

PHILCO-TRANSITONE

Service Bulletin No. 2

PHILCO-TRANSITONE MODEL 5.

The Philco Transitone Model 5 is the latest Philco development in motor car radio. It is a powerful and extremely compact superheterodyne having many of the features of the larger radio Receivers.

The Receiver, Speaker and the new Full Wave Philco Vibrator are all housed in a single shielded container designed for quick installation on the dash of the car. The arrangement is particularly adaptable for small cars and for cars with little spare space. The full powered, electro-dynamic speaker is mounted in the bottom of the housing so as to afford excellent tone quality and volume without the necessity of using a speaker as a separate unit.

All the valves used are the latest Philco high-efficiency type, designed especially for motor car radio. Several of these valves each perform the functions which formerly required two and three valves, thereby effecting a great valve economy, reducing the number of valves necessary for satisfactory operation, and reducing the amount of current taken from the car battery to the very minimum.

Philco's system of automatic volume control is used to give that smooth, elastic control which counteracts fading while driving along, and prevents blasting of local stations.

The new Receiver is All Electric, operating entirely from the car battery. The new Full Wave Philco Vibrator is built in as an integral part of the Receiver.

This Receiver is destined to be one of the most popular models we have ever offered to the public and will meet with instant approval from everyone as soon as it can be seen and heard. Ease of installation will enable service stations to cut their costs and speed up installations. Customers will wait for their cars while the installation is being made, since the average installation will be made in only a fraction of the time formerly required. Remember it is essential to put in the best aerial you can.

MODEL 5 ADJUSTMENTS.

Become thoroughly familiar with the adjustment procedure and the position of the padding condensers before starting to adjust a Model 5 Receiver.

Furthermore, don't attempt to make the adjustments using a make-shift oscillator. The modern radio set depends on critically tuned circuits for its exceptional performance. It is nothing short of gross carelessness to try to adjust these delicately tuned circuits using unstable oscillators which are incapable of being calibrated accurately.

All precautions as outlined in Philco-Transitone Service Bulletin No. 1 with regard to low oscillator inputs because of the very efficient automatic volume control used, must be observed.

The intermediate frequency used is 460 K. C. Set up the oscillator or signal generator for this frequency.

Disconnect the grid lead from the 6A7 valve. Then connect the test lead to the grid of this valve and earth

the shield on to the Receiver housing. Use the fibre adjusting wrench 3164 for all adjustments.

Padder 10. Turn the adjusting nut in until tight. Then back off one full turn. Leave this condenser in this position until the last step.

Padder 11. This is the first I. F. primary condenser. With the Receiver and oscillator turned on and the oscillator set for 460 K. C., turn the Receiver volume control on full and adjust the oscillator attenuator. Then adjust the padder for maximum signal in the loud speaker.

Padder 13. This is the first I. F. secondary condenser. Adjust the attenuator so that the signal is barely audible. This should be repeated with each adjustment if necessary. Adjust the padder for maximum signal in the loud speaker. Repeat this procedure in the next two adjustments.

Padder 17. This is the second I. F. primary condenser.

Padder 20. This is the second I. F. secondary condenser.

Remove the oscillator connections from the 6A7 valve and reconnect the Receiver grid lead to this valve. The oscillator setting must now be changed to 1500 K. C.

The Receiver volume control must be turned on full, the oscillator lead connected to the aerial lead-in and the shield to the Receiver housing. To obtain the correct setting of the tuning condenser, open the plates as wide as possible. Place a piece of paper on the stator plates and then turn the rotor in until it strikes the paper.

Oscillator padder. This is the padder on the second section of the tuning condenser (section nearest drive mechanism). Adjust for maximum signal.

Aerial Padder. This is the remaining padder on the tuning condenser. Remove the paper from the tuning condenser and set the condenser and oscillator for 1400 K. C. Adjust the padder for maximum signal.

Low Frequency Padder 10. Set the oscillator for 600 K. C. and tune the Receiver to this frequency. Adjust the padder for maximum signal. After completing these operations, repad the aerial padder at 1400 K. C.

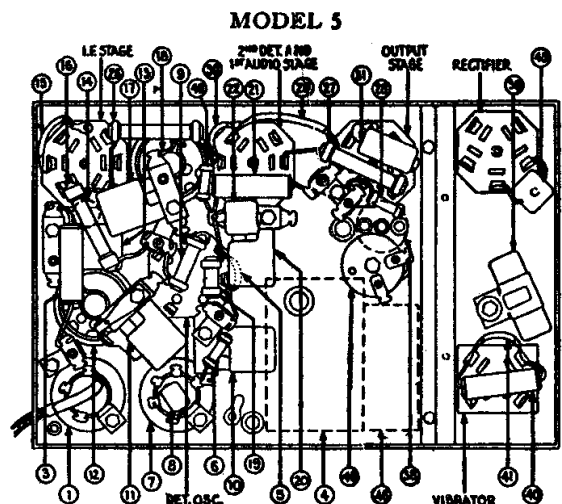


FIG. 2

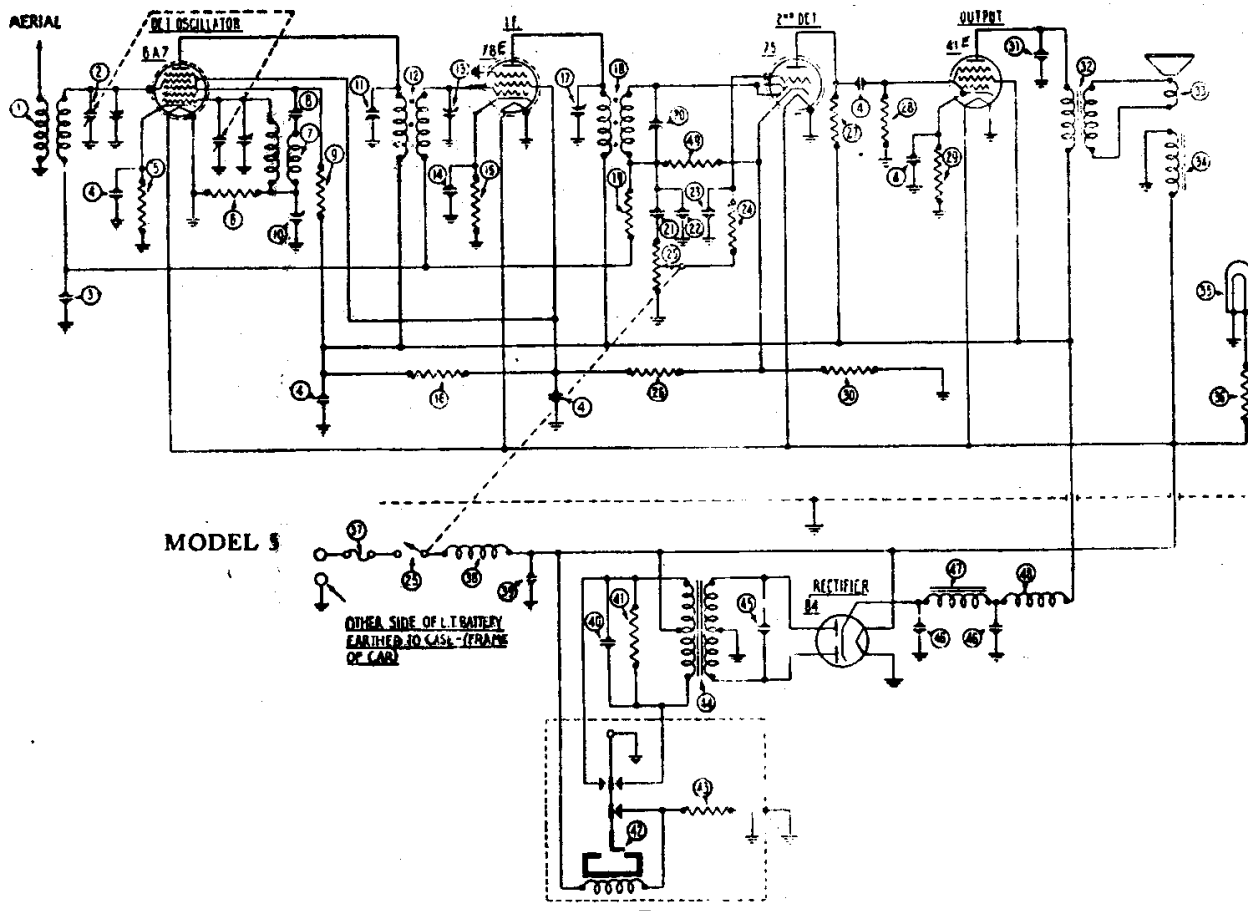


FIG. 1

MODEL 5 PARTS LIST.

1—Aerial Transformer	...	...	32-1084	37—Fuse, 15 A.	...	...	7227
2—Tuning Condenser	...	...	31-1019	38—R. F. Choke (Low voltage)	...	...	32-1083
3—Condenser (.05 mfd.)	...	...	30-4020	39—Condenser (.5 mfd.)	...	...	30-4015
4—Filter Condenser (25; .25; .5; 20 mfd.)	...	...	30-4017	40—Condenser (.05 mfd.)	...	...	30-4020
5—Resistor (200 ohms)	...	...	7217	41—Resistor (200 ohms)	...	...	7217
6—Resistor (1,300 ohms)	...	...	8267	42—Vibrator	...	...	38-5036
7—Oscillator Coil	...	...	32-1085	43—Resistor (200 ohms)	...	...	7217
8—Condenser (.00025 mfd.)	...	...	3082	44—Transformer	...	...	32-7030
9—Resistor (15,000 ohms)	...	...	6208	45—Condenser (.006 mfd.)	...	...	30-1002
10—Padder	...	...	04000-S	46—Condenser (4 mfd.; 8 mfd.)	...	...	30-4010
11—Padder	...	...	04000-J	47—Filter Choke	...	...	32-7026
12—First I. F. Transformer	...	...	32-1086	48—R. F. Choke (High voltage)	...	...	32-1078
13—Padder	...	...	04000-Y	49—Resistor (240,000 ohms)	...	...	4410
14—Condenser (.5 mfd.)	...	...	30-4018	Control Shaft (Tuning)	...	...	28-8006
15—Resistor (1,000 ohms)	...	...	33-3017	Control Shaft (Volume)	...	...	28-8007
16—Resistor (10,000 ohms)	...	...	4412	75 Valve	...	...
17—Padder	...	...	04000-D	78 Valve	...	...
18—Second I. F. Transformer	...	...	32-1087	41 Valve	...	...
19—Resistor (1,000,000 ohms)	...	...	4409	84 Valve	...	...
20—Padder	...	...	04000-M	6A7 Valve	...	...
21—Condenser (.05 mfd.)	...	...	30-4020	Dial	...	...	27-5006
22—Condenser (.00025 mfd.)	...	...	3082	Aerial Lead	...	...	38-5131
23—Condenser (.0005 mfd.)	...	...	3910	Battery Cable (Bat. end)	...	...	38-5136
24—Resistor (99,000 ohms)	...	...	6099	Battery Cable (Rec. end)	...	...
25—Volume Control and Switch	...	...	33-5009	Fuse Housing	...	...	28-1269
26—Resistor (32,000 ohms)	...	...	3525	Male Cap (Fuse)	...	...	28-1270
27—Resistor (240,000 ohms)	...	...	3768	Contact (Fuse)	...	...	27-7133
28—Resistor (490,000 ohms)	...	...	6097	Washer	...	...	27-7132
29—Resistor (700 ohms)	...	...	6443	Spring	...	...	28-8009
30—Resistor (400 ohms)	...	...	33-3016	Fuse Insulator	...	...	27-7131
31—Condenser (.006 mfd.)	...	...	30-1002	Aerial Male Cap	...	...	28-1270
32—Output Transformer	...	...	32-7005	Spark Plug Resistors	...	...	4531
33—Cone	...	...	02861	Dist. Resistors	...	...	4546
34—Field Coil	...	...	32-9013	Screw Type	...	...	4851
35—Pilot Lamp	...	...	6608	Interference Condenser (1 mfd.)	...	...	4522
36—Resistor (7 ohms)	...	...	7155	Interference Condenser (1/4 mfd.)	...	...	30-4007