



# RADIO SERVICE BULLETIN

Issue: No. 121

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Subject: Model 5164

## SPECIFICATION OF S.T.C. MODEL A5164 PORTABLE RADIOGRAM

### DESCRIPTION:

A five valve A.C. operated portable radiogram, incorporating:—  
High gain aerial coil.  
Inverse feedback.  
Power output pentode.  
Automatic gain control.  
Automatic three speed mixer record changer.

### TUNING RANGE:

530-1620 Kc/s.

### INTERMEDIATE FREQUENCY:

455 Kc/s.

### VALVE COMPLEMENT:

V1 Frequency converter 12AH8.  
V2 I.F. amplifier 6BA6.  
V3 Detector, A.G.C. and audio amplifier 6AT6.  
V4 Output 6CH6.  
V5 HT Rectifier 6X4.

### POWER SUPPLY:

230-250 volts, 50 cycles A.C.  
180 milliamperes with 240 volts at 50 cycles input on "RADIO".  
280 milliamperes with 240 volts at 50 cycles input on "GRAM".

### LOUDSPEAKER:

5 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 40 microvolts.  
I.F. Sensitivity—V2 Grid 4 millivolts.  
Broadcast Sensitivity—10 microvolts average.  
These 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.

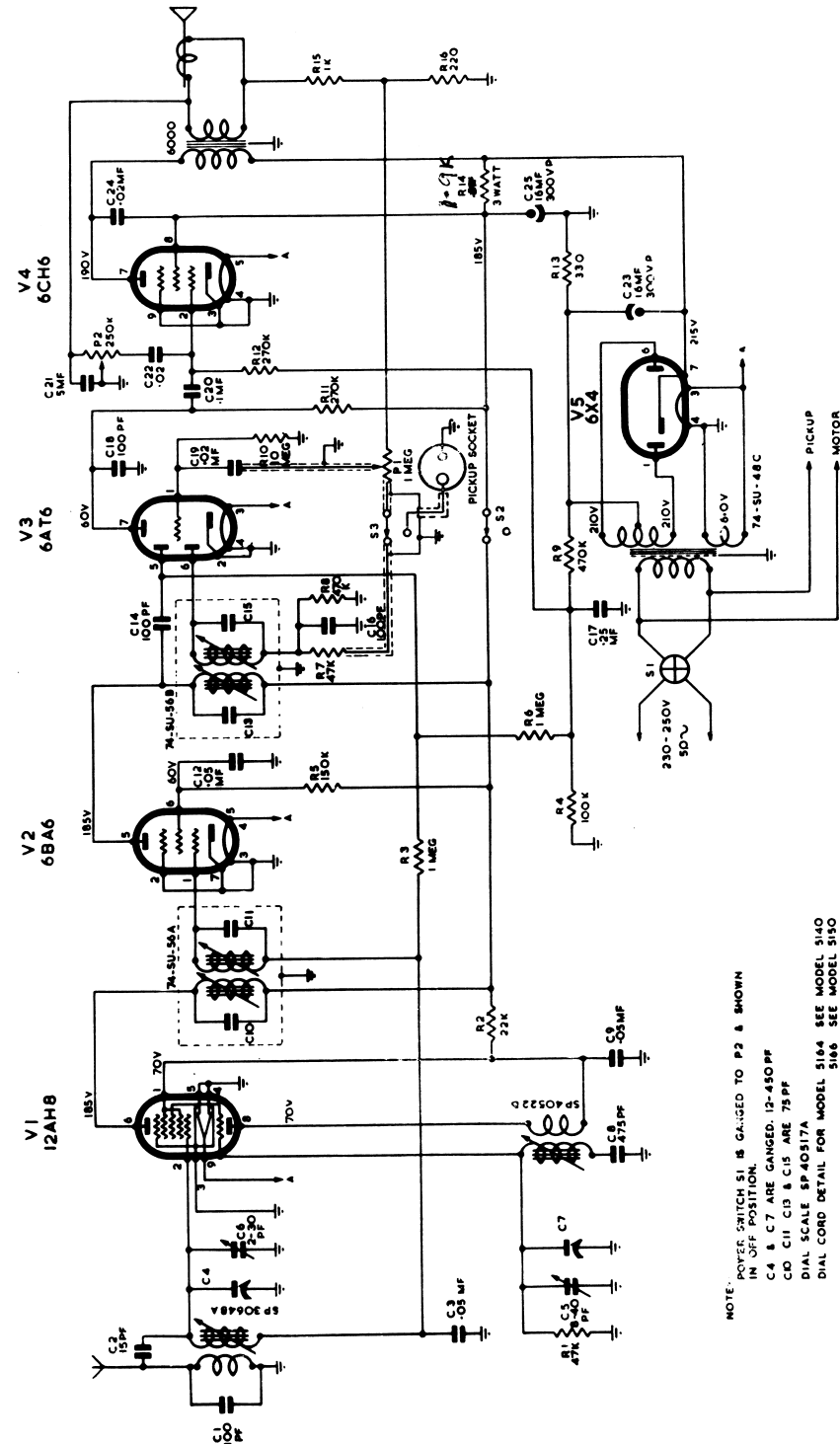
### ALIGNMENT FREQUENCIES:

Broadcast—600 Kc/s and 1400 Kc/s.

### CHECK POINT:

Broadcast—1000 Kc/s.

## MODEL 5164 PORTABLE RADIOGRAM MODEL 5166 TABLE RADIOGRAM



NOTE: POWER SWITCH S1 IS GANGED TO P2 & SHOWN IN OFF POSITION.  
C4 & C7 ARE GANGED. 12-450 PF  
C8, C11, C13 & C15 ARE 75 PF  
DIAL SCALE SP.40517A  
DIAL CORD DETAIL FOR MODEL 5164 SEE MODEL 5140  
5166 SEE MODEL 5130

NOTE: THE MANUFACTURER RESERVES THE RIGHT TO CHANGE COMPONENTS OR WIRING ARRANGEMENTS WITHOUT NOTICE.