



Model 32

SPECIFICATIONS

TYPE OF CIRCUIT: Philco Model 32 is an A.C. operated superheterodyne receiver with automatic volume control, pentode output and an electro-dynamic speaker. A phonograph jack provides input for a high impedance pickup.

POWER SUPPLY: 115 volts 50-60 cycles.
115 volts 25-40 cycles.

POWER CONSUMPTION: 35 watts.

FREQUENCY TUNING RANGE: 540 to 1720 Kc.

INTERMEDIATE FREQUENCY: 460 Kc.

AUDIO OUTPUT: 1 watt.

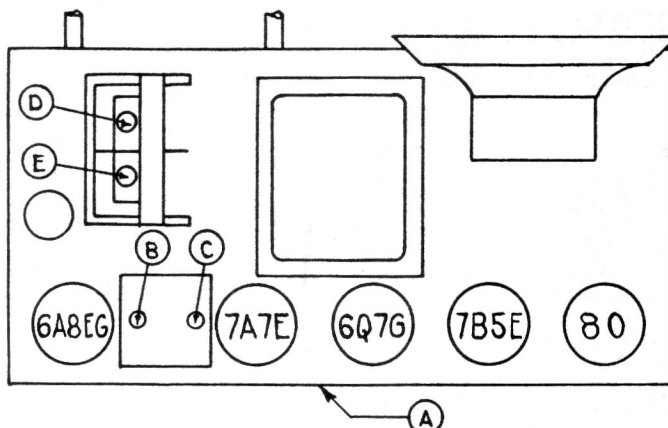
PHILCO TUBES USED: 6A8EG Converter; 7A7E I.F.; 6Q7G, 2nd detector, 1st audio and A.V.C.; 7B5E power output, 80 rectifier.

CABINET DIMENSIONS: 14" x 7 $\frac{1}{4}$ " x 9 $\frac{3}{8}$ ".

ALIGNMENT OF COMPENSATORS

Equipment Required: To accurately adjust this receiver an accurately calibrated signal generator such as the Philco Model 177 is required. Maximum signal strength is shown by the use of a vacuum tube voltmeter and circuit tester such as the Philco Model 028. The vacuum tube voltmeter is connected in the output circuit by using an aligning adapter, Philco Part No. 45-2767. The output indicator is connected as follows: Remove the 7B5E tube from the socket, insert the aligning adapter in the tube socket, insert the tube in the top of the adapter, connect the light-coloured wire which protrudes from the side of the adapter to the negative (—) terminal of the vacuum tube voltmeter. Attach the black wire to the positive (+) terminal of the voltmeter. A fibre handle screw driver, Philco Part No. 45-2610 and fibre wrench, Philco Part No. 7696 are the necessary aligning tools.

out Osc. section of gang. (3) With receiver volume control maximum adjust compensators (a) (b) and (c) for maximum output. If the output meter goes off scale when adjusting the compensators, retard the signal generator attenuator.



LOCATION OF COMPENSATORS

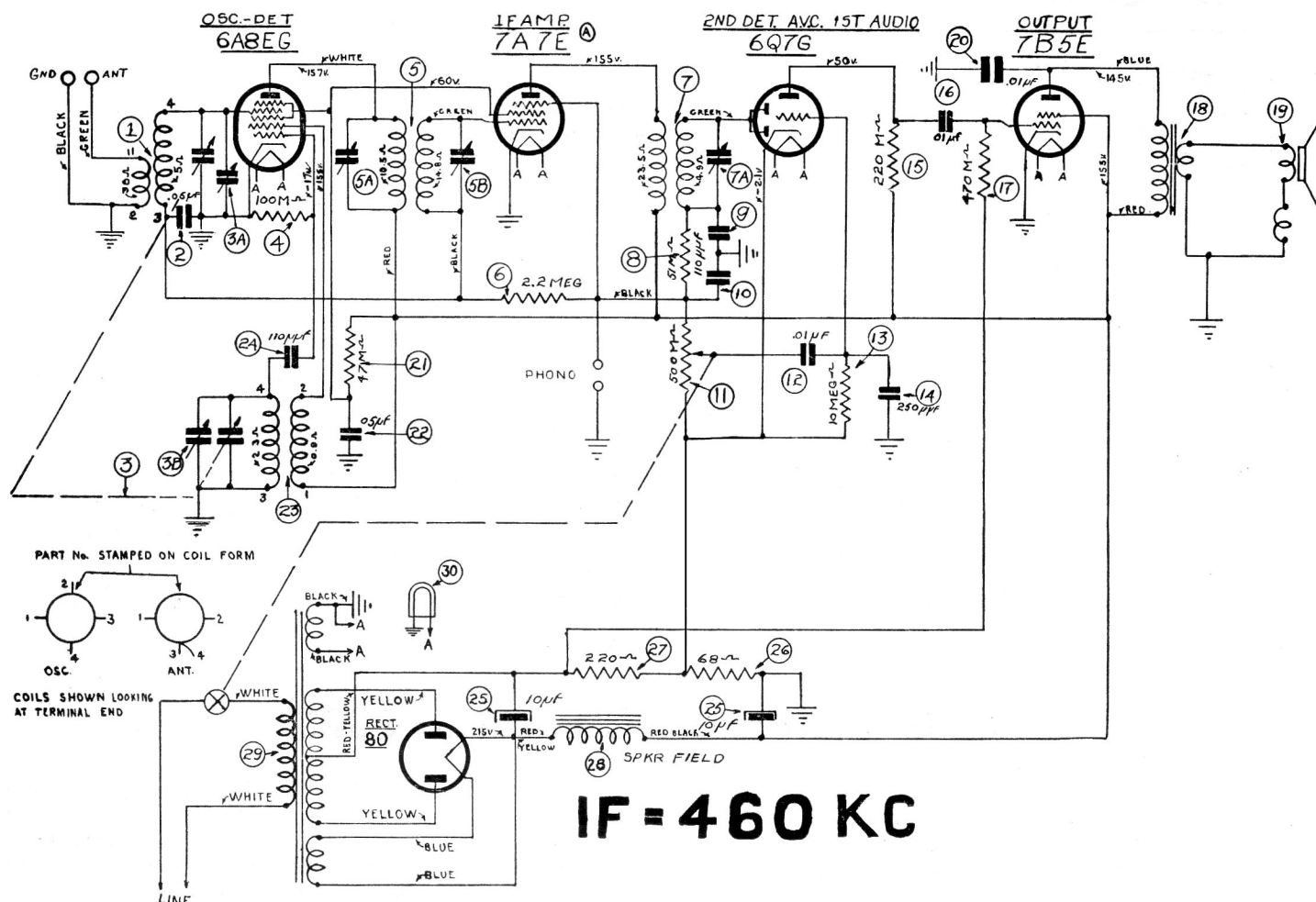
Radio Frequency Circuit. Connect the high side of the signal generator through a 100 mmfd. condenser to the green aerial wire which protrudes through the rear of the chassis, and the ground terminal of the signal generator to the chassis and proceed as follows:

- (1) With volume control maximum and signal generator and receiver both set to 1400 Kc. adjust compensators (D) and (E) in order for maximum output.
- (2) Check the calibration at 1000 and 600 Kc.

Dial Calibration: In order to adjust the receiver correctly the dial must be aligned to track properly with the tuning condenser. To adjust the dial, proceed as follows: (1) Turn the tuning condenser to maximum capacity position (plates fully meshed). (2) With the tuning condenser in this position turn the pointer until it is parallel with the dark horizontal stripe on the dial.

Intermediate Frequency Circuit: Connect the output lead from the high side of the signal generator through a 0.1 mfd. condenser to the grid of the 6A8EG converter tube and the ground connection of the signal generator to the chassis. Set the signal generator and receiver controls and adjust the I.F. compensators as follows.

- (1) Set signal generator at 460 K.C. for maximum output. (2) Turn receiver dial to 580 Kc. and short



NOTE: Voltages shown on schematic diagram were measured with a 1000 ohm per volt meter such as Philco Model 026 or 028. Line voltage was 115 volts. Volume control was maximum and the tuning condenser was closed.

REPLACEMENT PARTS — MODEL 32

Schem. No.	Description	Part No.	Schem. No.	Description	Part No.
1	Antenna Coil	32-3045	28	Speaker Field Coil	32-9556
2	Tubular Condenser (.05 mfd. 200 v)	30-4519	29	Power Transformer (25 cycle)	12-0001
3	Tuning Condenser	11-0001		Power Transformer (60 cycle)	12-0002
4	Resistor (100,000 ohms, 1/3 watt)	33-410244		Pilot Lamp	34-2064
5	1st I.C. Transformer	12-0003	30	Speaker Complete	36-1429
6	Resistor (2.2 megohms, 1/3 watt)	33-522244		Rivet for Output Transformer and Phono Jack	W-207
7	2nd I.F. Transformer	32-2944		Socket (4 prong)	27-6044
8	Resistor (51,000 ohms, 1/3 watt)	33-351244		Socket (Octal)	27-6058
9	Mica Condenser (110 mmfd.)	Part of 7		Socket (Loktal)	27-6131
10	Mica Condenser (110 mmfd.)			Rivets for Socket	06-0001
11	Volume Control and A.C. Switch	33-5279		Phono Jack	27-6149
12	Tubular Condenser (.01 mfd., 400 v)	30-4572		Rubber Grommet (Tuning Condenser Mtg.)	27-4610
13	Resistor (10 megohms, 1/3 watt)	33-610244		Dial Mounting Screw	W-2151
14	Mica Condenser (250 mmfd.)	60-125157		Palnut (Volume Control)	W-2157
15	Resistor (220,000 ohms, 1/3 watt)	33-422244		Tuning Shaft	38-9652
16	Tubular Condenser (.01 mfd., 400 v)	30-4572		"C" Washer	28-2043
17	Resistor (470,000 ohms, 1/3 watt)	33-447244		Antenna Coil Mounting Clip	28-5002
18	Output Transformer	32-7904		Line Cord	03-0001
19	Cone Voice Coil and Speaker Assembly	36-4098		Drive Cord	31-2292
20	Tubular Condenser (.01 mfd., 400 v)	30-4572		Drive Cord Spring	28-8954
21	Resistor (47,000 ohms, 1/2 watt)	33-347344		Drive Cord Ring	57-1240
22	Tubular Condenser (.05 mfd., 200 v)	30-4519		Dial Scale	07-0012
23	Oscillator Coil	32-3049		Pointer	27-4868
24	Mica Condenser (110 mmfd.)	60-111157		Dial Window	27-5370
25	Electrolytic Condenser (10-10 mfd., 350 v)	10-0001		Fibre Insulator	07-0002
26	Resistor (68 ohms, 1/2 watt)	33-068336		Asbestos Insulator	07-0001
27	Resistor (220 ohms, 1/2 watt)	33-122336		Chassis Mounting Screw	W-758
				Chassis Mounting Washer	W-410

PHILCO PRODUCTS LIMITED

PARTS AND SERVICE DIVISION
TORONTO, ONT.