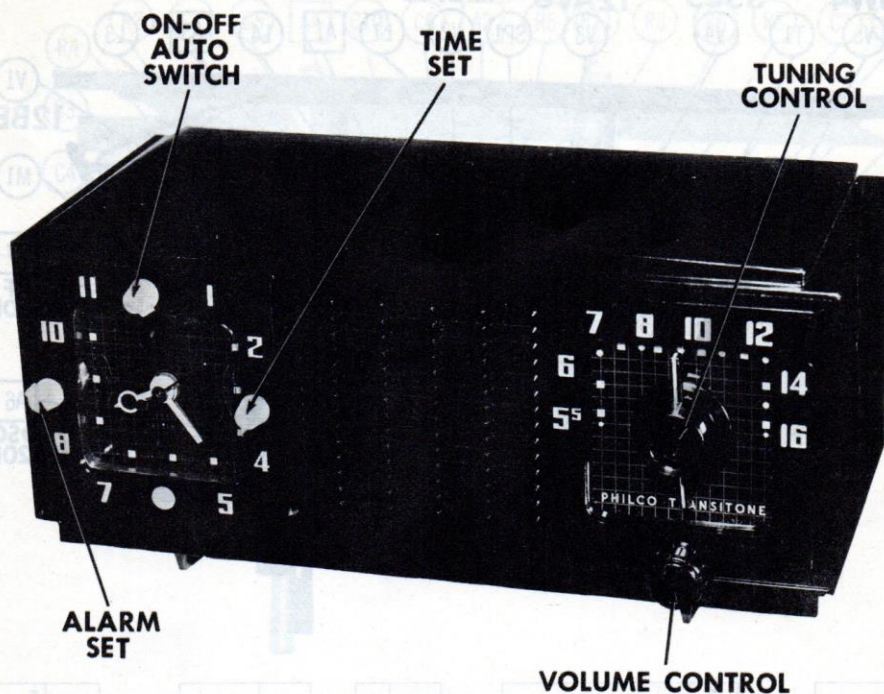


PHILCO
MODEL B710PHILCO
MODEL B710

TRADE NAME	Philco Model B710					
MANUFACTURER	Philco Corp., Tioga & "C" Sts., Philadelphia, Pa.					
TYPE SET	AC Operated AM Superheterodyne Receiver with Electric Clock					
TUBES (Five)	Types 12BE6 Conv., 12BA6 IF Amp., 12AV6 Det.-AVC-AF Amp., 35C5 Audio Output, 35W4 Rectifier					
POWER SUPPLY	110-120 Volts -60 Cycles			RATING .23 Amp. @ 117 Volts AC		
TUNING RANGE—BROADCAST	540-1620KC					
ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT						
Use isolation transformer, if available. If not, connect a .1MFD capacitor in series with low side of signal generator and B- Volume control should be at maximum position. Output of signal generator should be no higher than necessary to obtain an output reading. Use an insulated alignment screwdriver for adjusting. Attenuate signal generator to maintain 1.25 volts on VTVM.						
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
.1MFD	High side to pin 7 (grid) of 12BE6 (V1). Low side to B-.	455KC (400 μ Mod)	Tuning gang fully open	Across voice coil	A1, A2, A3, A4	Adjust for maximum output. If isolation transformer is not used, reduce dummy antenna to .001MFD to reduce hum modulation.
	Loop	1620KC	"	"	A5	Fashion loop of several turns of wire and radiate signal into loop of receiver. Adjust for maximum output.
	"	1500KC	Tune to 1500KC signal	"	A6	"

HOWARD W. SAMS & CO., INC. • Indianapolis 5, Indiana

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DATE 12-53

SET 223

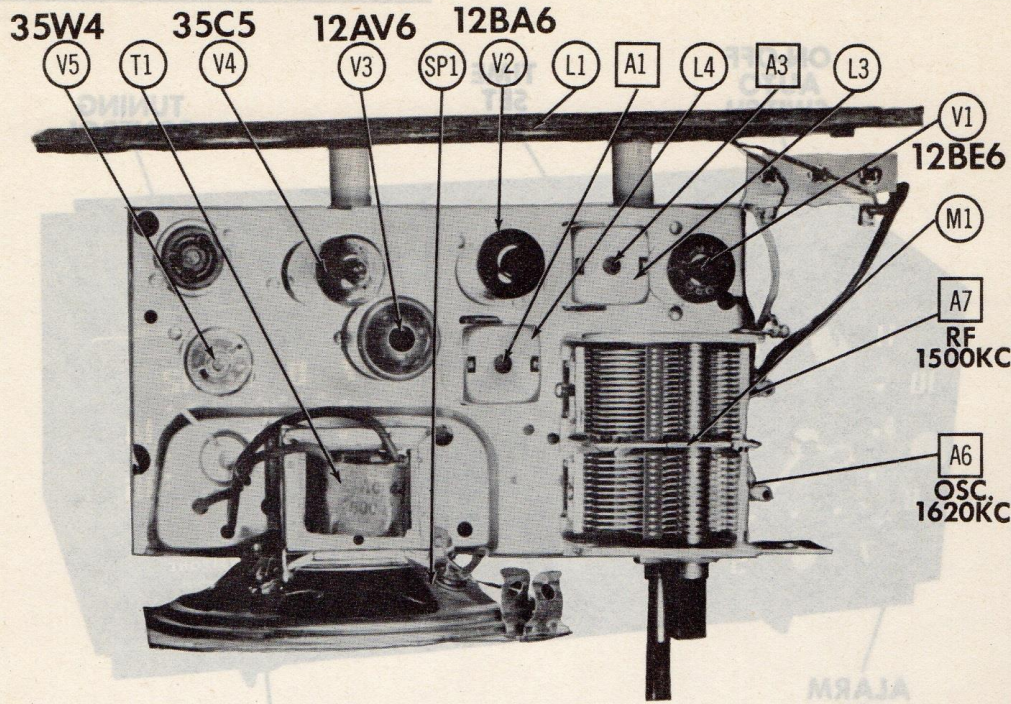
FOLDER 8

PARTS LIST AND DESCRIPTIONS

TUBES (SYLVANIA, GENERAL ELECTRIC or Equivalent)

ITEM No.	USE	REPLACEMENT DATA		RTMA BASE TYPE	NOTES
		PHILCO PART No.	STANDARD REPLACEMENT		
V1	Converter	12BE6	12BE6	7CH	
V2	2nd Amplifier	12BA6	12BA6	7BK	
V3	Detector	12AV6	12AV6	7CV	
V4	Audio Output	35C5	35C5	7CV	
V5	Rectifier	35W4	35W4	5BQ	

CHASSIS—TOP VIEW



CAPACITORS

Capacity values given in the rating column are in mfd. for Electrolytic and Paper Capacitors, and in mmfd. for Mica and Ceramic Capacitors.

ITEM No.	RATING CAP. VOLT	REPLACEMENT DATA				NOTES
		PHILCO PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	GEN. PART No.	
C1A	30 150	45-3037	FR350/30-30		3N534	Orange
C2	20 150					Red
C3	20 150					Blue
C4	20 150					
C5	20 150					
C6	20 150					
C7A	20 150					
C8	20 150					
C9	20 150					
C10	20 150					

* Items C7A, C7B, C7C, C7D, C7E, C7F, C7G, C7H, C7I, C7J, C7K, C7L, C7M, C7N, C7O, C7P, C7Q, C7R, C7S, C7T, C7U, C7V, C7W, C7X, C7Y, C7Z are combined in one unit.

CONTROLS

ITEM No.	RATING RESIST. ANCE	REPLACEMENT DATA		CENTRALAB PART No.	MALLORY PART No.	INSTALLATION NOTES
		PHILCO PART No.	IRC PART No.			
R1A	500KΩ	33-5585	Q33-333	B-60	U-48	Volume Attach to R1A
R1B	500KΩ	Not Req.	Not Req.	Not Req.	Not Req.	

RESISTORS

ITEM No.	RATING OHMS	REPLACEMENT DATA		RATING OHMS	WATT	NOTES
		PHILCO PART No.	IRC PART No.			
R2	22KΩ	66-3228340	BTS-22K	R7A	500KΩ	
R3	4700Ω	66-2478340	BTS-4700	R8	1500KΩ	
R4	2.2Meg	66-5228340	BTS-2.2Meg	R9	220Ω	
R5	1KΩ	66-3778340	BTS-47K	R10	1000Ω	
R6	10Meg	66-0108340	BTS-10Meg	R11	33-545-3	

* Special resistor - 1000 Ohm, 8800 Cold.

* Items R7A, R7B, C7A, C7B, C7C are combined in one unit.

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	RATING IMPEDANCE	REPLACEMENT DATA		RATING DC RES.	PRI. SEC.	NOTES
		PHILCO PART No.	STANCOR PART No.			
T1	2KΩ	3.4Ω 234Ω .92Ω	A-3332	A-3025	RO-2	① Band mounting tabs down, file out slots, mount on original mounting bracket.

PARTS LIST AND DESCRIPTIONS (Continued)

ITEM No.	SIZE	RATINGS		PHILCO PART No.	REPLACEMENT DATA		NOTES
		FIELD	V. C. IMP.		JENSEN PART No.	QUAM PART No.	
SPI	4"	PM	3.41	38-1827-23	57-113 Model P4-X	4A07	

SPEAKER

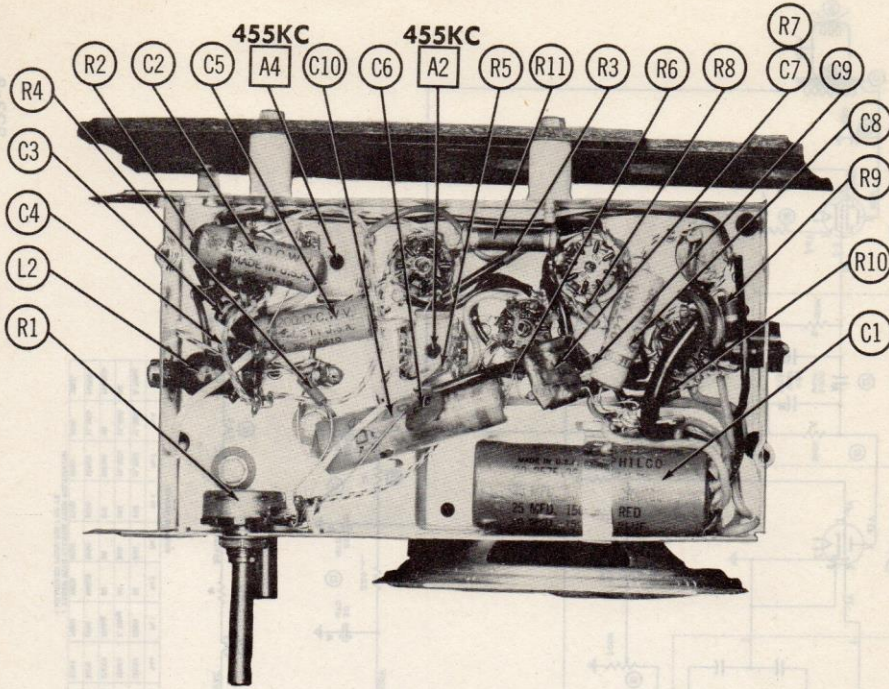
COILS (RF-IF)

ITEM No.	USE	DC RES.		PHILCO PART No.	REPLACEMENT DATA		NOTES
		PRI.	SEC.		MESSNER PART No.	MILLER PART No.	
L1	Loop Ant.	2.9Ω		78-7157-3			
L2	Osc. Coil	10	6.5Ω	38-4453-6	18-6758	71-Osc.	
L3	IF Transformer	15Ω	15Ω	32-1240A	18-6770	12-C1	
L4	Output IF	15Ω	15Ω	32-1240A	EC-352	12-C6	Includes cabinet back

MISCELLANEOUS

ITEM No.	PART NAME	PHILCO No.	NOTES
M1	Tuning Cap. Cabinet Knob Clock (3 used) Station tuning Volume Includes antenna loop Radio dial	31-2751-13 10924-11 54-4883-6 54-4978-5 54-4883-6 41-2941-4 76-7757-3 54-4877-5	(32-493MMF, 20-170MMF) Clock (3 used) Station tuning Volume Includes antenna loop Radio dial

CHASSIS—BOTTOM VIEW



PHILCO
MODEL B710

PHILCO
MODEL B710

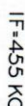


Diagram 10 shows a circuit with a battery, a switch, and a lamp. The battery is labeled "BATTERY" and the switch is labeled "SWITCH". The lamp is labeled "LAMP". The circuit is labeled "CIRCUIT 10".

THE COOPERATION OF THE MANUFACTURER OF THE RECEIVER MAKES IT POSSIBLE TO BRING YOU THIS SERVICE

	Pre 1	Pre 2	Pre 3	Pre 4
1000	00	240	200	
1000	00	240	540	
1000	00	00	170	
1000	5000	5000	5250	
1000	5000	5250	5500	

* TAKEN WITH VACUUM TUBE VOL. 1 MEASURED FROM PIN 7 OF VS.

1. DC Voltage measurements are at 20,000 ohms per volt. AC Voltages measured at 1,000 ohms per volt.
2. Socket connections are shown as bottom views.
3. The meter has a common ground terminal, common negative.
4. Line voltage is maintained at 117 volts for all measurements.
5. Nominal tolerance on component values makes possible a variation of $\pm 10\%$ in voltage and resistance readings.
6. Volume control at maximum, no signal applied for voltage measurements.