



## MODELS

**42-323, code 121-122; 42-340, code 121; 42-360, code 121**  
**42-327, code 121-122; 42-345, code 121; 42-365, code 121**

## SPECIFICATIONS

### MODELS 42-323, 42-327, CODES 121, 122

**Circuit Description:** Models 42-323 and 327, Codes 121 and 122, are six (6) tube superheterodyne radios with two tuning bands covering standard, police and shortwave broadcast stations, and operated on alternating current (A. C.) or direct current (D. C.) power supplies. The radios are designed to operate from the Philco low impedance loop aerial which is included in each model. In addition, connections are provided for an external aerial. In general, these models are similar in design with the exception of the cabinets and tuning mechanisms.

Model 42-323 is manually tuned and is assembled in a table type cabinet. Codes 121 and 122 differ only in the pilot lamp, rectifier tube and bias resistor. These differences are indicated on the part list and diagram.

Model 42-327 incorporates electric push-button tuning in addition to manual tuning and is assembled in a table type cabinet. Codes 121 and 122 differ only in the type of pilot lamp, rectifier tube and bias resistor. These differences are indicated on the part list and diagram. The electric push-button tuning mechanism consists of six (6) push-buttons. One push-button is used to control (ON-OFF) the power to the radios. The remaining five (5) push-buttons automatically tune in stations. The procedure for adjusting and operating the push-buttons will be found in the instructions supplied with the radio.

Other features included in these models are: Philco LOKTAL tubes; noise reducing converter tube (XXD); two Intermediate Frequency tubes; automatic volume control; beam power audio output stage, and a dynamic dust-proof speaker.

**Intermediate Frequency:** 455 KC.

**Tuning Bands:** 540 to 1720 KC; 9 to 15.5 MC.

**Audio Output:** 1 watt.

**Power Supply:** 115 volts, A. C. or D. C.

**Philco Tubes Used:** XXD, converter; two 7B7, I. F. amplifiers; 7C6, second detector, first audio A. V. C.; 50L6GT, beam power output and a 35Z5 rectifier, Code 121; 35Z3 rectifier, Code 122.

Cabinet Dimensions:	Height	Width	Depth
Model 42-323—	9"	13-13/16"	8 1/4"
Model 42-237—	9-1/16"	15"	8 1/4"

### MODEL 42-345, CODE 121

**Circuit Description:** Model 42-345, Code 121, is a seven (7) tube superheterodyne radio employing electric push-button tuning for automatically selecting standard broadcast stations and three (3) tuning bands covering Standard, Police, and Shortwave stations. In addition, this model employs the built-in Philco low impedance loop aerial, for reception of stations without an external aerial. Connections are also provided for an external aerial to be used in sections where signal strength is weak, such as steel reinforced buildings and other shielded areas.

Other features of design included in this model are Philco Loktal tubes; XXL, noise reducing converter tube; two intermediate frequency stages; variable tone control; automatic volume control; and a pentode audio output stage.

**Electric Push-Button Tuning:** Six (6) electric tuning push-buttons are provided for automatically selecting stations. Five (5) of the push-buttons are used from broadcast stations and one push-button for controlling (ON-OFF) the power supply. The procedure for adjusting the push-buttons will be found in the instructions supplied with the radio.

**Intermediate Frequency:** 455 KC.

**Tuning Bands:** 540 to 1720 KC; 2.3 to 7 MC; 9 to 15.5 MC.

**Audio Output:** 2 watts.

**Power Supply:** 115 volts A. C., 60 cycles. The radio can also be operated on 115 volts, 25 cycle current, by changing the power transformers as indicated in the parts list.

**Philco Tubes Used:** One XXL, converter; one XXL, oscillator; one 7B7, 1st I. F.; one 7B7, 2nd I. F.; one 7C6, 2nd detector, 1st audio, A. V. C.; one 7B5 audio output, and a 7Y4, rectifier.

**Cabinet Dimensions:** Height, 10-11/16"; Width, 16"; Depth, 9 1/2".

### MODEL 42-340, CODE 121

**Circuit Description:** Model 42-340, Code 121, is a seven (7) tube superheterodyne radio with two tuning bands covering Standard, Police and Shortwave broadcast stations and operates on alternating current (A. C.). This model is designed to operate from the Philco low impedance loop aerial which is built in the cabinet. In addition, connections are also provided for an external aerial. Other features of design are: Philco Loktal tubes; XXL noise reducing converter tube; two intermediate frequency stages; two point tone control; automatic volume control; pentode audio output stage.

**Intermediate Frequency:** 455 KC.

**Tuning Bands:** 540 to 1720 KC; 9 to 15 MC.

**Audio Output:** 1.5 watts

**Power Supply:** 115 volts A. C., 60 cycles. The radio can also be operated on 115 volts, 25 cycle current, by changing the power transformers as indicated in the parts list.

**Philco Tubes Used:** One XXL, converter; one XXL, oscillator; one 7B7, 1st I. F.; one 7B7, 2nd I. F.; one 7C6, 2nd detector, 1st audio, A. V. C.; one 7B5, audio output, and a 7Y4, rectifier.

**Cabinet Dimensions:** Height, 9-15/16"; Width, 16"; Depth, 9 1/2".

### MODEL 42-360, CODE 121

**Circuit Description:** Model 42-360, Code 121, is a seven (7) tube superheterodyne radio with two tuning bands covering Standard, Police and Shortwave broadcast stations and operates on alternating current (A. C.). In addition, this model incorporates a Philco low impedance loop aerial which is built into the cabinet; provisions for an external aerial; Philco LOKTAL tubes, including the XXL noise reducing converter tube; two intermediate frequency stages; continuously variable tone control; automatic volume control; pentode audio output stage and a 10-inch dynamic speaker.

**Intermediate Frequency:** 455 KC.

**Tuning Band Frequencies:** 540 to 1720 KC; 9 to 15.5 MC.

**Audio Output:** 2 watts.

**Power Supply:** 115 volts, 60 cycles A. C.

This model can also be operated on 115 volts, 25 cycle A. C. by changing the power transformer as indicated in the parts list.

**Philco Tubes Used:** One XXL, converter; One XXL, oscillator; one 7B7, 1st I. F. stage; one 7B7, 2nd I. F. stage; one 7C6, 2nd detector, 1st audio; one 41 audio output, and an 84 rectifier.

**Cabinet Dimensions:** Height, 36 3/4"; Width, 26 5/8"; Depth, 10 5/8".

SPECIFICATIONS

MODEL 42-365

**Circuit Description:** Model 42-365, Code 121, is a seven (7) tube, alternating current (A. C.) operated superheterodyne radio with three tuning bands covering Standard, Police, Amateur and Shortwave broadcast stations and the sound of a television program tuned in by special Philco Television Radios. The radio incorporates six (6) electric push-buttons for automatically selecting five (5) stations in the broadcast band; built-in Philco low impedance loop aerial completely rotatable; provisions for an external aerial; Philco LOKTAL tubes, including the XXL noise reducing converter tube; two intermediate frequency stages; continuously variable tone control; automatic volume control; pentode audio output stage and a dynamic speaker.

**Intermediate Frequency:** 455 KC.  
**Tuning Band Frequencies:** 540 to 1720 KC; 2.3 to 6.7 MC; 9 to 15.5 MC.  
**Audio Output:** 2 watts.  
**Power Supply:** 115 volts, 60 cycle A. C.

This model can also be operated on 115 volts, 25 cycle A. C. by changing the power transformer as indicated in the parts list.

**Philco Tubes Used:** One XXL, converter; one XXL oscillator; one 7B7, 1st I. F. stage; one 7B7, 2nd I. F. stage;

one 7C6, 2nd detector, 1st audio; one 41 audio output and a 7Y4, rectifier.

**Electric Push-Button Tuning:** Six (6) electric tuning push-buttons are provided for automatically selecting stations. Five (5) of the push-buttons are used from broadcast stations and one push-button for controlling (ON-OFF) the power supply. The procedure for adjusting the push-buttons will be found in the instructions supplied with the radio.

EXTERNAL AERIAL CONNECTIONS

MODELS 42-323, 42-327, 42-340, 42-345, 42-360, 42-365

The built-in low-impedance loop aerial system of these models is designed to operate without an outside aerial or ground, and to give exceptional receiving performance under average conditions.

To operate the radio, however, in steel reinforced buildings and other shielded locations, where signal strength is weak, the Philco outdoor aerial part No. 45-2817 is recommended for maximum receiving performance. The outdoor aerial can be easily connected to the radio by inserting the plug attached to the transformer (supplied with the aerial) into the socket provided at the rear of the radio. This aerial can be obtained from your local Philco distributor.

ALIGNING R. F. AND I. F. COMPENSATORS

The following procedure is used for all models:  
**EQUIPMENT REQUIRED**

- SIGNAL GENERATOR:** Covering the frequency range of the receiver, such as Philco Model 070.
- ALIGNING INDICATOR:** Either a vacuum tube voltmeter or an audio output meter may be used as an aligning indicator. Philco Models 027 and 028 circuit testers contain both these meters.
- TOOLS:** Philco Fiber Screw Driver, Part No. 45-2610.

CONNECTING ALIGNING INSTRUMENTS

**Audio Output Meter:** If this type of aligning meter is used, connect it to the voice coil terminals of the speaker or from the plate of the 35A5 tube to the chassis. Adjust the meter for the 0 to 10 volt scale.

**Vacuum Tube Voltmeter:** To use the vacuum tube voltmeter as an aligning indicator, make the following connections: Attach the negative (—) terminal of the voltmeter to any point in the circuit where the A. V. C. voltage can be obtained. Connect the positive (+) terminal of the vacuum tube voltmeter to the chassis.

**Signal Generator:** When adjusting the I. F. padders, the high side of the signal generator is connected through a .1 mfd. condenser to the antenna section of the tuning condenser. Connect the ground or low side of the generator to the chassis.

When aligning the R. F. padders a loop is made from a few turns of wire and connected to the signal generator output

terminals; the signal generator is then placed close to the loop of the radio.

The receiver can be adjusted in the cabinet or removed from the cabinet.

In order to adjust the radio outside of the cabinet the dial scale should be removed from the cabinet and placed on the dial background plate. The dial scale can be held in position by clips or rubber bands. The loop aerial should also be placed in approximately the same position around or near the chassis as when assembled.

After connecting the aligning instruments adjust the compensators as shown in the tabulation below. Locations of the compensators are shown in the schematic diagram of each model.

If the indicating meter pointer goes off scale when adjusting the compensators, reduce the strength of the signal from the generator.

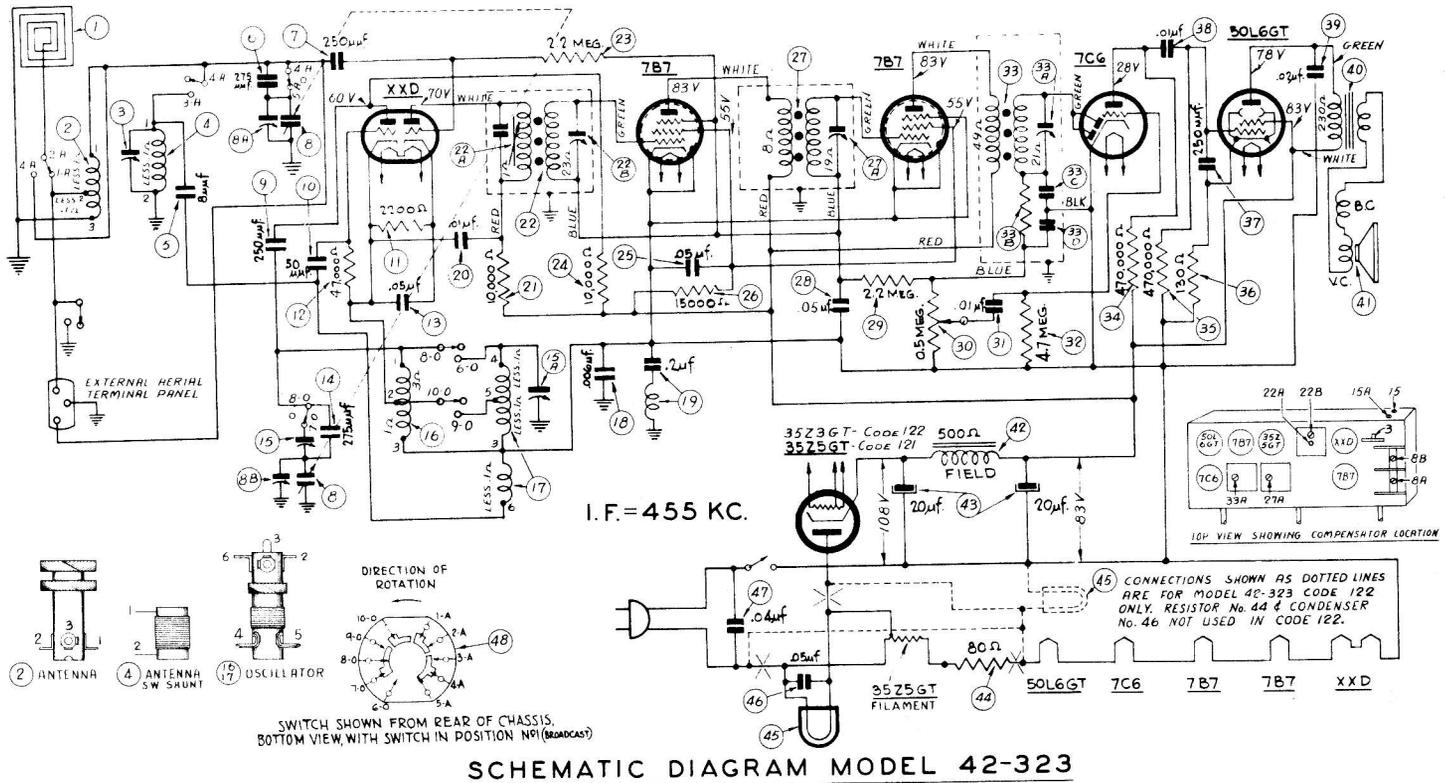
PROCEDURE—MODELS 42-323; 42-327; 42-340; 42-360										PROCEDURE—MODELS 42-345; 42-365									
Operations in Order	SIGNAL GENERATOR			RECEIVER				Special Instructions	Operations in Order	SIGNAL GENERATOR			RECEIVER				Special Instructions		
	Output Connections to Radio	Dial Setting	Dial Setting	Control Setting	Adjust Compensators in Order					Output Connections to Radio	Dial Setting	Dial Setting	Control Setting	Adjust Compensators in Order					
					42-323	42-327	42-340							42-360	42-345	42-365			
1	Aerial Section Tuning Condenser	455 KC	540 KC	Vol. Max. Band Switch Brdest.	22A 22B 27A 33A	24A 24B 29A 35A	15A 15B 18A 32A	25A 25B 29A 37A	1	Aerial Section Tuning Condenser	455 KC	540 KC	Vol. Max. Band Switch "Brdest."	29A 29B 32A 34A	29A 29B 32A 41A				
2	Loop (See above Instructions)	1720 KC	1720 KC	"	8B	8B	7	14A	Note A	2	Loop (See above Instructions)	1720 KC	1720 KC	"	15	6B	Note A		
3	"	1500 KC	1500 KC	"	8A	8A	23	4		3	"	1500 KC	1500 KC	"	9	13			
4	"	580 KC	580 KC	"	15	15	23B	4A	Roll Tuning Condenser Note B	4	"	580 KC	580 KC	"	9B	13A	Roll Tuning Condenser Note B		
5	Repeat Operation 2																		
6	"	15.5 MC	15.5 MC	Band Switch S. W.	15A 3	15A 3	7A 23A	14 12	Note C	5	"	6.7 MC	6.7 MC	Band Switch "Police"	15A	6A			
										6	"	15.5 MC	15.5 MC	Band Switch S. W.	15B Osc. 9A Aer.	6 Osc. 4	Note C		

**NOTE A.—Adjusting Dial Pointer:** In order to adjust the receiver correctly, the dial must be aligned to track properly with the tuning condenser. To do this, proceed as follows: Turn the tuning condenser to the maximum capacity position (plates fully meshed). With the condenser in this position, set the tuning pointer on the first mark below 540 KC.

**NOTE B.—**When adjusting the low frequency compensator (Broadcast) or the aerial padders of the high frequency tuning range; the receiver tuning condenser must be adjusted (rolled) as follows: First, tune the compensator for maximum output, then

vary the tuning condenser of the receiver for maximum output. Now turn the compensator slightly to the right or left and again vary the receiver tuning condenser for maximum output. This procedure of first setting the compensator and then varying the tuning condenser is continued until maximum output reading is obtained.

**NOTE C.—**Turn tuning condenser until pointer is on 15.5 MC mark, then adjust oscillator compensator to maximum on the second signal peak from the tight position (compensator closed). The Short Wave Aerial padder should then be "rolled" to maximum on the 15 MC signal. See Note B.

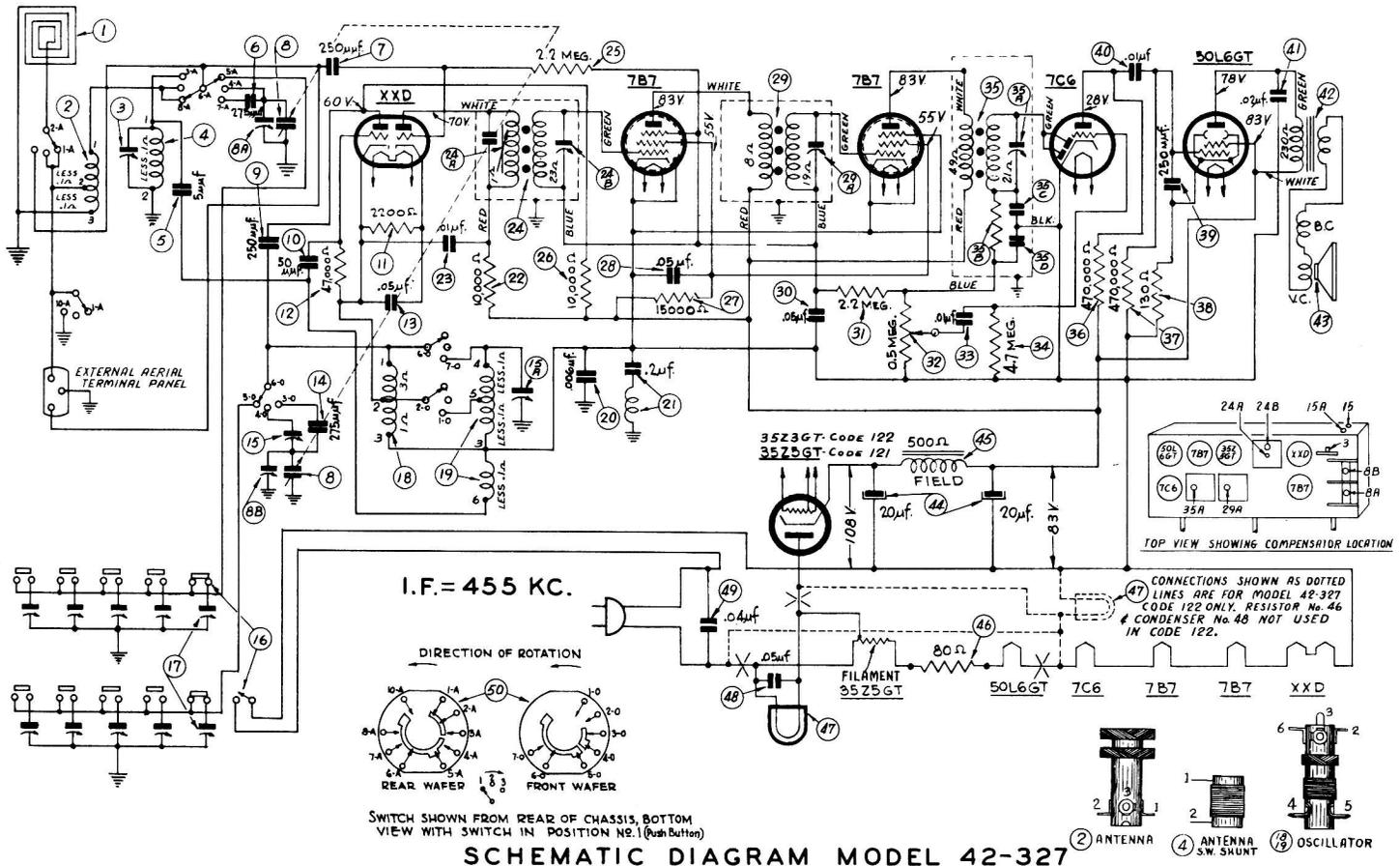


The D. C. voltages indicated at the tube elements in the above diagram were measured with a 1000 ohms per volt voltmeter. Philco Model 027. Line voltage, 117 volts A. C. No signal being received—range switch broadcast.

**REPLACEMENT PARTS—Model 42-323**

Sch. No.	Description	Part No.	Sch. No.	Description	Part No.	Sch. No.	Description	Part No.
1.	Loop Aerial Mtg. Screw	76-1279 W-2071	22B.	Compensator, Part of 22 Nut	W-1949	<b>Miscellaneous Parts</b>  Cabinet 10565-A Cable (Power) L-3199 Dial Scale 27-5762 Dial Pointer 56-2076 Knob (Tuning, Volume, Band) 54-4136 Socket Assembly (Pilot Lamp) (Code 121) 76-1177 Socket Assembly (Pilot Lamp) (Code 122) 76-1282 Socket (Aerial) 27-6145 Rivet W-207 Socket (Loktal Tubes) 27-6177 Socket (Octal Tubes) 27-6174 Rivet W-239 Screw (Chassis Mtg.) W-2080 Washer (Chassis Mtg.) W-410		
2.	Aerial Transformer (Broadcast) Mtg. Clip	32-3750 23-5002	23.	Resistor (2.2 megohms)	33-522339			
3.	Compensator (Aerial-S. W.)	31-6426	24.	Resistor (10,000 ohms)	33-310339	44.	Filament Resistor (Code 121 only)	30-4572
4.	Aerial Transformer (S. W.)	32-3751	25.	Condenser (.05 mfd, 200 volts)	30-4519	45.	Pilot Lamp (Code 121) (Code 122)	34-2068 34-2477
5.	Mica Condenser (8 mmfd)	60-080137	26.	Resistor (15,000 ohms)	33-315339	46.	Condenser (.05 mfd, 200 volts) (Code 121 only)	30-4519
6.	Mica Condenser (275 mmfd)	39-1200	27.	2nd I. F. Transformer Nut	32-3712 W-1949	47.	Condenser (.04 mfd, 400 volts)	30-4119
7.	Mica Condenser (250 mmfd)	60-125157	27A.	Secondary Compensator, Part of 27	30-4519	48.	Band Switch	42-1671
8.	Tuning Condenser Drive Cord	31-2555	28.	Condenser (.05 mfd, 200 volts)	33-522339			
	Drive Shaft	76-1323	29.	Resistor (2.2 megohms)	33-5458			
	"C" Washer	28-5990	30.	Volume Control (.5 megohm) Mtg. Nut	W-2157 30-4572			
8A.	Compensator (Aerial—1500 KC). Part of 8	W-758	31.	Condenser (.01 mfd, 400 volts)	30-4572			
8B.	Compensator (Oscillator—1720 KC). Part of 8	27-4596	32.	Resistor (4.7 megohms)	33-547339			
	Mica Condenser (250 mmfd)	54-4020	33.	3rd I. F. Transformer Nut	32-3713 W-1949			
	Mica Condenser (50 mmfd)	28-8954	33A.	Secondary Compensator, Part of 33	33-447339			
	Resistor (2200 ohms)	28-5663	33B.	Resistor (47,000 ohms), Part of 33	33-447339			
	Resistor (47,000 ohms)	W-410	33C.	Condenser (100 mmfd), Part of 33A	33-113336			
	Condenser (.05 mfd, 200 volts)	30-4519	33D.	Condenser (100 mmfd), Part of 33A	60-125157			
	Mica Condenser (275 mmfd)	31-2555	34.	Resistor (470,000 ohms)	33-447339			
	Compensator (S. W.—15 MC).	31-2553	35.	Resistor (470,000 ohms)	33-447339			
	Oscillator Transformer (Broadcast)	76-1323	36.	Resistor (130 ohms)	33-113336			
	Oscillator Transformer (S. W.). Part of 16	28-8954	37.	Mica Condenser (250 mmfd)	60-125157			
	Condenser (.006 mfd, 400 volts)	28-5663	38.	Condenser (.01 mfd, 400 volts)	30-4572			
	Condenser, .2 mfd, and R. F. Choke Assembly	W-758	39.	Condenser (.02 mfd, 400 volts)	30-4516			
	Condenser (.01 mfd, 400 volts)	27-4596	40.	Output Transformer	32-8173			
	Resistor (10,000 ohms)	54-4020	41.	Speaker Cone Assembly (For Speaker 36-1544-9)	36-1544-9 36-4190			
	1st I. F. Transformer	28-8954	42.	Field Coil (Replace Speaker 36-1544-9)	36-1544-9			
22A.	Compensator, Part of 22	28-5663	43.	Electrolytic Condenser (20, 20 mfd) Clamp	30-2503 56-1466			

**FIG. 1—PART LOCATIONS, UNDERSIDE OF CHASSIS, MODEL 42-323**

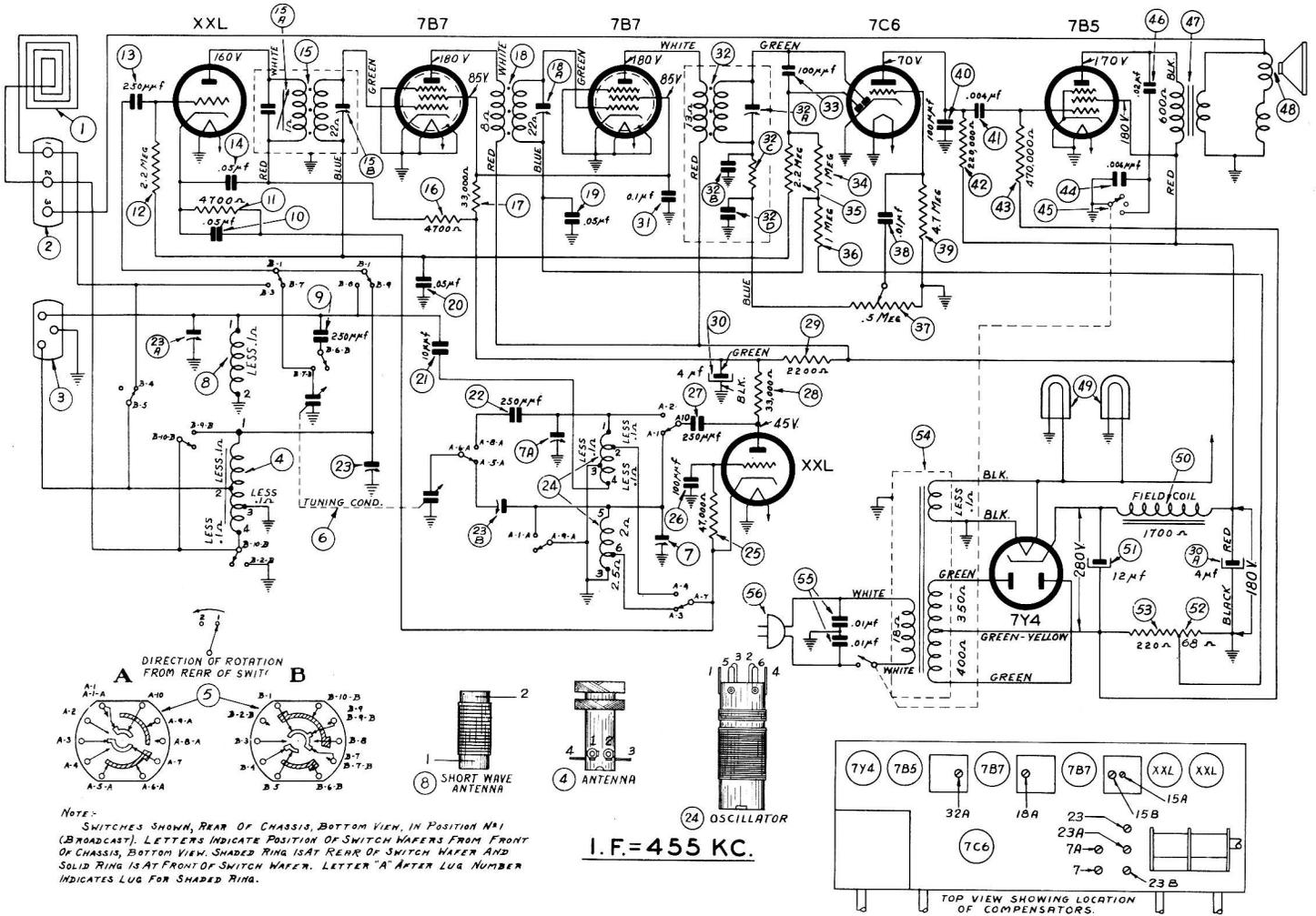


The D. C. voltages indicated at the tube elements in the above diagram were measured with a 1000 ohms per volt voltmeter. Philco Model 027. Line voltage, 117 volts A. C. No signal being received—range switch broadcast.

REPLACEMENT PARTS—Model 42-327

Sch. No.	Description	Part No.	Sch. No.	Description	Part No.	Sch. No.	Description	Part No.
1.	Loop Aerial	76-1279	24A.	Compensator Primary of (24)		49.	Condenser (.04 mfd, 400 volts)	30-4119
1A.	External Aerial Socket	W-2071	24B.	Compensator (Part of 24)		50.	Band Switch	42-1688
	Mtg. Screw	27-6145	24C.	Condenser (Part of 24)		<b>Miscellaneous Parts</b>		
	Rivet	W-207	25.	Resistor (2.2 megohms)	33-522339			
2.	Aerial Transformer (Broadcast)	32-3714	26.	Resistor (10,000 ohms)	33-310339		Cabinet (Complete)	10561-A
	Mtg. Clip	28-5002	27.	Resistor (15,000 ohms)	33-315339		Dial Scale	27-5754
3.	Compensator (Aerial—S. W.)	31-6426	28.	Condenser (.05 mfd, 200 volts)	30-4519		Dial Pointer	56-2076
4.	Aerial Transformer (S. W.)	32-3716	29.	2nd I. F. Transformer	32-3712		Escutcheon (Push-Button)	56-2233
	Mtg. Clip	28-5002		Mtg. Nut	W-1949		Mtg. Screw	W-2071
5.	Mica Condenser (5 mmfd)	60-005137	29A.	Compensator (Part of 29)			Knob (Tuning, Volume, Tone)	54-4101
6.	Mica Condenser (275 mmfd)	30-1200	30.	Condenser (.05 mfd, 200 volts)	30-4519		Knob (Push-Button)	54-4125
7.	Mica Condenser (250 mmfd)	60-125157	31.	Resistor (2.2 megohms)	33-522339		Socket (Tubes)	27-6177
8.	Tuning Condenser	31-2555	32.	Volume Control	33-5448		Rivet	W-239
	Drive Shaft	76-1276		Mtg. Nut	W-2157		Screw (Chassis Mtg.)	W-765
	"C" Washer	28-5990	33.	Condenser (.01 mfd, 400 volts)	30-4572		Terminal Panel	38-9579
	Drive Cord	31-2553	34.	Resistor (4.7 megohms)	33-547339		Terminal Panel	76-1257
	Rubber Grommet	27-4596	35.	3rd I. F. Transformer	32-3713		Tab (ON-OFF)	27-5738
	Rubber Grommet	54-4020	35A.	Compensator (Part of 35)			Tab Cover	27-5737
	Sleeve	28-5665	35B.	Resistor (Part of 35)			Tab Kit	40-6660
	Spring (Drive Cord)	28-8954	35C.	Condenser (Part of 35A)			Washer (Chassis Mtg.)	W-410
	Screw	W-758	35D.	Condenser (Part of 35A)				
	Washer	W-410	36.	Resistor (470,000 ohms)	33-447339			
9.	Mica Condenser (250 mmfd)	60-125157	37.	Resistor (470,000 ohms)	33-447339			
10.	Mica Condenser (50 mmfd)	60-050157	38.	Resistor (130 ohms)	33-113336			
11.	Resistor (2200 ohms)	33-222339	39.	Mica Condenser (250 mmfd)	60-125157			
12.	Resistor (47,000 ohms)	33-347339	40.	Condenser (.01 mfd, 400 volts)	30-4572			
13.	Condenser (.05 mfd, 200 volts)	30-4519	41.	Condenser (.02 mfd, 400 volts)	30-4516			
14.	Mica Condenser (275 mmfd)	30-1200	42.	Output Transformer	32-8173			
15.	Compensator (Broadcast—580 KC)	31-6434	43.	Speaker	36-1544-9			
16.	Push-Button Switch	42-1708		Cone Assembly (For Speaker	36-4190			
17.	Push-Button Compensator Assembly	31-6424		36-1544-9)	30-2503			
	Mtg. Screw	W-1974	44.	Electrolytic Condenser (20-20 mfd)	56-1466			
18.	Oscillator Transformer (Broadcast)	32-3715	45.	Field Coil (Replace Speaker 36-1544)				
	Mtg. Clip	28-5002	46.	Filament Resistor (80 ohms) (Used				
19.	Oscillator Transformer (S. W.)			in Code 121 only)	33-3406			
	(Part of 18)		47.	Pilot Lamp (6 volts—Code 121)	34-2068			
20.	Condenser (.006 mfd, 400 volts)	30-4445		Socket Assembly (Code 121)	76-1177			
21.	Condenser (.2 mfd and R. F. Choke	76-1161		Pilot Lamp (115 volts—Code 122)	34-2477			
	Assembly)	33-310339		Socket Assembly (Code 122)	76-1282			
22.	Resistor (10,000 ohms)	33-310339	48.	Condenser (.05 mfd, 200 volts)	30-4519			
23.	Condenser (.01 mfd, 400 volts)	30-4572		(Used in Code 121 only)				
24.	1st I. F. Transformer	32-3711						
	Mtg. Nut	W-1949						

FIG. 2—PART LOCATIONS, UNDERSIDE OF CHASSIS, MODEL 42-327

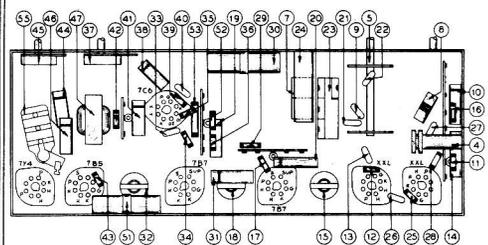


**SCHEMATIC DIAGRAM MODEL 42-340**

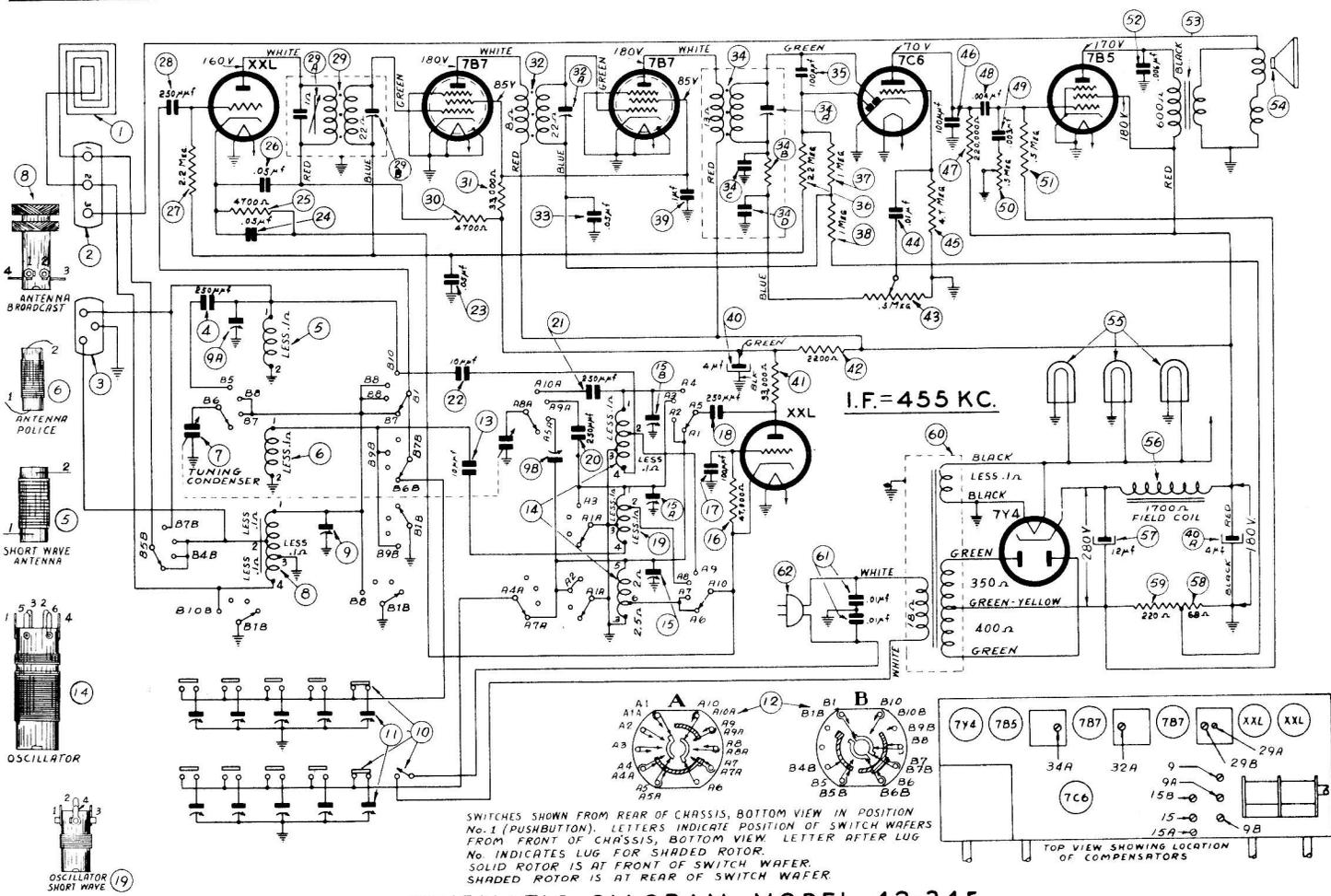
The D. C. voltages indicated at the tube elements in the above diagram were measured with a 1000 ohms per volt voltmeter. Philco Model 027. Line voltage, 117 volts A. C. No signal being received—range switch broadcast.

**REPLACEMENT PARTS—Model 42-340**

Sch. No.	Description	Part No.	Sch. No.	Description	Part No.	Sch. No.	Description	Part No.
1.	Loop Aerial Mtg. Screw	76-1270	23B.	Compensator (Oscillator—580 KC) (Part of 23)		52.	Resistor (68 ohms)	33-068336
2.	Loop Terminal Panel	38-9942	24.	Oscillator Transformer	32-3723	53.	Resistor (220 ohms)	33-122436
3.	External Aerial Socket	27-6145		Mtg. Clip	28-5003	54.	Power Transformer (115 volts, 60 cycle)	32-8064
4.	Aerial Transformer (Broadcast)	32-9724	25.	Resistor (47,000 ohms)	33-347339		Shield	56-1525
5.	Mtg. Clip	28-5002	26.	Mica Condenser (100 mmfd)	60-110257		Shield Base	56-1526
6.	Band Switch	42-1672	27.	Mica Condenser (250 mmfd)	20-025011		Mtg. Screw	W-453
	Mtg. Nut	W-2157	28.	Resistor (33,000 ohms)	33-333339		Power Transformer (115 volts, 25 cycle)	
7.	Tuning Condenser	31-2558	30.	Electrolytic Condenser (4-4 mfd, 400 volts)	30-2477	55.	Condenser (.01-.01 mfd)	3903-ODG
	Drive Cord (Pointer)	31-2547	30A.	Electrolytic Condenser (4 mfd) (Part of 30)		56.	Power Cord	L-3199
	Drive Cord (Tuning Cond.)	31-2546	31.	Condenser (.1 mfd, 400 volts)	30-4527		<b>Miscellaneous Parts</b>	
	Drive Shaft	56-6152	32.	3rd I. F. Transformer	32-3640		Cabinet	10569-A
	Mtg. Nut	W-2157		Mtg. Nut	W-1949		Dial Scale	27-5755
	Drive Drum (Tuning Cond.)	38-9883	32A.	Secondary Compensator (Part of 32)			Dial Pointer	56-2289
	Mtg. Rubber	27-4596	32B.	Condenser (Part of 32A)			Knob Assembly	54-4102
	Mtg. Sleeve	28-3806	32C.	Resistor (Part of 32)			Sockets	27-6177
	Spring (Tuning Condenser Cord Drive)	28-8751	32D.	Condenser (Part of 32A)			Mtg. Rivets	W-239
	Spring (Pointer Drive Cord)	28-3953	33.	Mica Condenser (100 mmfd)	60-110257		Screw (Mtg. Chassis)	W-2080
7A.	Compensator (Broadcast, Aerial)	31-6438	34.	Resistor (1 megohm)	33-510339		Washer (Mtg. Chassis)	W-410
	Compensator (Short Wave—Aerial) (Part of 7)		35.	Resistor (2.2 megohms)	33-522339			
8.	Aerial Transformer (Short Wave)	32-3725	36.	Resistor (1 megohm)	33-510339			
9.	Mica Condenser (250 mmfd)	20-026011	37.	Volume Control	33-5443			
10.	Condenser (.05 mfd, 200 volts)	30-4519		Mtg. Nut	W-2157			
11.	Resistor (4700 ohms)	33-247339	38.	Resistor (.01 mfd, 400 volts)	30-4572			
12.	Resistor (2.2 megohms)	33-522339	39.	Resistor (4.7 megohms)	33-547339			
13.	Mica Condenser (250 mmfd)	60-125257	40.	Mica Condenser (100 mmfd)	60-110257			
14.	Condenser (.05 mfd, 400 v.)	30-4518	41.	Condenser (.004 mfd, 600 volts)	30-4623			
15.	1st I. F. Transformer	32-3734	42.	Resistor (220,000 ohms)	33-442339			
	Mtg. Nut	W-1949	43.	Resistor (470,000 ohms)	33-447339			
15A.	Primary Compensator (Part of 15)		44.	Condenser (.006 mfd, 400 volts)	30-4591			
15B.	Secondary Compensator (Part of 15)		45.	Tone Control and Power Switch	42-1665			
15C.	Condenser (Part of 15)			Mtg. Nut	W-2157			
16.	Resistor (4700 ohms)	33-247339	46.	Condenser (.02 mfd, 400 volts)	30-4516			
17.	Resistor (33,000 ohms)	33-333339	47.	Output Transformer	32-8172			
18.	2nd I. F. Transformer	32-3705	48.	Speaker	36-1543-9			
	Mtg. Nut	W-1949		Cone Assembly (For Speaker 36-1543)	36-4206			
18A.	Secondary Compensator (Part of 18)		49.	Pilot Lamps	34-2064			
19.	Condenser (.05 mfd, 200 volts)	30-4519		Socket Assembly	76-1287			
20.	Condenser (.05 mfd, 200 volts)	30-4519	50.	Field Coil (Replace Speaker 36-1543)				
21.	Mica Condenser (10 mmfd)	60-010337	51.	Electrolytic Condenser (12 mfd, 400 volts)	30-2409			
22.	Mica Condenser (250 mmfd)	20-025011		Mtg. Clamp	56-1466			
23.	Compensator (Oscillator—Broadcast)	31-6428						
23A.	Compensator (Oscillator—S. W.) (Part of 23)							



**FIG. 3—PART LOCATIONS, UNDERSIDE OF CHASSIS, MODEL 42-340**

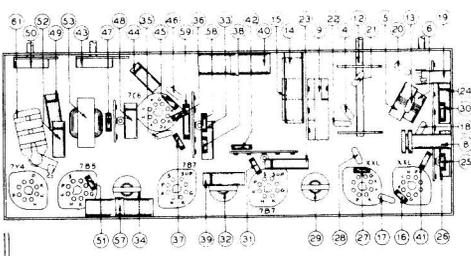


**SCHEMATIC DIAGRAM MODEL 42-345**

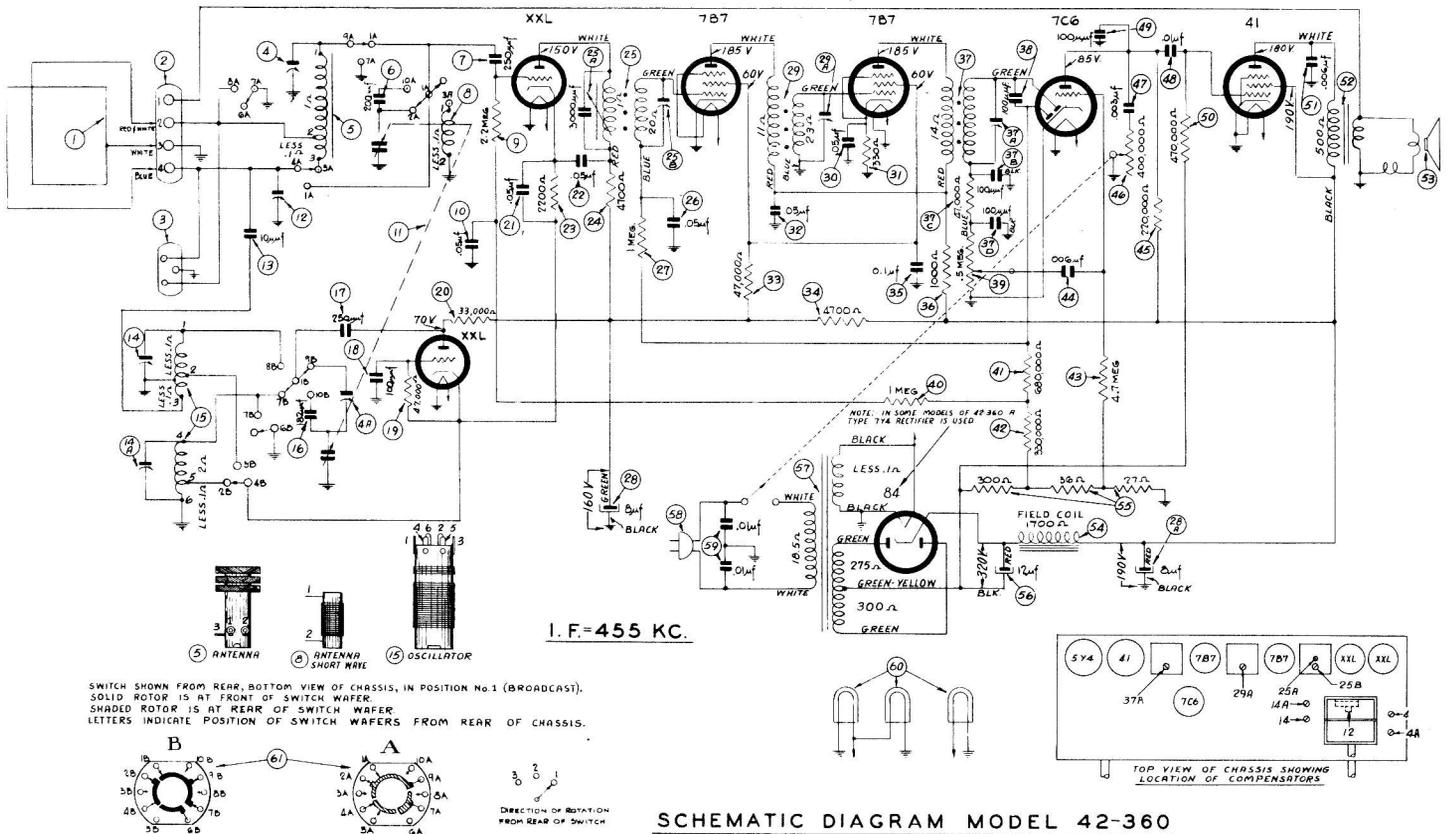
The D. C. voltages indicated at the tube elements in the above diagram were measured with a 1000 ohms per volt voltmeter. Philco Model 027. Line voltage, 117 volts A. C. No signal being received—range switch broadcast.

**REPLACEMENT PARTS—Model 42-345**

Sch. No.	Description	Part No.	No. Sch.	Description	Part No.	Sch. No.	Description	Part No.
1.	Loop Aerial	76-1303	23.	Condenser (.05 mfd, 200 volts)	30-4519	56.	Field Coil (Replace Speaker)	36-1543
2.	Mtg. Screw	W-2071	24.	Condenser (.05 mfd, 200 volts)	30-4519	57.	Electrolytic Condenser (12 mfd, 400 volts)	30-2409
3.	Loop Terminal Panel	38-9942	25.	Resistor (4700 ohms)	33-24339	58.	Resistor (68 ohms)	33-068336
4.	External Aerial Socket	27-6145	26.	Condenser (.05 mfd, 400 volts)	30-4518	59.	Resistor (220 ohms)	33-122436
5.	Silver Mica Condenser (250 mmfd)	20-025011	27.	Resistor (2.2 megohms)	33-522339	60.	Power Transformer (115 volts, 60 cycle)	32-8064
6.	Aerial Transformer (S. W.)	32-3764	28.	Mica Condenser (250 mmfd)	60-125257		Power Transformer (115 volts, 25 cycle)	
7.	Aerial Transformer (Police)	32-3766	29.	1st I. F. Transformer	32-3734		Shield	56-1525
8.	Tuning Condenser	31-2558	30.	Mtg. Nut	W-1949		Shield Base	56-1526
9.	Drive Shaft	29A	31.	Primary Compensator (Part of 29)			Mtg. Screw	3903-0143
10.	Mtg. Screw	W-2157	32.	Condenser (4700 ohms)	33-23339		Line Filter Condenser (.01-.01 mfd)	1-3199
11.	Drive Drum	38-9883	33.	Resistor (33,000 ohms)	32-3705		Power Cord	
12.	Drive Cord (Pointer)	31-2594	34.	2nd I. F. Transformer	W-1949			
13.	Spring	28-8953	34A.	Mtg. Nut				
14.	Drive Cord (Cond. Drive)	31-2546	34B.	Secondary Compensator (Part of 34)				
15.	Spring	28-8751	34C.	Resistor (Part of 34)				
16.	Pointer	56-1856	34D.	Condenser (Part of 34A)				
17.	Mtg. Screw	W-2002	35.	Condenser (Part of 34A)				
18.	Mtg. Sleeve	28-3806	36.	Mica Condenser (100 mmfd)	60-110257			
19.	Mtg. Rubber	27-4596	37.	Resistor (2.2 megohms)	33-522339			
20.	Aerial Transformer (Broadcast)	32-3763	38.	Resistor (1 megohm)	33-510339			
21.	Compensator (Aerial—Broadcast)		39.	Resistor (1 megohm)	33-510339			
22.	Compensator (Aerial—S. W.)		40.	Condenser (.1 mfd, 400 volts)	30-4527			
23.	Compensator (Oscillator—580 KC) (Part of 9)		40A.	Electrolytic Condenser (4-4 mfd, 400 volts)	30-2477			
24.	Push-Buttons and Power Switch	42-1686		Electrolytic Condenser (4 mfd) (Part of 40)				
25.	Mtg. Sleeve (Switch to Cabinet)	28-2258		Mtg. Clip	56-1466			
26.	Mtg. Sleeve (P. B. Switch, 3 required)	28-5665		Resistor (33,000 ohms)	33-33339			
27.	Drive Screw	W-523		Resistor (2200 ohms)	33-22339			
28.	Mtg. Screw	W-2002		Volume Control	33-5443			
29.	Push-Button Compensating Condenser Strip	31-6372		Mtg. Nut	W-2157			
30.	Band Switch	42-1684		Condenser (.01 mfd, 400 volts)	30-4572			
31.	Mtg. Nut	W-2157		Resistor (4.7 megohms)	33-547339			
32.	Mica Condenser (10 mmfd)	60-010337		Mica Condenser (100 mmfd)	60-110257			
33.	Oscillator Transformer (Broadcast—S. W.)	32-3762		Resistor (220,000 ohms)	33-422339			
34.	Mtg. Clip	28-5003		Condenser (.004 mfd, 600 volts)	30-4469			
35.	Compensator (Oscillator—Broadcast) (Part of 15)	31-6425		Condenser (.003 mfd, 100 volts)	33-5450			
36.	Compensator (Oscillator—S. W.) (Part of 15)			Tone Control	33-447339			
37.	Resistor (47,000 ohms)	33-347339		Mtg. Nut	W-2157			
38.	Mica Condenser (100 mmfd)	60-110257		Resistor (470,000 ohms)	33-447339			
39.	Mica Condenser (250 mmfd)	60-125257		Condenser (.006 mfd, 400 volts)	30-4591			
40.	Oscillator Transformer (Police)	32-3765		Output Transformer	32-8172			
41.	Mtg. Clip	28-5002		Speaker	36-1543-9			
42.	Mica Condenser (2500 mmfd)	60-225324		Cone Assembly (For Speaker)	36-4206			
43.	Silver Mica Condenser (250 mmfd)	20-025011		Socket Assembly	36-2064			
44.	Mica Condenser (10 mmfd)	60-010337		Pilot Lamps	76-1287			
				Socket Assembly				



**FIG. 4—PART LOCATIONS, UNDERSIDE OF CHASSIS, MODEL 42-345**



The D. C. voltages indicated at the tube elements in the above diagram were measured with a 1000 ohms per volt voltmeter. Philco Model 027. Line voltage, 117 volts A. C. No signal being received—range switch broadcast.

REPLACEMENT PARTS—Model 42-360

Sch. No.	Description	Part No.	Sch. No.	Description	Part No.	Sch. No.	Description	Part No.
1.	Loop Aerial	76-127J	25B.	Secondary Compensator (Part of 25)	W-1949	57.	Power Transformer (115 volts, 60 cycle)	32-8117
	Spring Washer	28-4186	26.	Condenser (.05 mfd, 200 volts)	30-4519		Power Transformer (115 volts, 25 cycle)	
	Sleeve	28-3806	27.	Resistor (1 megohm)	33-510339	58.	Power Cord	L-3199
	Sleeve	56-1545	28.	Electrolytic Condenser (8-8 mfd, 400 volts)	W-288	59.	Filter Condenser (Power Line)	3903-DG
	Screw (Loop Mtg.)	W-288	29.	2nd I. F. Transformer	32-3639	60.	Pilot Lamps (Dial)	34-2064
	Washer (3 required)	W-425	29A.	Secondary Compensator (Part of 29)	W-1949		Pilot Lamps (Indicator)	34-2068
	Washer (1 required)	W-425	30.	Condenser (.05 mfd, 200 volts)	30-4519		Socket Assembly (Pilot Lamp Dial)	76-1316
2.	Terminal Panel	38-9870	31.	Resistor (330 ohms)	33-133336		Socket Assembly (Indicator Pilot Lamp)	76-1078
3.	External Aerial Socket	27-6145	32.	Condenser (.05 mfd, 400 volts)	30-4518	61.	Band Switch	42-1673
4.	Compensator (Broadcast Aerial)	W-207	33.	Resistor (47,000 ohms)	33-347339		Mtg. Nut	W-2157
4A.	Compensator (Oscillator—Brdst.—580KC) (Part of 4)	31-6365	34.	Resistor (4700 ohms)	33-247339			
	Mtg. Rivet	W-239	35.	Condenser (.1 mfd, 100 volts)	30-4527			
5.	Aerial Transformer (Brdst. Band)	32-3726	36.	Resistor (1000 ohms)	33-210339			
	Mtg. Clip	28-5002	37.	3rd I. F. Transformer	32-3640			
6.	Mica Condenser (200 mmfd)	30-1205	37A.	Secondary Compensator (Part of 37)	W-1949			
7.	Mica Condenser (250 mmfd)	60-125157	37B.	Condenser (100 mmfd) (Part of 37)	60-110157			
8.	Aerial Transformer (S. W. Band)	32-3768	37C.	Resistor (47,000 ohms) (Part of 37)	33-5451			
	Mtg. Clip	28-5002	37D.	Condenser (100 mmfd) (Part of 37)	W-2157			
9.	Resistor (2.2 megohms)	33-522339	37E.	Condenser (100 mmfd) (Part of 37)	33-510339			
10.	Condenser (.05 mfd, 200 volts)	30-4519	38.	Condenser (100 mmfd)	60-110157			
11.	Tuning Condenser	31-2481	39.	Volume Control	33-5451			
	Tuning Shaft	56-6141		Mtg. Nut	W-2157			
	"C" Washer	28-2043	40.	Resistor (1 megohm)	33-510339			
	Drive Drum	38-9883	41.	Resistor (680,000 ohms)	33-468339			
	Drive Cord (Pointer)	31-2597	42.	Resistor (330,000 ohms)	33-433339			
	Drive Cord (Tuning Cond.)	31-2400	43.	Resistor (4.7 megohms)	33-547339			
	Insulating Bushing	27-9437	44.	Condenser (.006 mfd, 400 volts)	30-4591			
	Rubber Connector	27-9432	45.	Resistor (220,000 ohms)	33-422339			
	Mtg. Grommet	27-4596	46.	Tone Control	33-5463			
	Mtg. Sleeve	28-3806		Mtg. Nut	W-2157			
	Spring (Cond. Drive Cord)	28-8751	47.	Condenser (.003 mfd, 600 volts)	30-4532			
	Spring (Pointer Drive Cord)	28-8953	48.	Condenser (.01 mfd, 400 volts)	30-4572			
	Screw (Mtg. Cond.)	W-2002	49.	Mica Condenser (100 mmfd)	60-110157			
12.	Compensator (S. W. Aerial)	31-6384	50.	Resistor (470,000 ohms)	33-447339			
13.	Mica Condenser (10 mmfd)	60-010337	51.	Condenser (.006 mfd, 400 volts)	30-4591			
14.	Compensator (Oscillator—S. W.)	31-6364	52.	Output Transformer	32-8116			
14A.	Compensator (Oscillator—Broadcast) (Part of 14)	31-6364	53.	Speaker	36-1513-3 or 36-1513-4			
	Mtg. Rivet	W-239		Cone Assembly (For Speaker 36-1513-3)	36-4164			
15.	Oscillator Transformer	32-3727		Cone Assembly (For Speaker 36-1513-4)	36-4169			
	Mtg. Clip	28-5003		Cable (Speaker)	41-3541			
16.	Mica Condenser (182 mmfd)	30-1208		Mtg. Nut (Speaker)	W-124			
17.	Mica Condenser (250 mmfd)	60-125157	54.	Field Coil (Replace Speaker)				
18.	Mica Condenser (100 mmfd)	60-110157	55.	Bias Resistor (27-36-300 ohms)	33-3392			
19.	Resistor (47,000 ohms)	33-347339	56.	Electrolytic Condenser (12 mfd, 400 volts)	30-2471			
20.	Resistor (33,000 ohms)	33-333339						
21.	Condenser (.05 mfd, 200 volts)	30-4519						
22.	Condenser (.05 mfd, 400 volts)	30-4518						
23.	Resistor (2200 ohms)	33-222339						
24.	Resistor (4700 ohms)	33-247339						
25.	1st I. F. Transformer	32-3465						
25A.	Primary Compensator (Part of 25)							

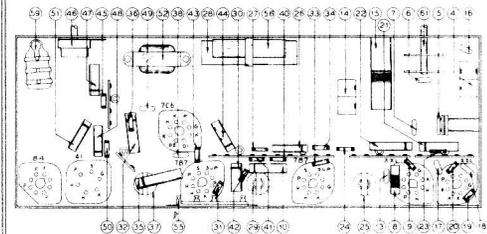
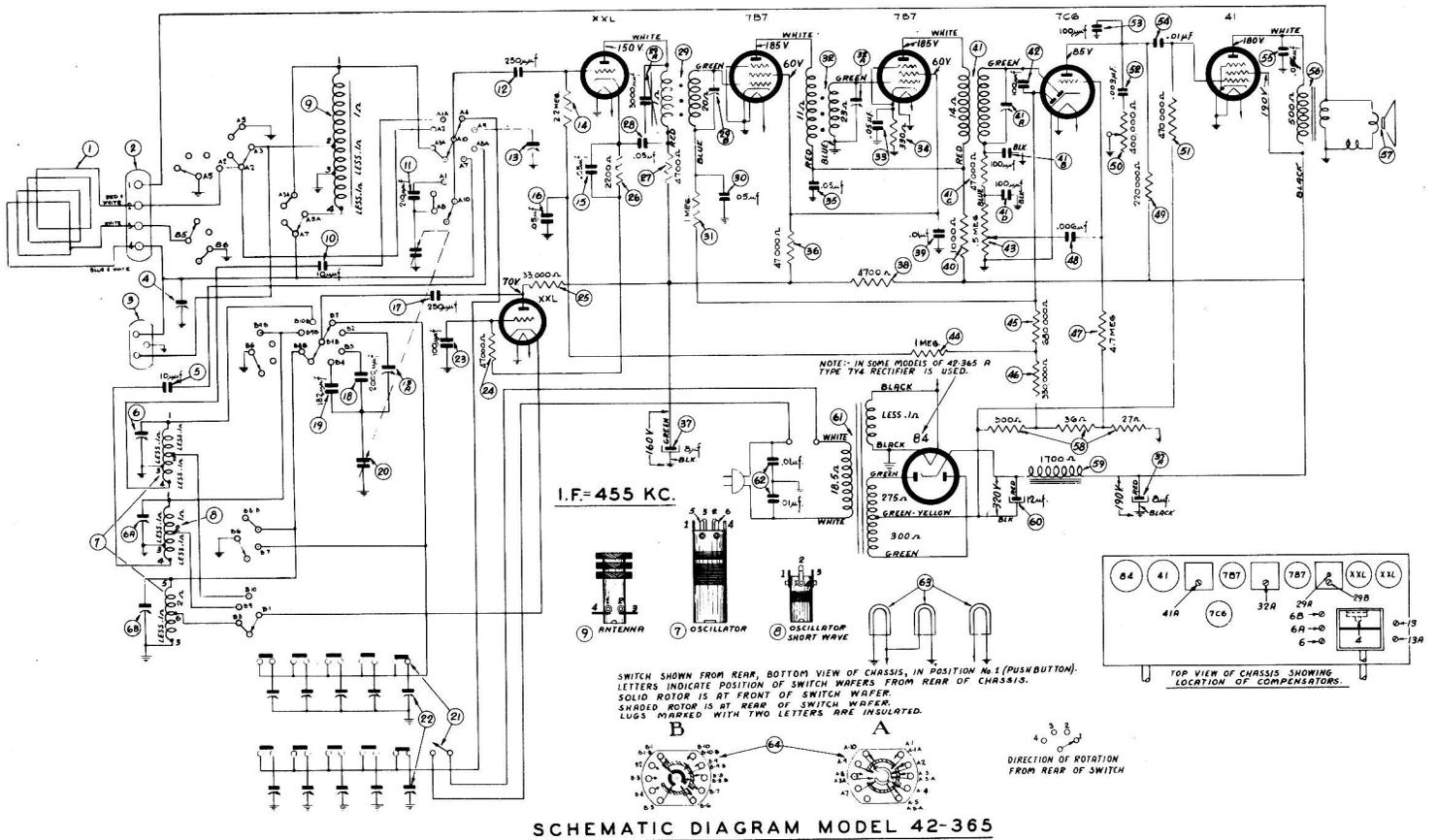


FIG. 5—PART LOCATIONS, UNDERSIDE OF CHASSIS, MODEL 42-360



SCHEMATIC DIAGRAM MODEL 42-365

The D. C. voltages indicated at the tube elements in the above diagram were measured with a 1000 ohms per volt voltmeter. Philco Model 027. Line voltage, 117 volts A. C. No signal being received—range switch broadcast.

REPLACEMENT PARTS—Model 42-365

Sch. No.	Description	Part No.	Sch. No.	Description	Part No.	No. Sch.	Description	Part No.
1.	Loop Aerial	76-1305	29A.	Primary Compensator (Part of 29)		61.	Power Transformer (115 volts, 60 cycles)	32-8117
	Sleeve (Mtg. Loop)	28-3806	29B.	Secondary Compensator (Part of 29)	30-4519		Power Transformer (115 volts, 25 cycles)	
	Spring Washer	56-1545	30.	Condenser (.05 mfd, 200 volts)	33-510339	62.	Power Line Filter Condenser	3903-DG
	Screw (Loop Mtg.)	28-4186	31.	Resistor (1 megohm)	32-8639	63.	Pilot Lamp (Dial)	34-2064
	Washer (Loop Mtg.)	W-288	32.	2nd I. F. Transformer	W-1949		Pilot Lamp (Indicator)	34-2068
2.	Terminal Panel (Loop Aerial)	38-9870	32A.	Secondary Compensator (Part of 32)			Socket Assembly (Dial Light)	76-1316
3.	External Aerial Socket	27-6145	33.	Condenser (.05 mfd, 200 volts)	30-4519		Socket Assembly (Indicator)	76-1078
	Mtg. Rivet	W-207	34.	Resistor (330 ohms)	33-133336		Light Shield	56-2194
4.	Compensator (S. W. Aerial)	31-6384	35.	Condenser (.05 mfd, 400 volts)	30-4518	64.	Band Switch	42-1683
5.	Mica Condenser (10 mmfd)	60-010337	36.	Resistor (47,000 ohms)	33-347339		Mtg. Nut	W-2157
6.	Compensator (Oscillator—S. W.)	31-6374	37.	Electrolytic Condenser (8-8 mfd)	30-2476	Miscellaneous Parts		
6A.	Compensator (Oscillator—Police)		37A.	Electrolytic Condenser (8 mfd)				
	(Part of 6)			(Part of 37)			Cord (Power)	L-3199
6B.	Compensator (Oscillator—Broadcast)			Mtg. Clamp	56-1452		Cabinet	10563A
	(Part of 6)		38.	Resistor (4700 ohms)	33-247339		Dial	27-5751
7.	Oscillator Transformer (Broadcast—S. W.)	32-3756	39.	Condenser (.01 mfd, 400 volts)	30-4572		Pointer	56-1856
	Mtg. Clip	28-5003	40.	Resistor (1000 ohms)	33-210339		Escutcheon (Push-Button)	56-2233
8.	Oscillator Transformer (Police)	32-3757	41.	3rd I. F. Transformer	32-3640		Mtg. Screw	W-2071
	Mtg. Clip	28-5002		Mtg. Nut	W-1949		Knob (Tuning, Volume, Tone)	54-4105
9.	Aerial Transformer	32-3755	41A.	Secondary Compensator (Part of 41)			Knob (Push-Button)	54-4106
	Mtg. Nut	28-5002	41B.	Condenser (100 mmfd) (Part of 41)			Indicator Arm and Link Assembly	76-1272
10.	Mica Condenser (10 mmfd)	60-010337	41C.	Resistor (47,000 ohms) (Part of 41)	33-347339		Rubber Corner (Chassis)	54-4015
11.	Silver Mica Condenser (210 mmfd)	30-1210	41D.	Condenser (100 mmfd) (Part of 41)			Rubber Grommet (Chassis Mtg.)	27-4571
12.	Mica Condenser (250 mmfd)	60-125157	42.	Mica Condenser (100 mmfd)	60-110157		Screw (Chassis Mtg.)	W-1345
13.	Compensator (Aerial—Broadcast)	31-6401	43.	Volume Control	33-5451		Socket (5 prong)	27-6158
13A.	Compensator (Oscillator—580 KC)		44.	Mtg. Nut	W-2157		Socket (6 prong)	27-6177
	(Part of 14)		45.	Resistor (1 megohm)	33-510339		Socket (Loktal)	27-6177
14.	Resistor (2.2 megohms)	33-522339	46.	Resistor (680,000 ohms)	33-468339		Mtg. Rivets	W-239
15.	Condenser (.05 mfd, 200 volts)	30-4519	47.	Resistor (330,000 ohms)	33-433339		Tab Kit 8	40-6660
16.	Condenser (.05 mfd, 200 volts)	30-4519	48.	Resistor (4.7 megohms)	33-547339		Tab (On-Off)	27-5738
17.	Mica Condenser (250 mmfd)	60-125157	49.	Condenser (.006 mfd, 400 volts)	30-4591		Tab Cover	27-5737
18.	Mica Condenser (2000 mmfd)	60-220324	50.	Resistor (220,000 ohms)	33-422339		Washer	28-5114
19.	Mica Condenser (182 mmfd)	30-1208		Tone Control	33-5450			
20.	Tuning Condenser	31-2581		Mtg. Nut	W-2157			
	Drive Drum	38-9883	51.	Resistor (470,000 ohms)	33-447339			
	Drive Cord (Pointer)	31-2597	52.	Condenser (.003 mfd, 600 volts)	30-4582			
	Drive Cord (Tuning Cond.)	31-2400	53.	Condenser (100 mmfd)	60-110157			
	Drive Shaft	56-6141	54.	Condenser (.01 mfd, 400 volts)	30-4572			
	"C" Washer	28-2043	55.	Condenser (.006 mfd, 400 volts)	30-4591			
	Insulating Bushing	27-9437	56.	Output Transformer	32-8116			
	Grounding Spring	28-8955	57.	Speaker	36-1513-3 or 36-1513-4			
	Grommet (Mtg. Cond.)	27-4598		Cone Assembly (For Speaker 36-1513-3)	36-4164			
	Rubber Connector (Tuning Cond.)	27-9432		Cone Assembly (For Speaker 36-1513-4)	36-4169			
	Spring (Cond. Drive Cord)	28-8751		Mtg. Nut	W-124			
	Spring (Pointer Drive Cord)	28-8953		Cable (Speaker)	41-3541			
	Sleeve (Mtg. Tuning Cond.)	28-3806		Bias Resistor (27-36-300 ohms)	33-3392			
21.	Push-Button and Power Switch Assembly	42-1687		Mtg. Rivet	W-239			
	Mtg. Sleeve	28-5665	58.	Field Coil (Replace Speaker 36-1513)	30-2471			
	Mtg. Screw	W-523	59.	Electrolytic Condenser (12 mfd, 400 volts)	30-2471			
	Mtg. Grommet	27-4596	60.	Mtg. Clamp	56-1452			
22.	Push-Button Compensator Assembly	31-6377						
23.	Mica Condenser (100 mmfd)	60-110157						
24.	Resistor (47,000 ohms)	33-347339						
25.	Resistor (33,000 ohms)	33-333339						
26.	Resistor (2200 ohms)	33-222339						
27.	Resistor (4700 ohms)	33-247339						
28.	Condenser (.05 mfd, 400 volts)	30-4518						
29.	1st I. F. Transformer	32-3465						
	Mtg. Nut	W-1949						

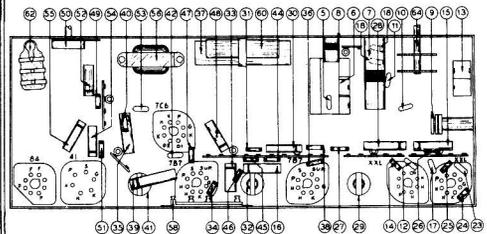


FIG. 6—PART LOCATIONS, UNDERSIDE OF CHASSIS, MODEL 42-365