

INSTALLATION AND OPERATING INSTRUCTIONS

MODEL 816

THE PHILCO AUTO RADIO MODEL 816 is Philco's newest in automobile radio. It is a highly developed superheterodyne, single-unit type Receiver, with all the modern features required in such a fine instrument.

THE NEW RECEIVER IS EQUIPPED WITH AN ADJUSTABLE ANTENNA STAGE, WHICH MAKES IT POSSIBLE TO OPERATE THE RECEIVER AT MAXIMUM EFFICIENCY ON ANY ROOF-TYPE OR UNDER-CAR TYPE ANTENNA.

Receiver, speaker and full-wave Philco Vibrator are housed in a rugged, compact, fully shielded container which is designed for quick and easy installation on the dash of all automobiles, with two "Tee" bolts. The installation in most cars, can be easily made above the steering column. The loud speaker faces the front seat, so that the improved Philco Electro-dynamic Speaker delivers its full toned reproduction toward the occupants of the car with utmost fidelity. The speaker panel is easily removed so that tubes and vibrator are accessible for service.

All tubes used are the latest Philco High Efficiency Tubes, designed for automobile radio. Several of these

tubes perform the functions formerly requiring two or three tubes, thereby effecting greater tube economy, reducing the number of tubes necessary for satisfactory operation, and also reducing the amount of current taken from the car battery to a minimum.

Philco's system of automatic volume control is used, giving smooth, elastic control which counteracts fading while driving along under varying conditions and prevents blasting of local stations.

This new, all-electric Receiver is equipped with improved interference filters and especially designed shielding to eliminate motor interference making it possible to install it quickly and easily.

The new streamline "wide vision" control can be installed on the edge of the instrument board. This control unit is exceptionally attractive and is designed to blend harmoniously with the instrument boards of practically all cars.

There are only two connections to make, one to the antenna, the other to the ammeter binding post.

Now, more than ever, THE NEW PHILCO AUTO RADIO IS EASY TO INSTALL and is a PLEASURE TO OPERATE.

GENERAL INSTRUCTIONS

ANTENNA—In cars equipped with a top antenna, the lead-in is generally brought down one of the windshield pillars and coiled behind the cowl trim panel. In such cases, the Receiver antenna lead must be spliced to the antenna lead-in as close as possible to the corner post. Ground the shield pigtail to the cowl panel under a convenient screw.

In cars having an all-metal turret top, the Philco special Under-car Antenna (Part No. 45-1128 Kit) should be installed. The shielded antenna lead-in furnished with the kit must be brought up through the floor of the car to the Receiver. Keep the lead-in out of the motor compartment. Complete instructions are furnished with the antenna kit.

RECEIVER—The Receiver must be installed under the cowl on the dash. Be sure that in the location selected, there is ample foot room and that the Receiver does not in any way interfere with the operation of the control pedals and ventilators. The Receiver can be installed on the right side of the dash, in the center or on the left side above the steering column. (Figure 3 shows a typical installation on the left side.

A cardboard template is provided so that the mounting bolt hole locations can be easily and accurately marked on the dash. The Receiver fastens to the dash with two "Tee" bolts. (See Figure 1). Drill two 7/16 inch holes and loosely assemble the "Tee" bolts. Install the Receiver on the dash, hooking the "Tee" bolts into

the brackets on the Receiver. Tighten the Receiver securely in place.

CONTROL UNIT—The control unit fastens to the bottom edge of the instrument board. (Figure 3 shows a typical installation). Drill two holes in the instrument board flange in the desired location and fasten the control mounting bracket securely by means of bolts and nuts. Seat the volume control shaft end in the proper bushing on the Receiver housing and fasten the shaft casing nut securely. (See Figures 2 and 3). Before coupling the tuning control shafts to the Receiver, turn the tuning control knob counter-clockwise to the mark below 55 on the scale. To couple the shaft, turn the knob counter-clockwise slowly until the shaft end is seated in the bushing and tighten the knurled casing nut securely with the fingers.

To adjust the setting of the control unit, after coupling the flexible shaft to the Receiver, turn the tuning control knob counter-clockwise as far as possible.

"A" BATTERY CONNECTIONS—Place the fuse and fuse insulator in the metal fuse housing in the control "A" lead. Couple this to the short Receiver lead and then connect the other "A" lead to the ammeter stud on the rear of the instrument board.

ANTENNA CONNECTIONS—When the radio is installed in a car having a top screen antenna, an under-car antenna, spare wheel antenna or an antenna having a similarly low capacitance (50 mmfd. to 450 mmfd.) —

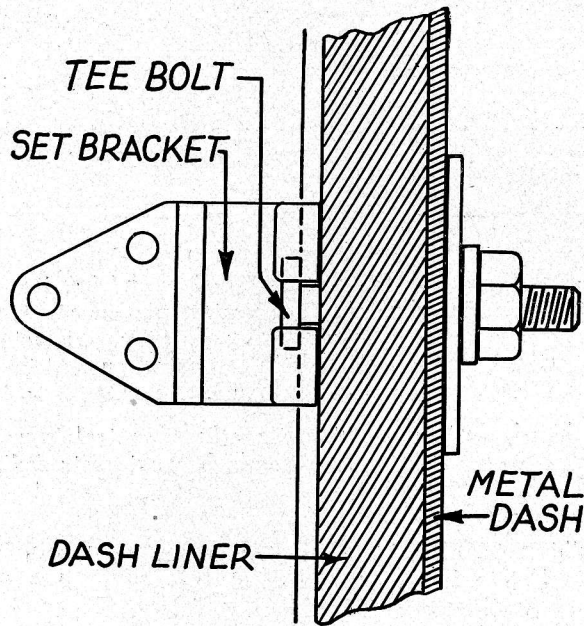


FIGURE 1

place the "connector plug" in the antenna lead connector and then plug the antenna lead into the antenna lead connector. (See Figure 2).

When the radio is installed in a car having a metal insert top antenna, insulated door antenna, insulated trunk cover or an antenna having a similarly high capacitance (450 mmfd. to 2500 mmfd.) place the "condenser connector" in the antenna lead connector and then plug the antenna lead into the antenna lead connector.

ANTENNA COUPLING ADJUSTMENT—Turn on the radio and tune in a *weak broadcast signal at approximately 75* on the control scale. The volume control should be turned well up. With a small screw driver, adjust the antenna coupling condenser for the maximum signal. For location of the coupling condenser see figure 2.

MOTOR INTERFERENCE SUPPRESSION—Remove the coil-to-distributor high tension lead from the distributor. Cut two inches from the end of the lead and screw on the distributor resistor. Then plug the distributor resistor into the distributor cap.

While the standard distributor resistor can be used in most cases, there will be occasions when it will be necessary to use a double end screw type resistor (Part No. 4851) in the coil-to-distributor high tension lead, close to the distributor. Cars equipped with two ignition coils require two distributor resistors. Extra resistors can be obtained from the nearest Philco dealer or distributor.

Two interference condensers are furnished — one must be connected to the generator side of the cut-out, the other to the battery side of the primary of the ignition coil or to the ignition switch. The condenser bracket must be fastened securely to a grounded metal part of the car. The condenser on the generator usually can be fastened to the generator housing under the same screw that holds the cut-out, while the coil condenser can usually be fastened under the coil mounting bolts.

In some cases, it may be necessary to connect an

additional condenser to the ammeter or to the dome light lead at the corner post. On some cars, a condenser can be used to advantage on the electric oil gauge or on the gas gauge. Connect the condenser to the terminal of the gauge and bolt the condenser securely to the frame or some other grounded part of the car.

Interference from electric clocks can be eliminated by connecting an interference condenser to the ammeter terminal.

Thirty inches of 1/2" copper braid is furnished for use as ground straps as required.

In some particularly stubborn cases, bonding the steering column to the dash with a short lead will be effective. Clean the paint from the steering column at the dash where it enters the motor compartment and solder on a short piece of braid, grounding this to the dash.

In other cases it may be necessary to ground the tubing and rods coming thru the dash in order to reduce the interference. (See Figure 4). Clean them with emery cloth and spot solder the braid, fastening the end under a convenient screw. When an under-car antenna is used it may be necessary to ground the exhaust pipe to the frame of the car with a piece of copper braid. The ground connection should be made ahead of the dash.

There may be some interference caused by an excessive gap between the distributor rotor and the high-tension contacts. This can be overcome by lengthening the contact end of the rotor. Place the metal end of the rotor on a steel block and peen or hammer it with a small machinist's hammer. Dress the end with a file so that it retains its original shape. The rotor should not brush or wipe the contacts, but should just clear them.

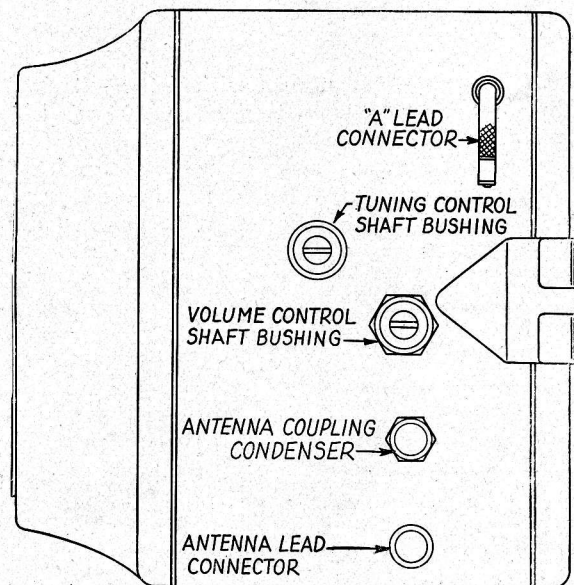


FIGURE 2

If the installation has been made carefully and the usual precautions observed, it should not be necessary to use spark plug resistors. In the event these operations do not reduce ignition disturbances to a satisfactory level, spark plug resistors should be installed. These can be obtained from the nearest Philco dealer or distributor.

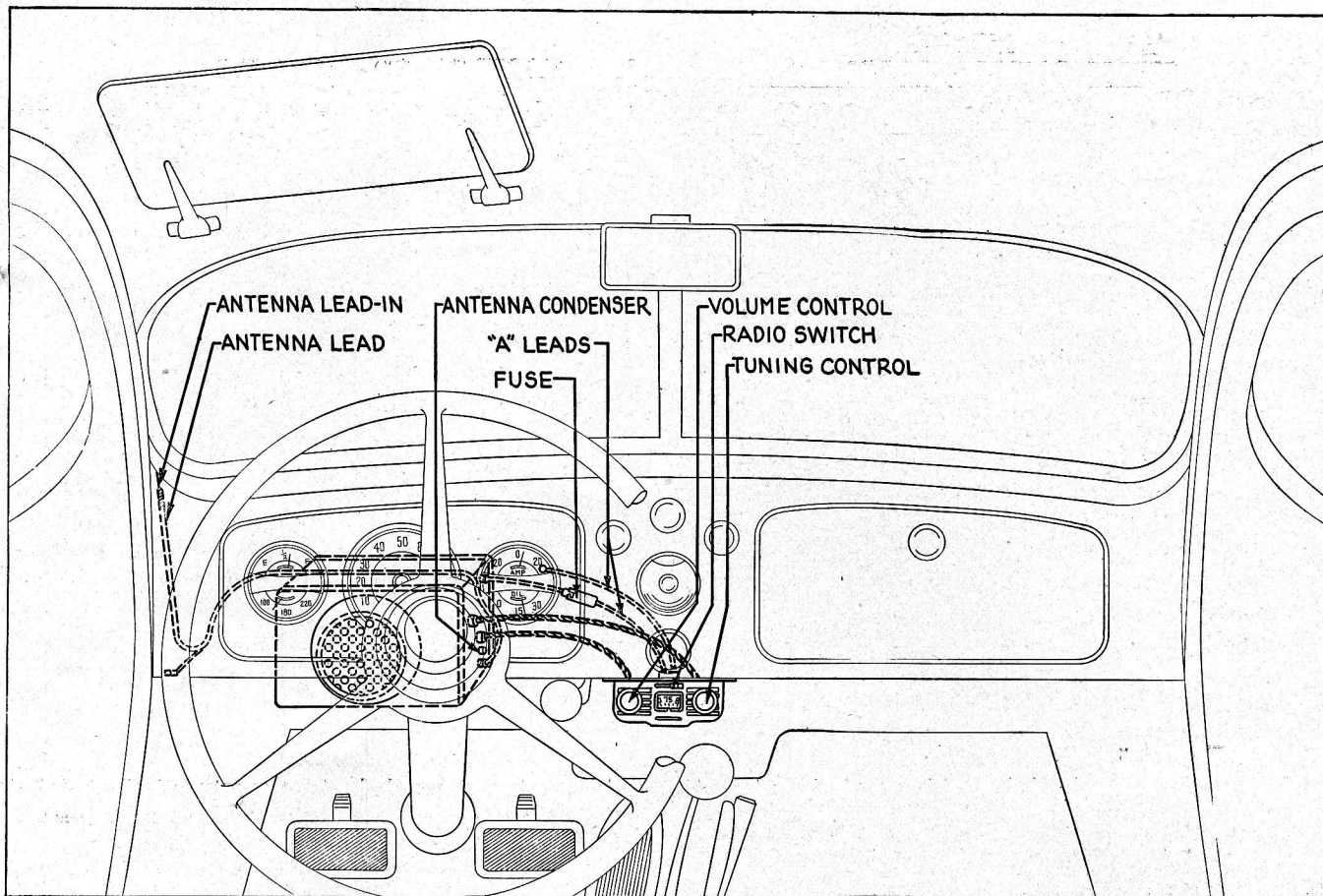


FIGURE 3

OPERATION

The radio switch is in the center of the control above the dial opening. The "off" position is to the right, the "on" position, to the left. The left-hand knob controls the volume, the right-hand knob the tuning.

Turn the radio "on." Allow the tubes to heat up, then adjust the volume control and tune in the various programs.

The numbers on the dial are channel numbers which, with the addition of "0" to the number correspond to the frequency in kilocycles. Adjust the volume to a suitable level and recheck the tuning. The Receiver must be tuned so that the maximum signal is obtained. Since the Receiver is extremely selective, it is of the utmost importance that the Receiver be tuned right on the station. Careless tuning off to one side even though the signal is still heard, results in very poor tone quality and very mushy reception.

Except on very weak signals, the automatic volume control maintains the same volume level while driving along without continually manipulating the manual volume control, cuts out external interference, counteracts fading and prevents blasting of local stations while tuning. It is virtually impossible, however, to maintain satisfactory reception while driving under bridges or in places which are totally shielded, known as dead spots.

MAINTENANCE AND SERVICE

The Receiver is fully covered by the Standard Warranty (see below). Read it carefully. Should this Receiver or the Receiver installation ever require atten-

tion, go immediately to your dealer or to the service station that made the installation for efficient service.

The installation record should be filled out by your dealer at the time the installation is made. Keep the record for your protection in case you ever do require service.

REPLACEMENT TUBES—Use only PHILCO High Efficiency Tubes for replacements.

REPLACEMENT PARTS—Use only genuine PHILCO replacement parts. Don't jeopardize the performance of your Receiver by using inferior parts.

DO NOT ATTEMPT TO ADJUST THE VIBRATOR—If service is ever required, go to your dealer or to the nearest authorized Philco Auto Radio Service Station.

REMOVE PAINT FROM UNDER SCREW HEAD

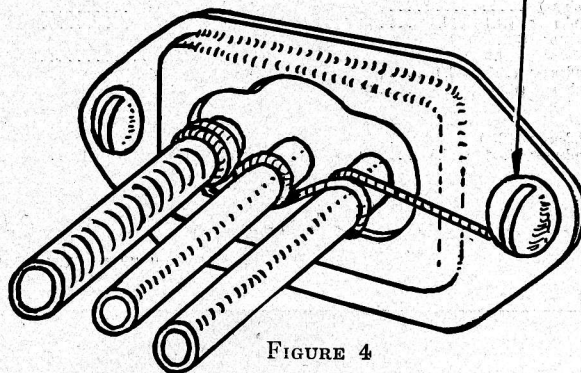


FIGURE 4

STANDARD WARRANTY

We warrant each new Radio Receiver and Speaker manufactured by us to be free from defects in material and workmanship under normal use and service, our obligation under this warranty being limited to making good at our factory or factory depots any part or parts thereof which shall, within ninety (90) days after delivery of such Receiver to the original purchaser, be returned to us with transportation charges prepaid, and which our examination shall disclose to our satisfaction to have been thus defective; this warranty being expressly in lieu of all other warranties expressed or implied, and of all other obligations or liabilities on our part, and we neither assume nor authorize any

representative or other person to assume for us any other liability in connection with the sale of our Receivers or Speakers. This warranty shall not apply to any Receiver or Speaker which shall have been repaired or altered outside of our factory or factory depots in any way so as, in our judgment, to affect its stability or reliability, nor which has been subject to misuse, negligence or accident, nor which has had the serial number altered, effaced or removed. Neither shall this warranty apply to any Receiver or Speaker which has been connected otherwise than in accordance with the instructions furnished by us.

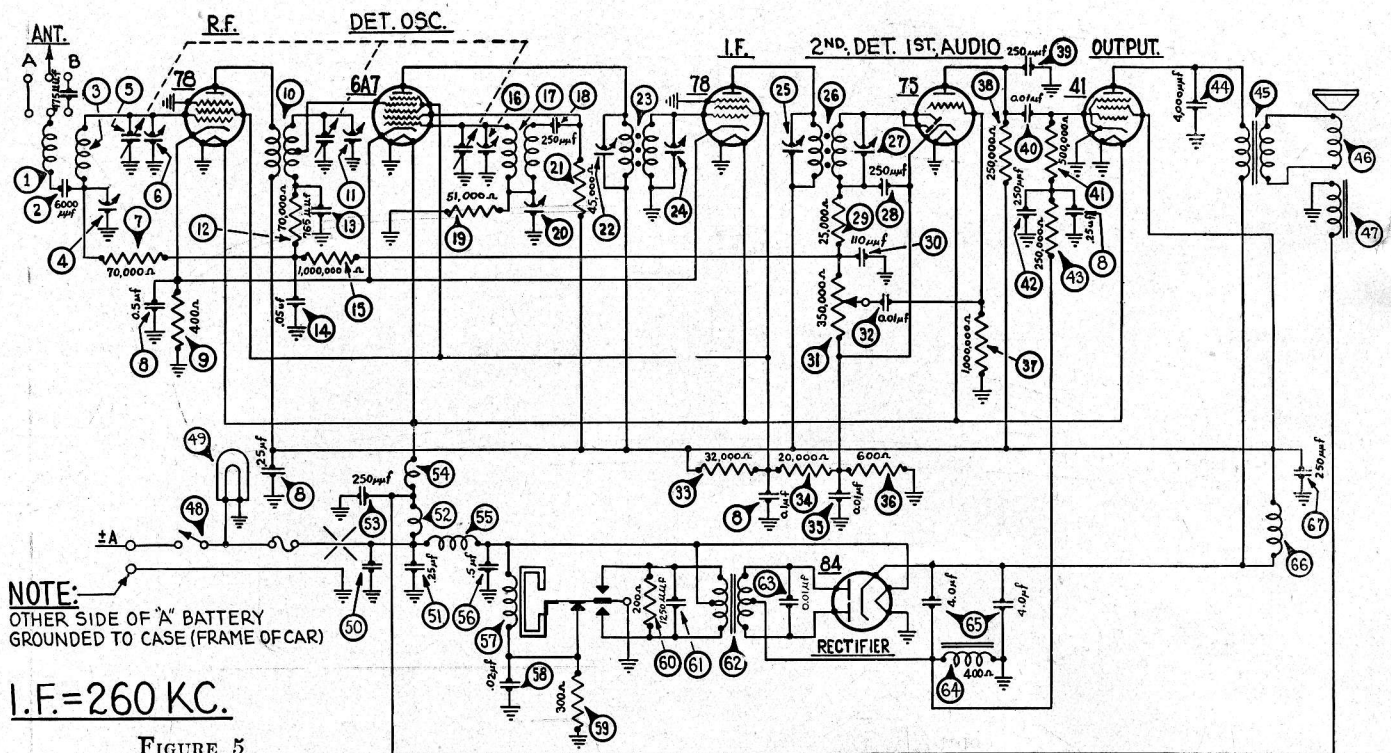


FIGURE 5

NOTE: When the Receiver is installed in a car having a top antenna, under-car antenna, spare wheel antenna or antenna having a similarly low relative capacitance (50 mmf. to 450 mmf.) use connector plug in "A."
 When the Receiver is installed in a car having a metal insert top antenna, insulated door antenna, insulated trunk cover antenna or antenna having similarly high relative capacitance (450 mmf. to 2500 mmf.) use condenser plug in "B."

MODEL 816 PARTS LIST

No.	Description	Part No.	No.	Description	Part No.
1	Antenna Choke	33-7516	41	Resistor (500,000 ohms)	33-449344
2	Condenser (6000 mmfd.)	30-4125	42	Condenser (250 mmfd.)	30-1032
3	Antenna Transformer	32-1984	43	Resistor (250,000 ohms)	33-424344
4	Antenna Coupling Condenser	31-6082	44	Condenser (4000 mmfd.)	30-4185
5	Tuning Condenser	31-1767	45	Output Transformer	32-7495
6	First Padder (on Tun. Cond.)	31-1767	46	Cone and Voice Coil	36-3526
7	Resistor (70,000 ohms)	33-370334	47	Field Coil Assembly	32-9236
8	Condenser (.1-25-.25-.5 mfd.)	30-4374	48	"On" and "Off" Switch	42-1160
9	Resistor (400 ohms)	33-1211	49	Pilot Lamp	34-2039
10	R. F. Transformer	32-1985	50	Condenser (450 mmfd.)	31-6065
11	Second Padder (on Tun. Cond.)	31-1767	51	Condenser (.25 mfd.)	30-4146
12	Resistor (70,000 ohms)	33-370334	52	"A" Choke	32-1464
13	Condenser (765 mmfd.)	30-1069	53	Condenser (250 mmfd.)	30-1032
14	Condenser (.05 mfd.)	30-4020	54	Filament Choke	32-1930
15	Resistor (1,000,000 ohms)	33-510344	55	Vibrator Choke	32-1968
16	Third Padder (on Tun. Cond.)	31-1767	56	Condenser (.5 mfd.)	30-4047
17	Oscillator Transformer	32-1986	57	Vibrator	38-5036
18	Condenser (250 mmfd.)	30-1032	58	Condenser (.02 mfd.)	30-4039
19	Resistor (51,000 ohms)	33-351344	59	Resistor (300 ohms)	33-3130
20	Low Frequency Padder	31-6083	60	Resistor (200 ohms)	33-1210
21	Resistor (45,000 ohms)	33-345344	61	Condenser (1250 mmfd.)	5886
22	Padder (Pri. 1st I. F. Trans.)	32-1928	62	Power Transformer	32-7482
23	First I. F. Transformer	32-1928	63	Condenser (.01 mfd.)	30-4381
24	Padder (Sec. 1st I. F. Trans.)	32-1929	64	Filter Choke	32-7491
25	Padder (Pri. 2nd I. F. Trans.)	32-1929	65	Filter Condenser (4-4 mfd.)	38-7684
26	Second I. F. Transformer	32-1929	66	R. F. Choke	32-1932
27	Padder (Sec. 2nd I. F. Trans.)	32-1929	67	Condenser (250 mmfd.)	30-1032
28	Condenser (250 mmfd.)	30-1032	68	Four Prong Socket	27-6044
29	Resistor (25,000 ohms)	33-325344	69	Five Prong Socket	27-6035
30	Condenser (110 mmfd.)	30-1031	70	Six Prong Socket	27-6036
31	Volume Control (350,000 ohms)	33-5148	71	Seven Prong Socket	27-6037
32	Condenser (.01 mfd.)	30-4124	72	Clamps (Speaker Mtg.)	29-3131
33	Resistor (32,000 ohms)	33-332433	73	Speaker Cable	41-3180
34	Resistor (20,000 ohms)	33-320334	74	Scale Assembly	42-5539
35	Condenser (.01 mfd.)	30-4124	75	Interference Condenser (.5 mfd.)	30-4007
36	Resistor (600 ohms)	33-1212	76	Distributor Resistor	33-1196
37	Resistor (1,000,000 ohms)	33-510344	77	Tuning and Volume Shaft	28-8495
38	Resistor (250,000 ohms)	33-424344	78	Tuning and Volume Knob	27-4288
39	Condenser (250 mmfd.)	30-1032	79	Tee Bolt (Receiver Mtg.)	28-6161
40	Condenser (.01 mfd.)	30-4124	80	Nuts (Receiver Mtg.)	W518A
41	Condenser (250 mmfd.)	30-1032	81	Bracket (Control Mtg.)	29-3711
42	Condenser (.01 mfd.)	30-4124			

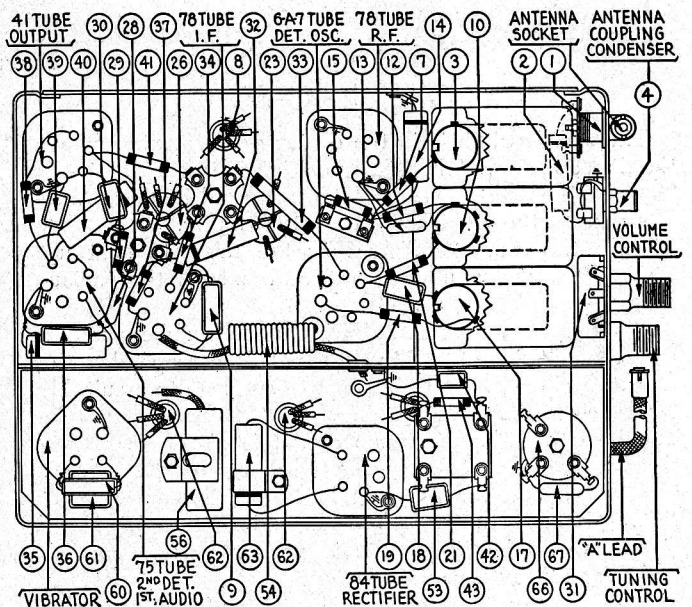


FIGURE 6

No.	Description	Part No.	No.	Description	Part No.
727	Fuse	727	29-6423	Connector Plug	29-6423
7729	Fuse Insulator	27-7729	27-8199	Connector Plug Insulator	27-8199
42-5534	Control Assembly	42-5534	30-4412	Condenser Plug	30-4412
41-3191	Antenna Shield Assembly	41-3191			

TRANSITONE AUTOMOBILE RADIO CORP.

PHILADELPHIA, PA.

Model 816 — Installation Registration

Receiver Serial No. _____ Date _____
 Installed by _____ Make and Year of Car _____
 Owner's Name _____ Owner's Address _____

KEEP THIS INSTALLATION RECORD. IT IS IMPORTANT IN CASE YOU EVER REQUIRE SERVICE.

INSTALLATION AND OPERATING INSTRUCTIONS

MODEL 816B

THE PHILCO AUTO RADIO MODEL 816B is Philco's newest automobile radio, designed especially for the 1936 Buick car. It is a highly developed superheterodyne, single-unit type Receiver, with all the modern features required in such a fine instrument.

The Receiver, speaker and full-wave Philco Vibrator are housed in a rugged, compact, fully shielded container which is designed for quick and easy installation on the dash of the 1936 Buick cars with two "Tee" bolts. The installation can be made easily above the steering column. The loud speaker faces the front seat, so that the improved Philco Electro-dynamic Speaker delivers its full-toned reproduction toward the occupants of the car with utmost fidelity. The speaker panel is easily removed so that tubes and vibrator are accessible for service.

All tubes used are the latest Philco High Efficiency tubes, designed for automobile radio. Several of these tubes each perform the functions formerly requiring two or three tubes, thereby effecting greater tube economy, reducing the number of tubes necessary for satisfactory operation, and also reduc-

ing the amount of current taken from the car battery to a minimum.

Philco's system of automatic volume control is used, giving smooth, elastic control which counteracts fading while driving along under varying conditions and prevents blasting of local stations.

This new, all-electric Receiver is equipped with improved interference filters and especially designed shielding to eliminate motor interference making it possible to install it quickly and easily.

The special "customed" control unit matches the instrument board fittings and is designed for installation in the space provided for radio control in the instrument board of the 1936 Buick cars.

There are only two connections to make, one to the antenna, the other to the ammeter binding post.

Now, more than ever, THE NEW PHILCO AUTO RADIO IS EASY TO INSTALL and is a PLEASURE TO OPERATE.

GENERAL INSTRUCTIONS

ANTENNA—The 1936 Buick cars have an all steel turret top which makes it necessary to install the antenna under the running boards. The special Philco Under-car antenna (Part No. 45-1128 Kit) should be installed. The shielded antenna lead-in furnished with the kit must be brought through the opening between the left front fender and the dash. Drill a $\frac{1}{2}$ " hole in the left side of the toe board and run the antenna lead-in through it to the Receiver. Keep the lead-in out of the motor compartment. Complete instructions for installing the antenna are furnished with the antenna kit.

RECEIVER—Install the Receiver on the left side of the dash above the steering column. A cardboard template is furnished so that the mounting bolt hole locations can be easily and accurately marked on the dash. The Receiver fastens to the dash with two "Tee" bolts. (See Figure 1). Drill two $\frac{7}{16}$ " holes and loosely assemble the "Tee" bolts. Install the Receiver on the dash, hooking the "Tee" bolts into the brackets on the Receiver. Tighten the Receiver securely in place.

When drilling the holes in the dash, care should be taken not to drill through any tubing or cables that are strapped to the dash in the motor compartment.

CONTROL UNIT—The slotted red light shield must be placed on the radio (right) switch lever and the opaque shield on the left switch lever.

Loosen the nut on the rear of the cigar lighter panel and then remove the ornamental cover plate from the center of the instrument board. This is fastened with two nuts in the rear of the plate. Place the face of the control against the back of the instrument board with the ends of the shafts protruding through to the front. Next place the control bezel plate over the shafts and switch levers and against the front

of the instrument board. Put the hex nuts on the threaded portion of the control shaft bushings and tighten securely.

Tighten the nut on the rear of the cigar lighter panel.

Press the knobs over the chromium plated, knob base washers and then put the knobs on the shafts. Tighten the set screws in the knobs securely.

Seat the volume control shaft in the proper bushing on the Receiver housing (see Figure 2 and Figure 3) and tighten the shaft casing nut securely. Before coupling the tuning control shaft to the Receiver, turn the tuning control knob counter-clockwise to the mark below 55 on the scale. To couple the shaft, turn the knob counter-clockwise slowly until the shaft end is seated in the bushing and tighten the knurled casing nut securely with the fingers.

To adjust the setting of the control unit, after coupling the flexible shaft to the Receiver, turn the tuning control knob counter-clockwise as far as possible.

"A" BATTERY CONNECTIONS—Place the fuse and fuse insulator in the metal fuse housing in the control "A" lead. Couple this to the short Receiver lead and then connect the other "A" lead to the ammeter stud on the rear of the instrument board.

ANTENNA CONNECTION—Place the connector plug (supplied with the Receiver) in the antenna lead connector in the Receiver and then plug the antenna lead into the antenna lead connector. The location of the antenna connector is shown in Figure 2.

ANTENNA COUPLING ADJUSTMENT—Turn on the radio and tune in a weak broadcast signal at approximately 75

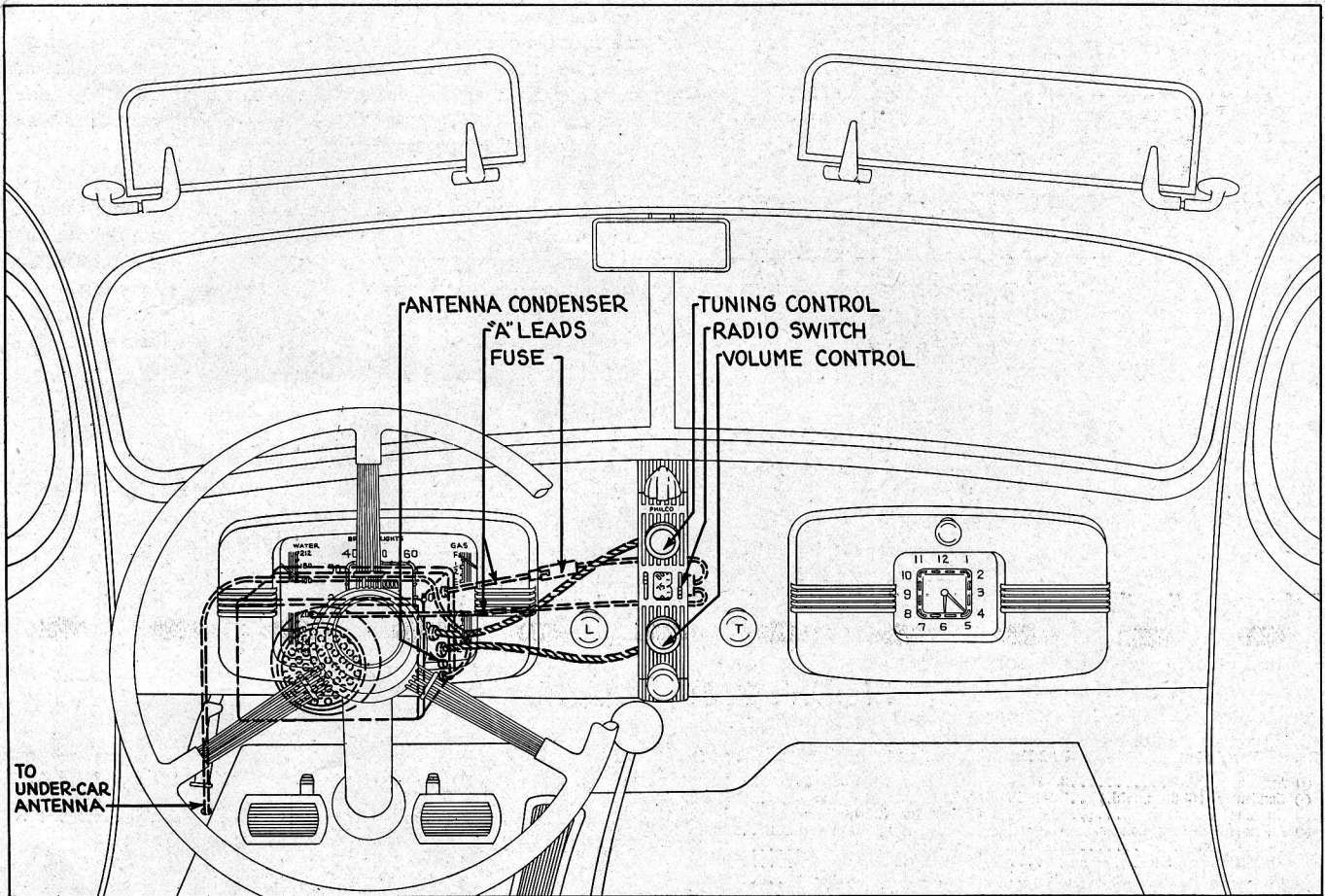


FIGURE 3

STANDARD WARRANTY

We warrant each new Radio Receiver and Speaker manufactured by us to be free from defects in material and workmanship under normal use and service, our obligation under this warranty being limited to making good at our factory or factory depots any part or parts thereof which shall, within ninety (90) days after delivery of such Receiver to the original purchaser, be returned to us with transportation charges prepaid, and which our examination shall disclose to our satisfaction to have been thus defective; this warranty being expressly in lieu of all other warranties expressed or implied, and of all other obligations or liabilities on our part, and we neither

assume nor authorize any representative or other person to assume for us any other liability in connection with the sale of our Receivers or Speakers.

This warranty shall not apply to any Receiver or Speaker which shall have been repaired or altered outside of our factory or factory depots in any way so as, in our judgment, to affect its stability or reliability, nor which has been subject to misuse, negligence or accident, nor which has had the serial number altered, effaced or removed. Neither shall this warranty apply to any Receiver or Speaker which has been connected otherwise than in accordance with the instructions furnished by us.

Model 816B — Installation Registration

Receiver Serial No. _____ Date _____
 Installed by _____ Make and Year of Car _____
 Owner's Name _____ Owner's Address _____

KEEP THIS INSTALLATION RECORD. IT IS IMPORTANT IN CASE YOU EVER REQUIRE SERVICE.

PHILCO TRANSITONE INSTALLATION AND OPERATING INSTRUCTIONS—MODEL 816B

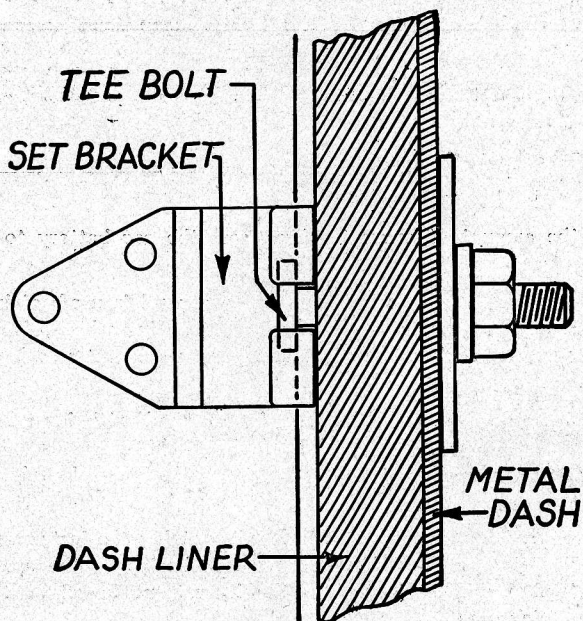


FIGURE 1

on the control scale. The volume control should be turned well up. With a small screw driver, adjust the antenna coupling condenser for the maximum signal. The location of the coupling condenser is shown in Figure 2.

MOTOR INTERFERENCE SUPPRESSION—Remove the coil-to-distributor high tension lead from the distributor. Cut two inches from the end of the lead and screw on the distributor resistor. Then plug the distributor resistor into the distributor cap.

Two interference condensers are furnished — one must be connected to the generator terminal of the cut-out, the other to the ammeter. The condenser bracket must be fastened securely to a grounded metal part of the car. The condenser on the generator can be fastened to the generator housing under the same screw that holds the cut-out, while the ammeter condenser can be fastened to the flange of the instrument board.

If the installation has been made carefully and the usual precautions observed, it should not be necessary to use spark plug resistors. In the event these operations do not reduce ignition disturbances to a satisfactory level, spark plug resistors should be installed. These can be obtained from the nearest Philco dealer or distributor.

OPERATION

The radio switch is in the center of the control to the right of the dial opening. The "on" position is to the bottom and the "off" position to the top. The bottom knob controls the volume and the top knob the tuning. The switch in the center of the control to the left of the dial opening is not used in the Model 816B.

Turn the radio "on." Allow the tubes to heat up, then adjust the volume control and tune in the various programs.

The numbers on the dial are channel numbers which, with the addition of "0" to the number correspond to the frequency

in kilocycles. Adjust the volume to a suitable level and recheck the tuning. The Receiver must be tuned so that the maximum signal is obtained. Since the Receiver is extremely selective, it is of the utmost importance that the Receiver be tuned right on the station. Careless tuning off to one side even though the signal is still heard, results in very poor tone quality and very mushy reception.

Except on very weak signals, the automatic volume control maintains the same volume level while driving along without continually manipulating the manual volume control, cuts out external interference, counteracts fading and prevents blasting of local stations while tuning. It is virtually impossible, however, to maintain satisfactory reception while driving under bridges or in places which are totally shielded, known as dead spots.

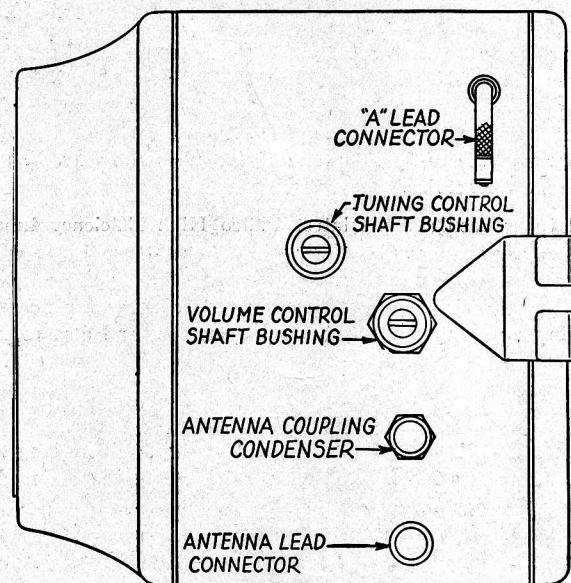


FIGURE 2

MAINTENANCE AND SERVICE

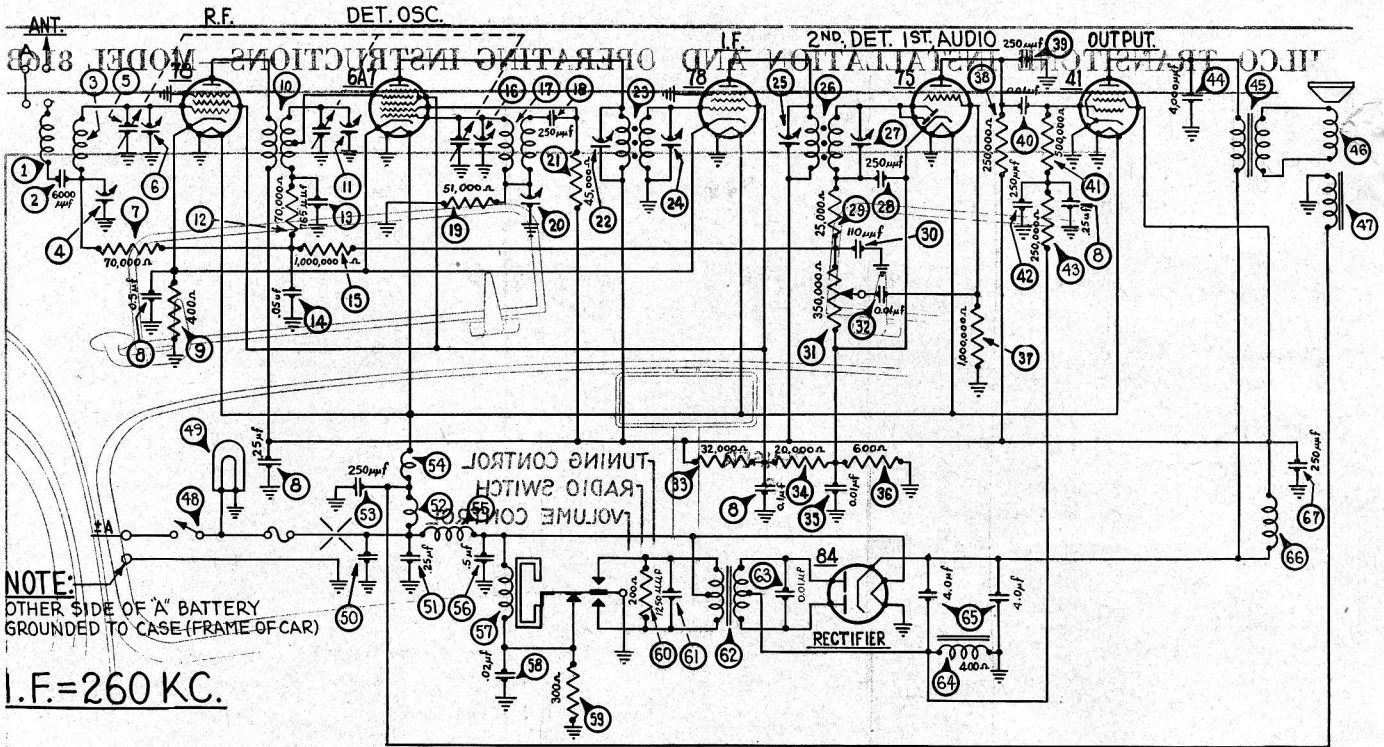
The Receiver is fully covered by the Standard Warranty. (See next page). Read it carefully. Should this Receiver or the Receiver installation ever require attention, go immediately to your dealer or the service station that made the installation for efficient service.

The installation record should be filled out by your dealer at the time the installation is made. Keep the record for your protection in case you ever do require service.

REPLACEMENT TUBES— Use only PHILCO High Efficiency Tubes for replacements.

REPLACEMENT PARTS—Use only genuine PHILCO replacement parts. Don't jeopardize the performance of your Receiver by using inferior parts.

DO NOT ATTEMPT TO ADJUST THE VIBRATOR— If service is ever required, go to your dealer or to the nearest authorized Philco Auto Radio Service Station.



Before connecting the antenna lead-in to the Receiver place the connector plug in "A".

FIGURE 4

MODEL 816B — PARTS LIST

No.	Description	Part No.	No.	Description	Part No.
1	Antenna Choke	38-7516	41	Resistor (500,000 ohms)	33-449344
2	Condenser (6000 mmfd.)	30-4125	42	Condenser (250 mmfd.)	30-1032
3	Antenna Transformer	32-1984	43	Resistor (250,000 ohms)	33-424344
4	Antenna Coupling Condenser	31-6082	44	Condenser (4000 mmfd.)	30-4185
5	Tuning Condenser	31-1767	45	Output Transformer	32-7495
6	First Padder (on tun. cond.)	30-4020	46	Cone and Voice Coil	36-3526
7	Resistor (70,000 ohms)	33-370334	47	Field Coil Assembly	32-9236
8	Condenser (.1-25-.25-.5 mfd.)	30-4374	48	"On" and "Off" Switch	42-1160
9	Resistor (400 ohms)	35-1211	49	Pilot Lamp	34-2039
10	R. F. Transformer	32-1985	50	Condenser (450 mmfd.)	31-6005
11	Second Padder (on tun. cond.)	30-4020	51	Condenser (.25 mfd.)	30-4146
12	Resistor (70,000 ohms)	33-370334	52	"A" Choke	32-1464
13	Condenser (765 mmfd.)	30-1069	53	Condenser (250 mmfd.)	30-1032
14	Condenser (.05 mfd.)	30-4020	54	Filament Choke	32-1930
15	Resistor (1,000,000 ohms)	33-510344	55	Vibrator Choke	32-1968
16	Third Padder (on tun. cond.)	30-4020	56	Condenser (.5 mfd.)	30-4047
17	Oscillator Transformer	32-1986	57	Vibrator	38-5036
18	Condenser (250 mmfd.)	30-1032	58	Condenser (.02 mfd.)	30-4039
19	Resistor (51,000 ohms)	33-351344	59	Resistor (300 ohms)	33-3130
20	Low Frequency Padder	31-6083	60	Resistor (200 ohms)	33-1210
21	Resistor (45,000 ohms)	33-345344	61	Condenser (1250 mmfd.)	30-5886
22	Padder (Pri. 1st I. F. Trans.)	32-1928	62	Power Transformer	32-7482
23	First I. F. Transformer	32-1928	63	Condenser (.01 mfd.)	30-4381
24	Padder (Sec. 1st I. F. Trans.)	30-4124	64	Filter Choke	32-7481
25	Second I. F. Transformer	32-1929	65	Filter Condenser (4-4 mfd.)	38-7684
26	Padder (Pri. 2nd I. F. Trans.)	30-4124	66	R. F. Choke	32-1932
27	Condenser (250 mmfd.)	30-1032	67	Condenser (250 mmfd.)	30-1032
28	Resistor (25,000 ohms)	33-325344		Four Prong Socket	27-6044
29	Condenser (110 mmfd.)	30-1031		Five Prong Socket	27-6035
30	Volume Control (350,000 ohms)	33-5148		Six Prong Socket	27-6036
31	Resistor (.01 mfd.)	30-4124		Seven Prong Socket	27-6037
32	Resistor (600 ohms)	33-1212		Clamps (Speaker Mtg.)	29-3131
33	Resistor (1,000,000 ohms)	33-510344		Speaker Cable	41-3180
34	Resistor (250,000 ohms)	33-424344		Interference Condenser (1/2 mfd.)	30-4007
35	Condenser (250 mmfd.)	30-1032		Distributor Resistor	33-1196
36	Resistor (32,000 ohms)	33-332433		Control Assembly	42-5561
37	Resistor (20,000 ohms)	33-320334		Scale Assembly	42-5570
38	Condenser (.01 mfd.)	30-4124		Tuning and Volume Shaft	28-8495
39	Resistor (600 ohms)	33-1212		Tuning and Volume Knob	27-4288
40	Resistor (1,000,000 ohms)	33-510344		Pilot Lamp Assembly	38-7213
41	Resistor (250,000 ohms)	33-424344		Knob Base	28-3698
42	Condenser (250 mmfd.)	30-1032			
43	Condenser (.01 mfd.)	30-4145			

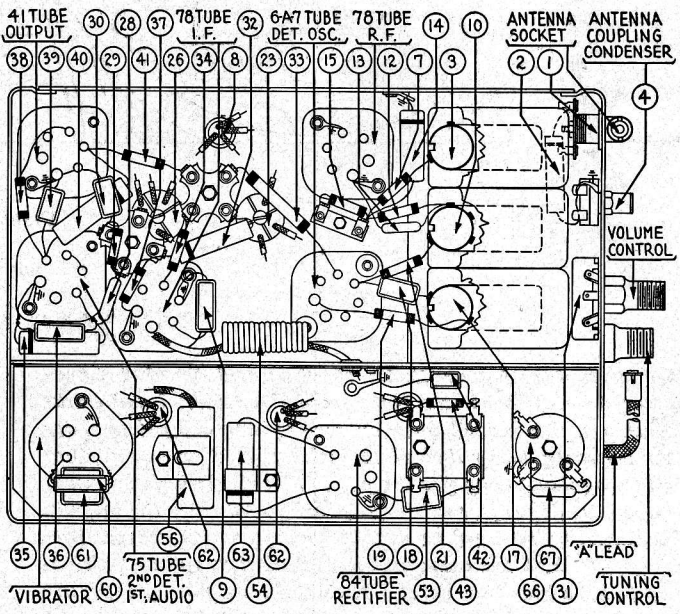


FIGURE 5

No.	Description	Part No.	No.	Description	Part No.
	Tee Bolt (Receiver Mtg.)	28-6161		Fuse Insulator	27-7729
	Nuts (Receiver Mtg.)	W518A		Connector Plug	29-6423
	Fuse	7227		Connector Plug Insulator	27-8199

TRANSITONE AUTOMOBILE RADIO CORP.

PHILADELPHIA, PA.

INSTALLATION AND OPERATING INSTRUCTIONS

MODEL 816C

THE PHILCO AUTO RADIO MODEL 816C is Philco's newest automobile radio, designed especially for the 1936 Chevrolet cars. It is a highly developed superheterodyne, single-unit type Receiver, with all the modern features required in such a fine instrument.

The Receiver, speaker and full-wave, Philco Vibrator are housed in a rugged, compact, fully shielded container which is designed for quick and easy installation on the dash of the 1936 Chevrolet cars with two "Tee" bolts. The installation can be made easily above the steering column. The loud speaker faces the front seat, so that the improved Philco Electro-dynamic Speaker delivers its full-toned reproduction toward the occupants of the car with utmost fidelity. The speaker panel is easily removed so that tubes and vibrator are accessible for service.

All tubes used are the latest Philco High Efficiency tubes, designed for automobile radio. Several of these tubes each perform the functions formerly requiring two or three tubes, thereby effecting greater tube economy, reducing the number of tubes necessary for satisfactory operation, and also reduc-

ing the amount of current taken from the car battery to a minimum.

Philco's system of automatic volume control is used, giving smooth, elastic control which counteracts fading while driving along under varying conditions and prevents blasting of local stations.

This new, all-electric Receiver is equipped with improved interference filters and especially designed shielding to eliminate motor interference making it possible to install it quickly and easily.

The special "customed" control unit matches the instrument board fittings and is designed for installation in the space provided for radio control in the instrument board of the 1936 Chevrolet cars.

There are only two connections to make, one to the antenna, the other to the ammeter binding post.

Now, more than ever, THE NEW PHILCO AUTO RADIO IS EASY TO INSTALL and is a PLEASURE TO OPERATE.

GENERAL INSTRUCTIONS

ANTENNA—The 1936 Chevrolet cars have an all steel turret top which makes it necessary to install the antenna under the running boards. The special Philco Under-car antenna (Part No. 45-1128 Kit) should be installed. The shielded antenna lead-in furnished with the kit must be brought along the frame on the left side of the car to the toe board. There is a hole in the toe board just above the foot switch which is plugged with a cap. Remove the cap and bring the lead-in through this opening to the Receiver. Keep the lead-in out of the motor compartment. Complete instructions for installing the antenna are furnished with the antenna kit.

RECEIVER—Install the Receiver in the left side of the dash above the steering column. A cardboard template is furnished so that the mounting bolt hole locations can be easily and accurately marked on the dash. The Receiver fastens to the dash with two "Tee" bolts. (See Figure 1). Drill two 7/16" holes and loosely assemble the "Tee" bolts. Install the Receiver on the dash, hooking the "Tee" bolts into the brackets on the Receiver. Tighten the Receiver securely in place.

When drilling the holes in the dash, care should be taken not to drill through any tubing or cables that are strapped to the dash in the motor compartment.

CONTROL UNIT—The slotted, red, light shield must be placed over the radio (bottom) switch lever and the opaque shield over the top lever.

Remove the ornamental cover plate from the center of the instrument board. This is fastened with two nuts on the rear of the plate. Place the face of the control against the back of the instrument board with the ends of the shafts protruding through to the front. Next place the control bezel plate over the shafts and switch levers and against the front of the

instrument board. Put the hex nuts on the threaded portion of the control shaft bushings and tighten securely.

Press the knobs over the chromium plated, knob base washers and then put the knobs on the shafts. Tighten the set screws in the knobs securely.

Seat the volume control shaft in the proper bushing on the Receiver housing (see Figure 2 and Figure 3) and tighten the shaft casing nut securely. Before coupling the tuning control shaft to the Receiver, turn the tuning control knob counter-clockwise to the mark below 55 on the scale. To couple the shaft, turn the knob counter-clockwise slowly until the shaft end is seated in the bushing and tighten the knurled casing nut securely with the fingers.

To adjust the setting of the control unit, after coupling the flexible shaft to the Receiver, turn the tuning control knob counter-clockwise as far as possible.

"A" BATTERY CONNECTIONS—Place the fuse and fuse insulator in the metal fuse housing in the control "A" lead. Couple this to the short Receiver lead and then connect the other "A" lead to the ammeter stud on the rear of the instrument board.

ANTENNA CONNECTION—Place the connector plug (supplied with the Receiver) in the antenna lead connector in the Receiver and then plug the antenna lead into the antenna lead connector. The location of the antenna connector is shown in Figure 2.

ANTENNA COUPLING ADJUSTMENT—Turn on the radio and tune in a weak broadcast signal at approximately 75 on the control scale. The volume control should be turned well up. With a small screw driver, adjust the antenna

PHILCO TRANSITONE INSTALLATION AND OPERATING INSTRUCTIONS—MODEL 816C

coupling condenser for the maximum signal. The location of the coupling condenser is shown in Figure 2.

MOTOR INTERFERENCE SUPPRESSION—Remove the coil-to-distributor high tension lead from the distributor. Cut two inches from the end of the lead and screw on the distributor resistor. Then plug the distributor resistor into the distributor cap.

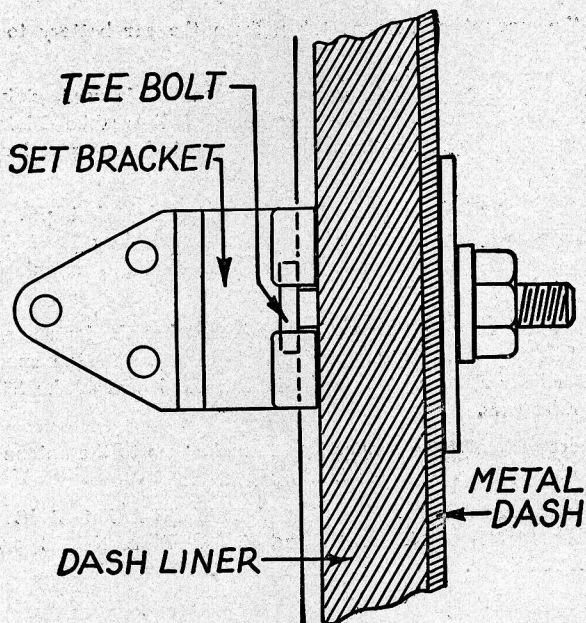


FIGURE 1

Two interference condensers are furnished — one must be connected to the generator terminal of the cut-out, the other to the ammeter. The condenser bracket must be fastened securely to a grounded metal part of the car. The condenser on the generator can be fastened to the generator housing under the same screw that holds the cut-out, while the ammeter condenser can be fastened to the flange of the instrument board.

If the installation has been made carefully and the usual precautions observed, it should not be necessary to use spark plug resistors. In the event these operations do not reduce ignition disturbances to a satisfactory level, spark plug resistors should be installed. These can be obtained from the nearest Philco dealer or distributor.

OPERATION

The radio switch is in the center of the control below the dial opening. The "on" position is to the left and the "off" position to the right. (The switch in the center of the control above the dial opening is not used in the model 816C). The left knob controls the volume and the right knob the tuning.

Turn the radio "on." Allow the tubes to heat up, then adjust the volume control and tune in the various programs.

The numbers on the dial are channel numbers which, with the addition of "0" to the number correspond to the frequency in kilocycles. Adjust the volume to a suitable level and re-

check the tuning. The Receiver must be tuned so that the maximum signal is obtained. Since the Receiver is extremely selective, it is of the utmost importance that the Receiver be tuned right on the station. Careless tuning off to one side even though the signal is still heard, results in very poor tone quality and very mushy reception.

Except on very weak signals, the automatic volume control maintains the same volume level while driving along without continually manipulating the manual volume control, cuts out external interference, counteracts fading and prevents blasting of local stations while tuning. It is virtually impossible, however, to maintain satisfactory reception while driving under bridges or in places which are totally shielded, known as dead spots.

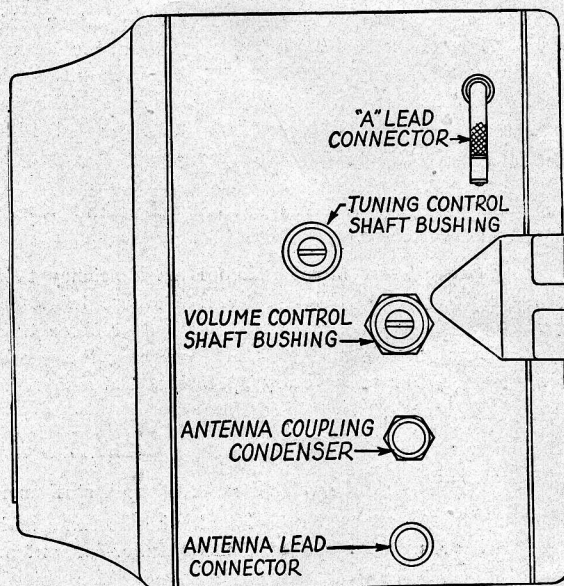


FIGURE 2

MAINTENANCE AND SERVICE

The Receiver is fully covered by the Standard Warranty. (See next page). Read it carefully. Should this Receiver or the Receiver installation ever require attention, go immediately to your dealer or the service station that made the installation for efficient service.

The installation record should be filled out by your dealer at the time the installation is made. Keep the record for your protection in case you ever do require service.

REPLACEMENT TUBES— Use only PHILCO High Efficiency Tubes for replacements.

REPLACEMENT PARTS—Use only genuine PHILCO replacement parts. Don't jeopardize the performance of your Receiver by using inferior parts.

DO NOT ATTEMPT TO ADJUST THE VIBRATOR— If service is ever required, go to your dealer or to the nearest authorized Philco Auto Radio Service Station.

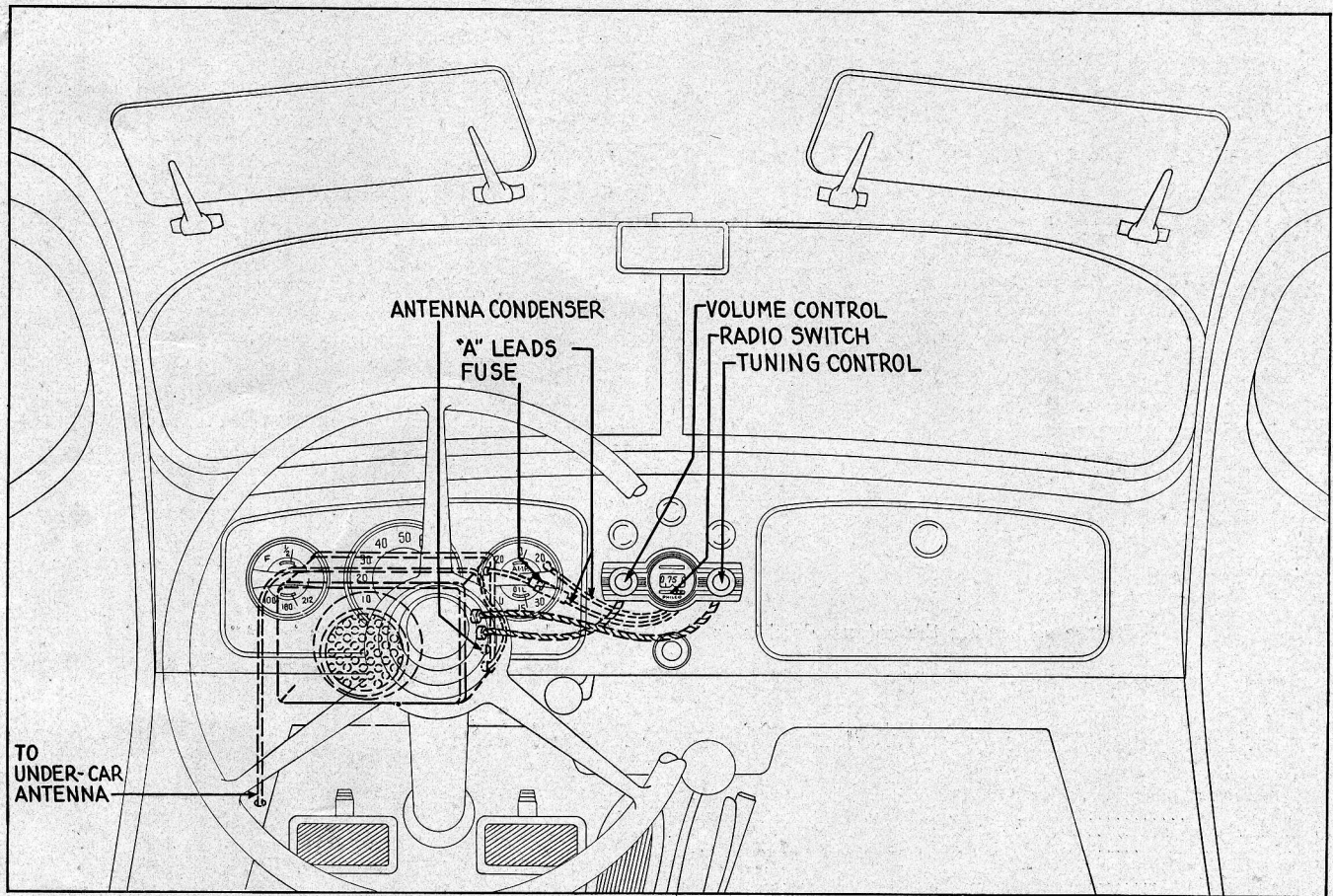


FIGURE 3

STANDARD WARRANTY

We warrant each new Radio Receiver and Speaker manufactured by us to be free from defects in material and workmanship under normal use and service, our obligation under this warranty being limited to making good at our factory or factory depots any part or parts thereof which shall, within ninety (90) days after delivery of such Receiver to the original purchaser, be returned to us with transportation charges prepaid, and which our examination shall disclose to our satisfaction to have been thus defective; this warranty being expressly in lieu of all other warranties expressed or implied, and of all other obligations or liabilities on our part, and we neither

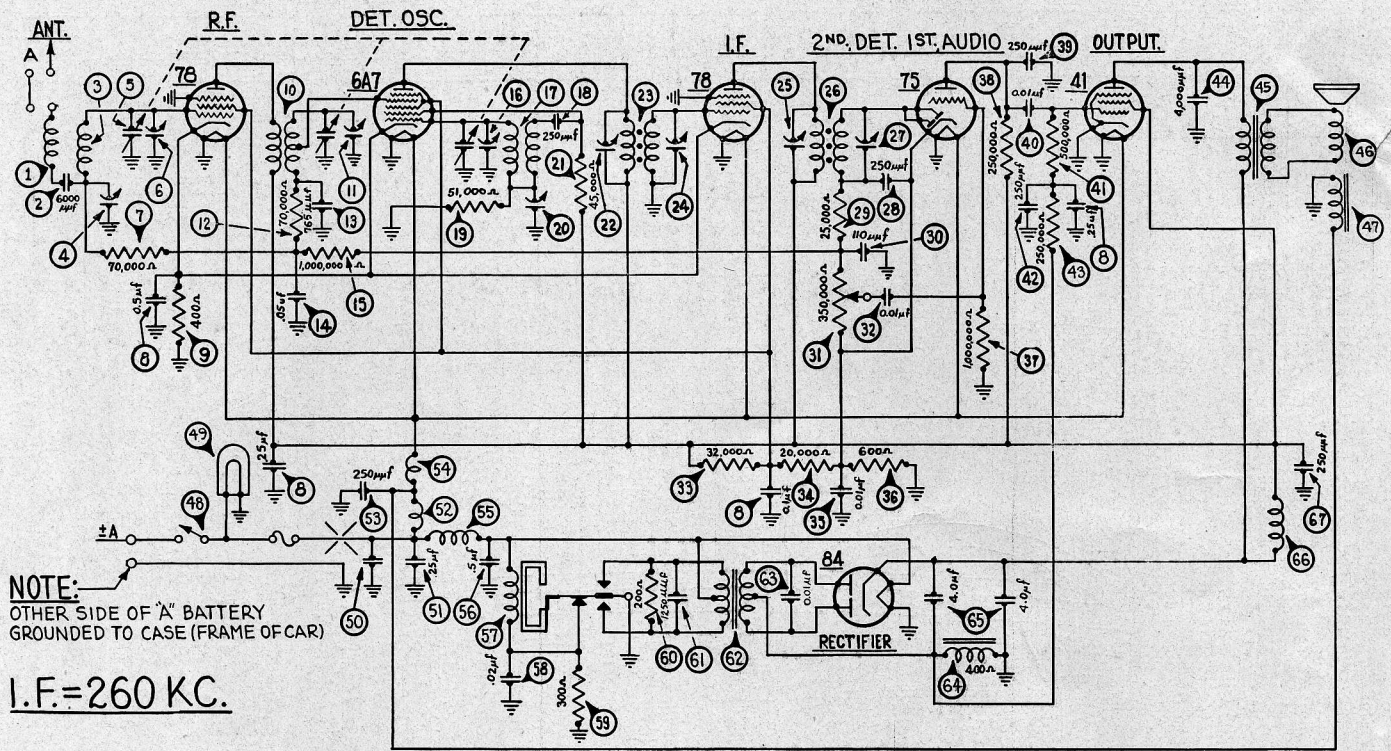
assume nor authorize any representative or other person to assume for us any other liability in connection with the sale of our Receivers or Speakers.

This warranty shall not apply to any Receiver or Speaker which shall have been repaired or altered outside of our factory or factory depots in any way so as, in our judgment, to affect its stability or reliability, nor which has been subject to misuse, negligence or accident, nor which has had the serial number altered, effaced or removed. Neither shall this warranty apply to any Receiver or Speaker which has been connected otherwise than in accordance with the instructions furnished by us.

Model 816C — Installation Registration

Receiver Serial No. _____ Date _____
 Installed by _____ Make and Year of Car _____
 Owner's Name _____ Owner's Address _____

KEEP THIS INSTALLATION RECORD. IT IS IMPORTANT IN CASE YOU EVER REQUIRE SERVICE.



Before connecting the antenna lead-in to the Receiver place the connector plug in "A".

FIGURE 4

MODEL 816C — PARTS LIST

No.	Description	Part No.	No.	Description	Part No.
1	Antenna Choke	33-7516	41	Resistor (500,000 ohms)	33-449344
2	Condenser (6000 mmfd.)	30-4125	42	Condenser (250 mmfd.)	30-1032
3	Antenna Transformer	32-1984	43	Resistor (250,000 ohms)	33-424344
4	Antenna Coupling Condenser	31-6082	44	Condenser (4000 mmfd.)	30-4185
5	Tuning Condenser	31-1767	45	Output Transformer	32-7495
6	First Padder (on tun. cond.)	31-1767	46	Cone and Voice Coil	36-3526
7	Resistor (70,000 ohms)	33-370334	47	Field Coil Assembly	32-9236
8	Condenser (.1-25-.25-.5 mfd.)	30-4374	48	On and Off Switch	42-1160
9	Resistor (400 ohms)	33-1211	49	Pilot Lamp	34-2039
10	R. F. Transformer	32-1985	50	Condenser (450 mmfd.)	31-6065
11	Second Padder (on tun. cond.)	31-1767	51	Condenser (.25 mfd.)	30-4146
12	Resistor (70,000 ohms)	33-370334	52	"A" Choke	32-1464
13	Condenser (765 mmfd.)	30-1069	53	Condenser (250 mmfd.)	30-1032
14	Condenser (.05 mfd.)	30-4020	54	Filament Choke	32-1930
15	Resistor (1,000,000 ohms)	33-510344	55	Vibrator Choke	32-1968
16	Third Padder (on tun. cond.)	31-1767	56	Condenser (.5 mfd.)	30-4047
17	Oscillator Transformer	32-1986	57	Vibrator	38-5036
18	Condenser (250 mmfd.)	30-1032	58	Condenser (.02 mfd.)	30-4039
19	Resistor (51,000 ohms)	33-351344	59	Resistor (300 ohms)	33-3130
20	Low Frequency Padder	31-6083	60	Resistor (200 ohms)	33-1210
21	Resistor (45,000 ohms)	33-345344	61	Condenser (1250 mmfd.)	5886
22	Padder (Pri. 1st I. F. Trans.)	31-1767	62	Power Transformer	32-7482
23	First I. F. Transformer	32-1928	63	Condenser (.01 mfd.)	30-4381
24	Padder (Sec. 1st I. F. Trans.)	31-1767	64	Filter Choke	32-7491
25	Padder (Pri. 2nd I. F. Trans.)	31-1767	65	Filter Condenser (4-4 mfd.)	32-7684
26	Second I. F. Transformer	32-1929	66	R. F. Choke	32-1932
27	Padder (Sec. 2nd I. F. Trans.)	31-1767	67	Condenser (250 mmfd.)	30-1032
28	Condenser (250 mmfd.)	30-1032	68	Four Prong Socket	27-6044
29	Resistor (25,000 ohms)	33-325344	69	Five Prong Socket	27-6035
30	Condenser (110 mmfd.)	30-1031	70	Six Prong Socket	27-6036
31	Volume Control	33-5148	71	Seven Prong Socket	27-6037
32	Condenser (.01 mfd.)	30-4124	72	Clamps (Speaker Mtg.)	29-3131
33	Resistor (32,000 ohms)	33-332433	73	Speaker Cable	41-3180
34	Resistor (20,000 ohms)	33-320334	74	Interference Condenser	30-4007
35	Condenser (.01 mfd.)	30-4124	75	Distributor Resistor	33-1196
36	Resistor (600 ohms)	33-1212	76	Control Assembly	42-5561
37	Resistor (1,000,000 ohms)	33-510344	77	Scale Assembly	42-5570
38	Resistor (250,000 ohms)	33-424344	78	Tuning and Volume Shaft	28-8495
39	Condenser (250 mmfd.)	30-1032	79	Pilot Lamp Assembly	38-7213
40	Condenser (.01 mfd.)	30-4145	80	Tuning and Volume Knob	27-4288
			81	Knob Base	28-3698

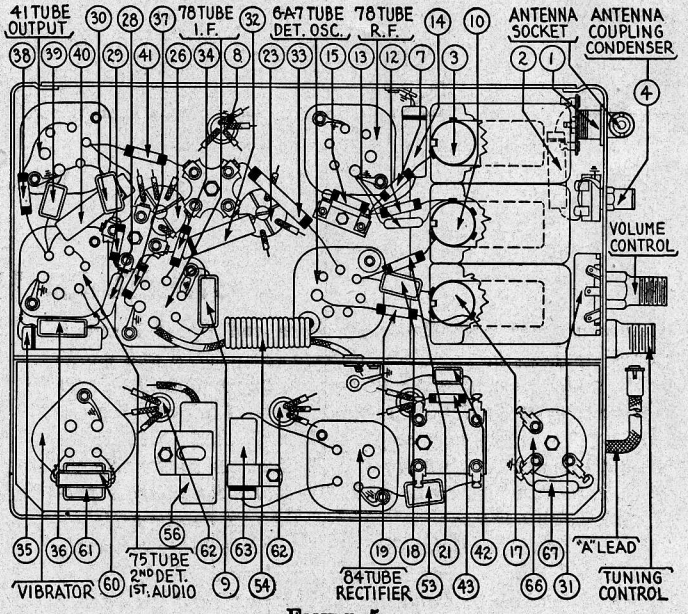


FIGURE 5

No.	Description	Part No.	No.	Description	Part No.
82	Tee Bolt (Receiver Mtg.)	28-6161	83	Fuse Insulator	27-7729
84	Nuts (Receiver Mtg.)	W518A	84	Connector Plug	29-6423
85	Fuse	7227	85	Connector Plug Insulator	27-8199

TRANSITONE AUTOMOBILE RADIO CORP.

PHILADELPHIA, PA.

INSTALLATION AND OPERATING INSTRUCTIONS

MODEL 816P

THE PHILCO AUTO RADIO MODEL 816P is Philco's newest automobile radio, designed especially for the 1936 Pontiac cars. It is a highly developed superheterodyne, single unit type Receiver, with all the modern features required in such a fine instrument.

The Receiver, speaker and full-wave Philco Vibrator are housed in a rugged, compact, fully shielded container which is designed for quick and easy installation on the dash of the 1936 Pontiac cars with two "Tee" bolts. The installation can be made easily above the steering column. The loud speaker faces the front seat, so that the improved Philco Electrodynamic Speaker delivers its full-toned reproduction toward the occupants of the car with utmost fidelity. The speaker panel is easily removed so that tubes and vibrator are accessible for service.

All tubes used are the latest Philco High Efficiency tubes, designed for automobile radio. Several of these tubes each perform the functions formerly requiring two or three tubes, thereby effecting greater tube economy, reducing the number of tubes necessary for satisfactory operation, and also reduc-

ing the amount of current taken from the car battery to a minimum.

Philco's system of automatic volume control is used, giving smooth, elastic control which counteracts fading while driving along under varying conditions and prevents blasting of local stations.

This new, all-electric Receiver is equipped with improved interference filters and especially designed shielding to eliminate motor interference making it possible to install it quickly and easily.

The special "customed" control unit matches the instrument board fittings and is designed for installation in the space provided for radio control in the instrument board of the 1936 Pontiac cars.

There are only two connections to make, one to the antenna, the other to the ammeter binding post.

Now, more than ever, **THE NEW PHILCO AUTO RADIO IS EASY TO INSTALL** and is a **PLEASURE TO OPERATE**.

GENERAL INSTRUCTIONS

ANTENNA—The 1936 Pontiac cars have an all steel turret top which makes it necessary to install the antenna under the running boards. The special Philco Under-car antenna (Part No. 45-1128 Kit) should be installed. The shielded antenna lead-in furnished with the kit must be brought along the frame on the left side of the car. Remove the left kick pad. From the underside of the left front fender, about three inches to the rear of the dash, a 3/4" hole will be found in the fender skirt close to the frame. Using a screw driver through this hole, remove the rubber plug from the hole in the shield at the top of the sill. Bring the lead-in through these holes to the Receiver. Replace the kick pad. Complete instructions for installing the antenna are furnished with the antenna kit.

RECEIVER—Install the Receiver on the left side of the dash above the steering column. A cardboard template is furnished so that the mounting bolt hole locations can be easily and accurately marked on the dash. The Receiver fastens to the dash with two "Tee" bolts. (See Figure 1). Drill two 7/16" holes and loosely assemble the "Tee" bolts. Install the Receiver on the dash, hooking the "Tee" bolts into the brackets on the Receiver. Tighten the Receiver securely in place.

When drilling the holes in the dash, care should be taken not to drill through any tubing or cables that are strapped against the dash in the motor compartment.

CONTROL UNIT—The slotted, red, light shield must be placed over the radio (bottom) switch lever and the opaque shield over the top lever.

Remove the ornamental cover plate from the center of the instrument board. This is fastened with two nuts on the rear of the plate. Place the face of the control against the back of the instrument board with the ends of the shafts

protruding through to the front. Next place the control bezel plate over the shafts and switch levers and against the front of the instrument board. Put the hex nuts on the threaded portion of the control shaft bushings and tighten securely.

Press the knobs over the chromium plated, knob base washers and then put the knobs on the shafts. Tighten the set screws in the knobs securely.

Seat the volume control shaft in the proper bushing on the Receiver housing (see Figure 2 and Figure 3) and tighten the shaft casing nut securely. Before coupling the tuning control shaft to the Receiver, turn the tuning control knob counter-clockwise to the mark below 55 on the scale. To couple the shaft, turn the knob counter-clockwise slowly until the shaft end is seated in the bushing and tighten the knurled casing nut securely with the fingers.

To adjust the setting of the control unit, after coupling the flexible shaft to the Receiver, turn the tuning control knob counter-clockwise as far as possible.

"A" BATTERY CONNECTIONS—Place the fuse and fuse insulator in the metal fuse housing in the control "A" lead. Couple this to the short Receiver lead and then connect the other "A" lead to the ammeter stud on the rear of the instrument board.

ANTENNA CONNECTION—Place the connector plug (supplied with the Receiver) in the antenna lead connector in the Receiver and then plug the antenna lead into the antenna lead connector. The location of the antenna connector is shown in Figure 2.

ANTENNA COUPLING ADJUSTMENT—Turn on the radio and tune in a *weak broadcast signal at approximately 75* on the control scale. The volume control should be turned

PHILCO TRANSITONE INSTALLATION AND OPERATING INSTRUCTIONS—MODEL 816P

well up. With a small screw driver, adjust the antenna coupling condenser for the maximum signal. The location of the coupling condenser is shown in Figure 2.

MOTOR INTERFERENCE SUPPRESSION—Remove the coil-to-distributor high tension lead from the distributor. Cut two inches from the end of the lead and screw on the distributor resistor. Then plug the distributor resistor into the distributor cap.

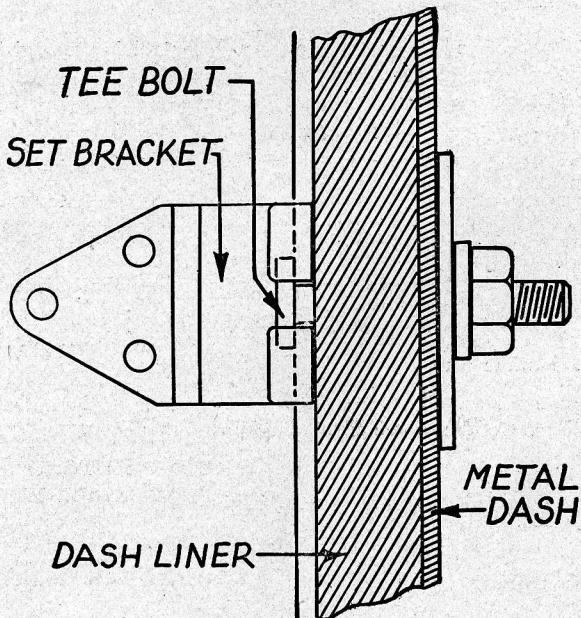


FIGURE 1

Two interference condensers are furnished — one must be connected to the "A" terminal on the generator. The condenser bracket must be securely fastened under the bearing cover screw on the end of the generator. In some cases it may be necessary to connect a condenser to the ammeter or ignition switch. The bracket should be fastened to the flange of the instrument board.

The copper braid supplied with the Receiver should be used to bond the torque tube to the "K" member on the frame of the car. Wrap the braid around the torque tube immediately behind the tunnel on the "KY" frame. Make two holes in the braid, soldering the edge of the holes to prevent fraying. A bolt, nut and washer can then be used to tighten the braid on the tube. The other end of the braid should be fastened with a bolt and nut to the "K" member. Scrape the paint from the torque tube and frame at the point where the braid is attached.

If the installation has been made carefully and the usual precautions observed, it should not be necessary to use spark plug resistors. In the event these operations do not reduce ignition disturbances to a satisfactory level, spark plug resistors should be installed. These can be obtained from the nearest Philco dealer or distributor.

OPERATION

The radio switch is in the center of the control below the dial opening. The "on" position is to the left and the "off" position to the right. The left knob controls the volume and the right knob the tuning. The switch in the center above the dial opening is not used in the Model 816P.

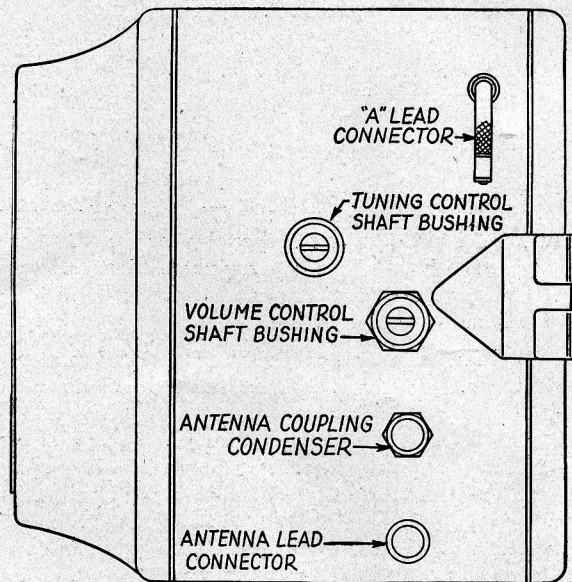


FIGURE 2

The numbers on the dial are channel numbers which, with the addition of "0" to the number correspond to the frequency in kilocycles. Adjust the volume to a suitable level and recheck the tuning. The Receiver must be tuned so that the maximum signal is obtained. Since the Receiver is extremely selective, it is of the utmost importance that the Receiver be tuned right on the station. Careless tuning off to one side even though the signal is still heard, results in very poor tone quality and very mushy reception.

Except on very weak signals, the automatic volume control maintains the same volume level while driving along without continually manipulating the manual volume control, cuts out external interference, counteracts fading and prevents blasting of local stations while tuning. It is virtually impossible, however, to maintain satisfactory reception while driving under bridges or in places which are totally shielded, known as dead spots.

MAINTENANCE AND SERVICE

The Receiver is fully covered by the Standard Warranty. (See next page). Read it carefully. Should this Receiver or the Receiver installation ever require attention, go immediately to your dealer or the service station that made the installation for efficient service.

The installation record should be filled out by your dealer at the time the installation is made. Keep the record for your protection in case you ever do require service.

REPLACEMENT TUBES— Use only PHILCO High Efficiency Tubes for replacements.

REPLACEMENT PARTS—Use only genuine PHILCO replacement parts. Don't jeopardize the performance of your Receiver by using inferior parts.

DO NOT ATTEMPT TO ADJUST THE VIBRATOR— If service is ever required, go to your dealer or to the nearest authorized Philco Auto Radio Service Station.

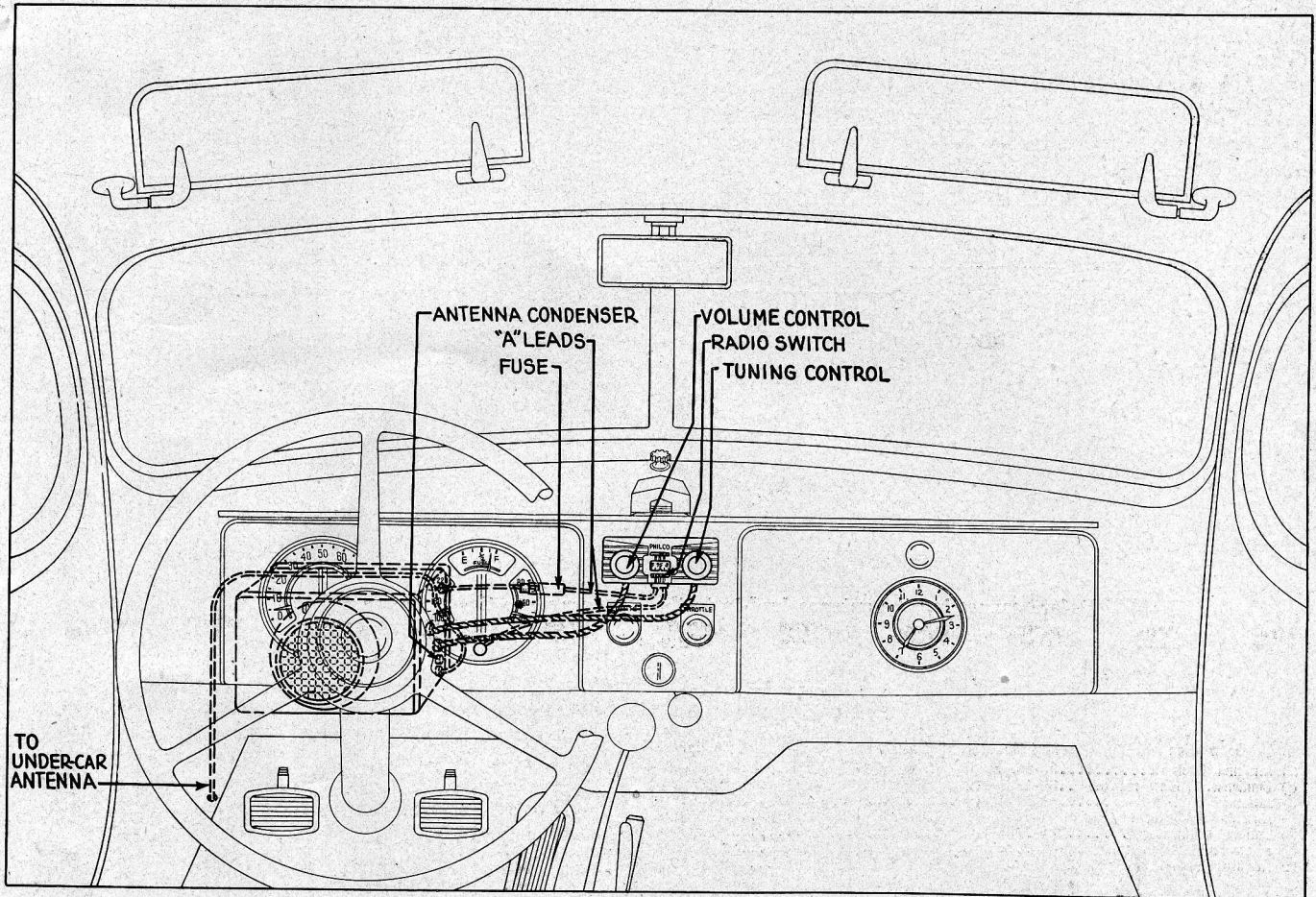


FIGURE 3

STANDARD WARRANTY

We warrant each new Radio Receiver and Speaker manufactured by us to be free from defects in material and workmanship under normal use and service, our obligation under this warranty being limited to making good at our factory or factory depots any part or parts thereof which shall, within ninety (90) days after delivery of such Receiver to the original purchaser, be returned to us with transportation charges prepaid, and which our examination shall disclose to our satisfaction to have been thus defective; this warranty being expressly in lieu of all other warranties expressed or implied, and of all other obligations or liabilities on our part, and we neither

assume nor authorize any representative or other person to assume for us any other liability in connection with the sale of our Receivers or Speakers.

This warranty shall not apply to any Receiver or Speaker which shall have been repaired or altered outside of our factory or factory depots in any way so as, in our judgment, to affect its stability or reliability, nor which has been subject to misuse, negligence or accident, nor which has had the serial number altered, effaced or removed. Neither shall this warranty apply to any Receiver or Speaker which has been connected otherwise than in accordance with the instructions furnished by us.

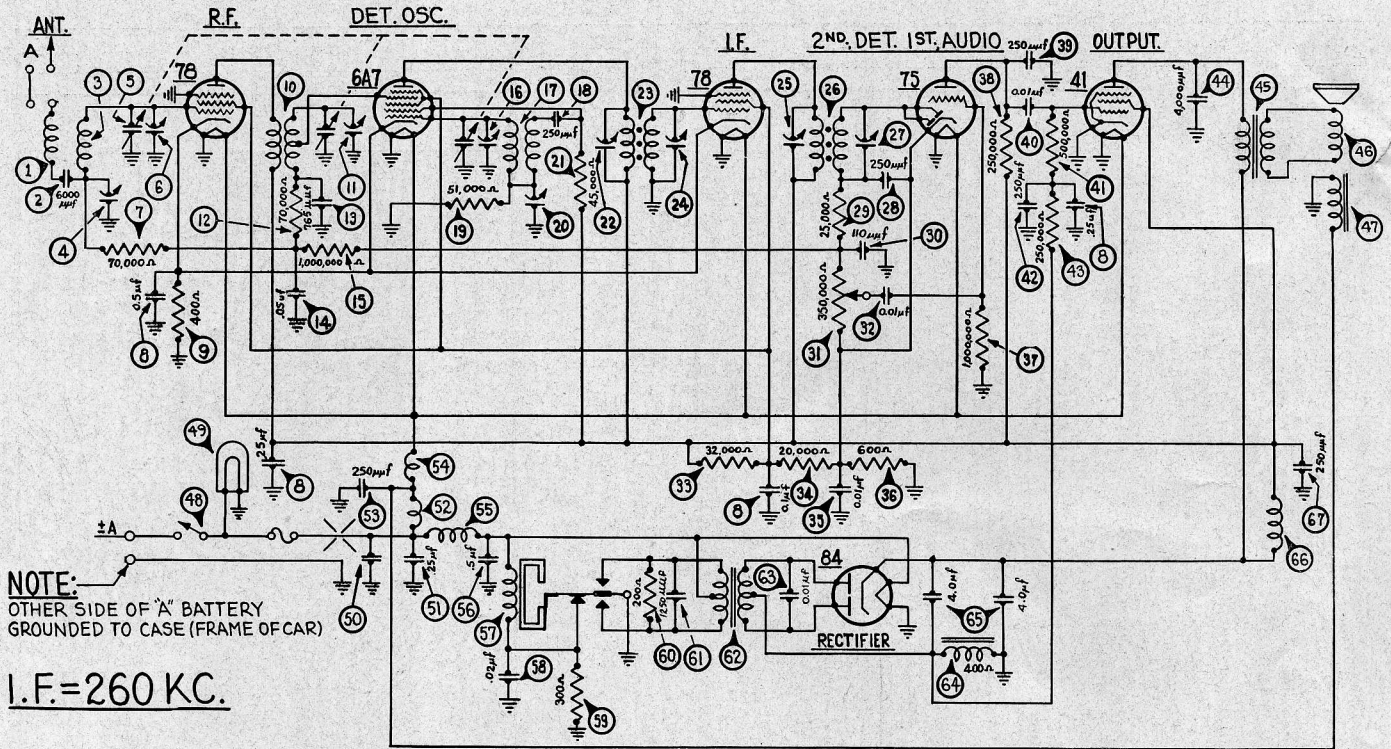
Model 816P — Installation Registration

Receiver Serial No. Date

Installed by Make and Year of Car

Owner's Name Owner's Address

KEEP THIS INSTALLATION RECORD. IT IS IMPORTANT IN CASE YOU EVER REQUIRE SERVICE.



Before connecting the antenna lead-in to the Receiver place the connector plug in "A".

FIGURE 4

MODEL 816P — PARTS LIST

No.	Description	Part No.	Description	Part No.	
1	Antenna Choke	38-7516	41	Resistor (500,000 ohms)	33-449344
2	Condenser (6000 mmfd.)	30-4125	42	Condenser (250 mmfd.)	30-1032
3	Antenna Transformer	32-1984	43	Resistor (250,000 ohms)	33-424344
4	Antenna Coupling Condenser	31-6082	44	Condenser (4000 mmfd.)	30-4185
5	Tuning Condenser	31-1767	45	Output Transformer	32-7495
6	First Padder (on tun. cond.)	30-1069	46	Cone and Voice Coil	36-3526
7	Resistor (70,000 ohms)	33-370334	47	Field Coil Assembly	32-9236
8	Condenser	30-4374	48	"On" and "Off" Switch	42-1160
9	Resistor (400 ohms)	33-1211	49	Pilot Lamp	34-2039
10	R. F. Transformer	32-1985	50	Condenser (450 mmfd.)	31-6065
11	Second Padder (on tun. cond.)	30-1069	51	Condenser (.25 mfd.)	30-4146
12	Resistor (70,000 ohms)	33-370334	52	"A" Choke	32-1464
13	Condenser (765 mmfd.)	30-1069	53	Condenser (250 mmfd.)	30-1032
14	Condenser (.05 mfd.)	30-4020	54	Filament Choke	32-1930
15	Resistor (1,000,000 ohms)	33-510344	55	Vibrator Choke	32-1968
16	Third Padder (on tun. cond.)	30-4020	56	Condenser (.5 mfd.)	30-4047
17	Oscillator Transformer	32-1986	57	Vibrator	38-5036
18	Condenser (250 mmfd.)	30-1032	58	Condenser (.02 mfd.)	30-4039
19	Resistor (51,000 ohms)	33-351344	59	Resistor (300 ohms)	33-3130
20	Low Frequency Padder	31-6083	60	Resistor (200 ohms)	33-1210
21	Resistor (45,000 ohms)	33-345344	61	Condenser (1250 mmfd.)	5886
22	Padder (Pri. 1st I. F. Trans.)	32-1928	62	Power Transformer	32-7482
23	First I. F. Transformer	32-1928	63	Condenser (.01 mfd.)	30-4381
24	Padder (Sec. 1st I. F. Trans.)	30-4124	64	Filter Choke	32-7491
25	Padder (Pri. 2nd I. F. Trans.)	32-1929	65	Filter Condenser (4-4 mfd.)	38-7684
26	Second I. F. Transformer	32-1929	66	R. F. Choke	32-1932
27	Padder (Sec. 2nd I. F. Trans.)	30-4124	67	Condenser (250 mmfd.)	30-1032
28	Condenser (250 mmfd.)	30-1032	68	Four Prong Socket	27-6044
29	Resistor (25,000 ohms)	33-325344	69	Five Prong Socket	27-6035
30	Condenser (110 mmfd.)	30-1031	70	Six Prong Socket	27-6036
31	Volume Control (350,000 ohms)	33-5148	71	Seven Prong Socket	27-6037
32	Condenser (.01 mfd.)	30-4124	72	Clamps (Speaker Mtg.)	29-3181
33	Resistor (800 ohms)	33-1212	73	Speaker Cable	41-3180
34	Resistor (1,000,000 ohms)	33-510344	74	Control Assembly	42-5562
35	Resistor (250,000 ohms)	33-424344	75	Scale Assembly	42-5540
36	Condenser (250 mmfd.)	30-1032	76	Interference Condenser (1/2 mfd.)	30-4007
37	Condenser (.01 mfd.)	30-4145	77	Distributor Resistor	33-1196
38	Resistor (600 ohms)	33-1212	78	Tuning and Volume Shaft	28-8495
39	Resistor (1,000,000 ohms)	33-510344	79	Tuning and Volume Knob	27-4299
40	Resistor (250,000 ohms)	33-424344	80	Pilot Lamp Assembly	38-7213
41	Condenser (250 mmfd.)	30-1032	81	Tee Bolt (Receiver Mtg.)	28-6161
42	Condenser (.01 mfd.)	30-4145			

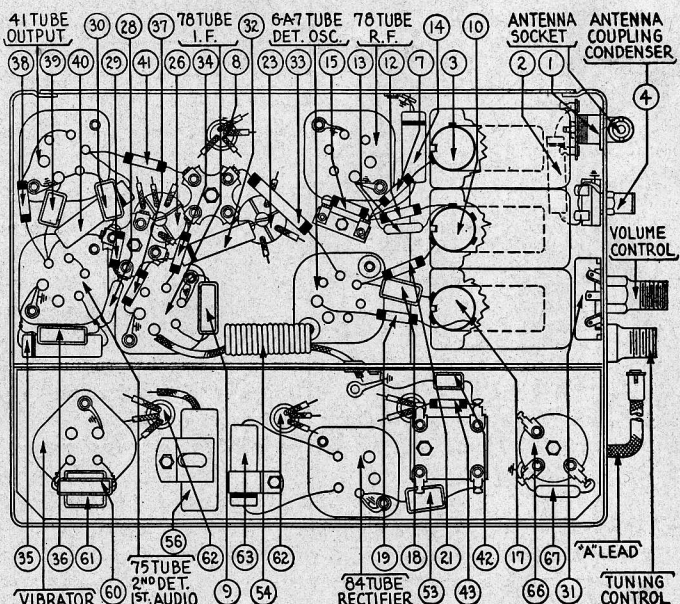


FIGURE 5

TRANSITONE AUTOMOBILE RADIO CORP.

PHILADELPHIA, PA.