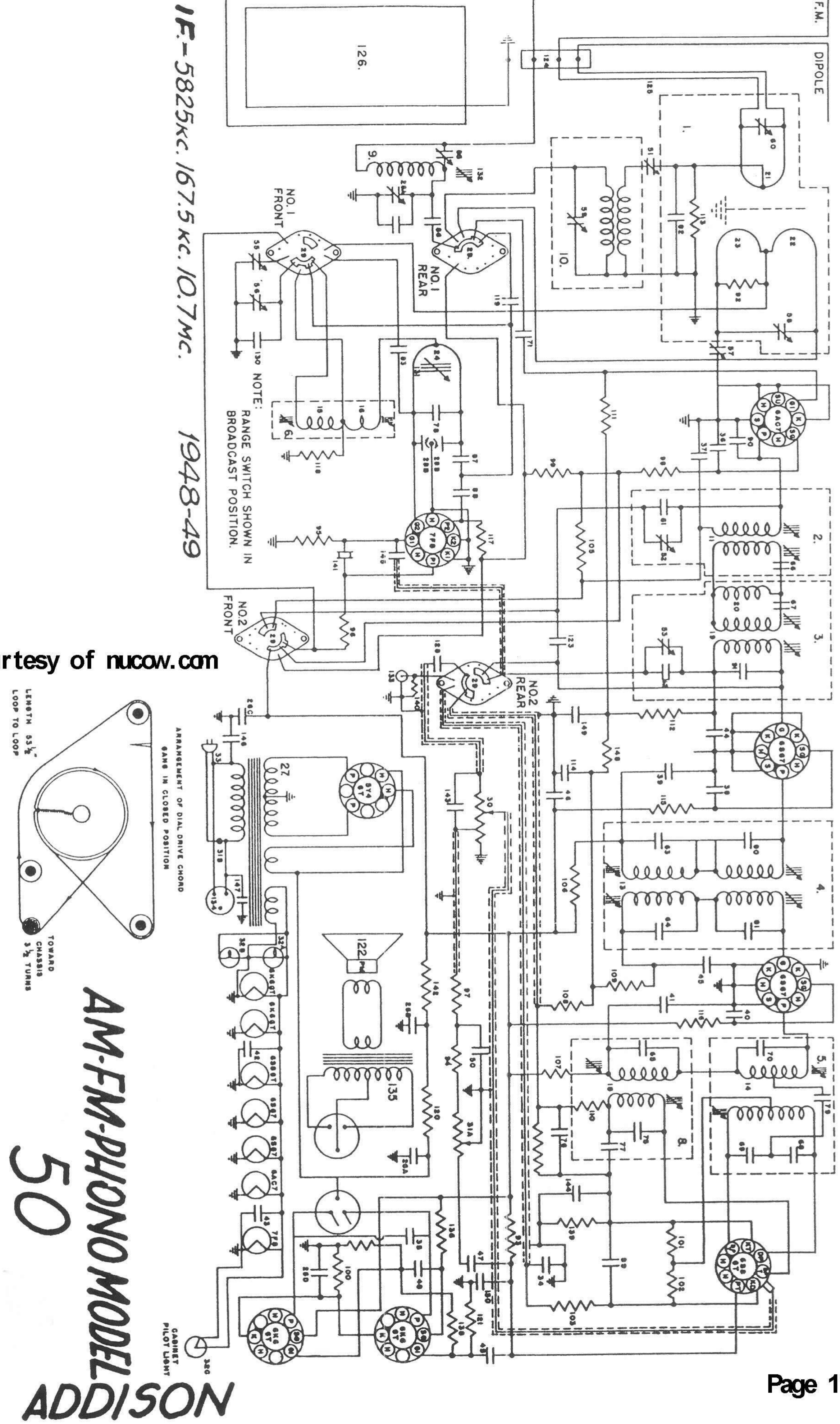


Figures in first column correspond to figures in Schematic Diagram

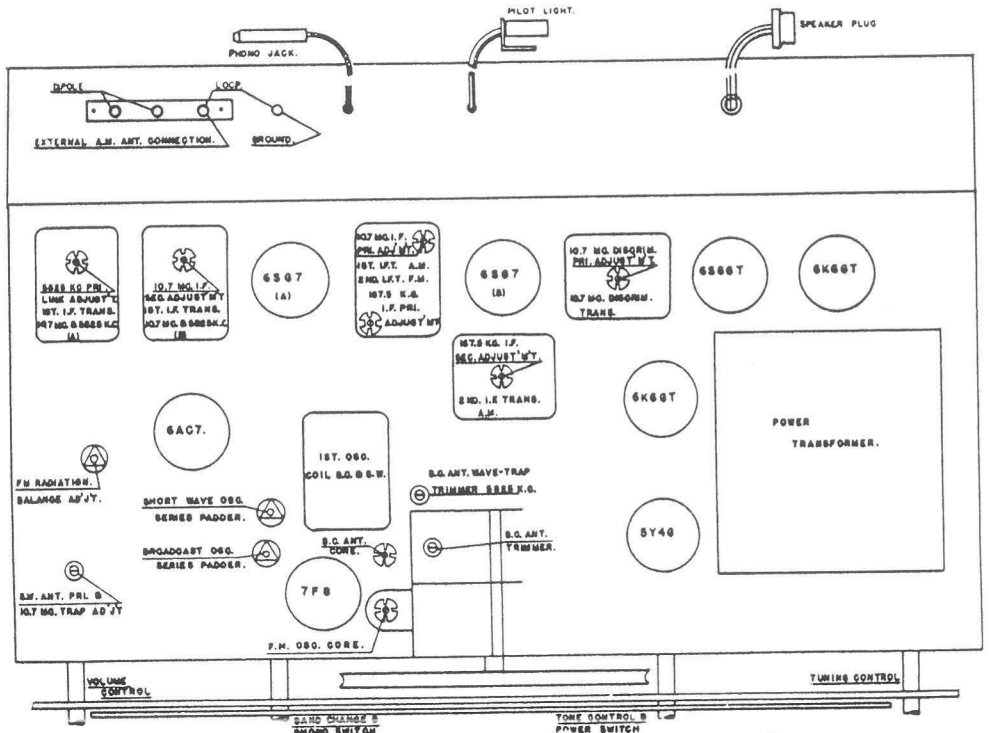
Item No.	Part No.	Description
1	88 F	Transformer Ass'y. F.M. Antenna
2	82 F	Transformer 10.7 mc.& 5.825 mc.I.F (A)
3	84 F	Transformer 10.7 mc.& 5.825 mc.I.F.(B)
4	85 F	Transformer 10.7 mc.& 167.5 kc.I.F.
5	87 F	Transformer 10.7 mc.Discriminator
6	83 F	Coil Ass'y. 1st.Oscillator (B.C.& S.W.)
8	86 F	Transformer 167.5 kc. Diode
9	8 G	Coil B.C. Antenna
10	33 G	Coil S.W. Antenna
11	Part of Item 2	Coil Ass'y
12	Part of Item 4	Coil Ass'y
13	Part of Item 4	Coil Ass'y
14	Part of item 5	Coil Ass'y
15	Part of item 6	Coil Ass'y
16	Part of Item 6	Coil Ass'y
18	Part of Item 8	Coil Ass'y
19	Part of Item 3	Coil Ass'y
20	Part of Item 3	Coil Ass'y
21	Part of Item 1	Coil Ass'y
22	Part of Item 1	Coil Ass'y
23	Part of Item 1	Coil Ass'y
24	9 G	Coil F.M. Oscillator
26A	34 G	Condenser 20 mfd. 400 V.(4 Section
26B		Condenser 30 mfd. 350 V.(Electrolytic
26C		Condenser 20 mfd. 300 V. (Filter
26D		Condenser 20 mfd. 25 V. (Condenser
27	31 G	Power Transformer 25 Cycle
	30 G	Power Transformer 60 Cycle
28A	78 F	(Tuning Cond.& Osc. Coil Ass'y
		(" " 2 section variable
		(Pulley & Hub Ass'y
		(Oscillator Coil F.M.
	32 G	Pulley & Hub Ass'y
	9 G	Oscillator Coil F.M.
28B		Condenser, Variable (Gang
29	77 F	Switch, Band Change
30	76 F-8	Control, Volume
31A	76 F-9	Control, Tone (Ass'y.
31B		Switch, Power (Ass'y.
32A		Bulb,Dial Type No.47 6.3 V. .15 amps.
32B		Bulb,Dial Type No.47 6.3 V. .15 amps.
32C		Bulb, Dial Type No.47 6.3 V..15 amps.
33	Cable and	Plug, Power
34		Condenser, Mica 500 mmfd.
35		Condenser, Paper .002 mfd. 600 W.V.
36-45		Condenser, Paper .005 mfd. 600 W.V.
46		Condenser, Paper .01 mfd. 600 W.V.
47		Condenser, Paper .01 mfd. 600 W.V.
	10 G	Condenser, 1.5 mmfd. (Made from Trans-
48		Condenser, Paper .03 mfd. 600 W.V.Line)
49		Condenser, Paper .03 mfd.600 W.V.
50		Condenser, Paper .003 mfd. 600 W.V.
51		Condenser,Trimmer, S.W. Ant. Primary
52	Part of Item 2	Condenser, Trimmer (5.825 mc.Primary)
53	Part of Item 3	Condenser, Trimmer (5.825 mc.Secondary)
55	13 G	Condenser, Air Trimmer(S.W.Osc. Series) Padder
56	13 G	Condenser, Air Trimmer(B.C.Osc. Series Padder)
57	13 G	Condenser, Air Trimmer(F.M. Radiation Balance)
58	Part of Item 1	Condenser, Trimmer(F.M. Ant. Secondary)
59	Part of Item 10	Condenser, Trimmer(S.W. Ant. Secondary)
60	Part of Item 1	Condenser, Trimmer(F.M. Ant. Primary)

Item No.	Part No.	Description
61	Part of Item 2	Condenser, 82 mmf. 300 V. Ceramic
62	Part of Item 3	Condenser 68 mmf. 300 V. Ceramic
63	Part of Item 4	Condenser 470 mmf. 300 V. Mica
64	Part of Item 4	Condenser 470 mmf. 300 V. Mica
65	Part of Item 8	Condenser 470 mmf. 300 V. Mica
66	Part of Item 2	Condenser 150 mmf. 500 V. Mica
67	Part of Item 3	Condenser 150 mmf. 500 V. Mica
68	Part of Item 5	Condenser 150 mmf. 500 V. Mica
69	Part of Item 5	Condenser 150 mmf. 500 V. Mica
70	Part of Item 5	Condenser 62 mmf. 500 V. Cermatic
71		Condenser 120 mmf. 300 V. Cermatic
75	Part of Item 8	Condenser 1000 mmf. 500 V. Mica
76		Condenser 100 mmf. 500 V. Mica
77	Part of Item 8	Condenser 100 mmf. 500 V. Mica
78		Condenser 53 mmf. 500 V. Ceramic
79	Part of Item 5	Condenser 12 mmf. 300 V. Ceramic
80	Part of Item 4	Condenser 33 mmf. 500 V. Ceramic
81	Part of Item 4	Condenser 33 mmf. 500 V. Ceramic
82	Part of Item 1	Condenser 30 mmf. 500 V. Mica
		Condenser, 15 mmfd. 5%N.P.O.
		Condenser, 4.7 mmfd. Mica
	90 F	Condenser, Trimmer 1-6 mmfd.
	90 F	Condenser, Trimmer 30-200 mmf.
83		Condenser 10 mmf, 300 V. Ceramic
85		Condenser, Trimmer(B.C.Ant.Wave Trap)
86		Condenser 82 mmf. 500 V. Ceramic
87		Condenser 39 mmf. 300 V. Ceramic
88		Condenser 91 mmf. 300 V. Ceramic
89		Condenser 50 mmf. 500 V. Mica
90		Condenser 27 mmf. 500 V. Ceramic
91	Part of Item 3	Condenser 27 mmf. 500 V. Ceramic
92	Part of Item 1	Resistor 1000 ohm 1/2 W.
93		Resistor 470000 ohm 1/2 W.
94		Resistor 47000 ohm 1/2 W.
95		Resistor 56000 ohm 1/2 W.
96		Resistor 1.5 megohm 1/2 W.
97		Resistor 47000 ohm 1/2 W.
98		Resistor 120000 ohm 1/2 W.
99		Resistor 120000 ohm 1/2 W.
100		Resistor 390 ohm 2W.
101		Resistor 100,000 ohm 1/2W.
102		Resistor 100,000 ohm 1/2 W.
103		Resistor 100,000 ohm 1/2 W.
104		Resistor 220,000 ohm 1/2 W.
105		Resistor 2,200 ohm 1/2 W.
106		Resistor 2,200 ohm 1/2 W.
107		Resistor 2,200 ohm 1/2 W.
108		Resistor 680,000 ohm 1/2 W.
109		Resistor 68,000 ohm 1/2 W.
110	Part of Item 8	Resistor 68,000 ohm 1/2 W.
111		Resistor 1 megohm 1/2 W.
112		Resistor 1 megohm 1/2 W.
113	Part of Item 1	Resistor 1 megohm 1/2 W.
114		Condenser, Paper .05 mfd. 600 V.
115		Resistor 47,000 ohm 1/2 W.
116		Resistor 27,000 ohm 1/2 W.
117		Resistor 10,000 ohm 1 W.
118		Resistor 22,000 ohm 1/2 W.
119		Condenser 15 mmf. 500 V. Ceramic
120	16 G	Resistor 400-700 ohm 4 W.
121		Resistor 470,000 ohm 1/2 W.
122	45 G	Speaker P.M. 12 inch.
123		Condenser 1.3 mmf.(Trans.Line)
124	17 G	Terminal Board (Antenna)
125		Transmission Line 300 ohm Impedance

Item No.	Part No.	Description
126		Ant.Loop(Stranded V.S.R. 1/64"Wire)
128		Condenser, Paper .01 mfd. 600 V.
130		Condenser, Ceramic 10 mmf. 300 V.
131	89 F-59A	F.M. Oscillator Core
132	89 F-60	Antenna Core
133		Phono Jack
134		Connector, Phono Motor
135	14 F-2	Output Transformer
136		Resistor 3,900 ohm 1/2 W.
137		Resistor 470,000 ohm 1/2 W
138		Resistor 1 megohm 1/2 W.
139		Resistor 3,900 ohm 1/2 W.
140		Resistor 680,000 ohm 1/4 W.

Item No.	Part No.	Description
141	36 G	Crystal, Osc. 5992.5 Kilocycles
142		Resistor 820 ohm 2 W.
143		Condenser 100 mmfd. Mica
144		Condenser 20 mfd. 25 W.V.
145		Condenser 4.7 mmfd.
146		Condenser, Paper .01 mfd. 600 W.V.
147		Condenser, Paper .01 mfd. 600 W.V.
148		Resistor 22,000 ohm 1/2 W.
149		Condenser, Paper .005 mfd. 600 W.V.
150		Condenser, Mica 100 mmf.
	47 G	Chassis Stamping
		Sockets, Octal Wafer 1 5/16" Mtg.Cent
	20 G	Filter Clamp, main filter
	19 G	Line Cord locking Plate

ADDISON



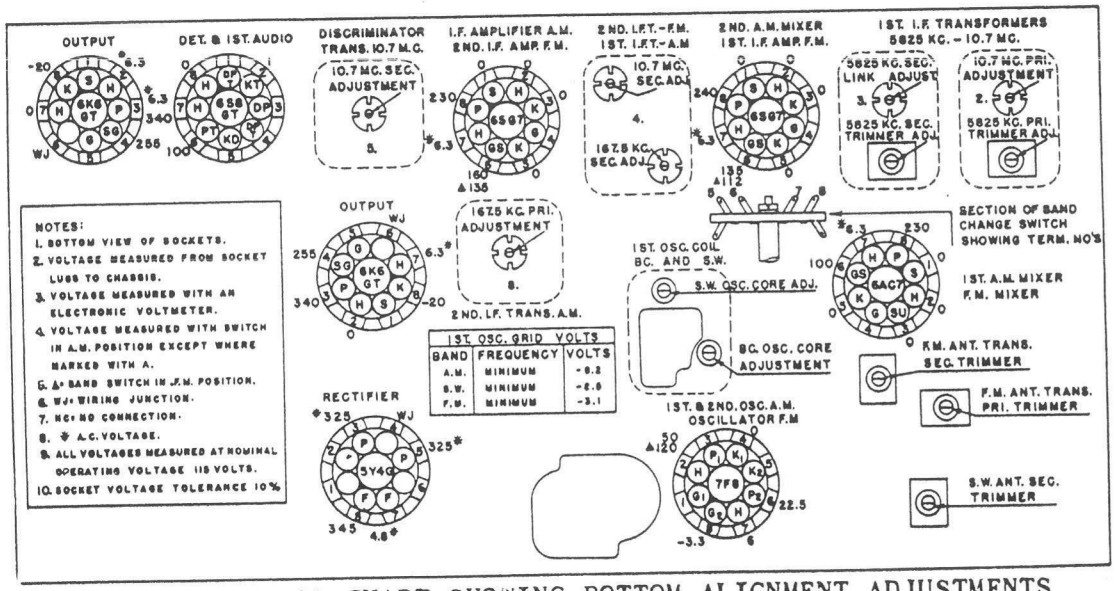
TOP AND BACK VIEW OF CHASSIS SHOWING
TUBE LOCATIONS AND TOP ALIGNMENT ADJUSTMENTS

CHANNEL NUMBERS TO MEGACYCLES

Cross index between channel calibrations on the dial and frequency in megacycles follow:

Channel No.	Frequency in Megacycles
200	87.9
205	88.9
210	89.9
215	90.9
220	91.9
225	92.9
230	93.9
235	94.9
240	95.9
245	96.9
250	97.9
255	98.9
260	99.9
265	100.9
270	101.9
275	102.9
280	103.9
285	104.9
290	105.9
295	106.9
300	107.9

To find the frequency in megacycles for CHANNEL NUMBERS between those given above, add .2 megacycle for every whole number added to the CHANNEL NUMBER: for example Channel 204 would be 88.7 megacycles and 251 would be 98.1 megacycles.



SOCKET VOLTAGE CHART SHOWING BOTTOM ALIGNMENT ADJUSTMENTS

1948-49
I.F. 5825 KC. 167.5 KC.
10.7 MC.
AM-FM-PHONO
MODEL
50

ADDISON

ALIGNMENT NOTES (Output Meter Method)

Use the following notes in conjunction with ALIGNMENT CHART, TOP AND BACK VIEW, SOCKET VOLTAGE CHART and SCHEMATIC DIAGRAM. Reference numbers of parts correspond to item numbers in Parts List.

1. (a) Place Shunt from link, between transformers (5) and (8), to ground (See "Shunts (1)", Adjust secondary (top) for maximum output.

   (b) Connect the Shunt from diode plate (pin No. 4) of 6S8GT tube socket to the shielded lead junction on transformer (8). Adjust primary (bottom) for maximum output. Remove Shunt.

2. (a) Place Shunt from plate of the 6SQ7 tube socket (A) to the transformer side of 2200 ohm resistor (106), See "Shunts (1)", Adjust secondary (bottom) for maximum output.

   (b) Connect the Shunt from grid of the 6SQ7 tube socket (B) to Transformer side of 68,000 ohm resistor (109). Adjust primary (top) for maximum output. Remove Shunt.

3. (a) Adjust secondary (bottom) core for null point.

   (b) Tune Signal Generator for maximum Output Meter reading, approximately 75 to 100 kc. off the null point obtained in 3 (a), and note reading.

   (c) Tune Signal Generator to the opposite side of the null point for maximum reading on the Output Meter. Note this reading. If the two readings are not equal, adjust primary (top) core until equal readings are obtained.

4. (a) Set Signal Generator to peak on high side of 10.7 mc. and adjust primary (top) and secondary (bottom) for maximum output. Note meter reading.

   (b) Set Signal Generator to peak on low side of 10.7 mc. and note reading. If necessary, readjust primary (top) and secondary (bottom), slightly, until Output Meter readings and frequency spacing are equal on both sides of the 10.7 mc. null point.

5. (a) Connect Signal Generator output in series with a 30 mmf. condenser to either lug of the F.M. antenna transformer primary Trimmer (60). Connect Signal Generator ground to the receiver chassis at a point close to the trimmer. Keep lead lengths to a minimum and do not drape shielded cable, from Signal Generator output, near under side of chassis.

   (b) Set Signal Generator to peak on high side of 10.7 mc. and adjust 10.7 mc. primary (bottom) of transformer (2) Adjust 10.7 mc. secondary (top) of transformer (3). These two adjustments should be adjusted for maximum output. Note reading on Output Meter.

   (c) Set Signal Generator to peak on low side of 10.7 mc. and note Output Meter reading. If meter readings obtained on the peaks on both sides of 10.7 mc. are not equal, readjust the 10.7 mc. primary of transformer (2), and the 10.7 mc. secondary of transformer (3). The peaks should appear approximately 80 kc. on each side of 10.7 mc.

6. (a) Set Signal Generator frequency control for maximum output. Adjust 5825 kc. secondary Trimmer and secondary link adjustment, on bottom of transformer (3), for maximum output.

7. (a) Adjust 5825 kc. primary trimmer (bottom) and 5825 kc. primary link adjustment (top) of transformer (2) for maximum output.

8. (a) Adjust F.M. oscillator core (131), on top of chassis, to midway position.

   (b) Preset F.M. radiation balance adjustment (57), on top of chassis, to approximately two turns from the closed position.

   (c) Short circuit F.M. antenna primary trimmer (60), located on bottom of chassis, with Hairpin Shorting Shunt (See "Shunts (2)",

   (d) Adjust F.M. antenna secondary trimmer (58), on bottom of chassis, for maximum output.

   (e) Transfer Shorting Shunt to F.M. antenna secondary Trimmer (58) and adjust F.M. antenna primary Trimmer (60) for maximum output.

   (f) Remove Shorting Shunt.

9. (a) Adjust F.M. oscillator core (131), slowly, until 97.9 mc. signal is turned in. Receiver should tune thru 87.9 and 107.9 mc. signal (channel 200 and 300).

10. (a) Connect Field Strength Meter to dipole antenna terminals, on back of chassis.

    (b) Adjust F.M. radiation balance trimmer (57), on top of chassis, to null point. If it is necessary to move this trimmer more than a quarter turn, repeat steps 8 and 10.

Alternate Method: Connect a D.C. Vacuum Tube Voltmeter to No. 1 lug of 7F8 tube socket and adjust F.M. radiation balance trimmer for maximum grid volt reading.

11. (a) Set Signal Generator to 9.6 mc. modulated 30% at 400 cycles.

    (b) Tune volume control to maximum.

    (c) Adjust short-wave series padder (55), on top of chassis, for maximum output.

12. (a) Adjust short-wave oscillator core, on bottom of chassis, for maximum output. Repeat steps 11 and 12 until dial tracks at 9.6 and 11.8 mc.

13. (a) Shunt short-wave antenna primary padder (51), (lug connected to coil) to chassis with a Shorting Clip.

    (b) Increase Signal Generator output if necessary.

    (c) Adjust short-wave antenna secondary trimmer (59), for maximum output, while rocking variable condenser.

    (d) Transfer the Shorting Clip to across the Short-wave antenna secondary trimmer (59).

    (e) Adjust short-wave antenna primary padder (51),for maximum output,while rocking variable condenser.

    (f) Remove Shorting Clip.

14. (a) Connect Field Strength Meter from Signal Generator side of 30 mmf. condenser to chassis.

    (b) Increase or decrease Signal Generator output until Field Strength Meter reads between10 and 15 microamperes.

    (c) Adjust short-wave antenna primary padder (51), for lowest reading on Field Strength Meter. Make this adjustment slowly, otherwise the dip may be passed unnoticed when a highly damped meter is used.

    (d) Disconnect Field Strength Meter.

Alternate Method: After the receiver is installed in cabinet, turn band switch to F.M. position and tune in an F.M. station. If a 10.7 MC. signal (indicated by a whistle or code) is heard in the speaker, adjust the short-wave antenna primary (51) until the interfering signal disappears or is minimized. Make this adjustment slowly.

15. (a) Connect Dummy Loop Antenna to Signal Web Antenna terminal and to ground terminal (See "Dummy Antennas (2),"

    (b) Preset broadcast antenna wave trap (85), on top of chassis, to approximately two turns from the closed position.

    (c) Adjust broadcast oscillator series padder (56), on top of chassis, for maximum output.

16. (a) Adjust broadcast oscillator core, on bottom of chassis, for maximum output.

    (b) Repeat steps 15 to 16 until frequency shift stops.

17. (a) Adjust broadcast antenna trimmer, on top of variable condenser, for maximum output.

18. (a) Adjust broadcast antenna core (132), on top of chassis, for maximum output while rocking variable condenser.

19. (a) Set dial pointer to approximately 1400 kc. and retune Signal Generator to maximum output.

    (b) Adjust Signal Generator output to approximately midscale reading on the Output Meter.

    (c) Adjust broadcast antenna wave trap trimmer (85), for lowest reading on Output Meter.

    (e) All Air Trimmers should be locked in position by applying a drop of beeswax on the screw threads.

20. (a) After the receiver is placed in cabinet and all connections are made for normal operation,readjust the broadcast antenna core for maximum output at 600 kc.

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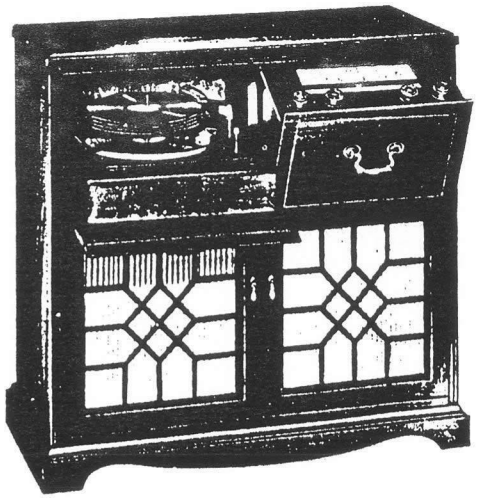
AM-FM-PHONO MODEL 50

ADDISON

ALIGNMENT CHART (Output Meter Method)

ALIGNMENT SEQUENCE	A.M. SIGNAL GENERATOR OUTPUT			POSITION OF		ADJUST	OSC. FREQUENCY	REMARKS
	FREQUENCY	IN SERIES WITH	TO	RANGE SWITCH	DIAL POINTER OR VAR. COND.			
1.	167.5 KC.	0.1 MFD.	2ND I.F. GRID 6SG7 (B)	SW	OPEN	2ND I.F. TRANS. (B)		SEE NOTE 1
2.	167.5 KC.	0.1 MFD.	1ST I.F. GRID 6SG7 (A)	SW	OPEN	1ST I.F. TRANS. (4)		SEE NOTE 2
3.	10.7 MC.	30 MMF.	2ND I.F. GRID 6SG7 (B)	FM	OPEN	DISCRIMINATOR TRANS. (5)		SEE NOTE 3
4.	10.7 MC.	30 MMF.	1ST I.F. GRID 6SG7 (A)	FM	OPEN	2ND I.F. 10.7 MC. TRANS. (4)		SEE NOTE 4
5.	10.7 MC.	30 MMF.	SEE NOTE (5)	FM	OPEN	1ST I.F. 10.7 MC. TRANS. (2) & (3)		SEE NOTE 5
6.	5825 KC.	30 MMF.	*LINK COUPLING ON 10.7 MC. I.F. NO. 2	SW	OPEN	5825 KC. I.F. TRANS. (3)	167.5 KC. ABOVE	SEE NOTE 6 *THE SHORT LEAD BETWEEN TRANSFORMERS NO. 2&3
7.	5825 KC.	30 MMF.	6AC7 GRID	SW	OPEN	5825 KC. I.F. TRANS. (2)	167.5 KC. ABOVE	SEE NOTE 7
8.	100 MC.	*300 OHM DUMMY	F.M. DIPOLE TERMINALS	FM	CHANNEL 260.5	F.M. OSC. CORE F.M. ANT. TRIMS. SEC. & PRIM.	10.7 MC. ABOVE	SEE NOTE 8 *SEE "DUMMY ANTENNAS (1).
9.	97.9 MC.	*300 OHM DUMMY	F.M. DIPOLE TERMINALS	FM	CHANNEL 250	F.M. OSC. CORE	10.7 MC. ABOVE	SEE NOTE 9 *SEE "DUMMY ANTENNAS (1)."
10.	DISCONNECT GENERATOR *CONNECT FIELD STRENGTH METER			FM	CHANNEL 215	RADIATION BAL. TRIMMER		SEE NOTE 10 *SEE "FIELD STRENGTH METER"
11.	*9.6 MC.	30 MMF.	ONE F.M. ANT. TERM.	SW	9.6 MC.	S.W. OSCILLATOR SERIES PADDER	5825 KC. ABOVE	*DISCONNECT FIELD STRENGTH METER CONNECT SIGNAL GENERATOR. SEE NOTE 11.
12.	11.8 MC.	30 MMF.	ONE F.M. ANT. TERM.	SW	11.8 MC.	S.W. OSC. CORE	5825 KC. ABOVE	SEE NOTE 12
13.	10.7 MC.	30 MMF.	ONE F.M. ANT. TERM.	SW	10.7 MC.	S.W. ANT. PRIM. & SEC. PADDER		SEE NOTE 13
14.	10.7 MC.	30 MMF.	ONE F.M. ANT. TERM.	FM	10.7 MC.	S.W. PRIMARY (10.7 MC. TRAP)		SEE NOTE 14
15.	535 KC.	30 MMF.	*HI. SIDE OF DUMMY LOOP ANT.	AM	CLOSED	B.C. OSCILLATOR SERIES PADDER	5825 KC. ABOVE	*SEE NOTE 15 SEE "DUMMY ANTENNAS (2).
16.	1620 KC.	30 MMF.	HI. SIDE OF DUMMY LOOP ANT.	AM	OPEN	B.C. OSC. CORE	5825 KC. ABOVE	SEE NOTE 16
17.	1400 KC.	30 MMF.	HI. SIDE OF DUMMY LOOP ANT.	AM	1400 KC.	B.C. ANTENNA TRIMMER		SEE NOTE 17
18.	600 KC.	30 MMF.	HI. SIDE OF DUMMY LOOP ANT.	AM	600 KC.	B.C. ANTENNA CORE		SEE NOTE 18
19.	5825 KC.	30 MMF.	HI. SIDE OF DUMMY LOOP ANT.	AM	1400 KC.	B.C. WAVE TRAP TRIM.		SEE NOTE 19
20.	600 KC.	SEE NOTE 20						

*REFER TO REMARKS (WITH CORRESPONDING ASTERISK) IN LAST COLUMN.



1948-49

IF = 5825KC.
167KC.
10.7 MC.

AM FM PHONO MODEL

50

ADDISON

ALIGNMENT CHART (Scope Method)

Before using this chart, see ALIGNMENT PROCEDURE on page 3. To locate adjustments, refer to page 2.

ALIGNMENT SEQUENCE	TYPE GENERATOR	SIGNAL GENERATOR OUTPUT			POSITION OF		ADJUST	TYPE OF SELECTIVITY CURVE	OSC. FREQUENCY	REMARKS.
		FREQUENCY	IN SERIES WITH	TO	RANGE SWITCH	DIAL POINTER OR VAR. COND.				
1	F.M.	107.5 KC.	0.1 MFD.	2ND I.F. GRID 6SG7 (B)	SW	OPEN	2ND I.F. TRANS. (6), TOP & BOTTOM	FLAT OR DOUBLE PEAK		SEE NOTES 1(A) & 2(A)
2	F.M.	107.5 KC.	0.1 MFD.	1ST I.F. GRID 6SG7 (A)	SW	OPEN	1ST I.F. TRANS. (4), BOTTOM & TOP	10% DOUBLE PEAK		SEE NOTES 1(A) & 2(A)
3	* A.M.	10.7 MC.	30 MMF.	1ST I.F. GRID 6SG7(A)	FM	OPEN	DISCRIMINATOR TRANS. (5), BOTTOM	ADJUST FOR NULL POINT		DISCONNECT F.M. SIGNAL GENERATOR AND SCOPE SEE NOTE 5.
4	* F.M.	10.7 MC.	30 MMF.	1ST I.F. GRID 6SG7 (A)	FM	OPEN	DISCRIMINATOR TRANS. (5), TOP			DISCONNECT A.M. SIGNAL GENERATOR AND OUTPUT METER SEE NOTES 1(B), 2(B), &3
5	F.M.	10.7 MC.	30 MMF.	1ST I.F. GRID 6SG7 (A)	FM	OPEN	2ND I.F. 10.7MC. TRANS. (4), TOP & BOTTOM			SEE NOTES 1(B), 2(B), &4 READJUST SLIGHTLY DISCRIMINATOR PRIMARY (TOP)
6	F.M.	10.7 MC.	30 MMF.	GRID OF 6AC7	FM	OPEN	1ST I.F. 10.7MC. TRANS. (2) & (3)			SEE NOTES 1(B), 2(B), &4 ADJUST TRANS. (2) BOTTOM; ADJUST TRANS. (3) TOP
7	A.M.	USE ALIGNMENT CHART ON PAGE 4. BEGIN WITH SEQUENCE NO. 6 AND CONTINUE THRU TO SEQUENCE NO. 10. INCLUSIVE								

*REFER TO REMARKS (WITH CORRESPONDING ASTERISK) IN LAST COLUMN.

ALIGNMENT NOTES (Scope Method)

1. (a) Sweep align (Use approximately 20 to 30 kc. to sweep).

   (b) Sweep align (Use approximately 450 kc. to sweep).

2. (a) For 107.5 kc.; connect Scope to terminal No. 8 on the rear plate section of band change switch.

   (b) For 10.7 mc.; connect Scope, thru a 100,000 ohm resistor, to lug no. 6 of 6K6GT tube socket. (next to 5Y4G Tube).

3. Sweep Generator output 100,000 to 200,000 microvolts.

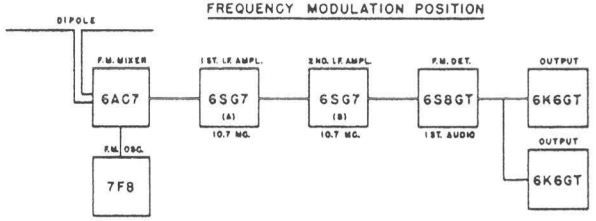
4. Scope Adjustments remain. Reduce Sweep input.

5. Connect Output Meter across voice coil. Feed an R.F. signal, calibrated at 10.7 mc. and modulated 30% at 400 cycles, to the receiver as indicated.

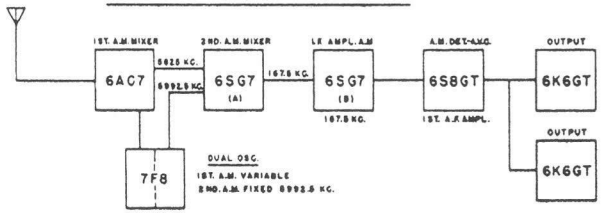
1948-49

BLOCK DIAGRAM OF CIRCUITS

FREQUENCY MODULATION POSITION



BROADCAST AND SHORTWAVE POSITION



ALIGNMENT EQUIPMENT

The following equipment is used as indicated in the alignment charts and alignment notes:

Signal Generators:

1. Amplitude Modulated Signal Generator with 400 cycle modulated signal to cover 167.5 kc. to 108 mc.
2. Frequency Modulated Signal Generator to cover 87 to 108 mc., with sweep to cover 10 to 30 kc. on narrow band and 450 kc. on wide band (Scope alignment only).

Cathode Ray Oscillograph (Scope alignment only).

Meters:

1. Suitable Output Meter.
2. Field Strength Meter (fig. 1). This meter may consist of a D.C. 100 microampere (full scale) meter, shunted by a 1000 mmf. mica bypass condenser; a crystal rectifier connected in series with the meter and a five foot, 75 ohm twisted, pair of leads. The open ends of the leads are connected to the dipole antenna terminals. Connect condenser directly across meter terminals, and crystal directly to one terminal of meter. Keep connecting leads as short as possible.

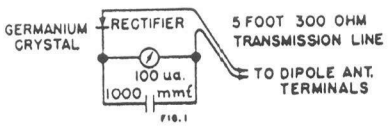


FIG. 1

Dummy Antennas:

1. 300 ohm Dummy Antenna (Fig. 2).
2. Dummy Loop Antenna (Fig. 3) is used to replace "Signal Web" antenna, when chassis is removed from cabinet.

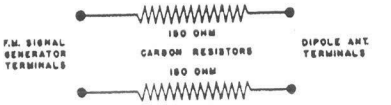


FIG. 2

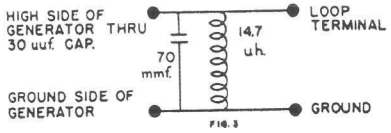


FIG. 3

Condensers:

1. 0.1 mfd. Condenser.
2. 30 mmf. Condenser.

Shunts:

1. 5000 ohm carbon Resistor in series with a 0.1 mfd. Condenser.
2. Hairpin Shorting Shunt composed to two inches of No. 14 bare tinned copper wire.

ALIGNMENT PROCEDURE (Output Meter and Scope Method)

1. This receiver has been aligned at the factory for best performance, and no attempt should be made to realign it unless the proper test equipment is available.
2. Turn the tuning condenser to full mesh, against stop, and set the dial pointer to the reference point which is immediately above F.M. at the left end of the dial.
3. Set tone control knob to the treble position, (extreme right).
4. When output meter is used, connect across voice coil: (3.2 ohms).
5. Feed an R.F. signal modulated 30% at 400 cycles to the receiver as indicated on the alignment chart Connect signal generator ground terminal to the chassis of the receiver, except where noted.
6. When F.M. signal generator is used, a 30% modulated signal is equal to 22.5 kilocycles deviation.
7. Turn volume control knob to maximum clockwise position and adjust signal generator output to produce a noticeable output meter reading, (approx. 500 mw.) Keep signal generator output as low as possible to prevent excessive AVC action in the receiver.
8. The low impedance "Signal Web" antenna should remain connected, or, if the chassis is removed from cabinet, a dummy antenna should be connected in its place (See fig. 3 on this page).

AM-FM-PHONO MODEL 50

ADDISON

MODEL - 50

VOLUME AND TONE CONTROL

Circuit Designation	Value	Mfrs. No.	IRC No.
30	3M 900K tap	76 F-6	
31A	3M	76 F-9	13-140 Sw.No. 21

CAPACITORS

			AEROVOX No.
26A,B,C,D	20-30-20-20 mfd. 400-350-300-25V Electrolytic	34 G	PRT450 PRT 25
34	500 mmfd. mica		1468
35	.002 600V pp.		684
36 to 45,149	.005 600V pp.		684
46,47,128	.01 600V pp.		684
48,49	.03 600V pp.		684
50	.003 600V pp.		684
55,56,57	Trimmers	13 G	
61	82 mmfd.ceramic	-part of item 2	1468
62	68 mmfd.ceramic	-part of item 3	1468
63,64	470 mmfd. mica	-part of item 4	1468
65	" " "	-part of item 8	1468
66,67,68,69	150 mmfd. mica	-parts of 2,3,5	1468
70	62 mmfd.ceramic	-part of item 5	1468
71	120 mmfd.ceramic		1468
75	1000 mmfd. mica	-part of item 8	1467
76,77,143,150	100 mmfd. mica		1468
78	53 mmfd.ceramic		1468
79	12 mmfd.ceramic	-part of item 5	1468
80,81	33 mmfd.ceramic	-part of item 4	1468
82	30 mmfd. mica	-part of item 1	1468
83,130	10 mmfd.ceramic		1468
86	82 mmfd.ceramic		1468
87	39 mmfd.ceramic		1468
88	91 mmfd.ceramic		1468
89	50 mmfd. mica		1468
90,91	27 mmfd.ceramic		1468
114	.05 600V pp.		684
119	15 mmfd.ceramic		1468
144	20 mfd.25V elec.		PRT25
145	4.7 mmfd.		1468
146,147	.01 600V pp.		684

MISCELLANEOUS

			JENSEN No.
1	FM Ant Trans.	88-F	
2	I.F. Trans. 10.7-5.825mc(A)	82-F	
3	I.F. Trans. 10- (B)	84-F	
4	I.F. Trans. 10.7-167.5	85-F	
5	Discrim.Trans.	87-F	
6	1st. Osc. Coil	83-F	
8	Diode Trans.	86-F	
9	BC Ant. Coil	8-G	
10	SW Ant. Coil	33-G	
11 to 23	Parts of 1,2,3,4,5 and 6		
24	FM Osc. Coil	9-G	
27	Power Trans.25C.	31-G	1035
27	Power Trans.60C.	30-G	1034
28A,B	Tuning Cond. and Osc. Coil Assy.	78-F	
122	Speaker 12" PM	45-G	P12S
126	Ant. Loop		
131	FM Osc. Core	89F-59A	
132	Ant. Core	89F-60	
135	Output Trans.	14F-2	7/8x7/8
141	Osc. Crystal	36G	

MODELS - A44,B44

VOLUME AND TONE CONTROL

Circuit Designation	Value	Mfrs. No.	IRC No.
R12	2 Meg. 400K Tap	76	13-139X Sw.No. 21
R15	2 Meg.	78	13-139

CAPACITORS

				AEROVOX No.
C1,C21	.001 600V pp.			
C2 to C5	Trimmer Assy.	56A		
C7	4300 mmfd. mica		5%	1467
C8A,B	Tuning Gang	48		
C9,C10	100 mmfd. mica			1468
C11,C12,C13,C15	.05 400V pp.			484
C16A to D,C17	Parts of T2			
C18,C19,C20,C22				
C23,C24,C25	.005 600V pp.			684
C26A,C26B	30-30 mfd.450V Electrolytic	99		PRT450

MISCELLANEOUS

			JENSEN No.
T1	1st. I.F. Trans.	72	
T2	2nd. I.F. Trans.	73	
T3	Power Trans. 25C	9A	1021
T3	" " 60C	10A	1020
T4	Output Trans.	4A	2430
L2A,B,C	Ant. Coil Assy.	35A	
L3A to D	Osc. Coil Assy.	34A	
S	Speaker 10" Field Coil 500ω	3A	
S	Speaker with Trans.	52A	

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.

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