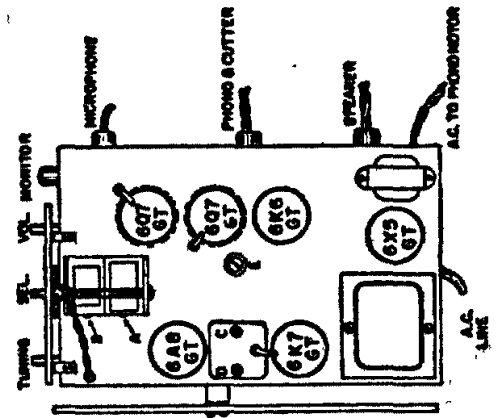
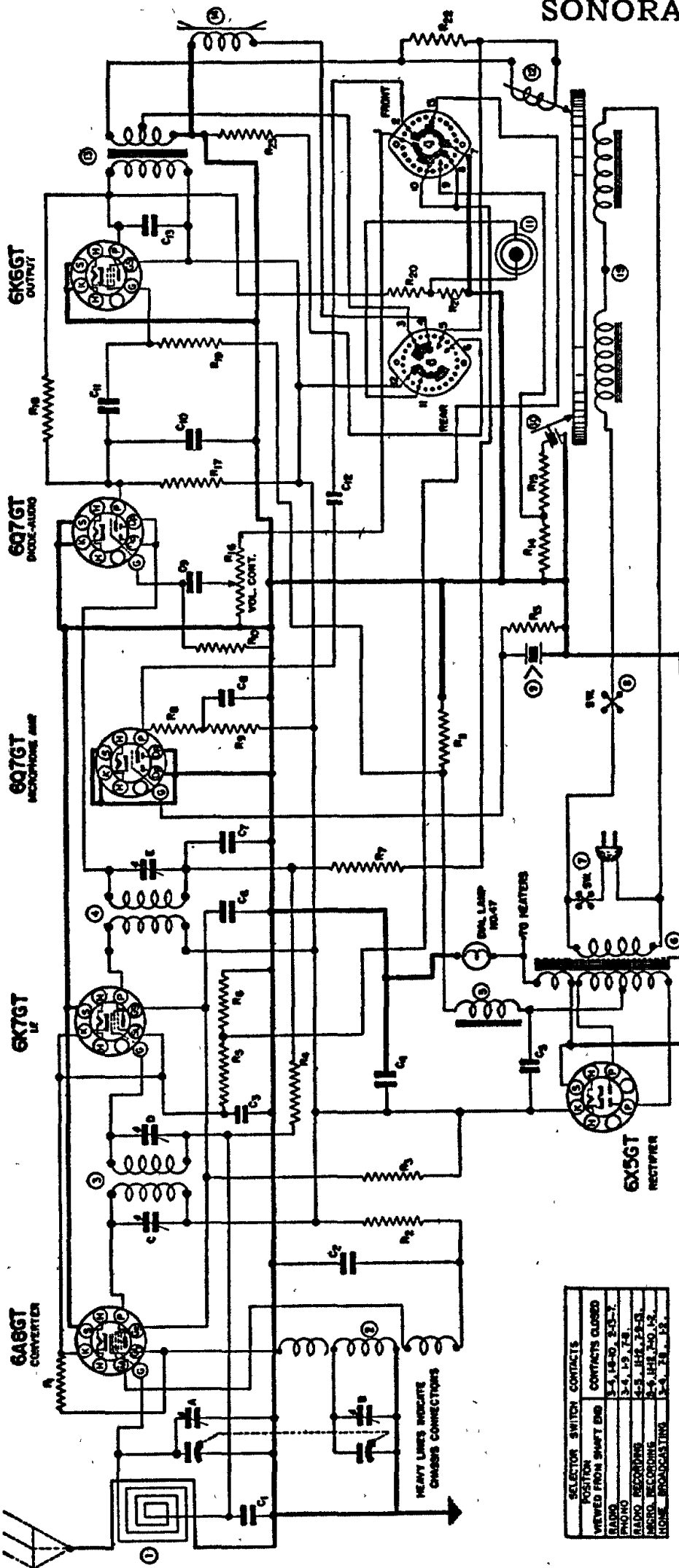


MODELS LC,LCU

**6 TUBE A.C.  
SUPERHETERODYNE  
SINGLE BAND**

RECORDED - PHONO - RADIO COMB.

EX-117 APPROVED 247.  
JULY 9 1946  
LCU

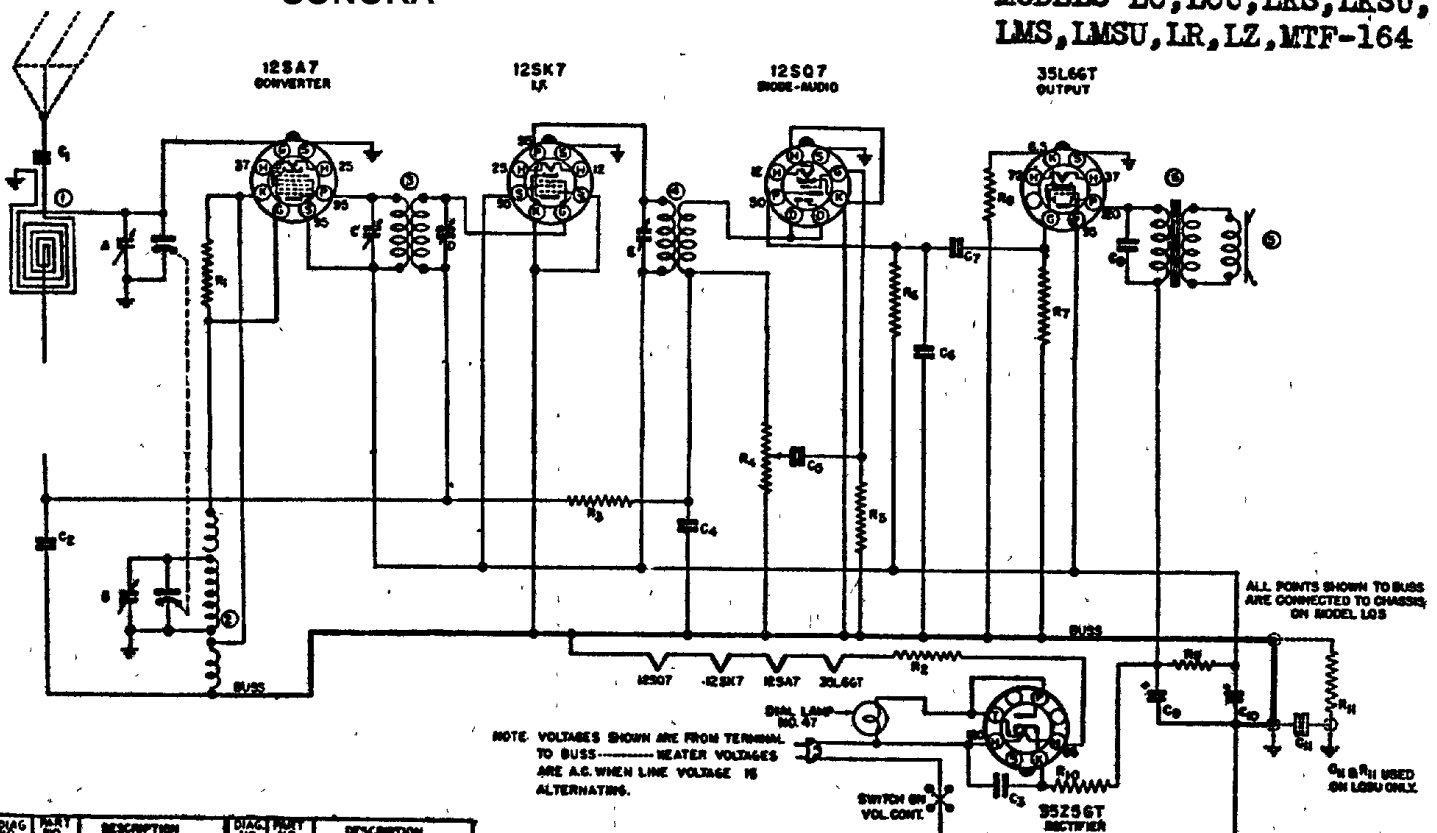


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3	14-5802	QW	14-5802	14-5802	QW	14-5802	14-5802	QW	14-5802	14-5802	QW
4	14-5803	QW	14-5803	14-5803	QW	14-5803	14-5803	QW	14-5803	14-5803	QW
5	14-5804	QW	14-5804	14-5804	QW	14-5804	14-5804	QW	14-5804	14-5804	QW
6	14-5805	QW	14-5805	14-5805	QW	14-5805	14-5805	QW	14-5805	14-5805	QW
7	14-5806	QW	14-5806	14-5806	QW	14-5806	14-5806	QW	14-5806	14-5806	QW
8	14-5807	QW	14-5807	14-5807	QW	14-5807	14-5807	QW	14-5807	14-5807	QW
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99	14-5898	QW	14-5898	14-5898	QW	14-5898	14-5898	QW	14-5898	14-5898	QW
100	14-5899	QW	14-5899	14-5899	QW	14-5899	14-5899	QW	14-5899	14-5899	QW

POSITION	SELECTOR SWITCH	CONTACTS
VIEWED FROM SHAFT END		CONTACTS CLOSED
RADIO		3-4, 13-10, 2-3-7
PHONE		3-4, 1-9, 7-8
RADIO RECORDING		4-5, 11-12, 7-8-9
INSTR. RECORDING		2-4, 11-12, 7-8, 1-9
HOME BROADCASTING		3-4, 7-8, 1-9

# SONORA

MODELS LQS, LQSU  
MODELS LC, LCU, LKS, LKSU,  
LMS, LMSU, LR, LZ, MTF-164

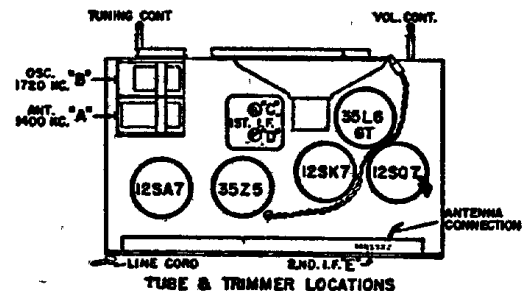


DIAG. NO.	PART NO.	DESCRIPTION	DIAG. NO.	PART NO.	DESCRIPTION
R1	N-4002	25,000 OHM 5W 20%	1	N-4330	ANTENNA COIL LOOP
R2	N-4002	82 OHM 2W 10%	2	N-3299	OSCILLATOR COIL
R3	N-3175	1 MEG OHM 5W 20%	3	N-4013	1ST. I.F. TRANSFORMER
R4	N-4014	1 MEG OHM VOL. CONT.	4	N-3808	2ND. I.F. TRANSFORMER
R5	N-4002	25,000 OHM 5W 20%	5	N-4010	4" SPEAKER
R6	N-4002	25,000 OHM 5W 20%	6	N-4011	OUTPUT TRANSFORMER
R7	N-3807	470,000 OHM 5W 20%			
R8	N-4002	220 OHM 3W 10%			
R9	N-3341	1000 OHM 5W 20%			
R10	N-4002	33 OHM 5W 20%			
R11	N-1779	150,000 OHM 5W 20% (500V ONLY)			
C1	N-344	.01 MFD. 400 V.			
C2	N-1240	.05 MFD. 200 V.			
C3	N-1240	.05 MFD. 400 V.			
C4	N-229	100 MMFD. MICA			
C5	N-272	.004 MFD. 400 V.			
C6	N-104	.0005 MFD. 400 V.			
C7	N-241	.01 MFD. 400 V.			
C8	N-275	.02 MFD. 400 V.			
C9	N-405	.33 MFD. 100 V. ELECT.			
C10	N-405	.30 MFD. 100 V.			
C11	N-300	.22 MFD. 200V. (500V ONLY)			

MODELS LQS, LQSU

L.F. 456 KC.

5 TUBE AC-DC  
SUPERHETERODYNE  
SINGLE BAND  
BROWN B.T.C. APPROVED  
JUNE, 1941



## ALIGNMENT FOR MODELS: LC, LCU, LKS, LKSU, LMS, LMSU, LQS, LQSU, LR, LZ, MTF-164

**GENERAL DATA.** The alignment of this receiver requires the use of a test oscillator that will cover the frequencies of 456, 600, 1400 and 1720 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.** Remove the chassis from the cabinet and set on a bench taking care that no iron or other metal is near the loop. Do not make this setup on a metal bench. 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.** With the gang condenser set at minimum, adjust the test oscillator to 456 KC and connect the output to the grid of the first detector tube (12A8GT) through a .05 or .1 mfd. condenser. The ground on the test oscillator should be connected to the chassis ground. 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 200 mmfd. (.0002) condenser. With the gang condenser set at minimum capacity, set the test oscillator at 1720 K.C. and adjust the oscillator (or 1720 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.

\* 6A8GT for MODELS: LC, LCU, 12SA7 for MODELS: LKS, LKSU, LMS, LMSU, LQSU, LQS, 1A7GT for MODELS: LR, LZ

Δ 4 I.F. TRIMMERS ON MODELS LC, LCU, LKS, LKSU

† 100 mmfd for MODELS: LKS, LKSU, LMS, LMSU, LQS, LQSU