

# PHILCO AUTO RADIO Model 927

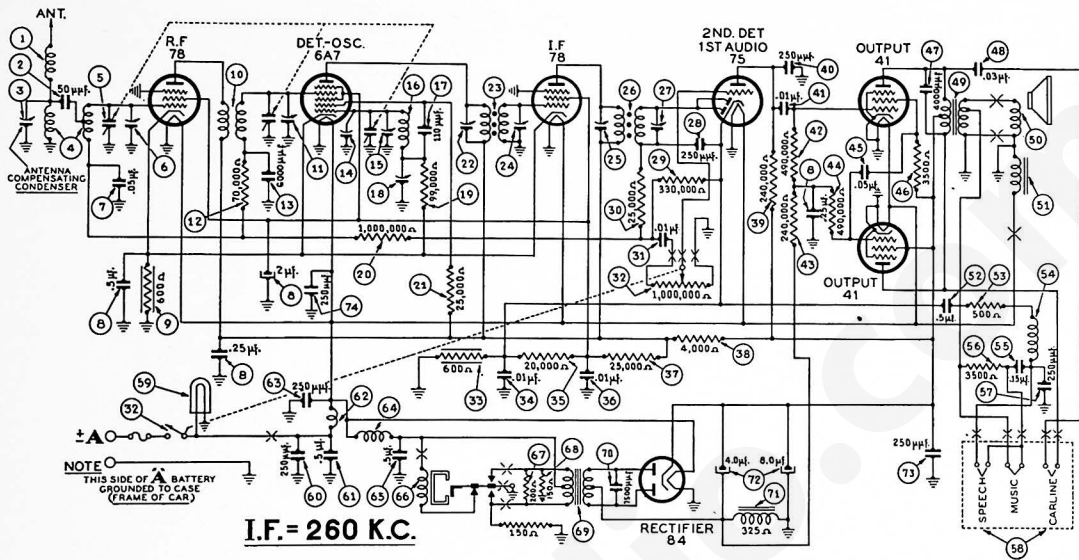


FIGURE 1

## MODEL 927 PARTS LIST

No.	Description	Part No.
1	Antenna Choke	32-1956
2	Condenser (.50 mfd.)	30-1101
3	Antenna Compensating Condenser	31-6248
4	Antenna Transformer	32-2945
5	Tuning Condenser (on Tun. Cond.)	31-2241
6	First Padder (on Tun. Cond.)	30-4444
7	Condenser (.05 mfd.)	30-4568
8	Condenser (.25, .25, .5, .5, 2 mfd.)	30-150431
9	Resistor (600 ohms)	33-160431
10	R. F. Transformer	32-2946
11	Second Padder (on Tun. Cond.)	33-370344
12	Resistor (70,000 ohms)	33-370344
13	Condenser (6,000 mfd.)	30-4487
14	Thermol Comp. Condenser	31-6253
15	Third Padder (on Tun. Cond.)	32-2947
16	Oscillator Transformer	30-1031
17	Condenser (110 mfd.)	30-1031
18	Low Frequency Padder	31-6230
19	Resistor (99,000 ohms)	33-330344
20	Resistor (1,000,000 ohms)	33-510344
21	Resistor (25,000 ohms)	33-325344
22	Padder (Pri. 1st I. F. Trans.)	32-3013
23	First I. F. Transformer	32-3013
24	Padder (Sec. 1st I. F. Trans.)	32-3014
25	Second I. F. Transformer	32-3014
26	Padder (Sec. 2nd I. F. Trans.)	30-1032
27	Condenser (250 mfd.)	33-433344
28	Resistor (25,000 ohms)	33-325344
29	Condenser (.01 mfd.)	30-4479
30	Volume Control (1,000,000 ohms) & On-Off Switch	33-5268
31	Resistor (600 ohms)	33-160431
32	Condenser (.01 mfd.)	30-4479
33	Resistor (20,000 ohms)	33-325344
34	Condenser (.01 mfd.)	30-4479
35	Resistor (25,000 ohms)	33-325444
36	Resistor (4,000 ohms)	33-240444

No.	Description	Part No.
37	Resistor (240,000 ohms)	33-424344
38	Condenser (250 mfd.)	30-1032
39	Condenser (.01 mfd.)	30-4145
40	Resistor (490,000 ohms)	33-449344
41	Resistor (240,000 ohms)	33-424344
42	Resistor (490,000 ohms)	33-449344
43	Condenser (.05 mfd.)	30-4454
44	Resistor (3,500 ohms)	33-235344
45	Condenser (4,000 mfd.)	30-4185
46	Condenser (.03 mfd.)	30-4560
47	Output Transformer	32-7957
48	Cone & Voice Coil	45-2653
49	Field Coil	32-9493
50	Condenser (.5 mfd.)	Part of 30
51	Resistor (500 ohms)	33-150344
52	Choke	32-1372
53	Condenser (.15 mfd.)	30-4571
54	Resistor (3,500 ohms)	33-235344
55	Condenser (250 mfd.)	30-1032
56	Reception Control	42-5850
57	Pilot Lamp	34-2040
58	Condenser (250 mfd.)	30-1032
59	Vibrator	30-4474
60	Condenser (.5 mfd.)	30-4474
61	"A" Choke	32-1374
62	Condenser (250 mfd.)	30-1032
63	Vibrator Choke	32-2537
64	Condenser (.5 mfd.)	30-4474
65	Vibrator	41-3170-3
66	Resistor (200 ohms)	33-120344
67	Resistor (150 ohms)	33-115344
68	Power Transformer	32-7951
69	Condenser (7,500 mfd.)	30-4567
70	Filter Choke	32-7952
71	Filter Condenser (4-8 mfd.)	30-2316
72	Condenser (250 mfd.)	30-1032
73	Condenser (250 mfd.)	30-1032
74	Complete Control	42-5840
75	Tuning Shaft	28-5811
76	Tuning & Volume Knob	27-4725
77	"Car-line" Knob	27-4731
78	"Music" Knob	27-4732

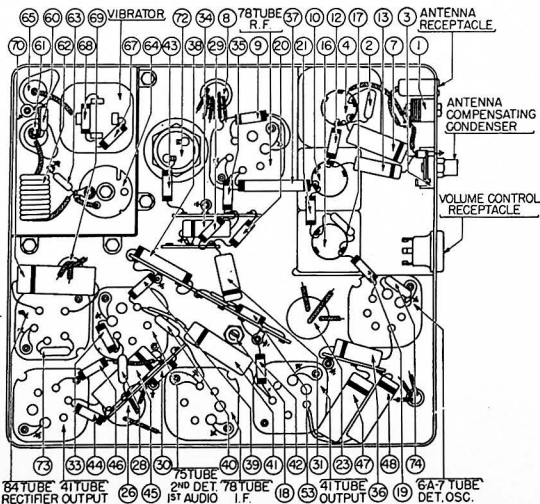


FIGURE 2

"Speech" Knob	27-4733	Interference Condenser	30-4007
Dial	27-5339	"T" Bolt	28-6161
Fuse	7227	Washer	28-2606
Fuse Insulator	27-7729	Nut	W-518
Distributor Resistor	33-1196		

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## I. F. TRANSFORMERS AND PADDERS

The I. F. transformers are assembled complete with padding condensers.

Both the primary and the secondary padders are placed side by side in the top of the transformer shield can. The adjusting screws are accessible thru the holes in the top of the shield. (See Figure 4).

The coil windings terminate in leads instead of terminals or lugs. The color scheme of the leads is given in Figure 3.

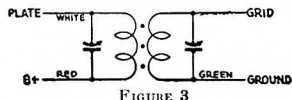


FIGURE 3

If replacements are ever necessary, replace the entire coil assembly, 32-3013 for the first I. F. stage and 32-3014 for the second I. F. stage. Neither the coil nor the padders will be furnished separately. Order only by the above numbers.

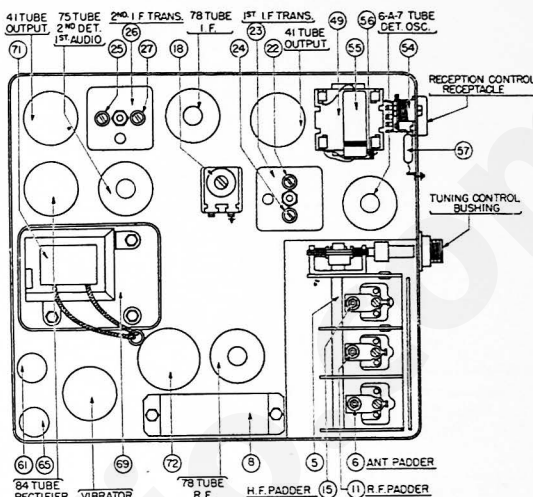


FIGURE 4

## MODEL 927 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 of 177. Vacuum Tube Voltmeter and Circuit Tester, Philco Model 027. In addition a padding screw driver, Philco Part No. 45-2610.

**General** — The output meter must be connected by means of an adapter to the plate of the type 41 output tube and to the Radio chassis.

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 signal generator output lead must be connected to the Radio housing.

OPERATION	SIGNAL GENERATOR		DUMMY CAPACITY	SPECIAL INSTRUCTIONS	ADJUST PADDER
	FREQUENCY	CONNECTION			
1	260 K. C.	To grid of 6A7 Tube	.1 Mfd. Condenser in Series with Generator Lead	No Antenna Connection	25 27 24
2	1550 K. C.	To Antenna Receptacle on Radio	50 Mmfd. See Note 1	Turn Tuning Condenser Plates Out of Mesh as Far as They Will Go.	15 11 6
3	580 K. C.	To Antenna Receptacle on Radio	50 Mmfd. See Note 1	Set Tuning Condenser at 580 K. C.	15 Note 2
4	1550 K. C.	To Antenna Receptacle on Radio	50 Mmfd. See Note 1	Turn Tuning Condenser Plates Out of Mesh as Far as They Will Go.	15
5	1400 K. C.	To Antenna Receptacle on Radio	50 Mmfd. See Note 1	Set Tuning Condenser at 1400 K. C.	11 6 Note 3
6	600 K. C.	Note 4	Note 4	Note 4	3 Note 4

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 50 Mmfd. Condenser in series between the signal generator and the antenna lead.

NOTE 2 — Rock the tuning condenser while adjusting the low frequency padder. Tune the condenser to the signal and adjust the padder for maximum output. Rotate the tuning condenser back and forth slightly for maximum output. Then re-adjust the padder for maximum output. Repeat this procedure until no further improvement is noticed.

NOTE 3 — 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.

NOTE 4 — When installing the Radio in a car, follow the installation instructions carefully. Tune in a weak broadcast signal at approximately 60 on the control scale. With a small screw driver adjust the antenna compensating condenser ③ for the maximum signal.