

PHILCO TRANSITONE SERVICE BROADCAST

AUGUST, 1939

MODEL C931 PHILCO AUTO RADIO

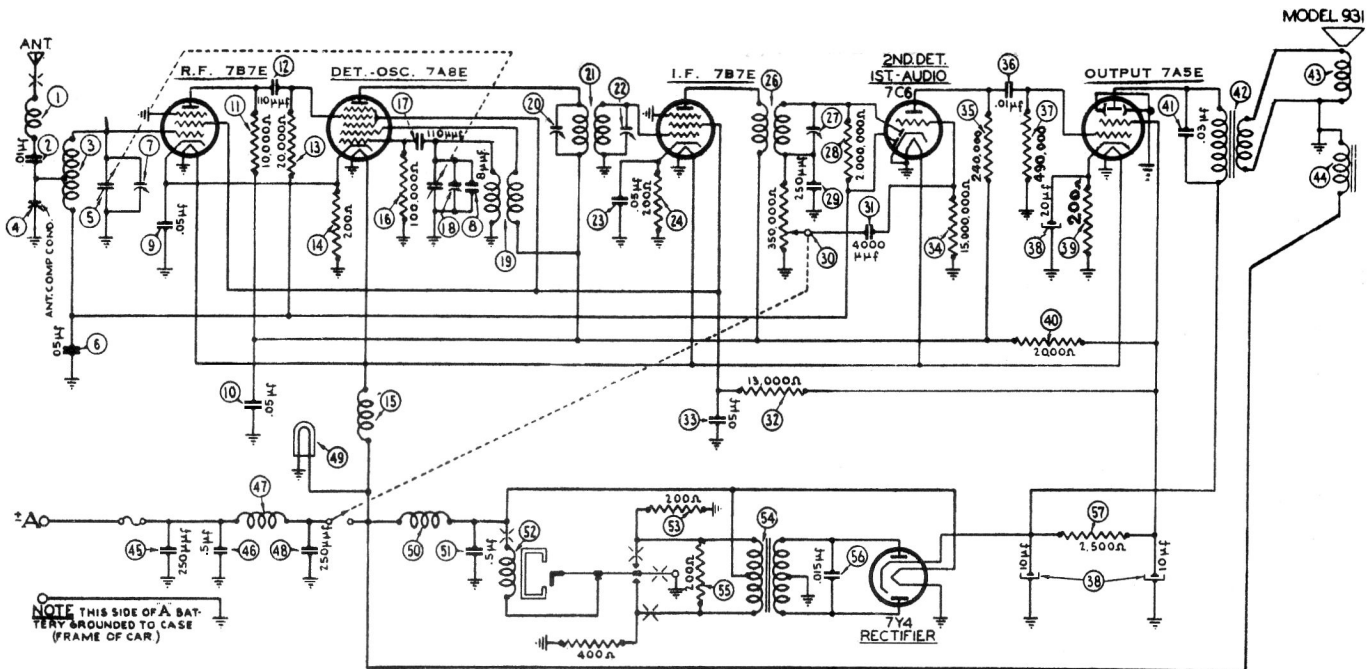
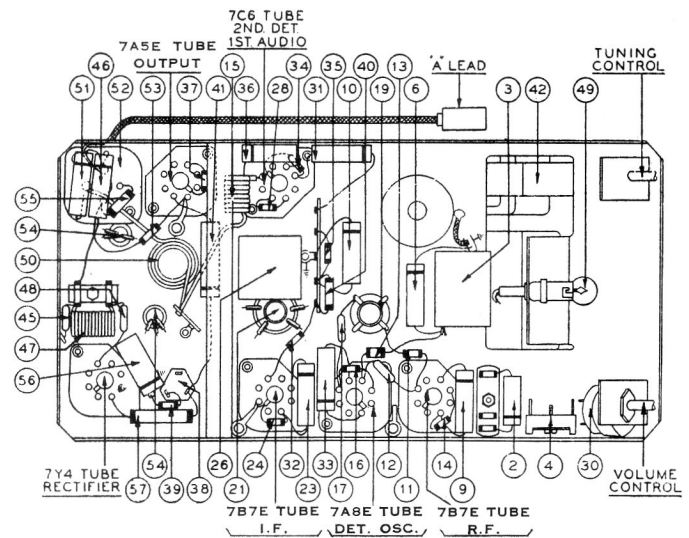


FIGURE 1

PARTS LIST

No.	Description	Part No.	No.	Description	Part No.
1	Antenna Choke	65-0168	27	Resistor (490,000 ohms)	33-449344
2	Condenser (.01 mfd.)	61-0014	28	Filter Condenser	
3	Antenna Transformer	65-0196		(10-10-20 mfd.)	61-0068
4	Antenna Compensator	63-0030	29	Resistor (200 ohms)	33-120344
5	Tuning Condenser	63-0028	30	Resistor (2,000 ohms)	33-220344
6	Condenser (.05 mfd.)	30-4444	31	Condenser (.03 mfd.)	30-4449
7	First Padder (on Tun. Cond.)		32	Output Transformer	65-0221
8	Condenser (8 mmfd.)	30-1106	33	Cone Kit	
9	Condenser (.05 mfd.)	30-4569		(For 73-0027-1 Speaker)	91-0076
10	Condenser (.05 mfd.)	30-4569	34	Field Coil	Not Replaceable
11	Resistor (10,000 ohms)	33-310344	35	Condenser (250 mmfd.)	61-0033
12	Condenser (110 mmfd.)	30-1031	36	Condenser (.5 mfd.)	61-0054
13	Resistor (20,000 ohms)	33-320344	37	"A" Choke	32-1644
14	Resistor (200 ohms)	33-120344	38	Condenser (250 mmfd.)	61-0033
15	Filament Choke	65-0158	39	Pilot Lamp	34-2039
16	Resistor (100,000 ohms)	33-410344	40	Vibrator Choke	65-0204
17	Condenser (110 mmfd.)	30-1031	41	Condenser (.5 mfd.)	61-0054
18	Second Padder (on Tun. Cond.)		42	Vibrator	83-0017
19	Oscillator Transformer	65-0194	43	Resistor (200 ohms)	33-120344
20	Padder (Pri. 1st I. F. Trans.)		44	Power Transformer	65-0185
21	First I. F. Transformer	65-0191	45	Resistor (200 ohms)	33-120344
22	Padder (Sec. 1st I. F. Trans.)		46	Condenser (.015 mfd.)	30-4552
23	Condenser (.05 mfd.)	30-4569	47	Resistor (2,500 ohms)	33-225444
24	Resistor (200 ohms)	33-120344		Drive Cord (16 1/2")	55-0588
25	Second I. F. Transformer	65-0192		Drive Cord (5 3/4")	55-0589
26	Padder (sec. 2nd I. F. Trans.)			Drive Cord (13 3/4")	55-0632
27	Resistor			Drive Cord (7 3/4")	55-0653
	(2,000,000 ohms)	33-520344		Dial Assembly	77-0346
28	Condenser (250 mmfd.)	61-0033			
29	Volume Control (350,000 ohms)				
	and On-Off Switch	67-0020			
30	Condenser (4,000 mmfd.)	30-4456			
31	Resistor (13,000 ohms)	33-313344			
32	Condenser (.05 mfd.)	30-4569			
33	Resistor				
	(15,000,000 ohms)	33-615344			
34	Resistor (240,000 ohms)	33-424344			
35	Condenser (.01 mfd.)	61-0014			



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FIGURE 2

No.	Description	Part No.	No.	Description	Part No.
	Pointer	57-0794		Mounting Strap	57-0812FC36
	Window Crystal	55-0501		Complete Speaker	73-0027
	Tuning and Volume Knob	55-0547		Loktal Socket	55-0575
	Back Strap	28-5998FA3			

MODEL 931 ADJUSTMENTS

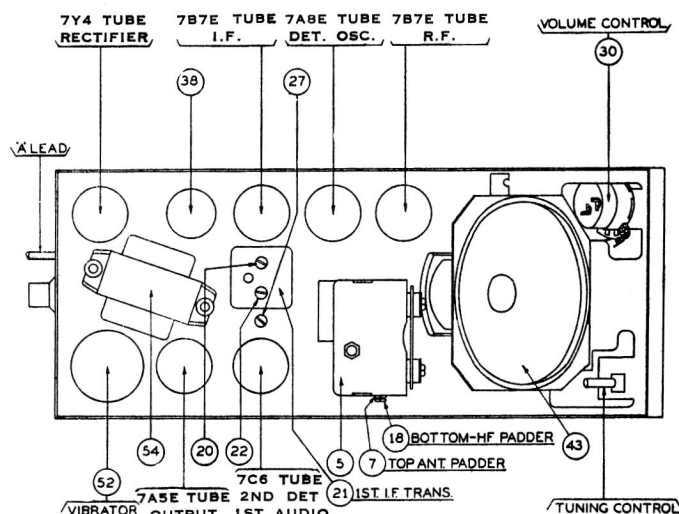
All padding adjustments are carefully made at the factory and ordinarily no readjustments are necessary. However, when readjustments are required, the procedure given below must be followed in detail.

Equipment—Fully charged heavy duty storage battery or 6-volt power pack, 177 Philco Signal Generator, 028 Philco vacuum tube voltmeter and circuit tester and a 27-7159 Padding screw driver.

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 7A5E 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.



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FIGURE 3

OPERATION	SIGNAL GENERATOR		DUMMY CAPACITY	SPECIAL INSTRUCTIONS	ADJUST PADDER
	FREQUENCY	CONNECTION			
1	460 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.	27 29 20 27
2	1580 K.C.	To Antenna Receptacle on Radio	30 Mmfd. See Note 1	Set Tuning Condenser at 1580 K.C.	18
3	1400 K.C.	To Antenna Receptacle on Radio	30 Mmfd. See Note 1	Set Tuning Condenser at 1400 K.C.	7 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 ④ for maximum on a weak signal at approximately 580 K.C.

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