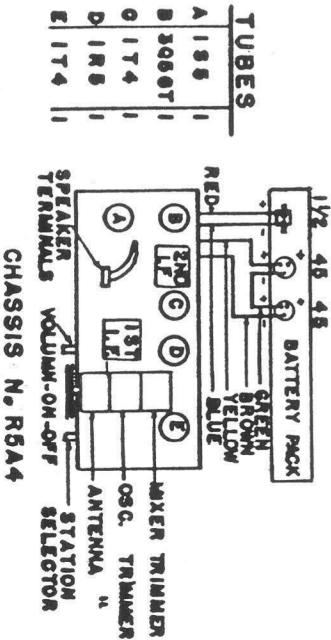


C-11	Filter Condenser 10MFD, 150 Volt Type P.R.
C-2	Condenser T, .05 MFD, 400 Volt 20%
	Dial Drive Cord 18 lb, Schindler
C-3 & C-8	Condenser .1 MFD, 200 Volt 20% - 10%
C-6 & C-10	Condenser .003 " 600 Volt 25%
C-9	Condenser .02 " 600 Volt 20%
C-5	" 250 MMF, Mica 20%
C-7	" 100 MMFD, " 20%
C-4	" 50 MMF, " 20%
R-10	Resistor 330 Ohms, 1/2 Watt 10%
R-3	" 10K " 1/2 " 20%
R-2 & R-11	" 100K " 1/2 " 20%
R-8	" 470K " 1/2 " 20%
R-1 & R-5	" 1 Megohm 1/2 " 20%
R-4	" 2.2 " 1/2 " 20%
R-6	" 4.7 " 1/2 " 20%
R-7	" 3.3 " 1/2 " 20%

Courtesy of nucow.com

# 1946-47 MODEL 7

## I.F. - 456 KC.



# ALIGNMENT DATA 1946-47

## MODELS 5A 10 F MODEL 7

### 1. TUNING I.F. AMPLIFIER TO 456 KILOCYCLES

- (a) Connect the Output from the Signal Generator through a 60 mmf. mica condenser to the lead provided for use of an external antenna.
- (b) Connect the Output Meter across the voice coil.
- (c) Turn the control situated at the left on front of chassis (On-Off switch and Volume Control) to its maximum clockwise position and the Tuning Control so that the plates are completely in mesh.
- (d) Set Generator to 456 Kilocycles.
- (e) Adjust both trimmers located on top of the 2nd I.F. Transformer (T2) until maximum deflection is obtained on the Output Meter.
- (f) Adjust both trimmers located on top of the 1st I.F. Transformer (T1) until maximum deflection is obtained.

N.B.:

After each adjustment has been made it may be necessary to re-adjust the Generator Attenuator to a reasonable output.

### 2. BROADCAST ALIGNMENT

- (a) Leave Generator and Output Meter connected as described in the Tuning of the I.F. Amplifier.
- (b) Set Signal Generator to 1500 K.C. and Tuning Condenser for a corresponding dial reading.
- (c) Adjust the Oscillator Trimmer situated on the top right side of chassis through the 3rd opening from front until deflection is obtained on the Output Meter.
- (d) Now adjust the Mixer Trimmer situated on the back of the Loop Antenna until maximum deflection is obtained on the Output Meter.
- (e) If adjustment should be necessary at the low frequency end of the Broadcast Band, bend the slotted plates on Mixer section of the Tuning Condenser for maximum output.

### 3. SHORT WAVE BAND ALIGNMENT

- (a) Turn the Band Switch (Right hand knob) to Short Wave position and set the Signal Generator to 15 Megacycles and the Tuning Condenser for a corresponding dial reading.
- (b) Adjust the Short Wave Oscillator Trimmer situated on the top right side of chassis through the centre opening until maximum deflection is obtained determining also that set is peaked to the "Fundamental" signal and not the "Image". This may be checked by rotating the Tuning Condenser to approximately 14.1 Megacycles where the "Image" should be observed.
- (c) Set the Generator to 12 Megacycles and the Tuning Condenser for a corresponding dial reading and adjust the Short Wave Mixer Trimmer situated on the top right side of chassis through the opening nearest the front for maximum deflection on the Output Meter.
- (d) Set the Generator to 6 Megacycles and check that the signal is observed when the Tuning Condenser is at a corresponding dial reading. If not, bend the slotted plates on the Oscillator section of the Tuning Condenser, but bear in mind that any adjustments to this section will produce an alteration on the Broadcast band and re-adjustment of the slotted plates on mixer section of tuning condenser may be necessary.

### 1. TUNING THE I.F. AMPLIFIER TO 456 KILOCYCLES

- (a) Connect the output from the Signal Generator through a 1000 mmf. mica condenser to the control grid (back section of gang) of the 1R5 Mixer tube.
- (b) Connect the Output Meter across the voice coil.
- (c) Turn the control situated at the left on front of chassis (On-Off switch and Volume Control) to its maximum clockwise position and the Tuning Control so that the plates are completely in mesh.
- (d) Set Generator to 456 Kilocycles.
- (e) Adjust both trimmers located in the 2nd I.F. Transformer (T2) until maximum deflection is obtained on the Output Meter.
- (f) Adjust both trimmers located on top of the 1st I.F. Transformer (T1) until maximum deflection is obtained.

(g) Repeat the above two adjustments and determine that peak deflection has been obtained.

NB: After each adjustment has been made it may be necessary to re-adjust the Generator Attenuator for a reasonable output.

### 2. BROADCAST BAND ALIGNMENT

- (a) Leave Output Meter connected as described in the Tuning of the I.F. Amplifier and connect the Generator through a 200 mmf. mica condenser to the antenna wire (Red).
- (b) Set the Signal Generator to 1500 K.C. and the Tuning Condenser for a corresponding dial reading.
- (c) Adjust the Oscillator Trimmer on the right hand side of the middle section of the Tuning Condenser until a deflection is obtained on the Output Meter.
- (d) Now adjust the Antenna and Mixer Trimmers on the right hand side of the two outer sections for peak deflection on the Output Meter, rocking Tuning condenser slightly during the operation.
- (e) If adjustment should be necessary at the low frequency end of the Broadcast Band, bend the slotted plates on the Antenna and Mixer sections of the Tuning Condenser for maximum output.

MODEL - 2A-B-C

VOLUME CONTROL

Circuit Designation	Value	Mfrs. No.	IRC No.
R	.5M	90-02	13-133 Sw.No. 21

CAPACITORS

AEROVOX No.

C1,C5	500 mmfd. mica	84-351	1468
C2	50 mmfd. mica	84-251	1468
C3	.05 mfd. pp.	84-551	684
C4	250 mmfd. mica	84-331	1468
C6	.25 mfd. pp.	84-631	684
C7,C9	.005 mfd. pp.	84-451	684
C8	.02 mfd. pp.	84-521	684
C10,C11	.025 mfd. pp.	84-531	684
C12 A and B	60-30 mfd. 150V electrolytic	83-01	PRT150
CG	Tuning Gang Ass.	86-02	

MISCELLANEOUS

L1	Bc. Osc. Coil	94-05	
L2	I.F. Wave Trap	95-05	
L3	Ant. Coil Ass'y.	94-04	
T1	1st. I.F. Trans.	95-03	
T2	2nd. I.F. Trans.	95-04	
T3	Speaker and Output Trans.	103-21	

MODEL - 5A-B-C-D-E-F

VOLUME CONTROL

Circuit Designation	Value	Mfrs. No.	IRC No.
R	.5M	90-01	13-133 Sw.No. 21

CAPACITORS

AEROVOX No.

C1	500 mmfd. mica	84-351	1468
C2,C3,C4	50 mmfd. mica	84-251	1468
C5,C6	.05 mfd. pp.	84-551	684
C7,C8	.025 mfd. pp.	84-531	684
C9	250 mmfd. mica	84-331	1468
C10	500 mmfd. mica	84-351	1468
C11	.003 mfd. pp.	84-431	684
C12	.005 mfd. pp.	84-451	684
C13	.25 mfd. pp.	84-631	684
C14	.02 mfd. pp.	84-521	684
C15	700 mmfd. mica	84-371	1468
CF A and B	60-30 mfd. 150V electrolytic	83-01	PRT150
CG	Tuning Gang Ass. Trimmers (3)	86-01 85-01	

MISCELLANEOUS

L	Ant. Loop Ass'y.	119-01	
L1	Bc. Osc. Coil	94-02	
L2	Short Wave Osc. Coil	94-03	
L3	Short Wave Ant. Coil	94-01	
T1	1st. I.F. Trans.	95-01	
T2	2nd. I.F. Trans.	95-02	
T3	Speaker and Output Trans.	103-31	

Courtesy on nucow.com

MODEL - 7

VOLUME CONTROL

Circuit Designation	Value	Mfrs. No.	IRC No.
R	1M	5	13-137 Sw.No. 21

CAPACITORS

AEROVOX No.

C1,C2	.05 400V pp	25A	484
C3,C8	.1 mfd.		
C3,C8	.1 200V pp.	27	284
C4	50 mmfd. mica	32	1468
C5	250 mmfd. mica	30	1468
C6,C10	.003 600V pp.	28	684
C7	100 mmfd. mica	31	1468
C9	.02 600V pp.	29	684
C11	10 mfd. 150V electrolytic	25	PRT150
CG	Tuning Gang Ass.	4	

MISCELLANEOUS

L1	Ant. Coil	12	
L2	R.F. Coil	13	
L3	Osc. Coil	14	
T1	I.F. Trans. Input	10	
T2	I.F. Trans. Output	11	
S	Speaker and Output Trans.	20	

MODEL - All-B11

VOLUME CONTROL

Circuit Designation	Value	Mfrs. No.	IRC No.
R	1M	90-06	11-137 Sw.No. 21

CAPACITORS

AEROVOX No.

C1	.025 mfd. pp.	84-531	684
C2	.02 mfd. pp.	84-521	684
C3	80-30-20 mfd. 150-150-25V electrolytic	83-03	PRT150 PRT25

MISCELLANEOUS

S	Speaker PM	103-41	
P	Pickup	125-01	
M	Motor and Turntable 25 Cy.	101-01	
M	Motor and Turntable 60 Cy.	101-02	

MODEL - C11-D11 DANGATONE

VOLUME CONTROL

<u>Circuit Designation</u>	<u>Value</u>	<u>Mfrs. No.</u>	<u>IRC No.</u>
R	1M	90-06	11-137 Sw.No. 21

CAPACITORS

AEROVOX No.

C1	80-30-20 mfd. 150-150-25V electrolytic	83-03	PRT150 PRT25
C2	.02 600V pp.		684
C3	.025 600V pp.		684

MISCELLANEOUS

S	Speaker FM	103-41
P	Pickup	125-01
M	Motor 25 Cycle	101-01
M	Motor 60 Cycle	101-02

MODEL - B2A-B-C

VOLUME CONTROL

<u>Circuit Designation</u>	<u>Value</u>	<u>Mfrs. No.</u>	<u>IRC No.</u>
R5	.5M	90-02	13-133 Sw.No. 21

CAPACITORS

AEROVOX No.

C1,C2,C10	500 mfd. mica		1468
C3,C6,C8	.025 mfd. pp.		684
C4	50 mmfd. mica		1468
C5	.05 mfd. pp.		684
C7	250 mmfd. mica		1468
C9,C11	.005 mfd. pp.		684
C12A	60 mfd. electro. 14A		PRT150
C12B	40 mfd. electro. 14A		
C13	.02 mfd. pp.		684
CG	Tuning Gang Ass'y.86-02		

MISCELLANEOUS

L1	Ant. Coil Ass'y.	13A
L2	Bc.Osc. Coil	12A
T1	1st. I.F. Trans.	95-03
T2	2nd. I.F. Trans.	95-04
T3	Output Trans.	99-04
S	Speaker and Output Trans.	

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