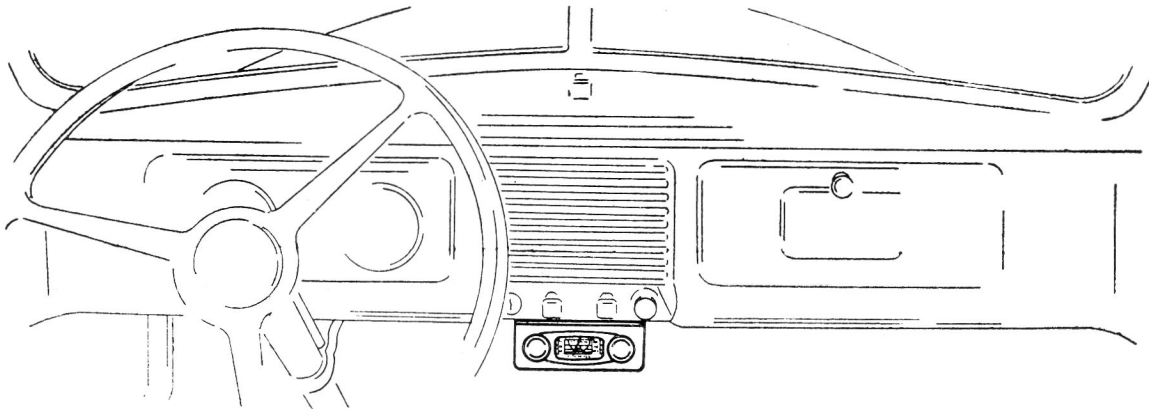


PHILCO AUTO RADIO

MODEL 810

- | | |
|----------------------------|--------------------------|
| ★ 6 TUBES | ★ ILLUMINATED DIAL |
| ★ DYNAMIC SPEAKER | ★ INTERFERENCE FILTERING |
| ★ AUTOMATIC VOLUME CONTROL | ★ TUNED AERIAL CIRCUIT |
| ★ FULL SENSITIVITY | ★ NEW LOKTAL TUBES |

CAN BE INSTALLED IN ANY AUTOMOBILE



A TYPICAL INSTALLATION

Easy to Install
Easy to Operate
Low in Price
Big in Performance

OPERATION

To Turn Radio "On"—

Turn the left hand knob to the right. The first range of motion operates the "ON-OFF" switch, from that point on the control acts as a Manual Volume Control.

To Tune In Radio Programs—

After the Radio has warmed up for a few seconds, the broadcast programs may be tuned in by turning the right hand knob. The program must be tuned in accurately for the best reception.

To Adjust The Volume—

After the desired program has been tuned in, adjust the volume to a suitable level. Turn the left hand knob clockwise to increase the volume and counter clockwise to decrease the volume.

To Turn Radio "Off"—

Turn the left hand knob to the left until a slight click is heard and the dial light goes out.

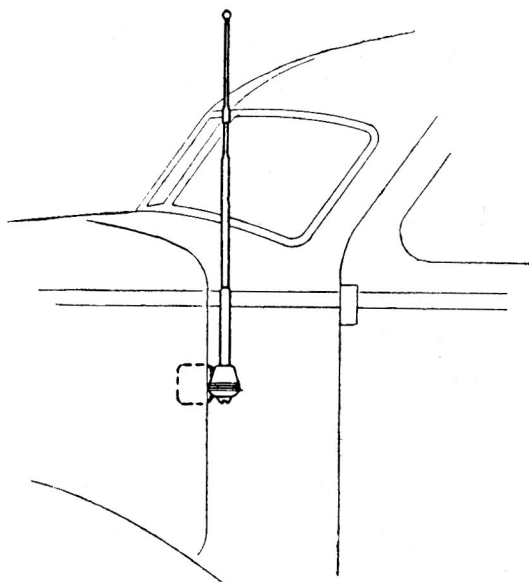


FIGURE 2
INSTALLATION OF THREE-WAY MOUNTING ANTENNA

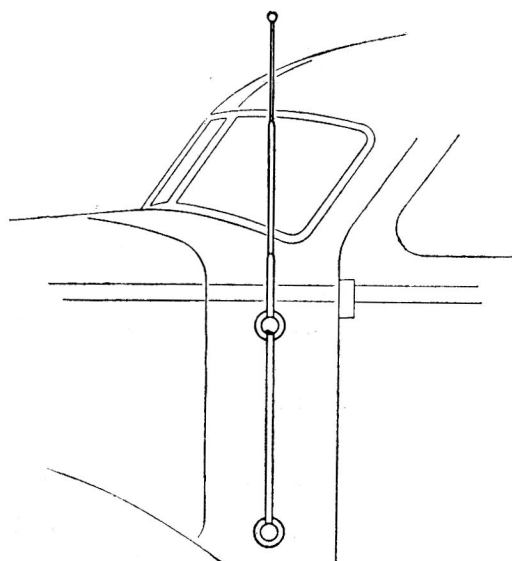


FIGURE 1
INSTALLATION OF COWL ANTENNA

INSTALL PHILCO COWL AERIAL

AERIAL—The model 810 has been designed for use with the Philco Cowl Aerial. Use the standard three piece, telescopic cowl aerial, Part No. 91-0219 or the extra long cowl aerial, Part No. 91-0220, or the Duoflex cowl aerial, Part No. 91-0217 or the three way mounting cowl aerial, Part No. 91-0216. The aerial should be installed before proceeding with the Radio installation. Complete aerial installation instructions are packed with each aerial.

HOW TO INSTALL THE MODEL 810

RADIO—Determine the best possible location for the Radio along the lower edge of the instrument board. Use the front mounting bracket as a template and then drill two 5/16" holes in the instrument board flange.

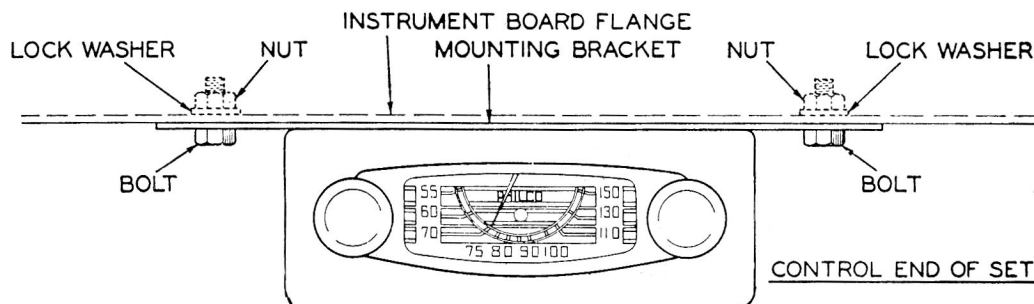


FIGURE 3
FRONT VIEW OF INSTALLATION

Fasten the bracket to the top of the Radio housing with two screws, and then attach the dash mounting bracket to the stud on the back of the Radio. Hold the radio in place and bend the dash bracket to fit the dash. Mark the location for the mounting bolt hole in the dash, and then drill a $\frac{5}{16}$ " hole. Fasten the front mounting bracket to the flange of the instrument board, and bolt the dash mounting bracket securely to the dash. (See Figures 3 and 4).

CONNECTIONS—Plug the aerial lead-in into the connector on the Radio. Place the fuse in the fuse housing on the "A" lead and connect to the short lead on the back of the Radio. Then connect the other end of the "A" lead to the ammeter stud.

AERIAL COMPENSATOR — There is an aerial compensator on the lower left side of the radio housing, near the front, which is covered by a removable snap button. The aerial must be installed on the car and connected to the radio. The rod should be extended to approximately two-thirds of its extreme height. With the radio turned on, tune in a weak signal between 130 and 150 on the dial scale. The volume control should be turned well up. With a small screw driver adjust the aerial compensator for maximum signal.

HOW TO APPLY MOTOR INTERFERENCE SUPPRESSION

Remove the coil-to-distributor high tension lead from the distributor. Cut the high-tension lead two inches from the distributor end and screw the distributor resistor on the coil lead. (See Figure 5). Then screw on the short length and plug the cable into the distributor cap. Cars equipped with two ignition coils require two distributor resistors. Extra resistors can be obtained from the nearest Philco Auto Radio dealer or distributor.

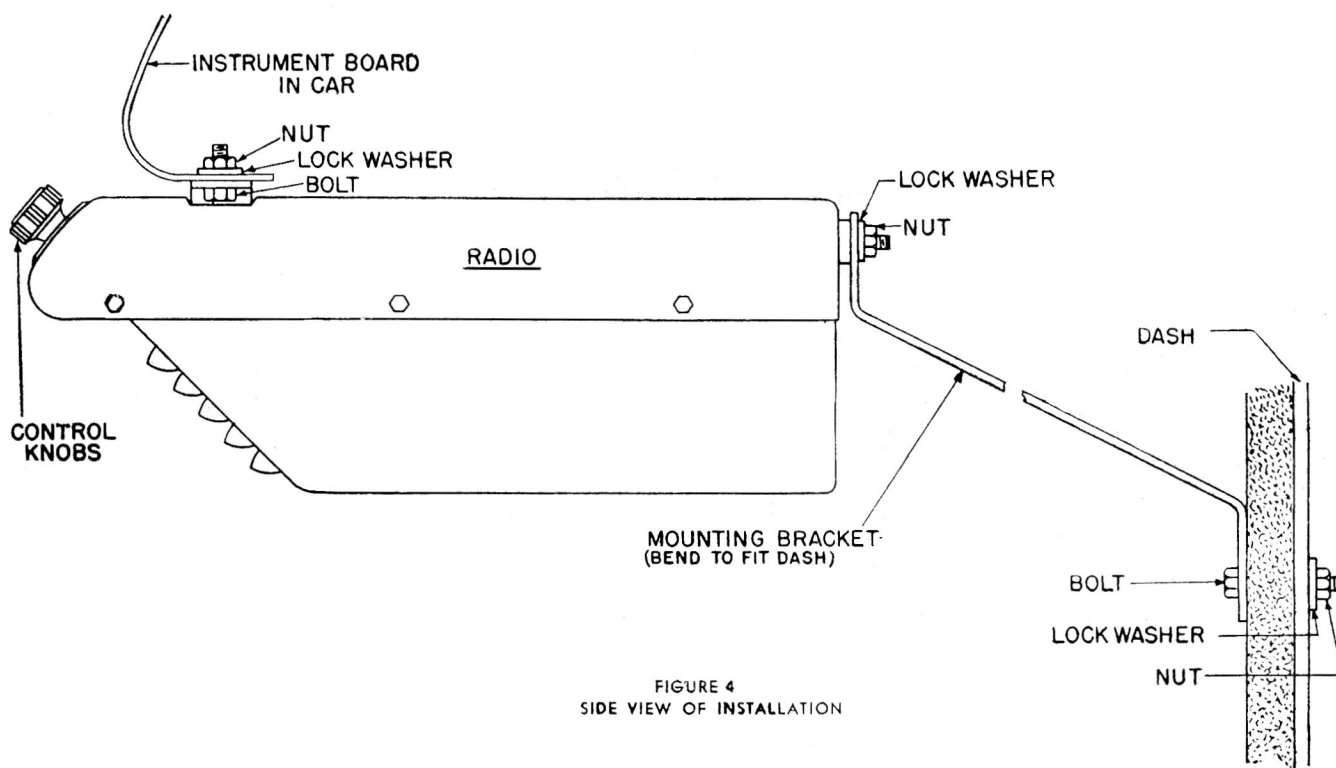


FIGURE 4
SIDE VIEW OF INSTALLATION

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 (See Figure 6), 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 ignition switch. 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.

In some particularly stubborn cases of motor interference, 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.



FIGURE 5
Screw the Distributor Resistor
on the Coil Lead

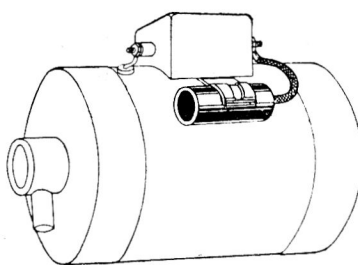


FIGURE 6
Connect the Interference Condenser
to the Generator Cut-Out

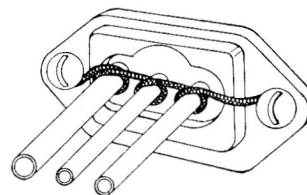


FIGURE 7
Ground the Tubing and Rods
coming thru the Dash

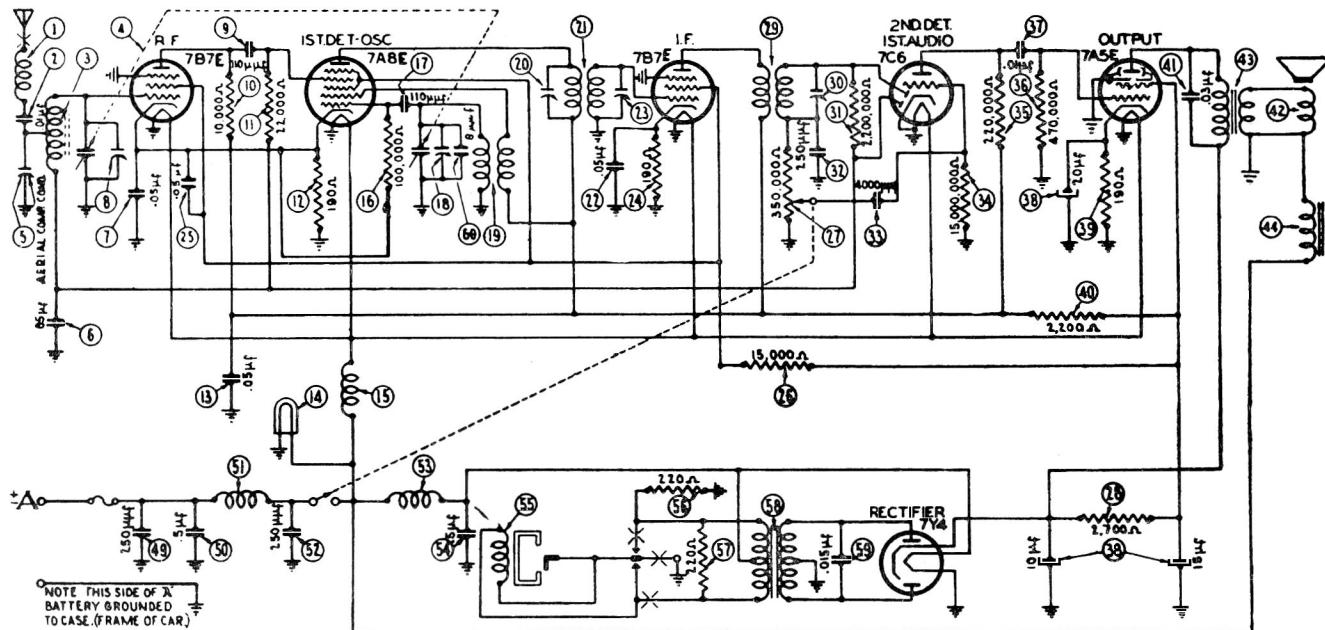
In other cases it may be necessary to ground the tubing and rods coming thru the dash in order to reduce the interference. Clean them with emery cloth and spot solder the braid, fastening the end under a convenient screw. (See Figure 7.) When an under-car aerial is used, it may be necessary to ground 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.

On cars equipped with a voltage regulator in place of the generator cut-out, it will be necessary to use the condenser formerly connected to the generator on the voltage regulator. This should be connected to the battery terminal of the voltage regulator and mounted under one of the mounting screws holding the voltage regulator in place.

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

MODEL 810 SCHEMATIC

I.F. - 460 K. C.



PARTS LIST

No.	Description	Part No.	No.	Description	Part No.												
(1)	Antenna Choke	65-0168	(34)	Resistor (15,000,000 ohms)	33-615254	No.	Description	Part No.	No.	Description	Part No.						
(2)	Condenser (.01 mfd.)	61-0114	(35)	Resistor (220,000 ohms)	33-422254		Window Crystal	55-0501		Nut (Radio Mtg.)							
(3)	Antenna Transformer	65-0196	(36)	Resistor (470,000 ohms)	33-447254		Back Strap	28-5998FA3		(back)	W98FA3						
(4)	Tuning Condenser	63-0028	(37)	Condenser (.01 mfd.)	61-0114		(Radio Mtg.)			Bolt (Radio Mtg.)							
(5)	Aerial Compensator	63-0030	(38)	Filter Condenser	61-0068		Mounting Bracket	57-0812FC45		(back)	W1318FA3						
(6)	Condenser (.05 mfd.)	61-0101	(39)	Resistor (190 ohms)	33-119336		(Radio Mtg.)			Nut (Radio Mtg.)							
(7)	Condenser (.05 mfd.)	61-0111	(40)	Resistor (2200 ohms)	33-222354		Interference Condenser	30-4007		(front)	W1532FA3						
(8)	First Padder (on Tun. Cond.)		(41)	Condenser (.03 mfd.)	61-0119		Distributor Resistor	33-1196		Screw (Radio Mtg.)							
(9)	Cond. (100 mmfd.)	60-110157	(42)	Cone and Voice Coil						(front)	97-0082FA3						
(10)	Resist. (10,000 ohms)	33-310254		(For 73-0027-1)	91-0076												
(11)	Resistor (22,000 ohms)	33-322254		(For 73-0027-2)	91-0077												
(12)	Resistor (190 ohms)	33-119336	(43)	Output Transformer	65-0258												
(13)	Condenser (.05 mfd.)	61-0111	(44)	Field Coil	not replaceable												
(14)	Pilot Lamp	69-0004	(49)	Cond. (250 mmfd.)	60-125157												
(15)	Filament Choke	65-0158	(50)	Condenser (.5 mfd.)	61-0106												
(16)	Resistor (100,000 ohms)	33-410254	(51)	"A" Choke	32-2477												
(17)	Cond. (100 mmfd.)	60-110157	(52)	Cond. (250 mmfd.)	60-125157												
(18)	Second Padder (on Tun. Con.)		(53)	Vibrator Choke	65-0204												
(19)	Oscillator Transformer	65-0194	(54)	Condenser (.5 mfd.)	61-0106												
(20)	Padder (Pri. 1st I.F. Transf.)		(55)	Vibrator	83-0025												
(21)	First I.F. Transformer	65-0191	(56)	Resistor (220 ohms)	33-122336												
(22)	Condenser (.05 mfd.)	61-0111	(57)	Resistor (220 ohms)	33-122336												
(23)	Padder (Sec. 1st I.F. Trans.)		(58)	Power Transformer	65-0185												
(24)	Resistor (190 ohms)	33-119336	(59)	Condenser (.015 mfd.)	61-0138												
(25)	Condenser (.05 mfd.)	61-0111	(60)	Condenser (8 mmfd.)	60-008337												
(26)	Resist. (15,000 ohms)	33-315354															
(27)	Vol. Control (350,000 ohms)																
	On-Off Switch	67-0020															
(28)	Resistor (2700 ohms)	33-227434															
(29)	Second I.F. Trans.	65-0192															
(30)	Padder (Sec. 2nd I.F. Trans.)																
(31)	Resistor (2,200,000 ohms)	33-522254															
(32)	Cond. (250 mmfd.)	60-125157															
(33)	Cond. (4000 mmfd.)	61-0128															

