Allied Radio Corp.

	Model: 6F-235	Chassis:	Year: Pre 1951
	Power:	Circuit:	IF:
	Tubes:		
	Bands:		

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POWER SUPPLY. This receiver is designed to operate on any alternating current supply (AC) ranging from 110 to 120 volts, 50 to 60 cycles; or on any direct current supply (DC) ranging from 110 to 120 volts.

AERIAL SYSTEM

This receiver has a built-in "loop" aerial. Its excellent design is such as to increase pick-up from stations having wide variations in signal strength. The efficiency and selectivity of the loop provide outstanding reception without the use of an external aerial. The "loop" aerial used on this receiver is somewhat directional so reception from weak stations can be improved by turning the set in the proper direction. In or near metal buildings, iron ore deposits or steel structures or in localities remote from broadcasting stations, reception can be improved by using an outside aerial 50 feet to 100 feet in length including lead-in. Connect the outside aerial to the aerial lead. When using the outside aerial with AC power supply it may be necessary to reverse the power cord plug in wall socket to eliminate hum or distortion.

TUBES USED

Six tubes are used. Type numbers and locations are shown in the tube location diagram on the cabinet. If tubes are removed from their sockets for test or replacement purposes, make certain that each tube is placed in its proper socket when replacing the tubes in the set. Failure to replace the tubes in their proper sockets may result in damage to the tube, or to the receiver, or both.

TUNING RANGE

This receiver is designed to operate over the standard broadcast band which extends from 535 to 1620 Kilocycles (KC) (185 to 560 Meters).

DIAL CALIBRATION. The scale is calibrated from 55 to 160 (Standard Broadcast). This band covers all Standard Broadcasts frequencies of the United States, Canada, Mexico, Cuba and many Central and South American Countries. Add a zero to figures on the scale to obtain kilocycles.

One end of the indicator points to the wave length in meters. Therefore, both wave length in meters and frequency in kilocycles can be read at each setting of dial indicator.

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

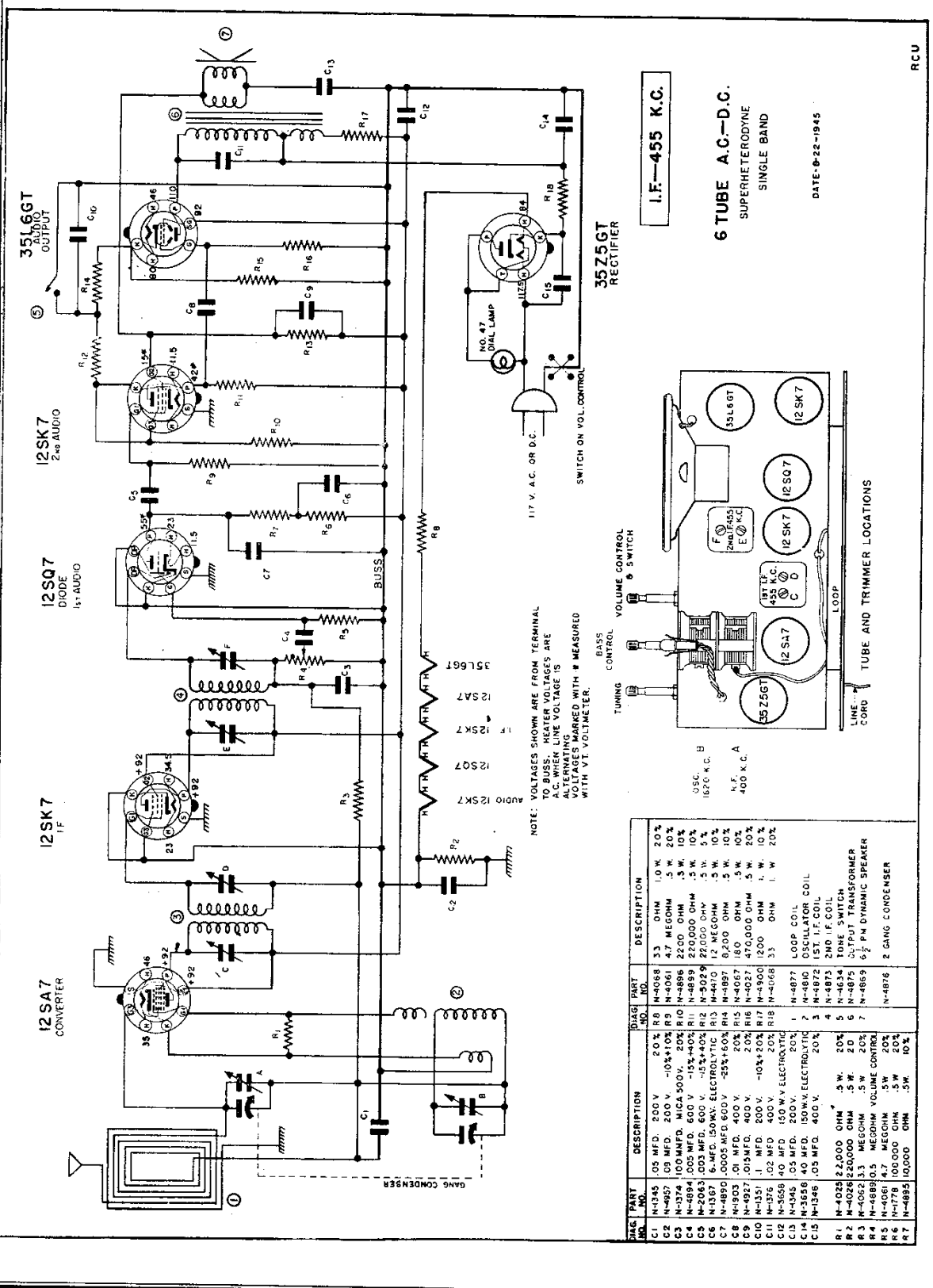
GENERAL DATA. The alignment of this receiver requires the use of a test oscillator that will cover the frequencies of 455, 600, 1400 and 1620 KC and an output meter to be connected across the primary or secondary of the output transformer. If possible, all alignments should be made with the volume control 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 first detector 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 four 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 test oscillator at 600 KC, and tune in signal on condenser to check alignment of coils.

MODEL 6F-235



DIAG. NO.	PART NO.	DESCRIPTION
C1	N-1345	.05 MFD. 200 V
C2	N-4957	.09 MFD. 200 V. -10%+10%
C3	N-1374	100 MMFD. MICA 500V. 20%
C4	N-4894	.005 MFD. 600 V -15%+40%
C5	N-2063	.003 MFD. 600 V. -15%+40%
C6	N-1367	6 MFD. 150 WV. ELECTROLYTIC
C7	N-4890	.0005 MFD. 600 V -25%+60%
C8	N-1903	.01 MFD. 400 V. 20%
C9	N-4927	.015 MFD. 400 V. 20%
C10	N-1351	.1 MFD. 200 V. -10%+20%
C11	N-1376	.02 MFD 400 V 20%
C12	N-3658	40 MFD 150 WV ELECTROLYTIC
C13	N-1345	.05 MFD. 200 V. 20%
C14	N-3658	40 MFD. 150 WV. ELECTROLYTIC
C15	N-1346	.05 MFD. 400 V. 20%
R1	N-4028	22,000 OHM .5 W. 20%
R2	N-4028	220,000 OHM .5 W. 20%
R3	N-4062	1.5 MEGOHM .5 W. 20%
R4	N-4889	0.5 MEGOHM VOLUME CONTROL
R5	N-4061	4.7 MEGOHM .5W 20%
R6	N-1378	100,000 OHM .5W 20%
R7	N-4893	10,000 OHM .5W 10%
R8	N-4068	33 OHM 1.0 W. 20%
R9	N-4061	4.7 MEGOHM .5 W. 20%
R10	N-4896	2200 OHM .3 W. 10%
R11	N-4899	220,000 OHM .3 W. 10%
R12	N-5029	22,000 OHM .5 W. 5%
R13	N-4470	1.2 MEGOHM .5 W. 10%
R14	N-4897	8,200 OHM .5 W. 10%
R15	N-4067	180 OHM .5W. 10%
R16	N-4027	470,000 OHM .5 W. 20%
R17	N-4900	1200 OHM 1. W 10%
R18	N-4068	33 OHM 1. W 20%
I	N-4877	LOOP COIL
2	N-4810	OSCILLATOR COIL
3	N-4872	1ST I.F. COIL
4	N-4873	2ND I.F. COIL
5	N-4634	TONE SWITCH
6	N-4875	OUTPUT TRANSFORMER
7	N-4869	6½ PM DYNAMIC SPEAKER
	N-4878	2 GANG CONDENSER