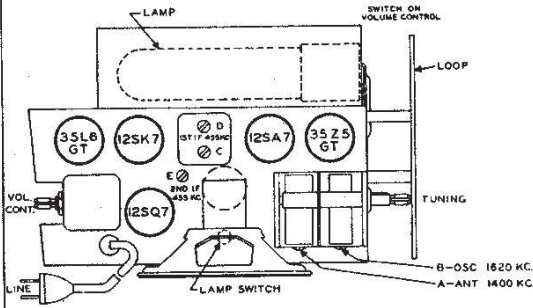


PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
R1 N-4025	22,000 OHM .5W 20%	C6 N-4135	230 MF 300V 20%
R2 N-4026	220,000 OHM .5W 20%	C7 N-1344	50 MF 400V 20%
R3 N-282	1 MEG OHM .5W 20%	C8 N-1378	52 MF 400V 20%
R4 N-4083	47,000 OHM .5W 20%	C9 N-4238	60 MF 150V ELECTROLYTIC
R5 N-4239	5 MEG OHM VOL. CONT.	C10 N-1345	20 MF 400V 20%
R6 N-4084	88 MEG OHM .5W 20%	E11 N-1248	.05 MFD 400V 20%
R7 N-4085	47,000 OHM .5W 20%	E12 N-1345	.05 MFD 200V 20%
R8 N-1776	150,000 OHM .5W 20%		
R9 N-4027	220 OHM .5W 10%		
R10 N-8244	220 OHM .5W 10%		
R11 N-4027	470,000 OHM .5W 20%		
N-8087	88 OHM 2.5W 10%	1 N-3336	ANTENNA COIL LOOP
N-8273	47 OHM 1W 10%	2 N-8237	2 GANG CONDENSER
		3 N-830	OSCILLATOR COIL
		4 N-830	1ST I.F. TRANSFORMER
		5 N-4846	2ND I.F. TRANSFORMER
		6 N-4885	TRIMMER
		7 N-3888	OUTPUT TRANSFORMER
		8 N-8235	4" P.M. SPEAKER
C1 N-1345	.05 MFD 200V 20%	N-2094	LAMP SWITCH
C2 N-1345	.05 MFD 200V 20%	N-2383	25W T-10 110V LAMP
C3 N-8015	100 MF 300V 20%		
C4 N-4884	.005 MFD 600V -15 +20%		
C5 N-1351	.1 MFD 200V -10 +20%		



IF 455 KC.  
5 TUBE AC-DC

APRIL, 1947

**SERVICE DATA**

Lack of sensitivity and poor tone quality may be due to any one or a combination of causes such as weak or defective tubes or speaker, open or grounded bias resistor, bypass condenser, etc. Never attempt to realign set until all other possible sources of trouble have been first thoroughly investigated and definitely proved not to be the cause.

**NOTE:** IT IS ABSOLUTELY NECESSARY THAT AN ACCURATELY CALIBRATED TEST OSCILLATOR WITH SOME TYPE OF OUTPUT MEASURING DEVICE BE USED WHEN ALIGNING THE RECEIVER AND THAT THE PROCEDURE BE CAREFULLY FOLLOWED. OTHERWISE THE RECEIVER WILL BE INSENSITIVE AND THE DIAL CALIBRATION WILL BE INCORRECT. THE TRIMMERS WILL BE REFERRED TO BY THEIR FUNCTION AS INDICATED ON THE PARTS DIAGRAM.

**ALIGNMENT PROCEDURE**

**GENERAL DATA.** The alignment of this receiver requires the use of a test oscillator that will cover the frequencies of 455, 600, 1400 and 1620 KC and an output meter to be connected across the primary or secondary of the output transformer. If possible, all alignments should be made with the volume control on maximum and the test oscillator output as low as possible to prevent the AVC from operating and giving false readings.

**CORRECT ALIGNMENT PROCEDURE.** The intermediate frequency (I.F.) stages should be aligned properly as the first step. After the I.F. transformers have been properly adjusted and peaked, the broadcast band should be adjusted.

**I.F. ALIGNMENT.** Remove the chassis and loop antenna from the cabinet and set them up on the bench so that they occupy exactly the same respective positions on the bench as they did in the cabinet. Care should be taken to have no iron or other metal near

the loop. Do not make this set-up on a metal bench. With the gang condenser set at minimum, adjust the test oscillator to 455 KC and connect the output to the grid of the converter tube (12SA7) through a .05 or .1 mfd. condenser. The ground on the test oscillator should be connected to the ground buss, indicated on the circuit diagram. Align all three I.F. trimmers to peak or maximum reading on the output meter.

**BROADCAST BAND ALIGNMENT.** Connect the test oscillator to the antenna of the set through a 100 mmfd. (.0001) condenser. With the gang condenser set at minimum capacity, set the test oscillator at 1620 KC, and adjust the oscillator (or 1620 KC trimmer) on gang condenser. Next — set the test oscillator at 1400 KC, and tune in the signal on the gang condenser. Adjust the antenna trimmer (or 1400 KC trimmer) for maximum signal. Next set the oscillator at 600 KC, and tune in signal on condenser to check alignment of coils.

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