

NOTE: 1. In later production R14 and C13a are disconnected from pin #8 of the 35Z5 and a 33-ohm 1W resistor (R16) is connected from pin #8 to the junction of R14 and C13a.

2. The jumper between pins 4 and 5 on the 12SQ7 is removed and one pin is connected to the secondary of the second I.F. (L5) and the other pin is connected directly to the junction point of R5 and the secondary of the 1st I.F. (L4).

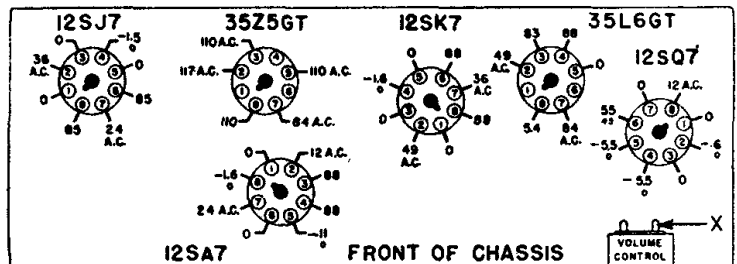
### CONDENSERS

| Symbol     | Capacity   | Type             |
|------------|------------|------------------|
| C-1.....   | .005 mfd   | .....600 V.      |
| C-2.....   | .785. mmfd | .....Mico        |
| C-3.....   | .05 mfd    | .....400 V.      |
| C-4.....   | .02 mfd    | .....400 V.      |
| C-5.....   | .50. mmfd  | .....Mica        |
| C-6.....   | .250. mmfd | .....Mica        |
| C-7.....   | .01 mfd    | .....400 V.      |
| C-8.....   | .01 mfd    | .....400 V.      |
| C-9.....   | .01 mfd    | .....400 V.      |
| C-10.....  | .500. mmfd | .....Mico        |
| C-11.....  | .01 mfd    | .....400 V.      |
| C-12.....  | .02 mfd    | .....400 V.      |
| C-13a..... | .30. mfd   | Elect.....150 V. |
| C-13b..... | .30. mfd   | Elect.....150 V. |
| C-13c..... | .20. mfd   | Elect.....150 V. |
| C-14.....  | .05 mfd    | .....400 V.      |
| C-15.....  | .2 mfd     | .....400 V.      |
| C-16.....  | .250. mmfd | .....Mico        |
| C-17.....  | .1 mfd     | .....200 V.      |
| C-18.....  | .20. mmfd  | .....Mica        |
| C-19a..... | .420. mmfd | (max.)..Vor.     |
| C-19b..... | .180. mmfd | (max.)..Var.     |
| C-20a..... | .30. mfd   | Elect.....150 V. |
| C-20b..... | .50. mfd   | Elect.....150 V. |

### RESISTORS

| Symbol    | Resistance   | Type   |
|-----------|--------------|--|
| R-1.....  | 10,000 ohms  | .....C1/2W   |
| R-2.....  | 10 meg ohm   | .....C1/2W   |
| R-3.....  | 22,000 ohms  | .....C1/2W   |
| R-4.....  | 100 ohms     | .....C1/2W   |
| R-5.....  | 1 meg ohm    | .....C1/2W   |
| R-6.....  | 47,000 ohms  | .....C1/2W   |
| R-7.....  | 27,000 ohms  | .....C1/2W   |
| R-8.....  | 500,000 ohm  | Volume Control, (Tapped at 1/3 and 2/3 of Rotation which is 100,000 ohms and 200,000 ohms from the start, due to the taper). |
| R-9.....  | 5 meg ohm    | .....C1/2W   |
| R-10..... | 270,000 ohms | .....C1/2W   |
| R-11..... | 470,000 ohms | .....C1/2W   |
| R-12..... | 150 ohms     | .....C1/2W   |
| R-13..... | 150,000 ohms | .....C1/2W   |
| R-14..... | 150 ohms     | .....C1W   |
| R-15..... | 1,000 ohms   | .....C1W   |
| R-16..... | 33 ohms      | .....C1W   |

### VOLTAGE DATA:—

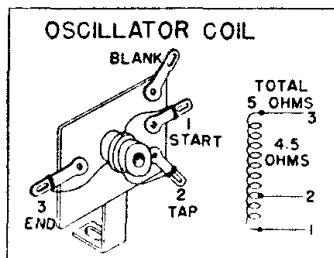


Bottom View of Chassis, Showing Voltages.

- All readings made between Tube Socket Terminals and Switch Lug on volume control (Point "X" on drawing).
- Measured on a 117 Volt A.C. line.
- Volume control full on.
- Dial tuned to low frequency end, no signal.
- Voltages indicated obtained on Vacuum Tube voltmeter.
- A second voltage reading is shown made with a 1000 ohm-per-volt meter when use of this instrument would result in appreciably lower readings.

### COILS

| Symbol                       | Description      |
|------------------------------|------------------|
| L-1.....(Sec. 2.3 ohms)..... | Loop             |
| L-2.....(2.5 ohms).....      | R. F. Coil       |
| L-3.....                     | Osc. Coil        |
| L-4.....                     | 1st I. F. Trans. |
| L-5.....                     | 2nd I. F. Trans. |
| L-6.....(325 ohms).....      | Choke, Filter    |



## SPECIFICATIONS

### POWER SUPPLY:—

110-120 Volts A.C. or D.C.  
Frequency 50-60 cycles.  
Power Consumption—30 watts.

### CIRCUIT:—

Chassis 6A1 A.C.—D.C. 6 Tube Superheterodyne, with R.F. stage; Single tuning range, 540 Kc. to 1630 Kc., covering standard broadcast band; built-in AEROSCOPE loop antenna, with provision for connecting an external antenna.

# 6A1—CHASSIS

# Admiral

## DIAL DRUM POSITION

If the dial drum position is disturbed, it should be carefully re-positioned to insure correct tuning of the permeability tuned coil. When the gang condenser is fully open, the drum will be properly positioned if the center of the condenser shaft and the dial cable hole on the drum are in a straight line parallel to the chassis base. Note that the dial cable hole should be on the left side (looking at front) of the chassis.

## ALIGNMENT PROCEDURE

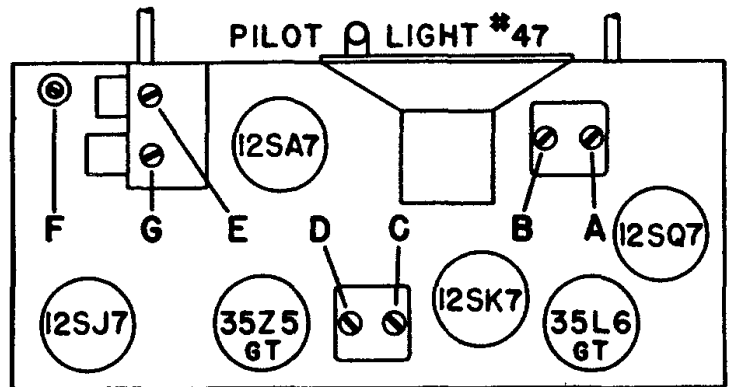
1. Be sure Radio Receiver and Signal Generator are thoroughly warmed up before starting alignment procedure.
2. Check setting of Pointer Extremes and note correct 600 K.C. and 1400 K.C. positions on Dial Background. (See Dial Diagram on reverse side.)
3. Connect Output Meter across Voice Coil.
4. Turn Receiver Volume Control full on.
5. Use lowest Output setting of Signal Generator capable of producing adequate Output Meter indication and then proceed as outlined in chart below.
6. Repeat adjustments to insure final overall maximum results.

## R. F. SLUG POSITION

If the tuned coil slug needs replacing or re-positioning, first see that the dial drum is in its proper position. Then with the threaded stud half-way through the bakelite, note that the top of the slug is flush with the top of coil form. Then re-align.

### TOP VIEW

### TUBE & TRIMMER LOCATION



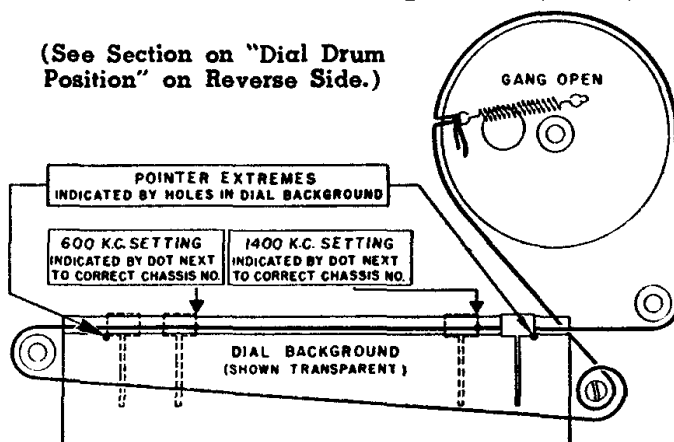
### BACK OF CHASSIS

| Connect Signal Generator To—   | Dummy Antenna Between Radio and Generator       | Set Generator Frequency To— | Set Receiver Dial Frequency To— | Adjust Following Trimmers              | Type of Adjustment       |
|--|---|-----------------------------|---------------------------------|--|--------------------------|
| 12SA7 Control Grid   | 250 mmfd. Mica Condenser                        | 455 KC.                     | High frequency end of Dial      | A and B—2nd I. F.<br>C and D—1st I. F. | Adjust to maximum Output |
| External Antenna Wire on Loop  | 250 mmfd. Mica Condenser                        | 1630 KC.                    | High frequency end of Dial      | E—Osc.                                 | Adjust to maximum Output |
| External Antenna Wire on Loop  | 250 mmfd. Mica Condenser                        | 1400 KC.                    | Tune in Generator signal        | F—R. F. (Iron Core)                    | See Note Below           |
| Loop radiator (or place pickup lead from gen. close to loop of set to obtain adequate signal). | No actual connection between set and generator. | 1400 KC.                    | Tune in Generator signal        | G—Ant.                                 | Adjust to maximum Output |

NOTE: Adjustment F is the threaded stud at the top end of the slug wire. Screw stud up or down in the bakelite for maximum output. Alignment is correct if the output is reduced when the position of the lever arm is changed slightly in either direction (up or down).

## POINTER SETTINGS AND DIAL CORD STRINGING

(See Section on "Dial Drum Position" on Reverse Side.)



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