

# PHILCO TRANSITONE SERVICE BROADCAST

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File in Philco Section  
of Auto Radio Manual

## PHILCO MODEL 936

### SCHEMATIC MODEL 936

I.F. = 470 KC

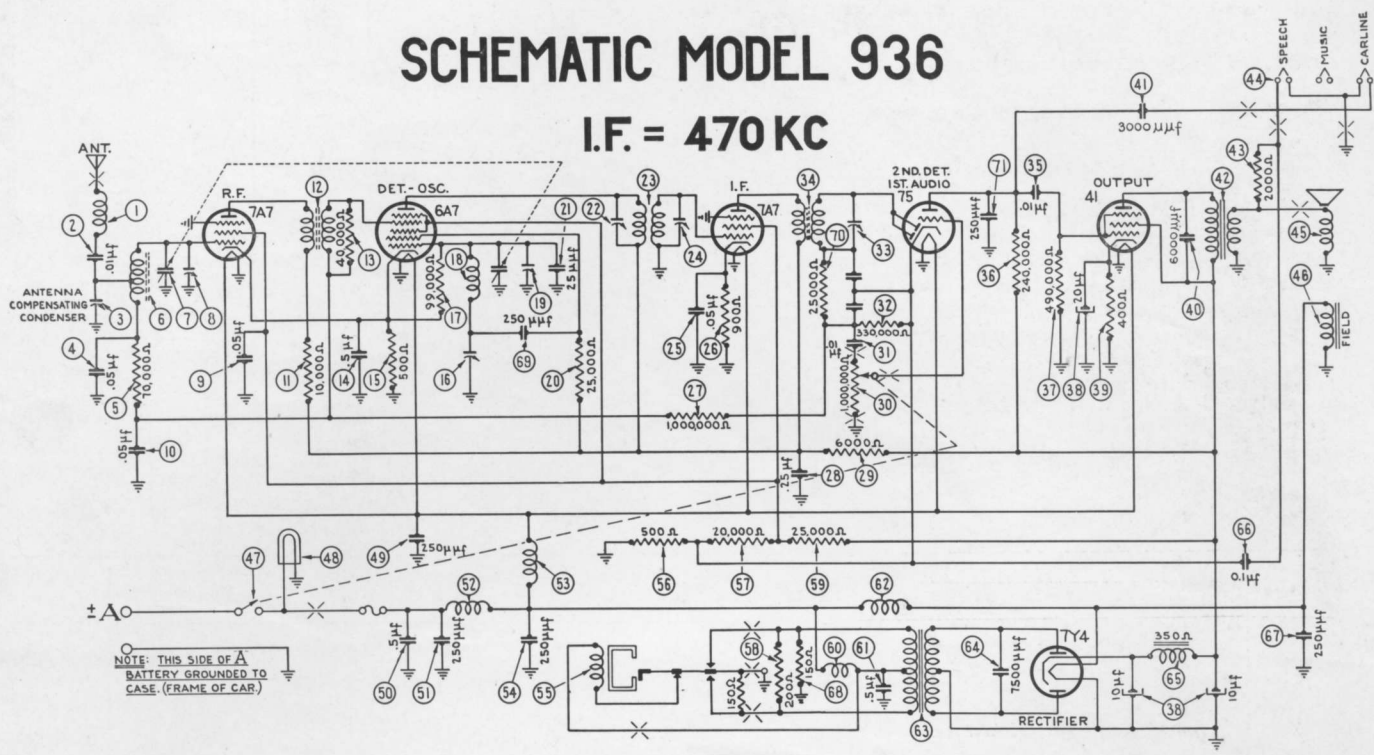


FIGURE 2

### MODEL 936 PARTS LIST

No.	Description	Part No.	No.	Description	Part No.
1	Antenna Choke	32-1956	20	Resistor (400 ohms)	33-140438
2	Condenser (.01 mfd.)	30-4479	21	Condenser (6,000 ohms)	30-4024
3	Antenna Compensating Condenser	31-6248	22	Condenser (3,000 mmfd.)	30-4469
4	Condenser (.05 mfd.)	30-4444	23	Output Transformer	65-0048
5	Resistor (70,000 ohms)	33-370257	24	Resistor (2,000 ohms)	33-220447
6	Antenna Transformer	65-0085	25	Reception Control	412-1004
7	Tuning Condenser	63-0016	26	Cone and Voice Coil Kit	91-0028
8	First Padder (on Tun. Cond.)		27	Field Coil	Not Replaceable
9	Condenser (.05 mfd.)	30-4569	28	On-Off Switch and Vol. Control	
10	Condenser (.05 mfd.)	30-4444	29	(1,000,000 ohms)	33-5268
11	Resistor (10,000 ohms)	33-310337	30	Pilot Lamp	34-2040
12	R. F. Transformer	65-0009	31	Condenser (250 mmfd.)	61-0033
13	Resistor (40,000 ohms)	33-340237	32	Condenser (.5 mfd.)	30-4474
14	Condenser (.5 mfd.)	30-4565	33	Condenser (250 mmfd.)	61-0033
15	Resistor (500 ohms)	33-150438	34	"A" Choke	65-0057
16	Low Frequency Padder	31-6230	35	Filament Choke	65-0057
17	Resistor (99,000 ohms)	33-399337	36	Condenser (250 mmfd.)	61-0033
18	Oscillator Transformer	65-0052	37	Vibrator	41-3398
19	Second Padder (on Tun. Cond.)		38	Resistor (500 ohms)	33-150438
20	Resistor (25,000 ohms)	33-325337	39	Resistor (20,000 ohms)	33-320337
21	Condenser (25 mmfd.)	30-1108	40	Resistor (200 ohms)	33-120347
22	Padder (Pri. 1st I. F. Trans.)		41	Resistor (25,000 ohms)	33-325437
23	First I. F. Transformer	65-0044	42	Vibrator Choke	32-2483
24	Padder (Sec. 1st I. F. Trans.)		43	Condenser (.5 mfd.)	30-4565
25	Condenser (.05 mfd.)	30-4444	44	Choke	32-1374
26	Resistor (900 ohms)	33-190438	45	Power Transformer	65-0046
27	Resistor (1,000,000 ohms)	33-510257	46	Condenser (7,500 mmfd.)	30-4567
28	Condenser (.25 mfd.)	30-4448	47	Filter Choke	32-7959
29	Resistor (6,000 ohms)	33-260337	48	Condenser (.01 mfd.)	30-4499
30	Vol. Control (1,000,000 ohms)		49	Condenser (250 mmfd.)	61-0033
31	and On-Off Switch	33-5268	50	Resistor (150 ohms)	33-115337
32	Condenser (.01 mfd.)	61-0014	51	Condenser (250 mmfd.)	61-0034
33	Resistor (330,000 ohms)	33-433337	52	Resistor (25,000 ohms)	33-325344
34	Padder (Sec. 2nd I. F. Trans.)		53	Condenser (250 mmfd.)	30-1032
35	Second I. F. Transformer	65-0045	54	Control Unit	85-0058
36	Condenser (.01 mfd.)	30-4501	55	Dial	55-0304
37	Resistor (240,000 ohms)	33-424337	56	Tuning and Volume Knob	27-4725
38	Resistor (490,000 ohms)	33-449337	57	Distributor Resistor	33-1196
39	Filter Condenser		58	Interference Condenser	30-4007
40	(10-10-20 mfd.)	61-0028	59	Control Mtg. Bracket	28-5790

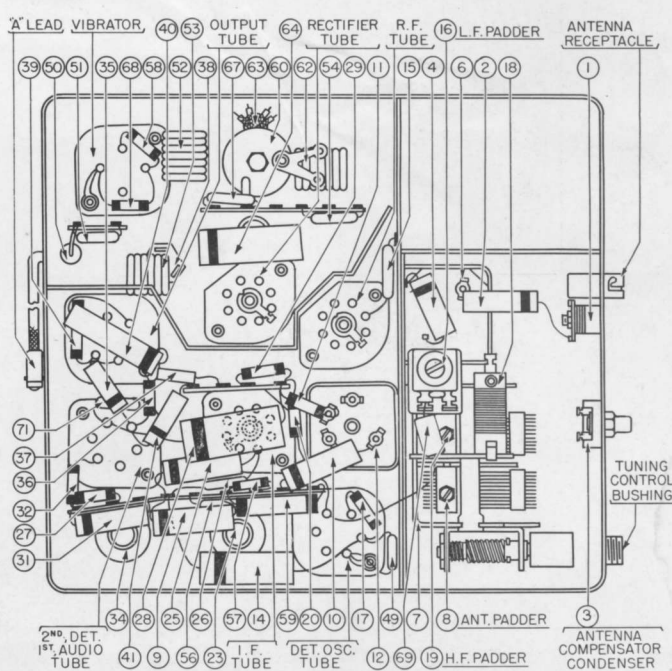


FIGURE 1

No.	Description	Part No.	No.	Description	Part No.
60	Reception Control Mtg. Bracket	28-5852	61	"T" Bolt	28-6161
61	Flexible Shaft	57-0631	62	Nut	W518

### MODEL 936 — 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, 077 or 177 Philco Set Tester, 27-7159 Padding screw driver.

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

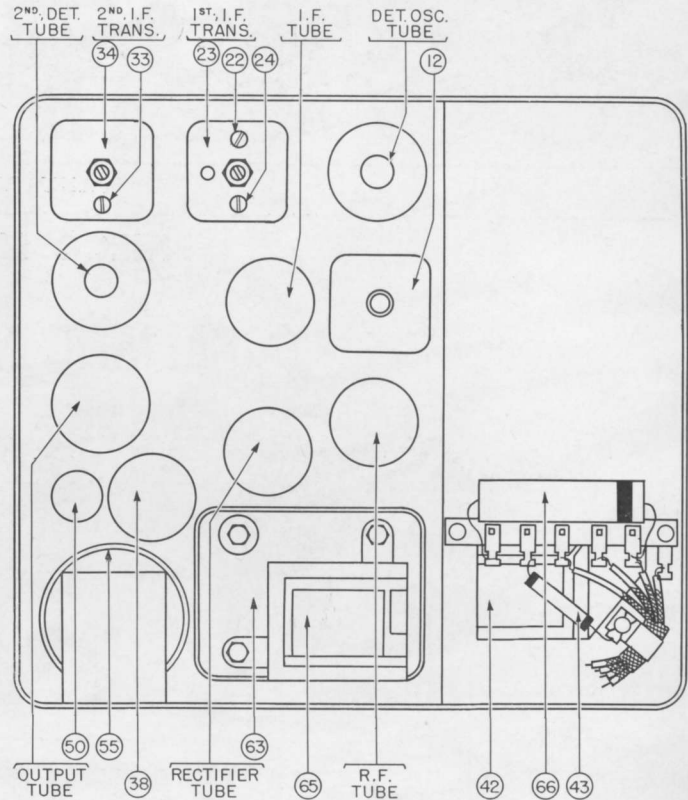


FIGURE 3

OPERATION	SIGNAL GENERATOR		DUMMY CAPACITY	SPECIAL INSTRUCTIONS	ADJUST PADDER
	FREQUENCY	CONNECTION			
1		ADJUST THE ANTENNA COMPENSATOR ③ TWO TURNS FROM TIGHT			
2	470 K.C.	To Grid of 6A7 Tube	.1 Mfd.	Turn Tuning Condenser Plates Out of Mesh as Far as They Will Go.	③③ ②④ ②②
3	1580 K.C.	To Antenna Receptacle on Radio	See Note 1	Note 2	①⑨
4	1400 K.C.	To Antenna Receptacle on Radio	See Note 1	Set Tuning Condenser at 1400 K.C.	⑧ Note 4
5	580 K.C.	To Antenna Receptacle on Radio	See Note 1	Set Tuning Condenser at 580 K.C.	①⑥ Note 3
6	1580 K.C.	To Antenna Receptacle on Radio	See Note 1	Note 2	①⑨
7	1400 K.C.	To Antenna Receptacle on Radio	See Note 1	Set Tuning Condenser at 1400 K.C.	⑧ Note 4
8	1200 to 1400 K.C.	Note 5	Note 5	Note 5	③

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** — Turn the condenser rotor plates completely out of mesh as far as they will go.

**NOTE 3** — 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 readjust the padder for maximum output. Repeat this procedure until no further improvement is noticed.

**NOTE 4** — 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 5** — When installing the radio in the car, follow the installation instructions carefully. Tune in a weak broadcast signal between 1200 and 1400 Kilocycles on the control scale. Remove the plug button on the end of the radio and adjust the antenna compensator ③ (See Figure 2) for maximum signal.

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