

PHILCO



SERVICE

HOME RADIO

PHILCO RADIO-PHONOGRAPH, MODEL 46-1226

CIRCUIT DESCRIPTION

The radio circuit of Philco Model 46-1226 is a superheterodyne employing a 7F8 converter, two 7H7 i-f amplifiers, a 7C6 second detector—first audio, a 6J5GT/G phase inverter, and two 6K6GT/G audio-output tubes. The power supply uses a 5Y3GT/G tube in a full-wave rectifier circuit.

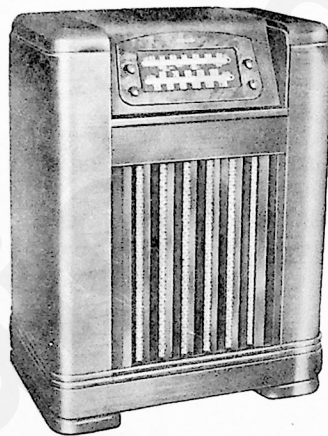
A low-impedance loop is used for signal pickup. The use of a high-efficiency dual-triode converter tube results in high signal-to-noise ratio. Oscillator-to-mixer signal injection is made by capacity coupling between the oscillator and mixer cathodes. On the short-wave band, reverse feedback from the oscillator is applied through a 10-mmf condenser (C406) to the mixer grid, to minimize the reaction on oscillator frequency when the antenna padder is adjusted. Two i-f amplifier stages, operating at 455 kc, and using type 7H7 tubes, provide high gain and good selectivity. The diode section of the 7C6 tube provides detection and a-v-c voltage, while the triode section operates as the first audio amplifier. A type 6J5GT/G triode tube functions as a phase inverter, driving the two 6K6GT/G output tubes in push-pull operation.

The audio section is bass compensated. Increased bass response is obtained by inverse-feedback voltage, taken from the output transformer and applied to the input of the first audio stage. The tone control is continuously variable, providing, with clockwise rotation, first an increase in bass response, then, as rotation is continued, attenuation of the higher frequencies. The 12-inch electrodynamic speaker provides excellent bass reproduction.

For service information on the record changer, refer to the service manual PR-1156, on Philco Automatic Record Changer Models D-10 and D-10A.

PHILCO TROUBLE-SHOOTING PROCEDURE

In this manual, the circuit is divided into four sections, with schematic and chassis layouts, showing test points, for each section. The first step in each trouble-shooting chart is a master check, indicating whether trouble exists in that section. Failure to secure "NORMAL INDICATION" in a given step indicates trouble, which should then be located by voltage, resistance, or capacitance checks of parts indicated in the step. Components are symbolized according to the letter designations as given on the first page of the service manual for PHILCO RADIO, MODEL 46-350.



MODEL 46-1226

SPECIFICATIONS

CIRCUIT	Eight-tube superheterodyne
FREQUENCY RANGE	Broadcast: 540-1720 kc Shortwave: 9.3-15.5 mc
INTERMEDIATE FREQUENCY	455 kc
AUDIO OUTPUT	6 watts
POWER INPUT	110 watts at 117 volts, 60 cycles, a.c.
AERIAL	Low-impedance loop
PHILCO TUBES	7F8, 7H7(2), 7C6, 6J5GT/G, 6K6GT/G(2), 5Y3GT/G
SPEAKER	12" electrodynamic
RECORD CHANGER	D-10, automatic, 10" — 12" records

PRELIMINARY CHECKS

The following preliminary checks are recommended, before turning on the radio:

1. Carefully inspect both top and bottom of the chassis. Make sure that all tubes are secure in the proper positions. Look for bad connections, burnt resistors, or other obvious faults.

2. Check the resistance between B+ and chassis, with the ohmmeter polarity such that it gives the highest resistance reading; if lower than 50,000 ohms, check condensers C101, and C102 (A and B) for leakage or shorts.

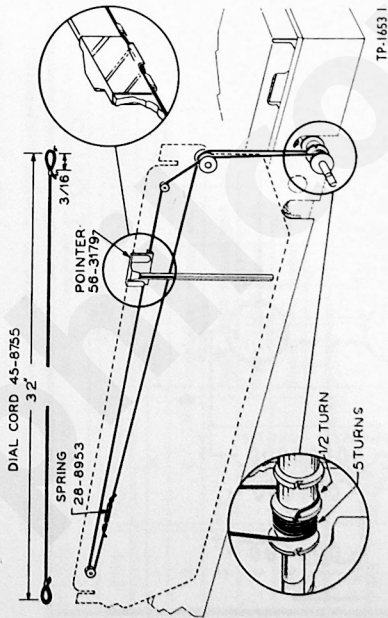


Figure 1
Pointer drive-cord
installation details

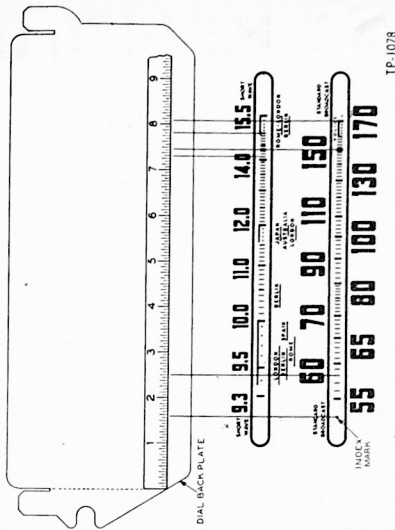


Figure 2
Calibrating dial
backplate

TESTS TO ISOLATE TROUBLE WITHIN SECTION 1

Make all measurements for this section with a 20,000-ohms-per-volt meter, using the control at 540 kc, the tone control at extreme counterclockwise position, and band switch applicable d-c range. All voltages given in this manual are average, and were taken with a 117-volt, a-c, 60-cycle input. The volume control was set at minimum, with the tuning

control at 540 kc, the tone control at extreme counterclockwise position, and band switch at BC. If the "NORMAL INDICATION" is obtained in step 1, proceed to tests for Section 2. If not, isolate and remedy the trouble in this section.

STEP	TEST POINTS	NORMAL INDICATION	POSSIBLE CAUSE OF ABNORMAL INDICATION
1	E to C	225 volts	Trouble within this section. Isolate by the following tests.
2	A to C	300 volts	Defective 5Y3GT/G, C101, C102A, C102B, R102, or T100.
3	B to C	Negative 15 volts	Open or shorted R100.
4	D to C	185 volts	Open R102, R303, R305 or R404. Shorted C102B, C305, C309, or C408.
5	E to C	225 volts	Defective L100 or T200. Shorted C303, C306, or C310.

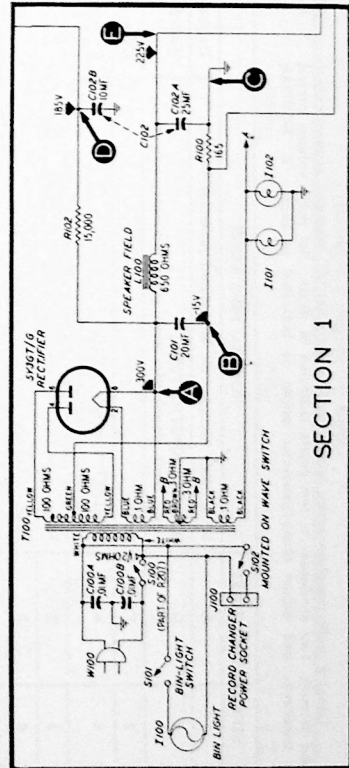


Figure 3. Section 1 schematic.

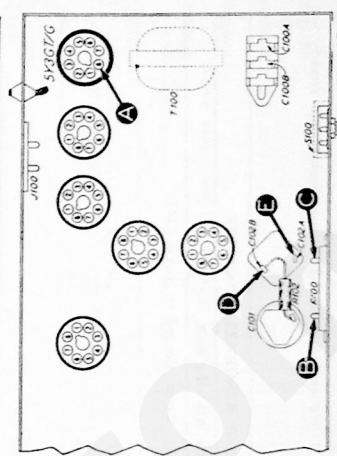


Figure 4. Bottom view, showing Section 1 test points.

NOTE: Low voltage may be caused by defective tubes drawing excessive current. High voltage may be caused by weak output tubes (6X6GT/G).

TESTS TO ISOLATE TROUBLE WITHIN SECTION 2

Connect audio-signal-generator ground lead to test point "C" (chassis); connect output lead through .1-mf condenser to test points indicated in chart. Set radio volume control to maximum, and adjust signal-generator output as indicated in chart. If "NORMAL INDICATION" is obtained in step 1, proceed to Section 3. If not, isolate and remedy the trouble in this section.

Connect audio-signal-generator ground lead to test point "C" (chassis); connect output lead through .1-mf condenser to test points indicated in chart. Set radio volume control to maximum, and adjust signal-generator output as indicated in chart. If "NORMAL INDICATION" is obtained in step 1, proceed to Section 3. If not, isolate and remedy the trouble in this section.

STEP	TEST POINT	NORMAL INDICATION	POSSIBLE CAUSE OF ABNORMAL INDICATION
1	A	Loud, clear signal with low signal-generator output. (REMOVE 6J5GT/G TUBE.)	Trouble within this section. Isolate by the following tests.
2	G	Loud, clear signal with high signal-generator output.	Defective 6K6GT/G, T200, 1S200, or R212. Open, shorted or leaky C207.
3	F	Same	Open or shorted C208. Open R213.
4	E	(REPLACE 6J5GT/G TUBE.) Loud, clear signal with moderate signal-generator output.	Defective 6J5GT/G. Open R209, R210, or R211. Leaky or shorted C206. Shorted C205.
5	D	Same	Open C206. Shorted C203 when tone control is in extreme clockwise position.
6	B	Loud, clear signal with low signal-generator output.	Defective 7C6. Open R208.
7	A	Same	Defective S200(F). Open C200 or C202.
8	PL200 (Band switch on PHONO)	Same	Defective PL200, or S200(F). Open R201 or C202.
Listening check		Distortion may be caused by leaky C206, C207, C208, C209, or C210. Hum will result if C209 is open.	

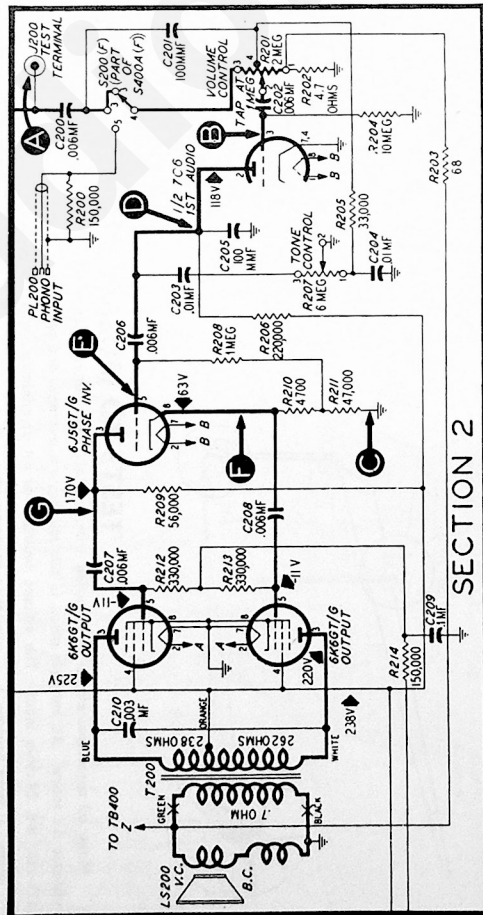


Figure 5. Section 2 schematic.

TP-1653B

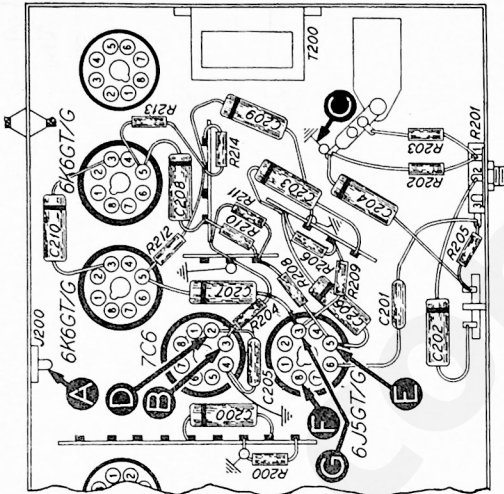


Figure 6. Bottom view, showing Section 2 test points.

TP-1653F

TESTS TO ISOLATE TROUBLE WITHIN SECTION 3

For all tests in this section use a modulated 455-kc signal. Connect signal-generator ground lead to test point "C" (chassis); connect output lead through a .1-mfd condenser to test points indicated in chart. Set volume control at maximum, and adjust signal-generator

output as indicated in chart. If "NORMAL INDICATION" is obtained in step 1, proceed to Section 4. If not, isolate and remedy the trouble in this section.

STEP	TEST POINTS	NORMAL INDICATION	POSSIBLE CAUSE OF ABNORMAL INDICATION
1	A	Loud, clear signal with low signal-generator output.	Trouble within this section. Isolate by the following tests.
2	E	Loud, clear signal with high signal-generator output.	Defective 7C6, Z302, or improperly aligned Z302. Open R307 or R308. Shorted C311 or C312.
3	D	Loud, clear signal with moderate signal-generator output.	Defective 7H7, C308, or S300(R). Shorted C309 or C310. Open R304, R305, or R306.
4	B	Loud, clear signal with low signal-generator output.	Defective 7H7, Z301, or improperly aligned Z301. Open R302 or R303. Shorted C305 or C306.
5	A	Same	Defective or improperly aligned Z300. Open C303.

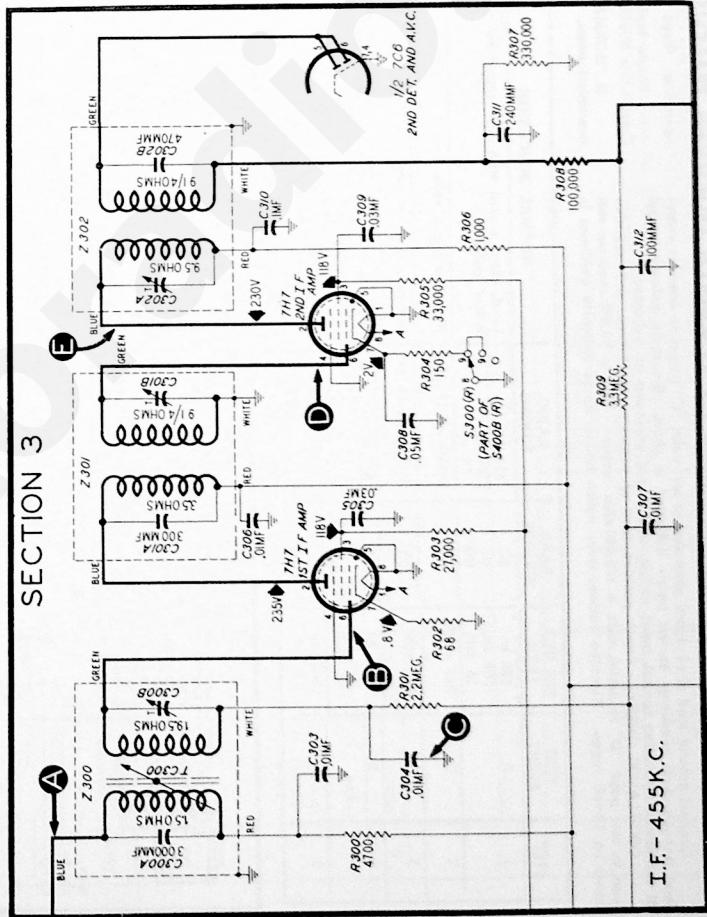


Figure 7. Section 3 schematic.

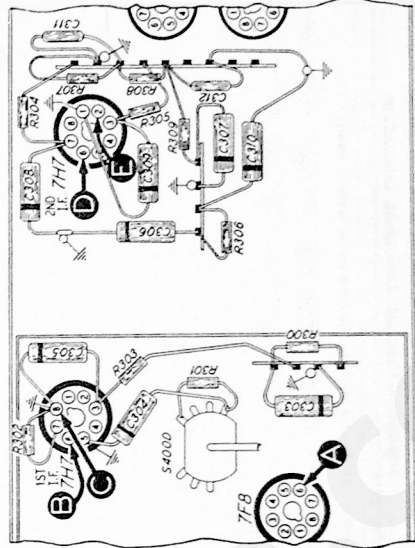


Figure 8. Bottom view, showing Section 3 test points.

TESTS TO ISOLATE TROUBLE WITHIN SECTION 4

Connect ground lead of r-f signal generator to test point "C" (chassis); connect output lead through .1-mf condenser to test points indicated in chart. Set radio volume control at maximum; set tuning control, band switch, and signal generator as indicated.

OSCILLATOR CHECK: Attach positive lead of voltmeter to chassis, and negative lead to test point "D" in series with a 100,000-ohm resistor. Use a 20,000-ohms-per-volt meter on 10-volt range. Negative voltage over entire tuning range indicates oscillator is

operating. Steps 2 and 3 indicate possible causes of oscillator trouble.

Rotate tuning control; dirt, bent plates, or poor bearing contact will cause noise. Correct this trouble before making step 1.

If "NORMAL INDICATION" is not obtained in step 1, isolate trouble by following remaining steps.

STEP	TEST POINT	SIG. GEN. FREQ.	BAND SWITCH	RADIO TUNING	NORMAL INDICATION	POSSIBLE CAUSE OF ABNORMAL INDICATION
1	A	580 kc 1700 kc 15 mc	BC BC SW	580 kc 1700 kc 15 mc Rotate 540-1720 kc	Loud, clear signal with low signal-generator output. Negative 2 to 3 volts.	Trouble within this section. Isolate by following tests. Defective 7F8, S400C(F), S400D(R), C405, C407, C408, C402A, L402, or R403.
2	D	Not used	BC	Rotate 9.3-15 mc	Negative 1 to 2 volts.	Defective 7F8, S400C(F-R), C405, C407, C408, C409, C402C, C406, or L403.
3	D	Not used	SW	1000 kc 15 mc 1000 kc 15 mc	Loud, clear signal with low signal-generator output. Same.	BC: Defective 7F8, C400, C401A, R400, or C307. Open R401. Defective or misaligned Z800. SW: Defective 7F8, C401B, or C406.
4	B	1000 kc 15 mc 1000 kc 15 mc	BC SW BC SW	1000 kc 15 mc 1000 kc 15 mc		BC: Defective L400, S400B(F-R), or S400D(R). SW: Defective C401B, L401, S400A(F), S400B(F-R), or S400D(R).
5	A					

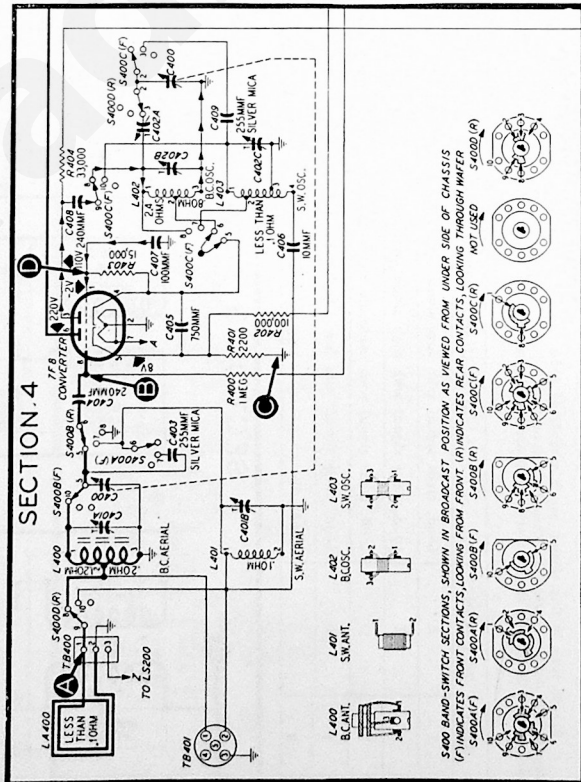


Figure 9. Section 4 schematic.

TP-1563D

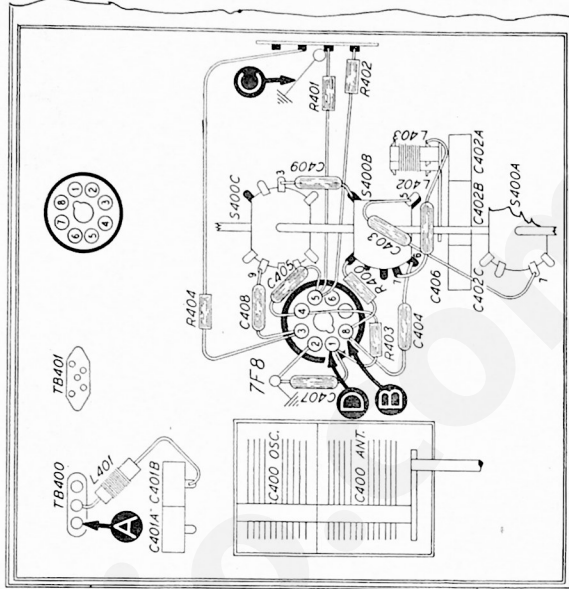


Figure 10. Bottom view, showing Section 4 test points.

TP-1653H

ALIGNMENT PROCEDURE

CAUTION: Do not turn on radio with speaker disconnected, as this will cause damage to the set.

DIAL BACKPLATE CALIBRATION: Turn tuning control until pointer coincides with index dot (535 kc) on dial, disconnect loop, and remove chassis from cabinet. Calibrate dial backplate as indicated in figure 2. Mark these calibrations at the bottom edge of backplate so that they may be seen below the pointer. Make certain pointer is set at index mark (535 kc) on dial when the tuning-condenser plates are fully meshed. Before proceeding with the alignment, reconnect the radio loop aerial to terminals 1 and 2 on TB400.

SIGNAL GENERATOR: When aligning 1,4 stages, connect output lead through a .1-mfd condenser to terminal 1 of terminal board TB400 (see figure 11); when aligning 1,1

stages, connector generator leads to a 6- or 8-turn loop of wire about six inches in diameter and couple loosely to the radio loop aerial.

OUTPUT METER: Connect to terminals 2 and 3 on TB400.

Set band switch and tuning control as indicated in the chart below; set volume control at maximum clockwise position, and tone control at extreme counterclockwise position.

As the alignment progresses, the input signal must be attenuated to hold the output meter reading below 1.5 volts. When replacing the set in the cabinet after alignment, make certain that the tuning-condenser plates are fully meshed; then set the dial pointer to the index mark (535 kc) on the dial.

ALIGNMENT CHART

SIGNAL GENERATOR			RADIO			
Step	Connections to Radio	Dial Setting	Band Sw. Position	Dial Setting	Special Instructions	Adjust
1	Terminal 1 TB400	455 kc	BC	540 kc	Adjust for maximum. ONCE only, in order.	C302A C301B C300B TC300
2	6" coil loosely coupled to loop	580 kc	BC	580 kc	Adjust for maximum.	C402A
3	Same	1700 kc	BC	1700 kc	Adjust for maximum.	C402B
4	Same	1500 kc	BC	1500 kc	Adjust for maximum.	C401A
5	Same	580 kc	BC	530 kc (approx)	Rock tuning condenser while adjusting for maximum.	C402A
6	Repeat steps 3, 4, 5, and 3, in order, until no improvement results.					
7	Same	15 mc	SW	15 mc	Adjust for maximum on FIRST peak from loose position. Image should be heard at 14.1 mc.	C402C
8	Same	15 mc	SW	15 mc	Adjust for maximum.	C401E

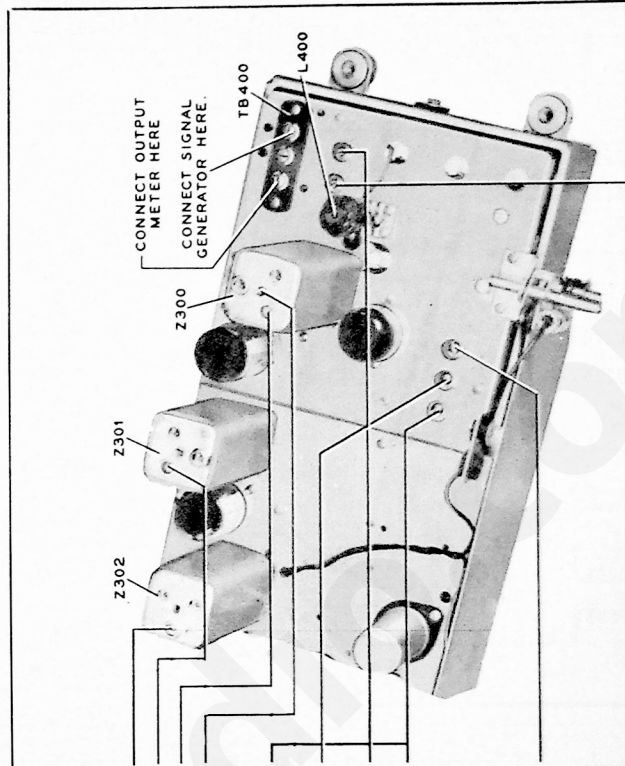


Figure 11. Chassis view, showing trimmer locations.

1P-1081

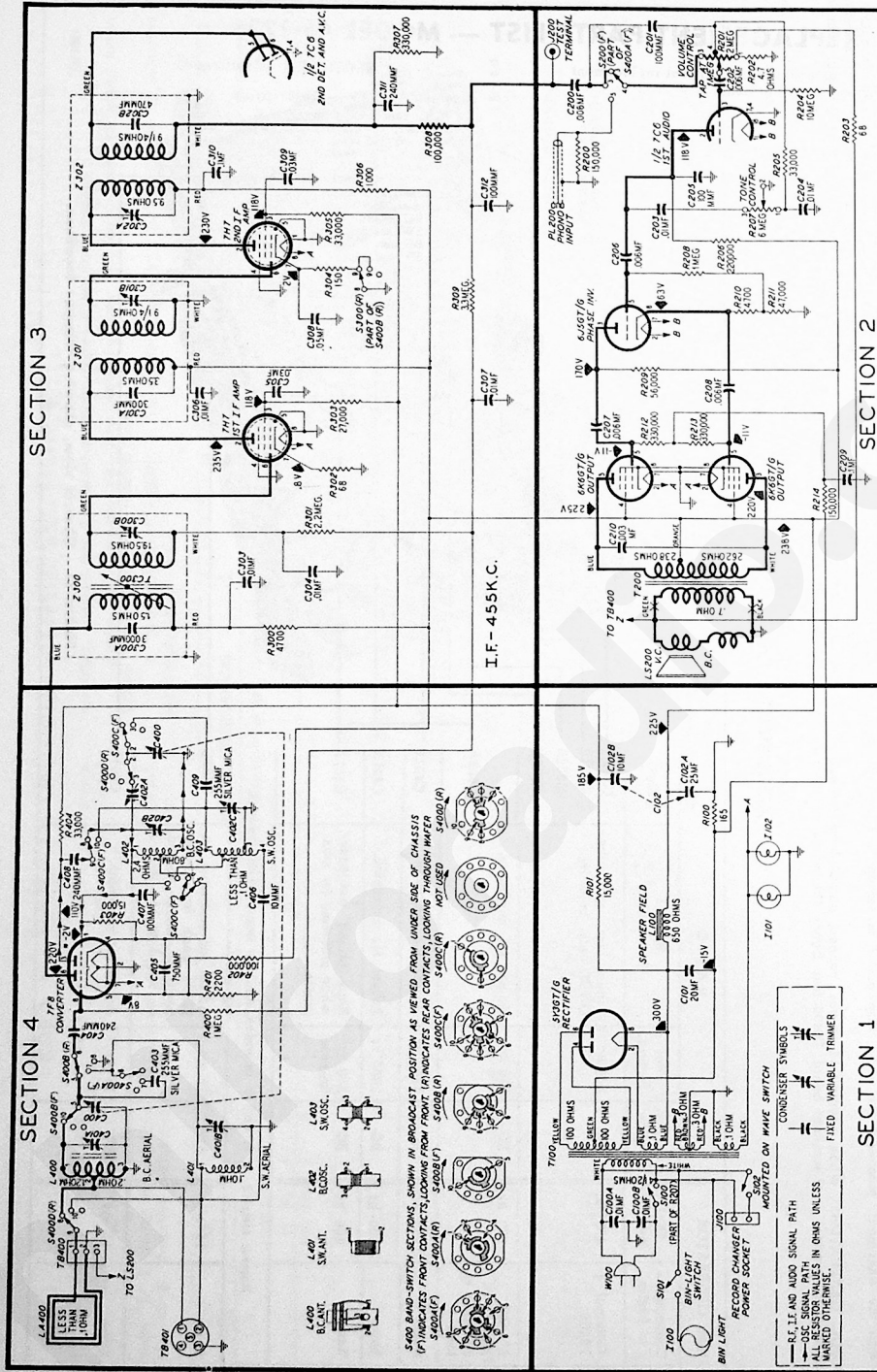


Figure 12. Complete schematic.

REPLACEMENT PARTS LIST — MODEL 46-1226

NOTE: Parts marked with an asterisk (*) are general replacement items, and the part numbers may not be identical with those used on factory assemblies. Use only the "Service Part No." shown in the parts list when ordering replacements.

SECTION 4 (Continued)

Reference No.	Description	Service Part No.
† C100	Condenser, line, filter	3903-ODG
	C100A: condenser, .01 mf.	Part of C100
	C100B: condenser, .01 mf.	Part of C100
† C101	Condenser, electrolytic, 20 mf.	30-2556*
† C102	Condenser, electrolytic	30-2556*
	C102A: condenser, 25 mf.	Part of C102
	C102B: condenser, 10 mf.	Part of C102
I100	Lamp, bin	34-2489*
I101	Lamp, pilot	34-2040*
I102	Lamp, pilot	34-2040*
J100	Socket, a-c phono power	27-6200*
L100	Field, speaker	Part of LS200
† R100	Resistor, 165 ohms	33-3435-1*
† R101	Resistor, 15,000 ohms	66-315340*
S100	Switch, power ON OFF	Part of R207
S101	Switch, bin-light	42-1702*
S102	Switch, phono a-c power	Part of 42-1776
T100	Transformer, power	32-8248*
W100	Cord, line	L-3339

SECTION 2

C200	Condenser, .006 mf.	45-3500-7*
C201	Condenser, 100 mmf.	60-10105407*
C202	Condenser, .006 mf.	45-3500-7*
C203	Condenser, .01 mf.	61-0120*
C204	Condenser, .01 mf.	61-0120*
C205	Condenser, 100 mmf.	60-10105407*
C206	Condenser, .006 mf.	45-3500-7*
C207	Condenser, .006 mf.	45-3500-7*
C208	Condenser, .006 mf.	45-3500-7*
C209	Condenser, .1 mf., 200v	61-0113*
† C210	Condenser, .003 mf.	61-0109*
I200	Socket, test	27-6180*
† LS200	Speaker	36-1595*
PL200	Cable and plug assembly, phono-input	41-3735-2
R200	Resistor, 150,000 ohms	66-4153340*
R201	Control, volume, 2 meg., tap at 1 meg.	33-5535-1*
R202	Resistor, 4.7 ohms	66-0473340*
R203	Resistor, 68 ohms	66-0683340*
R204	Resistor, 10 meg.	66-6103340*
R205	Resistor, 33,000 ohms	66-3333340*
R206	Resistor, 220,000 ohms	66-4223340*
R207	Control, tone, 6 meg.	33-5538-1*
R208	Resistor, 1 meg.	66-5103340*
R209	Resistor, 56,000 ohms	66-3563340*
R210	Resistor, 4,700 ohms	66-2473340*
R211	Resistor, 47,000 ohms	66-3473340*
R212	Resistor, 330,000 ohms	66-4333340*
R213	Resistor, 330,000 ohms	66-4333340*
† R214	Resistor, 150,000 ohms	66-4153340*
T200	Transformer, output	32-8274*
S200(F)	Switch	Part of S400A(F)

SECTION 3

† C303	Condenser, .01 mf.	61-0120*
C304	Condenser, .01 mf.	61-0120*
C305	Condenser, .03 mf.	45-3500-1*
C306	Condenser, .01 mf.	61-0120*
C307	Condenser, .01 mf.	61-0120*
C308	Condenser, .05 mf.	61-0122*
C309	Condenser, .03 mf.	45-3500-1*
C310	Condenser, .1 mf.	61-0113*
C311	Condenser, 240 mmf.	60-10245307*
C312	Condenser, 100 mmf.	60-10105407*
† R300	Resistor, 4,700 ohms	66-2473340*
R301	Resistor, 2.2 meg.	66-5223340*
R302	Resistor, 68 ohms	66-0683340*
R303	Resistor, 27,000 ohms	66-3273340*
R304	Resistor, 150 ohms	66-1153340*
R305	Resistor, 33,000 ohms	66-3333340*
R306	Resistor, 1,000 ohms	66-2103340*
R307	Resistor, 330,000 ohms	66-4333340*
R308	Resistor, 100,000 ohms	66-4103340*
R309	Resistor, 3.3 meg.	66-5333340*
S300(R)	Wave Switch	Part of S400B(R)*
Z300	Transformer, 1st i-f	32-4106*
	C300A: condenser, 3,000 mmf.	Part of Z300
	C300B: condenser, trimmer	Part of Z300
	TC300: tuning core	Part of Z300
Z301	Transformer, 2nd i-f	32-4107*
	C301A: condenser, 300 mmf.	Part of Z301
	C301B: condenser, trimmer	Part of Z301
Z302	Transformer, 3rd i-f	32-4108*
	C302A: condenser, trimmer	Part of Z302
	C302B: condenser, 470 mmf.	Part of Z302

SECTION 4

C400	Condenser, gang tuning	31-2719
C401	Condenser, antenna-trimmer, 2-section	31-6476
	C401A: condenser, trimmer, BC	Part of C401
	C401B: condenser, trimmer, S W	Part of C401
C402	Condenser, osc. trimmer and padder, 3 section	31-6464
	C402C: condenser, trimmer, SW osc.	Part of C402
	C402B: condenser, trimmer, BC osc.	Part of C402

† Refer to PRODUCTION CHANGES

Reference No.	Description	Service Part No.
	C402C: condenser, trimmer, S W osc.	Part of C402
C403	Condenser, 255 mmf.	30-1220-24*
C404	Condenser, 240 mmf.	60-10245307*
† C405	Condenser, 750 mmf.	60-10755301*
C406	Condenser, 10 mmf.	60-00105407*
C407	Condenser, 100 mmf.	30-1225-2*
C408	Condenser, 240 mmf.	30-1220-24*
C409	Condenser, 255 mmf.	32-4033-1
L400	Coil, BC antenna	32-4050-6
L401	Coil, SW antenna shunt	32-4019-2
L402	Coil, BC osc.	32-4113
L403	Coil, SW osc.	76-1989
LA400	Loop assembly	66-5103340*
R400	Resistor, 1 meg.	66-2223340*
† R401	Resistor, 2,200 ohms	66-4103340*
† R402	Resistor, 100,000 ohms	66-315340*
† R403	Resistor, 15,000 ohms	66-315340*
R404	Resistor, 33,000 ohms	42-1776*
S400	Band switch	Part of S400
	S400A: section, band switch	Part of S400
	S400B: section, band switch	Part of S400
	S400C: section, band switch	Part of S400
	S400D: section, band switch	Part of S400
TB400	Terminal panel, aerial	38-9942
TB401	Socket 5-prong, external aerial	27-6214*

MISCELLANEOUS

Description	Service Part No.
Band-Switch Hardware	
Link assembly	76-2186
Phono OFF-ON switch	Part of 42-1776
Shaft	56-3298FA11
Washer, "C"	1W42535FA3
Bin-Light Parts	
Bin-light cable, socket and switch assembly	76-2223-2
Cord, pull (25 ft. spool)	45-1420*
Lamp, bin-light	34-2484*
Socket assembly, bin-light-lamp	41-3742
Spring, pull-cord	28-8991
Switch cover	56-2344
Cable assembly	41-3754-5
Cable	41-3754-11
Cabinet and Cabinet Hardware	
Loop assy, BC	76-1989
Spring washer (loop mtg.)	28-4186
Washer (2 reqd.)	1W52540FA3
Bin mechanism, left-hand	76-2176
Bin mechanism, right-hand	76-2174
Cabinet (complete)	10643C
Baffle, wood	219041
Baffle and cloth assembly	40-6770
Bezel, wood	16602
Bolt, speaker-mounting	W1587
Dial-scale plate assembly	76-2005-1
Dome	45-6042
Frame, mounting assembly	76-2199
Hinge, baffle	45-6200
Lamp bracket	56-2332
Grommet (superstructure mounting)	27-4596
Top panel	45-6393
Chassis Mounting Hardware	
Foot assembly, (4) mounting grommet	54-4122
Nut "T"	W5202FA3
Washer	W2721FA3
Clip, antenna	28-5002FA1
Clip (2), BC oscillator, SW oscillator	56-2927FA1
Dial Scale Hardware	
Cord, pointer-drive (25 ft. spool)	45-8755*
Pointer	76-2005
Scale and backplate assembly	1W24894FE11
Spacer (2), scale backplate	56-3279FA3
Rubber band	54-4234
Spring, pointer-drive-cord	28-8993
Grommet (2), superstructure mtg.—sub. & plate assy.	27-4596
Spacer (2), superstructure mtg.—sub. & plate assy.	1W29184FA3
Washer (2)	1W52116FA3
Screw (2)	1W25349FA3
Grommet (3), r-f chassis mounting	54-4295
Knob (4)	54-1105
Lamp, pilot (2)	34-2040*
Lamp-socket assembly, pilot (2)	76-1985
Loop assembly	76-1989
Washer	1W52237FA3
Record-changer mounting parts, etc.	
Bolt (4), changer-mounting	56-3295
Grommet (4), changer-mounting	54-4313
Nut "T" (4), changer-mounting	1W56643FA3
Palnut (4), changer-mounting	1W29061FA3
Cable and plug assembly	41-3735-2
Socket, 5-prong external aerial	27-6214*
Socket (3), Loktal	27-6138*
Socket (1), Loktal (7F8)	27-6213*
Socket (4), octal	27-6199*
Speaker Hardware	
Bolt, mounting	W1587
Cable and plug assembly	41-3701
Nut (4), speaker-mounting	1W19988FA3
Plug, speaker-cable	27-4419-2
Terminal panel, aerial	38-9942

PRODUCTION CHANGES FOR MODEL 46-1226

CODE 121

All details of the sets in this code are as shown in the manual.

CODE 122

Refer to the accompanying schematic diagram for the circuit details of this code.

RUN 1

- a. The 7F8 converter tube was replaced by a 7AF7 tube. These two tubes are not directly interchangeable.
- b. C405, 750 mmf., Part No. 60-10755301*, was changed to .05 mf., Part No. 61-0122*.
- c. R403, 15,000 ohms, Part No. 66-3153340*, was changed to 47,000 ohms, Part No. 66-3473340*.
- d. R402, 100,000 ohms, Part No. 66-4103340*, was removed.
- e. R300, 4700 ohms, Part No. 66-2473340*, was changed to 10,000 ohms, Part No. 66-3103340*.
- f. C303 was disconnected at the ground end, and connected to the mixer cathode (pin 7 of 7AF7).
- g. R401 (2200 ohms) was disconnected at the ground end, and connected across C405. (This resistor was resymbolized R402 in Code 122 schematic.)
- h. Pin connections for the 7F8 tube are as follows:

1,8—heater	5—mixer grid
2—oscillator cathode	6—mixer plate
3—oscillator plate	7—mixer cathode
4—oscillator grid	

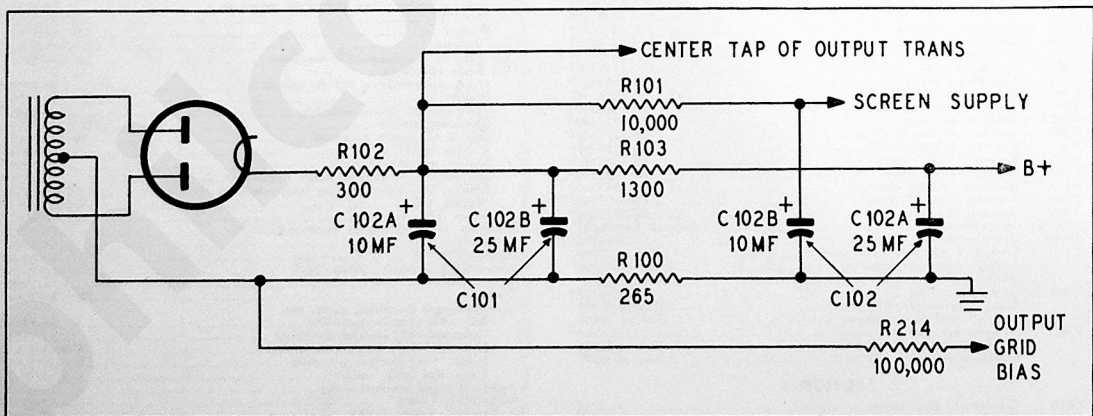
RUN 2

- a. The 110-volt bin lamp, Part No. 34-2484, was replaced by a 6-volt lamp, Part No. 34-2039.
- b. The bin-light cable, socket and switch assembly, Part No. 76-2223-2, was replaced by Part No. 76-2728.

CODE 125

RUN 1

The power supply (Section 1) circuit was changed according to the diagram below, to permit the use of a p-m loud-speaker.



Power-Supply Changes in Code 125

This change involves the following:

- a. R102, a 300-ohm resistor, Part No. 33-1336-4, was added.
- b. R101, 15,000 ohms, Part No. 66-315340*, was changed to 10,000 ohms, Part No. 66-3105340.
- c. R103, 1300 ohms, Part No. 33-1336-51, was added (replacing speaker field).
- d. R100, 165 ohms, Part No. 33-3434-1*, was changed to 265 ohms, Part No. 33-3435-7.
- e. R214 (in Section 2), 150,000 ohms, 66-4153340*, was changed to 100,000 ohms, Part No. 66-4103340.
- f. C101, 20 mf., Part No. 30-2555*, was changed to 10-25 mf., 450v, Part No. 30-2570.
- g. The electrodynamic speaker, Part No. 36-1595*, was replaced by a p-m speaker, Part No. 36-1611-2.

NOTE: All voltages are approximately the same as in previous codes, with the exception of the 6K6GT plate voltages, which are 20 volts higher.

RUN 2

C210, .003 mf., was changed to .006 mf., 1000v, Part No. 61-0105.

RUN 3

C100, .01-.01 mf., Part No. 3903-ODG, was replaced by two single .01-mf. condensers, Part No. 61-0120*.

CRITICAL LEAD DRESS FOR MODEL 46-1226

1. The lead from the aerial section of the tuning-condenser gang (C400) should be dressed along the base toward the 7F8 socket and away from oscillator coils L402 and L403.
2. The green lead of the first i-f transformer, Z300, should be dressed toward the 7H7 socket and away from the aerial leads.
3. All other leads of the i-f transformers should be dressed along the chassis.

