PHILCO TRANSITONE
SERVICE BROADCAST

MAY, 1934

MODEL 700 RECEIVER

THE latest Philco development in single-unit automobile radio is the new Model 700. This Receiver is compact, easier to install than ever before and will give exceptional performance.

It is a six-tube super-heterodyne with a genuine full-size Philco electro-dynamic speaker—the same type that is used in many of the larger home radio Receivers. It has remarkable sensitivity, a three-section tuning condenser, giving improved selectivity—wonderful tone, with a three-point tone control, and inherently quiet circuits. Interference filters in the "A" lead and in the pilot light lead greatly simplify motor interference suppression. In most installations standard suppression is sufficient.

Added to this, the ease of installation characteristic of this model (only one unit to install—one lead to the antenna, one lead to the ammeter) and the convenient, attractive airplane type steering column control, which makes this model universal in its application, are additional features of the Model 700 which appeal to both the dealer and the public.

I. F. TRANSFORMER AND PADDERS

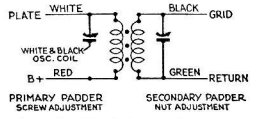
The new style I. F. transformer complete with padders is used in the Model 700.

The padders are placed in the top of the shield can one above the other.

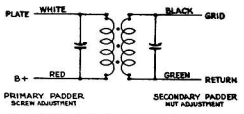
The primary padder is adjusted by means of the screw slot, accessible through the hole in the top of the shield can. The secondary padder is adjusted by means of the small hex nut, also accessible through the hole in the top of the shield. (See Figs. 1 and 2.)

The coil windings terminate in leads instead of terminals or lugs. The color scheme of the leads is given in Fig. 1.

If replacements are ever necessary, replace the entire coil assembly 32-1329 for the first I. F. stage and 32-1237 for the second I. F. stage. Neither the coil nor the padders will be furnished separately. Order only by the above numbers.



1st I. F. Transformer
32-1329



2nd I. F. Transformer
32-1237

FIG. 1

MODEL 700 ADJUSTMENTS

All adjustments have been carefully checked at the factory. If, however, it is found necessary to readjust the padding condensers, this procedure must be followed carefully. Do not attempt to make any adjustments until the procedure is clearly understood or without the use of a good oscillator or signal generator and output meter. The Philco Set Tester 048 is highly recommended for this procedure and for all service work.

The Receiver must be connected to a six-volt storage battery and turned on for operation. It is assumed that tubes have been checked and that the Receiver is in good condition except for the padding adjustments.

Remove the speaker lid from the Receiver. Remove the grid cap terminal from the 77 tube (for location see Fig. 2).

Set up the signal generator and adjust it to exactly 260 K. C. Connect the generator lead to the grid cap of the 77 tube. (See Fig. 2.) The output meter must be connected.

The Receiver volume control must be turned on to approximately full volume and the attenuator in the generator set for a half-scale reading of the output meter.

The padders (22) and (24) are adjusted first (Figs. 2 and 3). Turn the adjusting screw (22) all the way in. A metal screwdriver can be used for this. Then, with generator attenuator set so there is approximately half-scale reading, adjust the nut (24) with a fibre wrench for the maximum reading on the output meter.

Then adjust the screw (22) for maximum reading on the meter. This adjustment is critical. Note the maximum reading obtainable and then turn the screw in again and readjust, just bringing the adjustment up to the maximum reading. Do not pass it and then back off.

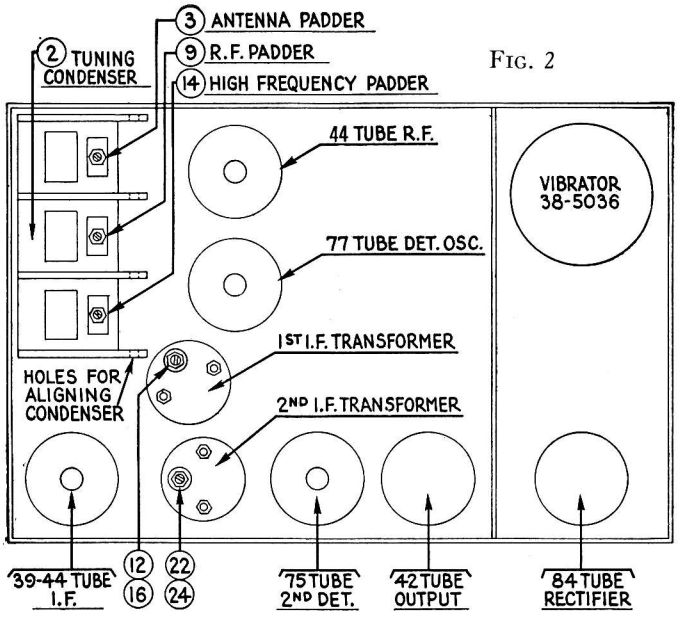


FIG. 2

Repeat the above procedure with the condensers (12) and (16).

After padding the first I. F. stage, remove the generator lead from the 77 tube and reconnect the grid lead to the 77 tube. Set the generator to 1600 K. C. and then connect the generator lead to the antenna lead.

There are four holes in line, one in each of the sections

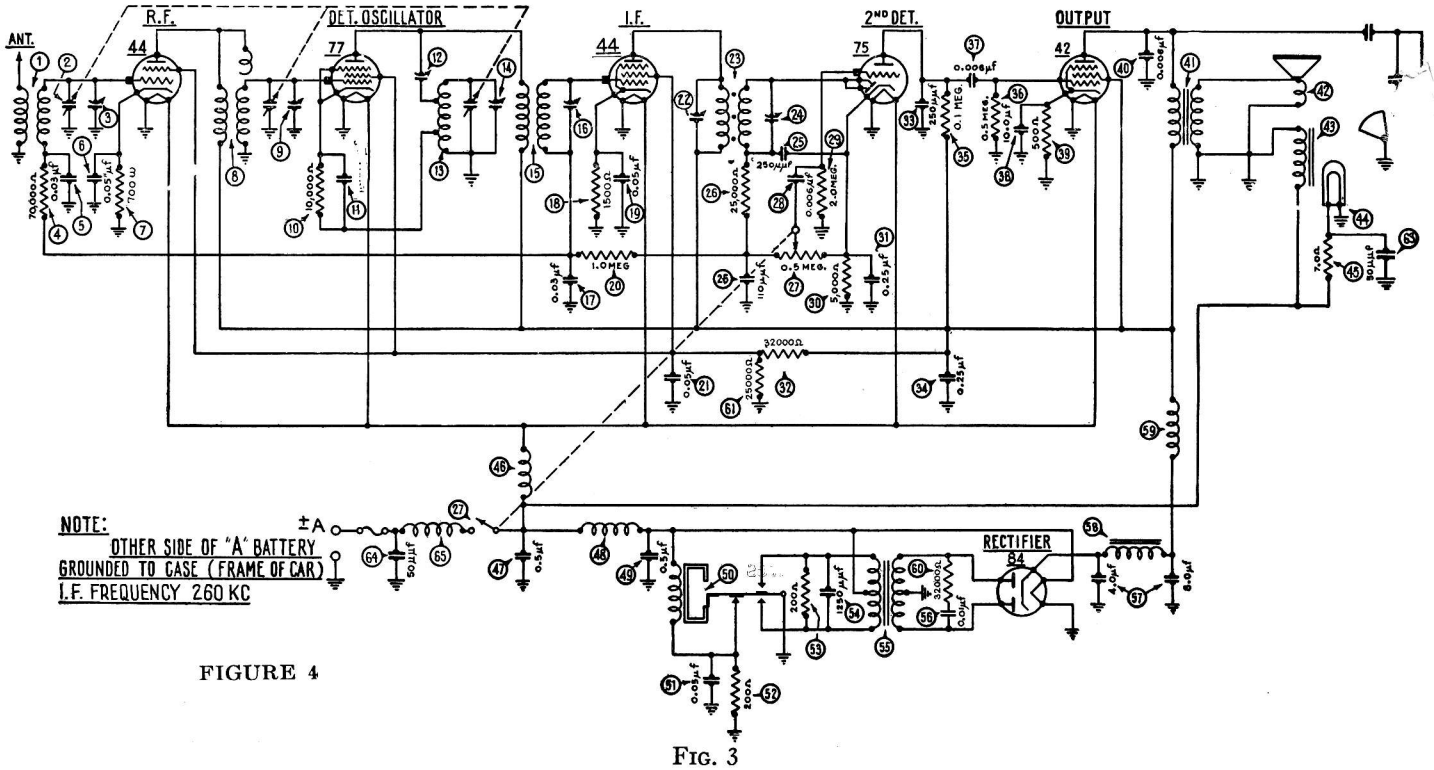


FIGURE 4

FIG. 3

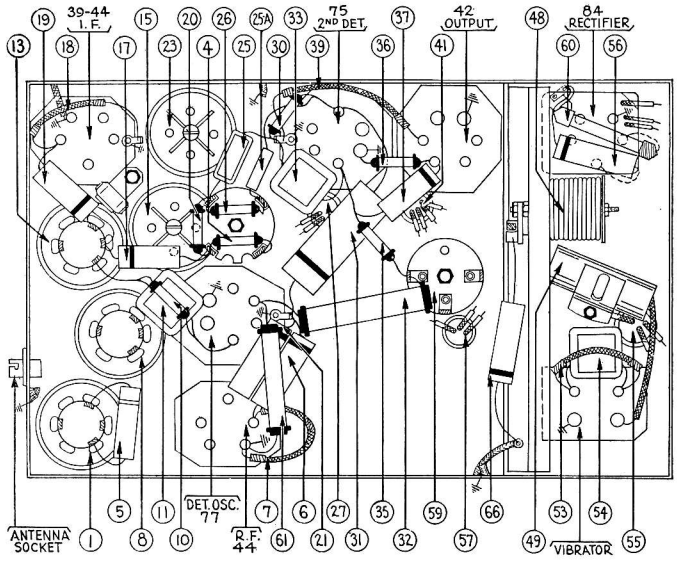


FIG. 4

of the tuning condenser housing. (See Fig. 2.) Place a nail of the size that fits snugly through the holes and then turn the condenser plates out of mesh until they strike against the nail.

With the tuning condenser in this position adjust the high-frequency padder ⑭ until the maximum reading is obtained in the output meter. This is the true setting for 1600 K. C., 160 on the dial scale.

Next turn the condenser plates in mesh to 140 on the scale, 1400 K. C., and set the signal generator for 1400 K. C. The R. F. padder ⑨ and the antenna padder ③ are next adjusted for the maximum reading on the output meter.

Recheck the adjustments and then remove all test leads. If this procedure has been carefully followed and an accurately calibrated oscillator or signal generator used, the Receiver is adjusted properly.

MODEL 700 PARTS LIST

①	Antenna Transformer	32-1331	
②	Tuning Condenser	31-1199	
③	1st Padder (in tun. cond.)		
④	Resistor (70,000 ohms)	33-1115	
⑤	Condenser (.03 mfd.)	30-4025	
⑥	Condenser (.05 mfd.)	30-4020	
⑦	Resistor (700 ohms)	6443	
⑧	R. F. Transformer	32-1332	
⑨	2nd Padder (in tun. cond.)		
⑩	Resistor (10,000 ohms)	33-1000	
⑪	Condenser (.0007 mfd.)	5863	
⑫	Padder (Pri. 1st I. F. Tran.)		
⑬	Oscillator Transformer	32-1333	
⑭	3rd Padder (in tun. cond.)		
⑮	1st I. F. Transformer	32-1329	
⑯	Padder (Sec. 1st I. F. Tran.)		
⑰	Condenser (.03 mfd.)	30-4025	
⑱	Resistor (1500 ohms)	33-3047	
⑲	Condenser (.05 mfd.)	30-4020	
⑳	Resistor (1,000,000 ohms)	33-1096	
㉑	Condenser (.05 mfd.)	30-4020	
㉒	Padder (Pri. 2nd I. F. Tran.)		
㉓	2nd I. F. Transformer	32-1237	
㉔	Padder (Sec. 2nd I. F. Tran.)		
㉕	Condenser (.00025 mfd.)	30-1032	
㉕	Condenser (.00011 mfd.)	30-1031	
㉖	Resistor (25,000 ohms)	33-1013	
㉗	Vol. Con. & Switch Assm.	38-5534	
㉘	Condenser (.006 mfd.)	30-4125	
㉙	Resistor (2,000,000 ohms)	33-1025	
㉚	Resistor (5000 ohms)	6096	
㉛	Condenser (.25 mfd.)	30-4146	
㉜	Resistor (32,000 ohms)	3525	
㉝	Condenser (.00025 mfd.)	3082	
㉞	Condenser (.25 mfd.)	04360	
㉟	Resistor (100,000 ohms)	6099	
㊱	Resistor (500,000 ohms)	6097	
㊲	Condenser (.006 mfd.)	30-4125	
㊳	Condenser (.10 mfd.)	30-2072	
㊴	Resistor (500 ohms)	33-3031	
㊵	Condenser (.006 mfd.)	30-4024	
㊶	Output Transformer	32-7214	
㊷	Cone & Voice Coil	36-3157	
㊸	Field Coil Assembly	36-3046	
㊹	Pilot Lamp	34-2031	
㊺	Resistor (7 ohms)	33-3035	
㊻	"A" Choke	32-1268	
㊼	Condenser (.5 mfd.)	30-4147	
㊽	Vibrator Choke	32-1235	
㊾	Condenser (.5 mfd.)	30-4015	
㊿	Vibrator	38-5036	
(51)	Condenser (.05 mfd.)	30-4039	
(52)	Resistor (200 ohms)	7217	
(53)	Resistor (200 ohms)	7217	
(54)	Condenser (.00125 mfd.)	5886	
(55)	Power Transformer	32-7216	
(56)	Condenser (.01 mfd.)	30-4051	
(57)	Condenser (4-8 mfd.)	30-2072	
(58)	"B" Choke	32-7215	
(59)	R. F. Choke	32-1281	
(60)	Resistor (32,000 ohms)	3525	
(61)	Resistor (25,000 ohms)	33-1013	
(62)	Tone Control	30-4180	
(63)	Condenser (.00005 mfd.)	30-1029	
(64)	Condenser (.00005 mfd.)	30-1029	
(65)	"A" Choke	32-1374	
(66)	Condenser (1 mfd)	30-4122	
	Spark Plug Resistor	33-1015	
	Distributor Resistor	33-1113E	
	Interference Condenser	30-4007	
	Nuts (mounting)	W55A	
	Battery Cable	38-5296	
	Acorn Nut	W821	
	Fuse	7227	
	Fuse Insulator	27-7131	
	Studs	28-6036	
	Bracket	6035	
	Strap	04344	
	Strap Pad	6206	
	Knob	27-4058	
	Glass	27-7325	
	Gasket (for glass)	27-7509	
	Pointer	28-1957	
	Face Assembly	42-5189	
	Control Housing Cover	29-7064	
	Control Unit Assembly	42-5184	
	Shaft	28-8206	
	Antenna Lead	38-5771	
	4-Prong Socket	27-60[illegible]6	
	5-Prong Socket	27-601[illegible]	
	6-Prong Socket	6417C	