

# SPECIFICATION OF S.T.C. MODEL A5160 CLOCK CONTROLLED RADIO

S56.

## DESCRIPTION:

A five valve clock controlled broadcast mantel radio receiver, incorporating:—

An automatic pre-set electric clock.

Automatic gain control.

Inverse feedback.

High gain power output pentode.

## TUNING RANGE:

530-1620 Kc/s.

## INTERMEDIATE FREQUENCY:

455 Kc/s.

## VALVE COMPLEMENT:

V1 Frequency converter 6BE6.

V2 I.F. Amplifier 6BA6.

V3 Detector, A.G.C. and audio amplifier 6AT6.

V4 Power output pentode 6CH6.

V5 H.T. Rectifier 6X4.

## POWER SUPPLY:

230-250 volts, 50 cycles A.C. **only**

180 Milliamps at 240 volts input.

## LOUDSPEAKER:

4 inch permanent magnet type, with 6000 ohm transformer.

## CIRCUIT VOLTAGES: Refer to Circuit Diagram.

These voltages may vary within 10% of their stated value and must be measured to receiver earth with a voltmeter having a resistance of at least 20,000 ohms per volt.

## MEASUREMENT SPECIFICATION:

I.F. Sensitivity—V1 grid 70 microvolts.

I.F. Sensitivity—V2 grid 3 millivolts.

Broadcast Sensitivity—10 microvolts average.

These sensitivity figures are related to an audio frequency output of 17 volts measured between the plate of V4 and pin 7 of V5 through a series condenser of .1 MFD capacity. When measuring I.F. sensitivity no wiring should be disconnected and a .1 MFD condenser should be used between the "HOT" signal generator lead and the grid of V1 or V2.

## ALIGNMENT FREQUENCY:

600 Kc/s and 1400 Kc/s.

## CHECK POINT:

1000 Kc/s.

## REMOVAL OF CHASSIS:

To remove the chassis from the cabinet, first SWITCH OFF POWER AND REMOVE PLUG—then remove the clock knobs and pull off the two front control knobs, remove the tone control knob and the time setting knob and spindle at the rear of the cabinet.

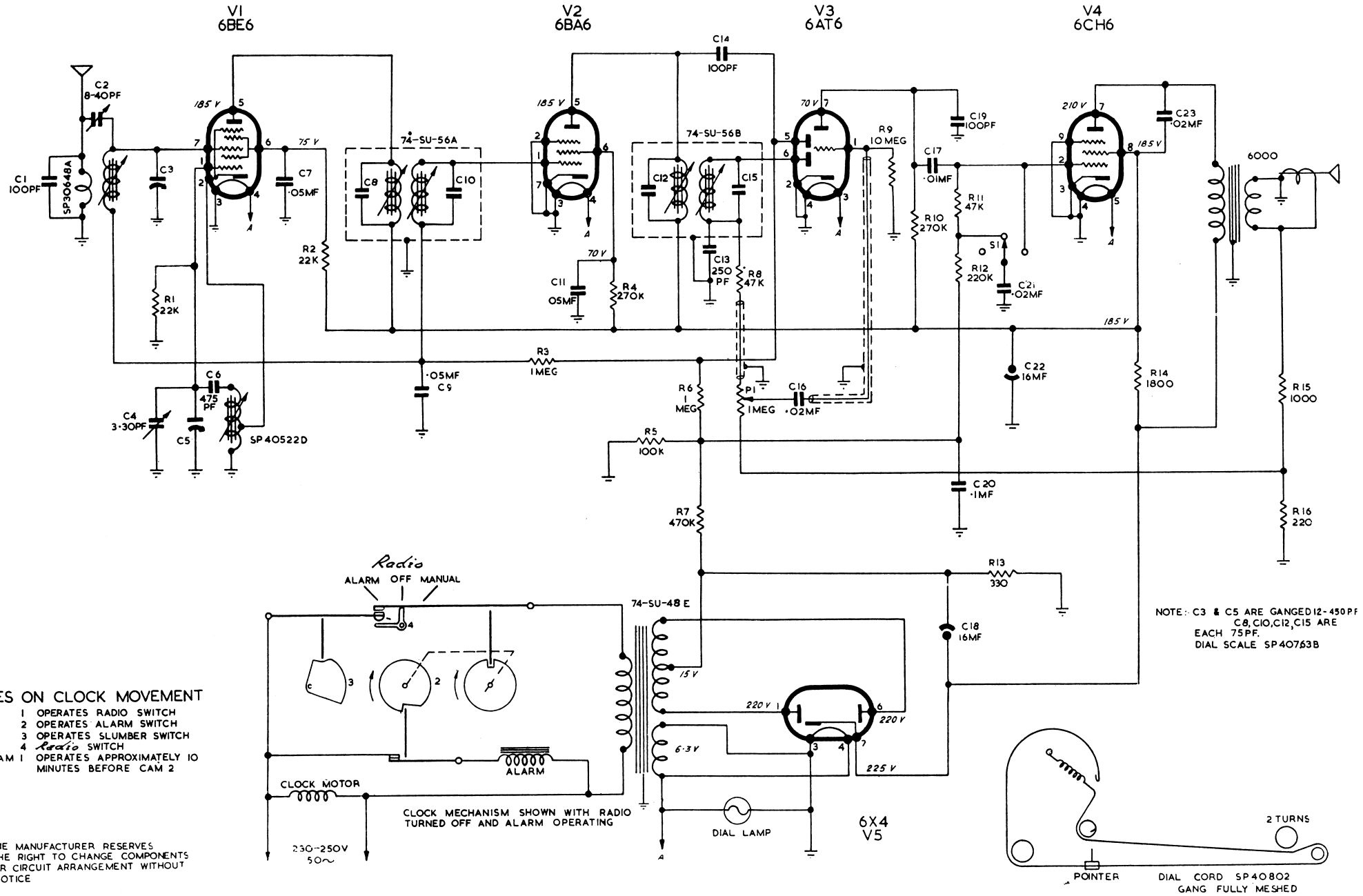
Now remove the four screws holding the cabinet back and place back aside, then remove the four screws underneath the cabinet and the chassis may be removed for service.

When replacing the chassis in the cabinet, lift the front of the chassis slightly to avoid fouling the loudspeaker.



# MODEL 5160

CLOCK CONTROLLED RADIO

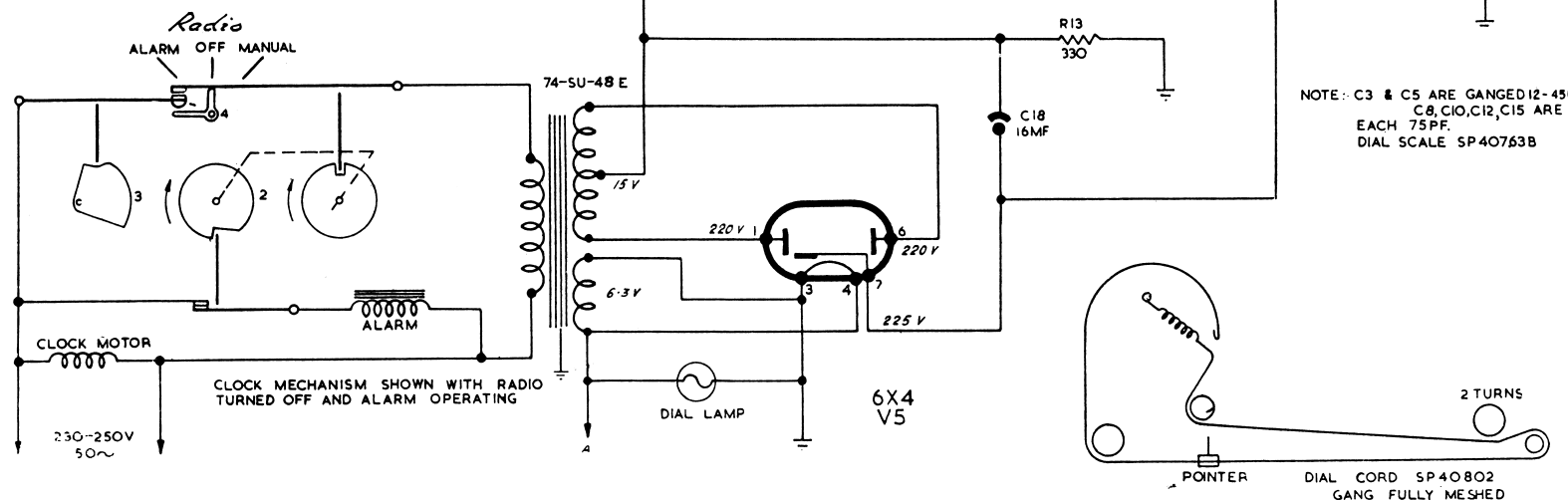


NOTE: C3 & C5 ARE GANGED 12-450 PF  
C8, C10, C12, C15 ARE EACH 75 PF.  
DIAL SCALE SP40763B

### NOTES ON CLOCK MOVEMENT

- 1 OPERATES RADIO SWITCH
- 2 OPERATES ALARM SWITCH
- 3 OPERATES SLUMBER SWITCH
- 4 *Radio* SWITCH
- CAM 1 OPERATES APPROXIMATELY 10 MINUTES BEFORE CAM 2

NOTE - THE MANUFACTURER RESERVES THE RIGHT TO CHANGE COMPONENTS OR CIRCUIT ARRANGEMENT WITHOUT NOTICE





# **RADIO SERVICE BULLETIN**

*Issue No. 132*

*Date of Issue: November, 1957*

*Subject: Model A5160/1  
Model A5162/1*

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## **SPECIFICATION OF S.T.C. MODEL 5160/1 CLOCK CONTROLLED RADIO**

The chassis of this receiver is similar to Model 5160 except for a few mechanical details and that a 47k  $\frac{1}{2}$  watt resistor is now in series with the control grid of the output valve V4. Consequently for all other circuit details refer to Model 5160, Service Bulletin No. 123.

## **SPECIFICATION OF S.T.C. MODEL 5162/1 MANTEL RECEIVER**

The chassis of this receiver is similar to Model 5162, except for a few mechanical details. Consequently for all circuit details refer to Model 5162, Service Bulletin No. 124.



# RADIO SERVICE BULLETIN

## SPECIFICATION OF S.T.C. MODEL A5162

### DESCRIPTION:

A five valve broadcast mantel radio receiver, incorporating:—  
Automatic gain control.  
Inverse feedback.  
High gain power output pentode.

### TUNING RANGE:

530-1620 Kc/s.

### INTERMEDIATE FREQUENCY:

455 Kc/s.

### VALVE COMPLEMENT:

- V1 Frequency converter 6BE6.
- V2 I.F. Amplifier 6BA6.
- V3 Detector, A.G.C. and audio amplifier 6AT6.
- V4 Power output pentode 6CH6.
- V5 H.T. Rectifier 6X4.

### POWER SUPPLY:

230-250 volts 50 cycles A.C.  
180 Milliampères at 240 volts input.

### LOUDSPEAKER:

4 inch permanent magnet type, with 6000 ohm transformer.

### CIRCUIT VOLTAGES:

Refer to circuit diagram.  
The voltages may vary within 10% of their stated value and must be measured to receiver earth with a voltmeter having a resistance of at least 20,000 ohms per volt.

### MEASUREMENT SPECIFICATION:

I.F. Sensitivity—V1 grid 70 microvolts.  
I.F. Sensitivity—V2 grid 3 millivolts.  
Broadcast Sensitivity—10 microvolts average.  
These sensitivity figures are related to an audio frequency output voltage of 17 volts measured between the plate of V4 and pin 7 of V5 through a series condenser of .1 MFD capacity. When measuring I.F. sensitivity no wiring should be disconnected and a .1 MFD condenser should be used between the "HOT" signal generator lead and the grid of V1 or V2.

### ALIGNMENT FREQUENCY:

600 Kc/s and 1400 Kc/s.

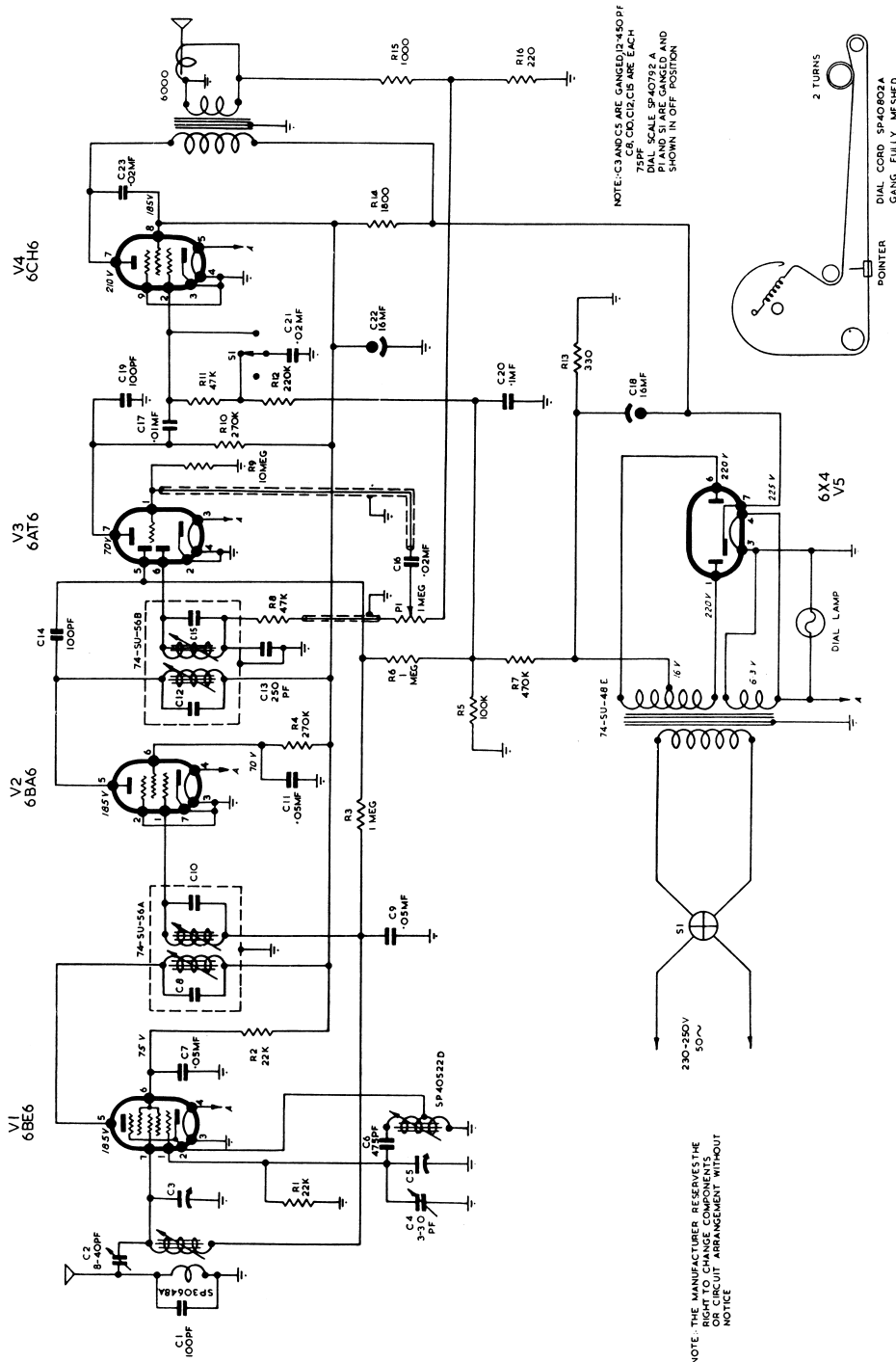
### CHECK POINT:

1000 Kc/s.

### REMOVAL OF CHASSIS:

To remove the chassis from the cabinet, first SWITCH OFF POWER AND REMOVE PLUG—Then pull off the two front control knobs, then the tone control knob at the rear of the cabinet. Now remove the four screws holding the cabinet back and place back aside, then remove the four screws underneath the cabinet and the chassis may be removed for service.

MODEL 5162



NOTE: C3 AND C5 ARE GANGED (2-4.50 PF)  
C6, C8, C10, C15 ARE EACH  
71.6 SCALE SP40792 A  
P1 AND S1 ARE GANGED AND  
SHOWN IN OFF POSITION

NOTE: THE MANUFACTURER RESERVES THE  
RIGHT TO CHANGE COMPONENTS  
WITHOUT NOTICE

