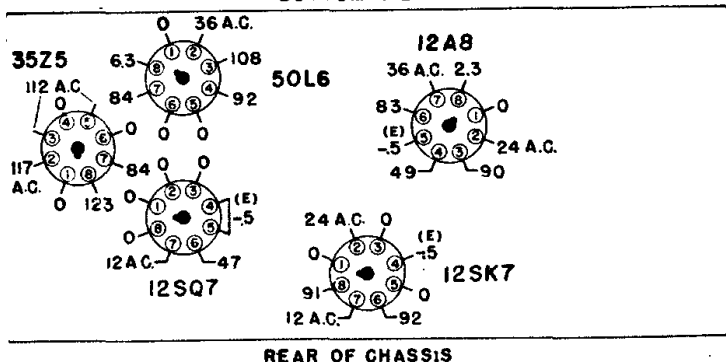


## VOLTAGE CHART

**BOTTOM VIEW**



### REAR OF CHASSIS

### VOLTAGE DATA

1. All readings made between Tube Socket Terminals and Terminal No. 8 on the 12SQ7 Socket.
2. Measured on a 117 Volt A.C. line.
3. Volume control full on.
4. Dial tuned to low frequency end, no signal.
5. Voltages indicated (E) obtained on Vacuum Tube volt meter.
6. All other readings shown are made with a 1000 ohm per volt meter.

## REPLACEMENT PARTS

## CONDENSERS

Symbol	Description	Part No.
C1	.001 Mfd., paper, 400 V.	65A2-5
C2	.00005 Mfd., mica, 500 V.	65B5-11
C3	.05 Mfd., paper, 400 V.	65A2-4
C4	.05 Mfd., paper, 400 V.	65A2-4
C5	.05 Mfd., paper, 400 V.	65A2-4
C6	.0001 Mfd., mica, 500 V.	65B5-17
C7	.00001 Mfd., mica, 500 V.	65B5-1
C8	.003 Mfd., mica, 500 V.	65B1-6
C9	.005 Mfd., paper, 400 V.	65A2-2
C10	.05 Mfd., paper, 400 V.	65A2-4
C11	.0005 Mfd., mica, 500 V.	65B5-27
C12	.00025 Mfd., mica, 500 V.	65B5-22
C13	.01 Mfd., paper, 400 V.	65A2-3
C14	.002 Mfd., paper, 400 V.	65A2-1
C15	.01 Mfd., paper, 400 V.	65A2-3
C16a	30 Mfd., electrolytic, 150 V.	67C7-41
C16b	30 Mfd., electrolytic, 150 V.	
C16c	20 Mfd., electrolytic, 150 V.	
C17	.2 Mfd., paper, 400 V.	65A2-10
b, c	Trimmer Condenser	66A1-i
C18	Tuning Condenser Gang	68A1

## RESISTORS

Symbol	Description	Part No.
R1	47,000 Ohms, Carbon, $\frac{1}{2}$ W.	60B8-473
R2	22,000 Ohms, Carbon, $\frac{1}{2}$ W.	60B8-223
R3	470 Ohms, Carbon, $\frac{1}{2}$ W.	60B8-471
R4	3,300 Ohms, Carbon, $\frac{1}{2}$ W.	60B8-332
R5	2.2 Meg Ohms, Carbon, $\frac{1}{2}$ W.	60B8-225
R6	220,000 Ohms, Carbon, $\frac{1}{2}$ W.	60B8-224
R7	.5 Meg. Ohms, Volume Control	75B1-7
R8	4.7 Meg Ohms, Carbon $\frac{1}{2}$ W.	60B8-475
R9	470,000 Ohms, Carbon, $\frac{1}{2}$ W.	60B8-474
R10	220 Ohms, Carbon, $\frac{1}{2}$ W.	60B8-221
R11	150 Ohms, Carbon, 1 W.	60B28-1
R12	1,000 Ohms, Carbon, 1 W.	60B28-2
R13	150,000 Ohms, Carbon, $\frac{1}{2}$ W.	60B28-154

## COILS & TRANSFORMERS

Symbol	Description	Part No.
L2	BC, Antenna coil	69A1
L3	SW, Antenna coil	69A2
L4	BC & SW, Oscillator coil	69A3
L5	1st I.F. Trans.	72B2
L6	2nd I.F. Trans.	72B1

## MISCELLANEOUS

Description	Part No.
Band Change Switch .....	77B1-4
Buttons, Snap for Dial Background	13A1-3-2
Cabinet, Ivory Plastic	34D1-1
Cabinet, Mahogany Plastic	34D1-2
Collar for Line Cord Connector.....	32A19
Connector for Line Cord (female plug).....	88A6-2
Cord, Line, 220 V.....	89A3
Dial Background .....	22B7-i
Dial Cord (42 inches).....	50A1-i
Dial Pointer Strip.....	25A3
Dial Pointer Slide.....	25A2
Drive Drum Assembly.....	A1012
Fibre Dial Pulley.....	17A1-3
Knob, Ivory .....	33A1-i
Knob, Mahogany or Walnut.....	33A1-2
Pilot light, Mazda No. 47.....	81A1-8
Pilot light Socket & leads.....	82A2-2
Shaft, Tuning .....	28A1-i

## ALIGNMENT PROCEDURE

1. Be sure both set and signal generator are thoroughly warmed up before starting alignment.
2. Turn gang condenser to wide open position and make sure that dial pointer is at position marked "pointer extremes" on the dial diagram (see below).
3. Connect Output Meter across the Voice Coil.
4. Turn receiver Volume Control full on.
5. Use *lowest* output setting of signal generator that will give a satisfactory reading on the Output Meter.
6. Proceed in sequence as indicated in the chart.

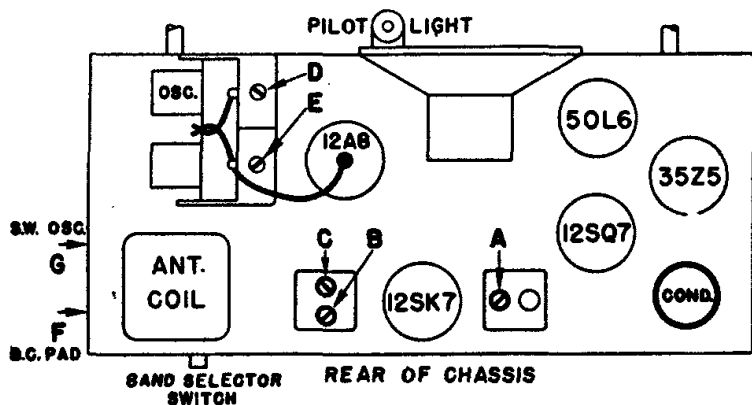
Dummy Antenna in Series with Signal Generator	Signal Generator Frequency	Connect Signal Generator to	Band Switch Position	Receiver Dial Pointer Setting	Adjust Following Trimmers	Type of Adjustment
.00025 Mica	455 K.C.	Grid Cap 12A8 Tube	B.C.	Gang-Condenser Wide open	(A) 2nd I.F. (B) 1st I.F. (C) 1st I.F.	Maximum Deflection Output Meter
.00025 Mica	1730 K.C.	End of Ant. Wire	B.C.	Set to Black dot at extreme upper end of scale.	(D) B.C. Osc.	Maximum Deflection Output Meter
.00025 Mica	1400 K.C.	End of Ant. Wire	B.C.	Tune in Generator Signal	(E) B.C. Ant.	Maximum Deflection Output Meter
.00025 Mica	600 K.C.	End of Ant. Wire	B.C.	Tune in Generator Signal	(F) B.C. Pad Rock Condenser gang while adjusting.	Maximum Deflection Output Meter

Recheck Alignment at 1400 Kc (2nd step above)

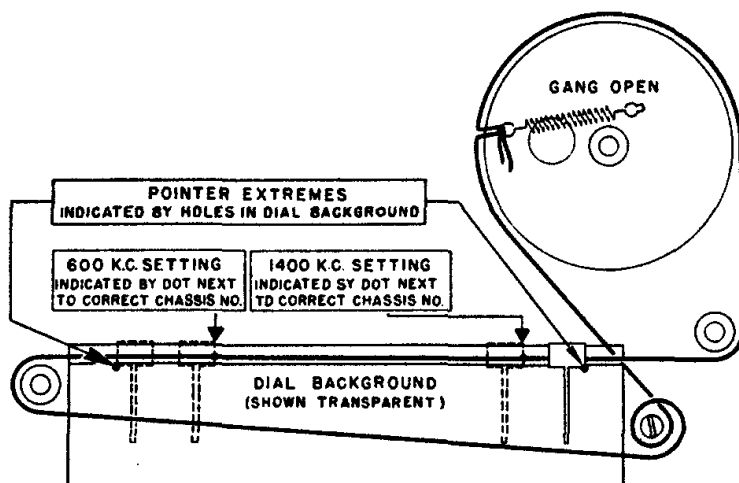
Dummy Antenna in Series with Signal Generator	Signal Generator Frequency	Connect Signal Generator to	Band Switch Position	Receiver Dial Pointer Setting	Adjust Following Trimmers	Type of Adjustment
400 ohm Carbon	15 Mc.	End of Ant. Wire	S.W.	Tune in Generator Signal	(G) S.W. Antenna	Maximum Deflection Output Meter

## TUBE and TRIMMER LAYOUT

Top View



## DIAL STRINGING



Chassis 5A1—A.C.-D.C. 5 tube Superheterodyne covering two bands, (540 K.C.—1730 K.C.) and 5.45 Megacycles—17.5 Megacycles.

**ALIGNMENT PROCEDURE**

1. Be sure both set and signal generator are thoroughly warmed up before starting alignment.
2. Turn gang condenser to wide open position and make sure that dial pointer is at position marked "pointer extremes" on the dial diagram (see below).
3. Connect Output Meter across the Voice Coil.
4. Turn receiver Volume Control full on.
5. Use *lowest* output setting of signal generator that will give a satisfactory reading on the Output Meter.
6. Proceed in sequence as indicated in the chart.

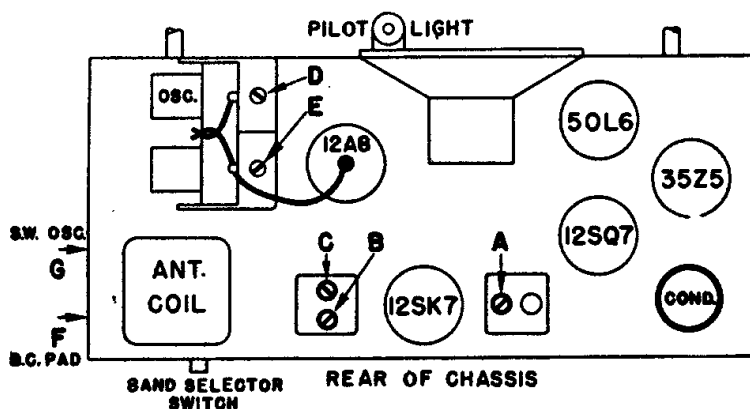
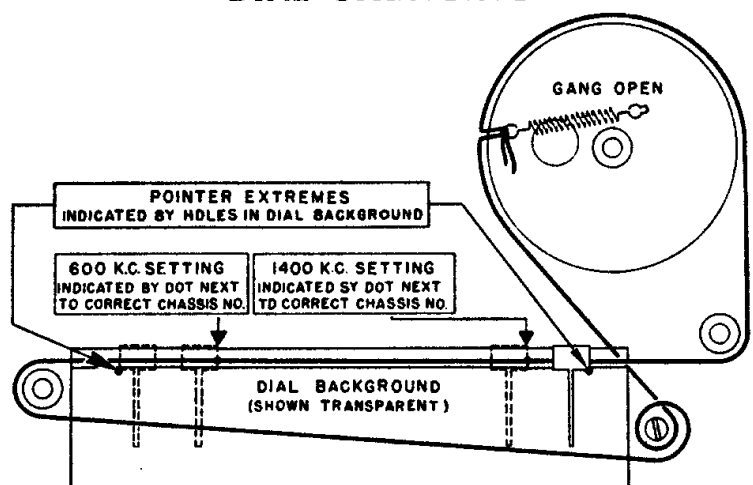
Dummy Antenna in Series with Signal Generator	Signal Generator Frequency	Connect Signal Generator to	Band Switch Position	Receiver Dial Pointer Setting	Adjust Following Trimmers	Type of Adjustment
.00025 Mica	455 K.C.	Grid Cap 12A8 Tube	B.C.	Gang-Condenser Wide open	(A) 2nd I.F. (B) 1st I.F. (C) 1st I.F.	Maximum Deflection Output Meter
.00025 Mica	1730 K.C.	End of Ant. Wire	B.C.	Set to Black dot at extreme upper end of scale.	(D) B.C. Osc.	Maximum Deflection Output Meter
.00025 Mica	1400 K.C.	End of Ant. Wire	B.C.	Tune in Generator Signal	(E) B.C. Ant.	Maximum Deflection Output Meter
.00025 Mica	600 K.C.	End of Ant. Wire	B.C.	Tune in Generator Signal	(F) B.C. Pad Rock Condenser gang while adjusting.	Maximum Deflection Output Meter

Recheck Alignment at 1400 Kc (2nd step above)

400 ohm Carbon	15 Mc.	End of Ant. Wire	S.W.	Tune in Generator Signal	(G) S.W. Antenna	Maximum Deflection Output Meter
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**TUBE and TRIMMER LAYOUT**

Top View

**DIAL STRINGING**

Chassis 5A1—A.C.-D.C. 5 tube Superheterodyne covering two bands, (540 K.C.—1730 K.C.) and 5.45 Megacycles—17.5 Megacycles.