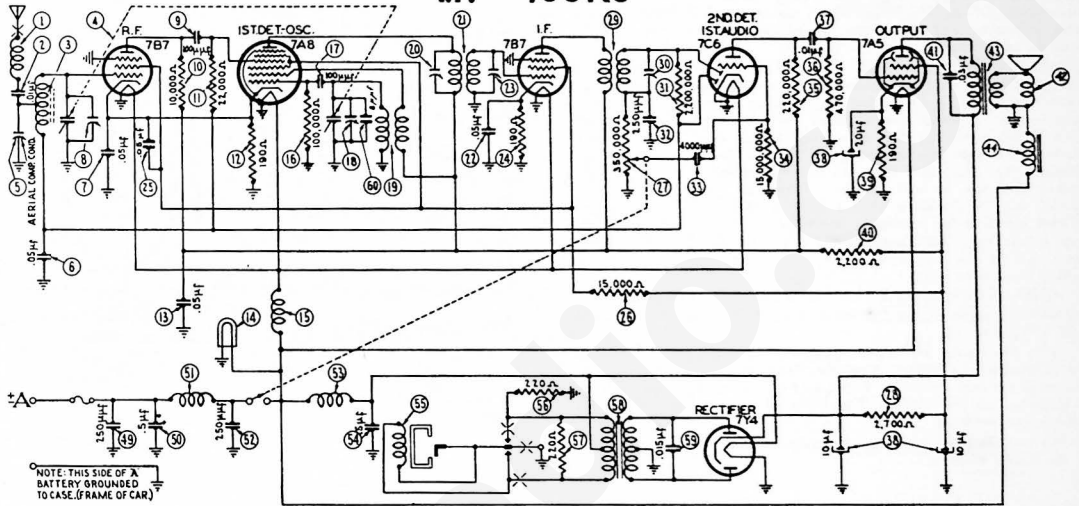


MODEL AR-10

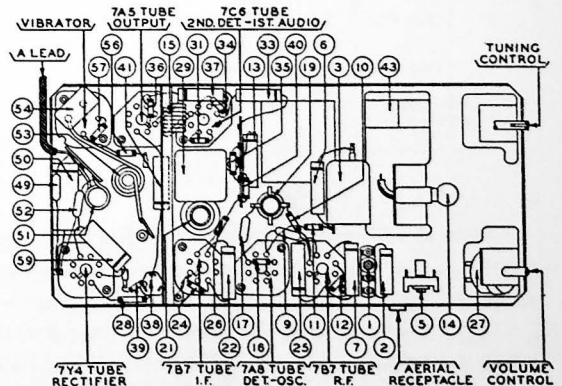
MODEL AR-10 SCHEMATIC

I.F. = 455KC



PARTS LIST — AR-10

No.	Description	Part No.	No.	Description	Part No.
①	Antenna Choke	65-0102	④	Condenser (.03 Mfd.)	61-0119
②	Condenser (.01 Mfd.)	61-0114	⑤	Replacement Cone	
③	Antenna Transformer	65-0198		(For 73-0027-1)	91-0076
④	Tuning Condenser	63-0028		(For 73-0027-2)	91-0077
⑤	Aerial Compensator	63-0030	⑩	Output Transformer (Not Replaceable)	65-0258
⑥	Condenser (.05 Mfd.)	61-0101	⑪	Field Coil	
⑦	Condenser (.05 Mfd.)	61-0111	⑫	Condenser (250 Mmfd.)	60-125157
⑧	Antenna Padder (on Tun. Cond.)		⑬	Condenser (.5 Mfd.)	61-0106
⑨	Condenser (100 Mmfd.)	60-110157	⑭	"A" Choke	33-2477
⑩	Resistor (10,000 ohms)	33-310154	⑮	Condenser (250 Mmfd.)	60-125157
⑪	Resistor (22,000 ohms)	33-322154	⑯	Vibrator Choke	65-0204
⑫	Resistor (190 ohms)	33-119336	⑰	Condenser (.5 Mfd.)	61-0137
⑬	Condenser (.05 Mfd.)	61-0111	⑱	Vibrator	63-0025
⑭	Pilot Lamp	69-0004	⑲	Resistor (220 ohms)	33-123334
⑮	Filament Choke	65-0158	⑳	Resistor (220 ohms)	33-123334
⑯	Resistor (100,000 ohms)	33-410154	㉑	Power Transformer	65-0185
⑰	Condenser (100 Mmfd.)	60-110157	㉒	Condenser (.015 Mfd.)	61-0138
⑱	Oscillator Padder (on Tun. Cond.)		㉓	Condenser (8 Mmfd.)	60-008337
⑲	Antenna Transformer	65-0194	㉔	Tuning & Volume Knob	77-0765
⑳	First I. F. Transformer	65-0191	㉕	Dial	55-1200
㉑	Condenser (.05 Mfd.)	61-0111	㉖	Dial Cord (16 1/2")	55-0588
㉒	Padder (Sec. 1st I. F. Trans.)		㉗	(5 3/4")	55-0589
㉓	Resistor (190 ohms)	33-119336	㉘	(7 3/4")	55-0652
㉔	Condenser (.05 Mfd.)	61-0111	㉙	Pointer	57-0633
㉕	Volume Control (350,000 ohms) & On-Off Switch	67-0020	㉚	Tuning Shaft	57-1910
㉖	Resistor (2,700 ohms)	33-227434	㉛	Window Crystal	55-0501
㉗	Second I. F. Transformer	65-0192	㉜	Speaker Unit	73-0027
㉘	Padder (Sec. 1st I. F. Trans.)		㉝	Tube Slide Cover	57-0791FC59
㉙	Resistor (15,000 ohms)	33-315334	㉞	Wiring Side Cover	77-0561FC59
㉚	Condenser (250 Mmfd.)	60-125157	㉟	Back Strap	28-5998FA3
㉛	Condenser (4,000 Mmfd.)	61-0128	㊱	Mounting Bracket	57-0819FC59
㉜	Resistor (15,000,000 ohms)	33-615154	㊲	Cover Screws	W1589FA3
㉝	Resistor (470,000 ohms)	33-447154	㊳	Front Screws	97-0111FA3
㉞	Condenser (.01 Mfd.)	61-0120	㊴	Fuse Lead	77-0235
㉟	Filter Condenser (10-10-20 Mfd.)	61-0068	㊵	Fuse	45-2359
㊱	Resistor (190 ohms)	33-119336	㊶	Vibrator Socket	27-6044
㊲	Resistor (2,500 ohms)	33-228334	㊷	Lokal Socket	55-0575
			㊸	Pilot Lamp Assembly	77-0342
			㊹	"A" Lead	77-0217
			㊺	Interference Condenser	30-4007
			㊻	Distributor Resistor	33-1196
			㊼	Bolt (Radio Mtg.)	W1819FA3



MODEL AR-10 (CONTINUED)

MODEL AR-10 — 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.

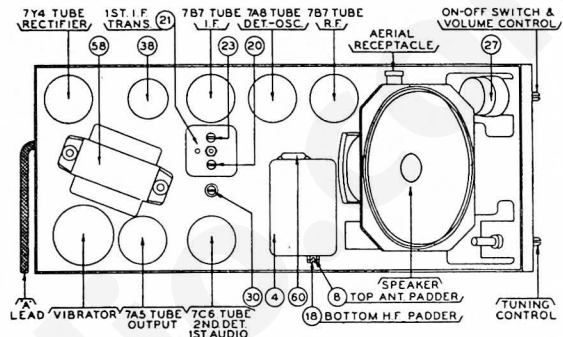
EQUIPMENT — Fully charged heavy duty storage battery or 6 volt power pack, 077 or 177 Philco Signal generator, 027 Philco Vacuum tube voltmeter and set tester or audio output meter, 45-2610 Padding screw driver.

GENERAL — VACUUM TUBE VOLTMETER. The Model 027 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. Connect the "AC" cord to a 110 volt AC socket. Press the VTVM button and the 10 volt button. Turn the "Set Zero Ohms — VTVM" control clockwise until a click is heard. Allow the tubes to heat up for a few minutes. Short the 150 meg. VTVM terminals and adjust the "Set Zero ohms VTVM" control until the meter reads zero on the 0-10 range scale (green scale). The needle will deflect from right to left.

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 ⑤ TWO TURNS FROM TIGHT			
2	455 K.C.	To Aerial Receptacle on Radio	.1 mfd.	Note 1	⑩ ⑬ ⑲ ⑪ ⑭ 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. 95-0185, 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.