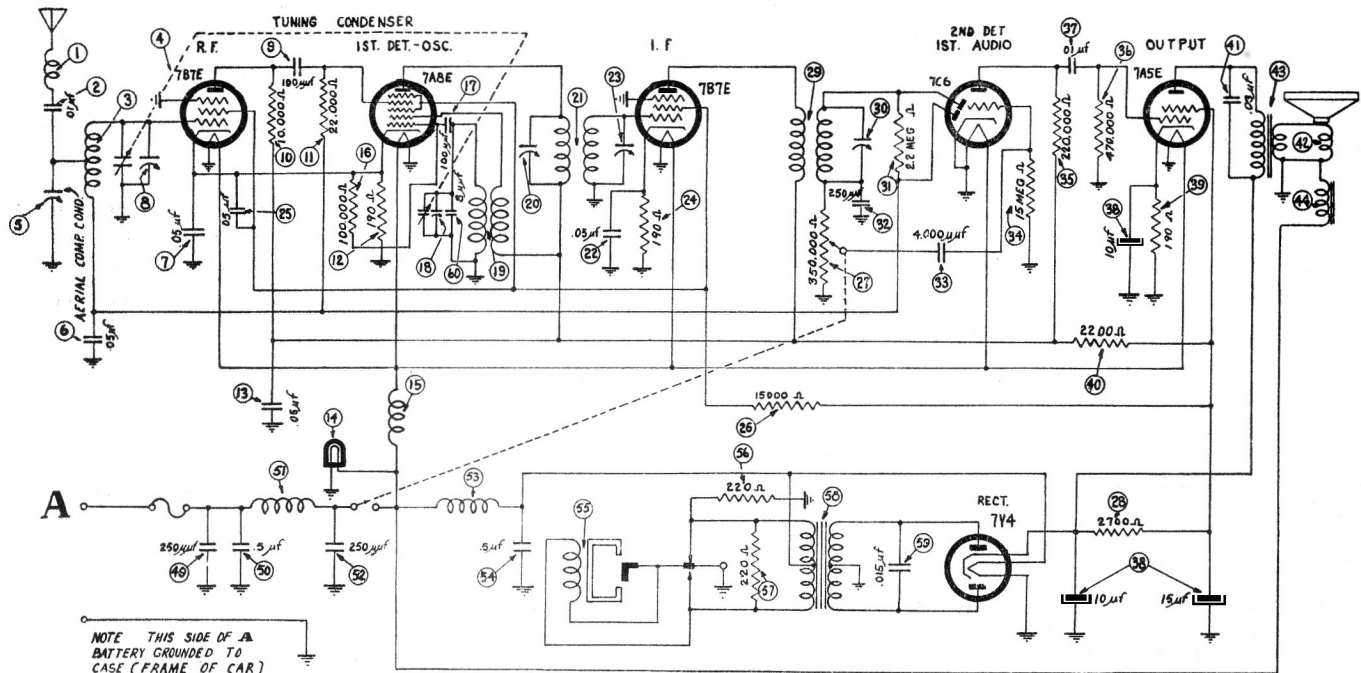




PHILCO AUTO RADIO

PHILCO MODEL 810

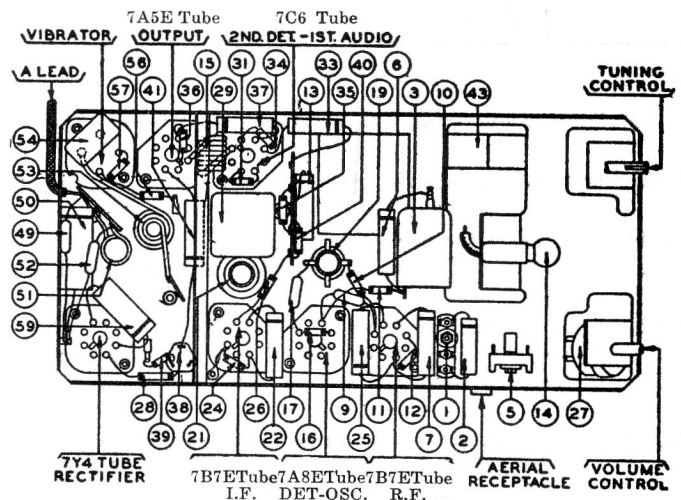


MODEL 810 SCHEMATIC

IF = 460 KC

PARTS LIST

Schem. No.	Description	Part No.	Schem. No.	Description	Part No.
1	Antenna Choke	65-0163	30	Padder (Sec. 2nd I.F. Trans.)	
2	Tub. Cond. (.01 mfd., 200v)	61-0114	31	Res. (2.2 meg., 1/3 watt)	33-522244
3	Antenna Transformer	65-0196	32	Mica Cond. (250 mmfd.)	60-125157
4	Tuning Condenser	63-0028	33	Tub. Cond. (.004 mfd., 200 v)	61-0128
5	Aerial Compensator	63-0030	34	Res. (15 meg., 1/3 w)	33-615244
6	Tub. Cond. (.05 mfd., 200v)	61-0101	35	Res. (220,000 ohms, 1/3 w)	33-422244
7	Tub. Cond. (.05 mfd., 200v)	61-0111	36	Res. (470,000 ohms, 1/3 w)	33-447244
8	First Padder (on tuning Cond.)		37	Tub. Cond. (.01 mfd., 200 v)	61-0114
9	Mica Cond. (100 mmfd)	60-110157	38	Electrolytic Condenser (10-15-20 mfd.)	61-0068
10	Res. (10,000 ohms, 1/3 w)	33-310244	39	Res. (190 ohms, 1/2 watt)	33-119336
11	Res. (22,000 ohms, 1/3 w)	33-322244	40	Res. (2200 ohms, 1/2 w)	33-222344
12	Res. (190 ohms, 1/2 watt)	33-119336	41	Tub. Cond. (.03 mfd., 600 v)	61-0119
13	Tub. Cond. (.05 mfd., 200v)	61-0111	42	Cone & Voice Coil (For 73-0027-1)	91-0076
14	Pilot Lamp	69-0004		(For 73-0027-2)	91-0077
15	Filament Choke	65-0158	43	Output Transformer	32-8119
16	Res. (100,000 ohms, 1/3 w)	33-410244	44	Field Coil (not replaceable)	
17	Mica Cond. (100 mmfd.)	60-110157	49	Mica Cond. (250 mmfd.)	60-125157
18	Second Padder (on Tun. Cond.)		50	Tub. Cond. (.5 mfd., 100 v)	61-0106
19	Oscillator Transformer	65-0194	51	"A" Choke	32-2477
20	Padder (Pri. 1st I.F. Transf.)		52	Mica Cond. (250 mmfd.)	60-125157
21	1st I.F. Transformer	65-0191	53	Vibrator Choke	65-0204
22	Tub. Cond. (.05 mfd., 200v)	61-0111	54	Tub. Cond. (.5 mfd., 100 v)	61-0106
23	Padder (Sec. 1st I.F. Transf.)		55	Vibrator	83-0025
24	Res. (190 ohms, 1/2 watt)	33-119336	56	Res. (220 ohms, 1/2 watt)	33-122336
25	Tub. Cond. (.05 mfd., 200v)	61-0111	57	Res. (220 ohms, 1/2 watt)	33-122336
26	Res. (15,000 ohms, 1/2 w)	33-315344	58	Power Transformer	65-0185
27	Vol. Con. (350,000 ohms) and On-Off switch	67-0020	59	Tub. Cond. (.015 mfd. 1000 v)	61-0138
28	Res. (2700 ohms, 1 watt)	33-227444	60	Mica Cond. (8 mmfd.)	60-008337
29	2nd I.F. Transformer	65-0192			



Schem. No.	Description	Part No.	Schem. No.	Description	Part No.
	Drive Cord (16 1/2")	55-0588		Tuning & Volume Knob	55-0547
	Drive Cord (5 3/4")	55-0589		Window Crystal	55-0501
	Drive Cord (13 3/4")	55-0652		Back Strap (Radio Mtg.)	28-5998FA3
	Drive Cord (7 3/8")	55-0653		Mtg. Brack. (Radio Mtg.)	57-0812FCA5
	Tuning Shaft	57-0802FA3		Interference Condenser	30-4007
	Speaker	73-0027		Distributor Resistor	33-1196
	Tube Side Cover	318-1964		Nut (Radio Mtg.)	W98FA3
	Wiring Side Cover	318-1963		Bolt (Radio Mtg.)	W1318FA3
	Pointer	57-1421		Nut (Radio Mtg.)	W1532FA3
	Dial	77-0526		Screw (Radio Mtg.)	97-0028FA3

MODEL 810 ADJUSTMENTS

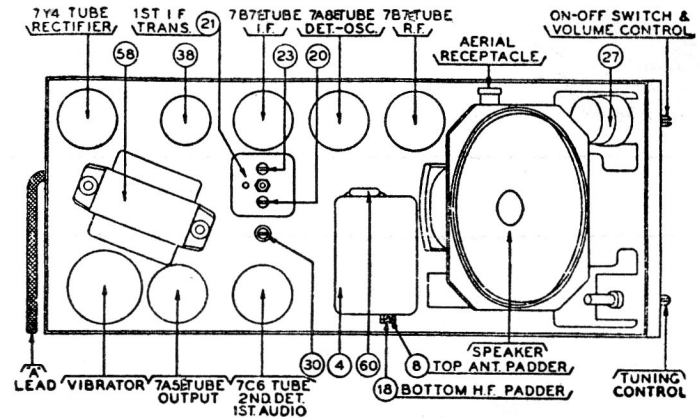
All padding adjustments are carefully made at the factory and ordinarily no readjustments are necessary. However, when readjustments are required, the procedure given below must be followed in detail.

EQUIPMENT—Fully charged heavy duty storage battery or 6 volt power pack, 177 Philco Signal generator, 028 Philco Vacuum tube voltmeter and set tester or audio output meter, 45-2610 Padding screw driver.

GENERAL—VACUUM TUBE VOLTMETER. The model 028 Vacuum tube voltmeter is an extremely sensitive and accurate test instrument and is recommended for use when aligning and adjusting auto radios. Connect the negative (—) terminal of the Vacuum Tube Voltmeter to the high side (ungrounded side) of the volume control. Connect the positive (+) terminal to the radio housing.

AUDIO OUTPUT METER. If an audio output meter is used, connect the leads across the voice coil of the speaker. Use the 0-30 volt scale.

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 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.

OPERATIONS	SIGNAL GENERATOR		DUMMY CAPACITY	SPECIAL INSTRUCTIONS	ADJUST PADDER
	FREQUENCY	CONNECTION			
1		ADJUST THE AERIAL COMPENSATOR (5) TWO TURNS FROM TIGHT			
2	460 K.C.	To Aerial Receptacle on Radio	.1 mfd.	Note 1	(30) (23) (20) (30) (23) (20)
3	1580 K.C.	To Aerial Receptacle on Radio	30 mmfd. See Note 2	Note 1	(18)
4	1400 K.C.	To Aerial Receptacle on Radio	30 mmfd. See Note 2	Set tuning condenser at 1400 K.C.	(8) Note 3
5	1200 to 1400 K.C.	Note 4	Note 4	Note 4	(5)

Make all adjustments for maximum reading on the output meter.

NOTE 1—Turn the condenser rotor plates completely out of mesh as far as they will go.

NOTE 2—Connect the aerial lead, Part No. 41-3191, to the aerial receptacle in the radio. Connect a 30 mmfd. Condenser in series between the signal generator and the aerial lead.

NOTE 3—When the aerial stage adjustment is made with the Radio installed in the car, the Radio aerial lead must be connected to the car aerial in the usual manner. Connect the signal generator output lead to a wire placed near the car aerial but not connected to it.

NOTE 4—When installing the radio in the car, follow the instructions carefully. Tune in a weak broadcast signal between 1200 and 1400 K.C. on the control scale. Remove the plug button on the side of the radio and adjust the aerial compensator (5) for maximum signal.

PHILCO PRODUCTS LIMITED

Parts and Service Division
Toronto, Ontario