (M)	10677C
	Bezel (M)	56-4954
	Bezel (L)	56-4954-1
	Knife hinge (2 required)	56-4066
	Rail (2 required)	56-4797FA3
	Wood baffle	219087
	Shaft assembly	31-2680
	Clamp, electrolytic mtg.	56-1466

PRODUCTION CHANGES

Run 2

T400	Oscillator transformer was changed	32-4190-1
C404	Condenser, d-c blocking, 47 mmf., was added	60-00515307*
C405	Condenser, fixed trimmer, temperature compensating, 10 mmf., was added	30-1224-26
	The above changes were made to correct frequency drift.	
C203	Condenser wiring was changed to go from pin 6 (grid) of 50A5 to pin 5 (B–) of 50A5.	

CRITICAL LEAD DRESS

1. Observe the following dress, to reduce hum pickup:

The pilot-lamp lead from pin 1 of the 7C6, the filament lead from pin 8 of the 7C6, and the a-c wiring from the off-on switch must be wired and dressed between the 7C6 and 50X6 sockets. C200 must be dressed down into the corner of the chassis, toward the volume control. The a-c cord to the switch and pin 1 of the 50X6 must be dressed toward the rear of the chassis, away from the 7C6 socket and C200.

2. The rear loop lead must be wired to the aerial section of C400, and the front loop lead must be wired to the ground lug of C400.