# ADMIRAL

# **CLOCK RADIO**

# 5S5X CHASSIS

ALARM
POINTER
Sets Time For
Automatic Turn-on
SLEEP KNOB
Plays Radio up to
60 Minutes

ALARM
Figure 1. Front View of Set Showing Controls.

## **SPECIFICATIONS**

ANTENNA: Aeroscope®, Loop Type.

CIRCUIT: Superheterodyne using five miniature type tubes; one 12BE6 (Converter), one 12BA6 (IF), one 12BA6 (Detector, AVC-AF Amplifier), one 50C5 (Output) and one 35C3 (Rectifier).

**CLOCK:** Westclox Timer. For part number, see Clock Parts.

**FREQUENCY RANGE:** Standard broadcast band; 535 to 1620 KC.

INTERMEDIATE FREQUENCY: 455 KC.

**POWER SUPPLY:** 105-120 volts, 60 cycle AC only.

POWER CONSUMPTION: 30 watts.

SPEAKER: 4" PM with Alnico V Magnet. Voice coil impedance 3.2 ohms.

# **CHASSIS REMOVAL**

- 1. Tilt cabinet forward and remove two screws located on the bottom front of cabinet. See figure 2.
- 2. Loosen the two screws located at the back, until they are held only by their last threads. Apply enough pressure to these loosened screws with the thumbs, to break the AC interlock connection inside the cabinet.
- 3. Remove screws completely and allow chassis, with attached front panel, to slide forward. Make certain that the Time Set knob at the rear clears the hole provided in the cabinet back.

### **DELUXE CLOCK RADIO**

MODEL	COLOR	CHASSIS		
Y3046X	Yellow and White			
Y3048X	Green and White	595X		
Y304IX	Gray and White			

#### TO REMOVE CHASSIS FOR SERVICING TUBES

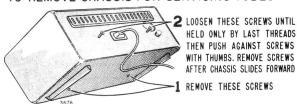


Figure 2. Rear View of Cabinet Showing Chassis Mounting Screws.

#### REMOVING THE CLOCK

- 1. Remove the cabinet (rear section) as instructed under Chassis Removal.
- 2. Remove all knobs by pulling them straight off. Remove the crystal insert by pushing inward and then outward on the four tabs used to secure the crystal into the top and bottom of the front panel. Remove radio dial pointer and clock face escutcheon.

# + + + +

- 3. Unsolder the three clock wires on the etched board taking notes from where each is removed.
- 4. The clock is removed through the front of the panel after removing the two anchoring nuts.

The etched board may be removed from the front panel for more convenience in servicing by removing the screws anchoring the antenna loop and the three screws securing the etched board to the front panel.

To replace chassis with front panel attached into the rear section, make certain that the etched board fits into the grooves provided in the rear section and that the Time Set knob clears the hole in the rear. WARNING: Before tightening the mounting screws, make certain that the AC interlock plug on the antenna support makes good contact into the AC socket in the cabinet.

For part number of clock used in this set, see M5 clock, in the Parts List.

## PARTS AND SERVICE FOR CLOCK

Consult your Admiral distributor for the address of the nearest parts and service station for clocks used in Admiral radios.

#### 5S5X PARTS LIST

RESISTORS		TRANSFORMERS			
Sym. Description	Part No.	Sym.	Description	Part No.	
R1 2.2 meg, $\frac{1}{2}$ W, 10%	60B8-223 60B8-225 60B8-101	T1 T2	Transformer I. F Transformer I. F MISCELLANEOUS		
R6 1 meg, Volume Control	75D25-15 Part of M3 Part of M3 Part of M3 60B8-151 60B14-122	M1 M2 M3 M4 M5	Cord Line and Plug Plug Interlock Couplate, Audio Speaker, 4 in. P.M Clock Radio Timer SCELLANEOUS CHASSIS PARTS	88W36 63C6-20 78B94-2	
CAPACITORS  C1A Gang Condenser	68C78-5 68C78-5 65D10-83 65M1-3 64L6-41 65M1-3 65D10-180 65D10-125 Part of M3 Part of M3	Chass Brack Shield Hum: Escute Space Quick Min. Min.	nal and Connect	14E270-2 15B1665-1 15B2089-2 15B2290-1 15A2346-2 23D407-1 32A250-2 52B5-3 87D35-13	
C11A 250 mrd. C11B C12 .01 mrd, 500V. C13A 30 mrd, 150V. C13B 50 mrd, 150V. C14 .047 mrd, 20%, 400V.  COILS L1 Loop Antenna. L2 Coil, Oscillator.	65D10-41 67C30-2 67C30-2 64L6-28	Cabir Cabir Cabir Point Knob Knob	cabinet parts  net, Yellow (Y3046X)  net, Turquoise (Y3048X)  net, Black (Y3041X)  net Front, White  r, Tuning  , Tubing  , Volume Control  c Crystal	34D129-45 34D129-47 34D162-1 33A410-1 33B409-1 33B409-2 33A417-1	

## **VOLTAGE PRECAUTION**

DO NOT CONNECT AN EARTH GROUND TO THIS RECEIVER.

The etched circuit common ground is connected directly to one side of the power line. To avoid possibility of damage to test equipment or to the etched circuit board, do not place the chassis directly on a metal service bench, tools or other metal objects.

When taking voltage readings or making resistance measurements, use test leads with needle point prods to avoid possibility of short circuits between sections of the etched wiring.

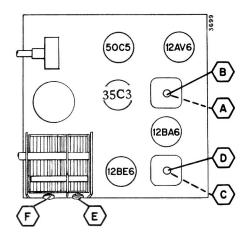


Figure 4. Top View of Chassis Showing Tube and Alignment Point Locations.

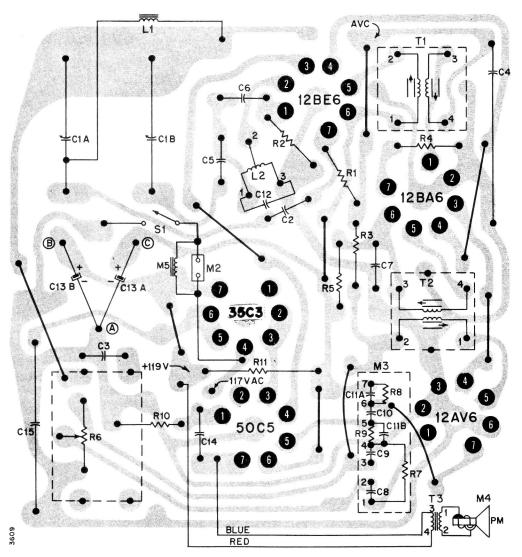
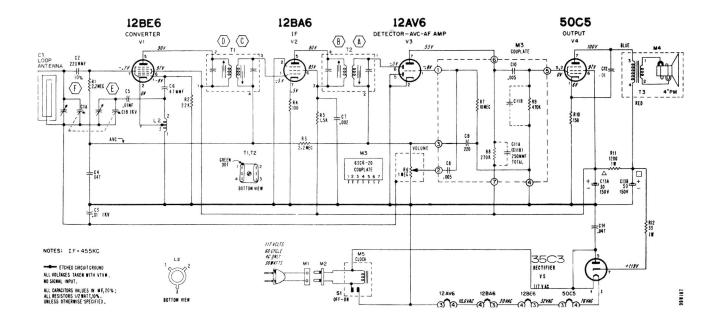


Figure 3. Rear View of Etched Circuit Board. Gray area represents etched wiring; black symbols and lines represent components and connections on opposite side.



# **VOLTAGE DATA**

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

# 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 etched circuit ground.
- Set volume control full on.
- Connect output meter across output secondary.
   For best results disconnect voice coil and use a 3.2 ohm load.
- 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	ADJUSTMENTS
1	Through a .1 mf capacitor to stator, Antenna section of gang tuning capacitor	455 KC	Gang fully open	"A", "B", "C" and "D" for maximum output
2	Same as "STEP 1"	1620 KC	Gang fully open	"E" for maximum output
3	Use a radiated signal. Loop of several turns of wire, or place generator lead close to receiver loop or rod for adequate signal pickup.	1400 KC	Tune in on generator signal	"F" for maximum output