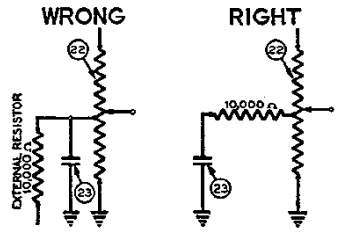
Philco Radio & Television Corp.

	Model: 620	Chassis:	Year: Pre June 1940
	Power:	Circuit:	IF:
	Tubes:		
	Bands:		

Resources
Riders Volume 11 - CHANGES 11-2
Riders Volume 6 - PHILCO 6-25
Riders Volume 6 - PHILCO 6-26
Riders Volume 6 - PHILCO 6-27
Riders Volume 7 - PHILCO 7-89
Riders Volume 7 - PHILCO 7-90
Riders Volume 7 - PHILCO 7-148

Philco 39-25

A few of the early production Model 39-25 Philco receivers had the bass-compensating condenser in the volume-control circuit improperly connected. The indication of such incorrect connection is a lack of high notes at low settings of the volume control. Above is shown the incorrect and the correct connections. The schematic of this receiver shown on *page 10-9 of Rider's Volume X* shows the correct connections.



If a Philco 39-25 lacks high notes at low settings of the volume control, check to see how the bass-compensating condenser is connected. These partial schematics tell the story.

●

Majestic 11056, 11057, 11058

Models 11056 and 11058 are found on *pages 9-8 to 9-10 of Rider's Volume IX*. The data given there also apply to Model 11057. A new electric tuning system has been incorporated in later runs of all these receivers, and is illustrated in Fig. 1. The procedure for indexing the tuning system for desired stations is as follows:

(1) Set receiver to Standard Broadcast band.
(2) Place "Manual-Electric" lever in "Manual" position, which is extreme counter-clockwise. Be sure the tone control is in the "Normal" position as shown by the indicator.
(3) Pull out Indexing Rod located at the center bottom half of the escutcheon. This rod has numbers on it which correspond to the push buttons (counting from left to right).
(4) Set Indexing Rod so that the number on the rod corresponding to the push button you wish to index is in line with the escutcheon plate.
(5) Turn tuning knob until the pointer has covered the entire dial. This is essential to engage the tuning disc.
(6) Tune in the desired station accurately, using the tuning eye.
(7) Push Indexing Rod all the way in, and that particular station will always be tuned in automatically when that particular button is depressed while the "Manual-Electric" lever is in the "Electric" position.
To index more than one station, go through steps (3) to (6) for each station desired and when finished, push the Indexing Rod back as far as it will go.

Caution: When using electric tuning, do not depress more than one button at a time. Depressing two buttons will cause the motor to run continuously or until the automatic thermal switch operates to prevent the motor from burning out. If this happens it may take fifteen minutes for the motor to become cool enough for the electric tuning to become operative again.

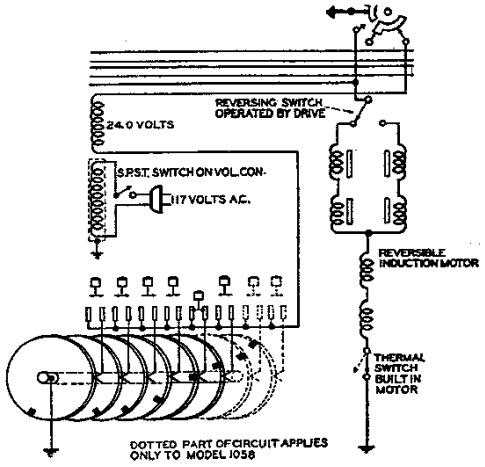
●

Philco 620

Certain oscillator trimmers are incorrectly numbered on *pages 6-26 and 6-27 of Rider's Volume VI* (early Model 620 Philco). In the parts list on *page 6-26*, the reference numbers should be changed as follows: Change 13 to 16; change 14 to 17; change 16 to 13; change 17 to 14. The same changes should be made on *page 6-27* in Fig. 2 and in the alignment instructions located below this figure. These changes must be made so that the reference numbers will agree with those shown on the schematic which appears on *page 6-25*. Do NOT alter the numbers on the schematic.

These errors in numbering also appear in the parts list for the late Model 620 Philco. Therefore the reference numbers on *page 7-90 of Rider's Volume VII* must be changed as follows: Change 13 to 16; change 14 to 17; change 16 to 13; change 17 to 14.

●

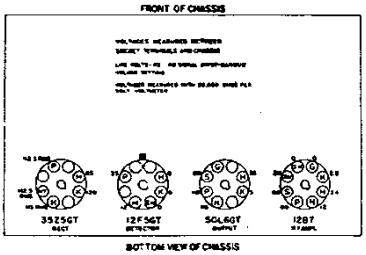


A new electric tuning system has been incorporated in later runs of Majestic models 11056, 11057, and 11058, the schematic being shown at the left. Note that the dotted portion of the drawing applies only to the last named model number.

●

G.E. H-400

The final service bulletin on this receiver was not available at the time *Rider's Volume X* went to press and the preliminary schematic, chassis layout, and alignment notes were run on *page 10-45*. The final service notes show no changes in any of these data. Herewith will be found the socket layout showing the voltages. Make a note on the schematic that the power consumption of this receiver is 25 watts and that the impedance at 400 cycles of the voice coil is 3.5 ohms.



Socket layout and voltages for the General Electric model H-400.

●

Emerson CF-255

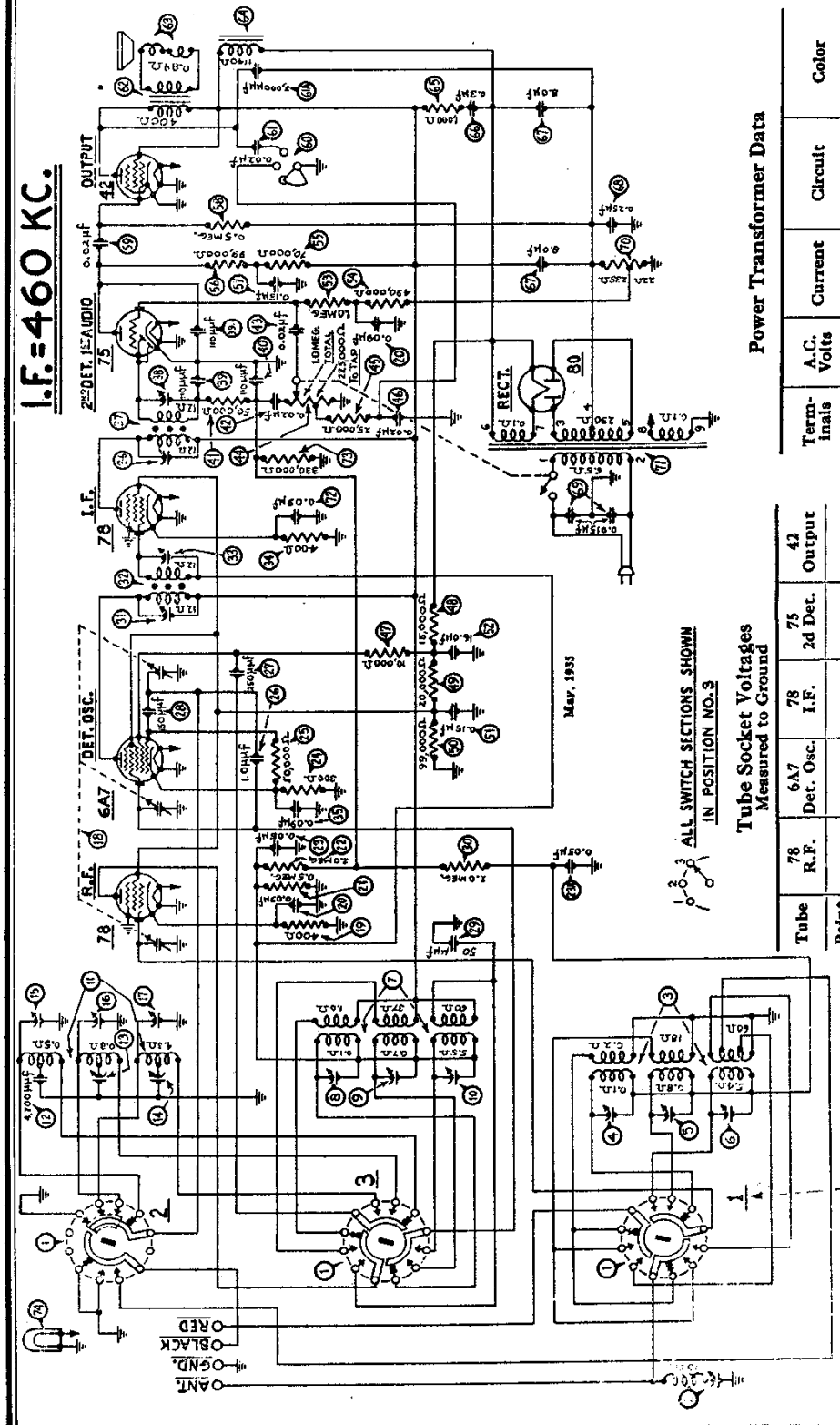
Two different type speakers have been used during production of this receiver. In the specifications listed on *page 10-23 of Rider's Volume X*, mention is made of a 4-inch magnetic speaker, but in some chassis a permanent magnet dynamic speaker has been used. In those chassis which employ the latter, the condenser, C-10, in the output circuit, has been changed to 0.024 mf. When the magnetic speaker is used, C-10 is 0.005 mf.

On receivers having serial numbers above 2,637,480, the detector coil, T2, has been changed. The part number is now 6FT-462A.

●

PHILCO RADIO & TELEV. CORP.

MODEL 620
Schematic
Voltage, Data



Power Transformer Data

Terminals	A.C. Volts	Current	Circuit	Color
1–2	120	.....	Primary	White
3–5	680	65 M.A.	Secondary	Yellow
6–7	5.0	2.0 A.	Fil. Rect.	Blue
8–9	6.3	2.0 A.	Filaments	Black
4	...	.....	Center Tap of 3-5	Yellow, Green Tracer

Tube Socket Voltages
Measured to Ground

Tube		78 R.F.	6A7 Det. Osc.	78 I.F.	75 2d Det.	42 Output
Point	P	258	258	258	153	243
	SG	95	95	95	...	258
	K	2.65	2.5	2.85	...	...
		6A7: G_3 & $_5$ = 175				

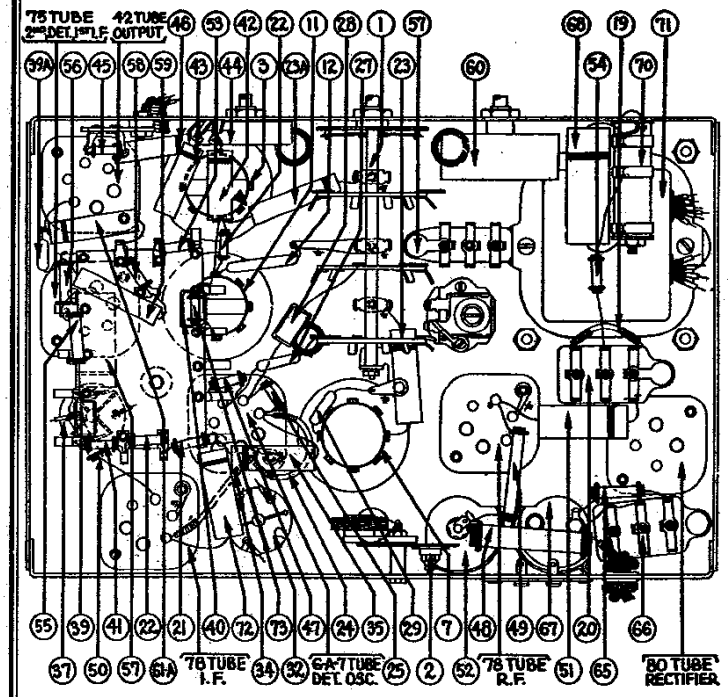
Above voltages were obtained by using a PHILCO type 025 Circuit Tester (or 0ARA All-purpose Tester), using test prods applied to underside of chassis. Volume control at maximum; dial at 55; wavebband switch counter-clockwise (band 1). Use Fig. 1 for test points. Line voltage 115 volts.

Fig. 3. Schematic Diagram of Model 620

Model 620

MODEL 620
Chassis, Parts

PHILCO RADIO & TELEV. CORP.



Replacement Parts Model 620

Description	Part No.	List Price
Dial Scale	27-5098	.25
Dial Hub and Set Screw	31-1550	.15
Dial Front Spring	28-2837	.10
Knob (Station Selector)	27-4206	.12
Knob (Fine Tuning)	27-4207	.10
Knob (Waveband)	27-4219	.10
Knob (Tone, Volume)	27-4208	.10
Tube Shield	28-2726	.10
Tube Shield Base	28-2725	.03
Tube Socket (4 Prong)	27-6034	.10
Tube Socket (6 Prong)	27-6036	.11
Tube Socket (7 Prong)	27-6037	.11
Speaker Plug Socket	27-6033	.08
Chassis Mtg. Screw	W-1495	1.50 per C.
Chassis Mtg. Washer (Rubber)	27-4198	.01
Electric Cord and Plug	L-943-A	.60
Bezel	28-2928	.35
Bezel Glass	27-7887	.60

Fig. 4. Bottom View of Chassis

	Description	Part No.	List Price
(1)	Waveband Switch	42-1107	$1.75
(2)	Wavetrap	38-6850	1.10
(3)	Antenna Transformer	32-1699	3.00
(4)	Compensating Condenser (Ant. S.W.)	Part of (3)	....
(5)	Compensating Condenser (Ant. Police)	Part of (3)	....
(6)	Compensating Condenser (Ant. Standard)	Part of (3)	....
(7)	R. F. Transformer	32-1636	3.25
(8)	Compensating Condenser (R.F. Short-Wave)	Part of (7)	....
(9)	Compensating Condenser (R.F. Police)	Part of (7)	....
(10)	Compensating Condenser (R.F. Standard)	Part of (7)	....
(11)	Oscillator Transformer	32-1637	2.50
(12)	Condenser (.0047 Mfd. Mica)	30-1052	.60
(13)	Compensating Condenser (Osc. Police)	Part of (11)	....
(14)	Compensating Condenser (Osc. H.F. Standard)	Part of (11)	....
(15)	Compensating Condenser (Osc. S.W.)	Part of (11)	....
(16)	Compensating Condenser (Osc. L.F. Police)	Part of 31-6027	.70
(17)	Compensating Condenser (Osc. L.F. Standard)	Part of 31-6027	
(18)	Tuning Condenser Assembly	31-1526	2.75
(19)	Resistor (400 ohms Flexible) (Yellow, Black, Brown)	33-3016	.20
(20)	Condenser (.09 Mfd. Twin Bakelite Block)	4989-DG	.40
(21)	Resistor (.5 Meg.) (Yellow, White, Yellow)	6097	.20
(22)	Resistor (2 Megs.) (Red, Black, Green)	33-1025	.20
(23)	Condenser (.05 Mfd. Tubular)	30-4020	.35
(23)A	Condenser (.05 Mfd. Tubular)	30-4020	.35
(24)	Resistor (300 ohms Flexible) (Orange, Black, Brown)	33-3010	.20
(25)	Resistor (50000 ohms) (Green, Brown, Orange)	6098	.20
(26)	Condenser (1 Mmfd.)	Part of (18)	....
(27)	Condenser (.00025 Mfd. Mica)	30-1032	.35
(28)	Condenser (.00015 Mfd. Mica)	30-1033	.35
(29)	Condenser (.00005 Mfd. Mica)	30-1029	.35
(30)	Resistor (2 Megs.) (Red, Black, Green)	33-1025	.20
(31)	Compensating Condenser (1st I.F. Primary)	Part of (32)	....
(32)	1st I.F. Transformer	32-1646	$2.25
(33)	Compensating Condenser (1st I.F. Secondary)	Part of (32)	....
(34)	Resistor (400 ohms Flexible) (Yellow, Black, Brown)	33-3016	.20
(35)	Condenser (.1 Mfd. Tubular)	30-4122	.35
(36)	Compensating Condenser (2nd I.F. Pri.)	Part of (37)	....
(37)	2nd I.F. Transformer	32-1647	2.25
(38)	Compensating Condenser (2nd I.F. Sec.)	Part of (37)	....
(39)	Condenser (.00011 Mfd. Mica)	30-1031	.35
(39)A	Condenser (.00011 Mfd. Mica)	30-1031	.35
(40)	Condenser (.00011 Mfd. Mica)	30-1031	.35
(41)	Resistor (50000 ohms) (Green, Brown, Orange)	6098	.20
(42)	Condenser (.02 Mfd. Tubular)	30-4215	.30
(43)	Condenser (.02 Mfd. Tubular)	30-4215	.30
(44)	Volume Control and On-Off Switch	33-5105	1.45
(45)	Resistor (25000 ohms) (Red, Green, Orange)	33-1013	.20
(46)	Condenser (.02 Mfd. Tubular)	30-4215	.30
(47)	Resistor (10000 ohms) (Brown, Black, Orange)	4412	.20
(48)	Resistor (15000 ohms) (Brown, Green, Orange)	5718	.35
(49)	Resistor (20000 ohms) (Red, Black, Orange)	6649	.20
(50)	Resistor (99000 ohms) (White, White, Yellow)	4411	.20
(51)	Condenser (.15 Mfd. Tubular)	30-4191	.35
(52)	Condenser (16 Mfd. Electrolytic)	30-2118	1.65
(53)	Resistor (1 Meg.) (Brown, Black, Green)	33-1096	.20
(54)	Resistor (.5 meg.) (Yellow, White, Yellow)	6097	.20
(55)	Resistor (70000 ohms) (Violet, Black, Orange)	5385	.20
(56)	Resistor (99000 ohms) (White, White, Yellow)	6099	.20
(57)	Condenser (.1 Mfd. Tubular)	30-4122	.35
(58)	Resistor (.5 meg.) (Yellow, White, Yellow)	6097	.20
(59)	Condenser (.02 Mfd. Tubular)	30-4113	.30
(60)	Tone Control	30-4316	.75
(61)	Condenser in Tone Control	Part of (60)	....
(61)A	Condenser (.003 Mfd. Tubular)	30-4042	.25
(62)	Output Transformer	32-7019	1.25
(63)	Voice Coil & Cone Assembly (S-14 Speaker)	36-3157	.80
(64)	Field Coil & Pot Assembly (S-14 Speaker)	36-3495	2.75
(65)	Resistor (1000 ohms) (Brown, Black, Red)	5837	.20
(66)	Condenser (.3 Mfd. Bakelite Block)	6287-DU	.40
(67)	Condenser (8 Mfd. & 8 Mfd. Electrolytic)	30-2079	2.40
(68)	Condenser (.25 Mfd. Tubular)	30-4146	.40
(69)	Condenser (.015 Mfd. Bakelite Block)	3793-DG	.40
(70)	Resistor (BC Wirewound, 22 ohms, 235 ohms)	33-3037	.20
(71)	Power Transformer (115 Volts 60 Cycles)	32-7381	4.00
	(115 Volts 25 Cycles)	32-7382	6.25
	(230 Volts 50 Cycles)	33-7383	4.50
(72)	Condenser (.1 Mfd. Tubular)	30-4122	.35
(73)	Resistor (330,000 ohms) (Orange, Orange, Yellow)	33-1200	.20
(74)	Pilot Lamp	34-2064	.09

MODEL 620
Alignment, Data
Socket, Trimmers

PHILCO RADIO & TELEV. CORP.

Model 620

Type Circuit: Superheterodyne, with preselector R.F. amplifier, and pentode output (3 watts); built in connections for Philco All-wave aerial; aerial selector built into and operated by wave-band switch.

Power Supply: Alternating Current. Voltage and frequency as specified on chassis nameplate.

Tubes Used: 1 type 78, R.F.; 1 type 6A7, Detector-Oscillator; 1 type 78, I.F.; 1 type 75, 2d Detector and 1st A.F.; 1 type 42 Output; 1 type 80 Rectifier.

Wave Bands: Three—(1) standard (with some Police); (2) Police, Aircraft and Amateur; (3) Short-wave.

Coverage of Each Band: Band 1, 540-1720 K.C.; Band 2, 1750 to 5800 K.C. (1.75-5.8 megacycles); Band 3, 5700-18000 K.C. (5.7 to 18.0 megacycles).

Tuning Drive: Two-speed gear drive, ball bearing. 50 to 1 ratio for slow-speed tuning.

Tone Control: 3-position, with bass compensation effective in first position.

Intermediate Frequency: 460 K.C.

Power Consumption: 65 watts.

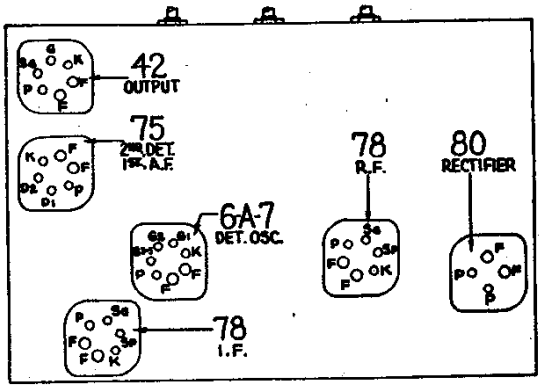


Fig. 1. Tube Sockets as viewed from bottom.

Adjusting Compensating Condensers

The adjustment of the compensating condensers in Model 620 requires a signal generator covering the broadcast and police band, and also one capable of producing a signal at certain frequencies in the short wave band. Philco Model 088 All-wave signal generator is ideal for these requirements. Or you can use the Philco Model 024 or 048A instrument for the broadcast frequencies, and the Model 091 crystal controlled short wave signal generator for the "short-wave" frequencies. The location of all compensating condensers is shown in Fig. 2. An output meter is also needed, such as in Philco Model 025.

Adjustment of I. F.

1. Remove the antenna connection from the receiver, disconnect the grid clip from the first detector (type 6A7 tube), and connect the "ANT" output terminal of the broadcast signal generator to the grid cap of this tube; connect the "GND" terminal of the signal generator to the "GND" terminal of the receiver.

2. Connect the 0 to 80 volt range of the output meter in the Philco 048A or 025 unit to the plate and cathode of the output tube or to the two bottom prongs of the speaker plug.

3. Adjust the signal generator to a frequency of 460 K.C. Place the receiver in operation with the dial turned to the low frequency end of the standard broadcast band, wave band switch to extreme left (clockwise), and have the volume control adjusted near its maximum setting. Adjust the signal generator attenuator for approximately half-scale reading of the output meter.

4. The I.F. compensating condensers are located at the tops of the I.F. coil shields. The primary is adjusted by turning the screw in top and the secondary by the nut. Adjust condensers ㊳ and ㊴ (2d I.F. primary and secondary) for maximum reading in the output meter, and then condensers ㊱ and ㊲ (1st I.F. primary and secondary).

Adjustment of Wave-Trap

1. Connect the signal generator leads to the antenna and ground terminals of the receiver. Replace the grid clip on the 6A7 grid cap.

2. With the wave-band switch of the receiver still in the extreme left (standard band), (540-1720 K.C.), turn the station selector to 55.

3. With the signal generator in operation at 460 K.C., adjust the wave-trap ② condenser until a MINIMUM reading is obtained on the output meter. The Philco fibre wrench, part No. 3164, is used for this adjustment. The wave-trap compensator is reached from rear of chassis.

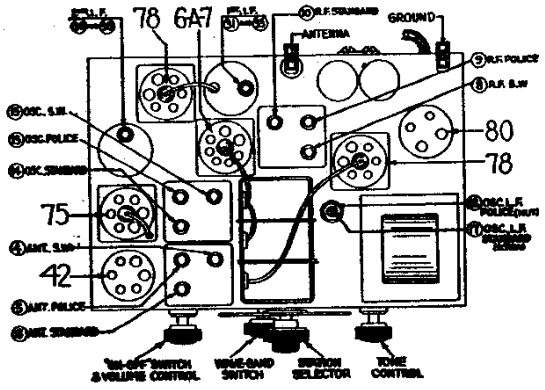


Fig. 2. Locations of Compensating Condensers

Adjustment of High and Low Frequency Compensators

1. With the wave-band switch still at Range No. 1 (broadcast band), set the dial at 1700 K.C. Set the signal generator at this frequency and adjust compensators ⑭, ④ and ⑯ for maximum output. These are the oscillator, antenna, and R.F. standard" compensators respectively.

2. Tune the receiver and the signal generator to 600 K.C. and adjust compensator ⑰ (screw) for maximum output. This is the oscillator L.F. standard compensator.

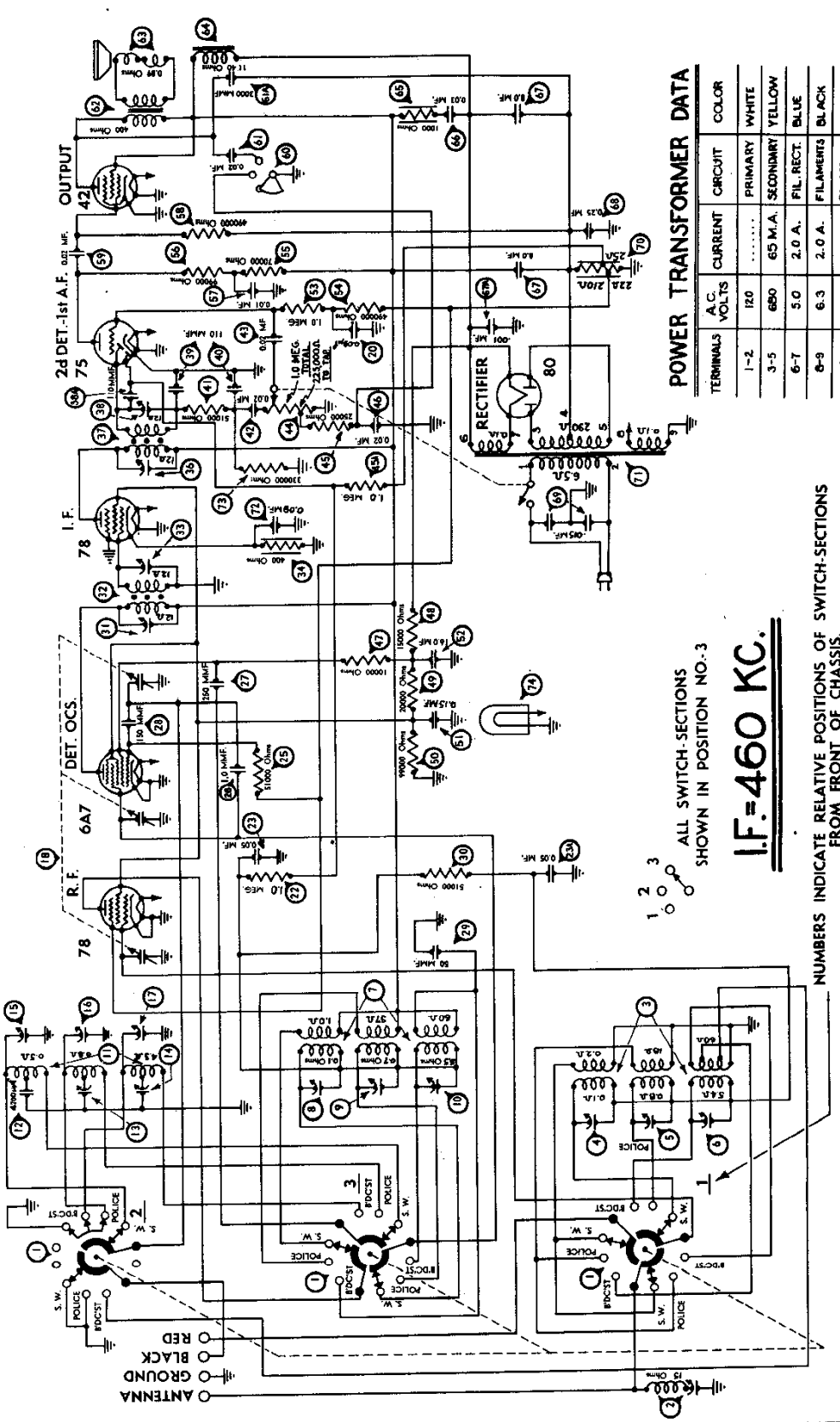
3. Turn the waveband switch to the second (middle) position. Set the dial at 3.6 M.C., at which point the fundamental of the 091 signal will be heard. If the Model 088 signal generator is being used, set it at 3.6 M.C. Adjust condensers ⑬, ③ and ⑨ in succession. These are the oscillator, antenna and R.F. police band adjustments.

4. Turn the tuning dial to 1.8 M.C., and set the signal generator (Model 024 or Model 088) at 1800 K.C. Adjust condenser ⑮ (Osc. L.F., police) (nut), to maximum signal.

5. Turn the wave-band switch to Band 3 (extreme right) and adjust the station selector to 18.0 megacycles. Set the signal generator at 18 M.C. By means of the Philco wrench, part No. 3164, adjust the oscillator S.W., antenna S.W. and R.F. S.W. compensators for maximum reading in the output meter. These are numbered ⑫, ① and ⑧ respectively in figure No. 2.

MODEL 620
Schematic

PHILCO RADIO & TELEV. CORP.



POWER TRANSFORMER DATA

TERMINALS	A.C. VOLTS	CURRENT	CIRCUIT	COLOR
1-2	120	.....	PRIMARY	WHITE
3-5	680	65 M.A.	SECONDARY	YELLOW
6-7	5.0	2.0 A.	FIL. RECT.	BLUE
8-9	6.3	2.0 A.	FILAMENTS	BLACK
4	...	.....	CENTER TAP OF 3-5	YELLOW, GREEN TRACER

MODEL 620
Changes, Parts

PHILCO RADIO & TELEV. CORP.

Later 1935 Production Runs

This sheet supplements the regular bulletin No. 218 on the Philco Model 620. All circuit and part number changes up to date have been included.

Beginning with run No. 7 the grid bias arrangement for the 78 R.F. and 6A7 1st detector was changed. A fixed bias from the B.C. resistor is fed through the AVC circuit to the grids of these tubes. The oscillator circuit was changed to series feed to eliminate possibilities of failure at 6.0 mc.

PARTS LIST

	Description	Part No.	Price List
①	Waveband Switch	42-1152	$1.75
②	Wavetrap	38-6850	1.10
③	Antenna Transformer	32-1699	3.00
④	Compensating Condenser (Ant. S.W.)	Part of ③	....
⑤	Compensating Condenser (Ant. Police)	Part of ③	....
⑥	Compensating Condenser (Ant. Standard)	Part of ③	....
⑦	R. F. Transformer	32-1636	3.25
⑧	Compensating Condenser (R.F. Short-Wave)	Part of ⑦	....
⑨	Compensating Condenser (R.F. Police)	Part of ⑦	....
⑩	Compensating Condenser (R.F. Standard)	Part of ⑦	....
⑪	Oscillator Transformer	32-1637	2.50
⑫	Condenser (.0047 Mfd. Mica)	30-1052	.60
⑬	Compensating Condenser (Osc. Police)	Part of ⑪	....
⑭	Compensating Condenser (Osc. H.F. Standard)	Part of ⑪	....
⑮	Compensating Condenser (Osc. S.W.)	Part of ⑪	....
⑯	Compensating Condenser (Osc. L.F. Police) Part of	31-6027	.70
⑰	Compensating Condenser (Osc. L.F. Standard) Part of	31-6027	
⑱	Tuning Condenser Assembly	31-1741	....
⑲	Condenser (.09 Mfd. Twin Bakelite Block)	4989-DG	.40
⑳	Resistor (1. Meg.) (Red, Black, Green)	33-1096	.20
㉑	Condenser (.05 Mfd. Tubular)	30-4020	.35
㉑a	Condenser (.05 Mfd. Tubular)	30-4020	.35
㉒	Resistor (50000 ohms) (Green, Brown, Orange)	6098	.20
㉓	Condenser (1 Mmfd.)	Part of ⑱	....
㉔	Condenser (.00025 Mfd. Mica)	30-1032	.35
㉕	Condenser (.00015 Mfd. Mica)	30-1033	.35
㉖	Condenser (.00005 Mfd. Mica)	30-1029	.35
㉗	Resistor (51,000 ohms) (Green, Brown, Orange)	6098	.20
㉘	Compensating Condenser (1st I.F. Primary)	Part of ㉙	....
㉙	1st I.F. Transformer	32-1646	2.25
㉚	Compensating Condenser (1st I.F. Secondary)	Part of ㉙	....
㉛	Resistor (400 ohms Flexible) (Yellow, Black, Brown)	33-3016	.20
㉜	Compensating Condenser (2nd I.F. Pri.)	Part of ㉝	....
㉝	2nd I.F. Transformer	32-1647	2.25
㉞	Compensating Condenser (2nd I.F. Sec.)	Part of ㉝	....
㉞a	Condenser (.00011 Mfd. Mica)	30-1031	.35
㉟	Condenser (.00011 Mfd. (Twin Bakelite)	8035-DG	.25
㊱	Condenser (.00011 Mfd. Mica)	Part of ㉟	....
㊲	Resistor (50000 ohms) (Green, Brown, Orange)	6098	.20
㊳	Condenser (.02 Mfd. Tubular)	30-4215	.30
㊴	Condenser (.02 Mfd. Tubular)	30-4215	.30
㊵	Volume Control and On-Off Switch	33-5105	1.45
㊶	Resistor (25000 ohms) (Red, Green, Orange)	33-1013	.20
㊶a	Resistor (1. Meg.) (Brown, Black, Green)	33-1096	.20
㊷	Condenser (.02 Mfd. Tubular)	30-4215	.30
㊸	Resistor (10000 ohms) (Brown, Black, Orange)	4412	.20
㊹	Resistor (15000 ohms) (Brown, Green, Orange)	5718	.35
㊺	Resistor (20000 ohms) (Red, Black, Orange)	6649	.20
㊻	Resistor (99000 ohms) (White, White, Yellow)	6099	$0.20
㊼	Condenser (.15 Mfd. Tubular)	30-4191	.35
㊽	Condenser (16 Mfd. Electrolytic)	30-2118	1.65
㊾	Resistor (1 Meg.) (Brown, Black, Green)	33-1096	.20
㊿	Resistor (.5 Meg.) (Yellow, White, Yellow)	6097	.20
(51)	Resistor (70000 ohms) (Violet, Black, Orange)	33-1115	.20
(52)	Resistor (99000 ohms) (White, White, Yellow)	6099	.20
(53)	Condenser (.09 Mf.)	4989-SG	.35
(54)	Resistor (.5 meg.) (Yellow, White, Yellow)	6097	.20
(55)	Condenser (.03 Mfd. Bakelite)	8318-SU	.35
(56)	Tone Control	30-4316	.75
(57)	Condenser in Tone Control	Part of ㊻	....
(57)a	Condenser (.003 Mfd. Tubular)	30-4042	.25
(58)	Output Transformer	32-7019	1.25
(59)	Voice Coil & Cone Assembly (S-14 Speaker)	36-3157	.80
(60)	Field Coil & Pot Assembly (S-14 Speaker)	36-3495	2.75
(61)	Resistor (1000 ohms) (Brown, Black, Red)	33-1028	.20
(62)	Condenser (.3 Mfd. Bakelite Block)	6287-DU	.40
(63)	Condenser (8 Mfd. & 8 Mfd. Electrolytic)	30-2079	2.40
(63)a	Condenser (.001 Mf.)	30-4310	.25
(64)	Condenser (.25 Mfd. Tubular)	30-4146	.40
(65)	Condenser (.015 Mfd. Bakelite Block)	3793-DG	.40
(66)	Resistor (BC Wirewound, 22 ohms, 25 ohms, 210 ohms)	33-3222	.20
(67)	Power Transformer (115 Volts 60 Cycles)	32-7381	4.00
	(115 Volts 25 Cycles)	32-7382	6.25
	(230 Volts 50 Cycles)	33-7383	4.50
(68)	Condenser (.1 Mfd. Tubular)	Part of (65)	....
(69)	Resistor (330,000 ohms) (Orange, Orange, Yellow)	33-1200	.20
(70)	Pilot Lamp	34-2064	.09
	Dial Scale	27-5098	.25
	Dial Hub and Set Screw	31-1550	.15
	Dial Front Spring	28-2837	.10
	Knob (Station Selector)	27-4206	.12
	Knob (Fine Tuning)	27-4207	.10
	Knob (Waveband)	27-4219	.10
	Knob (Tone, Volume)	27-4208	.10
	Tube Shield	28-2726	.10
	Tube Shield Base	28-2725	.03
	Tube Socket (4 Prong)	27-6034	.10
	Tube Socket (6 Prong)	27-6036	.11
	Tube Socket (7 Prong)	27-6037	.11
	Speaker Plug Socket	27-6033	.08
	Chassis Mtg. Screw	W-1495	1.50perC.
	Chassis Mtg. Washer (Rubber)	27-4198	.01
	Electric Cord and Plug	L-943-A	.60
	Bezel	28-2928	.35
	Bezel Glass	27-7887	.60

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

MODELS 610B,610F,611F PHILCO RADIO & TELEV. CORP.
611(121),620, 620(121),623 Changes

MODEL 610F

Approximate Date of Change	Run No.	CHANGES
8-1-35	..	Remove 27-7981 Bezel Glass Gasket and install 27-8036. Add Bezel Frame Gasket, Part No. 27-7972 to 610-F.

MODEL 610B

8-1-35	..	Add Part No. 27-7971 Bezel Frame Gasket.

MODEL 611-F

9-1-35	..	Remove bezel glass gasket, Part No. 27-7981, and install Part No. 27-8036.

MODEL 611 (Code 121)

9-1-35 | 2 | The new condensers are impregnated with the high melting point wax.

	Old Part	New Part
Condenser ㉕	8035-DU	8035-ODU
Condenser ㊺	3793-SU	3793-OSU
Condenser ㊼	6287-DU	6287-ODU
Condenser ㊽	3903-SU	3903-OSU
Condenser ㊼	4989-FU	4989-OFU
Condenser ㉑	4989-DU	4989-ODU
Condenser ㊸	3615-SU	3615-OSU
Tone Control ㊼	30-4345	30-4377

10-1-35 | 2 |

	Old Part	New Part
Resistor ㊵	4237 (1 watt) 51,000 ohms	4518 (½ watt)
Condenser ⑱	30-1055 .00225 mfd. mica	30-1042

Resistor ⑤ Part No. 33-1001 (5000 ohm) no longer necessary.

12-1-35 | 4 | The Oscillator Circuit was changed to series feed.
The Oscillator Plate is disconnected from the lead connecting Condenser ⑨ and Resistor ⑪ and connected to the top of the lower primary winding. The bottom end of this primary is disconnected from Condenser ⑮ and ⑲ and connected to the lead, connecting Condenser ⑥ and Resistor ⑪. The lead from Resistor ⑱ to the top of the primary is changed so that it connects to the bottom of the secondary. Resistor ⑳ is removed from the circuit. Resistor ⑬ is changed so that it connects from the 6A7 cathode to the switch side of Condenser ⑨. Resistor ⑲ is removed. The following are necessary part changes:

Part	Schematic No.	Remove Old Part No.	Add New Part No.
Resistor	⑲	33-1128 (120,000 ohm)	
Osc. Transformer	⑪	32-1831	32-1973
Resistor	⑳	33-1206 (20 ohm)	

The Dial Mask Assembly was changed to the Glowing Arrow Wave Band Indicator Type.

Part	Schematic No.	Remove Old Part No.	Add New Part No.
Tuning Condenser	⑰	31-1528	31-1740
Glowing Arrow Mask			27-5167
Glowing Arrow Screen			27-5166
Mask Arm			29-3274
Link			29-3285
Coupling			29-3586
Screen Brekat			31-1751
Hub and Set Screw Assy.		31-1550	31-1724

MODEL 620 (Code 121)

8-1-35 | | Add the following parts:
1 No. 27-7972 Bezel Frame Gasket.
1 No. 27-8036 Bezel Glass Gasket
Remove No. 27-7981 Bezel Glass Gasket
MODEL 620 B
Add No. 27-7971 Bezel Frame Gasket

10-1-35 | 5 |

	Old Part	New Part
Resistor ㊸	5837 (½ watt) 1,000 ohms	33-1028 (¼ watt)
Resistor ㊹	5385 (½ watt) 70,000 ohms	33-1115 (¼ watt)
Resistor ㊻	4411 (½ watt) 99,000 ohms	6099 (¼ watt)

MODEL 620 (Code 121)—

Approximate Date of Change	Run No.	CHANGES
11-1-35	5	A condenser, Part No. 30-4310 (.001 mf.) was connected from the center terminal of condenser ㊾ to the ground terminal of condenser ㊿. Tube Shield, Part No. 28-2726 and Tube Shield Base, Part No. 28-2725, for 6A7 tube no longer necessary.

MODEL 620

12-1-35 | 9 |

Schematic No.	Old Part No.	New Part No.
Ant. Transformer ③	32-1699	32-1867
Det. Transformer ⑦	32-1636	32-1868
Osc. Transformer ⑪	32-1637	32-1869

MODEL 623

9-1-35 | .. | Remove pilot light reflector No. 28-2979 and replace with reflector No. 28-3237. Change made to increase light intensity through dial scale.

	Old Part	New Part
Input Transformer ㊷	32-7454	32-7480

10-1-35 | 4 | Change made to increase sensitivity.

	Old Part	New Part
1st I. F. Transformer ㉓	32-1793 34 I. F. Tube	32-1671 1A4 Tube

3	Connect bottom terminal (ordinarily grounded) to positive terminal of filament supply.

	Old Part	New Part
Volume Control ㊹	33-5115	33-5142

11-1-35 | 6 | 10,000 ohm Resistor, part ④, Part No. 33-1000, no longer necessary.

12-1-35 | .. | The Dial Mask Assembly was changed to the Glowing Arrow Wave Band Indicator Type.

Part	Schematic No.	Old Part No.	New Part No.
Wave Switch	③	42-1112	42-1155
Tuning Condenser	㉘	31-1526	31-1740
Glowing Arrow Mask			27-5167
Glowing Arrow Screen			27-5166
Mask Arm			29-3274
Link			29-3285
Coupling			29-3586
Screen Bracket			31-1751
Hub Assembly		31-1550	31-1724

9	The Oscillator Circuit was changed to series feed.

Part	Remove Old Part No.	Schematic	Add New Part No.
Condenser	30-1033 (.00015 mf.)	㉖	30-1049 (.0006 mf.)
Resistor	6097 (490,000 ohm)	㉔	
Resistor	33-1013 (25,000 ohm)	⑯	
Oscillator Trans.	32-1831	⑪	32-1973
Resistor	33-1206 (20 ohm)	⑳	
Condenser	6359 (.006 mf.)	㉙	30-1031 (.00011 mf.)