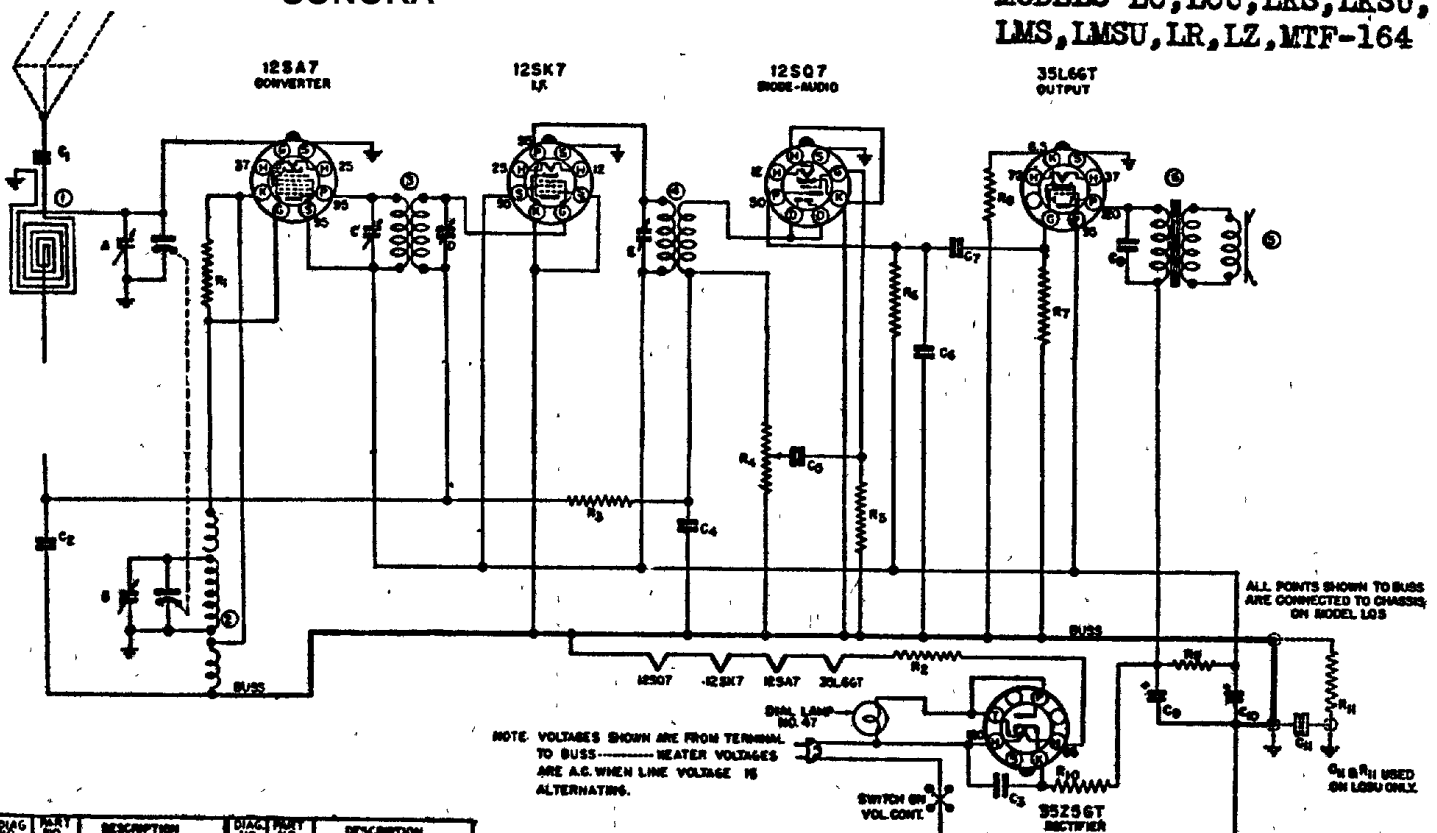


# SONORA

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

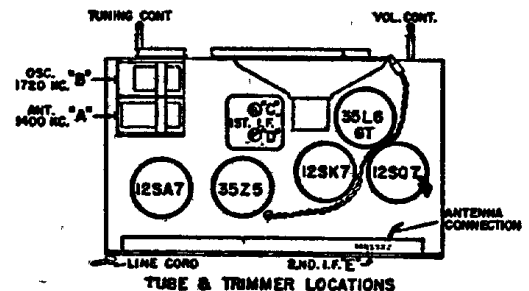


DIAG. NO.	PART NO.	DESCRIPTION	DIAG. NO.	PART NO.	DESCRIPTION
R1	N-4023	22,000 OHM 5W 20%	1	N-4330	ANTENNA COIL LOOP
R2	N-4023	82 OHM 2W 10%	2	N-3299	OSCILLATOR COIL
R3	N-3175	1 MEG OHM 5W 20%	3	N-4013	1ST. I.F. TRANSFORMER
R4	N-4014	1 MEG OHM VOL. CONT.	4	N-3808	2ND. I.F. TRANSFORMER
R5	N-4023	22,000 OHM 5W 20%	5	N-4010	4" SPEAKER
R6	N-4023	22,000 OHM 5W 20%	6	N-4011	OUTPUT TRANSFORMER
R7	N-3827	470,000 OHM 5W 20%			
R8	N-4024	220 OHM 3W 10%			
R9	N-3341	1000 OHM 5W 20%			
R10	N-4023	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-308	.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.

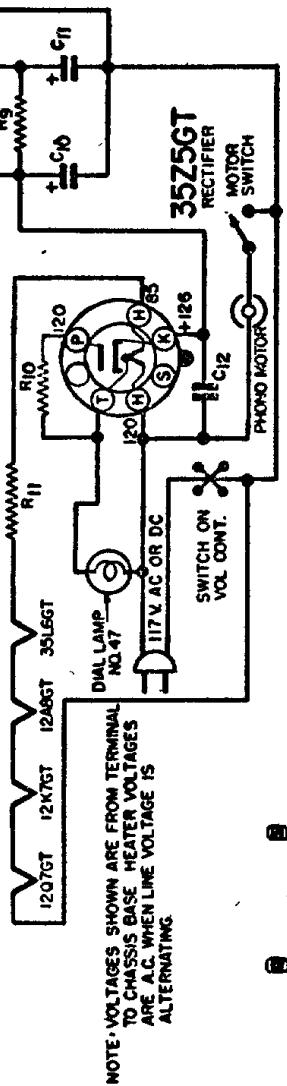
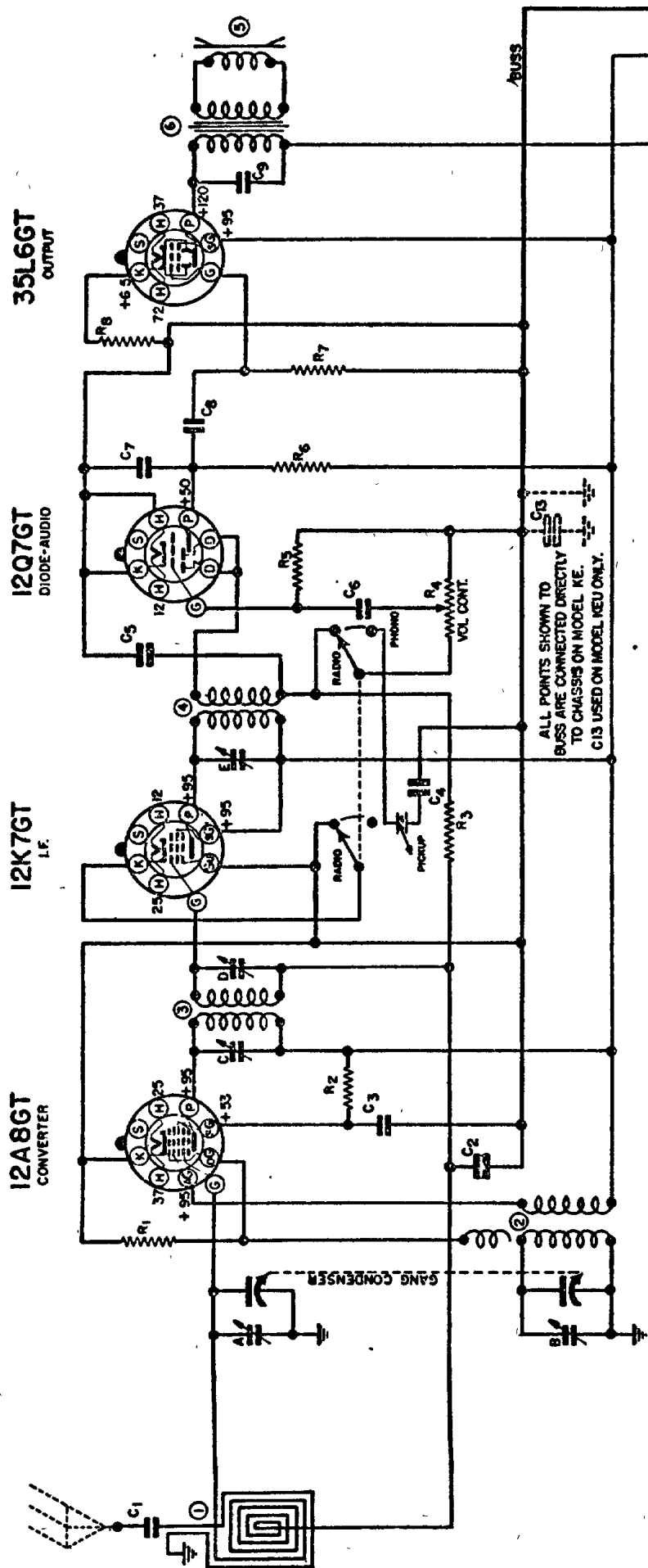
**BROADCAST BAND ALIGNMENT.** Connect the test oscillator to the antenna of the set through a 200 mmfd. (.0002) condenser. With the gang condenser set at minimum capacity, set the test oscillator at 1720 K.C. and adjust the oscillator (or 1720 KC trimmer) on gang condenser. Next—set the test oscillator 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

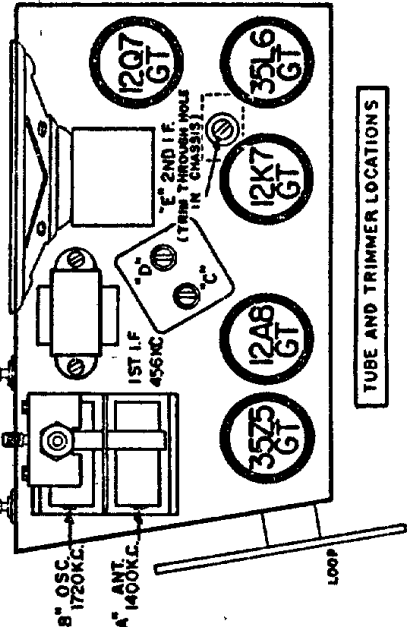
Δ 4 I.F. TRIMMERS ON MODELS LC, LCU, LKS, LKSU

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

5 TUBE AC-DC  
SUPERHETERODYNE  
SINGLE BAND  
PHONO COMBINATION  
DRAW L.T.C. APPROX 877  
JULY, 1941



I.F. 456 KC.



DIAG. NO.	PART NO.	DESCRIPTION	DIAG. NO.	PART NO.	DESCRIPTION
R1	N-1260	50,000 OHM .5W. 20 %	C10	N-2915	40 MFD. 150V. ELECTRO.
R2	N-1627	20,000 OHM .5W. 20 %	C11	N-1346	20 MFD. 150V. ELECTRO.
R3	N-1262	1 MEGOHM .5W. 20 %	C12	N-1346	.05 MFD. 400 V
R4	N-2376	.05 MEG. VOL. CONT. (KE)	C13	N-3080	.22 MFD. 200V. (KEU ONLY)
R5	N-3428	.05 MEG. VOL. CONT. (KEU)	1	N-2745	ANTENNA LOOP
R6	N-1263	10 MEGOHM .5W. 20 %	2	N-4124	ANTENNA LOOP (PORTABLE)
R7	N-1377	200,000 OHM .5W. 20 %	3	N-1482	OSCILLATOR COIL
R8	N-1264	500,000 OHM .5W. 20 %	4	N-2906	1ST I.F. TRANSFORMER
R9	N-1617	250 OHM .5W. 10 %	5	N-3754	2ND I.F. TRANSFORMER
R10	N-1614	50 OHM .5W. 20 %	6	N-2914	4" P.M. SPEAKER
R11	N-1618	80 OHM 2 W. 10 %	6	N-2952	OUTPUT TRANS. (KE)
G1	N-1344	.01 MFD. 400V.	6	N-3245	OUTPUT TRANS. (KEU)
C2	N-1345	.05 MFD. 200 V	N-2875	2 GANG CONDENSER	
C3	N-1345	.05 MFD. 200 V	N-2094	MOTOR SWITCH	
C4	N-1351	.1 MFD. 200V. (KE)	N-4136	MOTOR SWITCH (PORTABLE)	
C5	N-2642	.09 MFD. 200V. (KEU)	N-3648	PHONO MOTOR	
C6	N-1374	.0001 MFD. MICA	N-3860	PHONO MOTOR	
C7	N-1344	.01 MFD. 400V.	N-3930	PHONO MOTOR (PORTABLE)	
C8	N-1447	.0005 MFD. 400V.	N-4186	CRYSTAL PICK-UP	
C9	N-1376	.02 MFD. 400V.	N-4189	LONG-LIFE NEEDLE	
			N-2877	RADIO-PHONO SWITCH	
			N-2849	2ND I.F. TRIMMER	