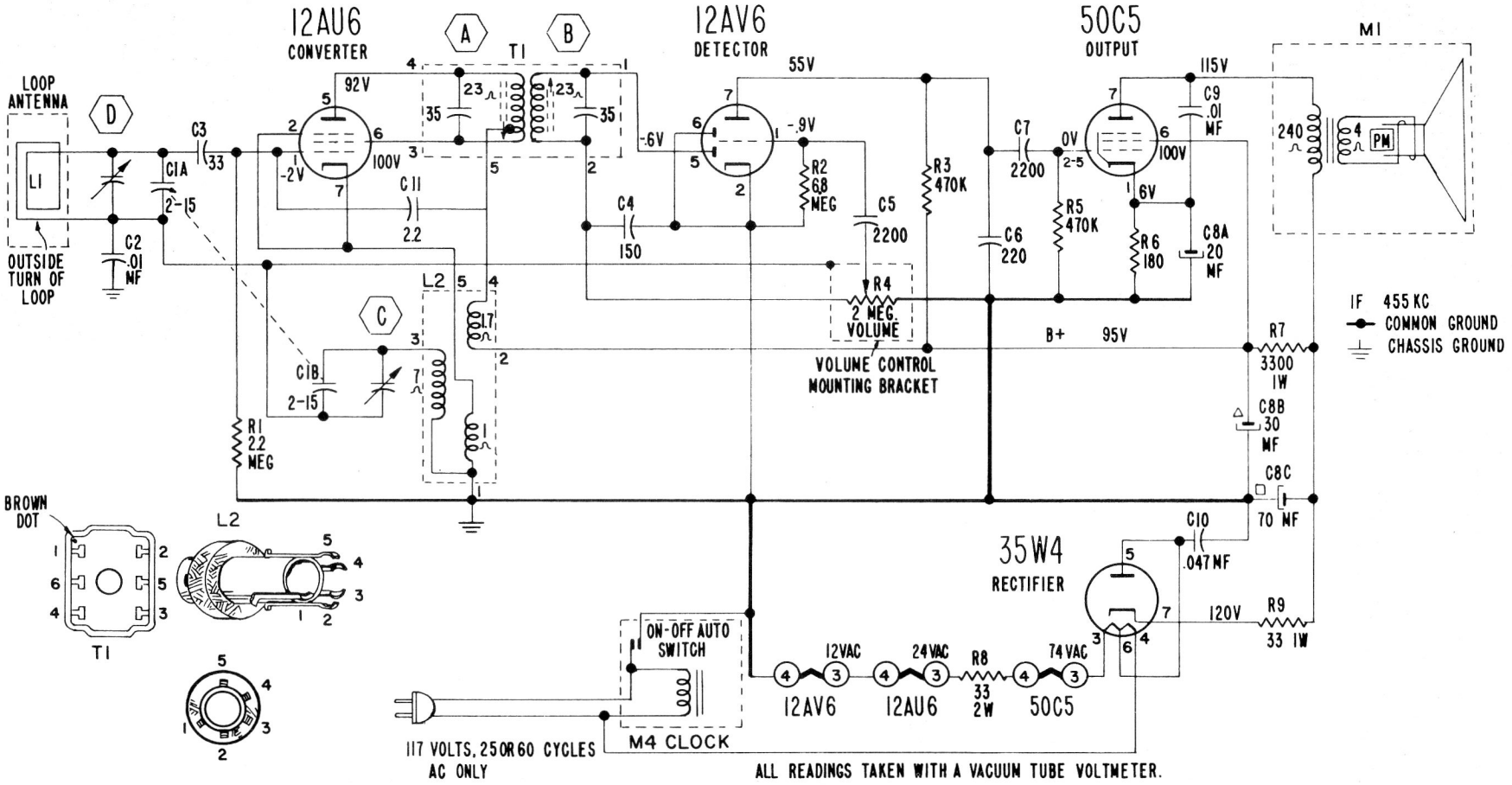
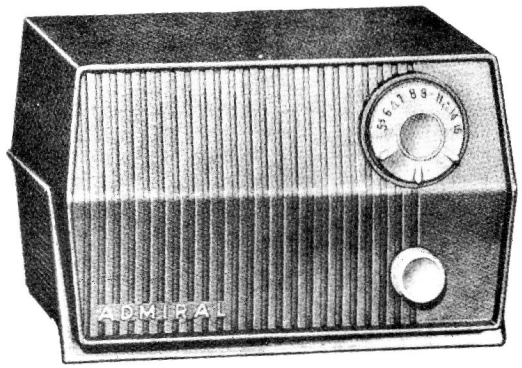
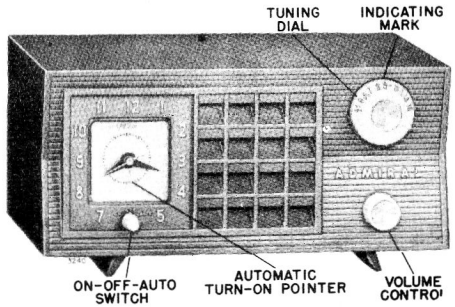




Model: 4L21X, 4L24X, 4L25X, 4L26X, 4L28X



Model: 4M22X, 4M23X, 4M25X, 4M28X

VOLTAGE DATA

Voltages shown on schematic diagram.

- All readings made between tube socket terminals and common ground; see figure 1.
- Dial turned to low frequency end; volume control at minimum.
- Measured on 117 Volts AC line.
- All voltages measured with vacuum-tube voltmeter.

SPECIFICATIONS

Circuit: Superheterodyne using 4 miniature tubes.

Frequency Range: Standard broadcast band, 535 to 1620 KC.

Intermediate Frequency: 455 KC.

Power Supply: Power line of 117 volts, 50 to 60 cycles, AC or DC.

Power Consumption: 30 watts.

Antenna: Built-in loop antenna.

Speaker: 4" PM. with Alnico V magnet. Voice coil impedance, 3.2 ohms.

MODEL	COLOR	CHASSIS
4M22X	Mahogany	4M2X
4M23X	Ivory	
4M25X	Coral	
4M28X	Green	
4L21X	Ebony	4L2X
4L24X	Pink	
4L25X	Red	
4L26X	Yellow	
4L28X	Turquoise	

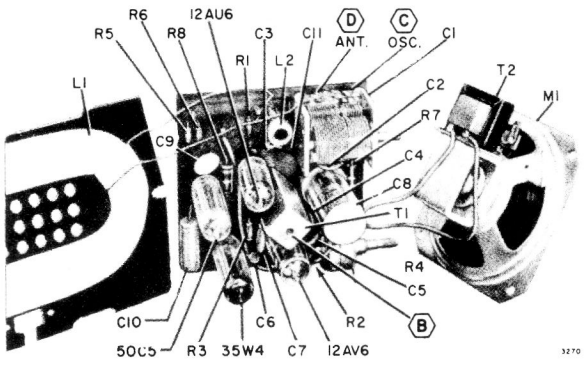


Figure 2. Top View of Chassis Showing Location of Components and Alignment Points.

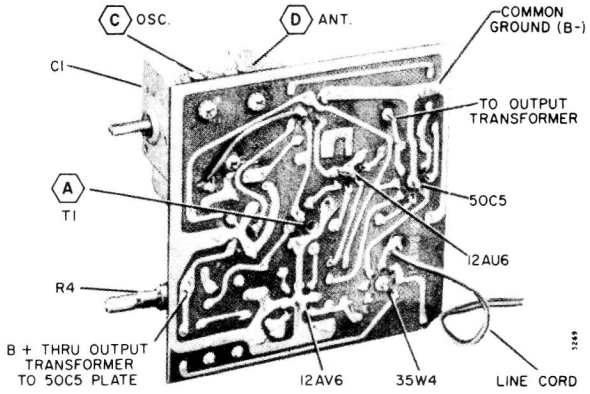


Figure 1. Bottom View of Chassis.

ALIGNMENT PROCEDURE

- Use an isolation transformer if available; otherwise, connect a .1 mfd. capacitor in series with low side of signal generator and connect to chassis.
  Caution: Do not connect a ground wire directly to chassis.
- Set volume control full on.
- Connect output meter across speaker voice coil.
- Use lowest setting of signal generator capable of producing adequate indication on lowest scale of output meter.
- Use a non-metallic alignment tool with a blade 3/32" wide for aligning IF transformers.
- Repeat adjustments to insure good results.

STEP	CONNECTION OF SIGNAL GENERATOR	SIGNAL GENERATOR FREQUENCY	RECEIVER GANG SETTING	ADJUSTMENT
1	Through a .1 mf capacitor to pin 1 of the 12AU6 (Converter) tube	455 KC	Gang fully open	* "A" and "B" for maximum output
2	Same as "STEP 1"	1620 KC	Gang fully open	"C" for maximum output
3	Radiated Signal. Loop of several turns of wire, or place generator lead close to receiver loop for adequate signal pickup.	1400 KC	Tune in generator signal	"D" for maximum output

* Adjustment "A" made from underside of chassis; see figure 1.