

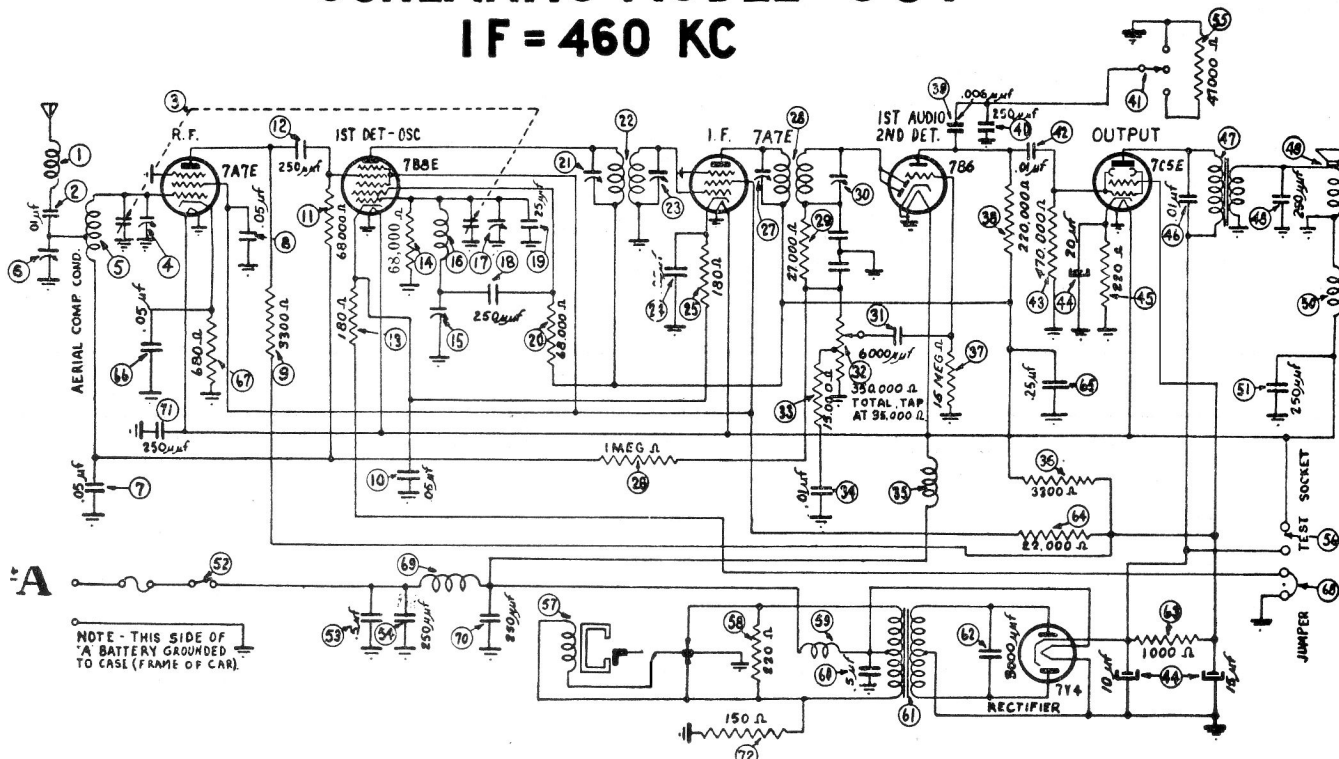


PHILCO AUTO RADIO

PHILCO MODEL 807

SCHEMATIC MODEL 807

IF = 460 KC



PARTS LIST — 807

Schem. No.	Description	Part No.	Schem. No.	Description	Part No.
1	Antenna Choke	12-0045	44	Elec. Cond. (10-15-20 mfd.)	61-0089
2	Tub. Cond. (.01 mfd. 200v)	61-0114	45	Res. (220 ohms, 1 watt)	33-122436
3	Tuning Condenser	63-0047	46	Tub. Con. (.01 mfd. 1000v)	61-0124
4	Ant. Padder (Part of 3)		47	Output Transformer	65-0408
5	Antenna Transformer	65-0323	48	Mica Cond. (250 mmfd)	60-125157
6	Aerial Compensator	77-0545	49	Replacement Cone (73-0058 Speaker)	91-0086
7	Tub. Cond. (.05 mfd. 200v)	61-0101	50	Field Coil	(Not Replaceable)
8	Tub. Cond. (.05 mfd. 200v)	61-0101	51	Mica Cond. (250 mmfd.)	60-110157
9	Res. (3300 ohms, 1/2 w)	33-233354	52	On-Off Switch	85-0112
10	Tub. Cond. (.05 mfd. 200v)	61-0101	53	Tub. Cond. (.5 mfd, 100v)	61-0106
11	Res. (68,000 ohms, 1/3w)	33-368254	54	Mica Cond. (250 mmfd.)	60-125157
12	Mica Cond. (250 mmfd.)	60-110157	55	Res. (47,000 ohms, 1/3 w)	33-347254
13	Res. (180 ohms, 1/2 watt)	33-118336	56	Test Socket	55-1118
14	Res. (68,000 ohms, 1/3w)	33-368254	57	Vibrator	83-0025
15	Low Frequency Padder	63-0048	58	Res. (220 ohms, 1/2 watt)	33-122354
16	Oscillator Transformer	65-0420	59	Vibrator Choke	65-0433
17	High Frequency Padder (Part of 3)		60	Tub. Cond. (.5 mfd, 100v)	61-0137
18	Mica Cond. (250 mmfd.)	60-110157	61	Power Transformer	65-0318
19	Mica Cond. (25 mmfd.)	60-025337	62	Tub. Cond. (.003 mfd, 1500v)	61-0115
20	Res. (68,000 ohms, 1/2w)	33-368354	63	Res. (1000 ohms, 1 watt)	33-210434
21	Padder (Pri. 1st I.F. Trans.)		64	Res. (22,000 ohms, 1w)	33-322454
22	First I.F. Transformer	65-0319	65	Tub. Cond. (.25 mfd, 400v)	61-0125
23	Padder (Sec. 1st I.F. Trans.)		66	Tub. Cond. (.05 mfd, 200v)	61-0111
24	Tub. Cond. (.05 mfd. 200v.)	61-0101	67	Res. (680 ohms, 1/2 watt)	33-163336
25	Res. (180 ohms, 1/2 watt)	33-118336	68	Test Link	57-1121
26	Res. (1 megohm, 1/3 w)	33-510254	69	"A" Choke	32-1644
27	Padder (Pri. 2nd I.F. Trans.)		70	Mica Cond. (250 mmfd.)	60-125157
28	Second I.F. Transformer	65-0320	71	Mica Cond. (250 mmfd.)	60-125157
29	Resistor (27,000 ohms)	33-327154	72	Res. (150 ohms, 1/2 watt)	33-115354
30	Padder (Sec. 2nd I.F. Trans.)			Set housing Ass.	77-0695FC61
31	Tub. Cond. (.006 mfd. 400v)	61-0155		Dial	55-1194
32	Vol. Control (350,000 ohms)	67-0032		Drive Cord	55-0935
33	Res. (15,000 ohms, 1/3w)	33-315254		Drive Cord Spring	57-1425
34	Tub. Cond. (.01 mfd.)	61-0114		Tuning Shaft	57-1385
35	Filament Choke	32-2729		Volume Shaft	57-1384
36	Resistor (3300 ohms, 1w)	33-233454		Pushbutton Shaft	57-1386
37	Res. (15 megohms, 1/3w)	33-615254		Pointer	57-1889PCP
38	Res. (220,000 ohms, 1/2w)	33-422254		Tone Control Lead	95-0135
39	Tub. Cond. (.006 mfd, 400v)	61-0155		Hook Bolt (Rec. Mtg.)	57-1340FA3
40	Mica Cond. (250 mmfd.)	60-125157		Lockwasher	
41	Tone Con. Sw. Wafer Ass.	77-0733		(Receiver Mtg.)	W1668FE7
42	Tub. Cond. (.01 mfd, 600v)	61-0120		Nut (Receiver Mtg.)	W98FA3
43	Res. (470,000 ohms, 1/2w)	33-447254			

Schem. No.	Description	Part No.	Schem. No.	Description	Part No.
	Interference Condenser	30-4007		Side Brackets	57-1461
	Distributor Resistor	30-1196		"U" Bracket	57-2162
	Speaker Socket	55-0443		Baffle	55-0957
	Tube Socket	55-0575		Speaker	73-0058
	Vibrator Socket	27-6153		Carriage Bolt	97-0061
	Nut (Volume Control)	W684FA3		Carriage Bolt Nut	W98FA3
	Speaker Kit (Complete)	81-0358		Screw (Speaker Mtg.)	W1582FA4
	Gasket and Screen	55-1320		Nut (Speaker Mtg.)	W124FA3
	Pilot Lamp	69-0004			

MODEL 807 — 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.

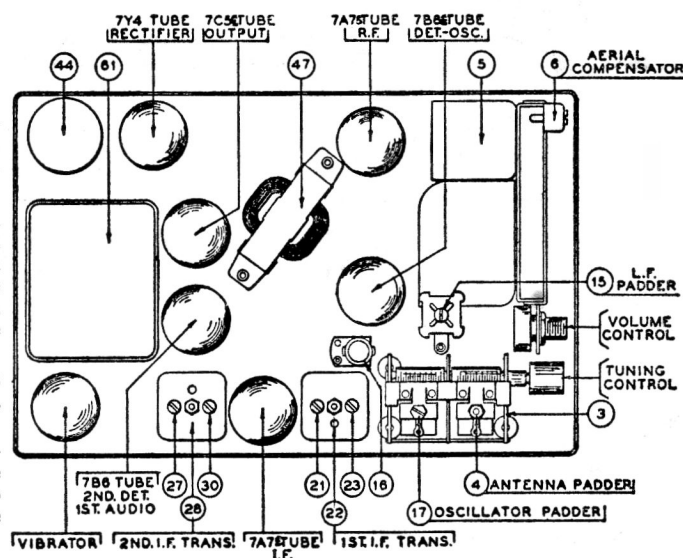
EQUIPMENT—Fully charged heavy duty storage battery or 6 volt power pack, 070 Philco Signal generator, 028 Philco Vacuum tube voltmeter and set tester or audio output meter, 45-2610 Padding screw driver.

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.



Operation	SIGNAL GENERATOR		DUMMY CAPACITY	SPECIAL INSTRUCTIONS	ADJUST PADDER
	FREQUENCY	CONNECTION			
1	ADJUST THE AERIAL COMPENSATOR (6) TWO TURNS FROM TIGHT				
2	460 K.C.	To Aerial Receptacle on Radio	.1 Mfd.	Note 2	(30) (27) (23) (21) (30) (27) (23) (21)
3	1580 K.C.	To Aerial Receptacle on Radio	See Note 1	Note 2	(17)
4	1400 K.C.	To Aerial Receptacle on Radio	See Note 1	Set Tuning Condenser at 1400 K.C.	(4) NOTE 4
5	580 K.C.	To Aerial Receptacle on Radio	See Note 1	Set Tuning Condenser at 580 K.C.	(15) NOTE 3
6	1580 K.C.	To Aerial Receptacle on Radio	See Note 1	Note 2	(17)
7	1400 K.C.	To Aerial Receptacle on Radio	See Note 1	Set Tuning Condenser at 1400 K.C.	(4) NOTE 4
8	580 K.C.	To Aerial Receptacle on Radio	See Note 1	Set Tuning Condenser at 580 K.C.	(15) NOTE 3
9	1200 to 1400 K.C.	Note 5	Note 5	Note 5	(6)

Make all adjustments for maximum reading on the output meter

NOTE 1—Connect the aerial lead, Part No. 95-0185, to the aerial receptacle in the radio. Connect a 10 Mmfd. Condenser in series between the signal generator and the aerial lead.

NOTE 2—Turn the condenser rotor plates completely out of mesh as far as they will go.

NOTE 3—Rock the tuning condenser while adjusting the low frequency padder. Tune the condenser to the signal and adjust the padder for maximum output. Rotate the tuning condenser back and forth slightly for maximum output. Then readjust the padder for maximum output. Repeat this procedure until no further improvement is noticed.

NOTE 4—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 5—When installing the radio in the car, follow the installation instructions carefully. Tune in a weak broadcast signal between 1200 and 1400 Kilocycles on the control scale. Adjust the aerial compensator (6) for maximum signal.