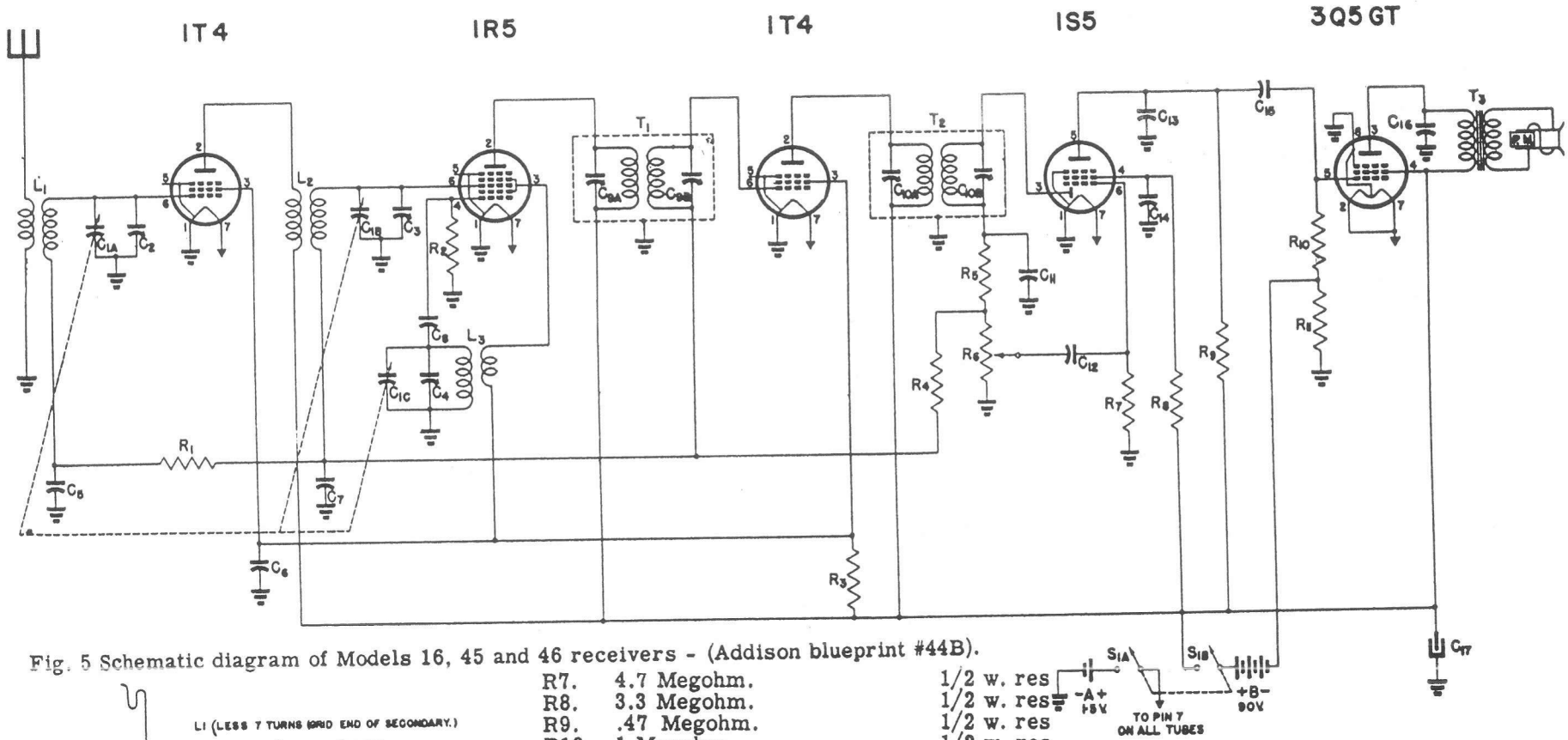


Fig. 5 Schematic diagram of Models 16, 45 and 46 receivers - (Addison blueprint #44B).

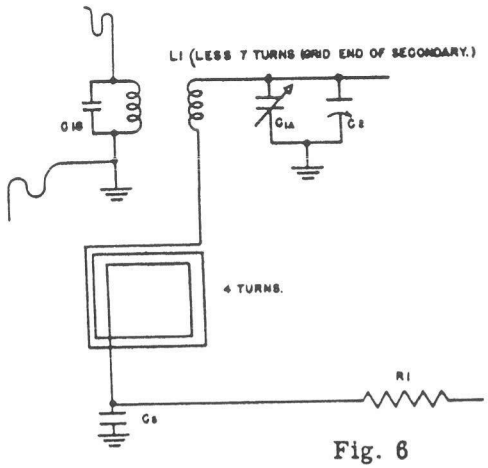


Fig. 6

Antenna circuit Model 47 only.

1948-49

R1.	1 Megonm.	1/2 w. res.
R2	100,000 ohm.	1/2 w. res.
R3	10,000 ohm.	1/2 w. res.
R4.	2.2 Megohm.	1/2 w. res.
R5.	100,000 ohm.	1/2 w. res.
R6.	Volume Control 1 Megohm &	D.P.S.T
R7.	4.7 Megohm.	1/2 w. res
R8.	3.3 Megohm.	1/2 w. res
R9.	.47 Megohm.	1/2 w. res
R10	1 Megohm.	1/2 w. res.
R11	330 ohm. 10%	1/2 w. res.
C1A.		R.F. section
C1B.	Variable Cond.	Mixer section.
C1C.		Oscillator section.
C2.	Trimmer Cond. on C1A.	
C3.	Trimmer Cond. on C1B.	
C4.	Trimmer Cond. on C1C.	
C5.	.05 mfd. 400 w.v. Paper Cond.	
C6.	.1 mfd. 200 w.v. Paper Cond.	
C7.	.05 mfd. 400 w.v. Paper Cond.	
C8.	50 mmfd. Mica Cond.	
C9A.	Trimmer Cond. (On I.F. Trans. T1).	
C9B.	Trimmer Cond. (On I.F. Trans. T1).	
C10A.	Trimmer Cond. (On I.F. Trans. T2).	
C10B.	Trimmer Cond. (On I.F. Trans. T2).	
C11.	250 mmfd. Mica Cond.	
C12.	.003 mfd. 600 w.v. Paper Cond.	
C13.	100 mmfd. Mica Cond.	
C14.	.1 mfd. 200 w.v. Paper Cond.	
C15.	.02 mfd. 600 w.v. Paper Cond.	
C16.	.003 mfd. 600 w.v. Paper Cond.	
C17.	10 mfd. 150 w.v. Electroytic Filter.	
C18.	50 mmfd. Mica Cond.	
L1.	Antenna coil.	
L1A.	Loop antenna.	
L2.	R.F. (Mixer) Coil.	
L3.	Oscillator Coil	
S1A.	ON-OFF Switch	
S1B.		
S.	4 1/2" P.M. Speaker.	
S.	8" P.M. Speaker.	
T1.	I.F. Transformer (Input).	
T2.	I.F. Transformer (Output).	
T3.	Output Transformer.	

IF=456KC
BATTERY
MODELS
16.45.46.47
ADDISON

CIRCUIT ARRANGEMENT

1948 - 49

The circuit consists of an R.F. stage with a high gain antenna coil as the first tuned circuit; tuned 1st Detector and local oscillator; I.F. amplifier stage; 2nd Detector, A.V.C. and first Audio amplifier, 3Q5 Beam Power Output.

ALIGNMENT PROCEDURE

All tuned circuits in this receiver have been accurately adjusted at the factory, and any further adjustment should not be necessary. If any re-alignment is required the procedure outlined in the Chart of Alignment Fig. 4 should be followed in the order shown.

Output Meter - Connect meter leads to the voice coil terminals of the speaker and turn the receiver volume control to maximum.

Test Oscillator or Signal Generator - For all alignment operations connect the ground side of the test apparatus to the receiver chassis, and keep the signal input to the circuit being tuned as low as possible to avoid A.V.C. action.

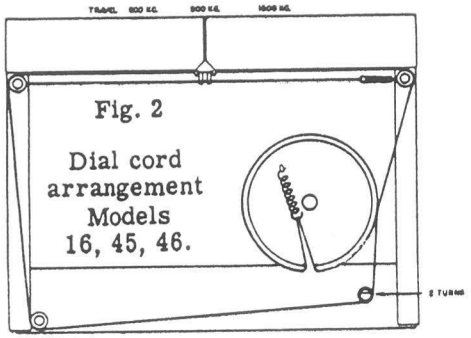


Fig. 2

Dial cord arrangement Models 16, 45, 46.

IF=456KC

BATTERY MODELS

16
45
46
47

ADDISON

CHART OF ALIGNMENT PROCEDURE

Steps in Alignment	Test Oscillator			Receiver Dial Setting	Circuit to Adjust	Symbol on Schematic
	Connection to Receiver	Dummy Antenna	Frequency Setting			
1.	Control Grid IT4-I.F. Pin No. 6	.05 MFD.	456 Kc.	No Signal 540-700 Kc.	2nd I.F Transformer	C10A C10B
2.	Control Grid IR5 Pin No. 6	.05 MFD.	456 Kc.	No Signal 540-700 Kc.	1st I.F. Transformer	C9A C9B
3.	Antenna Lead	200 MMF.	1500 Kc.	1500 Kc.	Oscillator Trimmer	C4
4.	Antenna Lead	200 MMF.	1500 Kc.	1500 Kc.	R.F. Trimmer	C3
5.	Antenna Lead	200 MMF.	1500 Kc.	1500 Kc.	Antenna Trimmer	C2

Fig. 4.

NOTE: Calibration points are marked on the top edge of the dial back at closed gang, 600 kc, 900 kc and 1500 kc. positions (see Fig. 2), for convenience in alignment of the receiver when out of the cabinet.

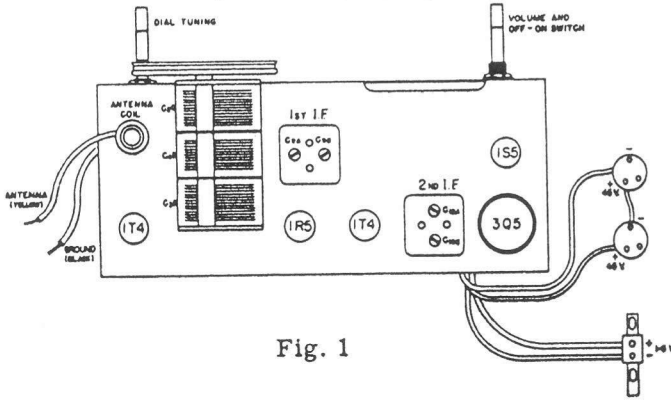
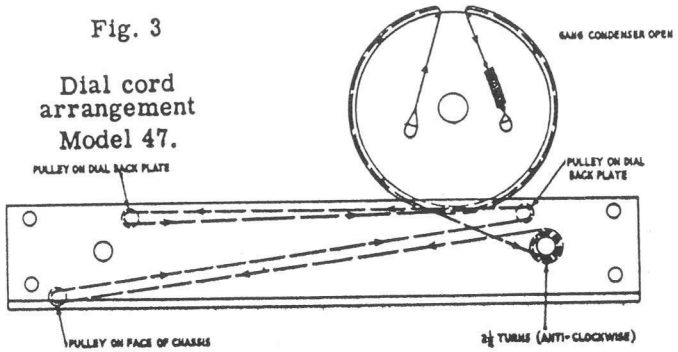


Fig. 1

Fig. 3

Dial cord arrangement Model 47.



MODELS - 16,45,46 and 47

VOLUME CONTROL

Circuit Designation	Value	Mfrs. No.	IRC No.
R6	1 Meg.	5	13-137 Sw.No. 22

CAPACITORS

			AEROVOX No.
C1A,B,C	Tuning Gang	40A	
C5,C7	.05 400V pp.		484
C6,C14	.1 200V pp.		284
C8,C18	50 mmfd. mica		1468
C11	250 mmfd. mica		1468
C12,C16	.003 600V pp.		684
C13	100 mmfd. mica		1468
C15	.02 600V pp.		684
C17	10 mfd. 150V Elec.		PRT150

MISCELLANEOUS

			JENSEN No.
L1	Ant. Coil	12	
L1A	Loop Ant.	49-11	
L2	R.F. Coil	13	
L3	Osc. Coil	14	
S	Speaker 4.5" PM	20	
S	Speaker 8" PM	32K	P8V
T1	1st. I.F. Trans.	10	
T2	2nd. I.F. Trans.	11	
T3	Output Trans.	61	2420

MODEL 49

VOLUME AND TONE CONTROLS

Circuit Designation	Value	Mfrs. No.	IRC No.
33-33A	500K	27-10	18-133X Sw. No. 21
34	2 Meg.	27-11	13-139

CAPACITORS

				AEROVOX No.
38A,B	Tuning Gang	15-10		
48	.01 600V pp.			684
49	.02 600V pp.			684
50	.05 400V pp.			484
51	.002 600V pp.			684
54	33 mmfd. ceramic		20%	1468
55	100 mmfd. ceramic		20%	1468
56	330 mmfd. ceramic		20%	1468
58A,A,B	Capristor	18-10		
59A,B,C	30-30-30 mfd. 450-400-350V	18-11		PRT450

MISCELLANEOUS

			JENSEN No.
24A,B	Dual 900ω	14-10	
40	I.F. Trans.	23-13	
41	Power Trans. 60C	23-11	1010
42	Power Trans. 25C	23-12	1011
45	Ant. Coil	29-10	
47	Osc. Coil	29-11	
92	Output Trans.	23-10	2430
94	Speaker 10" PM	24-10	P10T

IRC FIXED RESISTORS

Metallized:	Type	Wire Wound:	Type
1/2 watt 470ω to 22 meg.	BTS	1/2 watt .47 to 820ω	BW-1/2
1 watt 330ω to 22 meg.	BTA	1 watt .47 to 5100ω	BW-1
2 watt 470ω to 22 meg.	BT-2	2 watt 1 to 8200ω	BW-2

For replacing resistors rated from 5 to 10 watts IRC type AB is recommended. Their resistance values range from 1 to 50,000 ohms. Note however that above 25,000 ohms type AB should not be called upon to dissipate more than 5 watts. Type DG is recommended in this case.