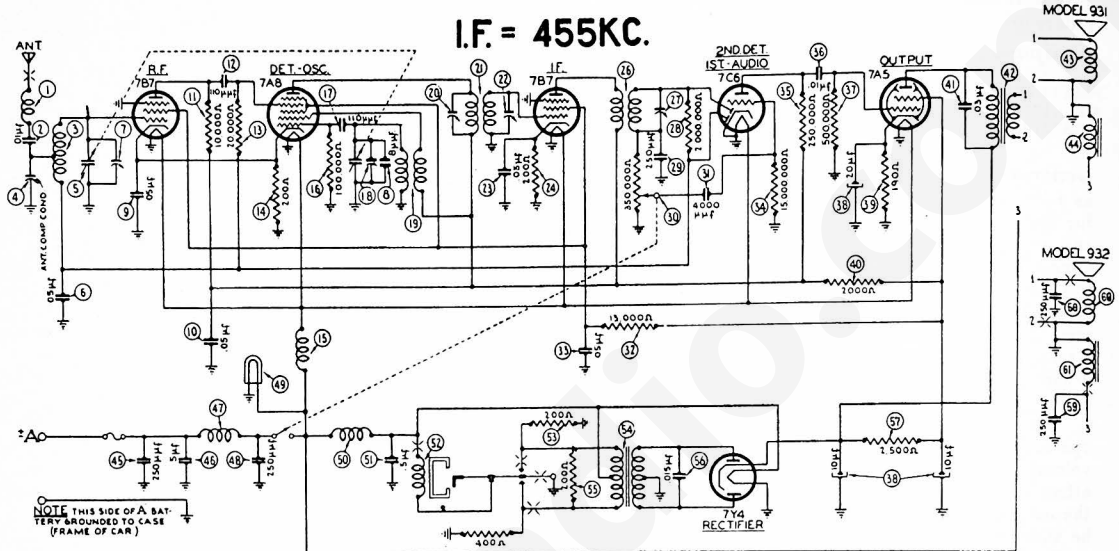


PHILCO AUTO RADIO Models 931 & 932

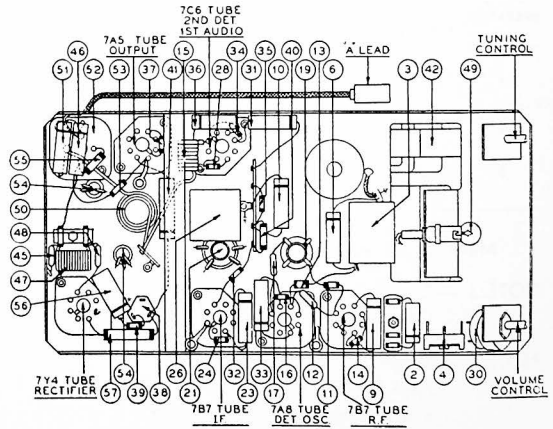
MODELS 931 and 932* PHILCO AUTO RADIO



*The Model 932 is similar to the Model 931.
Speaker connections for both Models are shown in Figure 1.

PARTS LIST

No.	Description	Part No.	No.	Description	Part No.
1	Antenna Choke	65-0102	37	Resistor (500,000 ohms)	33-449247
2	Condenser (.01 mfd.)	61-0014	38	Filter Condenser (10-10-20 mfd.)	61-0068
3	Antenna Transformer	65-0195	39	Resistor (190 ohms)	33-120346
4	Antenna Compensator	63-0030	40	Resistor (2,000 ohms)	33-220347
5	Tuning Condenser	63-0028	41	Condenser (.03 mfd.)	30-4414
6	Condenser (.05 mfd.)	30-4444	42	Output Transformer (Model 931)	
7	First Padder (on Tun. Cond.)		43	Output Transformer (Model 932)	65-0221
8	Condenser (8 mmfd.)	30-1106	44	Cone Kit (For 73-0027-1 Speaker)	91-0076
9	Condenser (.05 mfd.)	30-4589	45	Field Coil (Not Replaceable)	
10	Condenser (.05 mfd.)	30-4589	46	Condenser (250 mmfd.)	61-0033
11	Resistor (10,000 ohms)	33-10247	47	Condenser (.5 mfd.)	61-0054
12	Resistor (119 mmfd.)	30-1031	48	"A" Choke	33-1644
13	Resistor (20,000 ohms)	33-320247	49	Condenser (250 mmfd.)	61-0033
14	Resistor (200 ohms)	33-120346	50	Pilot Lamp	34-2039
15	Filament Choke	65-0158	51	Vibrator Choke	85-0204
16	Resistor (100,000 ohms)	33-410247	52	Condenser (.5 mfd.)	61-0054
17	Condenser (110 mmfd.)	30-1031	53	Vibrator	83-0017
18	Second Padder (on Tun. Cond.)		54	Power Transformer	65-0185
19	Oscillator Transformer	65-0194	55	Resistor (200 ohms)	33-120347
20	Padder (Pri. 1st I. F. Trans.)	65-0191	56	Resistor (200 ohms)	33-120347
21	Padder (Sec. 2nd I. F. Trans.)		57	Condenser (.015 mfd.)	30-4552
22	Condenser (.05 mfd.)	30-4589	58	Resistor (2,500 ohms)	33-226447
23	Resistor (200 ohms)	33-120346	59	Condenser (250 mmfd.)	61-0033
24	Second I. F. Transformer	65-0192	60	Condenser (250 mmfd.)	61-0033
25	Padder (Pri. 1st I. F. Trans.)			Field Coil (Not Replaceable)	
26	Resistor			Cone Kit (Model 932)	
27	Resistor (2,000,000 ohms)	33-520247		For 73-0024-3 Speaker	91-0068
28	Condenser (250 mmfd.)	61-0033		For 73-0024-2 Speaker	91-0028
29	Volume Control (350,000 ohms) and On-Off Switch	87-0020		For 73-0025-2 Speaker	91-0005
30	Condenser (4,000 mmfd.)	30-4456		Drive Cord (1 1/2")	55-0588
31	Resistor (13,000 ohms)	33-313247		Drive Cord (5 3/4")	55-0852
32	Condenser (.05 mfd.)	30-4569		Drive Cord (13 3/4")	55-0852
33	Resistor (15,000,000 ohms)	33-615247		Drive Cord (7 3/4")	55-0853
34	Resistor (250,000 ohms)	33-424247		Dial Assembly (Model 931)	77-0346
35	Condenser (.01 mfd.)	61-0014		Dial Assembly (Model 932)	77-0358



No.	Description	Part No.	No.	Description	Part No.
1	Pointer (Model 931)	57-0794	1	Back Strap	28-5998FA3
2	Pointer (Model 932)	57-0885	2	Mounting Strap	57-0812FC36
3	Window Crystal	55-0501	3	Complete Speaker	73-0027
4	Tuning and Volume Knob	55-0517	4	Loctal Socket	55-0575

PHILCO AUTO RADIO Models 931 & 932

MODELS 931 and 932 ADJUSTMENTS

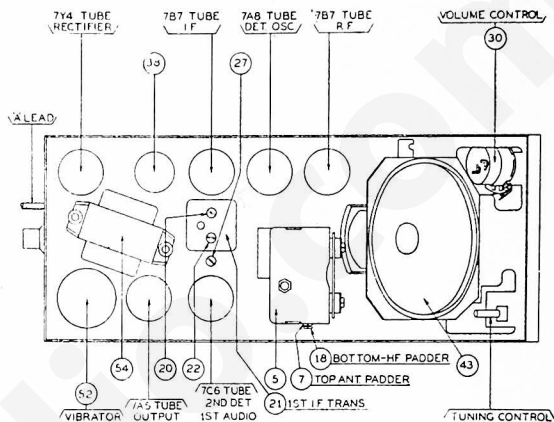
All padding adjustments are carefully made at the factory and ordinarily no readjustments are necessary. However, when readjustments are required, the procedure given below must be followed in detail.

Equipment — Storage Battery (fully charged) or a 6 volt power pack. Signal Generator such as Philco Models 077 or 177. Vacuum Tube Voltmeter and Circuit Tester, Philco Model 027. In addition a padding screw driver, Philco Part No. 45-2610.

General — The vacuum tube voltmeter can be used as a "wireless" output meter as a convenient method for obtaining maximum output reading. Solder one end of a piece of wire to a strip of phosphor bronze approximately 1" wide, 6" long and .02" thick. Coil this strip so that it can be slipped over the top of the type 7A5 output tube, and make a fairly tight contact. Connect the other end of the wire to the "high" terminal of the vacuum tube voltmeter. Then connect a wire from the radio chassis to the "plus" terminal of the vacuum tube voltmeter.

With the Radio and signal generator set up for operation at the prescribed frequency, turn the Radio volume control on full and set the signal generator attenuator so that a half scale reading is obtained on the output meter. The signal in the speaker should be audible but not loud.

The shielding on the generator output lead must be connected to the Radio housing.



MODEL 931

FIGURE 3

OPERATION	SIGNAL GENERATOR		DUMMY CAPACITY	SPECIAL INSTRUCTIONS	ADJUST PADDER
	FREQUENCY	CONNECTION			
1	455 K.C.	To Antenna Receptacle on Radio	30 Mmfd. See Note 1	Turn Tuning Condenser Plates Out of Mesh as Far as They Will Go.	Ⓒ Ⓓ Ⓔ
2	1580 K.C.	To Antenna Receptacle on Radio	30 Mmfd. See Note 1	Set Tuning Condenser at 1580 K.C.	Ⓘ
3	1400 K.C.	To Antenna Receptacle on Radio	30 Mmfd. See Note 1	Set Tuning Condenser at 1400 K.C.	Ⓣ Note 2

Make all adjustments for maximum reading on the output meter.

NOTE 1 — Connect the antenna lead, Part No. 41-3191, to the antenna receptacle in the radio. Connect a 30 Mmfd. Condenser in series between the signal generator and the antenna lead.

NOTE 2 — When the antenna stage adjustment is made with the Radio installed in the car, the Radio antenna lead must be connected to the car antenna in the usual manner. Connect the signal generator output lead to a wire placed near the car antenna but not connected to it. Also adjust the antenna compensator Ⓒ for maximum on a weak signal at approximately 580 K.C.