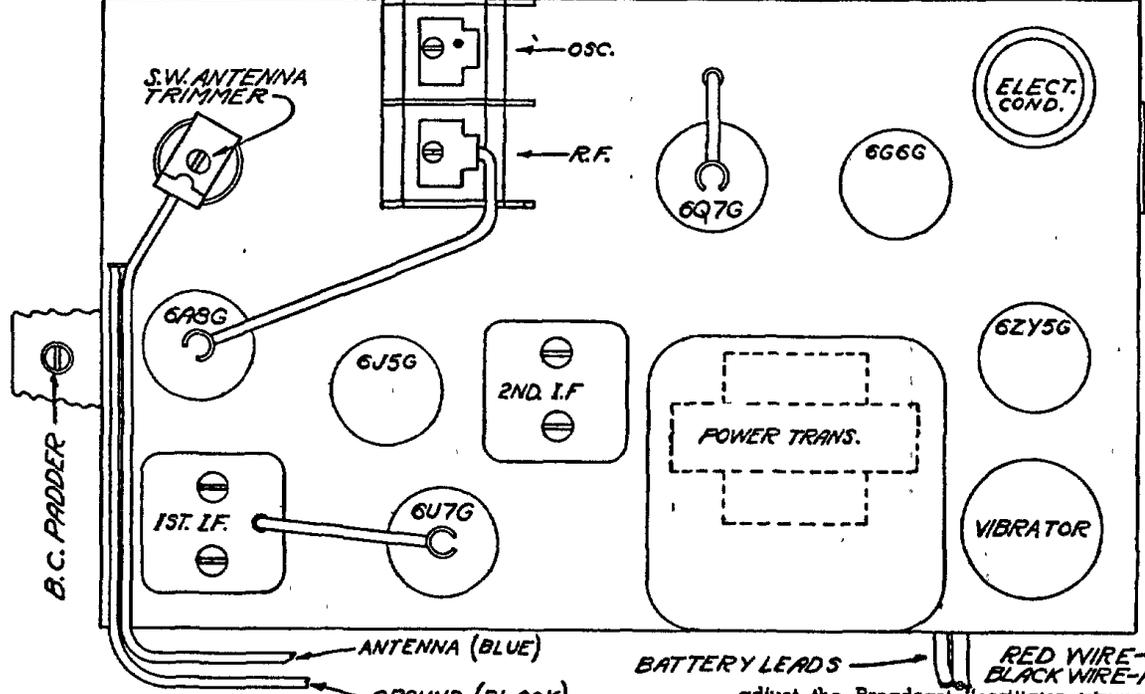


This receiver requires a good ground.

SELECTOR BAND SWITCH VOLUME CONTROL TONE CONT. & ON-OFF SWITCH



RESISTORS	WATTS	SP. TOL.	RES.	TYPE	RES.	TYPE
15,000	1/4	± 10%	1	500,000	1	500,000
500,000	1/4	± 10%	2	1,000,000	2	1,000,000
100,000	1/4	± 10%	3	500,000	3	500,000
500,000	1/4	± 10%	4	1,000,000	4	1,000,000
100,000	1/4	± 10%	5	500,000	5	500,000
500,000	1/4	± 10%	6	1,000,000	6	1,000,000
100,000	1/4	± 10%	7	500,000	7	500,000
500,000	1/4	± 10%	8	1,000,000	8	1,000,000
100,000	1/4	± 10%	9	500,000	9	500,000
500,000	1/4	± 10%	10	1,000,000	10	1,000,000
100,000	1/4	± 10%	11	500,000	11	500,000
500,000	1/4	± 10%	12	1,000,000	12	1,000,000
100,000	1/4	± 10%	13	500,000	13	500,000
500,000	1/4	± 10%	14	1,000,000	14	1,000,000
100,000	1/4	± 10%	15	500,000	15	500,000
500,000	1/4	± 10%	16	1,000,000	16	1,000,000
100,000	1/4	± 10%	17	500,000	17	500,000
500,000	1/4	± 10%	18	1,000,000	18	1,000,000
100,000	1/4	± 10%	19	500,000	19	500,000
500,000	1/4	± 10%	20	1,000,000	20	1,000,000

**ALIGNMENT**

The alignment of this receiver requires the use of a test oscillator which will cover the frequencies of 456, 600, 1400, 1730, 6000, 16,000 and 18,100 KC and an output meter which is 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**  
properly adjusted and peaked, the Broadcast Band should always be the next procedure; after which, the Short Wave Band may be aligned.

**I.F. ALIGNMENT**  
adjust the test oscillator to 456 KC and connect the output of test oscillator or signal generator to the grid of the first detector tube (6A8G) through a .05 or .1 mfd. condenser. The ground on the test oscillator can be connected to the chassis ground. Align all four I.F. trimmers to peak or maximum reading on the output meter.

The intermediate frequency I.F. stage should be aligned properly as the first step. After the I.F. transformers have been properly adjusted and peaked, the Broadcast Band should always be the next procedure; after which, the Short Wave Band may be aligned.

With the wave switch in the broadcast band and the gang condenser set at minimum, connect the output of the signal generator to the antenna lead (blue) through a .0002 mfd. mica condenser. Set the gang condenser to minimum and the oscillator to 1730 KC and

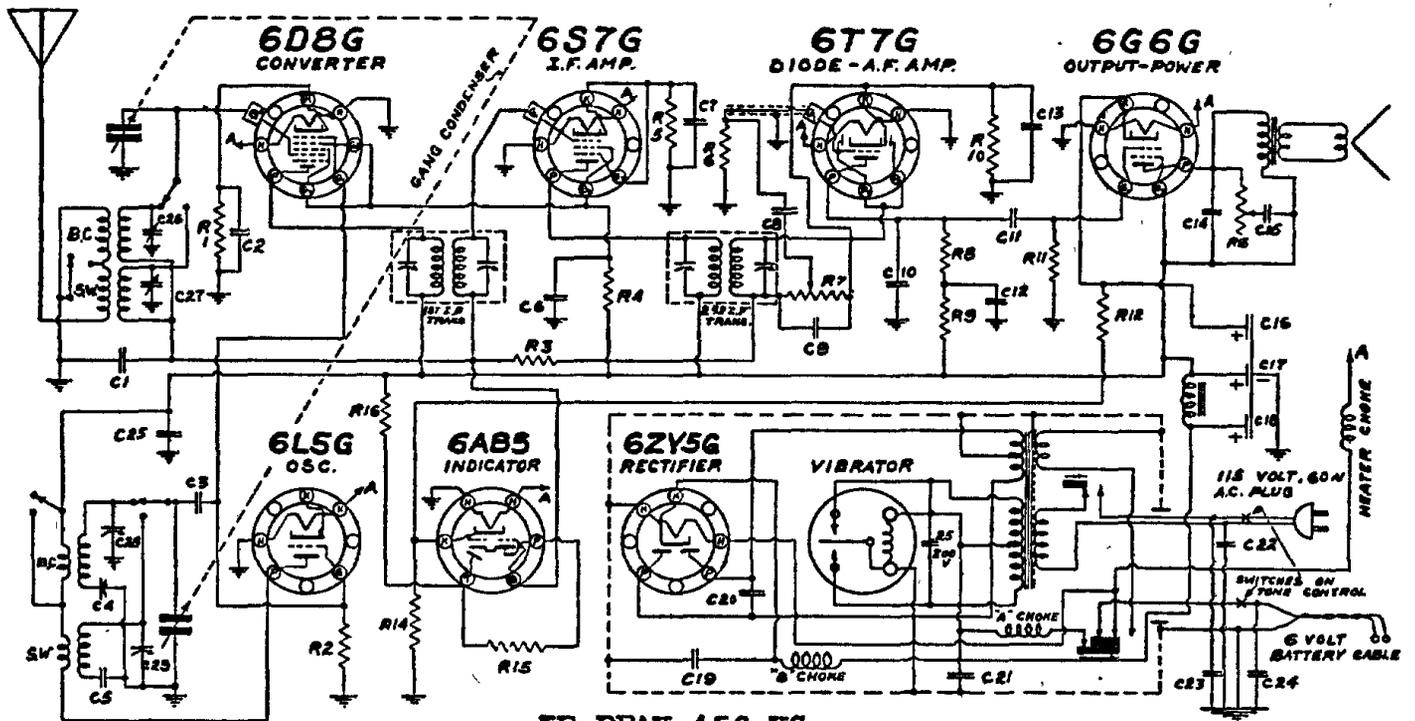
**BROADCAST BAND ALIGNMENT**  
adjust the test oscillator to 1730 KC and tune in this signal by rotating the gang to 1400 on the dial. Adjust the Broadcast "antenna" trimmer to a maximum signal. Set the signal generator to 600 KC and tune in the signal on the receiver.  
**SHORT WAVE BAND ALIGNMENT**  
The short wave band is adjusted by setting the generator to 16,000 KC and tuning in the signal. Adjust the "short wave antenna" to give maximum output. As there is no variable low frequency padding condenser on this band, the sensitivity of the receiver should be checked at 6000 KC to determine whether the circuits are in line at this frequency. Should the receiver lack sensitivity at 6000 KC, the antenna and oscillator coils, as well as the .004 mica padding condenser, should be tested for defects as sometimes these components become subject to mechanical or electrical injuries, despite their rugged construction and liberal ratings.

adjust the Broadcast "oscillator trimmer" to receive this signal. Make no other adjustments at this frequency. Then set the generator to 1400 KC and tune in this signal by rotating the gang to 1400 on the dial. Adjust the Broadcast "antenna" trimmer to a maximum signal. Set the signal generator to 600 KC and tune in the signal on the receiver.

Note: Approximately the same sensitivity should be noted at this point as was at 1400 KC. The signal strength may sometimes be improved by padding the circuits. This is done by slowly increasing or decreasing the oscillator padding condenser and, at the same time, continuously tuning back and forth across the signal with the receiver until the maximum reading is obtained on the output meter. This adjustment may seem a little complicated but is the easiest way to adjust the oscillator to the antenna. Return to 1400 KC and again go over the adjustments of this frequency to be certain that they were not put slightly out of alignment when adjustment was made at 600 KC.

18,100 KC for Model 7A

FOR ALIGNMENT DATA AND SERVICING-SEE MODEL 6D.



IF PEAK 456 KC

CONDENSERS

NR	CAPACITY	TYPE	NR	CAPACITY	TYPE
1	.05 Mfd.	200 V.	14	.005 Mfd.	600 V.
2	.05 Mfd.	200 V.	15	.05 "	400 V.
3	50 μmf	MICA	16	.5 "	25 V.
4	300-600 μmf	MICA	17	.8 "	200 V.
5	4000 μmf	M. 5%	18	.8 "	200 V.
6	.1 Mfd.	200 V.	19	.01 "	600 V.
7	.05 "	200 V.	20	.015 "	1000 V.
8	.01 "	400 V.	21	.5 "	10 V.
9	250 μmf	MICA	22	.05 "	400 V.
10	250 "	"	23	.01 "	600 V.
11	.01 Mfd.	400 V.	24	.5 "	10 V.
12	.1 "	200 V.	25	.1 "	200 V.
13	.5 "	200 V.			" OIL TYPE

RESISTORS

NR	OHMS	WATTS	SPL. TOL.	14	110	15	250,000	1/4	16	15,000	1/4	± 10%
1	1500	1/4	± 10%									
2	40,000	1/4	± 10%									
3	1,000,000	1/4										
4	30,000	1/4										
5	1,500	1/4	± 10%									
6	1,000,000	1/4										
7	500,000	1/4	(VOL CONT)									
8	500,000	1/4										
9	200,000	1/4										
10	10,000	1/4	± 10%									
11	500,000	1/4										
12	325	1/4	± 10%									
13	100,000	1/4	(TONE CONT)									

BAND SWITCH IN BROADCAST POSITION  
POWER SWITCH IN BATTERY POSITION.  
I F. - 456 K.C.  
C26 TO C29, 2-20 μmf TRIMMERS.

SCHEMATIC DIAGRAM  
MODEL 7A

This receiver requires a good ground.

