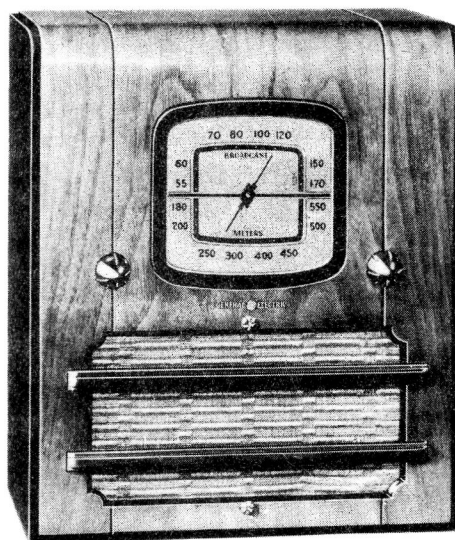


MODEL H-41B

Supplement to Model H-4B

Four-Tube, Single-Band, Battery-Operated Superheterodyne Receiver



Electrical Specifications

Frequency Range540—1,720 k.c. Alignment Frequencies 600 k.c., 1500 k.c., (osc., ant.)
Intermediate Frequency 455 k.c.

RADIOTRON COMPLEMENT

(1) Type 1A7G First Detector—Oscillator (2) Type 1N5G I. F. Amplifier
(3) Type 1H5G Second Det., A.F. and A.V.C. (4) Type 1C5G Power Output

BATTERIES REQUIRED

“A” one 1.4 Volt Air Cell or 1.5 Dry Cell; “B” two 45 Volt heavy duty “B” Batteries

CURRENT CONSUMPTION

“A” at 1.4 Volts 0.26 Volts
“B” at 90 Volts 9.6 Ma.

POWER OUTPUT

Undistorted 115 Milliwatts
Maximum 260 Milliwatts

LOUDSPEAKER

Type Permanent Magnet Dynamic
Diameter 5 inches
Voice Coil Impedance 3 Ohms at 400 Cycles

Mechanical Specifications

	Height	Width	Depth
Cabinet Dimensions	13 $\frac{1}{4}$ inches	10 $\frac{1}{8}$ inches	6 $\frac{3}{4}$ inches
Chassis Base Dimensions	2 inches	9 $\frac{3}{4}$ inches	5 $\frac{5}{8}$ inches
Overall Chassis Height			6 inches
Weight	8 lbs. (net)	10 $\frac{3}{4}$ lbs. (shipping)	
Operating Controls	(1) Power Switch—Volume; (2) Tuning		
Tuning Drive Ratio	8 to 1		

General Description

Model H41-B is a four tube, battery operated receiver housed in a modern styled, table type cabinet. The superheterodyne type of circuit is employed, incorporating such features of design as magnetite core Antenna, oscillator and I.F. transformers, the

new low-drain 1.5 volt tubes, Automatic volume control, diode detection, resistance coupled audio system, sensitive, five-inch, permanent magnet, dynamic loudspeaker, exceptionally low current drain and a large, easy-to-read dial.

Service Data

Refer to the Model H4-B Service Notes for all service data including Alignment Procedure, Schema-

tic and Wiring diagrams, Precautionary Lead Dress, and Radiotron Voltages.

REPLACEMENT PARTS PECULIAR TO MODEL H-41B

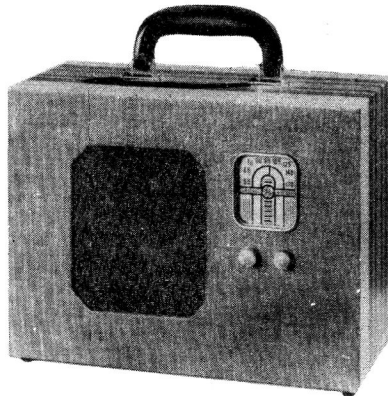
STOCK No.	DESCRIPTION		STOCK No.	DESCRIPTION	
30975	Crystal-Station selector dial crystal.....			REPRODUCER ASSEMBLIES	
S-2385	Dial-Dial scale and bracket assembly.....			CRL-500-1	
S-2386	Indicator-Station selector indicator assembly.....		S-2375	Cone-Reproducer cone and voice coil (L7).....	
S-2326	Knob-Volume control or tuning knob.....		S-2376	Reproducer-Reproducer complete.....	
11349	Spring-Knob retaining spring (Pkg.of 5).....		S-2377	Transformer-Output transformer (T1).....	

Refer to Model H4-B Service Notes,

for all common parts not listed above.

MODEL H-41BP

Four-Tube, Single-Band, Battery-Operated, Superheterodyne Receiver



Electrical and Mechanical Specifications

Frequency Range..... 550-1,720 kc
Intermediate Frequency..... 455 kc

TUBE COMPLEMENT

(1)Type 1A7-G..... 1st-Det.—Osc.
(2)Type 1N5-G..... I-F Amplifier
(3)Type 1H5-G..... 2nd-Det., A-F, and A.V.C.
(4)Type 1C5-G..... Output

BATTERIES REQUIRED

"A," one 1.5 volt dry plug-type "A," 2½-in. x 2½-in. x 4-in.
(Eveready No. 742 or equivalent)
"B," two 45 volt dry plug-type "B," 2½-in. x 4-in. x 5½-in.
(Eveready No. 762 or equivalent)

CURRENT CONSUMPTION

"A," 0.24 ampere—"B," 9.0 milliamperes

POWER OUTPUT

Undistorted..... 0.10 watt
Maximum..... 0.21 watt

LOUDSPEAKER

Type..... 4-inch permanent-magnet dynamic
Voice-coil Impedance..... 2 ohms at 400 cycles

	Height	Width	Depth
Cabinet Dimensions (inches).....	9½	12½	6½
Weight—(Net) less batteries.....			6 pounds
With batteries.....			12½ pounds
Tuning Drive Ratio.....			10 to 1

REPLACEMENT PARTS

STOCK NO.	DESCRIPTION	STOCK NO.	DESCRIPTION
RECEIVER ASSEMBLIES			
S-2474	Capacitor-Adjustable trimmer 300-600 mmfd. (C6).....	13601	Resistor-10 meg., 1/4 watt (R6)....
13057	Capacitor-60 mmfd. (C7).....	33305	Shaft-Tuning knob shaft and bushing.....
12720	Capacitor-100 mmfd. (C13, C14, C16)....	32595	Shield-Tube shield-less cap.....
30433	Capacitor-400 mmfd. (C15, C17).....	32537	Socket-Tube socket.....
12725	Capacitor-1000 mmfd. (C18).....	30585	Spring-Drive cord spring (Pkg.2)..
4886	Capacitor-.05 mfd. (C8).....	33301	Transformer-1st I.F. transformer (L3, L4, C9, C10).....
4839	Capacitor-.01 mfd. (C1).....	33302	Transformer-Second I.F. transformer (L5, L6, C11, C12).....
33303	Capacitor-8 mfd. Electrolytic (C19)....	33304	Volume control and switch (R5, S1, S2).....
32573	Coil-Oscillator coil.....	SPEAKER ASSEMBLIES (39128-1)	
S-2473	Condenser-2 gang variable tuning condenser (C2, C3, C4, C5).....	33058	Speaker complete.....
32634	Cord-Variable condenser drive cord..	33062	Transformer-Output transformer(T1)
S-2423	Drum-Drive cord drum and indicator assembly.....	MISCELLANEOUS ASSEMBLIES	
33300	Loop-Antenna loop complete.....	S-2422	Dial-Glass dial scale.....
32208	Plug-2 contact plug for battery cable.....	S-2475	Escutcheon-Dial scale escutcheon..
12827	Plug-3 contact plug for battery cable.....	33376	Handle-Carrying handle.....
12454	Resistor-33,000 ohms, 1/4 watt (R3)...	S-2434	Knob-Tuning knob.....
14076	Resistor-820 ohms, 1/4 watt (R9)....	S-2472	Knob-Volume control knob.....
13715	Resistor-68,000 ohms, 1/4 watt (R2)...		
12264	Resistor-220,000 ohms, 1/4 watt (R1)		
13730	Resistor-1 meg., 1/4 watt (R7).....		
12679	Resistor-2.2 meg., 1/4 watt (R4, R8).		

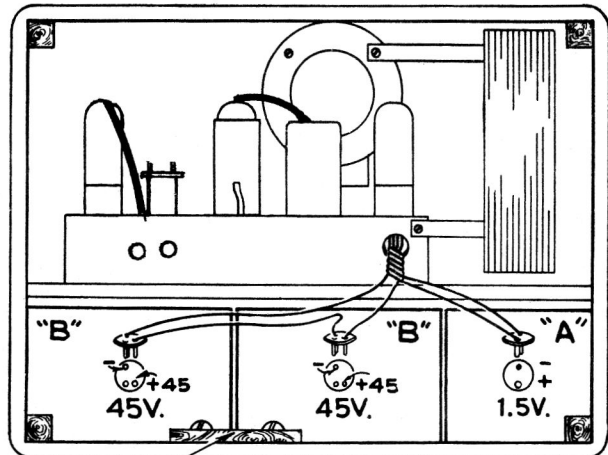
Alignment Procedure

Output Meter Alignment.—If this method is used, connect the meter across the voice coil, and turn the receiver volume control to maximum.

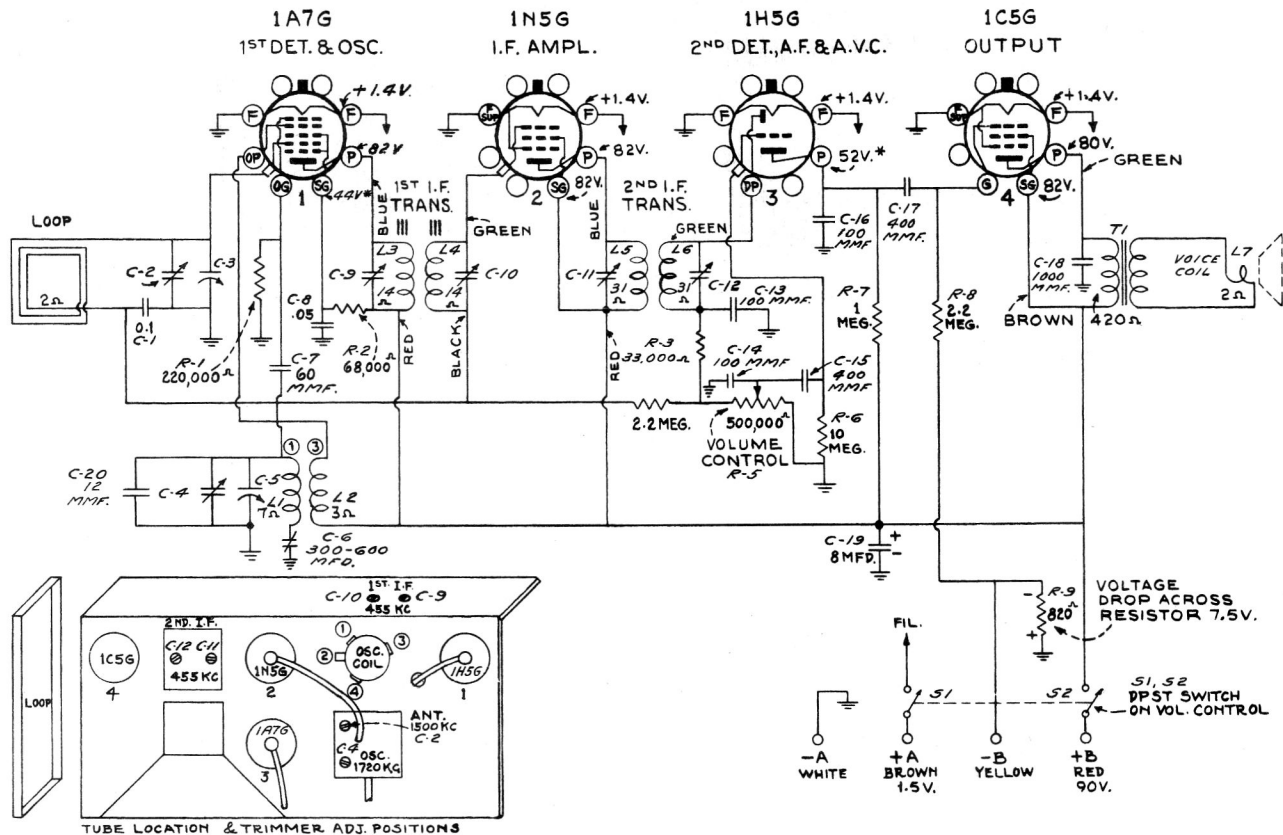
Test-oscillator.—For all alignment operations, keep the output as low as possible to avoid a-v-c action.

Pre-setting Dial.—With gang condenser in full mesh, the pointer should be horizontal.

Steps	Connect the high side of test-oscillator to—	Tune test-osc. to—	Turn radio dial to—	Adjust the following for max. peak output—
1	1A7G 1st-Det. grid cap, in series with .01 mfd.	455 kc	Quiet point at 1,600 kc end of dial	C9 C10 C11 C12 (1st and 2nd I-F transformers)
2	Antenna coil loop by means of one turn of wire placed near loop	1,720 kc	Full clockwise (out of mesh)	C4 (oscillator)
3		1,500 kc	Resonance on 1,500 kc signal	C2 (antenna)



REMOVE THIS BLOCK-PLACE BATTERIES IN CABINET AS INDICATED
REAR VIEW OF CABINET SHOWING BATTERIES



Schematic Circuit Diagram

Note: Values with star (*) are operating voltages. Values not starred are actual measured voltages. Measurements are made to chassis unless otherwise indicated, with set tuned to quiet point. Values should hold within approximately $\pm 20\%$ with rated battery voltage.