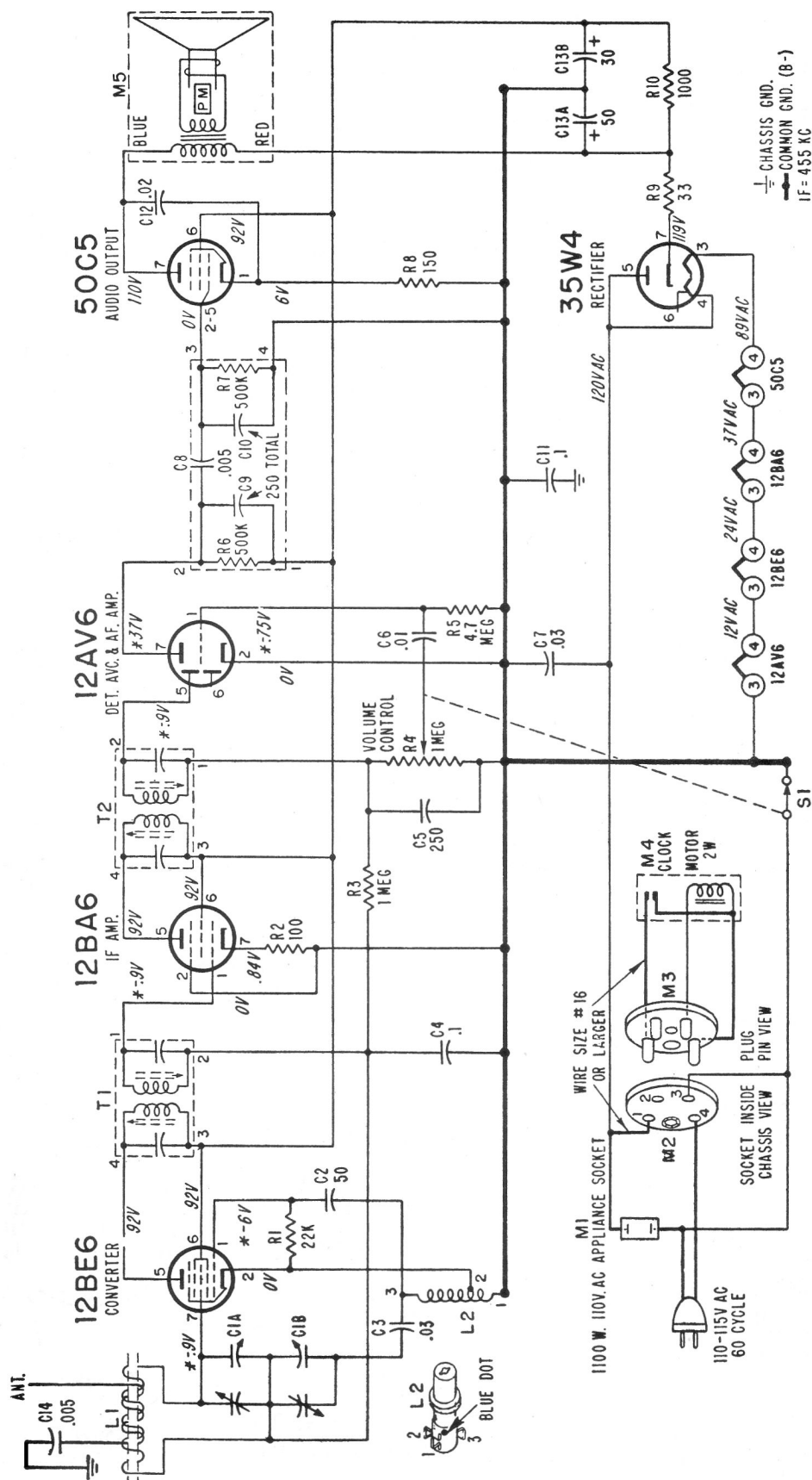


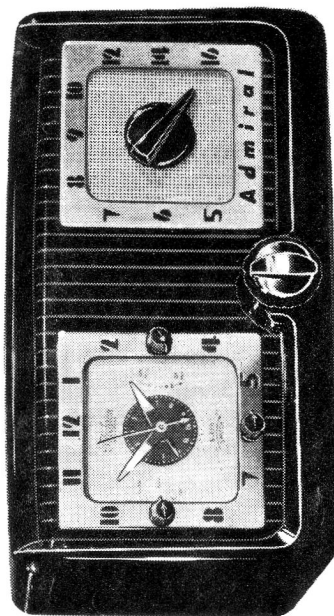


\*These readings will be either lower or practically zero if taken with a 1000 ohm-per-volt meter.

## VOLTAGE DATA

Voltages shown on schematic diagram

- All readings made between tube socket terminals and B minus (terminal of On-Off switch).
- Measured on 117 Volt AC line.
- Volume control minimum; dial turned to low frequency end.
- Voltages measured with Vacuum Tube Voltmeter.

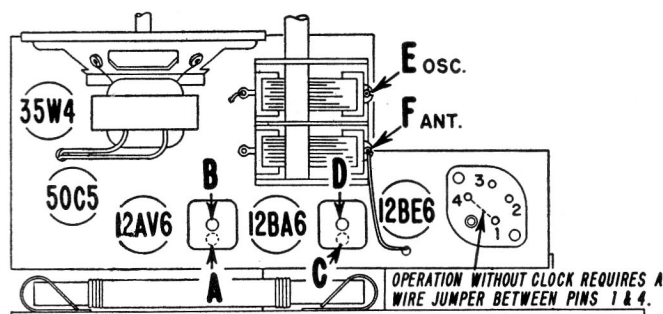


### ALIGNMENT PROCEDURE

- Connect a wire jumper between pins 1 and 4 on clock plug (M2) as shown in illustration below.
- Turn receiver volume control full on (fully clockwise).
- Use an isolation transformer if available, otherwise connect a .1 mfd. condenser in series with low side of signal generator and connect to chassis. Caution: Do not connect a ground wire directly to chassis.
- Connect output meter across speaker voice coil.
- Use lowest output setting of signal generator capable of producing adequate output meter indication and proceed in the following sequence.
- Repeat adjustments to insure good results.

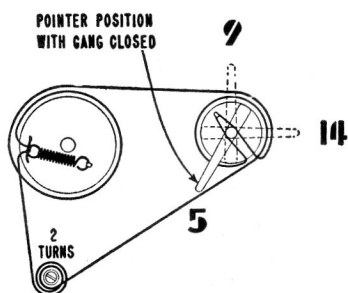
| Step                                                                                                                               | Dummy Antenna in Series with Signal Generator                                                             | Connection of Signal Generator (High Side) | Signal Generator Frequency | Receiver Gang Setting    | Trimmer Description | Trimmer Designation | Type of Adjustment |
|------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|--------------------------------------------|----------------------------|--------------------------|---------------------|---------------------|--------------------|
| 1                                                                                                                                  | 250 mmfd. condenser                                                                                       | Antenna stator of tuning condenser         | 455 KC                     | Gang fully open          | 2nd IF<br>1st IF    | *A, B<br>*C, D      | Maximum output     |
| 2                                                                                                                                  | 250 mmfd. condenser                                                                                       | Antenna stator of tuning condenser         | 1620 KC                    | Gang fully open          | Oscillator          | E                   | Maximum output     |
| Mount and set dial pointer to horizontal position with tuning condenser tuned to 1400 KC generator signal; see illustration below. |                                                                                                           |                                            |                            |                          |                     |                     |                    |
| 3                                                                                                                                  | Loop of several turns of wire, or place generator lead close to receiver loop for adequate signal pickup. | No actual connection (signal by radiation) | 1400 KC                    | Tune in generator signal | Antenna             | F                   | Maximum output     |

### TUBE AND TRIMMER LOCATION



Adjustments A and C made from underside of chassis.

### DIAL STRINGING AND POINTER SETTING



Dial stringing and pointer with solid lines shown with gang closed. Dashed line pointer positions (1400 KC and 900 KC) shown when tuning condenser is tuned to generator signal.

### OPERATING RADIO MANUALLY

To operate the radio manually, the "Auto-Off-On" switch must be in the "On" position or the radio will not operate.

The radio on-off switch will turn the radio on or off, but will have no control over the appliance or the clock.

### TO REMOVE CLOCK FROM CABINET

(Radio chassis need not be removed when removing clock.)

1. Remove the back from radio cabinet.
2. Remove the clock plug from the socket on top of the radio chassis by gently prying plug out from socket.
3. Turn the slumber switch to the "60" position.
4. Remove the 3 nuts which hold the clock back cover to the clock.
5. Carefully pull the clock through the front of the cabinet while twisting it slightly to eliminate binding.

### TO REMOVE FIELD and COIL ASSEMBLY or TO REMOVE ROTOR

The field and coil assembly and the rotor can be easily removed after the two screws which mount the nameplate are removed.

Note that when the rotor is replaced, the gear on the rotor must drop into the hole in the center of the gear plate and mesh with the clock gear.